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BOARD OF TRADE

FINAL REPORT on the CENSUS OF PRODUCTION

FOR 1948

Volume 2

Trade H

EXPLOSIVES AND FIREWORKS



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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Share In interpreting the data

In interpreting the data in the following tables, it is essential to bear in mind not only the qualifications mentioned in this report but also the general explanations and qualifications contained in the separate booklet published in this series by H.M. Stationery Office entitled "Final Reports of the Census of Production for 1948: Introductory Notes", price 2s Od. NET

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* Not applicable to this trade

EXPLOSIVES AND FIREWORKS TRADE

THIS REPORT on the Explosives and Fireworks Trade relates to establishments engaged wholly or mainly in the manufacture of explosives, fireworks, detonators, fuses, percussion caps, flares, signal rockets, small arms ammunition, etc., and in filling bombs, cartridges and shells.

Thirteen Government establishments are included for 1948 and ten for 1935. Production by Government Departments was not recorded for 1937.

This trade corresponds to minimum list heading 33 in the Standard Industrial Classification.

Any establishments in Northern Ireland are excluded in 1948; no production was recorded there in this trade for 1937 or 1935.

EXPLOSIVES AND FIREWORKS TRADE Summary

Larger establishments

TABLE I

TABLE 1			
	1948	1937(a)	1935
	£!000	£,000	£1000
Gross output (production)	18,569	7,589	7, 128
Cost of materials and fuel used	7,497	3, 302	3,420
Payment for work done on materials given out	2	17	8
Net output	11,071	4, 270	3,700
Wages and salaries of persons employed Average number of persons employed (b) Net output per person employed (b)	7,841 No. 24,911(c) £ 444	No. 12,736 £ 335	No. 12,628 £ 293
Stocks at end of year	£1000	£!000	٤١٥٥٥
Finished products and work in progress	2, 426		
Materials and fuel Number of establishments	3,820 No. 49	No.	No. 53

(a) Excluding Government establishments, production by which was not recorded for this year.
(b) Excluding outworkers.
(c) For the total number of persons employed in this trade see Table 3.

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

	1948	1937	1935
Qutput of firms in this trade	£1000	£1000	£1000
Total value of sales (1948) or production (1937 and 1935)			
Principal products (see Table 3)	16,985	6,574	6, 441
Other output (see Table 10)	1,916	1,015	687
Adjustment for changes in stocks and work in progress (see Table 14)	+ 88		
Less payment for transport by other firms	18,989 420	7,589	7, 128
Gross output (production)	18,569	7,589	7, 128
Materials and fuel used by firms in this trade			/
Purchases (see Table 13) Adjustment for changes in stocks (see Table 14)	7,816 - 319	3, 302	3, 420
Materials and fuel used	7, 497	3,302	3, 420
DS 32061/1			and the second section of the section of t

EXPLOSIVES AND FIREWORKS

Summary, 1948

Small firms in Great Britain

TABLE 2

Number of returns	6
Average number of persons employed (a)	A solution of the solution of
Males	24
Females	12
Total	36

(a) Including working proprietors.

Estimated average employment, 1948 All firms in Great Britain

TABLE 3

As returned by firms	
Employing on average more than ten persons (a)	24, 911
Employing on average ton persons or less (b)	36
	24, 947
Estimated average employment in firms not making satisfactory returns	-
Average employment in all firms	24, 947

⁽a) See Tables 1 and 15.
(b) See Table 2.

Analysis by size, 1948 Larger establishments in Great Britain

TABLE 4

Average	Establish- ments	Gross		Persons employed	Re	Net output per person.		
number employed	menus	output	output	employed	Wages	Salaries	Total	employed
11-24	No.	£1000 43	£1000 20	No. 54	£'000	£'000 5	£'000 12	\$. 379
25-49	5	161	81	192	31	11	42	423
`50-99	9	589	297	611	105	21	126	486
10C-199	13	1,450	905	1,783	372	95	467	507
200-299	4	750	457	1,015	215	47	262	451
300 and over	15	15, 576	9,310	21, 256	5, 154	1,777	6,931	438
* Total	49	18,569	11,071	24, 911	5, 884	1,957	7,841	444
DS 32061/1			and an activative and activative activative and activative				-	

Analysis by standard region, 1948 Larger establishments in Great Britain

TABLE 5

Region	Establish-	Gross	Net	output	rersons		Remuneration			
	ments	output	Value		employed	Wages	Salaries	Total		
England	No.	£'000	£'000		No.	£' 000	£'000	£'000		
Northern; and East and West Ridings of					lace.					
Yorkshire	11	1, 400	825	7.5	2,058	415	99	514		
North Midland; and Eastern	4	602	311	2.8	696	126	40	166		
London and South Eastern	6	609	390	3.5	1,091	241	50	29:		
Southern; and South Western	5	1, 360	722	6.5	1,929	470	116	587		
Midland	4	1,049	632	5.7	2, 147	514	127	640		
North Western	6	2, 131	1,565	14. 1	3,603	910	196	1, 107		
Total England	36	7, 151	4, 447	40.2	11, 524	2,676	629	3, 305		
Wales	4	2, 279	1,658	15.0	4, 177	1,048	267	1, 316		
Scotland	9	9, 140	4,966	44.9	9,210	2, 159	1,061	3, 221		
Great Britain	49	18, 569	11,071	100.0	24,911	5, 884	1,957	7,841		

TABLE 6 - Analysis according to specialisation within the trade, 1948 Larger establishments in Great Britain

No specialisation within this trade was distinguished.

TABLE 7 - Total make of intermediate products: Larger establishments

This table is not applicable to the trade.

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

Larger establishments

TABLE 8	Larger	Stabilsi	III CII LO			1,499,5140,31	4 3248
To Alloward Hallow Control House		1948 Sales		1937 Produc		193 Produc	
sept chang and with	Quantity	Value	Entries	Quantity	Value	Quantity	Value
	Th. cwts.	£' 000	No.	Th. cwts.	£1000	Th. cwts.	£1000
Propellent powders	17.0	885	••				
High explosives, except blasting powder	759.2	5, 175	5	580, 5	3,029	436.4	2, 329
Blasting powder	106.4	662	5	142.0	367	152.0	391
Fuses and blasting accessories						and the same of th	rsapao
Safety fuse	133.9	1, 436	••				207
Fuse, instantaneous	12.0	221	••:	The second		6 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	293
Electric detonators and fuses	27.5	1,371	9			व्यक्तिवर्षे तस्त्र	12.
Other fuses, tubes, primers, etc., except shell fuses	1. 7	89	5	139.0	1,660	117.0	1, 221
Detonators, other than electric, { including railway fog signals	7.2	472 88	5		of notions	ou satout	
Other accessories (including cables and parts of fuses and of blasting accessories)	17.3	670	5		Sepansial, 10 1048 1000 sep	Septiment :	00 (0) 00 (0) 00 (6)
Rockets (including line carrying rockets) and other pyrotechnic products	••	1,016	15		390	••	392
Small arms ammunition	Million			Million		Million	
Loaded cartridges for military and sporting purposes {	100.3 Th.cwts.	1, 271 591	3	291. 4 Th. cwts.	1, 121	333.8 Th.cwts.	1, 140
Other sporting ammunition, including shot but excluding empty cartridge cases	6.3	37		54. 1	77	65. 7	65
Other ammunition, loaded or filled	228.7	372 78	}	••	42		
Explosives, not elsewhere specified	••	237	5	••	565		900
Waste products, other than scrap metals	••:	4	5		(b)	••	(p)
OF SECTION AND ADDRESS OF FRANCE PARKET	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2						

estata for excusers indicates and to (malformore no) sales .

(d) crowled asset to facilitation of release engine and the court tests of beitlessic approachmence

2/H/7

Sales (or production) of principal products of the trade by establishments classified to other trades

Larger establishments

TABLE 9

Senor to the Beautiful Senor to	1948 Sales			1937 Produc		1935 Production	
	Quantity	Value	Entries	Quantity	Value	Quantity	Value
	Th.cwts.	ह्र¹ 000	No.	Th.cwts.	£'000	Th.cwts.	£' 000
Propellent powders	1.1	49	••			salama av	
High explosives, except blasting powder	_	Darri	d marinana	1.1	5	0.7	5
Fuses and blasting accessories	Parameter (1) and the			olisalusa	n antiles	to elemente	
Detonators, other than electric, including railway						oder senoti	
fog signals	•	48	Hane Magre	5.3	98	0.4	Lesco 1
Other	_	-	-				0153
Small arms ammunition	Million			Million		Million	60 - Skiple _
Loaded cartridges for military { and sporting purposes	86.3	1,080 591	8	26.3	170	75.7	386
Other sporting ammunition,	Th. cwts.		- PARABETTA	Th. cwts.	on the Control	Th. cwts.	3,230003 3,23000
including shot but excluding empty cartridge cases	6.3	37		51.4	74	62.9	62
Other ammunition, loaded or filled		58	••	-	. Les militals.		but end
Explosives, not elsewhere specified; and rockets (includ-			ACCEPT LABOUR	in seichti migraficat	od Appelsion Otto Tedado	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	782
ing line carrying rockets) and other pyrotechnic products	2 ••	74	3849*103 Z		442	Man Lenz.	ses Low
Work done for the trade or on commission other than filling of armunition (b)		99		a sagona a	Lair ban an	national de	6
Total		2,034		a demonstration	789	- washania	1, 242

- (a) Excluding production by Government establishments.
- (b) Amount charged in 1948 and amount received in 1935.

Sales (or production) in the trade of other than principal products

Larger establishments

TABLE 10

	1948 Sales	1937 (a) Production	1935 Production
	£, 000	£1 000	ଛ' ୦୦୦
Chemical products	1,597	502	491
Other goods	308	513	196
Scrap metals	11		100
Total	1,916	1,015	687

(a) Excluding production by Government establishments.

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TABLE 8 (contd.)

TABLE O (CONTEST)			erce (a .) meaning and the recommendation and meaning and the recommendation of the recommendation and the recom				
Total Control on Contr		1948 Sales		1937 (a) Production		1935 Product	
eafer greatest buter while	Quantity	Value	Entries	Quantity	Value	Quantity	Value
owers varie (Bt. cycs) 81900	ally Light	£1000	No.		£'000		£1000
Repair and maintenance work on ammunition (c)		1, 252	8		(þ)		
Work done for the trade or on commission (c)			0.601		ESLI TONIS		1.045/3
Filling of ammunition		1,022			440		1,245(d)
Other work		2,072	10		112		
Total		19,019	1.0,000		7,363	· Battle	7,683
Less sales (or production) in other trades (see Table 9)	10	2,034	· tales		789		1,242
Total principal products of this trade sold or made by establishments in the trade		16,985	46		6,574	10 100 mm. 2 7 8 mm.	6,441

- (a) Excluding production by Government establishments.(b) Not recorded separately.
- (c) Amount charged in 1948 and amount received in 1937 and 1935.
- (d) So far as recorded separately.

Analysis of sales, 1948

Larger establishments in Great Britain

TABLE II

TABLE II		
HILLENDIA HELDER	Sales	Percentage of total sales
Sales (or transfers) to other organisations under the same control	£' 000	
Productive works	1,606	11.0
Export sales organisations (including branches abroad)	2, 373	16.2
Other wholesale or selling organisations	112	0.8
Retail shops, etc.	Hans we	an salations
Total sales (or transfers) to other organisations under the same control	4,092	27.9
Sales to independent buyers		mende aver and
Exports invoiced directly overseas	1, 131	7.7
Exports invoiced to Crown Agents and purchasing houses in this country of individual firms and governments abroad	849	5.8
His Majesty's Government and Local Authorities (other than productive establishments)	1, 527	10.4
Manufacturers, repairers, builders, mines, public utilities, and transport and other productive undertakings	5, 503	37.6
Wholesalers, merchants and other agents for resale	1, 135(a)	7.7
Retailers, including multiple shops, caterers and N. A. A. F. I., for resale	319	2.2
Other businesses (including farmers) and institutions of all kinds	64	0.4
Members of the public, including employees	33	0.2
Total sales to independent buyers	10, 562	72. 1
Total	14, 654	100.0

⁽a) Of this total £1,043,000 was recorded as divided between £243,000 for export and £800,000 for other sales.

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

TABLE 12				25 · 注注28 x
Company (in the contract of th	5.54	Production (b)(c)	Exports (d)	Retained imports (e)
lent bus elabered beautioning to spend	perintruin	Th. cwts.	Th. cwts.	Th. cwts.
Propellent powders	{ 1948 1937	17.0	16. 4 16. 3	0. 1 3. 0
High explosives, except blasting powder	. { 1948 1937	759. 2	278.5 157.5	(f) 0.8
Total propellent powders and high explosives, except blasting powder	{ 1948 1937	776.2 580.5	294. 9 173. 8	0.1 3.8
Blasting powder	{ 1948 1937	106. 4 142. 0	11.3 17.1	17.6
Fuses and blasting accessories				
Safety fuse	{ 1948 { 1937	133.9	116.8 89.6	0.5
Other fuses, tubes and primers, etc.	{ 1948 1937	13.7(g)(h)	2.7 1.9	0.1
Other accessories (including detonate cables, and parts of fuses and blast accessories)	ors, ting { 1948 1937	53.4(h)(1)	12.5 3.2	0.1
Total fuses and blasting accessorie	es {1948 1937	201.0(g)(1) 139.0(g)	132.0 94.7	0.1
Rockets (including line carrying rocker and other pyrotechnic products	ts) {1948 1937	£'000 1,016 390	£' 000 285 41	£'000 1 -
Small arms ammunition		The state of the s		Ca A # Charles No.
Loaded cartridges for military and sporting purposes	\[\begin{pmatrix} 1948 \\ 1937 \end{pmatrix}	1,861 Million 291.4	3,512 Million 134.0	(f) Million 36.9
Other sporting ammunition, including shot but excluding empty cartridge cases		Th. cwts. 6.3 54.1	Th.cwts. 4.9 17.9 £.000	Th. cwts. 0.4 £1000
Explosives, not elsewhere specified	{ 1948 1937	£' 000 237 565	130 24	(f)

⁽a) Figures of sales (or production) refer only to larger establishments in the relevant years. All recorded exports from and imports into the United Kingdom are given in the table. The figures, recorded exports from and imports into the United Kingdom are given in the table. The figures, therefore, are not strictly comparable.

(b) Sales in 1948 and production for sale (excluding production by Government establishments) in 1937.

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

(d) Valued f.o.b.

(e) Valued c.i.f.

(f) Re-exports in excess of imports.

(g) Except shell fuses.

(h) Sales of electric detonators and fuses are included in the figures for "Other accessories".

(i) Partly estimated.

Purchased materials and fuel

Larger establishments

TABLE 13

	1948	3	1937 (a)	1935		
	Materials and fuel purchased		Usage of purchased materials and			id fuel	
THE RESIDENCE OF THE PARTY OF T	Quantity	Cost	Quantity	Cost	Quantity	Cost	
Materials	Th. cwts.	£' 000	Th. cwts.	£' 000	Th. cwts.	£1000	
Ammonium nitrate	144.3	170	163.9	120	114. 1	103	
Mercury	Th. 1bs. 9.6	2	Th. 1bs. 120. 3	21	Th. 1bs. 97. 4	13	
Metallic powders	Th. cwts.		Th. cwts.		Th. cwts.		
Aluminium	4.0	31					
Other	0.2	2	5.6	29	2.1	13	
Sodium nitrate	101.8	103	137.5	55	186.3	72	
Potassium nitrate		200, 10,000	engage mis		nessina in		
Refined	4.5	13			104 1100 441		
Unrefined	0.7	2	20.2	20		(b)	
Packing materials	370. 37.	960	••	213			
Alcohol	Th. bulk		75 A C L L L L L L L L L L L L L L L L L L		asomer nedal		
Industrial methylated spirits	galls. 386.0	78			Core one		
	Th. proof galls.	在本格 的第三人称			SEPATE SEE AN		
Other	332. 4 Th. tons	39	0.2274.030			146 33.56 m	
Ammonia liquor (in terms of 880 ammonia)	9, 0	277	ONE PROTEIN		LEGAN CLOTH	100 m	
50019	Th. 1bs. 3,915.0				-		
Cotton linters	Th. cwts.	224	D623 55600		e abas provide	DEBLE	
Jute yarn	48.4	403	inola minera		a tribleration		
Nitric acid (in terms of 100 per cent. acid)	Th. tons 2.1	45		(b)	1470123003	(b	
Potassium chlorate	Th. cwts.						
	1.4	8	A.111. A.115. A.115				
Pyrites	247.3	37	para emissione		11584. 309323		
Sodium bicarbonate	83.5	43			21300 (t. 1115)		
Sodium chloride	61.0	18					
Sulphur	84. 4	43					
Sulphuric acid (in terms of	Th. tons						
100 per cent. acid)	3.0	23)				

TABLE 13 (contd.)

No. of the last of	194	48	1937	(a)	19	35
		Materials and fuel purchased		purchased	materials a	nd fuel
	Quantity	Cost	Quantity	Cost	Quantity	Cost
Materials (contd.)	Th. cwts.	a' 000		£' 000		£' 000
Brass, including alloys of copper, but excluding nickel alloys other than nickel silver	14. 1	163				
Metal cartridge cases (other than small arms ammunition), empty		35			. Transfer	
High explosives	64. 9	240	}	2,675		3,051(c)
Propellent powders	3.7	22 20			1000000	
All other purchased materials		3, 927				
Fuel and electricity	Th. tons		Th. tons		Th. tons	
Coal	154. 5	405	130.3	116	135. 4	111
Coke	3.3 Th. B. T. U.	11	TH. B. T. U.	(b)	3.0 Th. B. T. U.	4
Electricity purchased	(kW.hrs.)		(kW.hrs.)		(kW.hrs.)	
From public supply	39, 550	146				7.5E
From other sources	-		18,608	33	18,473	53
Electricity obtained from other works under the same ownership	-	_				
Motor spirit (petrol) and derv. fuel	Th. galls.				16.7.75	
Used for road vehicles	435	31				
Used for other power purposes	68	4				
Other oil fuel (including creosote/pitch mixtures)	3,996 Th. therms	136	}	20	••	(b)
Gas purchased and gas obtained from other works under the same ownership	185	9 3				
All other purchased fuel	••	1				i sezione
Unclassified purchased materials, fuel and electricity	••	145	_	_	* -	_
Total		7,816	**************************************	3,302		3, 420

⁽a) Excluding Government establishments.
(b) Not recorded separately.
(c) Including fuel not specified separately.

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Stocks of finished products and work in progress and stocks of materials and fuel, 1948

Larger establishments in Great Britain

TABLE 14

- No. Whitesp Learn Lear	At beginning	ng of year	At end of year		
	Quantity	Value	Quantity	Value	
	Th. cwts.	£'000	Th. cwts.	£1000	
Finished products					
		1 1		and the common should	
High explosives, including blasting powder	100.4	531	115.4	633	
Fuses and blasting accessories	4	384 {	8.2	152 392	
Other finished products	••	392	••	479	
Work in progress		1,031		770	
Total finished products and work in progress		2, 337		2, 426	
Materials and fuel		3, 501	o party pacca.	3, 820	

Employment and remuneration (a)

TABLE 15

Larger establishments

INGUE .	a arrada tando da Maria de Ma				e sangramon and career home years on the first and distance of		Control and the Property of the Australian States and Australian S		NAME OF THE OWNER, OWNE
	Average number of operatives			Administrative, technical and clerical employees (b)			Total		
	1948	1937 (c)	1935	1948	1937 (c)	1935	1948	1937 (c)	1935
Males	LEA .	-			-		-		
Under 18	287	356	307	23	48	25	310	404	332
All ages	14, 583	6, 211	7, 103	2, 576	1,064	1, 132	17, 159	7,275	8, 235
Females	70 A S. S. S. S.						686		
Under 18	755	917	756	90	56	42	845	973	798
All ages	8, 561	4, 958	3,922	1, 187	503	471	7,748	5, 461	4, 393
Total		2 4 1 4 4 5 5 4							2 10 12
Under 18	1,042	1, 273	1,063	113	104	67	1, 155	1, 377	1, 130
All ages	21, 144	11, 169	11,025	3,763(d)	1, 567	1,603	24,907 (d)(e)(f)	12,736	12, 628
	£'000		3-2-6-30	£'000			£!000		
rotal remuneration	5, 884	•		1,957	• •	••	7,841	••	• •

(a) Excluded employees. The following numbers were employed at establishments in this trade but are not included in the table or in any other report (e.g., employees in a separate selling or transport organisation for which separate accounts are kept):-

Canteen workers	61	males	476	females
Other workers	116	males	12	females

- (b) Number at September 25, 1948, October 16, 1937, and October 12, 1935.
- (c) Excluding Government establishments.
- (d) There were, in addition, 4 working proprietors (3 males and 1 female) in 1948. Working proprietors are included in the 1937 and 1935 figures.
- (e) The employers' share of contributions to all National Insurance Schemes payable during the year in respect of these workers amounted to \$205,000.
- (f) The following persons (included in this total) were employed on special work by establishments employing 100 or more persons:-

		Operatives	Administrative, technical and clerical employees
	Transport of goods outside the premises	142	
Maintenance and repair of firms!		592	
buildings, but not plant	buildings, but not plant		
	Research work not directly connected with current production however		
	charged	3	327

In addition to the employees in the above table the firms in this trade employed 4 male and 305 female outworkers in 1948, the amount paid to them being £18,000. Similar information is not available for 1937 and 1935.

Wages and salaries paid, 1948 (a) Larger establishments in Great Britain

TABLE 16

	Amount	1					
	by all establishments	Amount	Percent	age of annu	al remunera	tion paid i	n
	menus	paid	First quarter	Second quarter	Third quarter	Fourth quarter	Year
Wages and salaries of	£'000	%£'000					
Operatives	5,884	22,629	23.2	24.4	25.4	26.9	100.0
Administrative, technical and							
clerical employees	1,957	11, 295	23.1	22.9	23.6	30.4	100.0
· Total	7,841	3; 924	23.2	23.9	24.8	28.0	100.0

(a) Including bonus and commission payments.

TABLE 17 - Payments for work done on materials given out, 1948 Larger establishments in G. Jat Britain

The total amount paid for work done on materials given out was \$2,000.

Payments for certain services, 1948 Larger establishments in Great Britain

TABLE 18

	Amount paid
Repair and maintenance	£!000
Of buildings	91
Of plant, machinery and vehicles	34
Unclassified	11
Hire of plant, machinery and vehicles	9
Advertising and market research	Management to the second
Advertising in newspapers, magazines and periodicals	7
Other advertising services (poster display, despatch of circulars, etc.) and market research	1
Unclassified	2
Payments made for research work	xolucia de la contraction de l
To research associations	ogg/
To universities, institutions, academic bodies and similar agencies	
To other commercial concerns	137
Postage, telephone, telegrams and cables	43
Commercial insurance premiums	110
Rates (excluding water rates) payable in the year	63

EXPLOSIVES AND FIREWORKS

Plant, machinery and vehicles required and disposed of, 1948 Larger establishments in Great Britain

TABLE 19

	Acqui	Acquisitions		
	New	Second-hand	Disposals	
	£!000	£1000	£'000	
Plant and machinery	354	118	97	
Vehicles	51	15	8	
Total	405	133	105	

Capital expenditure on building work and changes in occupation of buildings and land, 1948

Larger establishments in Great Britain

TABLE 20

1.	Capital expenditure on building work (a)	£'000	£'000 94
2.	Existing buildings and land (b)		the sample as
	(i) Capital cost of freeholds bought	1	
	Estimated capital value of		
	(11) Rented property newly occupied in the year (c)	-	
	(111) Leasehold buildings and land newly occupied in the year	1	
	Total of heading 2		2
	Total of headings 1 and 2		96
3.	Existing buildings and land relinquished (d)		
	(i) Selling value of freeholds sold	o order state assistant	
	(11) Estimated value of other properties relinquished	2	
	Total of heading 3		2
4.	Headings 1 and 2 less heading 3		94

(a) Excluding site value which, where appropriate, is included in heading 2(i).
(b) The figures do not reflect changes in ownership of previously occupied land and buildings.

Property which is occupied under an agreement for the payment of rent without the purchase of a lease or the payment of a premium.

(d) Including property destroyed or abandoned.

Summary

Larger establishments

TABLE 21

TABLE 21				
00019 00019	England	Wales	Scotland	Great Britain
Gross output (production)	£'000 7, 151	£1000 2, 279	£'000 9, 140	£'000 18,569
Cost of materials and fuel used	2,702	620	4, 174	7,497
Payment for work done on materials given out	2	-	alor -	2
Net output	4, 447	1,658	4, 966	11,071
Wages and salaries of persons employed Average number of persons employed (a)	3,305 No. 11,524	1,316 No. 4,177	3, 221 No. 9, 210	7,841 No. 24,911
Net output per person employed (a)	386	397	539	444
Stocks at end of year	£1000	£' 000	۵,000	£1000
Finished products and work in progress	673	110	1,642	2,426
Materials and fuel	2,004 No.	278 No.	1,539 No.	3,820 No.
Number of establishments	36	4	9	49

(a) Excluding outworkers.

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

	England	Wales	Scotland	Great Britain
Output of firms in this trade	£'000	£'000	£1000	£i 000
Total value of sales (see Table 23)	7, 282	2,280	9,340	18,901
Adjustment for changes in stocks and work in progress	- 54	- 1	+ 144	+ 88
	7,227	2, 279	9,483	18, 989
Less payment for transport by other firms	77		343	420
Gross output (production)	7,151	2,279	9,140	18, 569
Materials and fuel used by firms in this trade				
Purchases (see Table 24)	2,770	616	4, 430	7,816
Adjustment for changes in stocks	- 68	+ 4	- 255	- 319
Materials and fuel used	2,702	620	4, 174	7,497

EXPLOSIVES AND FIREWORKS COUNTRY TABLES

2/H/17

Summary

Small firms

TABLE 22

. 200732 197802 2012 197802 197	England and Scotland (a)	Wales	Great Britain
Number of returns	6	- P19	6
Average number of persons employed (b)		Joseph	remidations code
Males	24	- 1	24
Females	12	9	12
Total	36	-	36

- (a) Owing to the risk of disclosure of information relating to individual firms, separate particulars for Scotland cannot be given.
- (b) Including working proprietors.

Sales in the trade

Larger establishments

TABLE 23

DS 32061/1

TABLE 23		之前"1年"。如此在				A KEEP LANGE	
	England a	and Wales	, Scot	land	Great Britain		
	Quantity	Value	Quantity	Value	Quantity	Value	
, the state of the	Th. cwts.	£1000	Th. cwts.	£1000	Th. cwts.	£1000	
Principal products							
Propellent powders		(a)		(a)	15.9	836	
High explosives, except blasting powder		(a)		(a)	759.2	5, 175	
Blasting powder	46. 1	310	60.3	352	106. 4	662	
Fuses and blasting accessories	3				- Marie	1 2213/27	
Safety fuse	66. 1	771	67. 8	665	133.9	1, 436	
Fuse, instantaneous	9.3	96	2.7	124	12.0	221	
Electric detonators and fuses	15. 4	708	12. 1	663	27.5	1, 371	
Other fuses, tubes and primers, etc., except shell fuses	1.3	64	0.4	25	1.7	89	
Detonators, other than electric, including railway fog signals	••	(a)		(a) {	7.2	472 40	
Other accessories (including cables and parts of fuses and of blasting accessories)	••	(a)		(a)	17.3	670	
Small arms ammunition					Million		
Loaded cartridges for military and sporting purposes		(a)	••	(a)	14,0	191	
Other sporting ammunition, including shot but excluding empty cartridge cases			_				
Other ammunition, loaded or filled	228.7	372 20	} -	- {	Th. cwts.	37 2 20	
Explosives, not elsewhere specified; and rockets (including line carrying rockets) and other pyrotechnic					A. 444		
products	••	(a)	·	(a)	4.4	1, 179	
Waste products, other than scrap metals	••	4	-	_	••	4	
Repair and maintenance work on ammunition (b)		(a)		(a)	13.	1, 252	

TABLE 23 (contd.)

	England a	and Wales	ales Scotland		Great Britain	
anch a structure and	Quantity	Value	Quantity	Value	Quantity	Value
rincipal products (contd.)	100 EMB 41	ฮ. 000	1 .03%5 (2E	£'000		£,000
Work done for the trade or on commission (b)	Leonar	Tan I	S. ANS.		Secreta	
Filling of ammunition	123-25-57	1,022	18083 187	-		1,022
Other work		1,766		207	C D THE SE	1,973
Total principal products		9,270	0.0	7, 715		16,985
ther output	1 200				aterio	
Chemical products	••	23		1,574	somethy.	1,597
Other goods		258		50	••	308
Scrap metals	••	10	••	1	• • 1886	11
Total		9,561		9,340	alebienes	18, 901

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

⁽b) Amount charged.

Purchased materials and fuel

Larger establishments

TABLE 24

Materials Ammonium nitrate 131.2 155 13.1 15 144.3 170 Mercury Th. lbs. 0.1 - 75.5 2 Th. lbs. 9.6 2 Metallic powders Aluminium 3.8 29 0.2 2 4.0 33 Other 0.2 2 - - 0.2 2 Sodium nitrate 2.7 3 99.1 100 101.8 102 Potassium nitrate 4.5 13 - - 4.5 13 Unrefined (a) (a) 0.7 3 Packing materials 212 747 Th. bulk galls. 960 Almonial methylated spirits 17.8 4 368.2 74 366.0 76 Th. proof galls. 218. 2 315.5 38 332.4 30 Other 16.8 2 315.5 38 332.4 30 Ammonia liquor (in terms of 100 per cent. acid) 1.2 7 1.2 24 <t< th=""><th>TABLE 24</th><th></th><th></th><th></th><th></th><th>(ved nee</th><th>thate 23 for</th></t<>	TABLE 24					(ved nee	thate 23 for	
Materials Ammonium nitrate Ammonium nitrate Ammonium nitrate 131.2 Th.1bs. Mercury Th.cwts. 155 Th.1bs. Th.1bs. Th.1bs. Th.1bs. Th.cwts. Metallic powders Aluminium 3.8 29 0.2 2 4.0 31 0ther 0.2 2		England	and Wales	Scot	land	Great Britain		
Materials Ammonium nitrate 131.2 155 13.1 15 144.3 170 Mercury 0.1 - 0.5 Th.1bs. 9.5 2 9.6 2 Metallic powders 3.8 29 0.2 2 4.0 31 Other 0.2 2 - - 0.2 2 Sodium nitrate 2.7 3 99.1 100 101.8 102 Potassium nitrate 4.5 13 - - 4.5 12 Unrefined (a) (a) 0.7 2 Packing materials 212 747 960 Alucohol galls. 212 747 960 All Cohol galls. 212 747 960 All Cohol galls. galls. galls. 747 960 All Cohol galls. galls. galls. 747 960 76		Quantity	Cost	Quantity	Cost	Quantity	Cost	
Mercury	Materials	Th. cwts.	£'000	Th.cwts.	£'000	Th. cwts.	£'000	
Mercury Do. 1 Th. cwts.	Ammonium nitrate		155		15		170	
Metallic powders Aluminium 3.8 29 0.2 2 4.0 31 Other 0.2 2 - - 0.2 2 Sodium nitrate 2.7 3 99.1 100 101.8 103 Potassium nitrate 4.5 13 - - 4.5 12 Unrefined (a) (a) 0.7 2 Packing materials 212 747 960 Alcohol Industrial methylated spirits 17.8 4 368.2 74 366.0 76 Th. proof galls. 2 315.5 36 332.4 36 76 Ammonia liquor (in terms of 80 ammonia) - - 8.0 277 77. bbs. 77. bbs. 77. bbs. 77. bbs. 77. bbs. 3,915.0 77. bbs. 77. bbs. 3,915.0 77. bbs. 77. bbs. 40.2 40.2 40.2 77. bbs. 40.2 77. bbs. 40	Mercury	0.1	-	9.5	2	9.6	2	
Aluminium 3.8 29 0.2 2 4.0 31 Other 0.2 2 0.2 2 Sodium nitrate 2.7 3 99.1 100 101.8 103 Potassium nitrate	Metallic powders	Th. cwts.		Th. cwts.		Th. cwts.		
Sodium nitrate 2.7 3 99.1 100 101.8 103	Aluminium	3.8		0.2	2	4.0	31	
Potassium nitrate Refined	Other	0.2	2	-	1 SA 1920	0.2	2	
Refined	Sodium nitrate	2.7	3	99. 1	100	101.8	103	
Unrefined (a) (a) 0.7 2	Potassium nitrate					sacubon.	Laberado	
Packing materials 1.	Refined	4.5	13	-		4. 5	13	
Th. bulk galls.	Unrefined		(a)	1 2	(a)	0.7	2	
Industrial methylated spirits 17.8 4 368.2 74 386.0 78 Th. proof galls. Other 16.8 2 315.5 Th. tons Ammonia liquor (in terms of 880 armonia) Nitric acid (in terms of 100 per cent. acid) Potassium chlorate Pyrites - 247.3 Sodium bicarbonate 31.5 Th. tons Th. cwts. 1.2 Th. cwts. 1.3 Th. cwts. 1.4 Th. cwts. 1.5 Th. cwts. 1.6 Th. cwts. 1.7 Th. cwts. 1.8 Th. cwts. 1.9 Th. cwts. Th	Packing materials		212		747		960	
Spirits	Alcohol	galls.		galls.		galls.		
Other 16.8 2 315.5 38 332.4 39 Ammonia liquor (in terms of 800 ammonia) 9.0 277 9.0 277 Th. lbs. 3,915.0 224 3,915.0 Th. cwts. 24.3 Th. tons Nitric acid (in terms of 100 per cent. acid) 1.2 28 0.8 17 2.1 45 Pyrites - 247.3 37 247.3 37 Sodium bicarbonate 31.5 17 51.9 26 83.5 43 Sulphur 2 21 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms of 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms of 17.4 tons Th. tons		17.8	4	368.2	74	386.0	78	
Ammonia liquor (in terms of 880 ammonia) Cotton linters In. tons Th. tons Th. tons P. 0 277 9.0 277 Th. lbs. 3, 915.0 224 Th. cwts. 24.3 221 24.0 182 48.4 403 Th. tons Nitric acid (in terms of 100 per cent. acid) In. cwts. 1.3 7 0.1 1 1.4 8 Pyrites Pyrites Sodium bicarbonate 31.5 17 51.9 26 83.5 43 Solium chloride 29.8 8 31.2 9 61.0 18 Sulphur 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms Th. tons		Th. proof galls.		Th. proof galls.			recome liter	
Of 880 ammonia) - - 9.0 277 9.0 277 Cotton linters - - 3,915.0 224 3,915.0 224 Jute yarn 24.3 221 Th. cwts. 24.0 182 48.4 403 Nitric acid (in terms of 100 per cent. acid) 1.2 28 0.8 17 2.1 45 Potassium chlorate 1.3 7 0.1 1 1.4 8 Pyrites - 247.3 37 247.3 37 Sodium bicarbonate 31.5 17 51.9 26 83.5 43 Sodium chloride 29.8 8 31.2 9 61.0 18 Sulphur 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms Th. tons Th. tons Th. tons Th. tons		16.8	2		38		39	
Cotton linters			-		277		277	
Jute yarn 24.3 Th. tons 221 24.0 Th. tons 182 48.4 Th. tons Nitric acid (in terms of 100 per cent. acid) 1.2 28 0.8 Th. cwts. Th. cwts. O.1 1 1.4 8 7 0.1 1 1 1.4 8 Potassium chlorate 1.3 7 0.1 1 1.4 8 1.4 8 Pyrites - 247.3 37 247.3 37 Sodium bicarbonate 31.5 17 51.9 26 83.5 43 Sodium chloride 29.8 8 31.2 9 61.0 18 Sulphur 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms Th. tons	Cotton linters	Th cute	-	3,915.0	224	3, 915.0	224	
Nitric acid (in terms of 100 per cent. acid) 1.2 28 0.8 17 2.1 45 Potassium chlorate 1.3 7 0.1 1 1.4 8 Pyrites - - 247.3 37 247.3 37 Sodium bicarbonate 31.5 17 51.9 26 83.5 43 Sodium chloride 29.8 8 31.2 9 61.0 18 Sulphur 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms Th. tons Th. tons Th. tons Th. tons	Jute yarn	24.3	221	24.0	182	48.4	403	
Potassium chlorate Th. cwts.			28		177		45	
Pyrites - - 247.3 37 247.3 37 Sodium bicarbonate 31.5 17 51.9 26 83.5 43 Sodium chloride 29.8 8 31.2 9 61.0 18 Sulphur 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms Th. tons Th. tons Th. tons		Th. cwts.		Th. cwts.		Th. cwts.		
Sodium bicarbonate 31.5 17 51.9 26 83.5 43 Sodium chloride 29.8 8 31.2 9 61.0 18 Sulphur 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms Th. tons Th. tons Th. tons							ant the second	
Sodium chloride 29.8 8 31.2 9 61.0 18 Sulphur 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms Th. tons Th. tons Th. tons Th. tons		71 5	177					
Sulphur 17.4 8 67.0 35 84.4 43 Sulphuric acid (in terms Th. tons Th. tons Th. tons Th. tons								
Sulphuric acid (in terms Th. tons Th. tons Th. tons							The state of the s	
Sulphuric acid (in terms			8		35		43	
			15		8		23	

TABLE 24 (contd.)

TABLE 24 (contd.)						
	England ar	nd Wales	Scotl	and	Great Britain	
	Quantity	Cost	Quantity	Cost	Quantity	Cost
Materials (contd.)	Th. cwts.	£1000	Th.cwts.	£'000	Th. cwts.	£1000
Brass, including alloys of copper, but excluding nickel alloys other than nickel silver Metal cartridge cases (other	5.6	47	8.5	116	14.1	163
than small arms ammunition), empty	••	(a)	••	(a)		35
High explosives	31.6	181	33.3	60	64.9	240
Propellent powders	3.7	22 20	}	- {	3.7	22
All other purchased materials	••	1,926	••	2,002	••	3,927
Fuel and electricity	Th. tons		Th. tons		Th. tons	STATE OF THE STATE
Coal	82.8	219	71.7	186	154.5	405
Coke	2.8 Th.B.T.U.	10	0.5 Th. B. T. U.	1	3.3	11
Electricity purchased	(kW.hrs.)		(kW. hrs.)	10th 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Th.B.T.U. (kW.hrs.)	
From public supply	11,890	55	27,660	91	39,550	146
From other sources	-	_	-	-		-
Electricity obtained from other works under the same ownership	-				_	- 1
Motor spirit (petrol) and derv. fuel	Th.galls.		Th.galls.		Th.galls.	emster to
Used for road vehicles	373	26	62	5.	435	31
Used for other power purposes	57	3	11	-	68	4
Other oil fuel (including creosote/pitch mixtures) Gas purchased and gas	111 Th. the rms	4.	3,885 Th. therms	132	3,996 Th.therms	136
obtained from other works under the same ownership	91	3	94	5 {	185	9 3
All other purchased fuel	20102000	1	. =	_	••	1
Unclassified purchased materials, fuel and electricity	••	128	••	16		145
Total		3,386		4,430	(6) 1	7,816

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

Employment and remuneration

Larger establishments

TABLE 25

				1				- 25	4647
	Engla	nd and Wale	S	S	cotland		Gr	eat Britain	
	Average number of operatives		Total	Average number of operatives	Admini- strative, technical and clerical employees (a)	Total	Average number of operatives	Admini- strative, technical and clerical employees (a)	Total
Males									
Under 18	101	6	107	186	17	203	287	23	310
All ages	9,851	1, 350	11, 201	4,732	1, 226	5, 958	14,583	2, 576	17, 159
Females				and it			Extraordia		
Under 18	417	24	441	338	66	404	755	90	845
All ages	3,940	558	4, 498	2, 621	629	3, 250	6,561	1, 187	7,748
Total									
Under 18	518	30	548	524	83	607	1,042	113	1, 155
All ages	13, 791	1,908(b)	15,699 (b)(c)	7,353	1,855(b)	9,208 (b)(c)	21, 144	3,763(b)	24,907 (b)(c)
Total	£'000	£1000	£'000	£'000	£1000	£1000	£'000	£1000	£1000
remuneration	3,724	896	4,620	2, 159	1,061	3,221	5, 884	1,957	7,841

(a) Number at September 25, 1948.

(b) There were, in addition, 4 working proprietors (3 males and 1 female) in Great Britain; 2 males in England and Wales, and 1 male and 1 female in Scotland.

(c) The employers' share of contributions to all National Insurance Schemes payable during the year in respect of these workers amounted to a total of £205,000; £138,000 for England and Wales, and £67,000 for Scotland.

In addition to the employees in the above table the firms in this trade employed outworkers whose numbers and remuneration are set out below.

	Average numl	per of outworke	ers employed	Total amount
	Males	Females	Total	paid to outworkers
				£1000
England and Wales	4	305	309	18
Scotland		-	-	-
Great Britain	4	305	309	18

Monthly index of employment of operatives: Larger establishments (average employment in 1948 = 100)

TABLE 26

		Monthly index (a)				Monthly index (a)			
Month		England and Scotland Great Britain		Month	England and Wales	Scotland	Great Britain		
	1948				1948	1.00-0			
	January	98.8	97.0	97.6	August	99.3	100.9	100.3	
	February	99.4	97.2	97.9	September	99.9	101.1	100.7	
	March	98.7	97.4	97.9	October	101.6	101.7	101.7	
	April	99.4	100.0	99.8	November	102.3	101.9	102.0	
	May	99.8	100.5	100.3	December	102.1	101.5	101.7	
	June	99.7	100.1	100.0	Percentage				
	July	99.0	100.7	100.1	employment in this trade covered by the index	23.4	89.7	46.5	

⁽a) The index numbers are calculated from the number of operatives employed in one week in each month returned by larger establishments that made returns for the calendar year 1948.

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