

THE REPORT

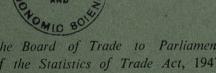
on the
CENSUS OF PRODUCTION
FOR 1951

Volume 4

Trade M

RADIO AND TELECOMMUNICATIONS

POLITICAL L



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).

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RADIO AND TELECOMMUNICATIONS TRADE

THIS REPORT on the Radio and Telecommunications Trade relates to establishments engaged wholly or mainly in the manufacture of telegraph and telephone equipment, radio apparatus, gramophones, electric lamps, including discharge lamps, etc. Production by Government Departments was not recorded for 1937.

This trade corresponds to minimum list headings 72, 73 and 74 in the Standard Industrial Classification.

Production by Government Departments in Northern Ireland for 1951, 1950 and 1949 has been included with private firms in the report on the Electrical Engineering (General) Trade (Volume 4, Trade K).

The increase between 1950 and 1951 in the number of persons recorded as employed by private firms in this trade is due, in part, to the reclassification of establishments to trades in accordance with the rule stated in the General Notes on the back cover of this report.

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.

RADIO AND TELECOMMUNICATIONS TRADE

Summary

Larger establishments (a)

(A) Private firms

	Un	ited Kingd	om	Great	Britain	Un	ited Kingd	lom
	1951	1950(ь)	1949	1949(c)	1948	1946	1937	1935
	£, 000	£.000	£, 000	£'000	£, 000	£, 000	£, 000	£,000
Gross output (production) (d)	185,917	136.478	114,236		109,332	77.521	36,314	27,910
Cost of materials and fuel used (e)	93,065	66,260	51,715		48,545	33,102	16,204	12,810
Payment for work done on materials given out Transport payments (f)	1,688 1,414	1,171	767	::	955	679	61	23
Net output Wages and salaries of persons	89,749	69.047	61,753		59,832	43,740	20.049	15.077
employed	55,685	44.253	40,982	••	38.785	30.777		
Average number of persons	No.	No,	No.	No.	No.	No.	No.	No.
employed (g)	166,867	142.962	134.255	••	133,861	122,599	81,383	65.729
Net output per person employed (g)	£ 538	£ 483	£ 460	£	£ 447	£ 357	£ 246	£ 229
Stocks at end of year	£, 000	£,000	£,000	£,000	£,000	£, 000	£.000	£,000
Products on hand for sale and	40.700	00 510	00 004			10.000		
work in progress Materials and fuel	42,728 27,015	30,519 16,022	30,684	::	32,367 15,260	19,996 9,270	4,092(h)	2.450(h)
Number of establishments	No. 440	No. 424	No.	No.	No. 406	No.	No.	No. 156

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

	The second secon							
	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£, 000
Output of firms in this trade (i)								
Principal products (j) Other output (k) Changes in stocks and work	150,429 25,427	135.567	115,588	{	90,129	87.121	31,976 3,280	24,974 2,511
in progress (1)	+ 10.060	+ 1.581	- 837		+ 5.375	- 9,600	+1,058(h)	+ 425(h)
	185,917	137.148	114.751		109.675	1		
Less payment for transport outwards (f)		669	515		343	77.521	36.314	27.910
Gross output (production)	185,917	136.478	114,236	••	109,332	77,521	36,314	27.910
Materials and fuel used by firms in this trade								
Purchases Changes in stocks (1)	101,740 - 8,676	68.137 - 1.878	50.259 + 1.456	::	49,254 - 709	33,171	16.204	12.810
Materials and fuel used	93,065	66,260	51.715	••	48,545	33,102	16,204	12,810

(B) Government Departments

TABLE 1 (contd.)

			Great Britain	n		United Kingdom
	1951	1950	1949	1948	1946	1935
	£, 000	£,000	£,000	£,000	£,000	£, 000
Gross output (production) (d)	54,411	47,992	49,061	43,320	35,045	11,950
Cost of materials and fuel used (e)	15,466	9,697	11,396	10,657	6,397	3,417
Payment for work done on materials given out Transport payments (f)	34 · 20	13	16	9		7
Net output Wages and salaries of persons employed	38.890 31.802	38.283 27.330	37.649 26.170	32.654 24.228	28.636 19.806	8,526
Average number of persons employed (m)	No. 73,448	No. 72,448	No. 71,708	No. 67,191	No. 64,996	No. 36,192
Net output per person employed (m)	£ 529	£ 528	£ 525	£ 486	£ 441	£ 235
Stocks at end of year	£,000	£,000	£, 000	£, 000	£,000	£,000
Products on hand for sale and work in progress Materials and fuel	1,926	1.634 693	1,545 804	1.289 659	1,200	49 (h
Number of establishments	No. 23	No. 28	No. 26	No. 15	No.	No. 20

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 (i)						TARRE S
Principal products (j)	52,623	47,909	48.804 {	42,223 955	} 35.016 {	11,555
Other output (k) Changes in stocks and work in progress (1)	1.495	+ 89	+ 256	+ 143	+ 29	+ 11(1
200	54,411	47,998	49,061	43,320		
Less payment for transport outwards (f)	34,411	5	45,001	-	35,045	11,950
Gross output (production)	54,411	47,992	49,061	43,320	35,045	11,950
aterials and fuel used by tirms in	224	191				
Purchases Changes in stocks (1)	15.690 - 224	9.587 + 110	11.540 - 144	10.734	6.574 - 177	3,417
Materials and fuel used	15.466	9,697	11,396	10,657	6,397	3.417

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

(c) Owing to the risk of disclosure of information relating to individual firms in Northern Ireland separate

(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) 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.
(e) Amounts paid for delivery services are excluded for 1951 but included for other years.
(f) 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.
(g) Excluding outworkers but including working proprietors. For an estimate of the total number of persons employed by private firms in this trade see Table 3.
(h) Work in progress only.
(i) Total value of sales (1951, 1950, 1949, 1948 and 1946) or production for sale (1937 and 1935).
(j) For details for 1951 and 1948 see Table 8.
(k) For details for 1951 and 1948 see Table 10.
(l) For details for 1951 see Table 21.
(m) Excluding outworkers.

(m) Excluding outworkers.

Summary: Small firms (a)

Private firms

TABLE 2

	Great E	Britain	United Kingdom	Great Britain		
000.00	1951	1950	1949	1949	1948	
Number of returns	116	136	202	200	139	
Average number of persons employed (b)					000 101 100	
Males	432	549	750	743	639	
Females	152	263	193	192	179	
Total	584	812	943	935	818	

(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: All establishments Private firms (a)

TABLE 3

Number

	Uni	ited Kingdom		Great Britain		
2017	1951	1950	1949	1949	1948	
As returned by firms			1000000000000		San	
Employing on the average more than ten persons (b) Employing on the average ten or fewer persons (d)	166,867 584(e)	142.962 812(e)	134, 255 943	(c) 935	133,861	
Estimated average employment in firms not making satisfactory returns	167.451 150	143,774	135,198	(c) 184	134,679	
Estimated average employment in all firms	167,601(e)	143,958(e)	135,382	(c)	135,080	

(a) Including working proprietors. For the total number of persons employed by Government Departments in this trade see Tables 1 and 14.
(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

Average	Estab-	F	Long		R	lemuneration		Net outpu
number employed	Tish- ments output outpu	Net output	Persons employed	Operatives	Other employees (a)	Total	per person employed	
	No.	£, 000	£,000	No.	£,000	£,000	£,000	£
		(A) Pri	vate firms	in the Uni	ted Kingdom			
11 - 24 25 - 49 50 - 99	84 77 78	2.333 3.713 7.022	979 1.690 3.086	1.941 2.757 5,614	423 599 1,176	160 239 603	583 838 1,778	504 613 550
100 - 199 200 - 299 300 - 399	62 29 22	8,805 9,369 9,948	4.309 4.189 4.301	9,013 6,817 7,591	1,735 1,427 1,614	986 658 915	2.721 2.085 2.529	478 615 567
400 - 499 500 - 749 750 - 999	16 20 15	8.375 13.053 14.518	4.044 6.553 7.162	7.083 11.697 12.809	1.634 2.524 2.783	762 1.254 1.223	2.396 3.778 4.006	57 1 56 0 55 9
1.000 + 1.499 1.500 - 1.999 2.000 - 2.499	12 8 6	19,202 14,701 14,010	7.672 7.106 5.646	15.007 13.525 12.810	3.385 2.723 2.924	1,410 1,331 1,330	4.795 4.054 4.254	511 525 441
2,500 - 4,999 5,000 and over	5 6	19.884 40.982	10.571 22.440	18.367 41.836	4.218 9,723	2,483 5,445	6.701 15.168	576 536
Total private firms	440	185,917	89,749	166,867	36,887	18.798	55,685	538
	400000	(B) Govern	nment Depar	tments in G	reat Britain			1 AT 10.003
11 - 24 25 - 49 100 - 199	9 3 1	135 93 158	88 74 120	180 91 144	53 35 51	20 7 9	73 43 60	488 809 837
200 - 299 300 - 399 500 - 749	1 2 4	200 690 2,058	101 407 1,218	239 742 2,493	83 202 860	19 46 196	102 248 1.056	423 549 488
3,000 and over	3	51,078	36.882	69,559	22,918	7,303	30,221	530
Total Govern- ment Depart- ments	23	54,411	38,890	73.448	24.202	7,600	31,802	529

(a) Administrative, technical and clerical employees.

Analysis by standard region, 1951

Larger establishments in the United Kingdom

Private firms (a)

TABLE 5

	Service in	Land R	Net o	utput		F	Remuneration		
Region	Estab- lish- ments	Gross output	Value	Percent- age of total	Persons employed	Operatives	Other employees (b)	Total	Net output per person employed
	No.	£,000	£,000		No.	£'000	£.000	£,000	£
England and Northern Ireland			2 Dec 400		milijane. Ezolik	1 1 1 A			
Northern	18	8,919	5,090	5.7	10.065	1,910	882	2,792	506
East and West Ridings	21	2,938	1.430	1.6	3.297	725	225	9 50	434
North Midland; and Northern Ireland Eastern	17	9.349	4.867 10.494	5.4	9,162	2,200 3,512	937 2,701	3,137 6,214	531 572
London and South		24,400	10,434	11.7	10,344	3,312	2,701	0,214	372
Eastern	236	98,335	45.576	50.8	86.037	19,449	10.047	29,496	530
Sou thern	19	3.074	1,612	1.8	2.789	537	377	914	578
South Western	16	7.722	3,497	3.9	5.407	1.256	529	1.784	647
Midland	25	10,513	5.891	6.6	10,787	2.652	1,032	3,684	546
North Western	25	12,512	7.949	8.9	15,035	3,420	1.537	4.957	529
Total England and Northern Ireland	421	177.763	86.406	96.3	160,923	35,661	18,266	53,928	537
Wales	8	5,520	2,046	2.3	4,170	823	397	1,221	491
Scotland	11	2.634	1,297	1.4	1.774	402	135	537	731
United Kingdom	440	185,917	89,749	100.0	166,867	36,887	18,798	55,685	538

(a) No analysis by standard region can be given for Government Departments.

(b) Administrative, technical and clerical employees.

Analysis according to specialisation within the trade, 1951

Larger establishments in the United Kingdom

Private firms (a)

T	AB	LE	6
			_

			Sales of			R	emuneratio	n	Net output per person employed
	Establish- ments		charac- teristic products	Net output	Persons employed	Operatives	Other employees (b)	Total	
	No.	£,000	£'000	£'000	No.	£'000	£'000	£,000	£
Specialist producers of									
Telegraph and telephone apparatus	61	44,460	27.886	27,133	46,002	10,908	5,602	16,509	590
Radio apparatus (except valves) and gramophones	258	102,659	71.865	42,934	80,177	17,487	9,243	26.730	535
Valves and cathode ray tubes	24	12,569	9.843	7,006	14,549	3,036	1,311	4.347	482
Electric lamps	60	13,193	10,540	6,056	12,960	2,716	994	3,711	467
Remainder of the trade	37	13,035		6,619	13,179	2,740	1,648	4.388	502
Total	440	185,917		89,749	166.867	36,887	18,798	55,685	538

(a) No specialisation in the Government section of this trade was distinguished.

(b) Administrative, technical and clerical employees.

Total make of certain products

Larger establishments

Private firms (a)

TABLE 7 Returned in all trades Returned in this trade Great United Kingdom United Kingdom Britain 1948 Britain 1951 19 48 1951 Entries Quantity Quantity Entries Quantity Quantity Thous. Thous. Thous. No. Valves, electronic, other than X-ray valves Complete Transmitting and industrial 140 Over 50 watts anode dissipation 12,029 Not over 50 watts anode dissipation 24,419 23,678 Other electronic valves including rectifying 26.847 18 (b) valves and stabilising tubes Cathode ray tubes, complete 761 10 Electromagnetic deflection 102 102 19 Electrostatic deflection

(a) None of the products listed above was returned as made in Government establishments.(b) Owing to the risk of disclosure of information relating to individual firms separate particulars cannot be given.

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

Larger establishments

(A) Private firms

	Uni	ted Kingdom 1951		Great Br 1948	
	Quantity	Value	Entries	Quantity	Value
		£,000	No.	A CAUSE AND STREET	£,000
Radio transmitters for public broadcasting, complete		212		inmo.	494
Television transmitters, complete		716		••	351
Radio communication and navigational aids (including radar equipment), complete		12,585	86		8,422
Radio receiving sets, domestic (other than radiograms), complete, and chassis substantially assembled (a)	Thous.			Thous.	
Mains	1,136	11,077	58	1,071	12,187
Battery	253	1,943	31	248	1,973
Other, including car radio	143	1.362	10	86	1,033
Un classi fied	-	-	- {	6	86 376
Radiograms, complete, and chassis substantially assembled (a)	210	5.739	46	130	4.203
Television receiving sets, complete, and chassis substantially assembled, whether or not sound reception is incorporated (a)	711	24.328	44 {	82	3,528
Chassis, substantially assembled, for radio receiving sets, domestic, for radiograms, and for television receiving sets		(ь)	{	75	47.4 113
Radio testing equipment, not elsewhere specified		1.240	37		616

TABLE 8 (contd.)

	United Kingdom 1951			Great Britain 1948		
	Quantity	Value	Entries	Quantity	Value	
	Thous.	£'000	No.	Thous.	£,000	
Telegraph and telephone equipment, other than testing equipment						
Complete installations	188	17,864	19		11,620	
Telephone instruments, complete, sold separately	675	3,663	21 {	1,149	3,976 971	
Parts		5,016	53	••	6,044	
Telephone instruments and parts, not separately distinguished		136	20		665	
Line apparatus for long distance communication (carrier, duplex and repeater) and speech input equipment		4.420	16		3,878	
Telegraph and telephone testing equipment, not elsewhere specified						
Signalling apparatus, including traffic signals.	•	173	11		895	
other than for railways Electrical signalling apparatus for		1,037	15	}	1,077	
railways (c) Industrial radio frequency equipment (valve type), including heating and electronic	••	1,188	13			
control equipment		1,245	39		360	
Gramophones and phonographs						
Complete				TOTAL STATE OF THE		
Acoustic	78	319		64	360(c)	
With electrical amplification	16	227	10	23	391	
Record players	184	828	18	51	325(c)	
Motors and other parts and accessories (c)		3,375	23		1,965	
Other electrical sound reproducing apparatus	of the same but to					
Complete						
For public address	{ 25	421 89	} 27 {	12	321 275	
For sound films	7	1,244	7	5	1,190	
For industrial relay	2	79	} 12		210(4)	
	3.852	2.630	K d	1,846	316(d) 1,493(d)	
Radio loudspeakers, sold separately	ι	275	30		235	
Other descriptions	{ ⁶	156 106	} 11 {	30	153 97	
Unclassified	-	-	-		62(e)	
Parts		1,205	33		860(f)	
Electrical sound recording apparatus		702	25		509	
Resistors, sold separately						
Fixed	{ 258,260	2.497 438	} 34 {	28.467	554(c) 485	
Variable	10,967	1,589	25 {	1.942	370(c) 204	
Transformers (other than for lighting, heating, power and instruments)(c) (g)	1,751	452	16 {	633	155 . 85	
Components and parts of radio apparatus, telegraph and telephone apparatus, etc., not elsewhere specified		16.163	215		8,215	
		2-11-12 (12) 20 (12)	THE RESERVE		20-12-14-14-14-14-14-14-14-14-14-14-14-14-14-	

TABLE 8 (contd.)

PARTY TO THE PARTY OF THE PARTY	United Kingdom 1951			Great Britain 1948		
volue Envisa Conservy Volum	Quantity	Value	Entries	Quantity	Value	
non-s	Thous.	£,000	No.	Thous.	£.000	
Valves, electronic, other than X-ray valves, sold separately			diston t	Alexandro Actor (120) Alexandro (120)		
Complete			1000			
Transmitting and industrial	N TORREST		ter as as as	Tree (seri de		
Not over 50 watts anode dissipation	11,994	2,917	8)	domaso LeX	
Over 50 watts anode dissipation	82	1,055	7	2,909	1.628	
Other electronic valves, including rectifying valves and stabilising tubes	26.727	5,008	19 {	19,086	3.844	
Cathode ray tubes, complete			100	r securious alcomo		
Electromagnetic deflection	634	3,659	10	ederoterob bas		
Electrostatic deflection	18	184	6	105	444	
Parts of electronic valves (other than X-ray	10	104		4		
valves) and cathode ray tubes	(552	14	and towns non	230	
Electric lamp bulbs, filament type, complete, ready for use			sous to	eligis described these estrenges traits and eligibists arrows de	countries of the second	
Not over 24 volts						
Motor vehicle types	39,988	1.527	19	32.429	1,203(h)	
Torch bulbs, radio panel and cycle dynamo bulbs	61.607	708	16	32.998	279(h)	
Other bulbs not over 24 volts	16,672	597	18	18,534	7 57	
Over 24 volts	160,248	7,260	24	AS NAMES OF STREET	sis8 Traff	
Flashlight bulbs for photographic and other purposes	3,620	153	and to	136,350	6,114	
Vacuum tubes, complete					2 (20 mg) 25 (20)	
Discharge lamps, luminous tubes, fluorescent tubes and tube signs	eldmokan viin		Ad agreemen	poppe behrone	158 10 1	
For advertising purposes	9	72 463	23	and the same	184(c)	
For other purposes	desirionie d	in more recommendation	1 1 1 1 1 1	e saba socion	YES ALL VIEW	
Fluorescent tubular lamps	6,939	1,808	18	3,533	1,494	
Other not over 300 volts		aslov b	on the mov	bedfall edition	7587 (4)	
Not over 5 watts	Isolaton M. ad	16	BAY 407 B	561	45	
Over 5 watts	420	601	6	366	566	
Other, including X-ray tubes and X-ray valves	10	332	8	al bino B onlin	39(i)	
Parts of electric lamp bulbs and vacuum tubes (c)		1,413	16		998	
Unclassified radio, telegraph, telephone, etc., apparatus	6000000 07	1,845		E MANT EN	149	
Waste products (other than scrap metals)		194	61		48	
Total goods sold		157,190			100,069	

TABLE 8 (contd.)

	Uni	United Kingdom 1951					
Notes Married Santage value	Quantity	Value	Entries	Quantity	Value		
Electrical contract and other work carried out in the United Kingdom (1951) or Great Britain (1948) (j)	28.0003	£.000	No.	o radeo esta	€,000		
Electrical contract work done as main contractors			144	erauhut kine py	Li i tangan		
Telegraph and telephone lines and works	2 1 Net 12 2	4,330	9	oom same 25	2,859		
Installation of radio, telegraph and telephone apparatus and appliances	1 68	9,189	22	ib shows alles	3,450		
Other work for which payment was receivable	That, at 1		nishlidasi	a boo abylor g	DIVITION.		
Repair and maintenance work		2,989	65		1,233		
Research and development work	100	3,311	29		603(c)		
Other work done for the trade or on commission (c)	86	190	7		I for an a for it.		
Total contract and other work		20,008	977 30 454		8.145		
Less estimated value of goods made by firms and separately recorded as sold.			7 AUV3 7		sense Landania		
which were used in this work		9,987			4,692		
Total contract and other work exclusive of the value of goods made by firms	843,80			sempl alb	Edsy Suspec		
and used in the work	1	10,021	la in bio		3.453		
Total	2VB, 31	167,211		AS THE RESERVE	103,522		
Sales in other trades (see Table 9)	160,000	16.782	• 1•		13,393		
Principal products of this trade sold by establishments in the trade	onate 1	150,429	322		90,129		

(a) The 1948 figures exclude chassis substantially assembled.
(b) Not recorded separately.
(c) So far as recorded separately.
(d) Corrected figure.
(e) May include some gramophones with electrical amplification.
(f) May include some parts for gramophones with electrical amplification.
(g) For lighting, heating and power transformers and instrument transformers see the Electrical Engineering (General) Trade (Volume 4, Trade K).
(h) May include bulbs exceeding 24 volts.
(i) So far as recorded separately, excluding X-ray tubes and X-ray valves. For sales of X-ray apparatus, including tubes and valves, in 1948 see the Electrical Engineering (General) Trade (Volume 4, Trade K).
(j) The values (amount charged) shown for the different classes of work done are inclusive of all goods or materials used. The goods made and so used are included as output against the appropriate headings in Tables 8 and 10 for each year.

(B) Government Departments

TABLE 8 (contd.)

	Great Britain			
The state of the s	195	1	1948	
	Value	Entries	Value	
	£,000	No.	£,000	
Telegraph and telephone equipment, other than testing equipment	208 10 880000		10 10 to 10 10 10 10 10 10 10 10 10 10 10 10 10	
Complete installations	6	140		
Telephone instruments, complete, sold separately	2		187	
Parts	537)	
Line apparatus for long distance communication (carrier, duplex and repeater) and speech input equipment	27		395	
Telegraph and telephone testing equipment, not elsewhere specified	97		79	
Signalling apparatus, including traffic signals, other than for railways	5		46 (a)	
Components and parts of radio, telegraph and telephone apparatus, etc., not elsewhere specified	63		115	
Waste products (other than scrup metals)	1,171	••	-	
Total goods	1,906		823	
Electrical contract and other work carried out in Great Britain		Ten negro.		
Electrical contract work done as main contractors				
Telegraph and telephone lines and works	11,784		10,381	
Installation of radio, telegraph and telephone apparatus and appliances	12.316		10,071	
Other work		THE RESERVE		
Repair and maintenance work	25,295	9	20,948	
Research and development work	1,323	••••	(P)	
Total contract and other work	50,717		41,399	
Total	52,623	9	42,223	

(a) May include electrical signalling apparatus for railways.
(b) Not recorded separately.

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

Larger establishments

Private firms (a)

TABLE 9

	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
		£,000	No.		£,000
Radio transmitters for public broadcasting, complete	-		-		8
Television transmitters, complete	-	-	-		304
Radio communication and navigational aids (including radar equipment), complete		2,389	36		1,834

TABLE 9 (contd.)

ANTINE COMP.	United Kingdom 1951			Great Britain 1948	
	Quantity	Value	Entries	Quantity	Value
	Thous.	£'000	No.	Thous.	£'000
Radio receiving sets, domestic, mains only and battery only (excluding car radio); radiograms; and television receiving sets, whether or not sound reception is incorporated		The serve		azalinte i sen	ATTICLES.
Complete and chassis substantially assembled	101	1,253	5		
Telegraph and telephone testing equipment, not elsewhere specified; and components and parts of radio apparatus, telegraph and telephone apparatus, etc., not elsewhere specified	. 379.004	2,007	88	}	1,456(Ь)
Radio testing equipment, not elsewhere specified		28	8		14
Telegraph and telephone equipment, other than testing equipment			P 171-17 HE		de la
Complete installations; line apparatus for long distance communication (carrier, duplex and repeater) and speech input equipment	•• 22/12/20	781			1,532
Telephone instruments, complete, sold				1	3
separately	41	225	5	A THE STATE OF	57 9
Parts		694	22		762
Telephone instruments and parts not separately distinguished	••	136	20	The Province	665
Signalling apparatus, including traffic signals, other than for railways		227	8	}	571
Electrical signalling apparatus for railways		1.035			
Industrial radio frequency equipment (valve type), including heating and electronic control equipment		387	18		152
Electrical sound reproducing apparatus				ment farolt has	
Complete				AND THE PARTY OF	Stewart .
For public address and sound films	3	337	e {	3	336 43
For industrial relay	1	8	} · ·	-	
Other descriptions, including radio loud- speakers, sold separately, but excluding gramophones	12	24 14	} {	8	8 21
Unclassified	-	-	-	2	
Parts, including motors and other parts and accessories of gramophones and phonographs		558	17		516
Electrical sound recording apparatus		116	7		
Resistors, sold separately	120 0 000				
Fixed	34,272	449 421] 18	25,044	325 141
Variable	2,073	300	12 {	1,096	191 21

TABLE 9 (contd.)

	United Kingdom 1951			Great Britain 1948	
Searce and Charles and American	Quantity	Value	Entries	Quantity	Value
	Thous.	£,000	No.	Thous.	£'000
Valves, electronic (other than X-ray valves), sold separately, and cathode ray tubes, including parts	District .	552	9		298
Electric lamp bulbs, filament type, complete, ready for use; and flashlight bulbs for photographic and other purposes	69,099	2.411	5	58,484	2.043
Vacuum tubes, complete					
Discharge lamps, luminous tubes, fluorescent tubes and tube signs	1,491	743 128	} 13 {	1.704	818 100
Other, including X-ray tubes and X-ray valves	3	152			. 7
Parts of electric lamp bulbs and vacuum tubes		69			engen elegan
Unclassified radio, telegraph, telephone, etc., apparatus	-	-	20000		149
Total goods sold	aroka, I	15,445			12,898
Electrical contract and other work carried out in the United Kingdom (1951) or Great Britain (1948) (c)					To Lorez
Electrical contract work done as main contractors		PROPERTY OF THE PARTY OF THE PA	A STATE OF		cerrol so
Telegraph and telephone lines and works and				A STATE OF THE PARTY OF	40 42 104
the installation of radio, telegraph and telephone apparatus and appliances		2.097	7		686
Other work for which payment was receivable			-		10
Total contract and other work		2,097			696
Less estimated value of goods made by	1	a direct description		See Agencies	50 5005
firms and separately recorded as sold, which were used in this work		761			200
Total contract and other work exclusive		Telepopping			
of the value of goods made by firms and used in the work	N. S. C.	1.336			496
Total goods made and contract and other work done		16,782		1 4 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	13,393

(a) No sales of the principal products of this trade were recorded by Government establishments classified to other trades.
(b) Including all types of radio receiving sets, domestic, and also transformers, other than power and instrument transformers.
(c) The values shown for the different classes of work done are inclusive of all goods or materials used. The goods made and so used are included as output for each year.

Sales in the trade of other than principal products Larger establishments

TABLE 10				£,000
	(A) Privo	ite firms	(B) Gov Departs	
	United Kingdom	Great Britain	Great]	Britain
the second of th	1951	1948	1951	1948
Electrical machinery and plant	489	179	3 to 40 _25 3 623	
Electric lighting fittings and accessories	1.692	1,531	And Change to the late.	100 2 10 1 10 2 1 1 1 1 1 1 1 1 1 1 1 1
Capacitors	1,375	273(a)	-	
Cooking apparatus and appliances, electric	46	45	-	
X-ray apparatus	118(b)	176	-	The Agreement
Other electro-medical apparatus	393	132		-
Heating apparatus, electric	315	279		
Scientific instruments, electrical	594	7 005		
Other electrical goods and apparatus	13,163	7,265	•	
Scrap metals-sold	1,360	594	161	27
Other goods	5,125	3,165		132(c)
Total goods	24,669	13,640	161	159
Electrical contract and other work carried out in the United Kingdom (1951) or Great Britain (1948) by private firms, and in Great Britain (1951 and 1948) by Government Departments (d)	V	no existe the se		To losefamilianos
Electrical contract work done as main contractors		and animostal	D FREE SECTIONS	
Electric power and lighting lines and works) 1	1	652	543
Other electrical contract work, excluding that on telegraph and telephone lines and works and the installation of radio, telegraph and relephone apparatus and appliances	838	426		451
Electrical contract work done as sub-contractors	18			62
Other work done	537	397	683	192
Total contract and other work done	1,393	823	1,334	796
Less estimated value of goods made by firms and separately recorded as sold, which were used in this work			1,001	/30
	634	292	-	•
Total contract and other work exclusive of the value of goods made by firms and used	ranes inter party	eres, without to the		
in the work	759	531	1,334	796
Total goods and contract and other work done	25,427	14,171	1,495	955

(a) Including parts.
 (b) Excluding X-ray tubes and X-ray valves. Particulars of these goods in 1951 are included with other vacuum tubes in Table 8.
 (c) Described as 'Concentrates, metallic residues, wastes, etc.
 (d) The values shown for the different classes of work done are inclusive of all goods or materials used. The goods made and so used are included as output for each year.

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

agort	ARGUEL 4	Production (b)(c)	Exports (d)	Retained imports (e)
		£,000	£'000	£,000
Radio transmitters for public broadcasting, complete (f)	{1951 1948	212 494	279 418	1 2
Television transmitters, complete (f)	{1951 1948	716 351	91 38	17 34
Radio communication and navigational aids (including radar equipment), complete (f)	{ 1951 1948	12.585 8.422	5,337 2,265	577 216
Radio receiving sets, domestic (other than radiograms), complete, and chassis substantially assembled		Thous.	Thous.	Thous.
Mgins	1951	1,136	337 (g)	1(g)
Pattery	1951	253	83(g)	1(g)
Other, including car radio	1951	143	32(g)	A CONTRACTOR OF THE PARTY OF TH
Total radio receiving sets, domestic (other than radiograms), complete, and chassis substantially assembled	1951	1,533	466	3
Radiograms, complete, and chassis substantially assembled	1951	210	13	Service Services
Television receiving sets, complete, and		1 1 1 1 1 1 1 1 1		
chassis substantially assembled, whether or not sound reception is incorporated	1951	711	1(g)	
	1871	£,000	£'000	€,000
Radio testing equipment, not	§ 1951	1,240	235	11
elsewhere specified	1948	616	115	8
Telegraph and telephone equipment, other than testing equipment (f)	{1951 1948	27.223 23.463	13,364 10,273	100
Line apparatus for long distance communication (carrier, duplex and repeater) and speech input equipment (f)	{ 1951 1948	4.447	1,462 1,213	11 1
Telegraph and telephone testing equipment, not elsewhere specified	{ 1951 1948	270 97 4	98 66	20
Industrial radio frequency equipment (valve type), including heating and electronic control equipment (f)	{1951 1948	1,245	168 64	2 21
Gramophones and phonographs		Thous.	Thous.	Thous.
Complete			The section of the section of	Decrete VIII
Acoustic	1951	78	79	13
With electrical amplification (f)	{ 1951 1948	£'000 227 391	£'000 57 40	£'000 8(h 7(h
second and a second and		Thous.	Thous.	Thous.
Record players	1951	184	41(i)	
Other electrical sound reproducing apparatus		£'000	£'000	£,000
Complete				
For public address (f)	{1951 1948	510 596	171 100	::-
religit our or needs are supported to the	£1951	Thous. 4,255(j)	Thous. 851	Thous.
Radio loudspeakers, sold separately	1948	2,137(j)	304	
Valves, electronic, other than X-ray valves (k)				4 0 2 4 4 4 4 4
Complete			Water State of the Control of the Co	A STATE OF THE STA
Transmitting and industrial			PROSTERNAL DEC. 128	A LICENSE OF STREET
Not over 50 watts anode dissipation	1951	12.029(1)	170	(m)
Over 50 watts anode dissipation	{ 1951 1948	140(1)	16 11	1 2

TABLE 11 (contd.)

		Producti	on (b)(c)	Export	s (d)		ts (e)
		The	ous.	Tho	us.	The	ous.
Valves, electronic, other than X-ray valves (k) (contd.)							
Complete (contd.)							
Other electronic valves, including						3 103 0 3 3 10	
rectifying valves and stabilising tubes	1951	26	.847(1)	10	002		C24
		20	,04/(1)	10,	992	3.	634
Total radio valves, electronic,	{ 1951 1948		.017(1) .466(1)		178	3.	615
other than X-ray valves, complete	1937		.034(n)		622 726	2.	322 268
Cathode ray tubes, complete (k)							
Electromagnetic deflection	1951		761(1)	100.000	5	9 3 100 100	214
Electrostatic deflection	1951		19(1)		2	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6
							0
Total cathode ray tubes, complete	{ 1951 1948		780(1) 102(1)		7 2		220
Parts of electronic valves (other than	ſ 1951	F. (000 552	£,0	00 53	£.0	488
X-ray valves) and cathode ray tubes	1948	1 100	230		30		79
Electric lamp bulbs, filament type, complete, ready for use		Thous.		Thous.		Thous.	
Not over 24 volts						See See	
Motor vehicle types	£ 1951		988	STATE OF THE PARTY	289	C. San	710
Tauah hulha andi and	1948	32,429		3,232			935
Torch bulbs, radio panel and cycle dynamo bulbs	{1951 1948	61,607		10.856 5.604		16,878	
Other bulbs not over 24 volts	(1951	16,672		2.760			707
Other bulbs not over 24 volts	1948		534	1,853			024
Over 24 volts	1951	160,	248	23,918			306
lashlight bulbs for photographic	1051				2217- 600		
and other purposes	1951		620	377			
Discharge large luminous tubes		£.0	100	£,0	00	£,0	00
Discharge lamps, luminous tubes, fluorescent tubes and tube signs							
For advertising purposes	1951		535	antenno, de	17		1
		Thous.	£'000	Thous.	C1.000	Tr)	
For other purposes		mous.	£ 000	Inous.	£,000	Thous.	£,00
Fluorescent tubular lamps	{ 1951 1948	6,939 3,533	1,808 1,494	410	634 222	1 2 1 1 1 1 1	
Other not over 300 volts		1 1 1 1 1 1 1					ASSESS.
Not over 5 watts	ſ 1951		16		11		
	1948	561	45	37	4	100.0002	
Over 5 watts	{1951 1948	420 366	601 566	225	66 143		
Total displace leading				-20			•
Total discharge lamps, etc. for other purposes	{ 1951 1948	4,460	2,424 2,105	672	712 370	7	17
		£,0	00	£'00	00	£'00	00
Other, including X-ray tubes and X-ray valves	1951	332			56		98

(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, except where otherwise stated.
 (c) Including production (or sales) by establishments classified to other trades.
 (d) Valued f.o.b.

(d) Valued f.o.b.
(e) Valued c.i.f.
(f) The oversea trade figures exclude valves and cathode ray tubes incorporated in apparatus.
(g) Excluding chassis substantially assembled.
(h) Including amplifiers and loudspeakers.
(i) Including complete equipments therefor.

(j) Partly estimated.(k) The oversea trade figures include valves and cathode ray tubes incorporated in apparatus.

(1) Production.
(m) Re-exports in excess of imports.
(n) Production by establishments classified to the Radio and Telecommunications Trade only.

(5975)

Usage of certain specified purchased materials, 1951 Larger establishments

(A) Private firms in the United Kingdom

TABLE 12

Materials used	Quan ti ty
	Th. tons
Iron	
Pig iron	0.1
Iron castings, in the rough	0.9
Non-alloy steel	in ignit.
Angles, shapes and sections	5.1
Girders, joists, beams and pillars (not fabricated)	0.1
Bars and rods	6.9
Hoop and strip (including tape)	11.4
Tin-, terme-, and black-plates and sheets	2.4
Electrical sheets	5.1
Other plates and sheets	
1/8 in. thick and over	2.0
Under 1/8 in. thick	12.8
Tubes and fittings	0.7
Wire (single wire)	3.1
Drop forgings	0.1
Alloy steel (including high-speed steel)	
Ingots, billets, blooms, slabs, bars, rods, angles, shapes, sections, girders, joists and pillars (not fabricated)	1.3
Plates, sheets and strip	
1/8 in. thick and over	0.4
Under 1/8 in. thick	0.3
Tubes and fittings	0.1
Castings, in the rough	0.1
Non-ferrous metals in all forms (except finished parts)	Th.cwts.
Aluminium and aluminium alloys	92.2
Brass and other copper alloys, including nickel silver but	244.7
excluding other nickel alloys	146.8
Copper	14.0
Nickel and nickel alloys, excluding nickel silver	7.0
Tin	15.9
Zinc and alloys of zinc	1.6
Lead compounds	2.2
Zinc compounds	2.2
Fimber (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	185
Softwood	505
Cotton yarn, thread and cloth	Th.1bs. 805.9
Rayon, nylon, etc. yarm, thread and cloth	125.1

RADIO AND TELECOMMUNICATIONS

(B) Government Departments in Great Britain

TABLE	120	(contd.)
******		1

Materials used	Quantity
	Th.tons
Non-alloy steel	EL AN
Angles, shapes and sections	0.1
Bars and rods	0.1
Hoop and strip (including tape)	0.1
Plates and sheets, under 1/8 in. thick	0.1
Non-ferrous metals in all forms (except finished parts)	Th.cwts.
Brass and other copper alloys, including nickel silver but excluding other nickel alloys	4.6
Copper	1.2
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	5.0
Softwood	10.9

Employment in September

Larger establishments (a) (A) Private firms

TABLE 13 (i) Operatives

		United Kingdom			Britain	United Kingdom	
	1951(b)	19 50 (b)	1949 (b)	1949(c)	1948(d)	1937 (d)	1935(d)
Mal es							
Under 18	3,051	2,757	2,514	19.12	2.871	6,191	4.093
All ages	62,610	55,487	50,962		51,286	33.840	25,576
Females				STATE STATE	01,200	33,040	23,3/6
Under 18	3.786	3.130	2.444	District bus as	2,850	7.607	5 050
All ages	64,995	54,689	47.391		49.368	32.299	5,853
					10,000	02,200	20,303
Total							
Under 18	6,837	5 007	4 050				
All ages	127,605	5,887	4.958		5.721	13,798	9.946
nii uges	127,603	110,176	98,353		100.654	66,139	53,885

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

(11) 120011	123 CT at 1 V			al employees	()		Number		
		U	nited Kingdom	1	Great Britain			Kingdom	
	100	1951	1950	19 49	1949(c)	1948	1937	1935	
Males	集会								
Under 18	0.00	814	655	731		722	777	56.5	
All ages		28,601	24,547	23,251	Sangainte Fall	21,534	10,345	7.887	
Females									
Under 18		1.687	1,453	1,354		1,280	1.300	897	
All ages		14.502	12,210	11,934		11.655	4,899	3.957	
To tal									
Under 18		2,501	0.100						
All ages		43,103(f)	2,108	2.085		2,002	2.077	1,462	
in ages		43,103(1)	36,757(f)	35,185(f)		33,189(f)	15,244	11.844	

	U	United Kingdom		m Great Br		United Kingdom	
	1951	1950	19 49	1949(c)	19 48	1937	1935
Mal es						THE RESERVE OF THE PERSON NAMED IN	
Under 18	3,865	3,412	3,245	2、小湖湖 西黎教士(1)	3,593	6.968	4.658
All ages	91.211	80,034	74,213		72,820	44.185	33,463
Females	4.7						
Under 18	5.473	4.583	3,798		4,130	8.907	6.750
All ages	79,497	66,899	59,325		61,023	37,198	32,266
Total							
Under 18	9.338	7.995	7.043		7.723	15.875	11.408
All ages	170.708(f)	146,933(f)	133,538(f)		133,843(f)	81.383	65.729

TABLE 13 (contd.)

(B) Government Departments

(1) Operation	ves				, namber	
	Great Britain				United Kingdom	
	1951 (b)	1950 (b)	1949 (b)	19 4 8 (d)	1935 (d)	
Males Under 18	2.236 58.315	2.299 58.365	2.453 58.345	2.197 54.942	801 29,506	
All ages Females Under 18 All ages	115 1,210	58 839	42 839	39 931	91 296	
Total Under 18 All ages	2,351 59,525	2.357 59,204	2,495 59,184	2.236 55,873	892 29,802	

		Great Britain				
	1951	1950	1949	1948	1935	
Males Under 18 All ages Females	167 9.466	52 8,952	40 9,256	76 7,470	239 5.331	
Under 18 All ages	351 4,464	317 4,224	306 4,341	254 3.848	55 1,059	
Total Under 18 All ages	518 13,930	369 13,176	346 13,597	330 11,318	29 4 6,390	

water and the second	at a subsect of supplied	Great Britain					
	1951	1950	1949	1948	1935		
Males			A SHE WALL	0.000	1 040		
Under 18	2,403	2,351	2.493	2.273 62.412	1.040		
All ages	67,781	67.317	67,601	02,412	34,037		
emales Under 18	466	375	348	293	146		
All ages	5,674	5,063	5,180	4,779	1,355		
Total Under 18	2.869	2,726	2,841	2.566	1,186		
All ages	73.455	72.380	72.781	67.191	36,192		

(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):-

(A) Private firms

Canteen workers Other workers	.137 Males 427 Males	1,445 Females 198 Females
(B) Gove	ernment Depart	ments
Canteen workers	- Males	7 Females
Other workers	89 Males	27 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) Wo	rkin	g p	rop	rie	tors
-----	------	------	-----	-----	-----	------

	Uı	nited Kingdo	Great Britain		
	1951	1950	1949	1949	1948
Males	21	15	21		16
Females	1	4	2	••	2
Total	22	19	23		18

(5975)

(5975)

Average employment

Larger establishments

(A) Private firms (a)

	United Kingdom			Great	Britain	United Kingdom	
	1951	1950	1949	1949(ы)	1948	1937	1935
Operatives (c) Administrative, technical and	124,814	106,999	99,228		100,654	66,139	53,885
clerical employees	42,031	35,944	35,004		33,189(d)	15,244(d)	11,844(d)
Total	166,845	142,943	134,232		133,843	81,383	65,729

(B) Government Departments

		Great Britain				
	1951	1950	1949	1948	1935	
peratives (c) dministrative, technical	59,589	59,166	58,538	55,873	29,802	
and clerical employees	13,859	13,282	13,170	11,318(d)	6.390(d)	
Total	73.448	72,448	71,708	67,191	36,192	

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

(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 operatives employed in Great Britain on outside work of erection, fitting, etc.: 4.916 (1951) and 2,789 (1948) by private firms; 27,985 (1951) and 52,596 (1948) by Government Departments. Similar information for other years is not available.

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

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

(A) Private firms

Cont. Service Control of Control	United Kingdom		Great Britain		United Kingdom		
	1951	1950	1949	1949	1948	1937	1935
Males Females	5 288	10 269	45 137		2 108	::	::
Total	293	279	182		110		

(B) Government Departments

	A STATE OF THE PARTY OF THE PAR				
to be banded as a state of		United Kingdom			
	1951	1950	1949	1948	1935
Males Females	1 9	1 15	1 95	1 105	
Total	10	16	96	106	

Shift working, 1951 (a)

Larger establishments in Great Britain

(A) Private firms

TABLE 15

43079	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 Continuous 4 shift systems per 24 hours averaging 6 hours per shift	8.275	66.328	11
All 2 shift systems Other shift systems	156,729 26,014	1,471,920 211,044	22 6
Total	191,018	1.749,292	(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:-

	Ret	Returns		Operatives		
The state of the s	Total in trade	Showing shift-work	Total in trade	Total on returns showing shift-work	Number employed on shift- work	
Number Percentage of total in trade Percentage of total on returns showing shift-work	100.0	30 9.0(c)	100.0	68.644 54.0(c)	38,020 30.0(c) 55.4	

(c) Rounded to avoid disclosure.

(B) Government Departments

TABLE 15 (contd.)

	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
ontinuous 3 shift systems per 24 hours averaging 8 hours per shift ontinuous 4 shift systems per 24 hours	458	3,660	2
averaging 6 hours per shift 11 2 shift systems ther shift systems	952	- 8,459	- 2
Total	1,409	12,119	(d)

(d) 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 Percentage of total in trade Percentage of total on returns showing shift-work	100.0	44.4	59,525 100.0	56,251 94.5 100.0	248 0.4 0.4

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

Larger establishments

(A) Private firms

TABLE 16	na draw a	7) july new			£.000
And the second s		United Kingdom			Britain
	1951	1950	1949	1949(a)	1948
Wages and salaries (b) of				886581	* 31234-1 11-
Operatives Administrative, technical and	36.887	29,029	26,609		25,661
clerical employees	18.798	15.224	14.373		13,125
Total	55,685	44,253	40,982	pionon. Dan	38,785
Employers' contributions to all National Insurance Schemes	1,568	1,321	1,260		997

TABLE 16 (contd.)

(B) Government Departments

	Great Britain				
	1951	1950	1949	1948	
Wages and salaries (b) of	ESSENCE PROPERTY OF THE PARTY O				
Operatives Administrative, technical and	24,202	21.278	20.436	18.776	
clerical employees	7.600	6.053	5,734	5.452	
Total	31,802	27.330	26,170	24,228	
Employers' contributions to all					
National Insurance Schemes	771	725	741	56 2	

 ⁽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

	Uni	Great Britain		
811.71	1951	1950	1949	1948
(A) Private firms	30	20	10	20
		-1		
(B) Government Departments	511	2 mg	3	5

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

Larger establishments

-			-		
T	Λ Ι			-	

5,000

	(A) Private firms					ernment ments
The second secon	United Kingdom		Great Britain		Great Britain (a)	
	1951	1949	1949(ь)	1948	1951	1949(c)
Plant, machinery and vehicles Acquisitions Plant and machinery				0.450	46 4	26
New Second-hand	3.178 205	1,936 175	::	2.453	464	-
Vehicles New Second-hand	368 96	184 43	::	149 34	309	9/27 - 0 1/2 2 (
Total acquisitions	3,847	2,338		2,862	773	26
Disposals Plant and machinery Vehicles	126 79	268 46	::	149 48	1 79	1
Total disposals	206	315		197	81	1
New building work Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	702	415		435	1,300	2

⁽a) Similar information in respect of Government establishments in this trade is not available for 1948.
(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) The particulars returned for 1949 were incomplete.

RADIO AND TELECOMMUNICATIONS TRADE

1951

Summary: Larger establishments

(A) Private firms

	LE	

Compression 12	England (a)	Wales	Scotland	Great Britain	Northern Ireland (a)	United Kingdom
	£,000	£,000	£,000	£'000	£,000	£'000
Gross output (production)	177.763	5,520	2,634			185,917
Cost of materials and fuel used Payment for work done on materials given out Transport payments	88,377 1,642 1,338	3,432	1,302	{		93,065 1,688 1,414
Net output Wages and salaries of persons employed	86,406 53,928	2,046 1,221	1,297 537	::	:: ::	89.749 55,685
Average number of persons employed (b)	No. 160,923	No. 4,170	No. 1,774	No.	No.	No. 166,867
Net output per person employed (b)	£ 537	£ 491 £'000	£ 731 £'000	£	£	£ 538
Stocks at end of year			2 000	2 000	2 000	2 000
Products on hand for sale and					1201010 4500	
work in progress Materials and fuel	41,723 25,998	7 46 732	259 285		1.00	42,728 27,015
Number of establishments	No. 421	No. 8	No. 11	No.	No.	No.

	£,000	£,000	£,000	£,000	£,000	£.000
Output of firms in this trade		of a Call	a designation for		en seal est	100 W 27 W
Total value of sales (see Table 20)	168,009	5,343	2.505			175,857
Changes in stocks and work in progress (see Table 21)	+ 9,754	+ 177	+ 128			+ 10,060
Gross output (production)	177,763	5,520	2,634			185,917
Materials and fuel used by firms in this trade						
Purchases Changes in stocks (see Table 21)	96.864	3,590(c) - 157	1,333(c) - 31		::	101.740
Materials and fuel used	88,377	3,432(c)	1,302(c)		-774 -80	93.065

(B) Government Departments

	England	Wales	Scotland	Great Britain
	£.000	£.000	£.000	£,000
Gross output (production)	46,640	2,712	5,058	54,411
Cost of materials and fuel used Payment for work done on materials given out Transport payments	13,333 33 18	789 1	1,344	15,466 34 20
Net output Wages and salaries of persons employed	33,255 27,777 No.	1,923 1,418 No.	3,712 2,608 No.	38,890 31,802 No.
Average number of persons employed (d)	63,506 £	3,719 £	6.223 £	73.448 £
Net output per person employed (d)	524 £'000	517 £'000	597 £'000	529 £°000
Stocks at end of year				
Products on hand for sale and work in progress Materials and fuel	1.780 797	63 111	84 10	1,926
	No.	No.	No.	No.
Number of establishments	19	2	2	23

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

£:000	£,000	£,000	£,000
2 15/ 5	I BIELET		
46,408	2.702	5,008	54,118
+ 232	+ 10	+ 50	+ 292
46,640	2,712	5,058	54,411
13 458	886	1.345	15,690
- 125	- 98	- 1	- 224
13,333	789	1,344	15,466
	46,408 + 232 46,640 - 13,458 - 125	46,408 2,702 + 232 + 10 46,640 2,712 13,458 886 - 125 - 98	46.408 2.702 5.008 + 232 + 10 + 50 46.640 2.712 5.058 - 13.458 - 886 - 1.345 - 125 - 98 - 1

(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. The proportion of the net output of the United Kingdom recorded in Northern Ireland was negligible.
 (b) Excluding outworkers but including working proprietors.
 (c) Including payment for work done on materials given out.
 (d) Excluding outworkers.

Summary: Small firms in Great Britain (a)

TABLE 19 Private firms								
	England	Wales	Scotland	Great Britain				
Number of returns	113		3	116				
Average number of persons employed (b)								
Males Females	415 149	-	17	432 152				
Total	564	- 6	20	584				

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

(5975)

(5975)

RADIO AND TELECOMMUNICATIONS COUNTRY TABLES

Sales in the trade Larger establishments (A) Private firms

T	AD	TT	0	-
	ΑВ	LE	4	U

	England o	and Wales	Scot	land	Great I	Britain	Britain Northern Ireland		United K	ingdom
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	1000	£,000		£'000		£,000		£,000		£'000
Principal products	2. 3.2.2. 1	18 8			4 1 - 3					
Radio transmitters for public broadcasting, complete	625.	212				212	-			212
Television transmitters, complete	5 ·	716	1 2 5	2 . 8	2	716	8 2. 8	1 2 3		716
Radio communication and navigational aids (including radar equipment), complete		(a)	8 7 8	(a)		10,197		A RE	2 14 4	10,197
Radio receiving sets, domestic, mains only and battery only (excluding car radio); radiograms; and television receiving sets, whether or not sound reception is incorporated	Thous.				Thous.				Thous.	10,137
Complete and chassis substantially assembled	A MAN	(a)		(a)				(a)	2,210	41,835
Other radio receiving sets, domestic, including car radio, complete, and chassis substantially assembled	143	1,362(b)	8 - 4	2	o de la composición della comp		trans.	(b)	143	1,362
Telegraph and telephone testing equipment, not elsewhere specified; and components and parts of radio apparatus, telegraph and telephone apparatus, etc., not elsewhere specified	to deed of the dead of the dea	(a)	or to the state of	(a)	ata	14,329	sattred tay	Sh. eous	lac bann lagi	14,329
Radio testing equipment, not elsewhere specified	9894	(a)	and the state of t	(a)	T Gree	1,212	100	Sales I	pand cand	1,212
Telegraph and telephone equipment, other than testing equipment	Total Park	100	and the state of		3 6	1000 to 0000 t	B - 5	0.000	Adam.	1,212
Complete installations; line apparatus for long distance communication (carrier, duplex and repeater) and speech input equipment	(A)	(a)	ca catch	(a)	Appe Audy	21,503		STAN SOT	ingino .	21,503
Telephone instruments, complete, sold separately	634	3,438	10.00	19 1	634	3,438	- No.	Part of the state	634	3,438

Signalling apparatus, including traffic signals, other than for railways 610 .											
Signaling opporatus, including traffic Signaling opporatus S	D. C.		l (a) l		(a)		4 322	- 1	- 1	1	4.322
Signals Steet than for rollways Signals			(4)		(4)		1,022				
Industrial relaysest Column Colum	signals, other than for railways		810		-		810				810
type), including heating and electronic control equipment Gramphones and phonographs, complete Acoustic Note electrical amplification Record players 184 828 828 184 828 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 184 828 828 828 828 828 848 848 848 848 8			154	-	-		154				154
Note	type), including heating and electronic		8 58	-	-		8 5 8	•	-		858
# With electrical amplification 16 227 - 16 227 - 16 227 - 16 828 Cher electrical sound reproducing apparatus complete 50 184 828 - 184 828 - 184 828 For public address and sound films 30 1,327 89 - 30 1,327 89 - 10 1 71 1 - 1 71 1 - 1 71 1 - 1 71 1 - 1 71 1 - 1 71 7	Gramophones and phonographs, complete										
Record players 184 828 - 184 828 - 184 828	Acoustic	78	319	-	-			•	-		
Other electrical sound reproducing apparatus complete For public address and sound films 30	With electrical amplification	16	227	•		16		-			
For public address and sound films {	Record players	184	828	-	•	184	828	-	•	184	828
For public address and sound films For industrial relay Comparison of the descriptions, including radio loudspeckers, sold separately Parts of gramophones and other electrical sound reproducing apparatus (including gramophone solors) (c) Electrical sound recording apparatus (including gramophone solors) (c) Electrical sound recording apparatus Resistors, sold separately Fixed Variable Transformers (other than for lighting, heating, power and instruments) (c) Valves, electronic (other than X-ray valves), including parts Electric lamp bulbs, filament type, complete, ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, lusinous tubes, flument type, complete, ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, lusinous tubes, flument type, complete, ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, lusinous tubes, flument type, complete, ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, lusinous tubes, flument type, complete complete; ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, lusinous tubes, flument type, complete complete; ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, lusinous tubes, flument type, complete complete; ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, lusinous tubes, flument type, complete complete; ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, lusinous tubes, flument type, complete, ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, lusinous tubes, flument type, complete, ready for use; flashlight bulbs for photographic and other purposes Thous, co											
For industrial relay	For public address and sound films			} -	- {			} -	- {		89
Transformers (other than for lighting, heating, power and instruments) (c) Valves, electronic (other than X-ray valves) sold separately, and cathode ray tubes. complete, ready for use: flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, luminous tubes, fluorescent tubes and tube signs Cther, including X-ray valves Parts of electric lamp bulbs and vacuum tubes Unclassified radio, telegraph, telephone, etc. apparatus Last of the complete Last	For industrial relay		(a)		(a) {			} -	- {		
Second reproducing apparatus (including gramsphone motors) (c) Complete	Other descriptions, including radio loudspeakers, sold separately			} -	- {			} -	- {		
Resistors, sold separately Fixed Variable Transformers (other than for lighting, heating, power and instruments) (c) Valves, electronic (other than X-ray valves), sold separately, and cathode ray tubes. including parts Electric lamp bulbs, filament type, complete, ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, luminous tubes, fluorescent tubes and tube signs Cther, including X-ray valves and X-ray valves Parts of electric lamp bulbs and vacuum tubes Unclassified radio, telegraph, telephone, etc. apparatus Waste products (other than scrap metals) (a) (b) (c) (c) (c) (c) (d) (d) (d) (e) (a) (e) (d) (e) (fixed) (fixed) (g) (g) (g) (hand (g)	sound reproducing apparatus (including		4,021	-	-			-			
Fixed Variable Transformers (other than for lighting, heating, power and instruments) (c) Valves, electronic (other than X-ray valves), sold separately, and cathode ray tubes, including parts Electric lamp bulbs, filament type, complete, ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, luminous tubes, fluorescent tubes and tube signs (ther, including X-ray tubes and X-ray valves) Parts of electric lamp bulbs and vacuum tubes Unclassified radio, telegraph, telephone, etc. apparatus Waste products (other than scrap metals) (a) (b) (c) (c) (c) (c) (d) (d) (d) (d	Electrical sound recording apparatus		586				586	-			586
Variable	Resistors, sold separately										
Transformers (other than for lighting, heating, power and instruments) (c) Valves, electronic (other than X-ray valves) sold separately, and cathode ray tubes, including parts Electric lamp bulbs, filament type, complete, ready for use: flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, luminous tubes, fluorescent tubes and tube signs Cther, including X-ray tubes and X-ray valves Parts of electric lamp bulbs and vacuum tubes Unclassified radio, telegraph, telephone, etc. apparatus Waste products (other than scrap metals) (a) (a) (a) 1.751 452 12,823 -	Fixed		(a)		(a) {	223,988		} -	- {		
National Struments C National Strumen	Variable		(a)		(a)	8.894	1,289	-		8,894	1,289
sold separately, and cathode ray tubes, including parts Electric lamp bulbs, filament type, complete, ready for use; flashlight bulbs for photographic and other purposes Vacuum tubes, complete Discharge lamps, luminous tubes, fluorescent tubes and tube signs Cther, including X-ray tubes and X-ray valves Parts of electric lamp bulbs and vacuum tubes Unclassified radio, telegraph, telephone, etc. apparatus Waste products (other than scrap metals) 12.823 12.	Transformers (other than for lighting, heating, power and instruments) (c)		(a)		(a)	1,751	452	-		1,753	452
Complete, ready for use; flashlight bulbs for photographic and other purposes (a) (a) 213,036 7,834 - - 213,036 7,834	Valves, electronic (other than X-ray valves), sold separately, and cathode ray tubes,		12,823	-			12,823		-		12.823
Discharge lamps, luminous tubes, fluorescent tubes and tube signs 1,384 517 354 42 351 3	complete, ready for use; flashlight bulbs		(a)	•	(a)	213,036	7,834		- 11	213,036	7.834
Discharge lamps, luminous tubes, fluorescent tubes and tube signs 3,339 42 351 351 3	Vacuum tubes, complete		The second	Thous.	The second second					A CONTRACTOR	
Valves 7 180 - - 180 - - 180 - - 180 - - - 180 - - - 180 -								} -	- {		
Parts of electric lamp bulbs and vacuum tubes 1.344 - - 1.344 - - 1.344 Unclassified radio, telegraph, telephone, etc. apparatus 1.845 - - 1.845 - - 1.845 Waste products (other than scrap metals) (α) (α) </td <td></td> <td>7</td> <td>180</td> <td></td> <td></td> <td>7</td> <td>180</td> <td>-</td> <td>-</td> <td>7</td> <td>180</td>		7	180			7	180	-	-	7	180
etc. apparatus 1,845 1,845 (a) (a) (a) (b) (a) 194	Parts of electric lamp bulbs and vacuum		1,344	-			1,344		-		1,344
Waste products (other than scrap metals) (d)			1,845	-			1,845	-			
Total goods (principal products) sold 139,702(b) 2,043 (b) 141,744	Waste products (other than scrap metals)		(a)		(a)		•••		(a)		
	Total goods (principal products) sold		139,702(b)		2,043		••		(b)		141,744

EN

United Kingdom

RADIO AND

TELECOMMUNICATIONS

COUNTRY TABLES

Quantity

Principal products (contd.)

con tractors

receivable

Other output

Capacitors

X-ray apparatus

commission (c)

Electrical contract and other work carried out in the United Kingdom (d) Electrical contract work done as main

Other work for which payment was

Repair and maintenance work

Research and development work

Other work done for the trade or on

Total principal products

Electric lighting fittings and accessories

Cooking apparatus and appliances, electric

Electrical machinery and plant

Other electro-medical apparatus

Heating apparatus, electric

Total contract and other work

Less estimated value of goods made by firms and separately recorded as sold, which were used in this

Total contract and other work
exclusive of the value of goods
made by firms and used in the work

Telegraph and telephone lines and works and the installation of radio, telegraph and telephone apparatus and

	GI
Kingdom	NEE
Value	RING
£' 000	S
	HIP
	BUI
	LDIN
11.422	10
11.422	DIND
2,989	ELE
3,311	CTR
190	ICA
17.912	T G
	000
9,227	S
0.005	cou
8,685 150,429	VTR
	T
489	ABL
1,692	ES
46	
118(e) 393	
315	

Scientific instruments, electrical		(a)		(a)	 594	-	-		59 4
Other electrical goods and apparatus		(a)		(a)	 13,163	-	-		13,163
Scrap metals sold		(a)	3. %	(a)	 		(a)		1,360
Other goods	J	(a)		(a)	 5,125	- 1	-		5,125
Total goods (other output) sold	1	(a)		(a)			(a)		24,669
Electrical contract and other work carried out in the United Kingdom (d)									
Electrical contract work done as main contractors, other than on telegraph and telephone lines and works and the installation of radio, telegraph and telephone apparatus and appliances		(a)	100	(a)	838		-	100	838
Electrical contract work done as sub-contractors		18		-	18		-	2 2	18
Other work done	E IEE	537		-	537		-		537
Total contract and other work done		(a)		(a)	1,393				1,393
Less estimated value of goods made by firms and separately recorded as sold, which were used in this work		634		-	634		-		634
Total contract and other work exclusive of the value of goods made by firms and used in the work		(a)		(a)	7 59		-		7 59
Total other output		(a)		(a)			(a)		25,427
Total principal products and other output		173,352(b)		2,505			(b)		175,857

England and Wales

Value

£, 000

11,422

(a)

(a)

190

17,892

(a)

(a)

(a)

(a)

1,375

46

393

(a)

118(

..

..

. .

Quantity

Scotland

Quantity

Value

£, 000

(a)

(a)

19

(a)

(a)

(a)

(a)

(a)

(a)

..

..

Great Britain

Value

£'000

11,422

2,989

3,311

17,912

9.227

8,685

489

1,692

1,375

46

118(e)

393

315

190

Quantity

Northern Ireland

Value

£'000

(a)

Quantity

(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. (e) Excluding X-ray tubes and X-ray valves.

(B) Government Departments

TABLE 20 (contd.)

	England and Wales	Scotland	Great Britain
	Value	Value	Value
	£,000	£, 000	£,000
Principal products			
Telegraph and telephone equipment, other than testing equipment			
Complete installations	8	A second second	6
Telephone instruments, complete, sold separately	2		2
Parts	537	•	537
Line apparatus for long distance communication (carrier, duplex and repeater) and speech input equipment	27		27
Telegraph and telephone testing equipment, not elsewhere specified	97		97
Signalling apparatus, including traffic signals, other than for railways	5	-	5
Components and parts of radio, telegraph and telephone apparatus, etc., not elsewhere specified	63	-	63
Waste products (other than scrap metals)	1,151	20	1,171
Total goods (principal products)	1,886	20	1,906
Electrical contract and other work carried out in Great Britain			
Electrical contract work done as main contractors			
Telegraph and telephone lines and works	10,575	1,209	11.784
Installation of radio, telegraph and telephone apparatus and appliances	11,075	1,240	12,316
Other work			
Repair and maintenance work	22,879	2,416	25,295
Research and development work	1,323		1,323
Total contract and other work	45,851	4,865	50,717
Total principal products	47,738	4,885	52,623
Other output			
Scrap metals sold	138	23	161
Electrical contract and other work carried out in Great Britain			
Electrical contract work done as main contractors			
Electric power and lighting lines and works	579	73	6 52
Other work done	655	27	683
Total contract and other work done	1,234	100	1,334
Total other output	1,372	123	1,495
Total principal products and other output	49,110	5,008	54,118

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

TABLE 21	Ivate IIIIIs				£,000
222.6 715.10	England and Wales (a)	Scotland	Great Eritain	Northern Ireland (a)	United Kingdom
Products on hand for sale { at beginning of year at end of year	10,728 13,211	52 104	89 ::		10,780
Work in progress { at beginning of year at end of year	21.810 29.258	79 155	::	::	21,888 29,413
Total products on hand for { at beginning of year sale and work in progress { at end of year	32,538 42,469	131 259	::		32,669 42,728
Materials and fuel { at beginning of year at end of year	18,085 26,730	254 285	::		18,339 27,015

(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) Government Departments £,000 Great Eritain England and Wales Scotland 653 842 6 53 8 42 { at beginning of year at end of year Products on hand for sale 981 947 { at beginning of year at end of year 34 Work in progress 84 1,634 1,600 Total products on hand for { at beginning of year sale and work in progress { at end of year 34 693 917 {at beginning of year at end of year 685 908 9 Materials and fuel

Employment in September

Larger establishments (a) (b)

TABLE	22
-------	----

(A)	Private	fi rms
-----	---------	--------

TENERS (BANK)	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Males					3,051
Under 18	3,006	45			
All ages	61.924	686		• •	62,610
Females					190 5.50
Under 18	3,627	159			3,786
All ages	63.929	1,066	(ASA 65		64,995
Total		1	Constant of the second		
Under 18	6,633	204			6,837
All ages	125,853	1,752			127,605

	England and Wales	Scotland	Great Britain	Northern Ireland (c)	United Kingdom
Males	and true and to		and the state of t	enemalization to bell	814
Under 18	811	3	••		
All ages	28,389	212			28,601
Females					1 007
Under 18	1,647	40	••	#40 M 1 1 100 TY	1,687
All ages	14,342	160	••		14,502
Total					0 501
Under 18	2,458	43		•••	2,501
All ages (d)	42,731	372	••	•••	43,103

(continued overleaf)

TABLE 22 (A) (contd.)

100000	England and Wales (c)	Scotland	Great Britain	Northern Ireland (c)	United Kingdom
Males Under 18 All ages	3,817 90,313	4 8 898	:: ;	12 May	3,865 91,211
Females Under 18 All ages	5,274 78,271	199 1,226	stay to verinal pas	se } the set	5,473 79,497
Total Under 18 All ages (d)	9,091 168,584	247 2,124	town is carrent per town in har		9,338 170,708

TABLE 22 (contd.)

(B) Government Departments

(i) Operatives	1000	Here is making a to y	Numbe
	England and Wales	Scotland	Great Britain
Males Under 18 All ages	1,975 53,228	261 5,087	2,236 58,315
Females Under 18 All ages	109	6 25	115 1,210
Total Under 18 All ages	2,084 54,413	267 5,112	2,351 59,525

(ii) Administrative technical and clarical employees

(11) Administrative, techni	ical and clerical employees		Num
and provide the property of the first state of the state	England and Wales	Scotland	Great Britain
Males Under 18	167	isel in hance f	167
All ages Females	8.806	660	9,466
Under 18 All ages	327 4,035	24 429	351 4,464
Total Under 18 All ages	494 12,841	24 1,089	518 13,930

The least	England and Wales	Scotland	Great Britain	
Males				
Under 18	2,142	261	2,403	
All ages	62,034	5,747	67,781	
emales				
Under 18	436	30	466	
All ages	5,220	454	5.674	
otal	and the second s			
Under 18	2,578	291	2,869	
All ages	67,254	6,201	73,455	

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

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

(c) Owing to the risk of disclosure of information relating to individual firms, particulars for Northern Ireland cannot be given separately and have been included with those for England and Wales.
 (d) Working proprietors. In addition, working proprietors, shown in Table 22(iv) below, were engaged in this trade in larger establishments.

(iv) Working proprietors

Number

	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Males Females	21		21 1		21
Total	22	Charter bev	22		22

TABLE 22 (contd.)

(v) Excluded employees

Number

	(A	(A) Private firms			(B) Government Departments		
	England, Wales and Northern Ireland	Scotland	United Kingdom	England and Wales	Scotland	Great Britain	
Canteen workers Males Females	135 1,415	2 30	137 1.445	7	:	7	
Total	1,550	32	1,582	7		7	
Other workers Males Females	426 197	1 1	427 198	89 27		89 27	
Total	623	2	625	116		116	
Total excluded employees	2,173	34	2,207	123	-	123	

Average employment

Larger establishments

(A) Private firms (a)

Number

TABLE 23

	England and Wales (b)	Scotland	Great Britain	Northern Ireland (b)	United Kingdom
Operatives (c)	123,378	1,436	••		124,814
Administrative, technical and clerical employees	41,693	338			42,031
Total	165,071	1,774	••		166,845

(B) Government Departments

Number

	England and Wales	Scotland	Great Britain
Operatives (c)	54,456	5,133	59,589
Administrative, technical and clerical employees	12,769	1.090	13,859
Total	67,225	6,223	73,448

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

satisfactory returns see lable 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.

(c) Including the following operatives employed on outside work of erection, fitting, etc:-

	England and Wales	Scotland	Great Britain
(A) Private firms	4,868	48	4,916
(B) Government Departments	26,071	1,914	27,985

Outworkers. In addition to the employees in England and Wales shown above, the private firms in this trade employed 5 male and 288 female outworkers and the Government establishments 1 male and 9 female outworkers. No outworkers were recorded for Scotland and Northern Ireland.

Wages and salaries and employers' National Insurance contributions

	wages and sataties a	and embrokers	National Insulance Contillo	utio
TABLE 24	paid duri	ng the year:	Larger establishments	14 99

					200 700000	combs. Turning all	£ DUC		
	(A) Private firms					(B) Government Departments			
England and Wales (a)	Scotland	Great Britain	Northern Ireland (a)	United Kingdom	England and Wales	Scotland	Great Britain		
36,485	402	••		36,887	22,144	2,058	24,202		
18,663	135	•••	•••	18.798	7,050	550	7,600		
55,148	537			55,685	29,195	2,608	31,802		
1,552	16			1,568	706	6.5	771		
	36,485 18,663 55,148	England and Wales (a) Scotland 36,485 402 18,663 135 55,148 537	England and Wales (a) Scotland Great Britain 36,485 402 18,663 135 55,148 537	England and Wales (α) Scotland Great Britain Ireland (α) 36,485 402 18,663 135 55,148 537	England and Wales (α) Scotland Britain Reland (α) United Kingdom 36,485 402 36,887 18,663 135 18,798 55,148 537 55,685	England and Wales (α) Scotland Great Britain Northern Ireland (α) United Kingdom (α) England and Wales 36,485 402 36,887 22,144 18,663 135 18,798 7,050 55,148 537 55,685 29,195	England and Wales (a) Scotland Great Britain Ireland (a) Northern Ireland Kingdom Wales Scotland Wales (a) Scotland Scot		

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

(b) Including bonus and commission payments but excluding payments, amounting to £30,000 by private firms and less than £500 by Government Departments, to outworkers in England and Wales.

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

TABLE 25 £. 000 (A) Private firms (B) Government Departments England Northen Great United Great cotlan Ireland and Wales Scotland Britain Kingdo Wales(a) Bri tain (a) Plant, machinery and vehicles Acquisitions Plant and machinery New 3,081 97 3.178 421 43 464 •: Second-hand 205 200 205 Vehicles 368 246 63 309 96 Second-hand (b) 96 Total acquisitions (b) (b) 3.847 667 106 773 Disposals Plant and machinery 114 13 126 Vehicles (b) (b) 79 72 79 .. Total disposals (b) (b) 206 74 7 81 New building work Capital expenditure on new building and other constructional work of a capital nature (excluding site values and 700 development charges) 2 702 1,213 86 1,300

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

> Payments for transport services for finished goods sold and materials and fuel purchased: Larger establishments

£'000

	(A) Private firms					(B) Government Departments			
	England and Wales	Scotland	Great Britain	Northern Ireland	United Kingdom	England and Wales	Scotland	Great Britain	
Amounts paid to other firms and undertakings	1,322(a)	35	1	(a)	1,356	10	2	11	
Amount paid or credited to firms' own separate transport organisations	58	100 y 100	58	ented test	58	9	-0.20-7	9	
Total	1,380(a)	35		(a)	1,414	19	2	20	

(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.

DS 5975/1 WT.4003 K.4 3/56 CI.

TABLE 26

The following brief notes refer to Great Britain and, unless otherwise stated, to the census of produc-tion 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, ware-houses 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, experi-mental, 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

All these figures exclude conteen employees and persons engaged in merchanting or any other activity not covered by a firm's return who are shown separa-tely 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 parttime 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 exworks 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 in-formation 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

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

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. Crown copyright reserved

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