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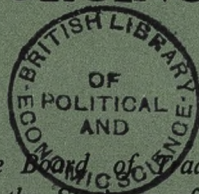
BOARD OF TRADE

THE REPORT
on the
CENSUS OF PRODUCTION
FOR 1951

Volume 5

Trade C

CHAIN, NAIL, SCREW AND MISCELLANEOUS
FORGINGS



*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

5
42
[HA 251]

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* Not applicable to this trade

CHAIN, NAIL, SCREW AND MISCELLANEOUS FORGINGS TRADE

THIS REPORT on the Chain, Nail, Screw and Miscellaneous Forgings Trade relates to establishments engaged wholly or mainly in the manufacture of bolts, nuts, screws, rivets, nails (other than wire nails), etc., laminated and other springs (including clock and watch springs), anchors and chains (other than transmission chains), steel drop forgings and miscellaneous iron forgings.

Miscellaneous steel forgings other than drop forgings are included in the report on the Iron and Steel (Melting and Rolling) Trade (see Volume 3, Trade B).

This trade corresponds to minimum list headings 91, 92 and 99(4) in the Standard Industrial Classification.

There were no larger establishments in Northern Ireland in the register for this trade in 1951.

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.

METAL GOODS NOT ELSEWHERE SPECIFIED
CHAIN, NAIL, SCREW AND MISCELLANEOUS FORGINGS TRADE

Summary
Larger establishments (a)

	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)	118,004	95,456	85,817	..	81,282	32,010	21,321
Cost of materials and fuel used (d)	58,472	49,583	43,491	..	37,727	16,341	10,561
Payment for work done on materials given out	1,416	1,017	823	..	719	281	235
Transport payments (e)	1,991	..	..	..	..	..	..
Net output	56,125	44,856	41,503	..	42,836	15,388	10,525
Wages and salaries of persons employed	29,925	26,484	24,822	..	23,540	..	..
Average number of persons employed (f)	No. 84,765	No. 81,077	No. 79,126	No. ..	No. 78,247	No. 66,619	No. 55,841
Net output per person employed (f)	£ 662	£ 553	£ 525	£ ..	£ 547	£ 231	£ 188
Stocks at end of year	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Products on hand for sale and work in progress	7,940	7,289	7,024	..	5,916	..	..
Materials and fuel	11,313	9,095	8,970	..	8,072	..	..
Number of establishments	No. 687	No. 682	No. 672	No. ..	No. 640	No. ..	No. 569

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)	104,059	96,451	85,891	..	71,379	26,166	17,391
Other output (i)	13,272						
Changes in stocks and work in progress (j)	+ 673	+ 295	+ 988	..	+ 834		
Less payment for transport outwards (e)	118,004	96,747	86,878	..	82,132	32,010	21,321
	..	1,291	1,061	..	850		
Gross output (production)	118,004	95,456	85,817	..	81,282	32,010	21,321
Materials and fuel used by firms in this trade							
Purchases	60,606	49,292	44,372	..	39,211	16,341	10,561
Changes in stocks (j)	- 2,134	+ 291	- 880	..	- 1,484		
Materials and fuel used	58,472	49,583	43,491	..	37,727	16,341	10,561

- (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.

(90501/1)

Summary: Small firms (a)

TABLE 2

	Great Britain		United Kingdom	Great Britain	
	1951	1950	1949	1949	1948
Number of returns	2,427	2,669	3,136	2,948	3,197
Average number of persons employed (b)					
Males	6,021	6,716	7,674	7,372	8,071
Females	615	544	565	561	593
Total	6,636	7,260	8,239	7,933	8,664

- (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	
	1951	1950	1949	1949	1948
As returned by firms					
Employing on the average more than ten persons (b)	84,765	81,077	79,126	(c)	78,247
Employing on the average ten or fewer persons (d)	6,636(e)	7,260(e)	8,239	7,933	8,664
Estimated average employment in firms not making satisfactory returns	91,401	88,337	87,365	(c)	86,911
	926	913	623	623	810
Estimated average employment in all firms	92,327(e)	89,250(e)	87,988	(c)	87,721

- (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	163	3,418	1,755	2,962	758	220	978	592
25 - 49	188	8,410	4,314	6,978	1,803	536	2,340	618
50 - 99	156	13,994	6,905	10,945	2,959	774	3,734	631
100 - 199	76	14,662	6,998	10,562	2,890	815	3,705	663
200 - 299	38	12,906	6,200	9,433	2,616	635	3,252	657
300 - 399	22	10,318	5,133	7,553	2,120	597	2,717	680
400 - 499	17	12,432	6,222	7,512	2,353	537	2,891	828
500 - 749	13	10,673	4,814	7,643	2,147	677	2,824	630
750 - 999	4	4,616	2,156	3,312	807	220	1,027	651
1,000 and over	10	26,575	11,627	17,865	5,059	1,399	6,458	651
Total	687	118,004	56,125	84,765	23,513	6,412	29,925	662

- (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	11	1,338	523	0.9	973	252	51	303	538
Northern									
East and West Ridings	69	11,127	4,922	8.8	7,507	2,247	658	2,905	656
North Midland	24	4,468	1,968	3.5	3,474	922	261	1,183	567
Eastern	13	909	458	0.8	649	178	64	242	706
London and South Eastern	82	9,343	4,696	8.4	6,393	1,861	552	2,413	735
Southern	11	1,414	895	1.6	1,045	304	92	397	856
South Western	9	602	329	0.6	546	138	27	165	603
Midland	353	70,527	33,690	60.0	50,072	13,898	3,662	17,561	673
North Western	52	5,385	2,752	4.9	4,608	1,184	384	1,569	597
Total England	624	105,113	50,234	89.5	75,267	20,986	5,751	26,738	667
Wales	17	4,106	2,089	3.7	3,749	957	303	1,259	557
Scotland	46	8,786	3,802	6.8	5,749	1,570	358	1,928	661
Great Britain	687	118,004	56,125	100.0	84,765	23,513	6,412	29,925	662
Northern Ireland	-	-	-	-	-	-	-	-	-
United Kingdom	687	118,004	56,125	100.0	84,765	23,513	6,412	29,925	662

(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									
Anchors and chains	60	5,584	4,540(b)	2,645	4,055	1,242	287	1,529	652
Springs									
Laminated	34	5,679	4,699	2,521	3,505	1,156	312	1,468	719
Other than laminated	120	9,409	8,446	5,382	10,217	2,406	631	3,037	527
Bolts, nuts, screws, rivets, nails, etc. (c)	280	56,534	50,017	27,350	41,286	10,470	3,061	13,531	662
Steel drop forgings	77	28,146	25,550	11,966	15,512	5,526	1,256	6,781	771
Remainder of the trade	116	12,652		6,261	10,190	2,713	865	3,578	614
Total	687	118,004		56,125	84,765	23,513	6,412	29,925	662

(a) Administrative, technical and clerical employees.

(b) Including amounts charged for proving chain cables and anchors for the trade or on commission.

(c) Including bifurcated rivets made from wire but excluding wire nails, staples, etc.

TABLE 7 - Total make of intermediate products: Larger establishments

This table is not applicable to the trade.

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
Iron and steel					
Anchors and grapnels and parts thereof	4.2	309	14	4.2	252
Ships' stud-link chain cable					
Of iron	7.4	532	20	10.9	716
Of steel	..	73			
Of steel	10.7	863	6	7.2	514
Chains (excluding transmission chains)					
Welded and forged chain, unstudded					
Of steel, electrically welded	6.2	680	23	3.9	343
Of iron, hand-made	6.1	636	38	4.9	440
	..	85			
Shackles, forged or cast, and other gear (e.g., swivel pieces, slips) for use with chain cable, mooring, hauling or lifting gear	4.1	448	34	3.4	272
	..	116			
Crane chains, wrought iron and steel	3.2	345	20	4.5	435
Chain tackle	3.0	390	21	0.7	90
Other chains	4.6	541	38	5.2	484
	..	105			
Springs					
Laminated					
For road vehicles	58.1	5,410	41	44.9	3,912
For locomotives, carriages and wagons	21.6	1,583	16	19.0	1,137
Other	0.6	147	12	0.1	8
	..	165			
Unclassified	-	-	-	8.0	473
Other than laminated					
Upholstery and mattress springs (including spring seating and mattress interiors)	30.9	3,910	67	15.7	1,804
	..	808			
Valve, shock absorber and similar engine springs	3.8	914	26	0.7	284
	..	101			
Other	13.5	3,195	72	19.1	3,179
	..	833			
Unclassified	6.4	1,282	27	1.6	529
	..	341			
Fencing material of iron and steel, other than of wire (e.g., gates, grilles, fences, standards, trellis)	21.8	2,032	73	11.9	916
	..	288			
Boot and shoe grindery					
Made from wire	6.1	597	12		
Other (including clog irons) (a)	1.8	178	18	8.1	614
	..	43			
Nails, including cut nails (b)	16.7	870	24	16.2	693
	..	150			
Tacks	5.4	521	19	4.8	426
Studs and spikes (other than boot and shoe studs and spikes and screw studs)	0.5	38	10	0.8	96
	..	69			

TABLE 8 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Iron and steel (contd.)					
Horse shoes (sold as such)	1.9	111	..	3.0	137
Rivets (other than tubular, or bifurcated rivets manufactured from wire)					
Of ½ inch in diameter or over	35.6	1,338	16	47.4	1,424
Under ½ inch in diameter					
Unclassified	15.0	906	38	18.2	768
Bifurcated rivets made from wire	..	245		..	124
Washers (other than washers assembled with bolts, etc.)	14.7	1,346	47	13.5	812
	..	248		..	268
Tubular rivets	Mill. 472	208	6	Mill. ..	92 11
Bolts, whether threaded or not, bolt ends, hexagon or square head set screws and screw studs, hexagon and square nuts, whether tapped or not, and washers assembled with any of these articles	Th. gross	Th. tons		Th. gross	Th. tons
	10,042	16.6	118	10,898	17.5
Bright	5,251	..		4,894	..
	..	14.6		..	3.5
	..	..		..	912
Black or metal coated (but not painted, japanned or otherwise coated, except with metal)	8,337	61.6	71	4,948	41.4
	7,191	..		5,774	..
	..	100.4		..	93.9
All other kinds	3,730	11.6	44	1,343	6.2
	579	..		544	..
	..	2.2		..	12.4
Unclassified	519	..	19	215	..
	..	1.2		..	1.0
	..	..		..	437
Other set screws, screw studs and screws for metal, nuts, and washers assembled with any of these articles					
Black or metal coated (but not painted, japanned or otherwise coated, except with metal)	766	3.8	12	1,077	1.3
	10,110	..		5,089	..
	..	1,885		..	100
All other kinds	13,701	7.8	39	12,068	7.0
	49,943	..		33,647	..
	..	190		..	201
Screws for wood; screw hooks, screw rings and screw knobs; and coach screws, so far as recorded separately					
	Th. tons			Th. tons	
Hooks, fasteners and shackles, not elsewhere specified	2.2	581	27	1.9	536
	..	543		..	203
Saddlery hardware, not elsewhere specified	..	115(d)	..	..	155
Moulders' chaplets (d)	0.6	86	..	..	69
Forgings, not elsewhere specified					
Iron, in the rough and machined	0.7	76	17	6.0	280
	..	114		..	65

TABLE 8 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Iron and steel (contd.)					
Forgings, not elsewhere specified (contd.)					
Steel drop forgings, in the rough and machined (e)					
Of alloy steel	114.5	15,736	86	97.2	10,953
Of non-alloy steel	157.2	15,579	122	102.9	9,321
Unclassified	-	-	-	5.5	576
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver)	Th. cwts.			Th. cwts.	
Rivets (other than tubular) and washers	16.0	331	29	15.9	207
				..	36
	Th. gross	Th. cwts.		Th. gross	Th. cwts.
Bolts and nuts	3,431	23.6	60	3,990	34.0
	1,065	..		3,069	..

	Th. cwts.			Th. cwts.	
Nails and tacks; screws for wood; and coach screws, screw hooks, screw rings, screw knobs, and screws for metal, so far as recorded separately	9.1	156	19	25.0	421
	..	895		..	761
	Mill.			Mill.	
Tubular rivets	841	715	6	628	443
	Th. cwts.			Th. cwts.	
Springs (d)	..	52	13	2.8	113
				..	31
Copper					
Nails and tacks	11.3	192	15	17.2	205
	Mill.			Mill.	
Tubular rivets	381	184	..	..	..
	Th. cwts.			Th. cwts.	
Rivets (other than tubular) and washers	6.8	153	20	..	115(f)
	..	27		..	147
				..	41
Springs (d)	..	30	..	-	-
				Th. cwts.	
Other manufactures	11.1	473	22	7.7	247(d)
Rivets of aluminium	..	233		..	145
Taper pins of all metals	28.4	358	14	27.0	245(d)
	..	423		..	125
Screw machine products (e.g., turned screws, rivets, washers), unclassified	Th. gross				
Of iron and steel	4,319	1,129	77	33.4	427
	..	1,598		..	694
Of brass and other copper alloys, including nickel silver, but excluding other nickel alloys	13,146	3,346	70	31.1	990
	..	920		..	1,064
Of copper	..	217	12	..	5
Of other metals	1,154	299	36	..	149
	..	154		..	..
Of unclassified metals, other than iron and steel	..	16	..	-	-

TABLE 8 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
Other manufactures (contd.)		£'000	No.		£'000
Other screws, nuts, bolts, nails, etc., not of iron, steel, brass or copper (d)	..	26	9	..	42
General and jobbing work (including repair work, wheelwrighting and horse-shoeing) (g)		1,081	83		915
Work done for the trade or on commission (g)					
Proving chain cables and anchors		190	22		211
Other		401	45		673
Total		116,602	..		81,872
Sales in other trades (see Table 9)		12,543	..		10,493
Principal products of this trade sold by establishments in the trade		104,059	647		71,379

(a) Excluding malleable cast in 1948.

(b) Excluding wire nails and staples, and insulated staples, for which see the Wire and Wire Manufactures Trade (Volume 5, Trade D).

(c) Included for 1948 in the Wire and Wire Manufactures Trade.

(d) So far as recorded separately.

(e) Excluding axles, tyres and wheels. For the sales of axles, tyres, wheels and steel forgings other than drop forgings, see the Iron and Steel (Melting and Rolling) Trade (Volume 3, Trade B).

(f) Described as 'Other bolts, nuts, screws, rivets and washers'.

(g) 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
Iron and steel	Th. tons	£'000	No.	Th. tons	£'000
Chains (excluding transmission chains)					
Shackles, forged or cast, and other gear (e.g., swivel pieces, slips) for use with chain cable, mooring, hauling and lifting gear	0.4	27	..	..	4
Chain tackle	0.1	6	..	..
Welded and forged chain, unstudded, of iron, hand-made; and other chains, not elsewhere specified, including crane chains, wrought iron and steel, but excluding welded and forged chain, unstudded, of steel, electrically welded	1.5	148	11	3.1	245
Ships' stud-link chain cable	..	19	..	..	12
Anchors and grapnels and parts thereof	0.9	53	..	..
Springs					
Laminated					
For road vehicles	14.6	1,196	6	13.0	1,049
For locomotives, carriages and wagons	13.8	1,030	9	3.7	229
Other	-	1	..	-	-
Unclassified	-	-	-	8.0	473
Other than laminated					
Upholstery and mattress springs (including spring seating and mattress interiors)	5.3	502	17	4.1	344
Valve, shock absorber and similar engine springs	..	131	..	..	340
	..	4	..	..	2

(90501/1)

TABLE 9 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
Iron and steel (contd.)	Th. tons	£'000	No.	Th. tons	£'000
Springs (contd.)					
Other than laminated (contd.)					
Other	1.3	123	6	2.7	260
	..	90	..	..	100
Unclassified	5.5	982	13	1.4	423
	..	29	..	..	39
Fencing material of iron and steel, other than of wire (e.g., gates, grilles, fences, standards, trellis)	6.2	417	32	4.8	231
	..	168	..	..	231
Boot and shoe grindery					
Made from wire	-	-	-	0.1	12
Other (including clog irons)	0.3	49	5	..	30
Studs and spikes (other than boot and shoe studs and spikes and screw studs)	..	19	..	..	..
Nails, including cut nails	1.9	104	7	2.1	121
	..	150	..	..	64
Tacks	-	2	..	..	..
Rivets (other than tubular or bifurcated rivets manufactured from wire)					
Of ½ inch in diameter or over	-	-	-	-	-
Under ½ inch in diameter					
Unclassified	8.5	455	5	11.0	351
	..	..	..	..	70
Bifurcated rivets made from wire					
Washers (other than washers assembled with bolts, etc.); and tubular rivets	..	197	6	3.3	163(a)
	..	..	..	..	4
Bolts, whether threaded or not, bolt ends, hexagon or square head set screws and screw studs, hexagon and square nuts, whether tapped or not, and washers assembled with any of these articles	Th. gross	Th. tons		Th. gross	Th. tons
Bright	126	0.3	108	85	0.3
	22	..	26	563	..
	..	..	14	..	..

Black or metal coated (but not painted, japanned or otherwise coated, except with metal)	-	-	-	129	3.7
	..	..	..	47	..
	..	..	..	..	1.0

All other kinds; and unclassified	..	1.0	83	26	0.7
	..	..	454	9	..
	..	..	..	..	0.8

Other set screws, screw studs and screws for metal, nuts, and washers assembled with any of these articles					
Black or metal coated (but not painted, japanned or otherwise coated, except with metal)	-	-	-	1	-
	..	..	..	..	0.4

All other kinds	216	0.1	19	..	..
Screws for wood; screw hooks, screw rings and screw knobs; and coach screws, so far as recorded separately	30

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TABLE 9 (contd.)

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Iron and steel (contd.)					
Hooks, fasteners and shackles, not elsewhere specified; and saddlery hardware, not elsewhere specified	0.1 ..	14 104	6	0.2 ..	43 71
Forgings, not elsewhere specified					
Iron, in the rough and machined	0.1 ..	13 7	..	5.2 ..	194 51
Steel drop forgings, in the rough and machined					
Of alloy steel	23.5	2,906	19	20.0	2,369
Of non-alloy steel	20.3	1,498	31	8.6	709
Unclassified	-	-	-	0.8	76
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver)				Th. cwts.	
Rivets (other than tubular) and washers	-	-	-	0.3	9
Bolts and nuts; and tubular rivets	..	467	6	..	430
Nails and tacks; screws for wood; and coach screws, screw hooks, screw rings, screw knobs, and screws for metal, so far as recorded separately	-	-	-	0.1 ..	2 1
Springs	-	-	-	..	9
Copper	Mill.				
Nails and tacks	-	-	-		
Tubular rivets	20	11	..	4.2	62
Rivets (other than tubular) and washers	-	-	-	..	11
Other manufactures	Th. cwts.				
Rivets of aluminium; and taper pins of all metals	18.7 ..	358 3	6	16.0 ..	210 15
Screw machine products (e.g., turned screws, rivets, washers), unclassified	Th. gross				
Of iron and steel	18 ..	8 135	8	4.2	54(b) 31
Of other metals, including copper and copper alloys	69 ..	11 307	6	..	..
Other screws, nuts, bolts, nails, etc., not of iron, steel, brass or copper	-	-	-	..	9
General and jobbing work (including repair work, wheelwrighting and horse-shoeing) (c)		12	..		26
Work done for the trade or on commission (c)					
Proving chain cables and anchors		16	..		81
Other		24	..		..
Total		12,543	..		10,493

(a) Excluding tubular rivets.
 (b) Excluding copper.
 (c) 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. tons	£'000	Th. tons	£'000
Manufactures of iron and steel				
Wire nails and tacks (including staples, other than insulated)	5.1	356	5.1	208
Tools and implements	..	882	..	932
Railway material (including axles, tyres and wheels)	10.9 ..	647 7	13.6 ..	675 121
Stampings and pressings	6.4 ..	947 208	5.5 ..	603 109
Builders' ironmongery	2.2	168	2.1	139
Fabricated iron and steel	..	319	..	38
Steel forgings, other than drop forgings				66
Of alloy steel				
In the rough	3.9	563	7.7	797
Machined	0.1	47	0.4	83
Of non-alloy steel				
In the rough	9.4	803	3.0	245
Machined	5.4	549	..	40
Other iron and steel manufactures, not elsewhere specified	..	1,854	..	363
Manufactures of non-ferrous metals, not elsewhere specified				1,373
Stampings and pressings	0.2	150	0.5	151
Other				
Of brass	..	103	..	287
Of other non-ferrous metals	..	108	..	141
Parts and accessories of motor vehicles and cycles	..	1,541	..	1,031
Principal products of the mechanical engineering trades				
Agricultural machinery (other than tractors) and parts	..	304	..	657
Machine tools and parts	..	210	..	..
Other machinery and parts	..	442	..	..
Other goods	..	595	..	656
Scrap metals sold				
Iron and steel	218.3	991	201.2	667
Brass	6.8	1,089	6.6	444
Copper	0.2	27	0.3	24
Other metals	1.2	113	1.4	36
Work done (a)		249		33
Total		13,272		9,919

(a) Amount charged.

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

TABLE 11

		Production (b)(c)	Exports (d)	Retained imports (e)
		Th. tons	Th. tons	Th. tons
Iron and steel				
Anchors and grapnels and parts thereof	{ 1951 1948 1937	4.2 4.2 5.0	3.4 3.0 2.4	- - 2.5
Ships' stud-link chain cable	{ 1951 1948 1937	19.0(f) 18.1 13.6	5.7 6.3 3.5	- 0.9 0.6
Chains, including chain tackle, but excluding transmission chains (g)	{ 1951 1948 1937	30.0(f) 30.1(f) 16.1	7.4 7.1 5.3	- 0.7 2.0
Springs, laminated, other than for road vehicles	{ 1951 1948 1937	23.0(f) 27.1(f) 41.2	2.1 2.9 0.7	- - -
Fencing material of iron and steel, other than of wire (e.g., gates, grilles, fences, standards, trellis) (h)	{ 1951 1948 1937	25.0(f) 17.1(f) 55.5	10.0 3.1 4.3	- - -
Rivets (other than tubular) including bifurcated rivets made from wire (i)	{ 1951 1948	52.0(f) 68.8(f)	5.9 9.8(j)	0.1(j) -
Washers (other than washers assembled with bolts, etc.) (i)	{ 1951 1948	17.0(f) 18.0(f)	2.3 (k)	(k) -
Bolts, whether threaded or not, bolt ends, hexagon or square head set screws and screw studs, hexagon and square nuts, whether tapped or not, and washers assembled with any of these articles (i)		£'000	£'000	£'000
Bright (l)	{ 1951 1948 1937	8,517 6,959 2,719	618 239 79	.. 14 62
Black or metal coated (but not painted, japanned or otherwise coated, except with metal)	{ 1951 1948	15,113 10,371	1,416 762	....
All other kinds	{ 1951 1948	3,351 2,439	973 932	....
Total bolts, etc.	{ 1951 1948 1937	27,692(m) 20,366(m) 7,227(o)	3,006 1,932 597(n)	80(n) 61(n) 313(n)

(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) Sales in 1951 and 1948, and production for sale in 1937.

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

(d) Valued f.o.b.

(e) Valued c.i.f.

(f) Partly estimated.

(g) The 1937 figures exclude jack chain (including mattress chain), mattress hooks and mattress links made of wire.

(h) Described in 1948 and 1937 as 'Fencing material of cast or wrought iron (other than fencing wire)'. (i) The 1951 and 1948 sales figures are exclusive of the recorded unclassified screw machine products.

(j) Including washers (other than washers assembled with bolts, etc.)

(k) Included with rivets (other than tubular) including bifurcated rivets made from wire.

(l) The figures for 1937 and retained imports for 1948 include all bright set screws, screw studs, screws for metal, nuts and assembled washers.

(m) Including unclassified sales.

(n) Described as 'Bolts, whether threaded or not, bolt ends, set screws and screw studs, and other screws for metal, and nuts, whether tapped or not, (including washers assembled with any of these articles).

(o) Including coach screws.

Usage of certain specified purchased materials, 1951

Larger establishments in the United Kingdom

TABLE 12

Materials used	Quantity
	Th. tons
Iron castings in the rough	3.0
Non-alloy steel	
Ingots, billets, blooms and slabs	96.8
Angles, shapes and sections	22.5
Bars and rods	426.5
Hoop and strip (including tape)	25.9
Plates and sheets (other than tin-, terne- and black-plates and sheets and electrical sheets)	
1/8-inch thick and over	22.4
Under 1/8-inch thick	11.2
Wire (single wire)	167.6
Forgings in the rough (other than drop forgings)	7.4
Castings in the rough	1.2
Alloy steel (including high speed steel)	
Ingots, billets, blooms and slabs	89.3
Bars, rods, angles, shapes, sections, girders, joists, beams and pillars (not fabricated)	64.4
Wire (single wire)	7.0
Forgings in the rough (other than drop forgings)	0.6
Drop forgings	0.7
Iron and steel not specified above, except finished parts and scrap	55.6
Aluminium and aluminium alloys in all forms, except finished parts and scrap	Th.cwts. 26.8
Brass and other copper alloys (including nickel silver but excluding other nickel alloys) in all forms, except finished parts and scrap	351.1
Copper in all forms, except finished parts and scrap	31.4
Nickel and nickel alloys (other than nickel silver) in all forms, except finished parts and scrap	3.5
Zinc and zinc alloys in all forms, except finished parts and scrap	17.3

TABLE 13

Employment in September
Larger establishments (a)

	Number					
	United Kingdom			Great Britain		United Kingdom
	1951(b)	1950(b)	1949(b)	1949(c)	1948(d)	1937(d)
Males						
Under 18	2,551	2,516	2,398	..	2,737	7,796
All ages	46,519	46,417	44,347	..	44,520	41,394
Females						
Under 18	1,488	1,343	1,415	..	1,683	5,769
All ages	24,921	23,256	21,961	..	22,797	18,867
Total						
Under 18	4,039	3,859	3,813	..	4,420	13,565
All ages	71,440	69,673	66,308	..	67,317	60,261

(continued overleaf)

TABLE 13 (contd.)

(ii) Administrative, technical and clerical employees (e)							
	United Kingdom			Great Britain	United Kingdom		
	1951	1950	1949	1949 (c)	1948	1937	1935
Males							
Under 18	246	242	203	..	238	449	339
All ages	7,420	6,974	6,508	..	6,327	4,133	3,795
Females							
Under 18	806	733	667	..	747	571	375
All ages	5,236	4,873	4,533	..	4,459	2,225	1,851
Total							
Under 18	1,052	975	870	..	985	1,020	714
All ages	12,656 (f)	11,847 (f)	11,041 (f)	..	10,786 (f)	6,358	5,646

(iii) Total employees							
	United Kingdom			Great Britain	United Kingdom		
	1951	1950	1949	1949 (c)	1948	1937	1935
Males							
Under 18	2,797	2,758	2,601	..	2,975	8,245	6,500
All ages	53,939	53,391	50,855	..	50,847	45,527	37,734
Females							
Under 18	2,294	2,076	2,082	..	2,430	6,340	5,263
All ages	30,157	28,129	26,494	..	27,256	21,092	18,107
Total							
Under 18	5,091	4,834	4,683	..	5,405	14,585	11,763
All ages	84,096 (f)	81,520 (f)	77,349 (f)	..	78,103 (f)	66,619	55,841

(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 (e.g., employees engaged in merchanting):-

Canteen workers 41 Males 843 Females
Other workers 191 Males 132 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) 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					
	United Kingdom			Great Britain	
	1951	1950	1949	1949	1948
Males	112	116	125	..	138
Females	2	5	4	..	6
Total	114	121	129	..	144

Average employment
Larger establishments (a)

TABLE 14							
	United Kingdom			Great Britain	United Kingdom		
	1951	1950	1949	1949 (b)	1948	1937	1935
Operatives	72,071	69,251	67,897	..	67,317	60,261	50,195
Administrative, technical and clerical employees	12,580	11,705	11,100	..	10,786 (c)	6,358 (c)	5,646 (c)
Total	84,651	80,956	78,997	..	78,103	66,619	55,841

(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.

	United Kingdom			Great Britain	United Kingdom		
	1951	1950	1949	1949	1948	1937	1935
Males	134	130	166	..	182	352	359
Females	537	500	408	..	509	112	117
Total	671	630	574	..	691	464	476

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	10,927	87,416	17
Continuous 4 shift systems per 24 hours averaging 6 hours per shift	-	-	-
All 2 shift systems	44,951	434,170	57
Other shift systems	1,500	11,729	9
Total	57,378	533,314	(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	647	69	71,440	27,959	11,450
Percentage of total in trade	100.0	10.7	100.0	39.1	16.0
Percentage of total on returns showing shift-work				100.0	41.0

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

TABLE 16 £'000

	United Kingdom			Great Britain	
	1951	1950	1949	1949(a)	1948
Wages and salaries (b) of					
Operatives	23,513	21,081	19,860	..	18,779
Administrative, technical and clerical employees	6,412	5,403	4,962	..	4,762
Total	29,925	26,484	24,822	..	23,540
Employers' contributions to all National Insurance Schemes	807	764	744	..	594

(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.

£'000

United Kingdom			Great Britain	
1951	1950	1949	1949	1948
91	78	84	..	108

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

TABLE 17 £'000

	United Kingdom		Great Britain	
	1951	1949	1949(a)	1948
Plant, machinery and vehicles				
Acquisitions				
Plant and machinery				
New	2,759	2,405	..	2,696
Second-hand	185	198	..	276
Vehicles				
New	344	182	..	202
Second-hand	123	87	..	58
Total acquisitions	3,412	2,872	..	3,232
Disposals				
Plant and machinery	175	162	..	130
Vehicles	117	80	..	45
Total disposals	292	242	..	175
New building work				
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	660	710	..	577

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

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1951

Note - There were no larger establishments in Northern Ireland in the register for this trade.

Summary
Larger establishments

TABLE 18

	England	Wales	Scotland	Great Britain
	£'000	£'000	£'000	£'000
Gross output (production)	105,113	4,106	8,786	118,004
Cost of materials and fuel used	51,839	1,910	4,723	58,472
Payment for work done on materials given out	1,362	10	44	1,416
Transport payments	1,678	96	216	1,991
Net output	50,234	2,089	3,802	56,125
Wages and salaries of persons employed	26,738	1,259	1,928	29,925
Average number of persons employed (a)	No.	No.	No.	No.
	75,267	3,749	5,749	84,765
Net output per person employed (a)	£	£	£	£
	667	557	661	662
Stocks at end of year	£'000	£'000	£'000	£'000
Products on hand for sale and work in progress	7,082	374	484	7,940
Materials and fuel	10,108	514	691	11,313
Number of establishments	No.	No.	No.	No.
	624	17	46	687

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

	£'000	£'000	£'000	£'000
Output of firms in this trade				
Total value of sales (see Table 20)	104,517	4,025	8,790	117,331
Changes in stocks and work in progress (see Table 21)	+ 596	+ 81	- 4	+ 673
Gross output (production)	105,113	4,106	8,786	118,004
Materials and fuel used by firms in this trade				
Purchases	53,736	2,036	4,834	60,606
Changes in stocks (see Table 21)	- 1,897	- 126	- 111	- 2,134
Materials and fuel used	51,839	1,910	4,723	58,472

(a) Excluding outworkers but including working proprietors.

Summary
Small firms in Great Britain (a)

TABLE 19

	England	Wales	Scotland	Great Britain
Number of returns	1,750	132	545	2,427
Average number of persons employed (b)				
Males	4,537	214	1,270	6,021
Females	554	3	58	615
Total	5,091	217	1,328	6,636

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

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Sales in the trade
Larger establishments

TABLE 20

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Th. tons	£'000	Th. tons	£'000	Th. tons	£'000
Principal products						
Iron and steel						
Chains (excluding transmission chains)						
Shackles, forged or cast, and other gear (e.g., swivel pieces, slips) for use with chain cable, mooring, hauling or lifting gear	..	(a)	..	(a)	3.7	422
Chain tackle	..	(a)	..	(a)	2.9	384
Welded and forged chain, unstudded						
Of steel, electrically welded	..	(a)	..	(a)	6.2	680
Of iron, hand-made						
Other chains, not elsewhere specified (including crane chains, wrought iron and steel)	..	(a)	..	(a)	30.5	2,768
					..	244
Ships' stud-link chain cable						
Anchors and grapnels and parts thereof	..	(a)	..	(a)	3.4	257
Springs						
Laminated						
For road vehicles	42.7	4,095	0.9	119	43.5	4,214
For locomotives, carriages and wagons	..	(a)	..	(a)	7.8	552
Other	0.6	146	-	-	0.6	146
	..	165			..	165
Other than laminated						
Upholstery and mattress springs (including spring seating and mattress interiors)	..	(a)	..	(a)	25.6	3,408
					..	676
Valve, shock absorber and similar engine springs	..	(a)	..	(a)	3.8	914
					..	97
Other	..	(a)	..	(a)	12.3	3,072
					..	743
Unclassified	..	(a)	..	(a)	1.0	300
					..	311
Fencing material of iron and steel, other than of wire (e.g., gates, grilles, fences, standards, trellis)	12.8	1,348	2.7	267	15.6	1,615
	..	111	..	9	..	120
Boot and shoe grindery						
Made from wire	..	(a)	..	(a)	6.1	597
Other (including clog irons)						
Studs and spikes (other than boot and shoe studs and spikes and screw studs)	..	(a)	..	(a)	2.0	167
					..	94
Nails, including cut nails	9.0	474	5.8	291	14.8	766
Tacks	4.2	419	1.2	100	5.4	519
Horse shoes (sold as such)	1.9	111	-	-	1.9	111
Rivets (other than tubular or bifurcated rivets manufactured from wire)						
Of ½ inch in diameter or over	..	(a)	..	(a)	35.6	1,338
Under ½ inch in diameter						
Unclassified	..	(a)	..	(a)	6.5	451
					..	245
Bifurcated rivets made from wire						
Washers (other than washers assembled with bolts, etc.); and tubular rivets	..	(a)	..	(a)	..	1,605

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TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
		£'000		£'000		£'000
Principal products (contd.)						
Iron and steel (contd.)						
Bolts, whether threaded or not, bolt ends, hexagon or square head set screws and screw studs, hexagon and square nuts, whether tapped or not, and washers assembled with any of these articles						
	Th. gross		Th. gross		Th. gross	
	9,916		9,916		9,916	
	Th. tons	2,867	Th. tons	10	Th. tons	2,867
	16.3		8		16.3	
Bright	Th. gross		Th. gross		Th. gross	
	5,220	2,285	5.4	441	5,228	2,295
	Th. tons		..	30	Th. tons	
	9.1	1,960			14.6	2,401
	..	775			..	806
	Th. gross				Th. gross	
	8,337				8,337	
	Th. tons	5,391			Th. tons	5,391
	61.6		26.8	1,941	61.6	
Black or metal coated (but not painted, japanned or otherwise coated, except with metal)	Th. gross				Th. gross	
	7,191	2,168			7,191	2,168
	Th. tons				Th. tons	
	73.6	5,612			100.4	7,553
					Th. gross	
					3,730	
					Th. tons	2,073
					11.6	
All other kinds; and unclassified	..	(a)	..	(a)	Th. gross	
					1,097	530
					Th. tons	
					2.4	346
					..	576
Other set screws, screw studs and screws for metal, nuts, and washers assembled with any of these articles						
	Th. gross				Th. gross	
	766				766	
	Th. tons	537			Th. tons	537
	3.8				3.8	
Black or metal coated (but not painted, japanned or otherwise coated, except with metal)	Th. gross				Th. gross	
	10,110	1,885			10,110	1,885
All other kinds						
	..	(a)	..	(a)	13,485	
					Th. tons	1,221
					7.7	
Screws for wood; screw hooks, screw rings and screw knobs; and coach screws so far as recorded separately					Th. gross	
					49,943	4,407
					..	161
	Th. tons				Th. tons	
	2.1	567			2.1	567
Hooks, fasteners and shackles, not elsewhere specified; and saddlery hardware, not elsewhere specified	..	554			..	554
Moulders' chaplets	..	(a)	..	(a)	0.6	86
Forgings, not elsewhere specified						
Iron, in the rough and machined	..	(a)	..	(a)	0.6	63
					..	106
Steel drop forgings, in the rough and machined						
Of alloy steel	..	(a)	..	(a)	91.0	12,829
Of non-alloy steel	..	(a)	..	(a)	136.9	14,081
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver)					Th. cwts.	
Rivets (other than tubular) and washers	..	(a)	..	(a)	16.0	331
Bolts and nuts; and tubular rivets	..	(a)	..	(a)	..	1,473

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TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value £'000	Quantity	Value £'000	Quantity	Value £'000
Principal products (contd.)						
Brass (including all alloys of copper, but excluding nickel alloys other than nickel silver) (contd.)						
Nails and tacks; screws for wood; and coach screws, screw hooks, screw rings, screw knobs, and screws for metal, so far as recorded separately	Th.cwts. 8.6 ..	148 895	Th.cwts. 0.5	8	Th.cwts. 9.1 ..	156 895
Springs	..	(a)	..	(a)	..	52
Copper						
Nails and tacks	..	(a)	..	(a)	11.3	192
Tubular rivets	Mill. 361	174	-	-	Mill. 361	174
Rivets (other than tubular) and washers	Th.cwts. 6.8 ..	153 27	-	-	Th.cwts. 6.8 ..	153 27
Springs	..	30	-	-	..	30
Other manufactures						
Rivets of aluminium; and taper pins of all metals	20.8 ..	473 653	-	-	20.8 ..	473 653
Screw machine products (e.g., turned screws, rivets, washers), unclassified	Th.gross				Th.gross	
Of iron and steel	4,301 ..	1,121 1,462	-	-	4,301 ..	1,121 1,462
Of other metals, including copper and copper alloys	14,230 ..	3,634 1,000	-	-	14,230 ..	3,634 1,000
Other screws, nuts, bolts, nails, etc., not of iron, steel, brass or copper	..	23	..	3	..	26
General and jobbing work (including repair work, wheelwrighting and horse-shoeing) (b)		871		198		1,069
Work done for the trade or on commission (b)						
Proving chain cables and anchors		154		21		175
Other		377		-		377
Total principal products		96,220		7,839		104,059
Other output						
Manufactures of iron and steel						
Wire nails and tacks (including staples, other than insulated)	Th.tons ..	(a)	Th.tons ..	(a)	Th.tons 5.1	356
Tools and implements	..	882	-	-	..	882
Railway material (including axles, tyres and wheels)	6.7 ..	439 7	4.1	208	10.9 ..	647 7
Stampings and pressings	..	(a)	..	(a)	6.4 ..	947 208
Builders' ironmongery	..	(a)	..	(a)	2.2	168
Fabricated iron and steel	..	(a)	..	(a)	..	319

TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value £'000	Quantity	Value £'000	Quantity	Value £'000
Other output (contd.)						
Manufactures of iron and steel (contd.)						
Steel forgings, other than drop forgings						
Of alloy steel						
In the rough	..	(a)	..	(a)	3.9	563
Machined	0.1	47	-	-	0.1	47
Of non-alloy steel						
In the rough	9.4	802	-	1	9.4	803
Machined	5.4	549	-	-	5.4	549
Other iron and steel manufactures, not elsewhere specified	..	1,833	..	21	..	1,854
Manufactures of non-ferrous metals, not elsewhere specified						
Stampings and pressings	0.2	150	-	-	0.2	150
Other						
Of brass	..	(a)	..	(a)	..	103
Of other non-ferrous metals	..	108	-	-	..	108
Parts and accessories of motor vehicles and cycles	..	1,540	..	1	..	1,541
Principal products of the mechanical engineering trades						
Agricultural machinery (other than tractors) and parts	..	(a)	..	(a)	..	304
Machine tools and parts	..	(a)	..	(a)	..	210
Other machinery and parts	..	(a)	..	(a)	..	442
Other goods	..	588	..	8	..	595
Scrap metals sold						
Iron and steel	197.3	900	21.1	91	218.3	991
Brass	..	(a)	..	(a)	6.8	1,089
Copper	0.2	26	-	1	0.2	27
Other metals	1.1	101	0.1	13	1.2	113
Work done (b)		212		36		249
Total		108,542		8,790		117,331

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

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

Larger establishments

TABLE 21

		England and Wales	Scotland	Great Britain
Products on hand for sale	{ at beginning of year	3,760	262	4,022
	{ at end of year	3,837	266	4,103
Work in progress	{ at beginning of year	3,019	226	3,245
	{ at end of year	3,619	218	3,837
Total products on hand for sale and work in progress	{ at beginning of year	6,780	488	7,267
	{ at end of year	7,456	484	7,940
Materials and fuel	{ at beginning of year	8,598	580	9,179
	{ at end of year	10,622	691	11,313

Employment in September
Larger establishments (a)(b)

TABLE 22
(i) Operatives

	England and Wales	Scotland	Great Britain
Males			
Under 18	2,246	305	2,551
All ages	42,891	3,628	46,519
Females			
Under 18	1,408	80	1,488
All ages	23,632	1,289	24,921
Total			
Under 18	3,654	385	4,039
All ages	66,523	4,917	71,440

(ii) Administrative, technical and clerical employees

	England and Wales	Scotland	Great Britain
Males			
Under 18	222	24	246
All ages	6,946	474	7,420
Females			
Under 18	762	44	806
All ages	4,975	261	5,236
Total			
Under 18	984	68	1,052
All ages (c)	11,921	735	12,656

(iii) Total employees

	England and Wales	Scotland	Great Britain
Males			
Under 18	2,468	329	2,797
All ages	49,837	4,102	53,939
Females			
Under 18	2,170	124	2,294
All ages	28,607	1,550	30,157
Total			
Under 18	4,638	453	5,091
All ages (c)	78,444	5,652	84,096

(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 (e.g., employees engaged in merchandising) are shown in Table 22(v) below.

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

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

(iv) Working proprietors

	England and Wales	Scotland	Great Britain
Males	95	17	112
Females	2	-	2
Total	97	17	114

(v) Excluded employees

	England and Wales	Scotland	Great Britain
Canteen workers			
Males	39	2	41
Females	806	37	843
Total	845	39	884
Other workers			
Males	191	-	191
Females	131	1	132
Total	322	1	323
Total excluded employees	1,167	40	1,207

(90501/1)

Average employment
Larger establishments (a)

TABLE 23

	England and Wales	Scotland	Great Britain
Operatives	67,067	5,004	72,071
Administrative, technical and clerical employees	11,852	728	12,580
Total	78,919	5,732	84,651

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

	England and Wales	Scotland	Great Britain
Males	134	-	134
Females	537	-	537
Total	671	-	671

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

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

Larger establishments

TABLE 24

	England and Wales	Scotland	Great Britain
Wages and salaries (a) of			
Operatives	21,943	1,570	23,513
Administrative, technical and clerical employees	6,054	358	6,412
Total	27,997	1,928	29,925
Employers' contributions to all National Insurance Schemes	752	55	807

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

£'000		
England and Wales	Scotland	Great Britain
91	-	91

(90501/1)

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

Larger establishments

	England and Wales	Scotland	Great Britain
Plant, machinery and vehicles			
Acquisitions			
Plant and machinery			
New	2,569	190	2,759
Second-hand	175	10	185
Vehicles			
New	330	15	344
Second-hand	119	4	123
Total acquisitions	3,194	218	3,412
Disposals			
Plant and machinery	165	9	175
Vehicles	115	3	117
Total disposals	280	12	292
New building work			
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	625	34	660

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

Larger establishments

	England and Wales	Scotland	Great Britain
Amounts paid to other firms and undertakings	1,682	216	1,898
Amount paid or credited to firms' own separate transport organisations	92	1	93
Total	1,774	216	1,991

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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