

## THE CHAIN, NAIL, SCREW, AND MISCELLANEOUS FORGINGS TRADES

### INTRODUCTORY

These trades comprise firms that were engaged wholly or mainly in the manufacture of anchors, chains, springs, bolts, nuts, nails, screws, and other forgings.

**Table I A.—General summary**

Particulars	1935	1934	1933	1930†	1924†
	£'000	£'000	£'000	£'000	£'000
Value of products (Gross output)...	21,357	18,991	14,382	16,465	14,395
Cost of materials, fuel and electricity used ... ..	10,536	9,491	7,053	8,319	7,408
Amount paid for work given out ... ..	186	105	86	97	82
Net output ... ..	10,635	9,395	7,243	8,049	6,905
	No.	No.	No.	No.	No.
Average number of persons employed (excluding outworkers)...	56,783	52,706	44,943	47,414	37,692
	£	£	£	£	£
Net output per person employed (excluding outworkers) ... ..	187	178	161	170	183
	No.	No.	No.	No.	No.
Number of returns ... ..	541	*	*	482	475
Number of establishments ... ..	570	*	*	538	*

\* Not available.

† The figures relate to Great Britain only, particulars of the small production in Northern Ireland not being available.

**Table I B.—Firms employing not more than ten persons on the average**

Particulars	1935	1930*	1924
	No.	No.	No.
Number of returns received ... ..	6,136	7,089	6,894
Average number of persons employed :—			
Males ... ..	13,145	14,987	14,483
Females ... ..	507	551	532
TOTAL ... ..	13,652	15,538	15,015
Number of firms not making returns ... ..	8	566	2,490

\* Great Britain only.

Particulars of the output of the small firms that made returns at the 1924 Census are shown below. The value of the gross output of these firms was £3,233,000, of which £2,761,000 was in respect of horse-shoes, horse-shoeing and general blacksmiths' work. The latter figure represented about 82 per cent. of the total returned on all schedules for this class of work. The limitation of the scope of the Census to firms

employing more than ten persons therefore led to the practical exclusion of this description of work from the Census. The output of other goods by the small firms in 1924 represented barely 2.5 per cent. of the total.

Output	Value	Proportion of total
	£'000	Per cent.
Iron and steel:—		
Chains and chain cables (including transmission chains)	95	3.6
Nails, tacks, bolts, screws, etc. ... ..	63	0.9
Horse-shoes and horse-shoeing ... ..	576	80.0
Fencing material ... ..	57	6.0
Builders' ironmongery ... ..	62	23.4
Other manufactures of iron and steel ... ..	153	2.7
Other goods made ... ..	16	0.1
General blacksmiths' work* ... ..	2,185†	81.8
Other work ... ..	26†	48.1
TOTAL ... ..	3,233	18.3

\* Including repair work and also horse-shoeing when this was not included with horse-shoes and horse-shoeing above.

† Amount received.

**Table II.—Size of establishments in 1935**

Size of establishment (average number employed)	Number of establishments	Gross output	Net output	Number of persons employed (excluding outworkers)	Net output per person employed
	No.	£'000	£'000	No.	£
11-24 ... ..	147	845	443	2,550	174
25-49 ... ..	155	2,123	1,074	5,489	196
50-99 ... ..	125	3,123	1,559	8,897	175
100-199 ... ..	73	3,647	1,769	9,888	179
200-299 ... ..	34	3,509	1,716	8,490	202
300-399 ... ..	20	2,823	1,326	6,846	194
400-499 ... ..	4	622	322	1,800	179
500-749 ... ..	4	953	352	2,269	155
750 and over ... ..	8	3,712	2,074	10,554	197
TOTAL ... ..	570	21,357	10,635	56,783	187



Table III.—Particulars of output, etc., in each of the principal areas of the United Kingdom

Area*	Number of establishments†	Gross output	Net output	Number of persons employed (excluding outworkers)	Net output per person employed
	No.	£'000	£'000	No.	£
1 ...	1935 64	1,275	737	4,185	176
	1930 47	915	526	3,057	172
2 ...	1935 47	1,679	956	4,843	197
	1930 50	1,549	864	4,830	179
3 ...	1935 58	2,140	963	5,402	178
	1930 49	1,699	795	4,483	177
4 ...	1935 11	300	113	585	194
	1930 13	376	135	829	162
5 ...	1935 312	12,880	6,583	34,989	188
	1930 260	9,897	4,861	29,315	166
6 ...	1935 9	482	275	1,079	255
7 ...	1935 4	38	19	114	164
8-II and 18	1935 14	459	212	933	227
6-II and 18	1935 27	979	506	2,126	238
	1930 21	543	289	1,167	248
12 and 13	1935 7	485	139	832	167
	1930 7	245	101	628	161
14...	1935 34	1,322	513	3,088	166
	1930 26	1,036	392	2,616	150
15...	1935 5	121	57	287	199
16 and 17	1935 5	176	68	446	153
15-17...	1935 10	297	125	733	171
	1930 9	205	86	489	176
TOTAL ...	1935 570	21,357	10,635	56,783	187
	1930 482	16,465	8,049	47,414	170

\* For particulars see page xviii.

† Number of returns for 1930.

‡ Excluding Northern Ireland.

Table IV.—Sub-divisions of the industry

Group	Number of establishments*	Gross output	Value of characteristic products	Net output	Number of persons employed (excluding outworkers)	Net output per person employed
	No.	£'000	£'000	£'000	No.	£
Anchor, chain-cables and chains, other than transmission chains	1935 42	931	721	491	2,437	202
Transmission chains	1935 6	735	559	531	2,158	246
Total:—						
Anchor, chain-cables and chains	1935 48	1,666	1,308	1,022	4,595	223
	1930 42	2,032	1,728	1,083	5,218	208
Springs ...	1935 76	2,501	2,171	1,373	7,493	183
	1930 46	1,350	1,296	743	3,851	193
Fencing material	1935 39	585	482	298	1,724	173
	1930 30	615	475	332	1,664	200
Nails, tacks, rivets, washers, etc. ...	1935 75	3,962	3,153	1,965	9,020	218
	1930 57	2,028	1,585	734	4,596	160
Bolts, nuts and screws	1935 109	5,405	4,700	2,492	16,248	153
	1930 91	3,988	3,362	1,775	13,325	133
Other output	1935 223	7,238	...	3,485	17,703	197
	1930 216	6,452	...	3,382	18,760	180
TOTAL ...	1935 570	21,357	...	10,635	56,783	187
	1930 482	16,465	...	8,049	47,414	170

\* Number of returns for 1930.

## PRODUCTION

Table V.—Output of principal products

Kind of output	1935			1934	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Iron and steel:—					
Anchor and grapnels and parts thereof ...	2.7	59	13	2.7	60
Ships' chain cables ...	9.3	279	21	7.5*	213*
Chains:—					
Steel transmission† ...	4.5	924	21	5.2	971
Other welded and forged chain ...	8.5	293	31	9.8	401
Mattress and jack chain and similar chain made from wire ...	1.2	32	6		
Other chain ...	3.5	206	26		
Total—Anchor and chains	29.7	1,793	...	25.2	1,645



Kind of output	1935			1934	
	Quantity	Value	Entries	Quantity	Value
Iron and steel:— <i>contd.</i>	Th. tons	£'000	No.	Th. tons	£'000
Springs:—					
Springs for small arms, clocks, watches, motor cars, motor cycles, musical instruments and ordnance	10.4	657	52	10.9	626
Springs for locks and latches	0.1	11	10	0.1	7
Other springs:—					
Laminated ... ..	34.0	1,053	44	26.4	862
Coil:—					
Upholstery and mattress springs ... ..	11.1	350	37	8.0	280
Other ... ..	9.6	642	52	8.8†	588
Total—Springs ... ..	65.2	2,713	...	54.2	2,363
Fencing material (other than fencing wire) of cast or wrought iron:—					
Standards ... ..	6.2	102	72	4.4	71
Other sorts (i.e., gates, grilles, fences, trellis, etc.) ... ..	44.0	945	132	34.5	781
Total—Fencing material	50.2	1,047	...	38.9	852
Shoe nails and rivets ... ..	4.8	127	17	} 31.7	} 659
Hob nails, boot and shoe studs and spikes ... ..	1.5	52	7		
Cut nails ... ..	20.6	300	20		
Tacks ... ..	6.4	224	21		
Other nailsφ ... ..	5.6	143	23		
Bifurcated rivets manufactured from wire ... ..	1.4	124	3	§	§
Rivets (other than shoe rivets and bifurcated rivets manufactured from wire) and washers (other than washers assembled with bolts, etc.)...	65.2	991	84	61.0§§	1,000§§
Total—Nails, rivets and washers... ..	105.5	1,961	...	92.7	1,659
Screws for wood ... ..	Th. gross 24,270 Th. tons 11.0	} 710	} 7	Th. gross 24,169	} 664
Coach screws ... ..	Th. gross 103 Th. tons 1.2			} 26	
Bolts and nuts (including screws for metals)¶:—				Th. tons	
Bright ... ..	23.9	1,584	85	24.5	1,619
Other than bright ... ..	125.5	2,889	92	110.3	2,332
Total—Screws, bolts and nuts, of iron and steel	...	5,484	...	...	4,822
Heel and toe tips (holed for fitting)   ... ..	0.7	20	5	} 3.3**	} 140**
Studs and spikes and boot and shoe tips and protectors, not elsewhere specified ... ..	2.1	84	9		
Clog irons   ††... ..	0.6	18	6		
	...	6	1		

Kind of output	1935			1934	
	Quantity	Value	Entries	Quantity	Value
Iron and steel:— <i>contd.</i>	Th. tons	£'000	No.	Th. tons	£'000
Hooks, fasteners and shackles:—					
Fasteners for machinery belting ... ..	1.0	84	9	} 0.6	} 78
Other descriptions ... ..	...	18	2		
Horse shoes, sold ... ..	2.5	85	17	2.3	72
Frost cogs of iron and steel  ...	5.2	81	10	...	23
Saddlery hardware, not elsewhere specified ... ..	0.4	23	6	5.7	80
Springing and spring seating	1.1	114	19	§	§
Forgings (including drop forgings), not elsewhere specified:—	3.4	182	7	1.8	167
Of iron ... ..	...	50	4	...	27
Of steel ... ..	97.3	4,021	89	1.1	21
TOTAL—Manufactures of iron and steel ... ..	...	17,967	...	...	127
Brass:—					
Nails and tacks ... ..	0.6	50	17	7.6	259
Rivets and washers ... ..	0.6	93	33	86.3	3,391
Bolts and nuts ... ..	2.5	387	44	...	...
Screws for wood ... ..	Th. gross 3,376 Th. tons 1.5	107	9	...	...
Copper:—					
Nails and tacks ... ..	0.6	50	19	2.0	275
Rivets and washers ... ..	0.6	75	19	...	441
Bolts, nuts and screws ... ..	0.1	8	14	...	...
Forgings (including drop forgings), other than of iron or steel ... ..	0.2	34	8	...	18
TOTAL—Manufactures of non-ferrous metals ... ..	...	1,077	...	...	1,019
Repair and jobbing work (including wheelwrighting and horse-shoeing) ... ..	...	81††	68	...	38††
Work done for the trade ... ..	...	59††	24	...	27††
TOTAL—PRINCIPAL PRODUCTS	...	19,184	...	...	16,810

\* Described as ships' cables.

† Including steel transmission chains for vehicles.

‡ Corrected figure.

φ Except wire nails and staples, for which see the Wire Trade (page 147).

§ Not recorded separately.

§§ Described as rivets and washers.

¶ Described in 1935 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).

|| So far as recorded separately.

\*\* Described as heel tips, boot protectors, boot plates and clog irons.

†† Excluding clog irons returned by clog makers on schedules for the Boot and Shoe Trade (see page 443, Part I).

‡‡ Amount received.



The figures shown in the preceding table include the following output recorded by firms whose returns were made on schedules for other trades and are not, therefore, included in Table I A.

Kind of output	1935			1934	
	Quantity	Value	Entries	Quantity	Value
	Th. tons	£'000	No.	Th. tons	£'000
Iron and steel :—					
Anchors and grapnels and parts thereof ...	0.1	3	1	0.1	2
Chains :—					
Steel transmission ...	2.5	383	10	2.4	383
Other welded and forged chain ...	0.1	4	1	0.2	7
Mattress and jack chain and similar chain made from wire ...	0.1	4	2		
Other chain ...	0.5	30	7		
Springs :—					
For small arms, clocks, watches, motor cars, motor cycles, musical instruments and ordnance	1.8	92	8	2.7	117
Other springs :—					
Laminated ...	10.1	333	15	6.5	228
Coil :—					
Upholstery and mattress springs ...	5.4	163	15	3.8	123
Other ...	1.7	93	10	0.8	54
Fencing material (other than fencing wire) of cast or wrought iron :—					
Standards ...	3.2	51	43	2.4	33
Other sorts ...	13.8	291	71	11.1	252
Nails and tacks (other than wire nails and staples) ...	0.4	7	5	0.3	3
Rivets and washers ...	7.7	103	17	7.0	92
Bolts and nuts (including screws for metal) :—					
Bright ...	0.9	76	1	0.9	64
Other than bright ...	1.9	59	11	1.4	30
Heel tips, boot protectors, studs, spikes and clog irons	0.5	16	5	0.4	15
Hooks, fasteners and shackles (other than for machinery belting) ...	0.3	10	3	0.3	10
Saddlery hardware not elsewhere specified ...	*	5	3	...	4
Springing and spring seating {	0.2	5	1	0.5	8
Forgings (including drop forgings), not elsewhere specified :—	...	23	2		
Of iron ...	3.1	90	79	2.5	78
Of steel ...	0.1	4	1	0.1	3
Brass :—					
Nails and tacks ...	*	1	1	0.2	1
Rivets and washers ...	*	5	2	1.0	6
Bolts, nuts and screws ...	0.3	35	2	0.4	22
Copper :—					
Nails and tacks ...	*	3	1	3.6	24
Rivets and washers ...	0.2	15	2	0.6	5
Forgings (including drop forgings) other than of iron and steel ...	0.1	10	2	—	—
Repair and jobbing work ...	...	12†	28	—	—
TOTAL ...	...	1,936	...	...	1,570

\* Less than 50 tons.

† Amount received.

Table VI.—Average values of goods produced, exported and imported

Kind of goods	Production (at factory)		1935 as a percentage of 1934	Exports (f.o.b.)		Imports (c.i.f.)	
	Average value			Average value	Average value		
	1935	1934	Per cent.	1935	1934	1935	1934
Iron and steel :—	£ per ton	£ per ton	Per cent.	£ per ton	£ per ton	£ per ton	£ per ton
Anchors and grapnels and parts thereof...	22.2	22.7	97.8	25.3	24.9	13.4	13.2
Ships' chain cables ...	30.0	28.3*	105.9	27.1	28.2	27.9	...
Chains :—							
Steel transmission	205.3	186.2	110.2	203.5	198.6	93.3	101.8
Other ...	39.8	41.1	96.8	36.5	35.1	24.7	24.2
Springs :—							
For small arms, clocks, watches, motor cars, motor cycles, musical instruments and ordnance ...	63.1	57.5	109.7	†	†	†	†
Other springs ‡ :—							
Laminated ...	31.0	32.7	94.9	31.8	35.5	...	...
Coil :—							
Upholstery and mattress springs	31.6	35.1	90.0	39.4	49.0	21.0	20.9
Other ...	66.7	66.6	100.1	51.5	52.0	75.3	...
Fencing material (other than fencing wire) of cast or wrought iron :—							
Standards ...	16.6	16.2	102.1	16.5	15.9	...	...
Other sorts (i.e., gates, grilles, fences, trellis, etc.)	21.5	22.7	94.8				
Nails and tacks (other than wire nails and staples) ...	21.8	20.8	104.7	27.8	26.9	22.4	31.6
Rivets and washers §	16.7	16.4	101.9	19.4	20.0	12.5	20.0
Screws for wood	£ per th. gross	£ per th. gross	109.8	52.2	60.7	45.8	46.8
	30.2	27.5					
	£ per ton	£ per ton	...				
	60.4	†	...				
Bolts and nuts (including screws for metals) :—							
Bright ...	66.3	66.0	100.5	51.7	55.5	227.0	140.3
Other than bright	23.0	21.1	108.8	25.5	24.5	27.1	21.2
Horse shoes ...	15.7	14.2	110.5	26.7	26.5	...	...
Saddlery hardware ...	100.8	93.5	107.8				
Brass :—							
Nails and tacks ...	84.0	86.2	97.4	†	†	†	†
Rivets and washers...	152.2	180.7	84.2				
Copper :—							
Nails and tacks ...	72.6	88.0	82.5				
Rivets and washers...	115.9	139.3	83.2				

\* Described as ship's cables.

† Not recorded separately.

‡ Except springs for locks and latches.

§ The figures for the two years are not strictly comparable—see footnote (§§) to Table V.



Table VII.—Volume of Production, 1924-1935

Kind of output	Total production			Production index (1935=100)			
	1935 as returned	1934		1924	1930	1933	1934
		As returned	At 1935 average values				
	£'000	£'000	£'000	Per cent.	Per cent.	Per cent.	Per cent.
Iron and steel :—							
Anchors and grapnels and parts thereof...	59	60	59	177	227	100	100
Ships' chain cables ...	279	213	226	209	225	63	81
Chains :—							
Steel transmission	924	971	1,070	141	171	92	116
Other ...	531	401	388		74	58	73
Springs and spring seating ...	2,945	2,511	2,454	92	79	58	83
Fencing material of cast or wrought iron :—							
Standards ...	102	71	72	70	51	45	70
Other sorts ...	945	781	740	74	79	56	78
Nails and tacks (other than wire nails and staples) ...	846	659	690	108	68	69	82
Rivets and washers...	1,115	1,000	1,019		132	69	91
Bolts, nuts and screws	5,484	4,822	5,266	85	86	82	96
Heel and toe tips, studs and spikes, and clog irons ...	128	140	119	120	122	105	94
Fasteners, hooks and shackles ...	187	173	161	77	85	76	86
Horse shoes and frost cogs ...	104	80	105	112	96	90	101
Saddlery hardware ...	114	194	209	406	213	151	183
Forgings (including drop forgings) ...	4,204	3,650	3,832	*	64	58	91
Brass and copper :—							
Nails, tacks, rivets and washers ...	268	282	246	101	99	82	92
Bolts, nuts and screws	775	719	909	74	66	90	117
Forgings, including drop forgings, other than of iron and steel ...	34	18	28	80	174	117	82
Work done ...	140	65	66	128	78	29	47
TOTAL ...	19,184	16,810	17,659	78	88	70	92

\* Goods falling under this description cannot be completely identified for 1924 and no figure is therefore inserted here.

Table VIII.—Production in relation to Exports and Imports

Kind of goods	Production	Exports	Proportion of production exported	Retained imports	Avail-	Share
					able for use in the United Kingdom	of home market held by British goods
	Th. tons	Th. tons	Per cent.	Th. tons	Th. tons	Per cent.
Iron and steel :—						
Anchors and grapnels and parts thereof ...	1935 2.7 1934 2.7	2.0 2.1	73.6 78.0	0.3 0.5	1.0 1.1	67.7 56.3
Ships' cables ...						
Chains :—	1935 9.3* 1934 7.5	0.9 0.9	10.2 12.4	0.2 0.0	8.6 6.6	98.2 100.0
Steel transmission† ...						
Other chains‡ ...	1935 4.5 1934 5.2	1.4 1.5	30.5 28.3	0.2 0.1	3.3 3.8	95.1 96.9
Springs§ :—						
Laminated ...	1935 13.2 1934 9.8	6.0 4.8	45.2 49.0	0.8 1.3	8.2 6.3	89.9 79.6
Coil :—						
Upholstery and mattress springs	1935 34.0 1934 26.4	1.1 0.8	3.2 3.2	0.0 0.0	32.9 25.6	100.0 99.9
Other ...						
Fencing material (other than fencing wire) of cast or wrought iron	1935 11.1 1934 8.0	0.6 0.4	5.3 5.7	0.4 0.4	10.9 8.0	96.0 94.6
Nails, tacks and staples (other than wire nails and staples), including hobnails, boot and shoe studs and spikes						
Rivets and washers	1935 9.6 1934 8.8	0.9 0.8	9.8 8.9	0.1 0.0	8.8 8.0	99.4 99.8
Bolts and nuts (including screws for metals)¶ :—						
Bright... ..	1935 50.2 1934 38.9	2.8 3.1	5.5 8.0	0.0 0.0	47.4 35.8	100.0 99.9
Other than bright						
Studs and spikes (other than boot and shoe studs and spikes and screw studs) and boot and shoe tips and protectors (other than protectors holed for fitting) ...	1935 38.9 1934 31.7	6.2 5.7	16.0 18.0	2.6 1.2	35.3 27.2	92.6 95.7
Screws for wood						
Value (at factory)	1935 66.6 1934 61.0	8.5 7.6	12.7 12.5	2.0 0.8	60.1 54.2	96.7 98.5
Value (f.o.b.)						
Value (c.i.f.)	1935 28.1** 1934 27.7**	1.1 1.0	3.9 3.4	0.1 0.3	27.1 27.0	99.4 98.9
Value (c.i.f.)						
Value (c.i.f.)	1935 125.5 1934 110.3	16.3 15.0	13.0 13.6	4.0 5.8	113.2 101.1	96.5 94.2
Value (c.i.f.)						
Value (c.i.f.)	1935 2.1 1934 2.1	0.9 0.9	44.8	0.0	1.2	100.0
Value (c.i.f.)						
Value (c.i.f.)	1935 710 1934 664	146 122	...	63 74	...	...
Value (c.i.f.)						

\* Described as ship's chain cables.

† Including steel transmission chains for road vehicles.

‡ The figures for exports and imports exclude chain of wire.

§ Excluding springs for small arms, clocks, watches, motor cars, motor cycles, musical instruments, ordnance, locks and latches.

¶ Described as nails and tacks (other than wire nails).

¶ See footnote (¶) to Table V.

\*\* Including estimates for output returned by value only.



**Table IX.—Other output of the Chain, Nail, Screw and Miscellaneous Forgings Trades**

The value of the gross output of the firms whose returns were made on schedules for the Chain, Nail, Screw and Miscellaneous Forgings Trades was £21,357,000 in 1935 and £18,991,000 in 1934, of which £17,248,000 in 1935 and £15,240,000 in 1934 consisted of products included in Table V. Particulars of the remaining items are shown below.

Kind of output	1935		1934	
	£'000		£'000	
Manufactures of iron and steel :—				
Wire nails (including staples) ... ..	390		379	
Tools and implements (including machine tools)...	19		12	
Iron and steel castings ... ..	124		83	
Railway material (including tyres and axles) ...	295		238	
Iron and steel stampings ... ..	174		244	
Builders' ironmongery ... ..	249		292	
Bolts, hasps and hinges of metal ... ..	42	}	710	
Gears and gear wheels, other than for vehicles ...	37			
Fabricated iron and steel ... ..	73			
Other iron and steel manufactures ... ..	676			
Manufactures of non-ferrous metals :—				
Stampings ... ..	120		149	
Other manufactures ... ..	435		444	
Vehicles and parts and accessories (except axles) ...	458		422	
Products of the Mechanical Engineering Trade ...	409		291	
Other goods made ... ..	181		109	
Scrap metal sold :—				
Iron and steel ... ..	313		254	
	(134,500 tons)		(117,700 tons)	
Brass ... ..	60		69	
	(3,100 tons)		(4,300 tons)	
Copper... ..	14		4	
Other metals ... ..	8		6	
Work done :—				
Constructional engineering ... ..	24*		38*	
Galvanising ... ..	8*		7*	
TOTAL ... ..	4,109		3,751	

\* Amount received.

**MATERIALS AND FUEL****Table X A.—Materials, fuel and electricity purchased and used**

Kind of materials, etc.	1935		1934	
	Quantity	Cost	Quantity	Cost
	Th. tons	£'000	Th. tons	£'000
Iron :—				
Bars ... ..	48.6	431	42.6	350
Wire and rods ... ..	9.5	129	10.5	132
Other kinds ... ..	15.2	133	18.3	161
Steel :—				
Bars ... ..	384.9	3,619	334.7	3,135
Wire and rods ... ..	108.0	1,368	97.5	1,228
Other kinds ... ..	151.3	1,381	133.1	1,280
Copper (in all forms) ... ..	1.7	82	1.5*	80
Brass (in all forms) ... ..	12.8	605	11.8	557
Fuel and electricity used for all purposes :—				
Coal ... ..	254.7	218	}	2,568
Coke ... ..	74.2	103		
Heavy fuel oil ... ..	12,450	209		
	Th. B.T.U. (Kw.-hrs.)			
Purchased electricity† ... ..	84,762	272		
All other purchased materials and fuel ... ..		1,986		
TOTAL ... ..		10,536		9,491

\* Corrected figure.

† Including electricity generated in other works under the same ownership.

**Table X B.—Consumption of coal, coke and electricity in 1935 and 1930**

Kind of fuel	1935	1930
		Th. tons
Coal ... ..	254.7	212.5
Coke ... ..	74.2	60.5
	Th. B.T.U. (Kw.-hrs.)	Th. B.T.U. (Kw.-hrs.)
Electricity :—		
Generated in same works ... ..	2,934	3,358
Generated in other works under same ownership ...	717	200
Purchased ... ..	84,045	53,906
Total electricity consumed ... ..	87,696	57,464



## EMPLOYMENT

Table XI A.—Average numbers employed in 1935 and 1934

Persons employed	Males		Females		Total	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
	Operatives (average for the year) ...	1935 6,191	33,985	5,072	16,860	11,263
Administrative, technical and clerical staff* ...	1934 5,174	31,013	4,542	16,052	9,716	47,065
	1935 330	3,874	397	2,064	727	5,938
	1934 213	3,725	308	1,916	521	5,641
TOTAL ...	1935 6,521	37,859	5,469	18,924	11,990	56,783
	1934 5,387	34,738	4,850	17,968	10,237	52,706
Average number of out-workers ...	1935 361		117		478	
	1934 240		79		319	

\* As at 12th October, 1935, and 13th October, 1934.

Table XI B.—Operatives employed in one week in each month of 1934 and 1935 by firms furnishing returns in respect of the twelve months ended December

Mid week of*	Operatives employed		Monthly index†		
	1934	1935	1933	1934	1935
	January ...	22,108	25,522	73.8	86.9
February ...	22,729	25,583	75.2	89.3	98.1
March ...	22,936	25,617	74.4	90.2	98.3
April ...	23,490	25,789	76.1	92.3	98.9
May ...	23,657	26,156	77.5	93.0	100.3
June ...	23,665	25,809	77.9	93.0	99.0
July ...	23,776	25,994	78.6	93.5	99.7
August ...	23,441	25,934	78.8	92.1	99.5
September ...	23,815	26,030	80.3	93.6	99.9
October ...	23,955	26,512	81.1	94.2	101.7
November ...	24,406	26,737	82.5	95.9	102.6
December ...	24,563	27,127	83.4	96.6	104.1
Average for the twelve months	23,545	26,068	78.3	92.6	100.0
Proportion of total operatives represented ...	50.03	51.27	...	...	...

\* For the ending date of each week see page xiv.

† Based on the estimated average for the year 1935.

Table XI C.—Average numbers employed, 1924-1935

Year	Operatives	Administrative, technical and clerical staff	Total (excluding outworkers)
1924* ...	34,205	3,487	37,692
1930* ...	42,606	4,808	47,414
1933 ...	39,812	5,131	44,943
1934 ...	47,065	5,641	52,706
1935 ...	50,845	5,938	56,783

\* Great Britain only.

## WAGES

Table XII.—Wages paid by firms furnishing returns of wages in 1935 and 1930

The aggregate amount of wages paid by firms furnishing returns of wages was £2,808,000 in 1935 representing 50.7 per cent. of the net output of these firms, the corresponding figures for 1930 being £2,783,000 and 62.7 per cent. The figures for these firms given below indicate the size of the sample and the extent to which it is representative.

Firms furnishing returns of wages	1935		1930*	
	Aggregate	Proportion of trade	Aggregate	Proportion of trade
	£'000	Per cent.	£'000	Per cent.
Gross output ...	11,260	52.7	9,184	55.8
Net output ...	5,540	52.1	4,436	55.1
Operative staff employed:—	No.		No.	
During mid-week of October:—				
Males ...	18,448	54.2	†	†
Females ...	8,960	52.5		
Total ...	27,408	53.2	23,238	55.6
Average for the year ...	27,018	53.1	23,927	56.2
Administrative, technical and clerical staff ...	2,999	50.5	†	†
Number of establishments ...	314	55.0	...	...

\* Great Britain only.

† Not recorded separately.



## COUNTRY TABLES (1935)

Note.—The figures given in the following tables relate only to firms whose returns were made on schedules for the Chain, Nail, Screw and Miscellaneous Forgings Trades.

Owing to the possible disclosure of information relating to individual firms, separate particulars for Northern Ireland cannot be given.

Table I.—General summary

Particulars	Unit	England and Wales and Northern Ireland	Scotland	United Kingdom
Value of products (Gross output) ...	£'000	19,738	1,619	21,357
Cost of materials, fuel and electricity used ...	"	9,574	962	10,536
Amount paid for work given out ...	"	167	19	186
Net output ...	"	9,997	638	10,635
Average number of persons employed (excluding outworkers) ...	No.	52,962	3,821	56,783
Net output per person employed (excluding outworkers) ...	£	189	167	187
Number of returns ...	No.	502	39	541
Number of establishments ...	"	526	44	570

Table II.—Output

Kind of output	Unit	England and Wales and Northern Ireland	Scotland	United Kingdom
Iron and steel :—				
Anchors and grapnels and parts thereof ...	Th. tons	2.6	—	2.6
Ships' chain cables ...	£'000	56	—	56
Chains :—	Th. tons	9.3	—	9.3
Steel transmission† ...	£'000	279	—	279
Other welded and forged chain ...	Th. tons	*	*	2.0
Mattress and jack chain and similar chain made from wire ...	£'000	8.4	—	8.4
Other chain... ...	Th. tons	289	—	289
Springs :—	Th. tons	1.1	—	1.1
Laminated ...	£'000	28	—	28
Coil :—	Th. tons	3.0	—	3.0
Upholstery and mattress springs ...	£'000	176	—	176
Other ...	Th. tons	8.6	—	8.6
Other ...	£'000	565	—	565
Other ...	Th. tons	0.1	—	0.1
Other ...	£'000	11	—	11
Other ...	Th. tons	23.9	—	23.9
Other ...	£'000	720	—	720
Other ...	Th. tons	*	*	5.7
Other ...	£'000	*	*	187
Other ...	Th. tons	*	*	7.9
Other ...	£'000	*	*	549

Kind of output	Unit	England and Wales and Northern Ireland	Scotland	United Kingdom
Iron and steel :— <i>contd.</i>				
Fencing material (other than fencing wire) of cast or wrought iron :—				
Standards ...	Th. tons	2.6	0.4	3.0
Other sorts (i.e., gates, grilles, fences, trellis, etc.) ...	£'000	45	6	51
Shoe nails and rivets ...	Th. tons	22.0	8.2	30.2
Hob nails, boot and shoe studs and spikes ...	£'000	534	120	654
Cut nails ...	Th. tons	*	*	4.8
Tacks ...	£'000	*	*	127
Other nails (except wire nails) ...	Th. tons	13.7	6.7	20.4
Bifurcated rivets manufactured from wire ...	£'000	199	98	297
Rivets (other than shoe rivets and bifurcated rivets manufactured from wire), and washers (other than washers assembled with bolts, etc.)	Th. tons	5.6	0.8	6.4
Screws for wood ...	£'000	205	19	224
Coach screws ...	Th. tons	*	*	5.5
Bolts and nuts (including screws for metals)§ :—	£'000	1.4	—	1.4
Bright ...	Th. tons	124	—	124
Other than bright ...	Th. tons	34.1	23.4	57.5
Heel and toe tips (holed for fitting)	£'000	600	288	888
Studs and spikes and boot and shoe tips and protectors, not elsewhere specified... ..	Th. gross	24,270	—	24,270
Clog irons   ...	Th. tons	11.0	—	11.0
Hooks, fasteners and shackles :—	£'000	710	—	710
Fasteners for machinery belting ...	Th. gross	*	*	103
Other descriptions ...	Th. tons	*	*	1.2
Horse shoes, sold ...	£'000	*	*	26
Frost cogs of iron and steel	Th. tons	100.9	23.1	124.0
Saddlery hardware, not elsewhere specified ...	£'000	2,385	445	2,830
Springing and seating ...	Th. tons	0.5	—	0.5
Forgings (including drop forgings), not elsewhere specified :—	£'000	13	—	13
Of iron ...	Th. tons	2.0	—	2.0
Of steel ...	£'000	82	—	82
Of iron ...	Th. tons	0.6	—	0.6
Of steel ...	£'000	17	—	17
Of iron ...	Th. tons	1.0	—	1.0
Of steel ...	£'000	84	—	84
Of iron ...	Th. tons	18	—	18
Of steel ...	£'000	18	—	18
Of iron ...	Th. tons	2.2	—	2.2
Of steel ...	£'000	75	—	75
Of iron ...	Th. tons	5.2	—	5.2
Of steel ...	£'000	81	—	81
Of iron ...	Th. tons	0.4	—	0.4
Of steel ...	£'000	23	—	23
Of iron ...	Th. tons	1.1	—	1.1
Of steel ...	£'000	109	—	109
Of iron ...	Th. tons	3.2	—	3.2
Of steel ...	£'000	177	—	177
Of iron ...	Th. tons	27	—	27
Of steel ...	£'000	2.6	—	2.6
Of iron ...	Th. tons	93	—	93
Of steel ...	£'000	90.3	6.9	97.2
Of iron ...	Th. tons	3,734	283	4,017
Of steel ...	£'000	3,734	283	4,017



Kind of output	Unit	England and Wales and Northern Ireland	Scotland	United Kingdom
Brass :—				
Nails and tacks ... ..	Th. tons	*	*	0.6
	£'000			49
Rivets and washers ... ..	Th. tons			0.6
	£'000			88
Bolts and nuts { Weight stated ...	Th. tons			2.2
{ Weight not stated	£'000	352		
Screws for wood ... ..	Th. gross	3,376	—	3,376
	Th. tons	1.5	—	1.5
	£'000	273	—	273
Copper :—				
Nails and tacks ... ..	Th. tons	*	*	0.7
	£'000			47
Rivets and washers ... ..	Th. tons			0.4
	£'000			60
Bolts, nuts and screws ... ..	Th. tons			0.1
	£'000	8		
Forgings (including drop forgings), other than of iron or steel ... ..	Th. tons	0.1	—	0.1
	£'000	24	—	24
Other goods made :—				
Manufactures of iron and steel :—				
Wire nails (including staples) ...	£'000	*	*	390
Tools and implements (including machine tools) ... ..	£'000	19	—	19
Iron and steel castings ... ..	£'000	124	—	124
Railway material (including tyres and axles) ... ..	£'000	*	*	295
Iron and steel stampings ... ..	£'000	174	—	174
Builders' ironmongery ... ..	£'000	*	*	249
Bolts, hasps and hinges of metal ...	£'000	42	—	42
Gears and gear wheels (other than for vehicles) ... ..	£'000	37	—	37
Fabricated iron and steel ... ..	£'000	73	—	73
Other iron and steel manufactures	£'000	663	13	676
Manufactures of non-ferrous metals :—				
Stampings ... ..	£'000	120	—	120
Other manufactures ... ..	£'000	435	—	435
Vehicles and parts and accessories (except axles) ... ..	£'000	458	—	458
Products of the Mechanical Engineering Trade ... ..	£'000	409	—	409
Other goods made ... ..	£'000	181	—	181
Scrap metal sold :—				
Iron and steel ... ..	Th. tons	117	17	134
	£'000	268	45	313
Brass ... ..	Th. tons	3	†	3
	£'000	59	1	60
Copper ... ..	£'000	14	†	14
Other and unspecified metals ...	£'000	8	—	8
		Amount received	Amount received	Amount received
Repair and jobbing work (including wheelwrighting and horse-shoeing) ...	£'000	49	20	69
Work done for the trade ... ..	£'000	58	1	59
Constructional engineering ... ..	£'000	24	—	24
Galvanising ... ..	£'000	8	—	8
TOTAL ... ..	£'000	19,738	1,619	21,357

\* Owing to the possible disclosure of information relating to individual firms, separate particulars cannot be given.

† Including steel transmission chains for vehicles.

§ See footnote (¶) to Table V, page 119.

|| So far as recorded separately.

‡ Less than 500.

Table III A.—Materials, fuel and electricity purchased and used

Kind of materials, etc.	Unit	England and Wales and Northern Ireland	Scotland	United Kingdom
Iron :—				
Bars ... ..	Th. tons	40.6	8.0	48.6
	£'000	370	61	431
Wire and rods ... ..	Th. tons	9.5	—	9.5
	£'000	129	—	129
Other kinds ... ..	Th. tons	14.8	0.4	15.2
	£'000	129	4	133
Steel :—				
Bars ... ..	Th. tons	327.7	57.2	384.9
	£'000	3,178	441	3,619
Wire and rods ... ..	Th. tons	99.7	8.3	108.0
	£'000	1,277	91	1,368
Other kinds ... ..	Th. tons	129.6	21.7	151.3
	£'000	1,240	141	1,381
Copper (in all forms) ... ..	Th. tons	1.7	*	1.7
	£'000	81	1	82
Brass (in all forms) ... ..	Th. tons	12.6	0.2	12.8
	£'000	594	11	605
Fuel and electricity used for all purposes :—				
Coal ... ..	Th. tons	219.7	35.0	254.7
	£'000	186	32	218
Coke ... ..	Th. tons	73.3	0.9	74.2
	£'000	102	1	103
Heavy fuel oil ... ..	Th. galls.	11,365	1,085	12,450
	£'000	191	18	209
Purchased electricity† ... ..	B.T.U. (Kw.-hrs.)	78,567	6,195	84,762
	£'000	252	20	272
All other purchased materials and fuel	£'000	1,845	141	1,986
TOTAL ... ..	£'000	9,574	962	10,536

\* Less than 50 tons.

† Including electricity generated in other works under the same ownership.

Table III B.—Consumption of electricity

Electricity consumed	England and Wales and Northern Ireland	Scotland	United Kingdom
	Th. B.T.U. (Kw.-hrs.)	Th. B.T.U. (Kw.-hrs.)	Th. B.T.U. (Kw.-hrs.)
Generated in same works ... ..	2,400	534	2,934
Generated in other works under same ownership ... ..	717	—	717
Purchased ... ..	77,850	6,195	84,045
TOTAL ... ..	80,967	6,729	87,696



Table IV A.—Numbers employed in week ended 12th October, 1935

Persons employed (excluding outworkers)	Males		Females		Total	
	Under 18	All ages	Under 18	All ages	Under 18	All ages
	England and Wales and Northern Ireland :—					
Operatives ... ..	5,584	31,684	4,859	16,275	10,443	47,959
Administrative, etc.* ...	311	3,626	391	1,966	702	5,592
Total ... ..	5,895	35,310	5,250	18,241	11,145	53,551
Scotland :—						
Operatives ... ..	685	2,724	276	794	961	3,518
Administrative, etc.* ...	19	248	6	98	25	346
Total ... ..	704	2,972	282	892	986	3,864
United Kingdom :—						
Operatives ... ..	6,269	34,408	5,135	17,069	11,404	51,477
Administrative, etc.* ...	330	3,874	397	2,064	727	5,938
TOTAL ... ..	6,599	38,282	5,532	19,133	12,131	57,415

\* Administrative, technical and clerical staff.

Table IV B.—Operatives employed in one week in each month of 1935

Week ended	Males and females		
	England and Wales and Northern Ireland	Scotland	United Kingdom
	January 19 ... ..	47,235	3,310
February 16 ... ..	47,009	3,344	50,353
March 16 ... ..	47,090	3,371	50,461
April 13 ... ..	46,660	3,477	50,137
May 18 ... ..	47,170	3,474	50,644
June 15 ... ..	46,415	3,506	49,921
July 13 ... ..	47,111	3,447	50,558
August 17 ... ..	46,912	3,530	50,442
September 14 ... ..	47,327	3,478	50,805
October 12 ... ..	47,959	3,518	51,477
November 16 ... ..	48,485	3,574	52,059
December 14 ... ..	49,064	3,670	52,734
Average for the twelve months ... ..	47,370	3,475	50,845

Table IV C.—Numbers of outworkers at two specified periods in 1935

Country	January			July		
	Males	Females	Total	Males	Females	Total
England and Wales ... ..	301	123	424	299	110	409
Scotland ... ..	46	—	46	76	—	76
Great Britain ... ..	347	123	470	375	110	485

No outworkers were recorded by firms in Northern Ireland.

Table V.—Firms employing not more than ten persons on the average

Particulars	England and Wales and Northern Ireland	Scotland	United Kingdom
Number of returns received ... ..	No. 5,008	No. 1,128	No. 6,136
Average number of persons employed :—			
Males ... ..	10,722	2,423	13,145
Females ... ..	425	82	507
Total ... ..	11,147	2,505	13,652