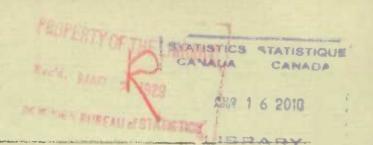
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CANADA

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

REPORT

on the

LINSEED OIL INDUSTRY

in CANADA 1927

Published by Authority of the Hon. James Malcolm, M.P., Minister of Trade and Commerce

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DEPARTMENT OF TRADE AND COMMERCE

DOMINION BUREAU OF STATISTICS

CENSUS OF INDUSTRY

OTTAWA, CANADA

Dominion Statistician: Chief, Census of Industry: J. C. Macpherson.

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REPORT ON THE LINSEED OIL INDUSTRY IN CANADA, 1927

Ottawa, February, 1929. The statistics of the Linseed Oil Industry in Canada for the calendar year 1927 are presented in this report. The number of individual plants operating during the year was 8 located by provinces as follows: Quebec 3, Ontario 2, Manitoba 2, and Alberta 1. In order that information relating to individual plants may not be disclosed the statistics by provinces are omitted and only those for the Dominion given throughout the tables of this report.

Principal Statistics

A comparative summary of the principal statistics of the industry is presented in Table 1, for the calendar years 1926 and 1927.

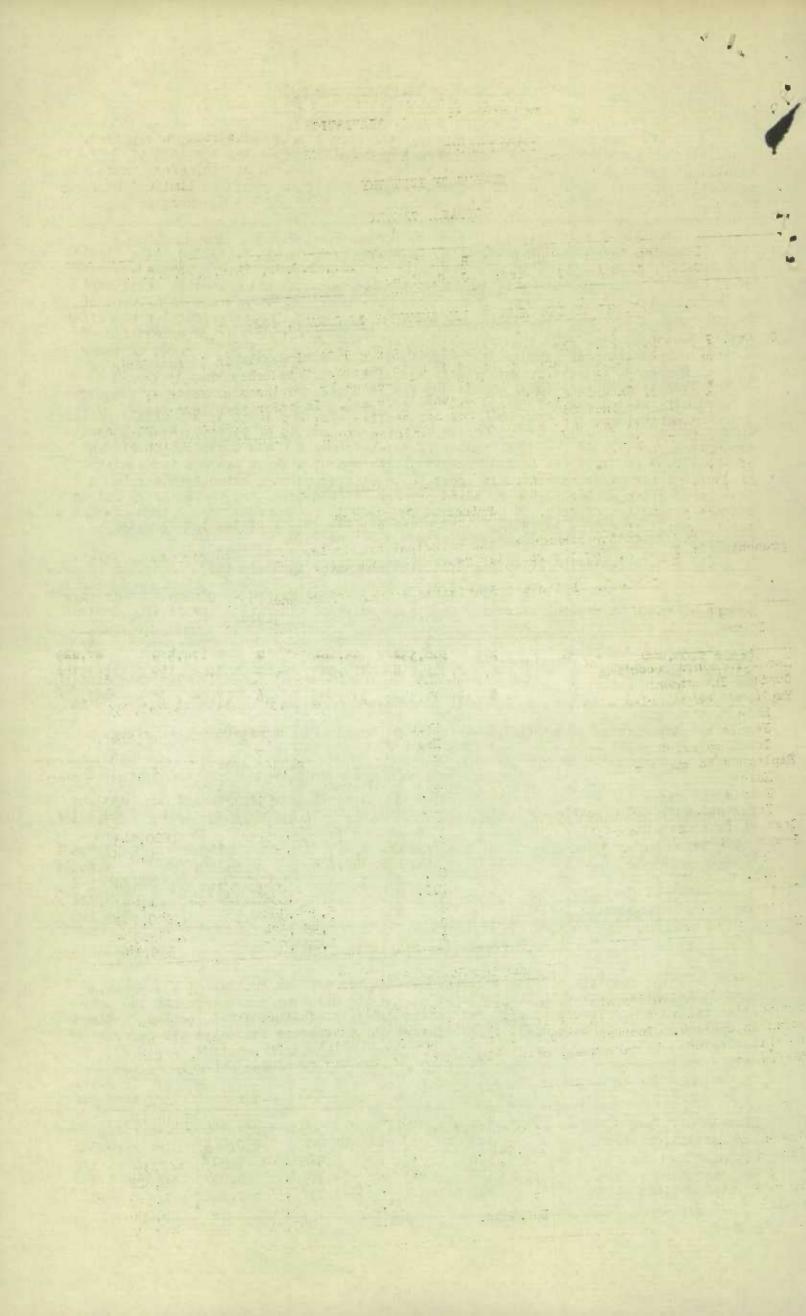
Table 1. Principal Statistics compared 1926 and 1927.

Items		1926	1927
Establishments reporting Capital Investment Employees on salaries -	No.	2,691,550	2,341,733
Male Female Total salaries	No. No.	31 6 84,369	28 5 87,659
Employees on wages - Male Female Total wages Cost of fuel and electricity	No. No. \$	193 1 198,263 64,465	205 1 220,943 65,905
Power equipment Units H.P. capacity Cost of materials Gross value of products Net value of products	No. H.P. \$	67 1,532 5,364,364 6,486,924 1,122,560	106 1,850 4,840,168 5,839,314 999,146

Production Statistics, 1927

The quantity and the selling value at the mill or factory of the various commodities manufactured in the Dominion during the calendar years 1926 and 1927 are shown in Table 2. Increases occurred in the quantity of Linseed Oil, hoiled, refined special oils and oil cake meal, whist linseed oil in the raw state and oil cake show decreases.

Products		1927	1926	/ Increase - Decrease
Linsedd oil, raw Linseed oil, boiled Oil cake Oil cake meal Special refined oils	Imp.Gals. "" ton " Imp.Gals.	3,112,520 1,062,985 5,988 35,349 691,837	3,239,916 968,663 11,907 30,099 647,317	



Size of Establishments, 1927

In view of the tendency towards concentration in industrial enterprises, a series of tables has been prepared presenting in a threefold way the size of establishments in the industry measured by (a) capital investment, (b) gross value of production and (c) employment, all within certain specified groups or limitations for the calendar year 1926 and 1927. The tables further indicate the movement of capital, production and employment within the industry.

In 1926, the number of establishments reporting was 8, with a total capital investment of \$2,691,550, a total gross value of production of \$6,486,924 and a total employment of 231. Of the total number of establishments 6 had a capital investment of \$2,501,218 or 92.93 per cent of the total investment and an average investment of \$416,869 per establishment; 6 establishments had a gross value of production amounting to \$5,656,969 or 87.20 per cent of the total production and an average production of \$942,828 per establishment. In employment 6 establishments had 199 persons on their payroll or 86.15 per cent of the total number employed and an average employment of 33 per establishment.

In 1927, the number of establishments reporting was 8 with a total capital investment of \$2,341,733, a total gross value of production of \$5,839,314 and a total employment of 239. Of the total number of establishments 6 had a capital investment of \$2,167,154 or 92.54 per cent of the total investment with an average investment of \$361,192 per establishment. In gross value of production 6 establishments had a total production of \$5,190,050 or 88.88 per cent of the total for the industry and an average production of \$865,008 per establishment. In employment 7 establishments had a total payroll of 225 or 94.13 per cent of the total number employed and an average employment of 32 per establishment.

(a) Capital invested in establishments grouped according to value, 1926 and 1927

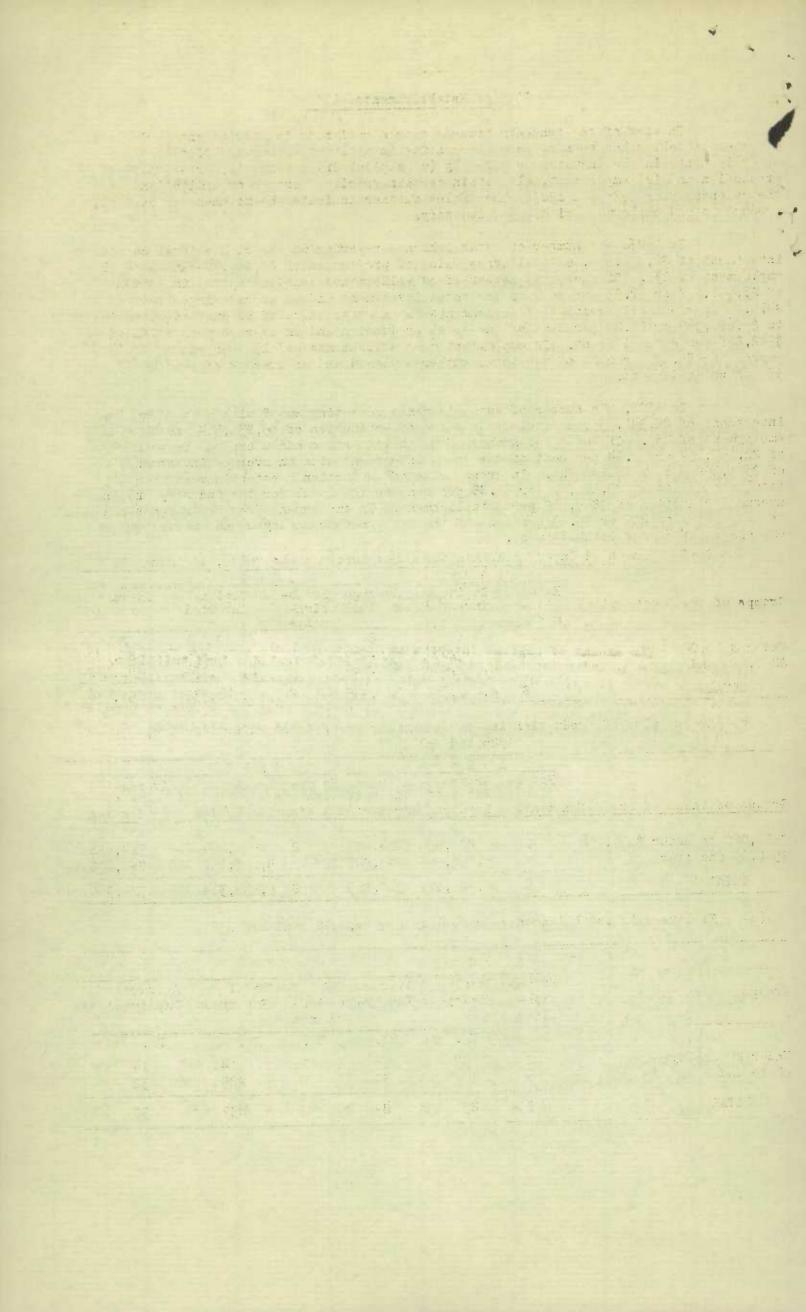
		1926		1 9	2 7	
Grappe of value of capital	Estab- lish- ments	Capital invested	Average capital	Estab- lish- ments	Capital invested	Average capital
Under \$100,000 \$200,000 and over	2 6	\$ 190,332 2,501,218	\$ 95,166 416,869	2	\$ 174,579 2,167,154	\$ 87,289 361,192
TOTAL	g	2,691,550	336,443	8	2,341,733	292,716

(b) Gross value of production in establishments grouped according to value, 1926 and 1927

		1926		1	927	
	Estab-	Gross Value of	Average Value of	Estab- lish	Gross Value of	Average Value of
Groups of value of production	ments	Production	Production	nments	Production	Production
		\$	\$		\$	\$
\$200,000 to under \$500,000	2		414,977	2	649,264	324,632
\$500,00 and over	6	5,656,969	942,828	6	5,190,050	865,008
TOTAL	8	6,486,924	810,865	8	5,839,314	729,914

(c) Employees in establishments grouped by number, 1926 and 1927.

	1926			1927		
Groups of employees	Estab- lish- ments		Average Employees	Estab- lish- ments	Total Employees	Average Employees
	No.	No.	Ng.	No.	No.	No.
Under 20 employees 20 to under 50 employees	2 6	32 199	16 33	1 7	14 225	14 32
TOTAL	8	231	29	8	239	30



REPORT ON THE LINSEED OIL IN CANADA, 1927

Production Statistics - Cont'd.

When values of production are compared decreases appear in raw linseed oil of (\$532,605) oil cake of (\$242,797) refined and special oils of (\$75,418). The only item of production showing an increase in value was oil cake meal amounting to \$253,773. The net decrease in production over 1926 amounted to \$647,610.

Table 2. Production, by Quantity and Value, 1927.

Classes of Products	Unit of Measure	Quantity	Selling Value at Mill
Linseed oil, raw Linseed oil, boiled Refined and special oils Hydrogenated oils Oil cake Oil cake meal	Imp. Gal. n n n n n n n n	3,112,520 1,062,985 592,955 98,882 5,988 35,349	2,535,805 868,224 520,301 88,994 258,669 1,567,321
Total value of products		-	5,839,314

Capital Investment

The amount of capital invested in the linseed oil industry in Canada is shown in Table 3, under two heads:- Fixed capital which includes land buildings, machinery and tools and working capital which comprises materials and supplies on hand, stocks in process, finished products on hand and cash, trading and operating accounts etc. Fixed capital shows a decrease of \$83,124 when compared with 1926. Working capital also shows a decrease amounting to \$266,693 over the amount reported for the previous year.

Table 3. Capital invested, by Provinces, 1927.

Items of Capital	Canada	Quebec	Other Provinces
	\$	\$	\$
Fixed capital - Lands, building etc.) Machinery and tools)	1,338,866	675,730	663,136
Working capital - Materials and stocks on hand Cash, trading and operating accounts, etc.	689,040 313,827	377,970 105,651	311,070 208,176
Total working capital	1,002,867	483,621	519,246
Grand Total of Capital	2,341,733	1,159,351	1,182,382

REPORT ON THE LINSEED OIL IN CANADA, 1927

Employment Statistics

Statistics of employment for the calendar year 1927 are shown under the three following heads:- (a) Employees by sex and remuneration; (b) employees by months and (c) working time of plants and employees. Table 4 presents statistics of employment by classes, sex and remuneration by provinces. Compared with 1926 there was an increase in the total number employed in the industry of 8 and of \$25,970 in the payments for salaries and wages.

Table 4. Employees, Salaries and Wages, by Provinces, 1927.

Classes of employees by sex		Canada	Quebec	Other Provinces
Salaried employees -			1	
Male	No.	28	11	17 .
Female	No.	5	1	4
Total salaries	\$	87,659	45,034	42,625
Employees on wages, average No				
Male	No.	205	102	103
Female	No.	i	1	-
Total wages	\$	220,943	107,664	113,279
Total male employees	No.	233	113	120
Total female employees	No.	6	2	4
Total salaries and wages	\$	308,602	152,698	155,904

Employment by months:- The number of persons entered on the payroll during each month of the year is shown by sex in Table 5. The months of highest employment were May and June and those of lowest employment September and October. The average monthly employment was 206 of which males numbered 205 and females 1. This represents an increase in the monthly average employment of 8 when compared with 1926.

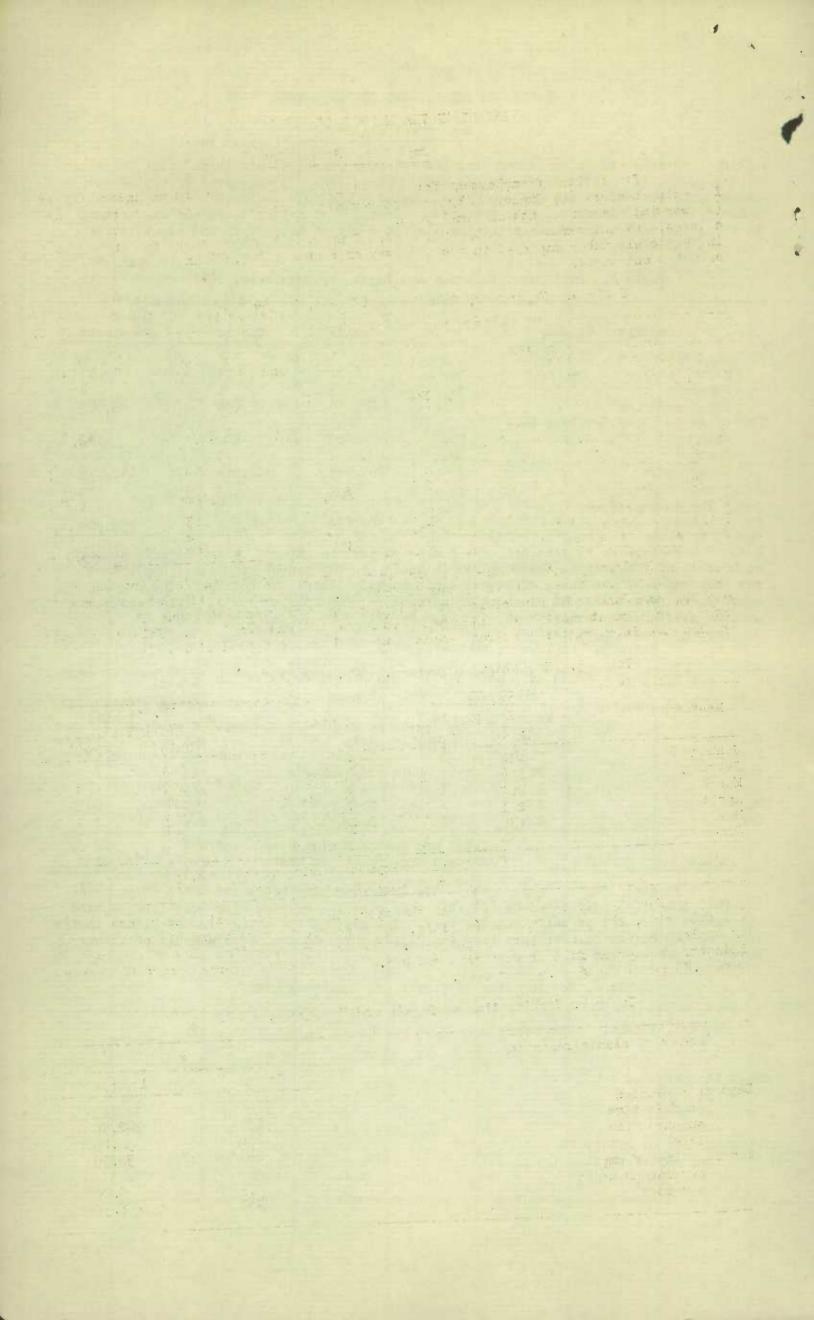
Table 5. Employment by Months, 1927.

36-7		Months	EMD TO	yees
Male	Female		Male	Female
212	1	July	198	1
216	1	August		1
207	1			1
201	1	October		1
236	1	November		1
224	1	December	211	1
			2,459	12
	216 207 201 236	216 1 207 1 201 1 236 1 224 1 Total empl	216	212 1

Working time: Table 6 shows the operating time of plants under three heads (a) full time, (b) part time and (c) idle, and also the average hours of labour worked by employees per day or shift and per week. The average operating time of plants in the industry whether on full or part time was 273,25 days and the average hours of labour were 9.89 per day and 58.37 per week.

Table 6. Working time of Plants and Employees, 1927.

Number of plants reporting		8
	Total	Average
Days in operation		
on full time	1,936	242.00
on part time		31.25
idle	250 246	30.75
Vorking time of employees		
per day or shift	79	9.89
per week	467	58.37



Other Employment Statistics

The number and percentage of wage-earners in months of highest employment working specified hours per day is shown in Table 7 for the Dominion as a whole. For the Dominion, the number working specified hours was distributed between the classes, the percentage working 10 hours being highest, with nearly 44 per cent of the total employment.

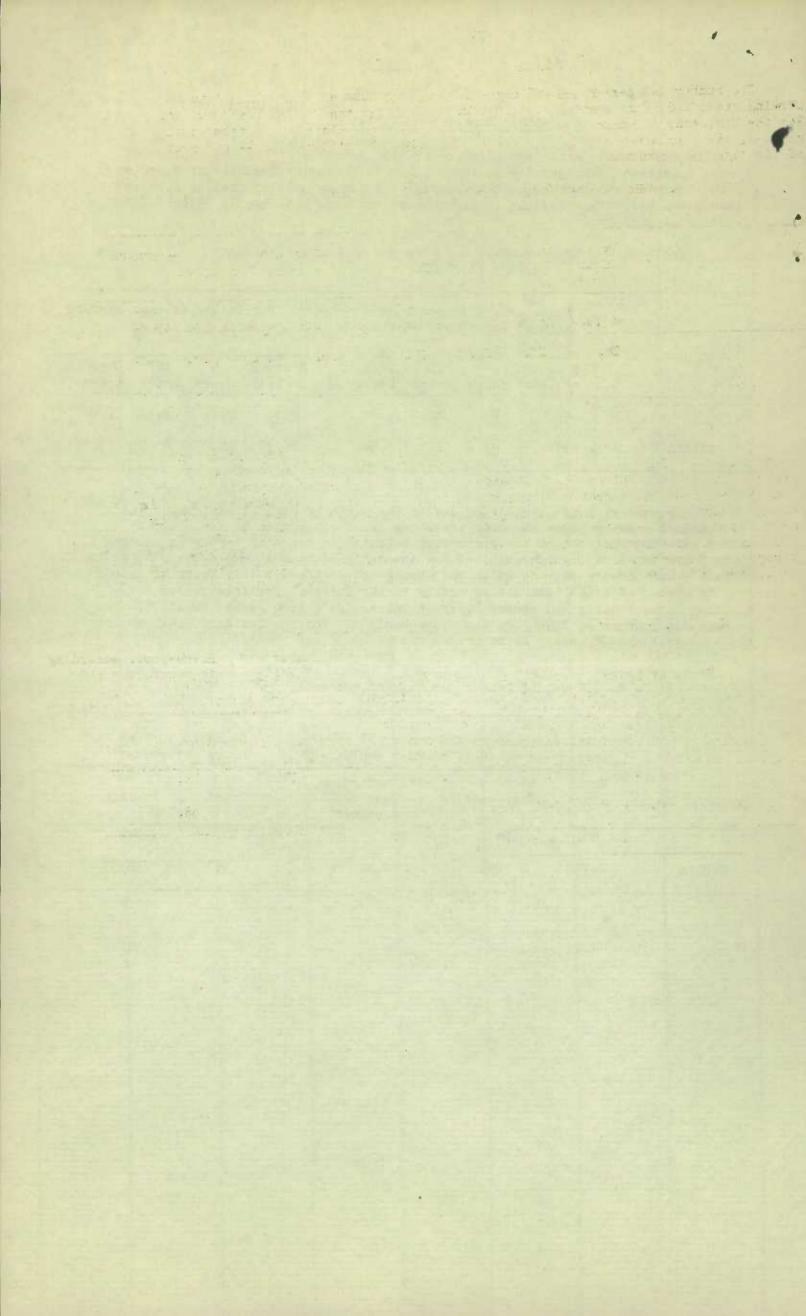
Table 7. - Hours worked by wage-earners in month of highest employment, 1927.

	Wage-earners in month of highest employment working per day of				Percentage of wage-earner working per day of			
		1		Over 10 hours	8 hours . Ur ldss			
	No.	No.	No.	No.	. p.c.	p.c.	p.c.	p,c.
CANADA	58	47	109	34	23.39	18.95	43.95	13.71

The number of hours worked per day in the month of highest employment and the standard working hours per week are shown for the Dominion in Table 8. It should be noted that whilst the statistics relating to hours of labour in columns 1, 2 and 3 are based on figures compiled for the month of highest employment, those in columns 4 and 5 represent the total and average of standard weekly hours of labour for the number of establishments reporting to the Bureau. For this reason the relation between daily and weekly hours of labour is to some extent impaired. The average daily hours of labour on the above basis was for the Dominion 9.41, whilst the average standard weekly hours worked out at 58.37 per plant.

Table 8. - Hours of Labour per day and per week, 1927.

			number of wage- ghest employment	Standard working hours per week		
	Total Hours	Total Wage-earners	Average hours per day per wage-earner	Total	Average	
	No.	No.	No.	No.	No.	
CANADA	2,334	248	9,,41	467	58.37	



REPORT ON THE LINSEED OIL IN CANADA, 1927.

Fuel Consumption

The quantity and cost value of the fuel consumed by the industry during the year is shown in Table 9, by classes. The total cost of fuel was \$23,580 and of this total bituminous coal accounted for \$22,598 or nearly 96 per cent.

Table 9. Fuel used, by Glasses, 1927.

Classes of fuel		quantity	Cost Value at Mill or Factory
Bituminous coal Wood Bas, natural	Ton Cord m. c.ft.	3,378 30 3,197	\$ 22,598 300 682
Total cost of fuel		-y as	23,580

Power Installation

The power installed in the industry in 1927 is shown by kind, number of units and horse-power according to manufacturers rating in Table 10. Primary power installation was represented by 4 units of internal combustion engines with a total rated h.p. capacity of 17. Secondary power was represented by 102 motors of a rated h.p. capacity of 1,833. The cost of electricity purchased during the year was \$42,325. The number of boilers installed was 11 with a rated h.p. capacity of 969.

Table 10. Power installed, 1927.

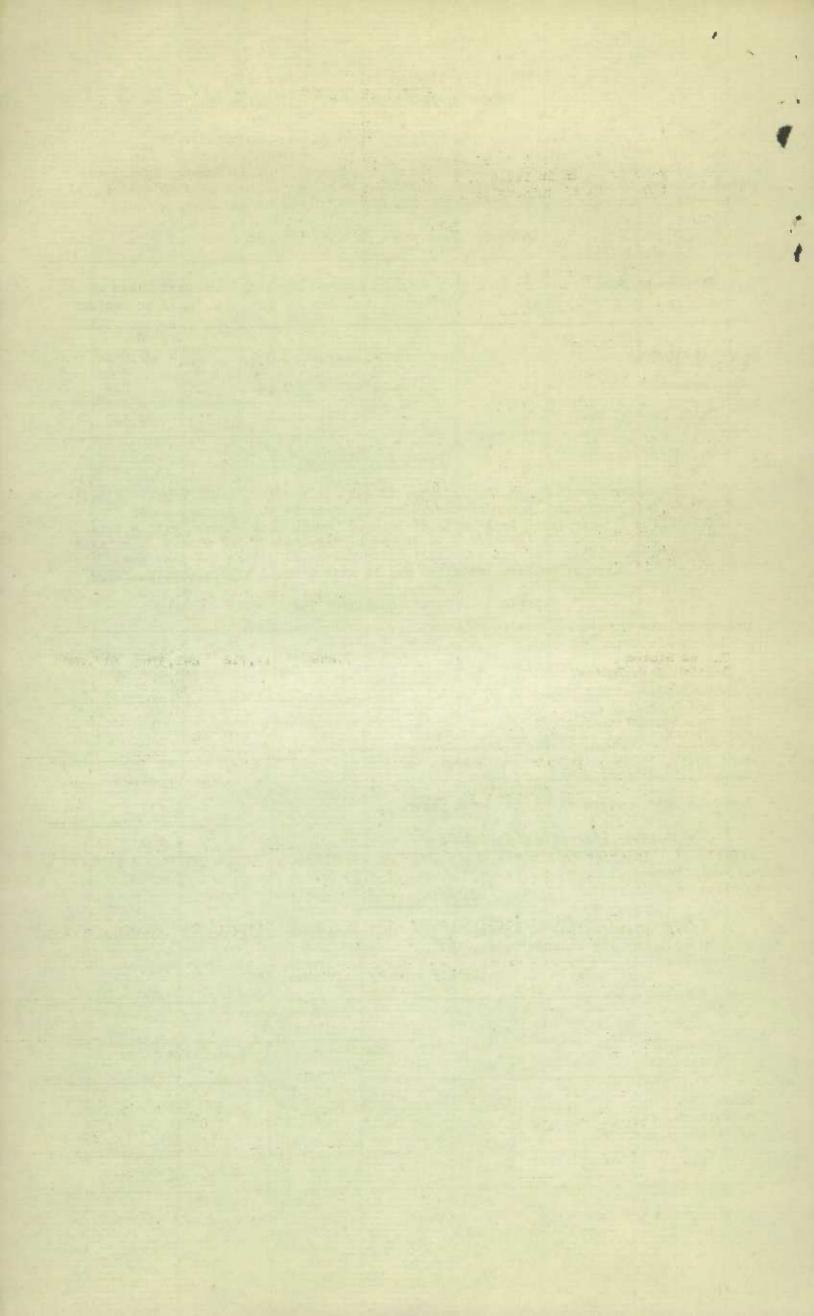
Kinds of Power	Number	Horse-power according to manufacturers! rating
Internal combustion engines Hydraulic turbines or water wheels	14	17
Total primary power	4	17
Electric motors operated by purchased power	102	1,833
Total power used in manufacturing	106	1,850

Materials Used.

The various items of materials used in the industry is given by provinces in Table 11. for the calendar year, 1927.

Table 11. Materials used by provinces, 1927

	CANA	O A
Principal Materials	Quantity Bushels	Cost Value
Flaxseed Containers, etc. All other materials	2,863,655	4,574,374 150,011 115,783
TOTAL		4,840,168



REPORT ON THE LINSEED OIL IN CANADA, 1927. IMPORTS AND EXPORTS

Imports of flax seed, oils and oilcake and meal, for consumption in Canada are shown in Table 12. by quantities and values and by principal countries for the calendar year 1927. The total value of imports for consumption in Canada fell from \$1,644,167 in 1926 to \$741,885 in 1927, whilst exports show a decrease from \$6,232,334 in 1926 to \$5,331,439 in 1927. According to the "Monthly Bulletin of Agricultural Statistics" the production of flax seed in Canada fell from 5,994,700 bushels valued at \$9,665,000 in 1926 to 4,884,600 bushels valued at \$7,562,000 in 1927, a decrease of 1,110,100 bushelsand \$2,126,000 in value.

Table 12. Imports and Exports of Flaxseed, Linseed Oil and Oilcake and Meal, 1927.

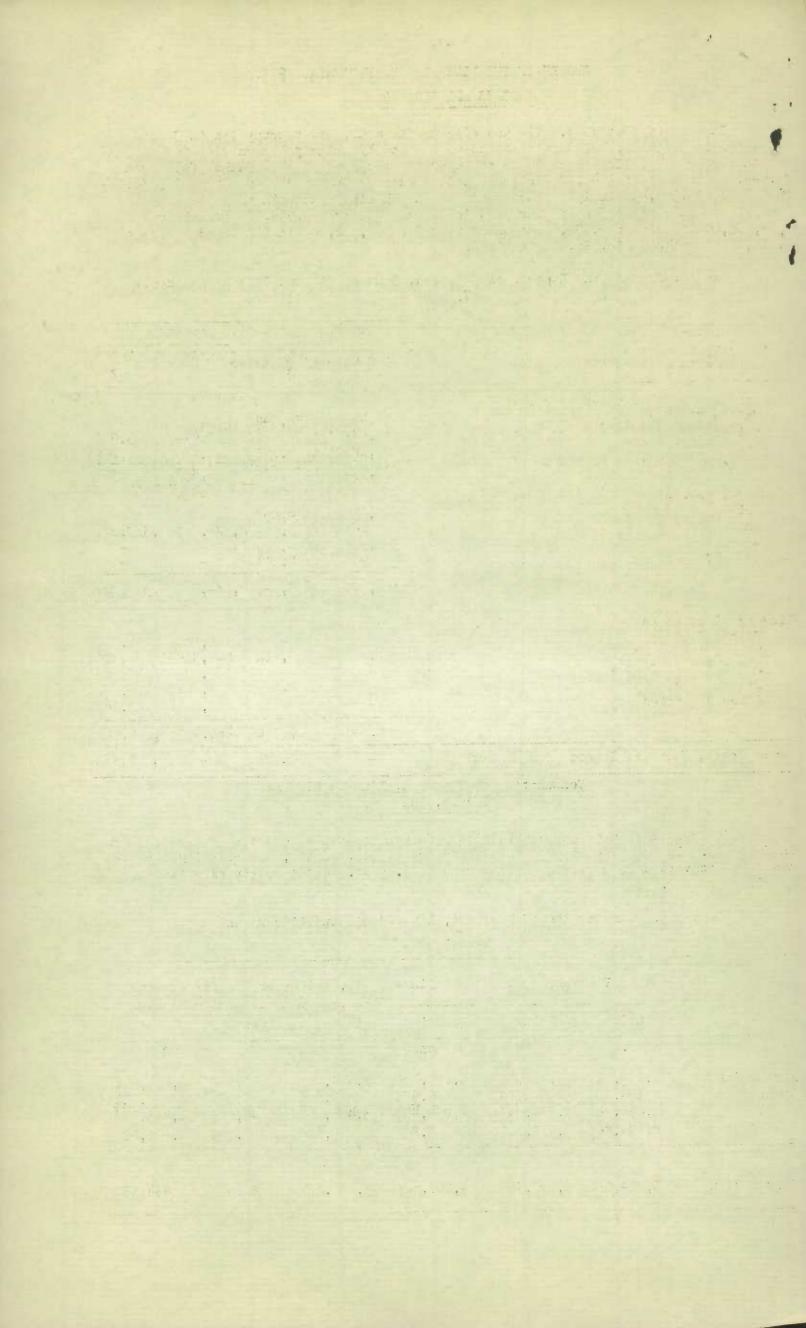
	Impor	Exports		
Articles by Countries	Quantity Lb.	Value \$	Quantity Gal.	
Flax or linseed oil boiled or raw - United Kingdom United States Other Countries Total	406,437 311,638 20,322 738,397	30,948 38,560 2,118 71,626	1,909	
Flaxseed, n.o.p. Bush. United Kingdom United States Argentina Other Countries	1,032 363 351,954 991	4,858 1,069 644,309 2,311		4,317,221
Total	354,340	652,547	2,184,860	4,317,221
Linseed oilcake and meal- United Kingdom United States British West Indies Netherlands Other Countries	7,246	17,712	120,589 72,101	517,280 277,414
Total	7,246	17,712	461,467	1,008,822
Grand Total, Value of Imports and Exports	-	741,885	440	5, 331, 439

Consumption of Flaxseed, Linseed Oil and Oilcake, 1927

The consumption of the commodities referred to in the foregoing table is shown in Table 13. In order to compare the statistics of linseed oil, the quantity imported has been converted into gallons at the rate of 9.35 lb. to the gallon of a stated specific gravity.

Table 13. Consumption of Flaxseed, Linseed Oil and Oilcake and Meal, 1927.

	Flaxseed		Linseed oil, boiled raw		or Oilcake and	
	Quantity	Value	Quantity	Value	Quantity	Value
	Bush.	\$	Gallons	\$	Ton	\$
Production Imports	4,884,600	7,562,000 ° 652,547	4,175,505	3,404,029	41,337	1,825,990
Total less Exports	5,238,940 2,184,860	4,317,221	4,254,478 5,853	3,475,655 5,396	48,583	1,843,702
Available for Consumption	3,054,080	3,897,326	4,248,625	3,470,259	25,510	834,880



APPENDIX

Firms engaged in the Linseed Oil Industry in Canada

1927

Canada Linseed Oil Mills, Ltd.

Dominion Linseed Oil Co. Ltd.

Sherwin-Williams Co. of Canada, Ltd.

Dominion Linseed Oil Co. Ltd.

Canada Linseed Oil Mills, Ltd.

Dominion Linseed Oil Co. Ltd.

Sherwin-Williams Co. of Canada, Ltd,

Alberta Linseed Oil Co. Ltd.

1213 Notre Dame St. E. Montreal, Que.

31 Mill St.

897 Centre St.

Baden, Ontario.

281 Sorauren Avenue, Toronto 3. Ont.

St. Boniface, Manitoba.

110 Sutherland St. Winnipeg, Manitoba.

Medicine Hat, Alberta.

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