



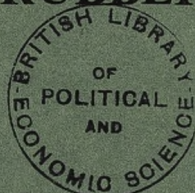
BOARD OF TRADE

THE REPORT
on the
CENSUS OF PRODUCTION
FOR 1951

Volume 11

Trade A

RUBBER



*Presented by the Board of Trade to Parliament
in pursuance of the Statistics of Trade Act, 1947
(10 & 11 Geo. 6, Ch. 39, Sec. 7).*

LONDON: HER MAJESTY'S STATIONERY OFFICE

1956

TWO SHILLINGS NET

5
42
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* Not applicable to this trade

RUBBER TRADE

THIS REPORT on the Rubber Trade relates to establishments engaged wholly or mainly in the manufacture of solid and pneumatic tyres of all types and inner tubes, sheet rubber, sponge rubber, rubber tubing and hose, balata belting, rubber footwear, gloves, bathing caps, toys, balls, flooring and tiling, etc., including those made from synthetic rubber. The manufacture of synthetic rubber itself is excluded.

This trade corresponds to minimum list heading 190 in the Standard Industrial Classification.

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

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.

RUBBER TRADE

Summary

Larger establishments (a)

TABLE 1

	Great Britain					
	1951	1950	1949	1948	1937	1935
Gross output (production) (b)	£'000 259,191	£'000 162,069	£'000 118,782	£'000 128,023	£'000 34,205	£'000 27,539
Cost of materials and fuel used (c)	179,731	103,758	70,318	74,332	19,615	13,496
Payment for work done on materials given out	1,217	429	326	444	42	15
Transport payments (d)	1,958	..	..	..	..	..
Net output	76,284	57,881	48,139	53,247	14,548	14,028
Wages and salaries of persons employed	37,950	31,762	28,043	27,860	..	..
	No.	No.	No.	No.	No.	No.
Average number of persons employed (e)	99,583	91,767	85,928	87,145	58,089	54,098
	£	£	£	£	£	£
Net output per person employed (e)	766	631	560	611	250	259
	£'000	£'000	£'000	£'000	£'000	£'000
Stocks at end of year						
Products on hand for sale and work in progress	18,297	10,820	7,932	7,220	..	..
Materials and fuel	35,671	22,278	12,616	14,100	..	..
	No.	No.	No.	No.	No.	No.
Number of establishments	328	325	315	326	..	185

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 (f)						
Principal products (g)	243,843	160,036	119,185	121,573	31,683	26,044
Other output (h)	7,954					
Changes in stocks and work in progress (i)	+ 7,393					
	259,191	162,952	119,469	128,640	34,205	27,539
Less payment for transport outwards (d)	..	883	687	618		
Gross output (production)	259,191	162,069	118,782	128,023	34,205	27,539
Materials and fuel used by firms in this trade						
Purchases	192,989	113,653	68,774	77,516	19,615	13,496
Changes in stocks (i)	- 13,258	- 9,895	+ 1,544	- 3,183		
Materials and fuel used	179,731	103,758	70,318	74,332	19,615	13,496

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

(b) 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.

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

(d) 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.

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

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

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

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

(i) For details for 1951 see Table 21.

Summary: Small firms (a)

TABLE 2

	Great Britain		United Kingdom	Great Britain	
	1951	1950	1949	1949	1948
Number of returns	185	192	240	232	205
Average number of persons employed (b)					
Males	789	794	969	940	849
Females	270	239	293	288	238
Total	1,059	1,033	1,262	1,228	1,087

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

(b) Including working proprietors.

Estimated average employment (a): All firms

TABLE 3

	United Kingdom			Great Britain	
	1951	1950	1949	1949	1948
As returned by firms					
Employing on the average more than ten persons (b)	99,583	91,767	85,928	85,928	87,145
Employing on the average ten or fewer persons (c)	1,059(d)	1,033(d)	1,262	1,228	1,087
Estimated average employment in firms not making satisfactory returns	156	267	179	179	413
Estimated average employment in all firms	100,798(d)	93,067(d)	87,369	87,335	88,645

(a) Including working proprietors.

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

(c) See Table 2.

(d) Excluding any small firms in Northern Ireland.

Analysis by size, 1951

Larger establishments in Great Britain

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	46	1,355	561	803	183	105	288	699
25 - 49	66	4,945	1,921	2,415	611	265	876	795
50 - 99	66	9,544	3,985	4,774	1,306	514	1,820	835
100 - 199	59	16,971	6,737	8,458	2,226	846	3,071	797
200 - 299	25	10,645	4,734	6,432	1,703	617	2,319	736
300 - 399	15	8,607	4,186	5,202	1,361	456	1,817	805
400 - 499	11	8,372	3,441	4,943	1,318	441	1,759	696
500 - 749	11	13,924	4,681	6,757	1,573	708	2,281	693
750 - 999	9	13,054	5,393	7,703	2,207	667	2,874	700
1,000 - 1,499	9	27,490	9,502	11,028	3,022	1,049	4,071	862
1,500 - 2,499	4	20,784	4,846	8,044	2,386	652	3,038	602
2,500 - 3,999	3	30,026	7,864	10,022	3,151	963	4,113	785
4,000 and over	4	93,473	18,431	23,002	7,486	2,137	9,623	801
Total	328	259,191	76,284	99,583	28,532	9,418	37,950	766

(a) Administrative, technical and clerical employees.

(5536/2)

(5536/2)

Analysis by standard region, 1951

Larger establishments in Great Britain

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	
England	No.	£'000	£'000		No.	£'000	£'000	£'000	£
Northern	6	723	314	0.4	544	106	35	141	577
East and West Ridings	10	3,047	1,510	2.0	1,634	388	173	561	924
North Midland	21	9,376	3,327	4.4	4,699	1,322	513	1,834	708
Eastern	17	5,121	2,221	2.9	2,536	731	255	986	876
London and South Eastern	100	44,609	15,456	20.3	19,622	5,406	2,023	7,429	738
Southern	12	2,995	1,652	2.2	1,892	538	209	746	873
South Western	16	8,632	2,251	3.0	3,839	1,155	345	1,500	586
Midland	29	86,795	19,027	24.9	22,137	7,123	2,245	9,367	859
North Western	83	72,315	23,087	30.3	30,479	8,642	2,549	11,192	757
Total England	294	233,612	68,846	90.2	87,382	25,410	8,348	33,758	788
Wales	13	2,518	592	0.8	1,654	384	159	543	358
Scotland	21	23,060	6,846	9.0	10,547	2,738	912	3,650	649
Great Britain	328	259,191	76,284	100.0	99,583	28,532	9,418	37,950	766

(a) Administrative, technical and clerical employees.

Analysis according to specialisation within the trade, 1951

Larger establishments in Great Britain

TABLE 6

	Estab- lish- ments	Gross output	Sales of charac- teristic products	Net output	Persons employed	Remuneration			Net output per person employed
						Operatives	Other employees (a)	Total	
Specialist producers of	No.	£'000	£'000	£'000	No.	£'000	£'000	£'000	£
Rubber tyres and tubes	19	137,105	107,758	28,077	35,079	11,470	3,385	14,856	800
Rubber heels and soles	14	2,650	2,014	1,100	1,868	504	159	663	589
Machinery belting	15	20,654	15,127	7,152	5,236	1,445	645	2,090	1,366
Remainder of the trade	280	98,781		39,954	57,400	15,113	5,229	20,342	696
Total	328	259,191		76,284	99,583	28,532	9,418	37,950	766

(a) Administrative, technical and clerical employees.

Total make of intermediate products
Larger establishments in Great Britain

TABLE 7

	Returned in this trade			Returned in all trades		
	1951		1948	1951		1948
	Quantity	Entries	Quantity	Quantity	Entries	Quantity
Principal products	Tons	No.	Tons	Tons	No.	Tons
Sheets and sheeting wholly of rubber						
Mechanical	7,926	..	..	8,067	..	..
Other	6,734	..	..	6,933	..	..
Insertion sheeting	2,299	24	4,669	2,299	24	4,669
Rubber sheeting with a textile backing	209	..		217	..	
Cloth proofed with rubber	Th.sq.yds.		Th.sq.yds.	Th.sq.yds.		Th.sq.yds.
Hospital sheeting (including jaconet and batiste)	4,140	17	1,998	4,140	17	2,066
Other, in single texture or double texture	60,452	..	36,970	60,646	42	37,664
Threads wholly of rubber	Tons		Tons	Tons		Tons
Reclaimed rubber	1,934	6	2,600	1,934	6	2,600
Other products	Th.sq.yds.		Th.sq.yds.			
Oilskin piece goods	415	..	1,982			

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

Larger establishments in Great Britain

TABLE 8

	1951			1948	
	Quantity	Value	Entries	Quantity	Value
Sheets and sheeting wholly of rubber	Tons	£'000	No.	Tons	£'000
Mechanical	2,122	636	41	1,862	334
Other	4,232	1,412	33	1,195	320
Insertion sheeting	2,165	524	24	..	62
Rubber sheeting with a textile backing	174	116	15	1,735	275
Cloth proofed with rubber	Th.sq.yds.			1,104	147
Hospital sheeting (including jaconet and batiste)	1,487	410	14	1,781	271
Other, in single texture or double texture	18,587	4,096	31	25,270	2,654(a)
Sheets, sheeting and cloth proofed with synthetic rubber	..	877	
Threads wholly of rubber	162	87	10	360	109
Reclaimed rubber	..	144		..	..	30
Rubber compound, sold as such	Tons			Tons	
Hose	1,572	1,618	6	2,270	1,004
Wholly of rubber, balata or gutta percha	28,664	2,196	9	19,239	1,009
Fabric wrapped	15,664	3,508	50	13,344	1,449
Reinforced throughout with metal wire or strip, not wire braided	1,135	248	15	1,481	146
Suction type	2,581	1,055	23	1,972	773
Other	858	473	19	733	245
				..	29

TABLE 8 (contd.)

	1951			1948	
	Quantity	Value	Entries	Quantity	Value
	Tons	£'000	No.	Tons	£'000
Hose (contd.)					
Fabric wrapped (contd.)					
Wire braided, with or without end fittings	7,932	962	11	3,510	1,547
Other fabric wrapped hose	3,085	1,467	23	..	240
Other descriptions of hose	5,665	2,094	24	3,537	925
Tubing wholly of rubber (other than for medical and surgical purposes)	1,195	469	39	1,503	391
..	..	120	..	..	123
Rubber tyres and tubes	Thous.			Thous.	
Pneumatic					
Outer covers, new					
Giant tyres (including 5in. S.S.)	3,082	55,671	12	2,746	26,866
Tractor and dumper and earth mover vehicle tyres	667	8,818	8	686	4,285
Car (including taxi) tyres	6,654	28,257	13	5,978	13,597
Motor cycle and tri-car tyres	1,048	2,078	10	727	847
Pedal cycle tyres	14,804	4,622	8	14,124	2,610
Aeroplane tyres	94	969	5	51	413
Animal-drawn and similar vehicle tyres	218	1,093	5	148	502
Barrow, trolley and other tyres	437	563	11	341	236
Inner tubes					
For giant tyres (including 5in. S.S.)	2,302	3,523	11	2,078	1,734
For tractor and dumper and earth mover vehicle tyres	653	1,007	8	637	486
For car (including taxi) tyres	5,337	3,353	11	4,842	1,570
For motor cycle and tri-car tyres	908	347	9	663	131
For pedal cycle tyres	13,350	1,688	9	14,357	1,129
For aeroplane tyres	65	110	..	40	41
For animal-drawn and similar vehicle tyres	185	146	5	129	49
For barrow, trolley and other tyres	442	120	7	381	66
Cushion, sponge rubber and solid tyres, including solid tyreing sold in the length	Tons			Tons	
For perambulators and other baby carriages	2,532	516	9	..	906
Other	3,528	820	25	..	..
..	..	174	..	..	..
Camelback and other tyre repair materials	..	3,503	13	..	1,206
Rubber accessories for motor vehicles and cycles, not elsewhere specified					
For motor vehicles, including motor cycles and tri-cars	..	5,667	63	..	2,309
For cycles	..	883	24	..	448
Machinery belting					
Balata (including gutta percha) and canvas	1,039	1,375	10	1,532	1,285
Rubber or rubber and canvas					
Conveyor and elevator	29,579	18,535	19	24,852	9,781
Power transmission					
Motor vehicle fan belts	1,105	919	10	912	638
Other V-belts and round section belts	1,725	2,262	15	1,006	918
..	..	1,082	..	..	398
Other	2,340	2,018	16	1,902	1,110
Rubber valves, washers and rings for industrial purposes (sold separately), not elsewhere specified	2,247	1,454	61	1,385	552
..	..	527	..	..	98

TABLE 8 (contd.)

	1951			1948	
	Quantity	Value	Entries	Quantity	Value
	Tons	£'000	No.	Tons	£'000
Mats, matting, flooring and tiling of rubber, other than of sponge rubber					
Mats and matting	3,794	820	47	3,756	556
..	..	..	..	..	134
Tiling and flooring (including sponge backed), covings and stair nosings	6,977	1,498	50	10,759	1,627
Rubber boots	Th.doz.prs.			Th.doz.prs.	
Of a length (front of sole to heel tip) exceeding 11 inches					
Knee height or less	216	2,411	8	195	1,501
Other and unclassified	56	741	6	..	..
Wellingtons					
Of a length exceeding 9¼ inches but not exceeding 11 inches	204	1,525	8	217	1,036
Of a length not exceeding 9¼ inches	403	1,975	10	317	904
Other descriptions of rubber boots	99	707	11	57	259
..	..	96	..	..	..
Rubber shoes					
Canvas shoes with rubber soles, without heels	1,364	3,974	13	946	1,965
Canvas shoes with rubber soles and heels	214	1,128	12	236	797
Other shoes of rubber and other materials and shoes wholly of rubber	346	1,701	18	528	1,780(b)
..	..	195	..	..	..
Tons				Tons	
Rubber soles, full and half size, including combined soles and heels	5,592	1,911	33	3,946	1,144
..	..	185	..	..	116
Rubber heels and heel tips	5,667	1,731	24	4,634	1,288
Th.doz.prs.				Th.doz.prs.	
Rubber gloves and gauntlets	598	832	27	295	304
Th.doz.				Th.doz.	
Bathing caps and helmets	114	126(c)	6	95	87
..	..	56	..	..	..
Rubber balls					
Bladders (football, punchball, water polo, etc.)	126	140	11	229	206
Playballs (including sponge rubber playballs) and other rubber balls for sports and games, including golf ball centres and uncovered tennis balls but not complete golf and tennis balls (d)	758	366	25	1,704	509
..	..	43	..	..	32
Toys, wholly or mainly of rubber (excluding balls)					
Balloons	9,746	601	16	6,098	346
Other	..	212	21	..	241
Hot water bottles	563	1,368	22	621	1,186
Medical, surgical and dental products, other than sheeting and gloves	..	2,340	43	..	1,682
Tons				Tons	
Printers' rollers, blankets and roller covering materials	518	487	24	424	226
..	..	267	..	..	229
Thous.				Thous.	
Wringer rollers	1,830	612	23	969	214
Industrial rollers	197	254	38	100	133
..	..	..	..	..	16
Th.gross				Th.gross	
Sealing and bottling rings	2,769	353	11	4,532	368
Screw stoppers for bottles	485	209	..	477	196

TABLE 8 (contd.)

	1951			1948	
	Quantity	Value	Entries	Quantity	Value
Railway springs, buffer recoils and other rubber products for locomotives, carriages and wagons	Tons 2 152	£'000 1,070	No. 22	Tons 1,855	£'000 754(e)
Sponge and cellular rubber products, not elsewhere specified				..	6
Mattresses	3,117	1,537	6	5,412	1,800
Other descriptions (including upholstery and cushions)	8,436	4,074	..	..	6
Rubberised hair	..	355	..	..	(f)
Vulcanite, ebonite and other hard rubber					
Sheets, rods and tubes	529	352	10	497	280
Battery boxes, plugs and lids	..	81	..	..	23
Other manufactures of vulcanite, ebonite and other hard rubber, not elsewhere specified	5,626	1,076	9	..	872
Rubber adhesives (including processed latex adhesives and synthetic latex adhesives made from synthetic rubber), sold as such	..	635	..	..	..
Insulating materials	3,157	1,380	32	2,537	692
Cable cloth	7,680	1,572	41	5,027	679
Varnished and non-adhesive cloth and tape (except cable cloth)	Thous.galls. 63	121	..	..	147
Adhesive cloth and tape	Th.sq.yds. 17,315	1,766	5	..	(f)
Other descriptions	Tons 1,248	1,514	10	692	770
Rubber bands	..	394	..	..	433
Erasers	1,739	746	10	1,331	465
Pressure sensitive adhesive tape, e.g., masking tape used for sealing purposes (c)	..	259	..	..	..
Miscellaneous rubber goods, including adhesive cellulose tape and surgical tape	78	34	10	..	(f)
Waste rubber	..	816	..	..	..
Other waste products	..	..	..	Th.gross 1,342	80
Work done for the trade or on commission (h)	..	378(c)	..	..	19
Tyres retreaded or remade	..	33(c)	..	281	147
Giant tyres (including 5 in. S.S.)	861	918	5	..	1,214(g)
Car (including taxi) tyres	..	494	..	..	..
Other tyres	3,432	750	140	Tons 6,111	1,074
	..	13,739	..	..	4,552
	10,943	286	86	12,296	99
	..	80	..	..	35
	..	295	41	1,255	6
	..	..	..	..	48
	Thous. 657	3,876	49	Thous. 493	2,128
	1,251	3,061	51	817	1,167
	53	317	16	32	100
	..	63	..	..	..

TABLE 8 (contd.)

	1951			1948	
	Quantity	Value	Entries	Quantity	Value
Work done for the trade or on commission (h) (contd.)		£'000	No.		£'000
Compounding of rubber		720	13		841
Rubber proofing		2,219	27		821(i)
Other work done		2,260	61		1,919
Total		251,418	..		126,913
Sales in other trades (see Table 9)		7,576	..		5,340
Principal products of this trade sold by establishments in the trade		243,843	291		121,573

- (a) Including cable cloth.
 (b) Including slippers and house shoes with soles of rubber returned by firms classified to the Boot and Shoe Trade (Volume 7, Trade L), which for 1951 are recorded as principal products in that trade.
 (c) So far as recorded separately.
 (d) For golf balls and covered tennis balls see the Sports Requisites Trade (Volume 11, Trade E).
 (e) Described as 'Railway springs, buffer recoils, buffers and other rubber products for locomotives, carriages and wagons, motor vehicles and aeroplanes'.
 (f) Not recorded separately.
 (g) Described as 'Self adhesive tape for industrial purposes, other than insulating tape'.
 (h) Amount charged.
 (i) Described as 'Waterproofing'.

Sales of principal products of the trade by establishments classified to other trades: Larger establishments in Great Britain

TABLE 9

	1951			1948	
	Quantity	Value	Entries	Quantity	Value
Sheets and sheeting wholly of rubber	Tons	£'000	No.	Tons	£'000
Mechanical	141	42	..	125	60
Other	199	66	..	..	124
Cloth proofed with rubber, in single texture or double texture, other than hospital sheeting (including jaconet and batiste), and sheets, sheeting and cloth proofed with synthetic rubber	Th.sq.yds. 324	108	6	Th.sq.yds. 742	104(a)
Machinery belting	..	946	..	..	30
Balata (including gutta percha) and canvas; and power transmission, motor vehicle fan belts and other V-belts and round section belts of rubber or rubber and canvas	Tons 920	943	..	Tons 713	548(b)
Rubber soles, full and half size, and rubber heels and heel tips, including combined soles and heels	..	126	5	67	25
Sponge and cellular rubber products, not elsewhere specified, including upholstery and cushions but excluding mattresses	57	26	..	..	116
Vulcanite, ebonite and other hard rubber, excluding sheets, rods and tubes, battery boxes, plugs and lids	75	76	5	..	362
Rubber adhesives (including processed latex adhesives and synthetic latex adhesives made from synthetic rubber), sold as such	..	94	..	..	..
Insulating materials, including varnished and non-adhesive cloth and tape (except cable cloth), and adhesive cloth and tape; and pressure sensitive adhesive tape	310	55	..	..	..
	1,398	1,473	11	852	725
	..	504	..	..	234

TABLE 9 (contd.)

	1951			1948	
	Quantity	Value £'000	Entries No.	Quantity	Value £'000
Miscellaneous rubber goods including, for 1951, adhesive cellulose tape and surgical tape; rubber sheeting with a textile backing; reclaimed rubber; rubber compound, sold as such; rubber accessories for cycles; rubber valves, washers and rings for industrial purposes (sold separately), not elsewhere specified; mats and matting of rubber, other than of sponge rubber; rubber boots and shoes; rubber gloves and gauntlets; playballs (including sponge rubber playballs) and other rubber balls for sports and games, including golf ball centres and uncovered tennis balls; toys, wholly or mainly of rubber, other than balloons; medical, surgical and dental products other than sheeting and gloves; printers' rollers, blankets and roller covering materials; rubberised hair; and erasers	..	3,062	24	..	2,999
Work done for the trade or on commission (including waterproofing) (c)		-	-		10
Total		7,576	..		5,340

(a) Including cable cloth.

(b) Described as 'Balata (including gutta percha) and canvas; and conveyor and elevator belting and motor vehicle fan belts of rubber or rubber and canvas.'

(c) Amount charged.

Sales in the trade of other than principal products

Larger establishments in Great Britain

TABLE 10

	1951		1948	
	Quantity	Value £'000	Quantity	Value £'000
Proofed, etc. garments	Thous. 752	946	Thous. 213	296
Proofed piece goods, other than rubber proofed	Th.sq.yds. 416 ..	101 40	Th.sq.yds. 1,756	204
Golf balls and tennis balls, covered ready for use	Th.doz. 722 Th.cwts. 37.6	674	Th.doz. 635	522
Plastics materials	..	649	..	988
Manufactures of plastics materials, other than garments and toys and games	..	449	..	..
Insulating materials other than cloth and tape	..	744	..	488
Parts and accessories (not wholly of rubber) of motor vehicles (other than motor cycles) and pedal cycles	..	219	..	488
Chemical manufactures, including varnishes, dyes, stains, inks, polishes and artists' colours	..	187	..	361
Boots, shoes, sandals and slippers, not mainly of rubber, and parts thereof	Th.pairs 35 ..	31 59	..	106
Machinery, parts and accessories, other than moulds	..	656	..	562
Other engineering products	..	354	..	..
Synthetic rubber	Th.cwts. 5.2	84	..	1,321
Other goods	..	2,210	..	..
Work done (b)	..	43	..	22
Total		7,954		5,173

(a) Described as 'Varnishes, dyes, stains, inks, polishes and artists' colours.'

(b) Amount charged.

(5536/2)

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

TABLE 11

		Production (b) (c)	Exports (d)	Retained imports (e)
		Tons	Tons	Tons
Sheets and sheeting wholly of rubber	{ 1951	15,000(f)	751	225
	{ 1948	3,646(g)	702	292(h)
	{ 1937	3,815	679	226
Insertion sheeting	{ 1951	£'000 524	£'000 134	£'000 ..
	{ 1948	275	61	..
Rubber sheeting with a textile backing	{ 1951	116	139	12(i)
	{ 1948	147	96	..
Cloth proofed with rubber	{ 1951	410	110	..
	{ 1948	271	114	..
Hospital sheeting (including jaconet and batiste)	{ 1951	4,973	1,883	..
	{ 1948	2,654(j)	1,155	..
Other, in single texture or double texture	{ 1951	231	39	..
	{ 1948	139	48	..
Sheets, sheeting and cloth proofed with synthetic rubber	{ 1951	6,254	2,305	..
	{ 1948	3,486(j)	1,473	4
	{ 1937	1,056	402	46
Threads wholly of rubber	{ 1951	Tons 1,934(f)	Tons 663	Tons ..
	{ 1948	2,600(f)	781	12
	{ 1937	1,495(f)	489	57
Reclaimed rubber	{ 1951	33,476(f)	4,367	147
	{ 1948	21,640(f)	1,969	5
	{ 1937	12,616(f)	3,973	3,062
Hose and tubing	{ 1951	1,135	1,113	..
	{ 1948	1,481	925	..
	{ 1937	1,501(g)	99	..
Tubing, wholly of rubber (other than for medical and surgical purposes)	{ 1951	1,503	168	..
	{ 1948	2,636(g)	1,212	..
	{ 1937	2,984	1,093	40
Total hose and tubing wholly of rubber, balata or gutta percha	{ 1951	3,000(g)	911	27
	{ 1948	..	..	..
	{ 1937	..	..	..
Fabric wrapped hose	{ 1951	£'000	£'000	£'000
	{ 1948	1,055	151	..
	{ 1937	773	151	..
Reinforced throughout with metal wire or strip, not wire braided	{ 1951	473	141	..
	{ 1948	274	51	..
	{ 1937	2,428	577	..
Suction type	{ 1951	1,787	442	..
	{ 1948	2,343	223	..
	{ 1937	1,048	140	..
Other	{ 1951	6,299	1,091	..
	{ 1948	3,882	784	4
	{ 1937	250	144	26
Other fabric wrapped hose, including wire braided, with or without end fittings	{ 1951	Thous.	Thous.	Thous.
	{ 1948	..	..	..
	{ 1937	..	..	..
Other descriptions of hose	{ 1951	94	27	1
	{ 1948	51	16	-
	{ 1937	1,048	211	1
Total hose not wholly of rubber	{ 1951	727	130	-
	{ 1948	441	49	12
	{ 1937	..	..	..
Rubber tyres and tubes (k)	{ 1951	94	27	1
	{ 1948	51	16	-
	{ 1937	1,048	211	1
Pneumatic	{ 1951	727	130	-
	{ 1948	441	49	12
	{ 1937	..	..	..
Outer covers	{ 1951	94	27	1
	{ 1948	51	16	-
	{ 1937	1,048	211	1
Aeroplane tyres	{ 1951	727	130	-
	{ 1948	441	49	12
	{ 1937	..	..	..
Motor cycle and tri-car tyres	{ 1951	94	27	1
	{ 1948	51	16	-
	{ 1937	1,048	211	1

(5536/2)

TABLE 11 (contd.)

	Production (b)(c)	Exports (d)	Retained imports (e)
	Thous.	Thous.	Thous.
Rubber tyres and tubes (k) (contd.)			
Pneumatic (contd.)			
Outer covers (contd.)			
Other motor vehicle tyres			
New			
Giant tyres (including 5in. S.S.)	{ 1951 3,082 1948 2,746	{ 1,034 537	{
Tractor and dumper and earth mover vehicle tyres	{ 1951 667 1948 686	{ 72 18	{
Car (including taxi) tyres	{ 1951 6,654 1948 5,978	{ 1,144 900	{
Retreaded or remade			
Giant tyres (including 5in. S.S.)	{ 1951 657 1948 493	{ 27 9	{
Car (including taxi) tyres	{ 1951 1,251 1948 817	{ 88 10	{
Other tyres	{ 1951 64(g)(l) 1948 32(l)	{ 1 -	{
Total other motor vehicle tyres	{ 1951 12,376(l) 1948 10,752(l) 1937 7,178(l)(m)	{ 2,365 1,474 1,377	{ 16 39 114
Pedal cycle tyres	{ 1951 14,804 1948 14,124 1937 10,762	{ 4,113 3,565 3,316	{ 40 11 305
Animal drawn and similar vehicle tyres	{ 1951 218 1948 148	{ 13 9	{ - -
Barrow, trolley and other tyres	{ 1951 437 1948 341(n)	{ 101 66	{ - -
Inner tubes			
For aeroplane tyres	{ 1951 65 1948 40	{ 20 11	{ - -
For motor cycle and tri-car tyres	{ 1951 908 1948 663 1937 372	{ 185 130 41	{ - 5 8
For other motor vehicle tyres			
For giant tyres (including 5in. S.S.)	{ 1951 2,302 1948 2,078	{ 779 459	{
For tractor and dumper and earth mover vehicle tyres	{ 1951 653 1948 637	{ 67 15	{
For car (including taxi) tyres	{ 1951 5,337 1948 4,842	{ 971 773	{
Total inner tubes for other motor vehicle tyres	{ 1951 8,292 1948 7,557 1937 5,032(o)	{ 1,817 1,247 1,069	{ 2 62 46
For pedal cycle tyres	{ 1951 13,350 1948 14,357 1937 9,838	{ 2,712 3,419 2,325	{ 3 136 308
For animal drawn and similar vehicle tyres	{ 1951 185 1948 129	{ 7 10	{ - -
For barrow, trolley and other tyres	{ 1951 442 1948 381(p)	{ 89 66	{ - -
Camelback and other tyre repair materials	{ 1951 £'000 3,503 1948 1,206	{ £'000 708 146	{ £'000 - -
Machinery belting	Tons	Tons	Tons
Motor vehicle fan belts of rubber, or rubber and canvas	{ 1951 1,105 1948 913	{ 197 80	{ .. -

TABLE 11 (contd.)

	Production (b)(c)	Exports (d)	Retained imports (e)
	Tons	Tons	Tons
Machinery belting (contd.)			
Other belting of balata (including gutta percha) and canvas or of rubber, or rubber and canvas	{ 1951 35,508(g) 1948 29,777(g) 1937 11,522	{ 3,635 2,129 2,402	{ 8 4,609 471
Mats, matting, flooring and tiling of rubber, other than of sponge rubber	£'000	£'000	£'000
Mats and matting	{ 1951 820 1948 689	{ 147 64	{
Tiling and flooring (including sponge backed), covings and stair nosings	{ 1951 1,498 1948 1,627	{ 490 239	{
Total mats, matting, flooring and tiling of rubber (q)	{ 1951 2,318 1948 2,317 1937 565	{ 637 302 52(r)	{ .. 3(r) 10(r)
Rubber boots	Th.doz.prs.	Th.doz.prs.	Th.doz.prs.
Of a length (front of sole to heel tip) exceeding 11 inches	{ 1951 272 1948 195	{ 59 26	{ 56 19
Wellingtons			
Of a length exceeding 9¼ inches but not exceeding 11 inches	{ 1951 204 1948 217	{ 49 19	{ 20 31
Of a length not exceeding 9¼ inches	{ 1951 403 1948 317	{ 75 23	{ 40 42
Other descriptions	{ 1951 112(g) 1948 57	{ 65 10	{ 40 15
Total rubber boots	{ 1951 991(g) 1948 786 1937 273	{ 248 78 16	{ 156 107 304
Rubber shoes			
Canvas shoes with rubber soles	{ 1951 1,578 1948 1,182	{ 261 109	{ 211 220
Other shoes of rubber and other materials and shoes wholly of rubber	{ 1951 384(g) 1948 528	{ 56 11	{ 30 8
Total rubber shoes	{ 1951 1,962(g) 1948 1,710 1937 1,788	{ 317 120 51	{ 241 228 60'
Rubber soles, full and half size, including combined soles and heels	{ 1951 6,132(g) 1948 4,346(g)	{ 561 200	{ - 5
Rubber heels and heel tips	{ 1951 5,667 1948 4,634	{ 508 206	{ - 3
Total rubber soles, heels and heel tips (s)	{ 1951 11,798(g) 1948 8,980(g) 1937 8,122	{ 1,069 406 452	{ - 8 823
Rubber gloves and gauntlets	{ 1951 598 1948 295 1937 130	{ 194 66 13	{ .. 5 101
Rubber balls	£'000	£'000	£'000
Bladders (football, punchball, water polo, etc.)	{ 1951 140 1948 206	{ 57 44(t)	{
Playballs (including sponge rubber playballs) and other rubber balls for sports and games, including golf ball centres and uncovered tennis balls but not complete golf and tennis balls	{ 1951 409 1948 541	{ 58 42	{
Total rubber balls for sports and games, including playballs but excluding complete golf and tennis balls	{ 1951 549 1948 747 1937 234	{ 115 85 27	{ 15(u) 20 25

TABLE 11 (contd.)

		Production (b)(c)	Exports (d)	Retained imports (e)
		£'000	£'000	£'000
Toys, wholly or mainly of rubber (excluding balls)				
Balloons	{ 1951	601	120	..
	{ 1948	346	43	..
Other	{ 1951	212	46	..
	{ 1948	241	39	..
Total toys, wholly or mainly of rubber (excluding balls)	{ 1951	813	166	75(v)
	{ 1948	587	82	12
Hot water bottles	{ 1951	Th.doz. 563	Th.doz. 66	Th.doz. -
	{ 1948	621	87	3
	{ 1937	292	27	21
Medical, surgical and dental products, other than sheeting and gloves	{ 1951	£'000 2,340	£'000 406	£'000 10
	{ 1948	1,682	270	..
Sealing and bottling rings	{ 1951	Th.gross 2,769	Th.gross 271	Th.gross ..
	{ 1948	4,532	280	..
Sponge and cellular rubber products of all descriptions, not elsewhere specified	{ 1951	Tons 11,856(g)	Tons 2,147	Tons ..
	{ 1948	5,424(g)	907	(w)
Vulcanite, ebonite and other hard rubber		£'000	£'000	£'000
Sheets, rods and tubes	{ 1951	432	239	..
	{ 1948	303	87	..
Other manufactures not elsewhere specified	{ 1951	3,357	341	..
	{ 1948	2,037	81	..
Total vulcanite, ebonite and other hard rubber	{ 1951	3,789	580	7(x)
	{ 1948	2,340	168	1(x)
	{ 1937	727	16(x)	8(x)
Rubber compound and adhesives (including processed latex adhesives and synthetic latex adhesives made from synthetic rubber)	{ 1951	Tons 23,933(g)	Tons 2,085(y)	Tons ..
	{ 1948	19,459(g)	1,156	..

- (a) Figures of production (or sales) refer only to larger establishments. All recorded exports from and imports into the United Kingdom are given in the table. The figures therefore, are not strictly comparable.
- (b) Sales in 1951 and 1948, and production for sale in 1937, except where otherwise stated.
- (c) Including production (or sales) by establishments classified to other trades.
- (d) Valued f.o.b.
- (e) Valued c.i.f.
- (f) Production for sale or for further manufacturing purposes in the same works.
- (g) Partly estimated.
- (h) Including synthetic rubber sheeting.
- (i) Described as 'Sheeting of rubber or synthetic rubber, with a textile backing'.
- (j) Including cable cloth.
- (k) The overseas trade figures include used tyres, whether reconditioned or not, but exclude tyres and tubes exported or imported with complete vehicles or chassis as part of their equipment, or fitted on wheels exported or imported separately.
- (l) Including retreaded tyres other than for motor vehicles.
- (m) Including new aeroplane and horse-drawn vehicle tyres.
- (n) Described as 'Barrow and trolley tyres'.
- (o) Including inner tubes for aeroplane and horse-drawn vehicle tyres.
- (p) Described as 'For barrow and trolley tyres'.
- (q) Described as 'Mats, matting and tiling of rubber' in 1937.
- (r) Excluding coverings and stair nosings.
- (s) Described as 'Rubber heels and soles' in 1937.
- (t) Described as 'Football bladders'.
- (u) Excluding playballs.
- (v) Including playballs.
- (w) Re-exports in excess of imports.
- (x) Described as 'In rods, tubes, sheets, etc., not elsewhere specified'.
- (y) Described as 'Latex compounds and adhesives (rubber solution or latex)'.

Usage of certain specified purchased materials, 1951
Larger establishments in Great Britain

TABLE 12

Materials used	Quantity
	Th.lbs.
Cotton yarn	14,214
Spun yarn of rayon, nylon, etc.	30
Continuous filament yarn of rayon, nylon, etc.	22,123
	Th.sq.yds.
Woven cotton cloth	118,044
Woven cloth of rayon, nylon, etc. or of rayon, nylon, etc. mixed with materials other than silk	29,992
	Th.cwts.
Zinc compounds	313

Employment in September

TABLE 13

Larger establishments (a)

	Number					
	Great Britain					
(i) Operatives	1951(b)	1950(b)	1949(b)	1948(c)	1937(c)	1935(c)
Males						
Under 18	1,894	1,489	1,394	1,588	2,954	2,628
All ages	55,800	51,286	45,909	49,772	29,957	28,021
Females						
Under 18	1,833	1,384	1,333	1,656	5,635	3,983
All ages	26,985	24,602	22,624	22,246	18,005	16,535
Total						
Under 18	3,727	2,873	2,727	3,244	8,589	6,611
All ages	82,785	75,888	68,533	72,018	47,962	44,556

(ii) Administrative, technical and clerical employees (d)

	Number					
	Great Britain					
	1951	1950	1949	1948	1937	1935
Males						
Under 18	481	378	410	421	666	490
All ages	12,217	11,141	10,522	9,937	6,868	6,578
Females						
Under 18	1,135	946	818	789	670	403
All ages	6,740	5,963	5,561	5,163	3,259	2,964
Total						
Under 18	1,616	1,324	1,228	1,210	1,336	893
All ages	18,957(e)	17,104(e)	16,083(e)	15,100(e)	10,127	9,542

(continued overleaf)

TABLE 13 (contd.)
(iii) Total employees

	Great Britain						Number
	1951	1950	1949	1948	1937	1935	
Males							
Under 18	2,375	1,867	1,804	2,009	3,620	3,118	
All ages	68,017	62,427	56,431	59,709	36,825	34,599	
Females							
Under 18	2,968	2,330	2,151	2,445	6,305	4,386	
All ages	33,725	30,565	28,185	27,409	21,264	19,499	
Total							
Under 18	5,343	4,197	3,955	4,454	9,925	7,504	
All ages	101,742(e)	92,992(e)	84,616(e)	87,118(e)	58,089	54,098	

(a) Excluded employees. The following persons were employed at the larger establishments in this trade in 1951 but are not included in the above tables or in any other Census of Production report (e.g., employees engaged in merchanting):-

Canteen workers	57	Males	886	Females	
Other workers	769	Males	303	Females	

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

(c) Average for the year.

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

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

	(iv) Working proprietors				Number
	Great Britain				
	1951	1950	1949	1948	
Males					
	18	20	20	24	
Females					
	2	3	4	3	
Total					
	20	23	24	27	

Average employment
Larger establishments (a)

	Great Britain						Number
	1951	1950	1949	1948	1937	1935	
Operatives							
	81,088	74,942	69,916	72,018	47,962	44,556	
Administrative, technical and clerical employees							
	18,475	16,802	15,988	15,100(b)	10,127(b)	9,542(b)	
Total							
	99,563	91,744	85,904	87,118	58,089	54,098	

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

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

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

	Great Britain					
	1951	1950	1949	1948	1937	1935
Males						
	83	73	102	44	..	..
Females						
	926	791	531	518	..	..
Total						
	1,009	864	633	562	..	..

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	86,668	694,698	57
Continuous 4 shift systems per 24 hours averaging 6 hours per shift	-	-	-
All 2 shift systems	51,342	513,606	66
Other shift systems	6,070	54,424	17
Total	144,080	1,262,728	(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	291	119	82,785	69,095	26,798
Percentage of total in trade	100.0	40.9	100.0	83.5	32.4
Percentage of total on returns showing shift-work				100.0	38.8

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

Larger establishments

TABLE 16

£'000

	Great Britain			
	1951	1950	1949	1948
Wages and salaries (a) of				
Operatives				
	28,532	24,035	21,019	21,539
Administrative, technical and clerical employees				
	9,418	7,727	7,025	6,320
Total				
	37,950	31,762	28,043	27,860
Employers' contributions to all National Insurance Schemes				
	988	888	831	676

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

Great Britain			
1951	1950	1949	1948
99	78	66	67

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

	Great Britain			£'000
	1951	1949	1948	
Plant, machinery and vehicles				
Acquisitions				
Plant and machinery				
New	4,931	4,384	3,791	
Second-hand	192	103	196	
Vehicles				
New	351	216	192	
Second-hand	136	32	61	
Total acquisitions	5,609	4,735	4,240	
Disposals				
Plant and machinery	126	77	70	
Vehicles	110	60	35	
Total disposals	236	137	106	
New building work				
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	1,040	1,049	930	

COUNTRY TABLES

1951

Summary: Larger establishments

	England	Wales	Scotland	Great Britain
	£'000	£'000	£'000	£'000
Gross output (production)	233,612	2,518	23,060	259,191
Cost of materials and fuel used	161,795	1,915	16,085	179,731
Payment for work done on materials given out	1,153			
Transport payments	1,818	12	129	1,958
Net output	68,846	592	6,846	76,284
Wages and salaries of persons employed	33,758	543	3,650	37,950
	No.	No.	No.	No.
Average number of persons employed (a)	87,382	1,654	10,547	99,583
	£	£	£	£
Net output per person employed (a)	788	358	649	766
	£'000	£'000	£'000	£'000
Stocks at end of year				
Products on hand for sale and work in progress	16,080	170	2,047	18,297
Materials and fuel	30,971	839	3,861	35,671
	No.	No.	No.	No.
Number of establishments	294	13	21	328

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

	£'000	£'000	£'000	£'000
Output of firms in this trade				
Total value of sales (see Table 20)	226,924	2,419	22,455	251,797
Changes in stocks and work in progress (see Table 21)	+ 6,689	+ 100	+ 605	+ 7,393
Gross output (production)	233,612	2,518	23,060	259,191
Materials and fuel used by firms in this trade				
Purchases	172,858	2,583(b)	17,612(b)	192,989
Changes in stocks (see Table 21)	- 11,064	- 668	- 1,527	- 13,258
Materials and fuel used	161,795	1,915(b)	16,085(b)	179,731

(a) Excluding outworkers but including working proprietors.
(b) Including payment for work done on materials given out.

TABLE 19

Summary: Small firms (a)

	England	Wales	Scotland	Great Britain
Number of returns	171	6	8	185
Average number of persons employed (b)				
Males	731	19	39	789
Females	256	10	4	270
Total	987	29	43	1,059

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

Sales in the trade

Larger establishments

TABLE 20

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Tons	£'000	Tons	£'000	Tons	£'000
Principal products						
Sheets and sheeting wholly of rubber						
Mechanical	1,423	451	558	143	1,981	594
Other	..	(a)	..	(a)	4,033	1,347
Insertion sheeting	1,614	377	551	147	2,165	524
Cloth proofed with rubber	Th.sq.yds.		Th.sq.yds.		Th.sq.yds.	
Hospital sheeting (including jaconet and batiste)	1,061	307	427	102	1,487	410
Other, in single texture or double texture; and sheets, sheeting and cloth proofed with synthetic rubber	16,001	3,657	2,423	418	18,425	4,075
	..	20	..	55	..	75
Threads wholly of rubber	Tons		Tons		Tons	
	1,572	1,618	-	-	1,572	1,618
Hose						
Wholly of rubber, balata or gutta percha	..	(a)	..	(a)	1,135	248
Fabric wrapped						
Reinforced throughout with metal wire or strip, not wire braided						
Suction type	2,088	901	493	154	2,581	1,055
Other	786	443	72	30	858	473
Wire braided, with or without end fittings	..	(a)	..	(a)	7,932	962
Other fabric wrapped hose	2,850	1,360	235	107	3,085	1,467
Other descriptions of hose	5,604	2,078	61	16	5,665	2,094
	..	249	..	..	..	249
Tubing wholly of rubber (other than for medical and surgical purposes)	824	377	371	92	1,195	469
	..	118	..	2	..	120
Rubber tyres and tubes	Thous.		Thous.		Thous.	
Pneumatic						
Outer covers, new						
Giant tyres (including 5in. S.S.)	..	(a)	..	(a)	3,082	55,671
Tractor and dumper and earth mover vehicle tyres	..	(a)	..	(a)	667	8,818
Car (including taxi) tyres	..	(a)	..	(a)	6,654	28,257
Motor cycle and tri-car tyres	..	(a)	..	(a)	1,048	2,078
Pedal cycle tyres	14,804	4,622	-	-	14,804	4,622
Aeroplane tyres	94	969	-	-	94	969
Animal-drawn and similar vehicle tyres	..	(a)	..	(a)	218	1,093
Barrow, trolley and other tyres	..	(a)	..	(a)	437	563

TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Thous.	£'000		£'000	Thous.	£'000
Principal products (contd.)						
Rubber tyres and tubes (contd.)						
Pneumatic (contd.)						
Inner tubes						
For giant tyres (including 5 in. S.S.)	..	(a)	..	(a)	2,302	3,523
For tractor and dumper and earth mover vehicle tyres	..	(a)	..	(a)	653	1,007
For car (including taxi) tyres	..	(a)	..	(a)	5,337	3,353
For motor cycle and tri-car tyres	..	(a)	..	(a)	908	347
For pedal cycle tyres	13,350	1,688	-	-	13,350	1,688
For aeroplane tyres	65	110	-	-	65	110
For animal-drawn and similar vehicle tyres	..	(a)	..	(a)	185	146
For barrow, trolley and other tyres	..	(a)	..	(a)	442	120
Cushion, sponge rubber and solid tyres, including solid tyreing sold in the length	Tons		Tons		Tons	
For perambulators and other baby carriages	2,532	516	-	-	2,532	516
Other	..	(a)	..	(a)	3,528	820
Camelback and other tyre repair materials	..	(a)	..	(a)	..	174
Rubber accessories for motor vehicles, including motor cycles and tri-cars, not elsewhere specified	..	(a)	..	(a)	..	3,503
Machinery belting						
Rubber or rubber and canvas						
Conveyor and elevator	..	(a)	..	(a)	29,579	18,535
Power transmission, motor vehicle fan belts, and other V-belts and round section belts; and belting of balata (including gutta percha) and canvas	..	(a)	..	(a)	2,949	3,613
Other power transmission	..	(a)	..	(a)	..	1,082
Tiling and flooring (including sponge backed), covings and stair nosings of rubber, other than of sponge rubber	5,480	1,187	1,497	311	6,977	1,498
Rubber soles, full and half-size, including combined soles and heels, and rubber heels and heel tips	..	(a)	..	(a)	11,245	3,638
	Th.do.		Th.do.		Th.do.	
Bathing caps and helmets	114	126	-	-	114	126
Rubber balls - bladders (football, punchball, waterpolo, etc.)	119	131	7	9	126	140
Toys, wholly or mainly of rubber - balloons	..	(a)	..	(a)	9,746	601
Hot water bottles	514	1,248	49	120	563	1,368
Wringer rollers	..	(a)	..	(a)	Thous.	612
Industrial rollers	..	(a)	..	(a)	197	254
Sealing and bottling rings	Th.gross		Th.gross		Th.gross	
Screw stoppers for bottles	485	209	-	-	485	209
Railway springs, buffer recoils and other rubber products for locomotives, carriages and wagons	Tons		Tons		Tons	
Sponge and cellular rubber products, not elsewhere specified	..	(a)	..	(a)	2,152	1,070
Mattresses	3,117	1,537	-	-	3,117	1,537
Other descriptions (including upholstery and cushions)	..	(a)	..	(a)	8,379	4,047
Vulcanite, ebonite and other hard rubber	..	(a)	..	(a)	..	104
Sheets, rods and tubes	..	(a)	..	(a)	529	352
					..	81

TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Tons	£'000	Tons	£'000	Tons	£'000
Principal products (contd.)						
Vulcanite, ebonite and other hard rubber (contd.)						
Battery boxes, plugs and lids	5,626	1,076	-	-	5,626	1,076
Other manufactures of vulcanite, ebonite and other hard rubber, not elsewhere specified	..	(a)	..	(a)	..	635
Rubber adhesives (including processed latex adhesives and synthetic latex adhesives made from synthetic rubber), sold as such	..	(a)	..	(a)	3,082	1,304
Cable cloth	..	(a)	..	(a)	..	172
Insulating materials, including varnished and non-adhesive cloth and tape (except cable cloth), and adhesive cloth and tape; and pressure sensitive adhesive tape, e.g., masking tape used for sealing purposes	..	(a)	..	(a)	7,384	1,520
Rubber bands	..	2,405	..	793	Th.galls.	118
Miscellaneous rubber goods, including adhesive cellulose tape and surgical tape; rubber sheeting with a textile backing; reclaimed rubber; rubber compound, sold as such; rubber accessories for cycles; rubber valves, washers and rings for industrial purposes (sold separately), not elsewhere specified; mats and matting of rubber, other than of sponge rubber; rubber boots and shoes; rubber gloves and gauntlets; playballs (including sponge rubber playballs) and other rubber balls for sports and games, including golf ball centres; toys wholly or mainly of rubber other than balloons; medical, surgical and dental products other than sheeting and gloves; printers' rollers, blankets and roller covering materials; rubberised hair; and erasers	..	378	-	-	Th.sq.yds.	17,315
Waste rubber	..	(a)	..	(a)	Tons	2,527
Other waste products	..	(a)	..	(a)	..	1,738
Work done for the trade or on commission (b)	Thous.		Thous.		Thous.	
Tyres, retreaded or remade						
Giant tyres (including 5 in. S.S.)	637	3,764	20	112	657	3,876
Car (including taxi) tyres	1,204	2,920	47	141	1,251	3,061
Other tyres	53	317	-	-	53	317
Compounding of rubber	..	63	..	..	..	63
Rubber proofing	..	720	..	-	..	720
Other work done	..	2,112	..	108	..	2,219
Total principal products		2,231		29		2,260
Other output		222,917		20,926		243,843
Proofed, etc. garments	252	202	501	743	752	946
Proofed piece goods, other than rubber proofed	..	(a)	..	(a)	Th.sq.yds.	416
Golf balls and tennis balls, covered ready for use	..	(a)	..	(a)	..	40
Plastics materials	..	(a)	..	(a)	Th.do.	722
Manufactures of plastics materials other than garments and toys and games	..	744	-	-	Th.cwts.	37.6
					..	449
					..	744

TABLE 20 (contd.)

	England and Wales		Scotland		Great Britain	
	Quantity	Value	Quantity	Value	Quantity	Value
	Th.pairs	£'000		£'000	Th.pairs	£'000
Other output (contd.)						
Insulating materials other than cloth and tape	..	219	-	-	..	219
Parts and accessories (not wholly of rubber) of motor vehicles (other than motor cycles) and pedal cycles	..	187	-	-	..	187
Chemical manufactures including varnishes, dyes, stains, inks, polishes and artists' colours	..	511	-	-	..	511
Boots, shoes, sandals and slippers, not wholly of rubber, and parts thereof	{ 35 ..	{ 31 59	-	-	{ 35 ..	{ 31 59
	Th.cwts.				Th.cwts.	
Machinery, parts and accessories, other than moulds	..	656	-	-	..	656
Other engineering products	..	354	-	-	..	354
Synthetic rubber	5.2	84	-	-	5.2	84
Other goods	..	1,935	..	275	..	2,210
Work done (b)		43		-		43
Total		229,342		22,455		251,797

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

(b) Amount charged.

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

Larger establishments

TABLE 21		£'000		
		England and Wales	Scotland	Great Britain
Products on hand for sale	{ at beginning of year	5,110	810	5,919
	{ at end of year	9,809	1,200	11,010
Work in progress	{ at beginning of year	4,352	633	4,985
	{ at end of year	6,441	847	7,288
Total products on hand for sale and work in progress	{ at beginning of year	9,462	1,442	10,904
	{ at end of year	16,250	2,047	18,297
Materials and fuel	{ at beginning of year	20,078	2,334	22,413
	{ at end of year	31,810	3,861	35,671

Employment in September
Larger establishments (a)(b)

TABLE 22 (i) Operatives		Number		
		England and Wales	Scotland	Great Britain
Males				
Under 18		1,659	235	1,894
All ages		50,205	5,595	55,800
Females				
Under 18		1,430	403	1,833
All ages		24,197	2,788	26,985
Total				
Under 18		3,089	638	3,727
All ages		74,402	8,383	82,785

TABLE 22 (contd.)

(ii) Administrative, technical and clerical employees

		Number		
		England and Wales	Scotland	Great Britain
Males				
Under 18		411	70	481
All ages		10,849	1,368	12,217
Females				
Under 18		932	203	1,135
All ages		5,921	819	6,740
Total				
Under 18		1,343	273	1,616
All ages (c)		16,770	2,187	18,957

(iii) Total employees

		Number		
		England and Wales	Scotland	Great Britain
Males				
Under 18		2,070	305	2,375
All ages		61,054	6,963	68,017
Females				
Under 18		2,362	606	2,968
All ages		30,118	3,607	33,725
Total				
Under 18		4,432	911	5,343
All ages (c)		91,172	10,570	101,742

(a) Excluded employees. The number of persons employed at the larger establishments in this trade but not included in the above tables or in any other Census of Production report (e.g., employees engaged in merchandising) are shown in Table 22(v) below.

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

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

(iv) Working proprietors.

		Number		
		England and Wales	Scotland	Great Britain
Males		16	2	18
Females		2	-	2
Total		18	2	20

(v) Excluded employees

		Number		
		England and Wales	Scotland	Great Britain
Canteen workers				
Males		54	3	57
Females		796	90	886
Total		850	93	943
Other workers				
Males		1,037	35	1,072
Females				769
Total		1,037	35	1,072
Total excluded employees		1,887	128	2,015

Average employment

Larger establishments (a)

TABLE 23		Number		
		England and Wales	Scotland	Great Britain
Operatives		72,710	8,378	81,088
Administrative, technical and clerical employees		16,308	2,167	18,475
Total		89,018	10,545	99,563

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

Outworkers. In addition to the employees shown above the firms in this trade employed 83 male and 926 female outworkers (all in England and Wales).

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

Larger establishments

	England and Wales	Scotland	Great Britain
Wages and salaries (a) of			
Operatives	25,794	2,733	28,532
Administrative, technical and clerical employees	8,506	912	9,418
Total	34,301	3,650	37,950
Employers' contributions to all National Insurance Schemes	889	99	988

(a) Including bonus and commission payments but excluding payments amounting to £99,000 to outworkers in England and Wales.

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

Larger establishments

	England and Wales	Scotland	Great Britain
Plant, machinery and vehicles			
Acquisitions			
Plant and machinery			
New	4,556	375	4,931
Second-hand	182	10	192
Vehicles			
New	338	13	351
Second-hand	127	9	136
Total acquisitions	5,203	406	5,609
Disposals			
Plant and machinery	107	19	126
Vehicles	108	2	110
Total disposals	214	22	236
New building work			
Capital expenditure on new building and other constructional work of a capital nature (excluding site values and development charges)	1,011	29	1,040

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

Larger establishments

	England and Wales	Scotland	Great Britain
Amounts paid to other firms and undertakings	(a)	(a)	1,927
Amount paid or credited to firms' own separate transport organisations	(a)	(a)	31
Total	1,830	129	1,958

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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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