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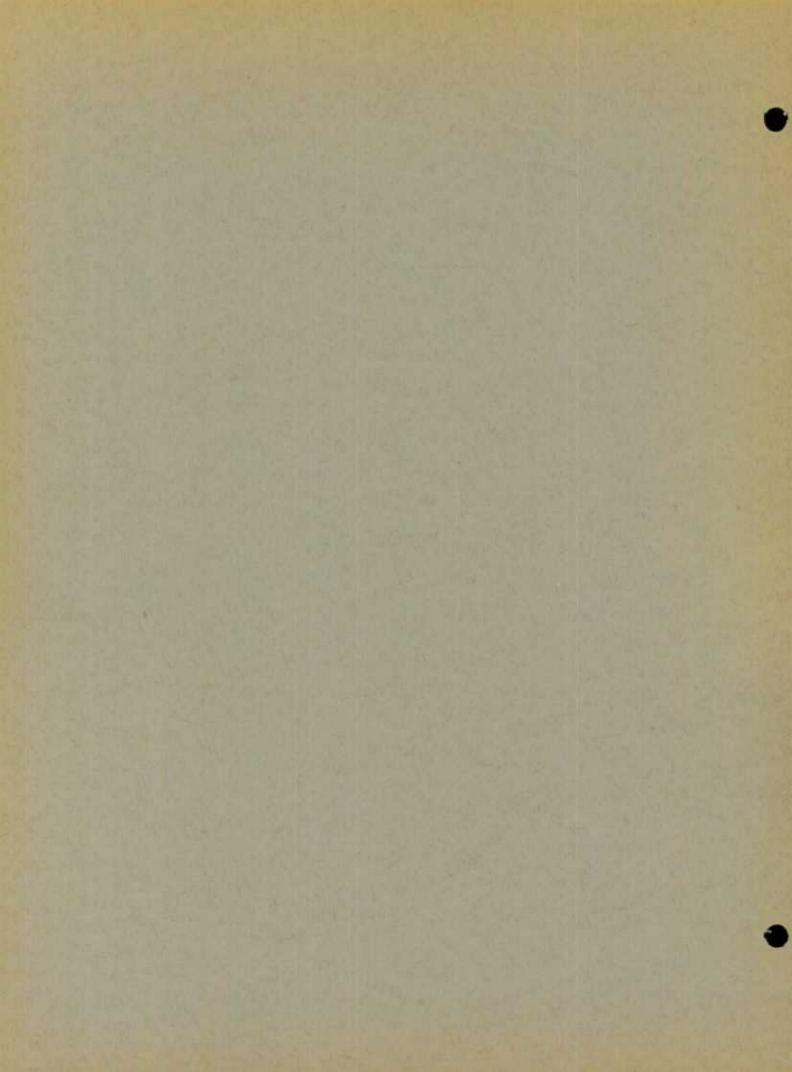
SUGAR INDUSTRY

IN

CANADA

1938





DEPARTMENT OF TRADE AND COMMERCE DOMINION BUREAU OF STATISTICS GENERAL MANUFACTURES BRANCH OTTAWA - CANADA

Dominion Statistician: Chief, General Manufactures Branch: R. H. Coats, LL.D., F.R.S.C., F.S.S. (Hon.)

A. Cohen, B.Com.

THE SUGAR REFINING INDUSTRY IN CANADA, 1938.

Production in the sugar refining industry was maintained at about the same level as the previous year. The output of sugar of all kinds in 1938, amounting to 1,043,462,614 lbs. represents an increase of 17,909,159 lbs. as compared with 1937. The production of cane sugar declined by 4,664,453 lbs. to a total of 900,448,767 while that of beet sugar increased by 22,573,612 lbs. to a total of 143,013,847. Granulated sugar comprises about 85 per cent of the total sugar production of the industry.

The refineries operating during the year were located as follows:
Ontario three, Quebec two, New Brunswick one, Nova Scotia one, Alberta two and
British Columbia one. These ten refineries in 1938 reported a capital investment
of \$36,347,866 and a gross value of production of \$41,392,096. They employed 2,318
persons who received \$3,315,633 in salaries and wages, and paid out \$28,838,685
for raw materials.

The sugar refining industry is, therefore, of considerable importance in the industrial life of Canada. The demand created by the war gave it a great impetus. All things considered, 1919 was a record year. The number of persons employed (3,491), the value added by manufacture, (\$16,321,882), and the exports (\$22,953,135), were the highest recorded, while the volume of sugar manufactured was only 10 per cent lower than that of the peak year1925 when 11,714,967 hundred-weight were produced. Since 1925, however, exports of sugar have declined with the result that production and employment slackened considerably. Exports of sugar, which in 1937 amounted to 24,659 hundredweight valued at \$107,527 increased to 33,229 hundredweight valued at \$139,339 in 1938.

Detailed statistics of production, capital invested, materials used, employment, imports and exports, etc., are given in the tables following. In order that there may be no disclosure of statistical information regarding individual plants, the statistics are shown for the Dominion only.

Table 1. - Principal Statistics of the Sugar Refining Industry, Representative Years, 1917-1938.

Year	Refineries Reporting	Capital Invested	Employees	Salaries and Wages	Cost of Materials Used	Gross Value ^X of Production
programming or the same of the	No.	\$	No			\$
1917	8	31,818,133	2,527	2,324,828	53,179,911	61,429,787
1919	8	38,725,542	3,491	4,177,894	86,308,204	102,630,066
1920	8	46,719,034	3,118	4,632,814	103,689,088	119,086,731
1925	8	50,089,717	2,784	3,828,442	54,457,385	68,445,879
1929	8	43,534,113	2,325	3,686,037	35,640,124	47,151,960
1933	8	35,758,074	2,092	3,048,817	22,846,473	37,189,960
1934	8	33,151,249	2,080	2,919,662	24,099,994	36,007,208
1935	8	33,017,874	2,134	3,086,691	25,137,568	36,597,997
1936	1.0	33,199,993	2,559	3,413,698	27,924,998	40,405,377
1937	10	35,413,781	2,332	3,318,861	29,013,057	40,916,044
1938	10	36,347,866	2,318	3,315,633	28,838,685	41,392,096

x Selling value at the factory. Statistics since 1933 do not include excise taxes:

Table 2 - Comparison of Principal Statistics, 1937 and 1938

Items		1937	1938		Increase Decrease
Refineries reporting	No.	10	10		
Capital invested	*	35,413,781	36,347,866	+	934,085
Employees on salaries Total Female Total salaries Employees on wages Monthly average	No. \$	414 349 65 1,181,584 1,918 1,829	425 364 61 1,163,988 1,893 1,809	+ +	11 15 4 17,596
Female	No \$	2,137,277	2,151,645	+	5 14,368
Cost of fuel and electricity	*	951,416	995,540	+	44,124
lost of materials used	*	29,013,057	28,838,685	=	174,372
ross value of production	*	40,916,044	41,392,096	+	476,052
Value added by manufacture X	\$	10,951,571	11,557,871	+	606,300

^{*} Gross value of products less cost of materials, fuel and electricity.

NOTE: Profits or losses cannot be estimated from census figures as no data are collected for certain expense items such as interest, rent, depreciation, taxes, insurance, advertising, etc.

Production in Sugar Refineries

Table 3 gives the production of sugar and its by-products by class, quantity and selling value at the refinery for the years 1937 and 1938. The quantity of sugars produced in Canadian refineries during 1938 was greater than that of 1937 by 17,909,159 pounds and the selling value was greater by \$476,052. The quantity of beet sugar increased by 22,573,612 pounds and the quantity of cane sugar decreased by 4,664,453 pounds, making the increase as stated above. Molasses shows increases in both quantity and value. Of the ten refineries reporting, five showed a value of production of under two million dollars, and five a production of between four million and eleven million dollars.

Table 3 - Sugar and By-Products

	1 9	3 7	1938		
Products	Quantity	Selling Value at Factory 1/	Quantity	Selling Value at Factory 1/	
	Pounds	\$	Pounds	*	
Sugar Total	1,025,553,455	40,253,771	1,043,462,614	40,725,621	
Granulated	30,081,822 3,812,223 3,907,875	34,131,459 4,399,432 1,349,649 168,979 204,252	885,728,626 119,878,897 29,947,848 3,608,747 4,298,496	34,764,562 4,242,827 1,327,162 156,129 234,941	
Syrups (not including molasses)	5,972,492	191,758	5,233,808	166,867	
Molasses	28,678,939	232,628	46,266,701	279,547	
Made from beet	11,710,939 16,968,000	82,722 149,906	16,050,149 30,216,552	98,126 181,421	
Beet pulp, wet and dried	151,636,000	237,887	1.65,156,000	214,699	
Other products	60	en		5,362	
TOTAL VALUE OF PRODUCTS	7 - 3 - 4	40,916,044		41,392,096	

^{1/} This does not include excise taxes.

Comparative Production and Consumption of Sugars

A comparative study of the production and consumption of sugars in Canada for the past four years is presented in table 4. Consumption of any commodity is computed on the basis of production plus imports less exports. The per capita consumption of sugar of all kinds by quantity and value (based on an estimated population) is shown for a four-year period.

Table 4. - Production of Sugars

Kind of Sugar		1935	1936	1937	1938
Sugar made from cane Sugar made from beet	Lb.	849,159,975 119,857,668			
TOTAL PRODUCTION OF SUGAR	Lb.	969,017,643	1,093,291,045	1,025,553,455	1,043,462,614
TOTAL VALUE	\$	35,815,914	39,449,459	40,253,771	40,725,621

Consumption of Sugars

	-ondamporon or pagars				
		1935	1936	1937	1938
Sugar Production	Lb.	969,017,643 35,815,914	, ,	1,025,553,455	
Sugar Imports	Lb.	4,292,000 202,401	4,926,400 228,909	7,576,600 331,336	9,995,300 298,627
TOTAL	Lb.	973,309,643 36,018,31 5		1,033,130,055 40,585,107	1,053,457,914 41,024,248
less					
Sugar Exports	Lb.	3,807,300 168,955	3,753,300 150,521	2,465,900 107,527	3,322,900 139,339
SUGAR AVAILABLE					
FOR CONSUMPTION	Lb.	969,502,343 35,849,360			1,050,135,014 40,884,909
Per Capita					
Consumption	Lb.	88.55 3.27	99.15 3.58	92.69 3.64	93.68 3.65

Production of Sugar Beets and Beetroot Sugar

The number of acres of sugar beets harvested, the total yield and average yield per acre and the total value of the crop delivered at the factory are shown in table 5 for the years 1918 to 1938. Acreage of sugar beets harvested increased by 1,436 acres, the total yield by 75,950 tons and the total value of the crop by \$578,629.

Table 5. - Area, Yield and Value of Sugar Beets in Canada and Production of Refined Beetroot Sugar Compared, 1918 to 1938

Year	Acres Grown	Total Yield	Yield Per Acre	Total Value	Average Price Per Ton	refine	and Value ery) of refi etroot sugar	ned
	No.	Tons	Tons	46	& cts.	Lb	*	* cts. per Cwt.
1918	18,000	204,000	11.25	2,593,715	7.56 12.08 5.78 7.27 8.54 9.73 8.33 8.84 8.25 7.32 6.16 6.31 6.30 6.27	50,092,835	4,358,077	8.70
1919	18,600	180,000	9.50	2,630,027		37,839,271	3,924,411	10.40
1920	34,491	343,000	9.94	5,307,243		89,280,719	12,856,424	14.40
1921	25,535	199,334	7.80	1,974,384		52,862,377	3,554,203	6.70
1922	14,955	127,807	8.55	966,521		29,911,770	1,645,885	5.50
1923	17,941	159,200	8.87	1,922,668		39,423,160	3,745,200	9.50
1924	31,111	295,177	9.50	1,704,791		85,770,709	6,192,645	7.30
1925	34,803	370,047	10.63	2,688,302		72,819,919	5,206,624	7.15
1926	30,073	267,754	8.90	2,286,761		70,388,105	4,269,076	6.06
1927	25,961	206,713	7.96	2,012,134		60,969,131	3,719,117	6.10
1928	34,323	244,930	7.14	2,041,465		64,653,348	3,340,571	5.17
1929	32,556	235,465	7.23	2,080,996		69,399,213	3,335,344	4.81
1930	40,532	397,576	9.81	3,278,625		94,624,701	4,529,944	4.79
1931	43,337	435,992	10.06	3,190,198		107,139,129	4,794,551	4.48
1932	44,817	505,671	11.28	3,113,942		132,016,859	5,789,205	4.38
1933	43,807	442,391	10.10	2,790,928		131,392,501	5,713,181	4.35
1934	38,495	412,672	10.72	2,599,982		114,002,950	4,714,624	4.14
1935	51,985	459,223	8.83	2,881,098		119,857,668	4,617,733	3.85
1936	*50,444	555,969	11,02	3,510,922		156,066,242	6,103,264	3.91
1937	*43,758	422,152	9,65	2,825,006		120,440,235	5,230,971	4.34
1938	*45,194	498,102	11.02	3,403,635		143,013,847	6,001,380	4.20

This is the number of acres harvested. The acreage seeded is slightly higher than these figures, being 45,322 acres in 1938.

Table 6. - Wholesale Prices of Sugar at Montreal and Vancouver for Specified Months, 1937 and 1938.

(Compiled by the Internal Trade Branch)

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Ty emple	Sugar, Granulated Standard, per Cwt.		Sugar No. 1 Light Yellow per Cwt.		Sugar, Granulated		Sugar No. 3 Yellow per Cwt. f.o.b. Factory	
	1937	1938	1937	1938	1937	1938	1937	1938
January	4.80	5,08	4,52	4,80	4,62	4.85	4.29	4.52
April	4.99	4,99	4.71	4.70	4.77	4.90	4.44	4.57
July	5.08	4.80	4.80	4.51	4,95	4.69	4.62	4.36
October	5.08	4.80	4,80	4.51	4,98	4.70	4.65	4.37

Materials Used

The cost of materials used in the industry during 1938, as shown in table 7, amounted to \$28,838,685. This is a decrease from the previous year of \$174,372. Raw materials, consisting of raw cane and sugar beets, constitute over 92 per cent of the total, other materials almost 2 per cent, and containers of all kinds over 6 per cent. The average cost price of raw cane sugar laid down at the factory was \$2.55 per hundredweight in 1937 and \$2.48 per hundredweight in 1938. The cost at the factory of sugar beets was \$6.69 per ton in 1937 and \$6.83 in 1938.

Table 7 - Materials Used

and the second s		3 0 7	P	2026	
		1 9 3	7	1938	3
Kinds of Materials	Unit of		Cost Value		Cost Value
	Measure	Quantity	at the	Quantity	at the
			Refinery		Refinery
			\$		\$
Raw cane sugar	Pound	928, 55,990	23,696,078	929,376,210	23,069,684
Sugar beets	Ton	422,152	2,825,006	498,102	3,403,635
Cornstarch	Pound	1,127,761	51,957	1,084,368	46,296
Boneblack	81	2,394,307	88,201	1,906,652	72,400
Infusorial earth	£1	4,586,786	95,532	4,908,597	101,473
Lime	99	1,242,997	5,217	1,782,272	8,066
Limestone	Ton	23,040	60,803	26,198	68,667
Sulphur	Pound	312,890	7,104	265,230	6,280
Sulphuric, Hydrochloric,		Company of the last			
muriatic and phosphoric					
acid	27	624,245	14,374	877,736	
Soda ash	3.5	190,320		189,171	
Filtering materials, n.e.s	10	-6	42,220	45	37,423
Other chemical materials	4:3	ra	11,896	==	16,090
Containers (boxes, bags,					
etc.)	end	40	1,841,299	***	1,611,139
All other materials and Supplies	- Arms		269,236		369,587
TOTAL COST OF MATERIALS USED	-0	6.3	29,013,057	-77	28,838,685

Capital Invested

Table 8. - Capital Invested in the Sugar Industry.

Items of Capital	1 9 3 7	1938
Fixed Capital	#	\$
Present value of land, buildings, fixtures, machinery, tools, etc.	18,242,516	17,456,207
Working Capital - Inventory value of materials on hand,		
stocks in process, finished products, fuel and miscellaneous supplies on hand	10,252,879	10,199,362
Operating capital (cash, bills and accounts receivable, prepaid expenses, etc.)	6,918,386	8,692,297
TOTAL CAPITAL INVESTED	35,413,781	36,347,866

Employment Statistics

Employment statistics are given in tables 9, 10 and 11. Wage earners in 1938 numbered 1,809 males and 84 females, with a payroll of \$2,151,645, while salaried employees numbered 364 males and 61 females, with salaries totalling \$1,163,988. Compared with 1937 there was a decrease of 14 in the number of persons employed and \$3,228 in the salaries and wages paid. The maximum employment of wage-earners was reached in November with a total of 2,947 and the minimum in January with a total of 1,161.

The following employment figures illustrate the degree of large scale production obtaining in this industry. The average employment per factory for the industry as a whole was 233 in 1937 and 232 in 1938. Five of the ten factories employed between 100 and 300 persons (average 168), four employed between 300 and 400 persons (average 351) and one employed less than one hundred.

Table 9. - Employees by Classes, Number, Sex and Remuneration, 1938.

Persons	Employed	Salaries
Male	Female	and Wages
No.	No.	\$
364 1,809	61 84	1,163,988 2,151,645
2,173	145	3,315,633
2,178	154	3,318,861
	Male No. 364 1,809 2,173	No. No. 364 61 1,809 84 2,173 145

Table 10. - Number of Wage-earners Employed by Months and Sex, 1933.

Months	Number o	f Employees	Months	Number o	Number of Employees		
Months	Male Female			Male	Female		
January	1,118	43	July	1,869	86		
February	1,114	54	August	1,909	104		
March	1,212	58	September.	2,290	116		
April	1,376	72	October	2,750	108		
lay	1,734	86	November	2,834	113		
June	1,842	105	December	1,630	64		

Table 11. - Average Weekly Earnings and Number of Wage-earners in the Month of Highest Employment with their Regular Hours of Work, 1938.

Number of Hours Worked per Week	Male	Female
30 hours or less	72 468 41 103 1,078 140 149 30 108 739	38 41 11 32
Average hours per week	51.9	43.1
Average weekly earnings	\$23.90	12.58

The above table does not include overtime.

Power Equipment

Table 12. - Power Equipment by Classes, 1938.

	Ordin	arily in Use	In Reserve or Idle	
Classes of Power	Number of Units	Manufacturers' Rating of Horse-power Capacity	Number of Units	Manufacturers' Rating of Horse-power Capacity
Steam engines and turbines	84	14,520	1	600
asoline, gas and oil engines	18	180	-	-
Total Primary Power	102	14,700	1	600
Electric motors operated by purchased power	604	7,900	36	1,009
TOTAL POWER USED FOR MANUFACTURING	706	22,600	37	1,609
lectric motors operated by power generated by the establishment	1,306	16,280	7	25
Total Electric Motors	1,910	24,180	43	1,034
Boiler installation	63	31,302	4	1,300

Table 13. - Consumption of Fuel and Electricity, 1938.

Kinds of Fuel Unit o		Cost Value delivered at Works
		the state of the s
Bituminous coal, Canadian	38,209 27,465 2,496 1. 6,756,297 15,426	430,814 189,912 41,095 22,153 219,619 3,046 1,107
COTAL COST OF FUEL		907,746
Electricity purchased (including service charges)	12,706,041	87,794 995,540

Imports and Exports

Table 14 shows the importation for consumption in Canada of the undermentioned commodities by countries, quantity and value. The total value of imports of sugar and molasses during the calendar year 1938 was \$19,830,860 an increase of \$75,550 from 1937.

Table 14. - Imports for Consumption by Countries, Calendar Years 1937 and 1938.

Articles by Countries		1 9	3 7	1938		
		Quantity	Value	Quantity	Value	
Sugar, n.o.p., not above			\$		\$	
No. 16 D.S. in colour, etcTotal	Cwt.	4,763,145	8,987,302	6,242,630	11,491,677	
United Kingdom	11	6	22	vid	-	
Australia	ff	131,581	226,395		-	
British Guiana	H	1,981,793	3,708,103	2,440,396	4,444,324	
Barbados	11	581,124	1,181,776	297,390	535,620	
Jamaica	11	1,067,216	2,141,958	1,821,760	3,392,317	
Trinidad and Tobago Other British West	††	382,913	752,598	900,692	1,663,738	
Indies	11	228,151	475,920	628,166	1,216,701	
Cuba	11	329,092	387,310	44,755	48,384	
Fiji Islands	11	53,915	106,855	102,622	182,937	
Peru	11	7,354	6,365	6,849	7,656	

Table 14 - Imports for Consumption by Countries, Calendar Years 1937 and 1938 - (Continued)

Articles by Countries		1 9	3 7	1938		
		Quantity	Value	Quantity	Value	
			\$		\$	
ugar above No. 16 D.S.					balanting.	
in colour, for refining						
purposes only Total	Cwt.	4,458,529	8,291,360	3,332,302	6,069,898	
United Kingdom	61		-	34	114	
Australia	н	1,667,358	2,918,591	985,397	1,666,072	
British East Africa	81	416,018	755,435	77,225	155,537	
British South Africa.	tt	169,154	275,870	205,680	360,205	
British Guiana	11	426,803	790,250	435,237	832,128	
Fiji Islands	11	1,194,310	2,313,504	1,160,868	2,191,031	
Barbados	11	221,339	463,658	98,058	189,278	
Jamaica	tt	282,498	613,589	241,092	422,943	
Trinidad and Tobago .	11	14,703	29,273	41,137	79,168	
Other British West	n. You				, , ,	
Indies	11	66,346	131,190	88,074	173,213	
Other Countries	11		-		212	
					11-00	
Sugar above No. 16 D.S.			100 600			
in colour, and all						
refined sugars Total	Cwt.	75,766	331,336	99,953	298,627	
	11					
United Kingdom	11	1,206	3,525	456	685	
United States	11	66,084	309,722	43,730	191,850	
British Guiana	11	2,246	4,515	47,029	87,434	
Cuba	11	1,000	1,700	8,000	16,93	
Other Countries		5,230	11,874	738	1,726	
nvert sugar and syrups,		1000				
the product of the sugar				1211119 200	heath in .	
cane or beet and all			The state of the s			
imitations and substi-	e e		13.6			
tutes thereof Total	Cwt.	4,747	10,230	8,519	16,108	
United States	31	4,747	10,230	9,519	16,108	
lolasses of cane, testing						
under 35° but not less						
than 20° Total	Gal	366,419	47,151	2,126,058	166,224	
United States	11	260,494	26,443	2,036,513	150,331	
Cuba	н	92,113	16,581	87,243	15,730	
Other Countries	11	13,812	4,127	2,302	163	
001102 001102 00 00 00 00 00 00 00 00 00 00 00 00 0		20,022	,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	
lolasses of cane, testing		K HIDE CO.				
under 56° but not less						
than 35° Total	Gal	26,417	4,493	18,782	4,56	
United States	11					
HOLLOU STOLOG	17	26,417	4,493	15,770	4,10	
Other Countries	11	1		3,012	466	

Table 14. - Imports for Consumption by Countries, Calendar Years 1957 and 1938 - (Concluded)

Articles by Countries		1937		1938	
		Quantity	Value	Quantity	Value
	~		\$		\$
	7	1			
olasses testing not more than 560 the produce of any		150000			
British Country entitled to					
benefits under preferential					
tariff Total (Gal.	12,040,302	2,035,072	10,818,127	1,731,668
Barbados	Ħ	4,901,821	1,553,733	4,403,203	1,386,461
Jamaica	H	2,308	757	9,602	541
Trinidad and Tobago	-11	5,853,872	330,203	674,423	36,142
Other British West Indies	11	506,836	100,250	1,704,862	110,101
British Guiana	11	772,793	49,231	4,026,037	198,423
Other Countries	11	2,672	898		40
lolasses and syrups of all			THE P	1207	Phone St.
kinds, the product of sugar	fi l				
cane or beet, n.o.p., and					A STATE OF THE STA
all imitations or		271			
substitutes Total	Cwt	11,023	48,239	12,261	52,091
United Kingdom	99	3,543	15,186	4,784	22,382
United States	li .	7,478	33,046	7,477	29,709
Other Countries	91	2	7	**	O(1) -
					133

The exports of sugar, molasses and syrups and sugar beets are shown in table 15 for the calendar years 1937 and 1938. The total value of the exports in 1938 amounted to \$240,881, an increase of \$29,352 as compared with the previous year. Sugar of all kinds, valued at \$139,339 was the principal item of export, of which \$110,547 or over 79 per cent went to Newfoundland.

Table 15. - Exports of Canadian Produce, Calendar Years 1937 and 1938.

Articles by Countries		1937		1938	
		Quantity	Value	Quantity	Value
			*		\$
				M 1	
Sugar of all kinds,		24,659	107,527	33,229	139,339
n.o.p Total Co	vt.	24,000	101,521	00,220	109,000
United Kingdom	n.	412	2,922	-	40"
	IT _	5,285	22,737	8	49
	11	537	2,474	588	2,589
	n.	48	295	73	364
Bermuda	n	29	138	15	72
Barbados	н	422	2,353	175	1,030
Trinidad and Tobago	11	664	3,494	4,601	20,529
Other British West Indies	ii.	242	1,031	928	3,961
Newfoundland	11	16,738	70,797	26,809	110,547
St. Pierre and Miquelon.	11	254	1,133	7	40
Other Countries	Н	28	153	25	158
				and the second	thursday 35
lolasses and syrups of all					
	al.	908,846	104,002	1,174,590	101,542
United States	11	908,178	103,598	1,173,976	101,154
	11	668	404	614	388
			The State of	STATE OF THE STATE	
Sugar beets Total T	on	-	-	- 1921 CHES	-
OTAL VALUE OF EXPORTS		-	211,529	-	240,881

List of Sugar Refineries Operating in 1938.

NOVA SCOTIA

(1) Acadia Sugar Refining Company, Limited, Dartmouth

NEW BRUNSWICK

(1) Atlantic Sugar Refineries Limited,

Saint John.

QUEBEC

(1) Canada & Dominion Sugar Company Limited,

1410 Montmorency Street, Montreal.

St. Lawrence Sugar Refineries Limited, (1)

4026 Notre Dame Street East, Montreal.

ONTARIO

(1) Beamish Sugar Refineries Limited,

587 Fleet Street, Toronto

(2) Canada & Dominion Sugar Company Limited,

Chatham

(2) Canada & Dominion Sugar Company Limited,

Wallaceburg.

ALBERTA

(2) Canadian Sugar Factories Limited,

Raymond.

(2) Canadian Sugar Factories Limited,

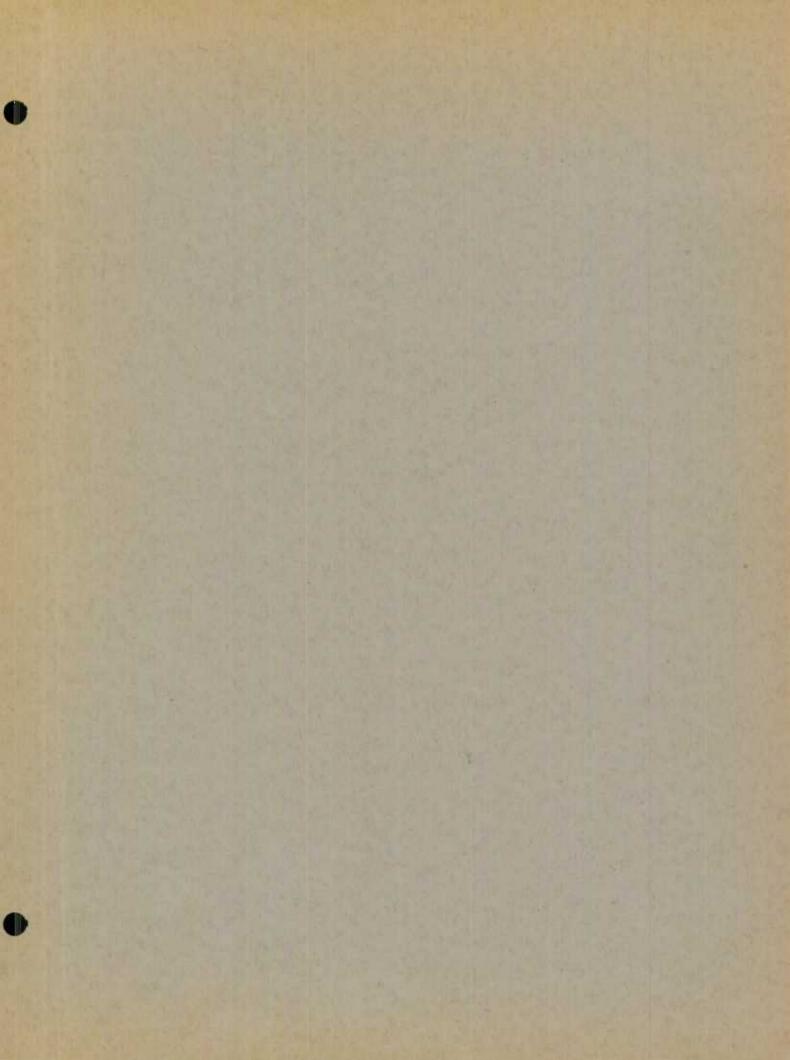
Picture Butte.

BRITISH COLUMBIA

(1) The British Columbia Sugar Refining Company Limited,

Rogers Street, Vancouver.

- (1) Make cane sugar only.
- Make beet sugar only



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