

BOARD OF TRADE

THE REPORT on the CENSUS OF PRODUCTION FOR 1951

Volume 2

Trade P

SEED CRUSHING AND OIL REFINING

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).

OF POLITICAL AND

LONDON: HER MAJESTY'S STATIONERY OFFICE

1955

TWO SHILLINGS NET

LIST OF TABLES

	Title	Page
Table No.	Summary: Larger establishments	2/P/2
1		2/P/3
2	Summary: Small firms Estimated average employment: All firms	2/P/3
3	Analysis by size, 1951: Larger establishments in Great Britain	2/P/3
5	Analysis by standard region, 1951: Larger establishments in Great Britain	2/P/4
6	Analysis according to specialisation within the trade, 1951: Larger establishments in Great Britain	2/P/4
7	Total make of intermediate products: Larger establishments in Great Eritain	*
8 or 8(i)	Sales of the principal products of the trade, including sales of these products by establishments classified to other trades: Larger establishments in Great Britain	2/P/5
8(ii)	Total sales by small firms in Great Britain	*
9	Sales of principal products of the trade by establishments classified to other trades: Larger establishments in Great Britain	2/P/8
10	Sales in the trade of other than principal products: Larger establishments in Great Britain	2/P/9
11	Production, exports and imports of certain principal products	2/P/9
12	Usage of certain specified purchased materials, 1951: Larger establishments in Great Britain	2/P/10
13	Employment in September: Larger establishments	2/P/11
14	Average employment: Larger establishments	2/P/12
15	Shift working, 1951: Larger establishments in Great Britain	2/P/12
16	Wages and salaries and employers' National Insurance contributions paid during the year: Larger establishments	2/P/13
17	Plant, machinery and vehicles - acquisitions and disposals, and capital expenditure on new building work: Larger establishments	2/P/13
Co	ountry tables, 1951	
18	Summary: Larger establishments	2/P/14
19	Summary: Small firms	2/P/14
20 or 20(i)	Sales in the trade: Larger establishments	2/P/15
20(ii)	Sales in the trade: Small firms	*
21	Stocks of products on hand for sale and work in progress, and stocks of materials and fuel: Larger establishments	2/P/17
22	Employment in September: Larger establishments	2/P/17
23 or 23(i)	Average employment: Larger establishments	2/P/18
23(ii)	Average employment: Small firms	*
24	Wages and salaries and employers' National Insurance contributions paid during the year: Larger establishments	2/P/19
25	Plant, machinery and vehicles - acquisitions and disposals, and capital expenditure on new building work: Larger establishments	2/P/19
26	Payments for transport services for finished goods sold and materials and fuel purchased: Larger establishments	2/P/19
	w w . It able to this toods	

* Not applicable to this trade

SEED CRUSHING AND OIL REFINING TRADE

THIS REPORT on the Seed Crushing and Oil Refining Trade relates to establishments engaged wholly or mainly in the manufacture of crude oil, cake and meal by crushing or extraction from oilseeds or nuts, and the refining and hydrogenation of such oil and olive oil, whale oil and fish oils other than liver oils.

This trade corresponds to minimum list heading 39(2) in the Standard Industrial Classification.

Most of the crude oil and simple cake meal produced in post-war years by this trade was for the Ministry of Food, and this output appears in gross output as amounts charged for work done and not selling values; the corresponding amounts of materials supplied by the Ministry of Food are therefore excluded from the totals of materials purchased and used. A substantial part of the increase in gross output and materials purchased between 1948 and 1951 is due to the increase in the proportion of output recorded as sales on firms' own account compared with the value of the work done for the Ministry of Food.

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.

CHEMICALS AND ALLIED TRADES

SEED CRUSHING AND OIL REFINING TRADE

Summary

Larger establishments (a)

Cost of materials and fuel used (c) Payment for work done on materials given out Transport payments (d) Net output Wages and salaries of persons employed Average number of persons employed (e) Average number of persons employed (e) Stocks at end of year Products on hand for sale and work in progress Materials and fuel Mo. No. No. No. No. No. Stocks at end of year Products on hand for sale and work in progress Materials and fuel No. No. No. No. No. No. No. No	
Gross output (production) (b) 43.274 36.109 27.751 26.248 35.400 Cost of materials and fuel used (c) Payment for work done on materials given out Transport payments (d) Net output Wages and salaries of persons employed A,056 3,657 3,496 3,471 No. No. No. No. No. No. No. Average number of persons employed (e) Net output per person employed (e) Stocks at end of year Products on hand for sale and work in progress Materials and fuel No. Stocks at end of year Products on hand for sale and work in progress Materials and fuel No.	1935
Cost of materials and fuel used (c) Payment for work done on materials given out Transport payments (d) Net output Wages and salaries of persons employed Average number of persons employed (e) Net output per person employed (e) Net output per person employed (e) Stocks at end of year Products on hand for sale and work in progress Materials and fuel No. No. No. No. No. No. No. No	£'000
Cost of materials and fuel used (c) Payment for work done on materials given out Transport payments (d) Net output Wages and salaries of persons employed Average number of persons employed (e) Net output per person employed (e) Stocks at end of year Products on hand for sale and work in progress Materials and fuel Mumber of establishments The values of gross output and of materials and fuel used are derived in the following way:- £'000	26,53
Payment for work done on materials given out S48	21, 486
Net output Register and salaries of persons employed Register and salaries Registe	2:
Net output wages and salaries of persons employed	5,018
Average number of persons employed (e) Average number of persons employed (e) No. 9.422 9.562 9.428 9.820 13.596 E E E E E E E E E E E E E E E E E E E	
Stocks at end of year Products on hand for sale and work in progress Materials and fuel No.	No. 12,54
Stocks at end of year £'000 £'00	£ 40
1.672 1.420 370	£,000
No. 47 No. 43 No. 44 No. 44 No. 44 No. 44 No. 44 No. 45 No. 47 No. 47 No. 48 No. 48 No. 49 No. 40 No	::
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 (f) Principal products (g) Sales Goods made and work done for the	No.
0utput of firms in this trade (f) Principal products (g) Sales Goods made and work done for the 2.000 £'000	
Principal products (g) Sales Goods made and work done for the	£,000
Principal products (g) Sales Goods made and work done for the	
Goods made and work done for the	25,00
Goods made and work able for the	1,53
43, 274 36, 304 27, 856 26, 310	26.53
Less payment for transport outwards (d) 195 105 62	20,00
Gross output (production) 43.274 36.109 27.751 26.248 35.400	26,53

Gross output (production) Materials and fuel used by

firms in this trade

Changes in stocks (i)

Materials and fuel used

Purchases

(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

29,425

- 261

29,164

22,065

- 302

21,763

20.247

- 11

20,236

35, 414

- 800

34,614

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) Including working proprietors. For the total number 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. The increase in gross output since 1948 was mainly the result of increased private sales of compound cake, cubes, meal, etc. for animals, with a corresponding drop in the amount of work done on these items for the Ministry of Food.

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

(i) For details for 1951 see Table 21.

Summary

Small firms (a)

4	LE	

		Great	Britain	
2010 2010	1951	1950	1949	1948
Number of returns	2	3	3	-
Average number of persons employed (b)	The state of the s			
Males Females	16	18 2	19 3	
Total	16	20	22	1207 120 120

(a) Firms employing on the average ten or fewer persons. (b) Including working proprietors.

Estimated average employment

All firms

TABLE 3				Numbe
		Great Br	itain	
	1951	1950	1949	1948
As returned by firms				
Employing on the average more than ten persons (a) Employing on the average ten or fewer persons (b)	9,422 16	9.562	9,428	9,820
	9,438	9,582	9,450	9,820
Estimated average employment in firms not making satisfactory returns	-	-	-	-
Average employment in all firms	9,438	9,582	9,450	9,820

(a) See Table 14.
(b) See Table 2.

Larger establishments in Great Britain

Analysis by size, 1951

TABLE 4

21,486

21,486

29,902

29,902

	2 10000 01 9		en magnati	7330(864.70)	grad montanda	Remuneration			
Average number employed	Establish- ments	Gross output	Net output	Persons employed	Operatives	Other employees (a)	Total	Net output per person employed	
	No.	£,000	£'000	No.	£'000	£'000	£'000	£	
11 - 24	5	409	33	92	24	12	36	356	
25 - 49	14	5,865	497	513	146	84	230	968	
50 - 99	9	7,013	712	680	190	97	287	1.047	
100 - 199	7	4.793	860	1,091	325	97	422	788	
200 and over	12	25,194	5,996	7,046	2, 237	843	3,080	851	
Total	47	43.274	8,097	9,422	2,922	1,133	4,056	8 5 9	

(a) Administrative, technical and clerical employees.

Analysis by standard region, 1951 Larger establishments in Great Britain

TABLE 5

			Net o	utput		F	Remuneration		Net output
Region	Estab- lish- ments	Gross output	Value	Percentage of total	Persons employed	Operatives	Other employees (a)	Total	Net output per person employed
	No.	£,000	£'000		No.	£,000	£.000	£,000	£
England									
East and West Ridings	13	12,807	1,797	22. 2	2,492	702	275	976	721
North Midland	4	889	121	1.5	228	69	13	82	5 30
London and South Eastern	8	9,810	1,365	16.9	1,515	479	245	725	901
South Western; and North Western	13	17,894	4. 318	53.3	4, 540	1,498	540	2.038	951
Northern; Eastern; Southern; and Midland	-	_		-					92 08 080m
Total England	38	41,399	7,602	93.9	8,775	2,748	1,072	3,821	866
Wales	-	- 00		227-	-	-			-
Scotland	9	1,875	495	6.1	6 47	174	61	235	765
Great Britain	47	43, 27 4	8,097	100.0	9,422	2,922	1,133	4,056	859

⁽a) Administrative, technical and clerical employees.

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

Larger establishments in Great Britain

No specialisation within this trade was distinguished.

TABLE 7 - Total make of intermediate products: Larger establishments in Great Britain

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 in Great Britain

TABLE 8										
			19	1951				19	1948	
	Goods made and a commission the Ministr	2~	work done,on basis for of Food		Sales		Goods made and done on a commission bas the Ministry of	Goods made and work done on a commission basis for the Ministry of Food	ű	Sales
	Quantity	Amount	Entries	Quanti ty	Value	Entries	Quantity	Amount	Quantity	Value
Unrefined vegetable and seed oils	Th. tons	000,3	No.	Th.tons	000,3	No.	Th. tons	8,000	Th. tons	000,3
Coconut oil	106.0	614	9			,	56.7	307		
Cotton seed oil	22.4	464	12				12.9	194		
Ground nut oil	80.9	710	13			-	178.3	1,416		
Palm kernel sil	200.2	1,839	13				182.1	1,523		-
Linseed oil	16.0	202	12		1	:	19.9	4 36		
Other sorts	18.0	315	:	10.8	2,325	2	27.6	262		
Total unrefined vegetable and seed oils	443.6	4, 147	:	10.8	2,326	:	477.4	4,138	•	
Vegetable and seed oils partly processed but not refined (e.g., hydrogenated only) (a)	51.7	175	5	4.1	514	:	19.6	88	6.4	654
Refined vegetable and seed oils										
nyarogenated Palm oil	37.2	171	L.		-			100		
Coconut oil			,				1.7	(a)		
Ground nut oil							16.9	76		
Palm kernel oil	0.66	28.7	6			. •	8.7	35		
Other sorts				:	(c)	:	95.6	300		
Other than hydrogenated										
Coconut oil	40.8	112	80		1	:	42.8	107		,
Cotton seed oil	24.4	82	11	1.2	178	:	20.0	39		w
Linseed oil, boiled			•	18.6	3, 330	12		-	13.8	2,797
	•			35.4	6,245	13	:	(P)	27.4	5,782
Linseed oil, boiled and refined, unclassified				2.5	51.5	69				
Palm kernel oil	64.8	191	14	4.4	623	:	76.1	219	3.7	46.0

(i) (j) (k)

Sales

			19	51				19	48	
	a comm	de and work ission basi inistry of	is for		Sales		done	le and work on a n basis for try of Food	Sale	es
Special control of the second	Quantity	Amount charged	Entries	Quantity	Value	Entries	Quantity	Amount charged	Quantity	Value
	Th. tons	£,000	No.	Th. tons	£,000	No.	Th. tons	ε.000	Th.tons	£,000
Refined vegetable and seed oils (contd.)										
Other than hydrogenated (contd.)										
Ground nut oil	40.0	123	13	h		. (79.4	254)	
Palm oil	25.1	96	7	19.0	4.315	} 27 {		(b)	15.0	2,966
Other sorts	70.2	192	12]	000	' (44.4	131(e))	
Fish and marine animal oils										
Whale oil										
Unrefined, hydrogenated	103.5	614		-	-	-	130.5	653)	
Refined	71.2	229	7	2.5	320	Ś	50.8	135	5.9	707(f)
Other fish and marine animal oils				X						
Unrefined	6.2	. 68		1.5	175		6.2	35	0.1	11 .
Refined	-	-		8.5	788	17	48.3	122	2.3	286
Refined vegetable and seed oils, and fish and marine animal oils, unclassified	353.6	1,025	5	5.6	922 (g)	22	201.8	612(h)	{ 1.6	331(h) 363
Total refined vegetable and seed oils; and fish and marine animal oils	896.0	3,161	{	99.4	17.428 835	}	823.1	2.724 {	69.9	13,345
Oil seed cake and meal (including extracted meals)										
Coconut cake and meal	61.5) (6	1		(30.6	1		
Linseed cake and meal	33.1		11				108.5			
Ground nut cake and meal				0.2	7	}				
Decorticated	80.5) (i) {	7				166.1) (i)		
Undecorticated	39.1		12	10.5	326		49.0			
Cotton seed cake and meal	97.8		12	10 9	261		40.6			
Palm kernel cake and meal	216.8	1	13	16.9	468		208.0)		
Compound cake, cubes, meal, etc. (j)(k)										
For cattle	1		,	217.0	6,675	7	1		220.3	3,020
For calves				15.5	499	5			20.5	29 4
For pigs	-	-	- {	87.3	2,711	7	} -	- {	21.1	311
For poultry				136.5	4, 402	6			81.0	1,306

			,							
Other oil seed cake and meal	46.5	(i)	••	23.5	687	6	17.6	(i)	2.0	28
Total oil seed cake and meal	575.3	(i)	••	518.3	16,035		620.5	(i)	344.9	4,959
Acids (including fatty acids)	14.6	(1)	7	1.8	197	13.	23.6	(1)	1.3	155
Waste products, including cotton linters	-		-		583		-	-	6	91
Work done for the trade or on commission other than for the Ministry of Food (m)		1			345	19	, ,			74
Total		7,483	••		38, 263	••		6,963		19,639
Sales (or production) in other trades (see Table 9) Principal products of this		1,298	••		2,819			1,117		1.275
trade sold (or made) by estab- lishments in the trade		6,185	32		35, 443	36		5,846		18,364

(a) Including, in 1948, any recovered oils.
(b) Not recorded separately.
(c) Included in the figures for refined vegetable and seed oils, and fish and marine animal oils, unclassified.
(d) Included in the figures for refined vegetable and seed oils, other than hydrogenated, other sorts.
(e) Including linseed oil, refined, other than hydrogenated.
(f) Including 500 tons, valued at £57,000. of sperm oil and spermaceti, so far as recorded separately.
(g) Including a small amount of refined vegetable and seed oils, hydrogenated, other sorts.
(h) Recorded as:-

Refined	vegetable sified	and	seed	oils.	other	than	hydrogenated
---------	---------------------	-----	------	-------	-------	------	--------------

	Pofined wordship and a distance of the state	Th.tons	£,000	Th.tons	£,000
	Refined vegetable and seed oils, other than hydrogenated, unclassified	201.8	612	{ 1.4	310 363
	Other fish and marine animal oils, unclassified		_	0.2	21
As defined in	the amounts charged for production of unrefined oils. S.R. & O. 1946, No. 1261.				

Goods made and work done on a commission basis for the Ministry of Food

£'000

Th.tons

Trade A) and the Cattle, Dog and Poultry Foods Trade (Volume 9, Trade C).

(1) Included with the amounts charged for production of refined oils.

(m) Amount charged.

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

Larger establishments in Great Britain

	E	

	1951			1948		
	Quantity	Value	Entries	Quantity	Value	
Goods sold	Th.tons	£.000	No.	Th.tons	£'000	
Vegetable and seed oils, partly processed but not refined (e.g., hydrogenated only)	- 1	-		0.4	20	
Refined vegetable and seed oils, other than hydrogenated						
Linseed oil, boiled and refined	7.3	1,330	71	1.8	313	
Other sorts, except coconut oil, cotton seed oil, palm kernel oil, ground nut oil and palm oil	1.5	284 35	} 11	1.0	74	
Fish and marine animal oils, refined and unrefined					•	
Whale oil	-	-	-	0.3	45	
Other sorts	3.3	253	16	1.5	189	
Unrefined vegetable and seed oils, other than coconut oil, cotton seed oil, ground nut oil, palm kernel oil and linseed oil; unclassified refined vegetable and seed oils and fish and marine animal oils; and acids (including fatty acids)	5.6	917	25 {	0.6	220 (a) 414	
Goods made and work done on a commission basis for the Ministry of Food (b)						
Unrefined vegetable and seed oils, other than coconut oil, ground nut oil and palm kernel oil	-	-	-	6.2	47	
Vegetable and seed oils, partly processed but not refined (e.g., hydrogenated only); refined vegetable and seed oils, hydrogenated, ground nut oil and palm oil; other than hydrogenated, other sorts (except coconut oil,						
cotton seed oil, ground nut oil, linseed oil, boiled and refined, palm oil and palm kernel oil); and fish and marine animal oils, whale oil, refined and unrefined; and refined vegetable and seed oils, and fish and marine animal oils, unclassified	429.8	1.298		373.6	1.070	
Linseed cake and meal	-	-	-	5.1	(c)	
Total		4, 117			2,392	

(a) Recorded as:-

Refined vegetable and seed oils, other than hydrogenated, unclassified Acid oils and cotton linters

Th.tons £'000 220 363 0.6

(b) Amount charged.(c) Included with amount charged for production of unrefined oil.

Sales in the trade of other than principal products Larger establishments in Great Britain

TABLE 10

	195	1951		1948		
	Quantity	Value	Quantity	Value		
		£.000		£,000		
Goods sold		1,031		1.662		
Work done (a)		406		346		
Total		1,437		2,008		

(a) Amount charged.

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

TABLE 11

		Production (b)	Exports	Retained imports
Unrefined vegetable and seed oils		Th.tons	Th.tons	Th.tons
Coconut oil	<pre>{ 1951 1948 1937</pre>	106.0 56.7 51.9	- 0.1	49.5 58.8 23.8
Cotton seed oil	<pre>{ 1951 1948 1937</pre>	22.4 12.9 107.9	13.5	15.2 12.4 1.4
Ground nut oil	<pre>{ 1951 1948 1937</pre>	80.9 178.3 116.1	5.0 24.8	16.2 7.3 5.6
Palm kernel oil	<pre>{ 1951 1948 1937</pre>	200.2 182.1 69.7	4.8 3.9 7.4	-
Linseed oil	$ \left\{ \begin{array}{l} 1951 \\ 1948 \\ 1937 \end{array} \right. $	16.1(c) 19.9 91.6	6.8(d) 0.1 4.5	142.9(d) 46.3 37.1
Other sorts (e)	$ \left\{ \begin{array}{l} 1951 \\ 1948 \\ 1937 \end{array} \right. $	28.8(c) 27.6 48.4	1.4 0.8 12.9	341.2 273.8 126.2
Total unrefined vegetable and seed oils (e)	{ 1951 1948 1937	454.4(c) 477.4 485.6	13.0 9.8 63.2	565.0 398.6 194.4
efined vegetable and seed oils				
Hydrogenated	{ 1951 1948 1937	96.3 122.8 24.0(f)	0.3 0.5 0.7	1.7 0.2 4.8
Other than hydrogenated	at agree was		and the first of the second	-10
Coconut oil	<pre>{ 1951 1948 1937</pre>	40.8(c) 42.8 15.1(f)	0.1 0.2 0.2	1.3
Cotton seed oil	<pre>{ 1951 1948 1937</pre>	25.6(c) 20.1(c) 90.5(f)	1.9 1.1 12.0	0.2
Linseed oil, boiled and refined	<pre>{ 1951 1948 1937</pre>	56.5(g) 41.2(g) 48.1(f)	(h) 0.3 7.3	(h) - 0.4
Palm kernel oil	<pre>{ 1951 1948 1937</pre>	69.2(c) 79.7(c) 10.4(f)	0.4 0.6 0.3	0.3

TABLE 11 (contd.)

		Production (b)	Exports	Retained imports
		Th.tons	Th.tons	Th.tons
Pefined vegetable and seed oils (contd.)				Service State Service
Other than hydrogenated (contd.)				
Other sorts	<pre>{ 1951 1948 1937</pre>	157.9(c)(i) 139.0(c)(j) 105.3(f)(k)	1.5 2.9 14.0	3.8 5.7 7.0
Fish and marine animal oils				
Whale oil	$ \left\{ \begin{array}{c} 1951 \\ 1948 \\ 1937 \end{array} \right. $	177.2(c) 187.2(c) (m) 93.7(f)	3.7 2.5 4.5	142.9(1) 112.7 170.8
Other sorts (n)	$ \left\{ \begin{array}{c} 1951 \\ 1948 \\ 1937 \end{array} \right. $	16.3(c) 56.9(c) 11.4(f)	2.9 0.3 3.9	3.9 25.5 22.8
Total refined vegetable and seed oils, and fish and marine animal oils	<pre>{ 1951 1948 1937</pre>	999.0(o) 894.8(c)(p) 380.3(f)	10.8 8.4 42.0	152.4 144.1 207.4
Oil seed cake and meal, including extracted meals, but excluding compound cakes, cubes, meal, etc.	{ 1951 1948 1937	637.3(c) 620.5(c) 829.4(f)	1.0 0.6 17.2	585.3 556.0 632.6

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

(c) Sales and goods made on commission for the Ministry of Food.
(d) Including boiled and refined linseed oil.
(e) The oversea trade figures include some refined oil.

(f) Production for sale.

(g) Sales.
(h) Included with unrefined linseed oil.

(i) Partly estimated.

(j) Including refined linseed oil made on commission for the Ministry of Food and mixed refined vegetable and seed oils (other than hydrogenated).

(k) Including mixed refined vegetable and seed oils (other than hydrogenated).

(l) Including sperm oil, unrefined.

(m) Including sperm oil and spermaceti.

(n) The oversea trade figures include liver oil other than cod liver oil.

(o) Sales (partly estimated) and goods made on commission for the Ministry of Food, including 359,200 tons of unclassified refined vegetable and seed oils and fish and marine animal oils.
 (p) Including 205,000 tons (partly estimated) of unclassified refined vegetable and seed oils, other than

hydrogenated.

TABLE 12 - Usage of certain specified purchased materials, 1951

Larger establishments in Great Britain

No information on usage of materials was required from this trade.

Employment in September

TABLE 13

(i) Operativ

Larger establishments (a)

		Numbe Great Britain							
	1951(b)	1950(b)	1949 (b)	1948(c)	1937 (c)	1935(c)			
Males Under 18 All ages Females Under 18 All ages	155 6,903 18 448	112 7,178 27 463	119 6.983 25 496	128 7,200 39 485	25 4 10, 858 9 4 4 28	186 10,107 38 353			
Total Under 18 All ages	173 7,351	139 7,641	144 7,479	167 7.685	348 11,286	224 10,460			

		Great Britain							
	1951	1950	1949	1948	1937	1935			
Males Under 18 All ages Females Under 18 All ages	53 1,472 79 584	58 1,388 63 503	53 1,480 76 538	44 1,512 80 623	126 1,614 170 696	86 1,555 38 530			
Total Under 18 All ages	132 2,056(e)	121 1,891(e)	129 2,018(e)	124 2,135(e)	296 2,310	124			

		Great Britain						
	1951	1950	1949	1948	1937	1935		
Males								
Under 18	208 8,375	170	172	172	380	272		
All ages Females	0,3/3	8,566	8,463	8.712	12,472	11,662		
Under 18	97	90	101	119	264	70		
All ages	1,032	966	1,034	1,108	1,124	76 88 3		
Total								
Under 18	305	260	273	291	644			
All ages	9,407(e)	9,532(e)	9,497(e)	9,820(e)	644 13,596	348 12.545		

(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 9 Males 180 Females Other workers 173 Males 23 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. No working proprietors were recorded for any post-war year. The 1937 and 1935 figures include any working proprietors.

2/P/13

SEED CRUSHING AND OIL REFINING

Average employment

Larger establishments (a)

TABLE 14						Number	
		Great Britain					
	1951	1950	1949	1948	1937	1935	
Operatives Administrative, technical and	7,405	7.677	7,425	7.685	11,286	10,460	
clerical employees	2,017	1,885	2,003	2.135(ь)	2,310(ь)	2,085(b)	
Total	9,422	9.562	9,428	9,820	13,596	12,545	

(a) For employment in small firms (employing on the average ten or fewer persons) see Table 2.
(b) In week ended September 25, 1948, October 16, 1937, and October 12, 1935. The 1937 and 1935 figures include any working proprietors.

Outworkers. No outworkers were recorded in this trade.

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 Continuous 4 shift systems per 24 hours	16,813	131,305	30	
averaging 6 hours per shift All 2 shift systems Other shift systems	- 277 -	2,618	3	
Total	17,090	133,923	(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 Percentage of total in trade Percentage of total on returns showing shift work	46 100.0	33 71.7	7,351 100.0	6,876 93.5 100.0	3,209 43.7 46.7

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

Larger establishments

	Great Britain					
And the transport of the second of the secon	1951	1950	1949	1948		
Wages and salaries (a) of						
Operatives Administrative, technical and	2,922	2,681	2,540	2, 462		
clerical employees	1,133	976	956	1,009		
Total	4,056	3.657	3,496	3,471		
Employers' contributions to all National Insurance Schemes	98	96	96	81		

(a) Including bonus and commission payments.

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

Larger establishments

TABLE 17

£.	

	Great Britain			
The Land Marine and the Control of t	1951	1949	1948	
Plant, machinery and vehicles Acquisitions				
Plant and machinery New	1,278	6 27	505	
Second-hand Vehicles	15	12	34	
New Second-hand	49 6	57 4	35 6	
Total acquisitions	1,348	700	580	
Disposals	and the same of the same of the same of			
Plant and machinery Vehicles	30 19	20 4	27 5	
Total disposals	49	24	32	
New building work Capital expenditure on new building and other constructional work of a capital nature				
(excluding site values and development charges)	413	235	40	

CHEMICALS AND ALLIED TRADES COUNTRY TABLES SEED CRUSHING AND OIL REFINING TRADE

1951

Summary

Larger establishments

TABLE 18

· · · · · · · · · · · · · · · · · · ·	England	Wales	Scotland	Great Britain
	£'000	£.000	£.000	£.000
Gross output (production)	41,399	<u> -</u>	1,875	43,274
Cost of materials and fuel used	33,256		1,358	34,614
Payment for work done on materials given out Transport payments	1 4 5 27	-	21	15 548
Net output Wages and salaries of persons employed	7,602 3,821		495 235	8,097 4,056
	No.	No.	No.	No.
Average number of persons employed	8,775	\$50000 60 - 10 10 500	647	9,422
	£	£	£	3
Net output per person employed	866	•	765	8 5 9
	£.000	£.000	£.000	£.000
Stocks at end of year				
Products on hand for sale and work in progress Materials and fuel	1.426 2.565	i i	246 230	1.672
	No.	No.	No.	No.
Number of establishments	38		9	47

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

And the second s	£:000	£,000	£,000	£'000
Output of firms in this trade				
Total value of sales (see Table 20)	41,253	-	1,812	43,065
Changes in stocks and work in progress (see Table 21)	+ 146	-	+ 62	+ 208
Gross output (production)	41,399	-	1,875	43,274
Materials and fuel used by firms in this trade				debterent
Purchases	33,942	2	1,472	35,414
Changes in stocks (see Table 21)	- 685	•	- 114	- 800
Materials and fuel used	33, 256	-	1,358	34,614

TABLE 19 - Summary: Small firms

See Table 2. There were no small firms (employing on the average ten or fewer persons) in England or Wales in the register for this trade.

SEED CRUSHING AND OIL REFINING COUNTRY TABLES

Sales in the trade
Larger establishments

TABLE 20

Sales Later and Laurent Contract Contract Contract	England and Wales		Scot	Scotland		Britain
	Quantity	Value	Quantity	Value	Quantity	Value
Principal products	Th.tons	£,000		£,000	Th.tons	£.000
Goods sold	CONTRACTOR OF THE PARTY OF THE					
Unrefined vegetable and seed oils						
Linseed oil		1				,
	-	1	-		1 2000 - 1000	1
Vegetable and seed oils, partly processed but not refined (e.g., hydrogenated only)	4.1	514	-	-	4.1	514
Refined vegetable and seed oils, other than hydrogenated					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Coconut oil	-	1	-	-	-	1
Cotton seed oil	1.2	178	-		1.2	178
Linseed oil, boiled and refined		(a)		(a)	49.2	8,760
Palm kernel oil	4.4	639	-	-	4.4	639
Other sorts, including ground nut oil and palm oil		(a)		(a) {	17.6	4.031 800
Fish and marine animal oils, refined and unrefined						
Whale oil, refined		(a)		(a)	2.5	320
Other sorts		(a)		(a)	6.8	710
Unrefined vegetable and seed oils, other than coconut oil, cotton seed oil, ground nut oil, palm kernel oil and linseed oil; unclassified refined vegetable and seed oils and fish and marine animal oils; and acids			•			
(including fatty acids) Oil seed cake and meal (including extracted meals)	••	(a)	••	(a)	12.6	2,527
Cotton seed cake and meal	10.9	261			10.0	001
	10.5				10.9	261
Ground nut cake and meal, undecorticated	10.5	326	-		10.5	326
Coconut cake and meal; ground nut cake and meal, decorticated; and linseed cake and meal	0.2	7		-	0.2	7
Palm kernel cake and meal	16.9	468	_	-	16.9	468
Compound cake, cubes, meal, etc.			Th.tons			
For cattle	216.6	6.664	0.4	11	217.0	6,675
For calves	15.5	499		_	15.5	499
For pigs	87.3	2,711	_	_	87.3	2,711
For poultry	136.5	4, 402	_		136.5	4.402
Other oil seed cake and meal		(a)		(a)	23.5	687
Waste products, including cotton linters		583	-			583
Work done for the trade or on commission other than for the Ministry of Food		(a)		(a)		345(b)
		Amount charged		Amount charged		Amount charged
Goods made and work done on a commission basis for the Ministry of Food		£'000		£'000		£'000
Unrefined vegetable and seed oils						
Coconut oil		(a)		(a)	106.0	614
Cotton seed oil	20.5	424	1.9	40	22.4	464
Ground nut oil		(a)		(a)	80.9	710
Palm kernel oil		(a)		(a)	200.2	1,839
Linseed oil	12.6	154	3.5	50	16.0	205
Other sorts		(a)		(a)	18.0	315
		10				

TABLE 20 (contd.)

	England	and Wales	Sco	Scotland		Great Britain	
	Quantity	Amount	Quantity	Amount	Quantity	Amount	
Principal products (contd.)	Th.tons	£,000	Th.tons	£.000	Th.tons	£.000	
Goods made and work done on a commission basis for the Ministry of Food (contd.)							
Refined vegetable and seed oils							
Other than hydrogenated							
Coconut oil	40.8	112	_	-	40.8	112	
Cotton seed oil		(a)		(a)	24.4	82	
Ground nut oil		(a)		(a)	40.0	123	
Palm oil	25.1	96		-	25.1	96	
Palm kernel oil	64.8	191	_		64.8	191	
Other sorts, except linseed oil, boiled and refined				0.00	in being uni		
Hydrogenated			3626520	Destroya de	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		
Vegetable and seed oils, partly processed but not refined (e.g., hydrogenated only)	}	(α)		(a)	322.9	1,435	
Fish and marine animal oils, unrefined; and refined whale oil							
Oil seed cake and meal (including extracted meals)					9.9.11		
Coconut cake and meal .	(a)) ((a)) 1	61.5	1	
Cotton seed cake and meal	89.3		8.5		97.8		
Ground nut cake and meal							
Decorticated	(a)	1	(a)		80.5		
Undecorticated	36.1	(c)	2.9	(c) {	39.1	(c)	
Linseed cake and meal	25.2	1	7.9		33.1		
Palm kernel cake and meal	(a)		(a)		216.8		
Other oil seed cake and meal	(a)	/	(a)) (46.5)	
Acids (including fatty acids)	(a)	(d)	(a)	(d)	14.6	(d)	
Total principal products		(a)		(a)		41,628	
Other output							
Goods sold		(a)		(a)		1,031(
Work done		406		1000		406	
Total		41, 253		1,812		43,065	

⁽a) Owing to the risk of disclosure of information relating to individual firms, separate particulars cannot be given.
(b) Amount charged.
(c) Included with the amounts charged for production of unrefined oils.
(d) Included with the amounts charged for production of refined oils.
(e) Net selling value.

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

Larger establishments

TABLE 21				£'00
		England and Wales	Scotland	Great Britain
Products on hand for sale Work in progress	{at beginning of year at end of year at beginning of year at end of year	(α)	(a)	1, 294 1, 495 169 176
Total products on hand for sale and work in progress	{at beginning of year at end of year	1, 28 0 1, 4 26	18 3 246	1,463
Materials and fuel	at beginning of year at end of year	1,879 2,565	115 230	1,995 2,794

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

Employment in September Larger establishments (a)(b)

TABLE 22

	England and Wales	Scotland	Great Britain
Males		Supplemental Control of the Control	
Under 18	149	6	155
All ages	6,417	486	6,903
Females			0,303
Under 18	18		18
All ages	408	40	4 48
Cotal			
Under 18	167	6	170
All ages	6,825	5 26	173 7,351

(ii) Administrative, technical and clerical employees				
	England and Wales	Scotland	Great Britain	
Males				
Under 18	52	1	53	
All ages	1,396	76	1,472	
Females	A STATE OF THE PARTY OF THE PAR	BARRETT TO THE STATE OF THE STA	1,4/2	
Under 18	73	6	79	
All ages	533	51	584	
Total Under 18 NAll ages (c)	125 1,929	7 1 27	132 2,056	

(continued overleaf)

548

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	2,748	3.74	2,922
Administrative, technical and clerical employees	1,072	61	1,133
Total	3,821	235	4,056
Employers' contributions to all National	91	7	98

⁽a) Including bonus and commission payments.

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	1, 202	76	1. 278
Second-hand	13	1	15
Vehicles	, ,	()	10
New	(a)	(a)	49
Second-hand	(a)	(a)	6
Total acquisitions	1,269	79	1,348
Disposals			
Plant and machinery	29	1	30
Vehicles	(α)	(a)	19
Total disposals	(a)	(a)	49
New building work			
Capital expenditure on new building and			
other constructional work of a capital			
nature (excluding site values and			
development charges)	401	12	413

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

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

Larger establishments

TABLE 26				
	England and Wales	Scotland	Great Britain	
Amounts paid to other firms and undertakings Amount paid or credited to firms' own	506	21	527	
separate transport organisations	21	-	21	

TAPLE 22 (contd.)

	England and Wales	Scotland	Great Britain
Males			
Under 18	201	7	208
All ages	7,813	562	8,375
Females			
Under 18	91	6	97
All ages	941	91	1,032
			2,002
Total			
Under 18	292	13	305
All ages (c)	8,754	653	9,407

(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 merchanting) are shown in Table 22(iv) below.
 (b) Number employed in the week ended September 22, 1951.
 (c) Working proprietors. No working proprietors were recorded in this trade.

(iv) Excluded employees

	England and Wales	Scotland	Great Britain
Canteen workers			
Males	9		9
Females	171	9	180
Total	180	9	189
ther workers			
Males	166	(173
Females	21	9	23
Total	187	9	196
Total excluded employees	367	18	385

Average employment.

Larger establishments (a)

BLE 23 Numb				
	England and Wales	Scotland	Great Britain	
Operatives Administrative, technical and clerical	6,885	5 20	7.405	
employees	1,890	127	2,017	
Total	8,775	647	9,422	

⁽a) For employment in small firms (employing on the average ten or fewer persons) see Table 2. Outworkers. No outworkers were recorded in this trade.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Later reports: Reports will be published later summarising the main census results and giving 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.

CROWN COPYRIGHT RESERVED

PRINTED AND PUBLISHED BY HER MAJESTY'S STATIONERY OFFICE To be purchased from

York House, Kingsway, LONDON, w.c.2 423 Oxford Street, LONDON, w.1 P.O. Box 569, LONDON, S.E.1

13a Castle Street, EDINBURGH, 2
39 King Street, MANCHESTER, 2
2 Edmund Street, BIRMINGHAM, 3
109 St. Mary Street, CARDIFF
Tower Lane, BRISTOL, 1
80 Chichester Street, BELFAST

or from any Bookseller

1955

Price 2s 0d net

PRINTED IN GREAT BRITAIN