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BOARD OF TRADE

THE REPORT  
on the  
CENSUS OF PRODUCTION  
FOR 1951

Volume 4

Trade F

CONSTRUCTIONAL ENGINEERING

*Presented by the Board of Trade to Parliament  
in pursuance of the Statistics of Trade Act, 1947  
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\* Not applicable to this trade

CONSTRUCTIONAL ENGINEERING TRADE

THIS REPORT on the Constructional Engineering Trade relates to establishments engaged wholly or mainly in the manufacture of structural iron and steelwork, tubular scaffolding, and prefabricated houses of steel or aluminium, and in carrying out constructional engineering work in the United Kingdom (1951, 1949, 1946 and 1935) or in Great Britain (1948).

This trade corresponds to minimum list heading 58 in the Standard Industrial Classification. Firms engaged in similar constructional work that did not themselves make any of the material used are included in the report on the Building and Contracting Trade.

Establishments in this trade in Northern Ireland are excluded in 1948; particulars of the very small production there in this trade in 1935 are included in the report on the Mechanical Engineering (General) Trade (Volume 4, Trade I).

For the year 1950, Census of Production returns were required in Great Britain only from establishments that sold no merchantable goods during the year; other establishments (i.e. those which engaged in merchanting as well as production) made returns in the Census of Distribution only. Information for 1950 comparable to that for any other year is, therefore, not available.

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.



## CONSTRUCTIONAL ENGINEERING TRADE

## Summary

## Larger establishments (a)

TABLE 1

	United Kingdom		Great Britain		United Kingdom	Great Britain
	1951	1949	1949(b)	1948	1946	1935
	£'000	£'000	£'000	£'000	£'000	£'000
Gross output (production) (c)	101,515	88,316	..	87,031	64,542	19,587
Cost of materials and fuel used (d)	50,593	42,999	..	43,001	33,666	10,511
Payment for work done on materials given out	5,844	9,248	..	9,219	2,313	335
Transport payments (e)	1,668	..	..	..	..	..
Net output	43,410	36,069	..	34,811	28,563	8,741
Wages and salaries of persons employed	26,019	21,963	..	21,053	19,120	..
Average number of persons employed (f)	No. 62,191	No. 59,072	..	No. 59,308	No. 64,079	No. 34,851
Net output per person employed (f)	£ 698	£ 611	..	£ 587	£ 446	£ 251
Stocks at end of year	£'000	£'000	£'000	£'000	£'000	£'000
Products on hand for sale and work in progress	19,874	20,417	..	16,326	13,462	2,387(g)
Materials and fuel	10,353	7,629	..	7,704	8,020	..
Number of establishments	No. 416	No. 398	..	No. 366	No. ..	No. 279

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 (h)						
Principal products (i)	90,922	86,468	..	80,639	61,344	17,230
Other output (j)	8,683					
Changes in stocks and work in progress (k)	+ 1,910	+ 3,247	..	- 36	+ 3,198	+ 389(g)
Less payment for transport outwards (e)	101,515	89,715	..	88,795	64,542	19,587
Gross output (production)	101,515	88,316	..	87,031	64,542	19,587
Materials and fuel used by firms in this trade						
Purchases	52,116	42,850	..	42,618	36,937	10,511
Changes in stocks (k)	-1,523	+ 149	..	+ 383	- 3,271	
Materials and fuel used	50,593	42,999	..	43,001	33,666	10,511

- (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) Work in progress only.  
 (h) Total value of sales (1951, 1949, 1948 and 1946) or production for sale (1935).  
 (i) For details for 1951 and 1948 see Table 8.  
 (j) For details for 1951 and 1948 see Table 10.  
 (k) For details for 1951 see Table 21.

## Summary

## Small firms (a)

TABLE 2

	Great Britain	United Kingdom	Great Britain	
	1951	1949	1949	1948
Number of returns	105	57	57	61
Average number of persons employed (b)				
Males	673	367	367	407
Females	55	28	28	25
Total	728	395	395	432

(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.

(b) Including working proprietors.

## Estimated average employment (a)

## All firms

TABLE 3

	United Kingdom		Great Britain	
	1951	1949	1949	1948
As returned by firms				
Employing on the average more than ten persons (b)	62,191	59,072	(c)	59,308
Employing on the average ten or fewer persons (d)	728(e)	395	395	432
Estimated average employment in firms not making satisfactory returns	62,919	59,467	(c)	59,740
Estimated average employment in all firms	343	48	48	292
Estimated average employment in all firms	63,262(e)	59,515	(c)	60,032

(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	85	2,100	989	1,579	449	154	603	627
25 - 49	91	4,468	2,210	3,326	967	333	1,300	665
50 - 99	102	11,614	5,198	7,291	2,228	825	3,053	713
100 - 199	65	14,019	6,394	8,841	2,655	1,001	3,655	723
200 - 299	27	10,443	4,518	6,729	1,982	796	2,778	671
300 - 399	11	6,171	2,840	3,729	1,101	524	1,624	762
400 - 499	6	4,630	1,709	2,677	752	370	1,121	639
500 - 749	13	12,683	5,569	7,677	2,349	976	3,325	725
750 - 999	7	10,365	4,802	6,083	2,009	672	2,681	789
1,000 - 1,499	4	9,890	3,477	4,644	1,526	440	1,967	749
1,500 and over	5	15,132	5,701	9,615	2,877	1,035	3,912	593
Total	416	101,515	43,410	62,191	18,895	7,125	26,019	698

(a) Administrative, technical and clerical employees.



## ENGINEERING, SHIPBUILDING AND ELECTRICAL GOODS

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	28	11,694	4,902	11.3	7,959	2,552	666	3,217	616
East and West Ridings	39	7,287	2,959	6.8	3,912	1,110	524	1,634	756
North Midland and Northern Ireland	23	4,428	1,678	3.9	2,574	784	260	1,044	652
Eastern	14	2,924	1,246	2.9	1,888	548	198	746	660
London and South Eastern	111	19,415	9,578	22.1	13,085	4,116	1,633	5,749	732
Southern	12	1,034	404	0.9	676	187	88	276	598
South Western	17	8,918	3,152	7.3	3,831	1,165	418	1,583	823
Midland	69	11,771	5,345	12.3	7,108	2,245	802	3,047	752
North Western	54	19,599	7,557	17.4	11,055	3,119	1,472	4,592	684
Total England and Northern Ireland	367	87,068	36,822	84.9	52,088	15,826	6,062	21,888	707
Wales	10	2,214	1,190	2.7	1,658	587	144	732	718
Scotland	39	12,233	5,398	12.4	8,445	2,481	918	3,400	639
United Kingdom	416	101,515	43,410	100.0	62,191	18,895	7,125	26,019	698

(a) Administrative, technical and clerical employees.

TABLE 6 - Analysis according to specialisation within the trade, 1951

Larger establishments in the United Kingdom

No specialisation within this trade was distinguished.

Total make of certain intermediate products

Larger establishments in the trade

TABLE 7

	United Kingdom 1951		Great Britain 1948
	Quantity	Entries	Quantity
	Th. tons	No.	Th. tons
Other than principal products			
Castings			
Of iron, including malleable iron (a)	2.4	5	8.4
Of non-alloy steel (b)	-	-	-
Of alloy steel (b)	0.7	..	-
	Th. cwts.		Th. cwts.
Of brass and other alloys of copper (c)	0.5	..	0.7
Of aluminium (d)	0.1	..	-

(a) For total output returned in all trades see the Iron Foundries Trade (Volume 3, Trade C).

(b) For total make returned in all trades see the Iron and Steel (Melting and Rolling) Trade (Volume 3, Trade B).

(c) For total output returned in all trades see the Brass Manufactures Trade (Volume 5, Trade F).

(d) For total output returned in all trades see the Non-Ferrous Metals (Smelting, Rolling, etc.) Trade (Volume 3, Trade G).

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## CONSTRUCTIONAL ENGINEERING

Sales and work done ('principal products' of the trade), including sales and similar work done by establishments classified to other trades

Larger establishments

TABLE 8

	United Kingdom 1951			Great Britain 1948	
	Sales (a)			Sales (a)	
	Quantity	Value	Entries	Quantity	Value
	Tons	£'000	No.	Tons	£'000
Staircases of iron and steel	5,948	618	135	5,121	391 (b)
	..	226	..	..	282
Tubular scaffolding of steel and aluminium, including fittings	11,229	1,111 (c)	20	3,592	466 (b)
	..	..	..	..	122
Steel rolling shutters	4,420	747	17	3,157	427 (b)
	..	289	..	..	261
Temporary or prefabricated steel house framework and frame sections of steel	6,973	529	33	33,113	2,024 (b)
	..	451	..	..	2,293
	No.		No.		
Prefabricated houses of aluminium	3,088	3,349	5	17,569	21,079 (b)
	..	..	..	..	69
Prefabricated buildings, other than houses and portable buildings, and fabricated components for constructional engineering, of aluminium and light alloys (b)	..	2,557	5	..	898
Portable buildings (garages, poultry houses, etc.), complete, and framework and frame sections therefor (b)	Tons			Tons	
Of iron and steel	655	121	16	..	474
	..	326	..	..	..
Of aluminium	75	60	7	..	361
	..	308	..	..	..
Glazing bars (b)					
Iron and steel	522	98	5	108	21
	..	133	..	..	37
Aluminium	498	445	7	1,163	342
	..	94	..	..	43
Lead or lead clothed	3,146	472	10	3,125	334
	..	392	..	..	85
Iron or steel fabricated					
Bridge components	16,341	1,189	54	35,947	1,954
	..	233	..	..	..
Mast and tower components	17,184	1,207	49	21,658	1,211
	..	264	..	..	..
Steel shuttering, including road forms	9,530	768	42	5,469	317
	..	256	..	..	154
Other descriptions, not elsewhere specified	625,289	38,283	553	579,624	26,110
	..	9,335	..	..	4,695
Unclassified	39,218	1,988	41	31,867	1,881
	..	1,335	..	..	1,278
Total goods, including goods made or fabricated and used by the same firms in constructional engineering work shown below		67,183	..		67,609
	Value of work done			Value of work done	
	£'000			£'000	
Constructional engineering, etc. work carried out					
Work done as main contractors (d)					
New building construction					
Permanent fabricated houses	3,543		..	19,431	
Other purely residential houses, including flats and tenements	147		19	314	

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TABLE 8 (contd.)

	United Kingdom 1951		Great Britain 1948
	Value of work done £'000	Entries No.	Value of work done £'000
Constructional engineering, etc. work carried out (contd.)			
Work done as main contractors (d) (contd.)			
New building construction (contd.)			
Electric power stations	4,553	52	15,695
Gasworks	3,833	41	
Petrol filling stations, repair and other garages	330	65	
Factories and workshops, not included above	16,431	186	
Warehouses and storage premises	1,795	105	1,086
Department stores and shops, including those combined with dwellings	16(b)	5	54
Office buildings	249(b)	10	529
Public buildings (buildings owned by Government, Local and other Public Authorities) except dwellings, schools, hospitals, offices and factories	230(b)	12	439
Schools and college buildings	1,677(b)	30	510
Other new buildings, including buildings on airfields	2,883	103	2,392
Work done on buildings, other than new construction	1,549	87	1,284
Unclassified new building construction and other work on buildings	2,493	18	1,009
Civil engineering			
On railways and light railways (permanent way, tunnels, bridges, etc.)	625	21	508
On harbours, wharves, docks and piers, canals and waterways, sea walls and embankments	329	19	354
On waterworks (reservoirs, aqueducts, wells, mains, hydraulic works, etc.)	95	16	430
On gas mains and works	947	14	3,308
On electric lines and works	38	6	148
On highways (roads, bridges, drains, etc.)	329(b)	..	40
Other civil engineering work	12,632	41	10,324
Work done as sub-contractors			
Work on buildings			
Patent glazing	2,509	48	1,224
Structural steelwork	13,028	190	7,906
Reinforced concrete	59	10	48
Other	2,231	70	503
Other work done as sub-contractors	2,281	84	709
Unclassified constructional engineering work carried out as main contractors	3,877	48	5,176
Unclassified constructional engineering work carried out as sub-contractors	3,616	43	
Unclassified constructional engineering work carried out as main or sub-contractors	2,628	13	
Total constructional engineering, etc. work	84,953	..	73,420
Less total value of goods made or fabricated in firms' own works and used in the work	41,434	369	47,575
Total constructional engineering, etc. work, exclusive of goods made and used by firms	43,519	..	25,845
Total principal products of this trade	110,702	..	93,454
Sales and work done in other trades (see Table 9)	19,780	..	12,815
Sales and work done (principal products of this trade) by establishments in the trade	90,922	387	80,639

- (a) Including goods made or fabricated by the firms and used by them in constructional engineering, etc. work  
 (b) So far as recorded separately.  
 (c) Including sales of aluminium tubular scaffolding, so far as recorded separately.  
 (d) Including any work done for firms that do not make a Census of Production return.

Sales and work done ('principal products' of the trade)  
by establishments classified to other trades

Larger establishments

TABLE 9

	United Kingdom 1951			Great Britain 1948	
	Sales (a)		Entries	Sales (a)	
	Quantity	Value		Quantity	Value
	Tons	£'000	No.	Tons	£'000
Staircases of iron and steel	1,438	164	50	1,512	121
	..	20		..	69
Tubular scaffolding, of steel and aluminium, including fittings	4,264	519	9	1,911	172
				..	33
Steel rolling shutters	2,035	247	7	2,526	324
				..	32
Temporary or prefabricated steel house framework and frame sections of steel	2,689	227	15	7,074	479
	..	56		..	843
Prefabricated houses of aluminium					
Prefabricated buildings, other than houses and portable buildings, and fabricated components for constructional engineering, of aluminium and light alloys	..	315	5		
Portable buildings (garages, poultry houses, etc.), complete, and framework and frame sections therefor				..	510
Of aluminium					
Of iron and steel	251	52	6		
	..	19			
Glazing bars	781	445	8	1,139	291
	..	99		..	144
Iron or steel fabricated					
Bridge components	1,813	151	18		
	..	214			
Mast and tower components	1,110	56	15	3,176	190
	..	158			
Steel shuttering, including road forms	1,653	154	21	468	41
	..	205		..	54
Other descriptions, not included elsewhere	42,629	3,144	224	22,129	1,506
	..	2,040		..	979
Unclassified	39,128	1,964	39	12,780	791
	..	260		..	810
Total goods, including goods made or fabricated, and used by the same firms in constructional engineering work shown below		10,510	..		7,388



TABLE 9 (contd.)

	United Kingdom 1951		Great Britain 1948
	Value of work done £'000	Entries No.	Value of work done £'000
Constructional engineering, etc. work carried out			
Work done as main contractors			
New building construction			
Permanent prefabricated houses, and other purely residential houses, including flats and tenements	15	7	48
Electric power stations	227	8	
Gasworks	1,747	10	
Petrol filling stations, repair and other garages	6	5	2,044
Factories and workshops, not included above	562	42	
Warehouses and storage premises	92	17	
Department stores and shops, including those combined with dwellings	-	-	13
Office buildings	-	-	4
Other new buildings, including buildings on airfields, public buildings (buildings owned by Government, Local and other Public Authorities) except dwellings, hospitals, offices and factories; and schools and college buildings	598	30	187
Work done on buildings, other than new construction	251	19	152
Unclassified new building construction and other work on buildings	159	7	17
Civil engineering			
On waterworks (reservoirs, aqueducts, wells, mains, hydraulic works, etc.)	76	7	160
Other, including civil engineering work on railways, and light railways (permanent way, tunnels, bridges etc.), harbours, wharves, docks and piers, canals and waterways, sea walls and embankments, gas mains and works, and electric lines and works	675	26	5,631(b)
Work done as sub-contractors			
Work on buildings			
Structural steelwork	429	38	642
Other including patent glazing, and reinforced concrete	255	16	49
Other work done as sub-contractors	272	27	157
Unclassified constructional engineering work carried out as main contractors	3,877	48	
Unclassified constructional engineering work carried out as sub-contractors	3,616	43	5,176
Unclassified constructional engineering work carried out as main or sub-contractors	2,628	13	
Total constructional engineering, etc. work	15,483	..	14,280
Less total value of goods made or fabricated in firms' own works and used in the work	6,213	103	8,853
Total constructional engineering, etc. work, exclusive of goods made and used by firms	9,270	..	5,427
Total	19,780	..	12,815

(a) Including goods made or fabricated by the firms and used by them in constructional engineering work.  
(b) Including work on highways (roads, bridges, drains, etc.).

Sales in the trade of other than principal products (a)  
Larger establishments

TABLE 10

	United Kingdom 1951		Great Britain 1948	
	Quantity	Value £'000	Quantity	Value £'000
Machinery and plant, including parts				
Agricultural machinery	..	238	..	132
Air conditioning, heating and ventilating plant and appliances	..	174	..	34
Boilers and boiler-house plant (excluding boilers for ships or locomotives)	..	45	..	108
Chemical and gas making machinery and plant	..	632	..	226
Machine tools (other than portable power tools)	..	160	..	241
Mechanical handling equipment	..	968	..	571
Mining machinery	..	71	..	121
Civil engineering and contracting machinery and plant	..	210	..	379
Other machinery and plant	..	1,262	..	
Iron and steel	Tons		Tons	
Castings	1,135	62	3,559	187
Forgings, stampings and pressings	2,354	161	2,290	148
Fencing materials of cast or wrought iron (other than fencing wire)	..	27	..	19
Door and window frames and casements of metal	3,243	228	2,232	151
Heavy plate work, not included elsewhere	..	4	..	81
Parts and accessories of motor vehicles	2,153	526	1,975	209
Other goods	..	13	..	97
Total goods	4,314	265	15,309	1,003
Scrap metals sold	..	128	..	181
Iron and steel	..	67	..	113
Other metals	..	1,931	..	3,056
Total work done other than constructional engineering (b)		7,183		7,057
Repair work	Th. tons		Th. tons	
Other	50.1	207	50.4	172
Total work done other than constructional engineering	..	2	..	60
Total	..	59	..	57
Total work done other than constructional engineering		889		428
Total		343		419
Total work done other than constructional engineering		1,233		847
Total		8,683		8,193

(a) Including goods made or fabricated by firms and used by them in constructional engineering work.  
(b) Amount charged.



TABLE 11 - Production, exports and imports of certain principal products

This table is not applicable to the trade.

## Usage of certain specified purchased materials, 1951

TABLE 12 Larger establishments in the United Kingdom

Materials used	Quantity
	Th. tons
Iron	
Pig iron	2.4
Iron castings in the rough	3.4
Wrought iron in all forms, except finished parts	1.4
Non-alloy steel	
Ingots, billets, blooms and slabs	3.4
Angles, shapes and sections	334.0
Girders, joists, beams and pillars (not fabricated)	283.8
Bars and rods	51.7
Hoop and strip (including tape)	7.5
Tin-, terne-, and black-plates and sheets	6.3
Other plates and sheets	
1/8 in. thick and over	151.2
Under 1/8 in. thick	15.5
Tubes and fittings	11.2
Wire (single wire)	2.1
Forgings in the rough, other than drop forgings	0.3
Drop forgings	1.1
Castings in the rough	0.7
Alloy steel (including high-speed steel)	
Ingots, billets, blooms, slabs, bars, rods, angles, shapes, sections, girders, joists and pillars (not fabricated)	0.6
Plates, sheets and strip	
1/8 in. thick and over	0.2
Under 1/8 in. thick	0.2
Tubes and fittings	0.2
Wire (single wire)	-
Forgings and castings in the rough	-
Non-ferrous metals in all forms (except finished parts)	Th. cwts.
Aluminium and aluminium alloys	330.0
Antimony	-
Brass and other copper alloys, including nickel silver but excluding other nickel alloys	5.3
Copper	2.3
Lead and alloys of lead	92.8
Tin	-
Zinc and alloys of zinc	22.0
Timber (other than reclaimed), including that used for packing or packing case manufacture but excluding joinery, other fabricated woodwork and purchased packing cases	Th. cu. ft.
Hardwood	77.1
Softwood	1,259.9

## Employment in September

## Larger establishments (a)

TABLE 13

## (i) Operatives

	United Kingdom		Great Britain		
	1951(b)	1949(b)	1949(c)	1948(d)	1935(d)
Males					
Under 18	2,128	2,133	..	1,966	3,059
All ages	44,820	45,835	..	45,593	28,015
Females					
Under 18	22	49	..	59	11
All ages	867	1,256	..	1,629	112
Total					
Under 18	2,150	2,182	..	2,025	3,070
All ages	45,687	47,091	..	47,222	28,127

## (ii) Administrative, technical and clerical employees (e)

	United Kingdom		Great Britain		
	1951	1949	1949(c)	1948	1935
Males					
Under 18	839	768	..	736	567
All ages	11,107	9,914	..	9,391	5,668
Females					
Under 18	446	418	..	423	159
All ages	3,057	2,757	..	2,657	1,056
Total					
Under 18	1,285	1,186	..	1,159	726
All ages	14,164(f)	12,671(f)	..	12,048(f)	6,724

## (iii) Total employees

	United Kingdom		Great Britain		
	1951	1949	1949(c)	1948	1935
Males					
Under 18	2,967	2,901	..	2,702	3,626
All ages	55,927	55,749	..	54,984	33,683
Females					
Under 18	468	467	..	482	170
All ages	3,924	4,013	..	4,286	1,168
Total					
Under 18	3,435	3,368	..	3,184	3,796
All ages	59,851(f)	59,762(f)	..	59,270(f)	34,851

(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	14 Males	361 Females
Other workers	726 Males	239 Females

(b) In week ended September 22, 1951, 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 24, 1949, September 25, 1948, 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 1935 figures include working proprietors.

## (iv) Working proprietors

	United Kingdom		Great Britain	
	1951	1949	1949(c)	1948
Males	44	44	..	37
Females	1	3	..	1
Total	45	47	..	38



Average employment  
Larger establishments (a)

TABLE 14

	United Kingdom		Great Britain		
	1951	1949	1949(b)	1948	1935
	Operatives	47,931(c)	46,506	..	47,222(c)
Administrative, technical and clerical employees	14,215	12,519	..	12,048(d)	6,724(d)
Total	62,146	59,025	..	59,270	34,851

- (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) Including 16,642 operatives (1951) and 10,567 operatives (1948) employed in Great Britain on outside work of erection, fitting, etc. Similar information for other years is not available.  
 (d) In week ended September 25, 1948, and October 12, 1935. The 1935 figures include working proprietors. Outworkers. In 1949, 3 outworkers were employed in this trade in addition to the employees shown above. Outworkers were not recorded in other years.

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

TABLE 15

	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	222	1,776	1
Continuous 4 shift systems per 24 hours averaging 6 hours per shift	-	-	-
All 2 shift systems	20,822	199,120	14
Other shift systems	-	-	-
Total	21,044	200,896	(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	..	15	..	5,070	4,148
Percentage of total in trade	100.0	4.0(c)	100.0	11.0(c)	9.0(c)
Percentage of total on returns showing shift-work				100.0	81.8

(c) Rounded to avoid disclosure.

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

TABLE 16

	United Kingdom		Great Britain	
	1951	1949	1949(a)	1948
	Wages and salaries (b) of			
Operatives	18,895	16,439	..	15,968
Administrative, technical and clerical employees	7,125	5,524	..	5,085
Total	26,019	21,963	..	21,053
Employers' contributions to all National Insurance Schemes	640	609	..	490

- (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 in 1949 a negligible amount paid to outworkers. Outworkers were not recorded in other years.

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

TABLE 17

	United Kingdom		Great Britain	
	1951	1949	1949(a)	1948
Plant, machinery and vehicles *				
Acquisitions				
Plant and machinery				
New	905	786	..	638
Second-hand	122	83	..	192
Vehicles				
New	298	180	..	130
Second-hand	128	68	..	57
Total acquisitions	1,453	1,117	..	1,017
Disposals				
Plant and machinery				
Vehicles	24	33	..	71
	80	68	..	22
Total disposals	105	101	..	94
New building work				
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	411	416	..	417

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



## CONSTRUCTIONAL ENGINEERING TRADE

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)	87,068	2,214	12,233	..	..	101,515
Cost of materials and fuel used	43,801	978	5,814	..	..	50,593
Payment for work done on materials given out	5,101	3	741	..	..	5,844
Transport payments	1,344	43	281	..	..	1,668
Net output	36,822	1,190	5,398	..	..	43,410
Wages and salaries of persons employed	21,888	732	3,400	..	..	26,019
	No.	No.	No.	No.	No.	No.
Average number of persons employed (b)	52,088	1,658	8,445	..	..	62,191
	£	£	£	£	£	£
Net output per person employed (b)	707	718	639	..	..	698
	£'000	£'000	£'000	£'000	£'000	£'000
Stocks at end of year						
Products on hand for sale and work in progress	14,673	977	4,223	..	..	19,874
Materials and fuel	8,967	182	1,204	..	..	10,353
	No.	No.	No.	No.	No.	No.
Number of establishments	367	10	39	..	..	416

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)	85,308	2,096	12,201	..	..	99,605
Changes in stocks and work in progress (see Table 21)	+ 1,759	+ 118	+ 33	..	..	+ 1,910
Gross output (production)	87,068	2,214	12,233	..	..	101,515
Materials and fuel used by firms in this trade						
Purchases	45,003	978	6,135	..	..	52,116
Changes in stocks (see Table 21)	- 1,202	-	- 321	..	..	- 1,523
Materials and fuel used	43,801	978	5,814	..	..	50,593

(a) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland, where 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) Including working proprietors.

## Summary

## Small firms in Great Britain (a)

TABLE 19

	England	Wales	Scotland	Great Britain
Number of returns	95	3	7	105
Average number of persons employed (b)				
Males	595	26	52	673
Females	49	-	6	55
Total	644	26	58	728

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

(b) Including working proprietors.



Sales (including goods made or fabricated by the firms and used in  
 constructional engineering work) and work done 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
	Tons	£'000	Tons	£'000	Tons	£'000		£'000	Tons	£'000
<b>Principal products</b>										
Staircases of iron and steel	4,462	451	47	4	4,510	455	-	-	4,510	455
	..	207			..	207			..	207
Tubular scaffolding of steel and aluminium, including fittings	6,965	592	-	-	6,965	592	-	-	6,965	592
Steel rolling shutters	2,385	500	-	-	2,385	500	-	-	2,385	500
	..	289			..	289			..	289
Temporary or prefabricated steel house framework and frame sections of steel	3,982	285	302	17	4,284	302	-	-	4,284	302
	..	324	..	70	..	395			..	395
Prefabricated houses of aluminium										
Prefabricated buildings, other than houses and portable buildings, and fabricated components for constructional engineering, of aluminium and light alloys (c)	..	5,959	-	-	..	5,959	-	-		5,959
Portable buildings (garages, poultry houses, etc.), complete, and framework and frame sections therefor (c)										
Of aluminium										
Of iron and steel	404	69	-	-	404	69	-	-	404	69
	..	307			..	307			..	307
Glazing bars (c)	..	(a)	..	(a)	3,385	569	-	-	3,385	569
					..	519			..	519
<b>Iron or steel fabricated</b>										
Bridge components	12,813	904	1,715	133	14,528	1,038	-	-	14,528	1,038
	..	19			..	19			..	19
Mast and tower components	10,276	721	5,798	430	16,074	1,151	-	-	16,074	1,151
	..	106			..	106			..	106
Steel shuttering, including road forms	..	(a)	..	(a)	7,877	614	-	-	7,877	614
					..	52			..	52
Other descriptions, not included elsewhere	474,470	28,690(b)	108,190	6,449	..	..	..	(b)	582,660	35,139
	..	6,790	..	504					..	7,294
Unclassified	90	24	..	1,075	90	24	-	-	90	24
					..	1,075			..	1,075
Total goods, including goods made or fabricated and used by the same firms in constructional engineering work shown below		47,802(b)		8,871		..		(b)		56,673



TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain		Northern Ireland		United Kingdom	
	Quantity	Value of work done	Quantity	Value of work done	Quantity	Value of work done	Quantity	Value of work done	Quantity	Value of work done
Principal products (contd.)		£'000		£'000		£'000		£'000		£'000
Constructional engineering, etc. work carried out										
Work done as main contractors										
New building construction										
Permanent prefabricated houses and other purely residential houses, including flats and tenements	(a)		(a)		3,676		-			3,676
Electric power stations	(a)		(a)		4,327		-			4,327
Gasworks	(a)		(a)		2,087		-			2,087
Petrol filling stations, repair and other garages	217		107		324		-			324
Factories and workshops, not included above	11,340(b)		4,529		..		(b)			15,869
Warehouses and storage premises	1,419(b)		283		..		(b)			1,703
Department stores and shops, including those combined with dwellings (c)	16		-		16		-			16
Office buildings (c)	(a)		(a)		249		-			249
Other new buildings including buildings on airfields; public buildings (buildings owned by Government, Local and other Public Authorities) except dwellings, hospitals, offices and factories; and schools and college buildings	3,664(b)		529		..		(b)			4,193
Work done on buildings, other than new construction	1,174		124		1,298		-			1,298
Unclassified new building construction and other work on buildings	2,334		-		2,334		-			2,334
Civil engineering										
On waterworks (reservoirs, aqueducts, wells, mains, hydraulic works, etc.)	(a)		(a)		18		-			18
On highways (roads, bridges, drains, etc.) (c)	329		-		329		-			329
Other, including civil engineering work on railways and light railways (permanent way, tunnels, bridges, etc.), harbours, wharves, docks and piers, canals and waterways, sea walls and embankments, gas mains and works, and electric lines and works	13,388		508		13,896		-			13,896

ENGINEERING, SHIPBUILDING AND ELECTRICAL GOODS COUNTRY TABLES

Work done as sub-contractors										
Work on buildings										
Structural steelwork	11,651(b)		948		..		(b)			12,599
Other, including patent glazing and reinforced concrete	(a)		(a)		..		(a)			4,545
Other work done as sub-contractors	(a)		(a)		..		(a)			2,009
Total constructional engineering, etc. work	61,146(b)		8,324		..		(b)			69,470
Less total value of goods made or fabricated in firms' own works and used in the work	29,548(b)		5,673		..		(b)			35,220
Total constructional engineering, etc. work, exclusive of the value of goods made and used by firms	31,598(b)		2,651		..		(b)			34,249
Total principal products	79,400(b)		11,522		..		(b)			90,922
Other output	Value		Value		Value		Value		Value	
	£'000		£'000		£'000		£'000		£'000	
Machinery and plant, including parts										
Agricultural machinery	.. (a)		.. (a)		.. 238		-		..	238
Air conditioning, heating and ventilating plant and appliances	.. 174		-		.. 174		-		..	174
Boilers and boiler-house plant (excluding boilers for ships or locomotives)	.. 45		-		.. 45		-		..	45
Chemical and gas making machinery and plant	.. (a)		.. (a)		.. 632		-		..	632
Civil engineering and contracting machinery and plant	.. 210		-		.. 210		-		..	210
Machine tools (other than portable power tools)	.. 160		-		.. 160		-		..	160
Mechanical handling equipment	.. (a)		.. (a)		.. 968		-		..	968
Mining machinery	.. 71		-		.. 71		-		..	71
Other machinery and plant	.. 1,154		.. 109		.. 1,262		-		..	1,262
Iron and steel	Tons		Tons		Tons		Tons		Tons	
Castings	1,135	62	-		1,135	62	-		1,135	62
Forgings, stampings and pressings	..	11	-		..	11	-		..	11
	..	(a)	..	(a)	2,354	161	-		2,354	161
	..		..		..	27	-		..	27

CONSTRUCTIONAL ENGINEERING COUNTRY TABLES



TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain		Northern Ireland		United Kingdom	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	Tons	£'000	Tons	£'000	Tons	£'000		£'000	Tons	£'000
Other output (contd.)										
Fencing materials of cast or wrought iron (other than fencing wire)	..	(a)	..	(a)	3,243	228	-	-	3,243	228
					..	4			..	4
Door and window frames and casements of metal	2,126	521	27	5	2,153	526	-	-	2,153	526
	..	13			..	13			..	13
Heavy plate work, not included elsewhere	..	(a)	..	(a)	4,314	265	-	-	4,314	265
					..	128			..	128
Parts and accessories of motor vehicles	..	67	-	-	..	67	-	-	..	67
Other goods	..	1,885	..	46	..	1,931	-	-	..	1,931
Total goods (other output)		6,758		425		7,183		-		7,183
Scrap metals sold	Th. tons		Th. tons						Th. tons	
Iron and steel	42.3	172(b)	7.8	35	..	..	..	(b)	50.1	207
	..	1	..	1					..	2
Other metals	..	54	..	4	..	59	-	-	..	59
Work done, other than constructional engineering (d)										
Repair work		680		209		889		-		889
Other		338		5		343		-		343
Total work done, other than constructional engineering		1,018		214		1,233		-		1,233
Total		87,405(b)		12,201		..		(b)		99,605

(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) So far as recorded separately.

(d) 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 (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom
Products on hand for sale	{ at beginning of year	1,340	109	..	..	1,449
	{ at end of year	1,529	176	..	..	1,705
Work in progress	{ at beginning of year	12,434	4,081	..	..	16,515
	{ at end of year	14,122	4,047	..	..	18,168
Total products on hand for sale and work in progress	{ at beginning of year	13,773	4,190	..	..	17,964
	{ at end of year	15,651	4,223	..	..	19,874
Materials and fuel	{ at beginning of year	7,947	882	..	..	8,829
	{ at end of year	9,149	1,204	..	..	10,353

(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

## Larger establishments (a)(b)

TABLE 22

(i) Operatives

Number

	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Males					
Under 18	1,697(c)	431	..	(c)	2,128
All ages	38,469(c)	6,351	..	(c)	44,820
Females					
Under 18	13	9	22	-	22
All ages	771	96	867	-	867
Total					
Under 18	1,710(c)	440	..	(c)	2,150
All ages	39,240(c)	6,447	..	(c)	45,687

(ii) Administrative, technical and clerical employees

Number

	England and Wales (c)	Scotland	Great Britain	Northern Ireland (c)	United Kingdom
Males					
Under 18	713	126	..	..	839
All ages	9,661	1,446	..	..	11,107
Females					
Under 18	391	55	..	..	446
All ages	2,651	406	..	..	3,057
Total					
Under 18	1,104	181	..	..	1,285
All ages (d)	12,312	1,852	..	..	14,164

(continued overleaf)



TABLE 22 (contd.)

	(iii) Total employees					Number
	England and Wales (c)	Scotland	Great Britain	Northern Ireland (c)	United Kingdom	
Males						
Under 18	2,410	557	..	..	2,967	
All ages	48,130	7,797	..	..	55,927	
Females						
Under 18	404	64	..	..	468	
All ages	3,422	502	..	..	3,924	
Total						
Under 18	2,814	621	..	..	3,435	
All ages (d)	51,552	8,299	..	..	59,851	

(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

	(iv) Working proprietors					Number
	England and Wales (c)	Scotland	Great Britain	Northern Ireland (c)	United Kingdom	
Males	37	7	..	..	44	
Females	1	-	..	..	1	
Total	38	7	..	..	45	

## (v) Excluded employees

	(v) Excluded employees					Number
	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom	
Canteen workers						
Males	14	-	14	-	14	
Females	335	26	361	-	361	
Total	349	26	375	-	375	
Other workers						
Males	704	22	726	-	726	
Females	236	3	239	-	239	
Total	940	25	965	-	965	
Total excluded employees	1,289	51	1,340	-	1,340	

## Average employment

## Larger establishments (a)

	TABLE 23					Number
	England and Wales (b)	Scotland	Great Britain	Northern Ireland- (b)	United Kingdom	
Operatives	41,320	6,611	..	..	47,931	
Administrative, technical and clerical employees	12,388	1,827	..	..	14,215	
Total	53,708	8,438	..	..	62,146	

(a) For employment in small firms (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. No outworkers were recorded in this trade.

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

## Larger establishments

TABLE 24

	TABLE 24					£'000
	England and Wales (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom	
Wages and salaries (b) of						
Operatives	16,413	2,481	..	..	18,895	
Administrative, technical and clerical employees	6,206	918	..	..	7,125	
Total	22,619	3,400	..	..	26,019	
Employers' contributions to all National Insurance Schemes	552	88	..	..	640	

(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.

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

## Larger establishments

TABLE 25

	TABLE 25					£'000
	England and Wales (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom	
Plant, machinery and vehicles						
Acquisitions						
Plant and machinery						
New	810	95	..	..	905	
Second-hand	101	21	..	..	122	
Vehicles						
New	280	17	..	..	298	
Second-hand	113	15	..	..	128	
Total acquisitions	1,304	149	..	..	1,453	
Disposals						
Plant and machinery	19	5	..	..	24	
Vehicles	72	8	..	..	80	
Total disposals	91	13	..	..	105	
New building work						
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	366	46	..	..	411	

(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.

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

## Larger establishments

TABLE 26

	TABLE 26					£'000
	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom	
Amounts paid to other firms and undertakings	1,132(a)	258	..	(a)	1,390	
Amount paid or credited to firms' own separate transport organisations	256	23	278	-	278	
Total	1,387(a)	281	..	(a)	1,668	

(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.



## 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 merchanting 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, merchant 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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