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CANADA—DEPARTMENT OF TRADE AND COMMERCE  
DOMINION BUREAU OF STATISTICS  
MINING, METALLURGICAL AND CHEMICAL BRANCH

(see 44-201)

# MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA

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1936 and 1937

Published by Authority of the Hon. W. D. Euier, M.P.,  
Minister of Trade and Commerce



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## NOTES ON STATISTICS OF PRODUCTION

In the collection of production data, the Dominion Bureau of Statistics made a division between primary and secondary production. In the first-named class there are separate sections for the collection of statistics on (a) **Agricultural Products**, (b) **Furs**, (c) **Fish**, (d) **Forest Products**, (e) **Mineral Products**.

In the second are included (a) **Manufacturing** and (b) **Construction**.

**Manufacturing** is subdivided into nine groups of industries, producing concerns being classified according to the principal component material of their major products. For example, manufactures of leather goods are classified under "Animal Products"; the pulp and paper industry under "Wood and Paper", etc. An outline of the scheme of classification in use for manufacturing industries is given below:—

Manufactures of:

- (1) **Vegetable Products**, including—Coffee, Tea and Spices; Fruit and Vegetable Preparations, including Preserving, Canning, Pickles, Vinegar and Cider; Flour and Grist Mill Products; Bread and other Bakery Products; Biscuits and Confectionery; Macaroni and Vermacelli; Distilled and Brewed Liquors and Wines; Rubber Products; Prepared Breakfast Foods; Starch and Glucose; Sugar; Tobacco Products; Linseed Oil and Oil Cake.
- (2) **Animal Products**, including—Fish and Fish Products; Dairy Factory Products; Slaughtering and Meat Packing; Leather and Leather Products; Furs and Fur Products.
- (3) **Textiles and Textile Products**, including—Cotton Textiles (Cloth, Yarn, Thread and Waste); Woollen Textiles (Cloth, Yarn, Blankets, Felt and Waste); Silk Products; Factory-Made Clothing; Carpets, Rugs and Mats; Cordage, Rope and Twine; Hats and Caps; Hosiery and Knitted Goods; Cotton and Jute Bags; Dyeing, Cleaning and Laundry Work; Dyeing and Finishing of Textiles, Awnings, Tents and Sails.
- (4) **Wood and Paper**, including—Pulp and Paper; Paper Goods; Printing, Publishing and Lithographing; Furniture; Carriages, Wagons and Sleighs; Boxes, Baskets and Crates; Cooperage; Woodware; Lumber; Planing Mills; Sash and Door Factories; Hardwood Flooring; Coffins and Caskets; Trees and Shoe Findings; Handles; Spools and Wood Turning; Boatbuilding.
- (5) **Iron and Steel and Their Products**, including—Primary Iron and Steel (Pig Iron, Ferro-Alloys, Steel and Rolled Products); Castings and Forgings; Heating and Cooking Apparatus; Boilers, Tanks and Engines; Farm Implements; Machinery; Automobiles; Auto Parts; Aircraft; Shipbuilding; Bicycles; Railway Rolling Stock; Wire and Wire Goods; Sheet Metal Products; Hardware, Cutlery and Tools; Miscellaneous Iron and Steel Products; Bridge Building and Structural Steel.
- (6) **Manufactures of the Non-Ferrous Metals**, including—Aluminium Products; Brass and Copper Products; White Metal Alloys; Jewellery and Silverware; Electrical Apparatus and Supplies; Miscellaneous Non-Ferrous Metal Products; Non-Ferrous Smelting and Refining.
- (7) **Manufactures of the Non-Metallic Minerals**, including—Asbestos Products; Cement; Cement Products; Coke and Gas; Glass (blown, cut, ornamental, etc.); Lime; Petroleum Products; Products from Domestic Clays; Products from Imported Clays; Salt; Sand-Lime Brick; Dressed Stone; Artificial Abrasives and Abrasive Products; Miscellaneous Non-Metallic Mineral Products, including (a) Artificial Graphite and Electrodes, (b) Gypsum Products, (c) Mica Products, (d) Miscellaneous Non-Metallic Mineral Products, n.e.s.
- (8) **Chemicals and Allied Products**, including—Coal Tar Distillation; Acids, Alkalies and Salts; Compressed Gases; Fertilizers; Medicinal and Pharmaceutical Preparations; Paints, Pigments and Varnishes; Soaps, Washing Compounds and Cleaning Preparations; Toilet Preparations; Inks; Adhesives; Polishes and Dressings; Hardwood Distillation; Miscellaneous Chemical Products, including: (a) Boiler Compounds, (b) Cellulose Products, (c) Insecticides, (d) Sweeping Compounds, (e) Disinfectants, (f) Matches, (g) Explosives, Ammunition and Fireworks; (h) Miscellaneous Chemical Products, n.e.s.
- (9) **Miscellaneous Products**, including—Brooms and Brushes; Electric Light and Power; Musical instruments, etc.

The statistics of manufactures are also classified according to the **use** or **purpose** of the end product as follows:—

- (1) **Food**, including—Breadstuffs; Fish; Nuts; Fruits and Vegetables; Meats; Milk Products; Oils and Fats; Sugar; Infusions; Miscellaneous.
- (2) **Drink and Tobacco**, including—Beverages, alcoholic; Beverages, non-alcoholic; Tobacco.
- (3) **Clothing**, including—Boots and Shoes; Fur Goods; Garments and Personal Furnishings; Gloves and Mitts; Hats and Caps; Knitted Goods; Waterproofs; Miscellaneous.
- (4) **Personal Utilities**, including—Jewellery and Time-Pieces; Recreational Supplies; Personal Utilities, n.e.s.
- (5) **House Furnishings**.
- (6) **Books and Stationery**.
- (7) **Vehicles and Vessels**.
- (8) **Producers' Materials**, including—Farm Materials; Manufacturers' Materials; Building Materials; General Materials.
- (9) **Industrial Equipment**, including—Farming Equipment; Manufacturing Equipment; Trading Equipment; Service Equipment; Light, Heat and Power Equipment; General Equipment.
- (10) **Miscellaneous**.

## EXPLANATORY NOTES

**Classification of Industries.**—The annual census of production in Canada, which is carried out by the Dominion Bureau of Statistics, divides the manufacturing plants into *nine main groups* according to the principal *component material of their major products*. These main groups in turn are subdivided into industries to which the various firms are classified in accordance with the nature of their *main products*. An outline of the scheme of classification is given on the next preceding page.

**Scope of Present Report.**—The present report presents statistics for the Manufactures of the Non-Metallic Minerals, one of the nine major groups, and covers all manufacturing plants that use non-metallic minerals as their principal materials. This group in turn is subdivided into fourteen industries, as follows: (1) Asbestos products; (2) Cement; (3) Cement products; (4) Coke and gas; (5) Glass; (6) Lime; (7) Petroleum products; (8) Products from domestic clays; (9) Products from imported clays; (10) Sand-lime brick; (11) Salt; (12) Stone dressing; (13) Artificial abrasives; (14) Miscellaneous. A separate chapter is devoted to a review of each of these industries.

**Period Covered.**—The returns from the manufacturers relate to the calendar year or to the business year which corresponded most nearly to that of the calendar year, and cover a year's operation except for establishments which began or discontinued business within the year.

**Establishments Covered.**—The census of manufactures covers only manufacturing and assembling operations. Works engaged solely in repairs have been excluded but when concerns did both manufacturing and repair work their reports covered their entire operations. Wholesale and retail establishments also have been excluded and firms which carried on wholesale or retail business in addition to manufacturing were instructed to confine their statements to manufacturing operations only.

**Number of Plants.**—Final compilations include figures only for establishments which operated all or part of the year. As a rule, a report was received for each single plant or factory but in a few cases a single report covered two or more plants located in the same city or town and operated under a common ownership. On the other hand, when a firm carried on more than one trade in the same establishment they were sometimes asked to make a separate return for each industry in which event the single plant was counted as two or more establishments. In the majority of industries, however, the number of plants is identical with the number of establishments.

**Capital Employed.**—Firms were asked to report only the capital employed for manufacturing purposes and were instructed to exclude any investment which was not a proper charge on manufacturing operations. Investments in other establishments were excluded as also were investments in land, buildings and equipment which were not used in manufacturing or which were under construction at the end of the year. In cases where the building or machinery was rented the concerns were instructed to estimate the values on the basis of annual rentals. The value of fixed assets was computed at the "present value" or the original cost less reasonable depreciation plus any increases in land values. Inventory values were as at the end of the year.

**Salaried Employees and Salaries.**—Salaried employees include all supervisory and office employees such as managers, superintendents, professional and office or clerical employees and travelling salesmen who were attached to the plant and who devoted all or the greater part of their time to such work. Employees in branch offices or salesmen on part time were excluded. In reporting the number of salaried employees the firms were instructed to give the number on the most representative date or the average for the year. In cases where the owner was also a manual worker such owner was considered to be a salaried employee. Salaried workers on new construction were excluded.

Salaries covered the actual amount of money paid to all salaried employees as defined above.

**Wage-earners and Wages.**—All manual workers whether skilled or unskilled who were engaged in the production or delivery of manufactured products were classed as wage-earners. Foremen and overseers who performed work similar to the other employees under their supervision were also included under this category. Wage-earners employed on new construction were excluded. Firms were asked to give the number of workers on the pay-roll on the 15th of each month or on the nearest representative date. The average for the year in a single establishment was calculated by adding the monthly figures and dividing by 12. The average for an industry was obtained by adding the averages for individual establishments. No distinction was made between full-time and part-time workers.

## EXPLANATORY NOTES—Concluded

Wages covered the actual amounts paid during the year to the wage-earners as defined on page 3. Owing to the inclusion of part time workers the figure obtained by dividing total wages by the average of employees does not represent the average wages received by full-time wage-earners.

**Fuel and Electricity.**—All fuel and electricity for heating or power purposes was included under this heading. Coke, gas and fuel oil made for the makers' own use were included. Any coal or coke charged directly to melting furnaces or used as raw material in making manufactured goods was excluded. The value represents the cost delivered at the works.

**Power Equipment.** Firms were instructed to report under this heading all power units whether in use during the year or not.

**Materials Used.**—Under this heading was included all materials used in the production of the goods recorded on the returns of the reporting companies. The value represents the cost delivered at the works. Any goods purchased for resale without further manufacture were excluded, as also were any charges for such items as rent, insurance, depreciation, new machinery, and new construction or plant repairs. The cost of containers and packing materials was included.

**Products.**—Firms were instructed to report under this heading the quantity and value of all goods made during the year whether for home consumption or for export and whether sold during the year or not. The gross value represents the selling value at the works or the amounts actually received at the factories from the sale of their products, the value for any unsold products being computed at average prices. In cases where goods were transferred to another plant or department which was covered by a separate report, the producers were asked to give the transfer values as entered in their books. In certain specific industries the value of factory sales was asked for instead of the value of production but in most instances and unless otherwise specified the value shown is the value of actual output.

The products made by the establishments in a given industry, on the one hand, usually include minor products different from those covered by the industry designation, and, on the other hand, may not include the entire output of products normally belonging to the industry because some goods of this class may be made as secondary products in other industries. In the detailed tables for individual industries the figures relating to specific products are, therefore, likely to be incomplete. In most cases this fact is indicated by an asterisk and total figures are given in special tables. The alphabetical list for all industries also helps to avoid any misunderstanding, by combining production data for all industries in the group.

**Net Value of Products.**—The gross value of products is not a satisfactory measure of the importance of a given industry because only a part of this value is actually created within the industry, another, and often a larger part being contributed by the value of the materials used. Again the finished products of one industry become the raw materials of another thus leading to a multiplication in values as the materials go through the different manufacturing processes. This duplication is eliminated and a truer measure of the importance of an industry indicated by the "net value of products" which is obtained by deducting the cost of materials, fuel and electricity, from the gross selling value of products.

**Imports and Exports.**—The quantities and values are based upon the declarations of importers (import entries) and of exporters (export entries) as subsequently checked by Customs' officials. The weight is the net weight of the goods; that is, it excludes the weight of the covers or receptacles, except for certain goods as definitely provided in the Customs' tariff.

Imports represent "Imports entered for Consumption" which means that the goods have passed into the custody of the importer and that duty has been paid on the dutiable portion. The value of merchandise imported is, under the provisions of the law, the fair market value or price thereof when sold for home consumption in the principal markets of the country, from which, and at the same time when, the said merchandise was exported directly to Canada.

The value of exports of Canadian merchandise is the actual cost or the value at the time of exportation at the points in Canada whence consigned for export.

Re-exports include only exports of foreign merchandise which has been imported. The value of such commodities is the actual cost of such goods.

**Abbreviations.**—The letters "n.o.p." or "n.e.s." mean "not otherwise provided for" or "not elsewhere specified".

**Units of Measure.**—The "ton" used throughout this report is the "short ton (2,000 pounds)" unless otherwise specified. The "gallon" is the "Imperial gallon."

## PREFACE

This report presents statistics of production, capital, employment, etc., for the manufacturing plants in Canada which use non-metallic minerals as their principal materials. Petroleum refining, coke and gas making, cement manufacturing and other such important industries fall in this category and are covered by this review.

In 1937, the 823 establishments in this group employed 23,837 workers and produced goods having a gross selling value of \$208,205,148. It will be noted that the aerated waters industry has been taken out of this group for 1937 and transferred to the beverages industries, and that the figures for earlier years have been revised accordingly.

Statistics given herein give details for the years 1936 and 1937 and bring up to date, in printed form, the yearly records which were started in 1919.

Attention is directed to the notes on the preceding pages which outline the Bureau's classification of industries for the presentation of production statistics. The various terms used in this report are defined on pages 3 and 4.

The alphabetical list of materials (Table 15) and of products (Table 16) provides convenient summaries for the several industries in this group. A similar list of products for all manufacturing industries is published annually by the Bureau and is available for a small charge.

This report has been prepared by Mr. Harold McLeod, B.Sc., statistician of the Mining, Metallurgical and Chemical Branch of the Bureau, under the direction of Mr. W. H. Losce, B.Sc., Chief of the Branch.

R. H. COATS,  
*Dominion Statistician.*

DOMINION BUREAU OF STATISTICS,  
OTTAWA, MARCH 23, 1939.

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## DOMINION BUREAU OF STATISTICS

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# MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA, 1937

## CHAPTER ONE

### GENERAL REVIEW

Production in 1937 by the manufacturing industries in Canada which used non-metallic minerals as their chief materials amounted to \$208,205,148 at factory prices, an advance of 17 per cent over the corresponding 1936 value of \$177,771,597.

A total of 823 establishments were in operation in 1937 distributed by provinces, as follows—Ontario, 435; Quebec, 172; British Columbia, 55; Manitoba, 37; Saskatchewan, 37; Alberta, 34; Nova Scotia, 26; New Brunswick 24; Prince Edward Island, 2; and the Northwest Territories, 1. Capital employed increased \$5 millions over 1936 to \$287,473,542; the average number of employees rose to 23,837 from 21,974, and payments for salaries and wages advanced to \$30,389,958 from \$26,402,410. The cost of materials used in manufacturing during 1937 was \$115,938,578 against \$96,534,218 in 1936 and the cost of fuel and electricity was \$14,599,345 compared with \$12,529,603.

There was a substantial increase in the output value for each of the individual industries, the gains being as follows—abrasive products, 33 per cent to \$14,174,351; asbestos products 47 per cent to \$1,896,677; cement products, 97 per cent to \$3,299,331; coke and gas, 5 per cent to \$41,702,929; glass, 30 per cent to \$14,437,250; Portland cement, 32 per cent to \$9,095,867; lime, 15 per cent to \$3,824,917; petroleum products, 15 per cent to \$98,454,014; products from imported clays, 24 per cent to \$3,599,181; products from domestic clays, 30 per cent to \$4,516,859; sand-lime brick, 4 per cent to \$197,921; stone dressing, 2 per cent to \$3,371,242; salt, 1.5 per cent to \$1,799,465, and the miscellaneous industry, 43 per cent to \$7,835,144.

About 53 per cent of the factories, or 435, were located in Ontario and their production amounting to \$94,994,715 accounted for 45 per cent of the Dominion total. Quebec with 172 factories and output worth \$61,309,188 accounted for 29 per cent of the grand total. British Columbia had 56 plants and production valued at \$14,902,493. Saskatchewan, 37 works and an output of \$8,029,403; Manitoba, 37 establishments and \$4,370,924; Alberta, 34 plants and \$10,867,020; Nova Scotia and Prince Edward Island, 28 works and \$12,783,915; and New Brunswick, 24 plants and output worth \$947,490.

Capital employed in 1937 totalled \$287,473,542 of which \$210,053,415 represented the value of land, buildings, machinery and equipment; \$53,050,342 was the value of inventories, and \$24,369,785 was the amount of cash, accounts receivable, etc.

The coke and gas industry, with \$91,911,250 accounted for 32 per cent of the total capital; petroleum products with \$64,280,266 accounted for 22 per cent; and the cement manufacturing industry, with \$54,150,672, for almost 19 per cent. Of the total capital investment, 46 per cent was in Ontario, and 28 per cent in Quebec.

Of the 23,837 workers in these industries, salaried employees accounted for 3,509 males and 784 females, or a total of 4,293 who were paid \$7,824,906 during the year. Wage-earners

accounted for 19,544 people, including 18,938 males and 606 females, and their yearly earnings amounted to \$22,565,052.

From the standpoint of employment, the petroleum products industry topped all others with 5,137 employees. Next in order came coke and gas, 4,027; glass works, 3,799; domestic clays, 2,287; abrasives, 1,289; imported clays, 1,218; stone dressing, 1,159; cement, 1,083; miscellaneous, 1,051; lime, 872; cement products, 840; salt, 543; asbestos, 451; and sand-lime brick, 81.

The cost of fuel and electricity for 1937 was \$14,599,345, of which \$7,162,365 was expended in Ontario, and \$4,599,848 in Quebec.

Imports of non-metallic minerals and their products amounted to \$136,473,376 in 1937, against \$115,497,181 in 1936, the United States supplying \$104,665,427, and the United Kingdom \$13,299,830. Imports of petroleum, asphalt and their products were valued at \$59,012,412, and coal and its products at \$42,394,780.

Exports of non-metallic minerals were valued at \$30,896,016, as against \$23,974,191 in 1936. The United States took \$19,393,344, and the United Kingdom \$3,276,123. Exports of asbestos and its products were worth \$14,545,370; coal and its products \$2,841,048; stone and its products \$8,518,939; and petroleum and its products, \$1,295,457.

Table 1.—Principal Statistics for the Manufactures of the Non-Metallic Minerals, by Industries, 1933-1937

Years	Number of plants	Capital employed \$	Average number of employees	Salaries and wages \$	Cost of fuel and electricity at works \$	Cost of materials at works \$	Gross selling value of products at works \$	Net value of production \$
ARTIFICIAL ABRAIVES AND ABRASIVE PRODUCTS								
1933	14	5,176,927	572	705,729	481,152	1,338,879	3,550,456	1,730,425
1934	14	5,109,861	861	1,091,992	697,028	2,317,552	7,414,533	4,400,273
1935	15	5,281,916	976	1,314,272	782,553	2,684,406	8,643,930	5,176,971
1936	15	6,241,502	1,149	1,528,194	967,236	3,164,252	10,631,533	6,500,045
1937	16	7,151,369	1,289	1,995,589	1,222,529	4,351,834	14,174,351	8,599,968
ASBESTOS PRODUCTS								
1933	11	1,777,975	222	208,580	55,031	331,062	757,626	371,533
1934	11	1,391,873	228	233,379	49,488	387,074	910,983	477,421
1935	13	1,703,301	327	323,854	66,793	518,994	1,130,252	544,495
1936	13	1,955,676	372	376,574	79,290	622,530	1,293,909	592,089
1937	13	2,003,659	451	464,882	91,252	812,639	1,896,677	992,786
CEMENT PRODUCTS								
1933	83	3,545,805	460	302,941	42,482	625,525	1,596,998	928,991
1934	88	3,285,150	489	405,028	42,107	444,274	1,042,258	555,877
1935	94	3,024,286	519	451,625	37,086	459,296	1,154,138	657,756
1936	97	3,053,745	602	509,209	50,036	763,021	1,713,347	900,290
1937	109	3,695,565	840	804,024	57,511	1,566,870	3,299,331	1,674,950
COKE AND GAS								
1933	42	94,225,476	3,526	4,606,308	2,606,590	12,729,075	29,936,975	14,601,310
1934	44	99,297,395	4,278	5,648,969	2,883,049	15,237,031	38,272,020	20,151,940
1935	44	98,939,160	4,107	5,627,861	2,432,111	16,233,519	38,474,789	20,809,159
1936	42	93,088,722	4,116	5,714,483	2,781,045	16,585,571	39,871,898	20,505,282
1937	33	91,911,250	4,027	5,709,569	2,906,092	17,217,957	41,702,929	21,578,880
GLASS								
1933	66	13,207,596	2,579	2,586,370	717,701	2,950,309	7,830,795	4,162,785
1934	67	13,808,243	3,001	3,176,204	893,488	3,549,677	9,790,571	5,347,706
1935	68	14,168,575	3,135	3,291,074	837,025	3,618,175	9,933,348	5,478,148
1936	68	14,687,098	3,323	3,522,157	851,774	4,208,700	11,094,762	6,034,282
1937	77	15,750,801	3,799	4,289,031	1,030,993	5,768,738	14,437,250	7,637,519
PETROLEUM PRODUCTS								
1933	47	68,193,854	4,028	6,141,945	3,137,719	49,187,757	70,268,265	17,942,789
1934	51	67,021,041	4,957	6,379,226	3,124,534	56,969,015	76,337,513	16,243,964
1935	58	64,707,454	4,856	7,153,224	3,847,049	58,869,814	79,950,525	17,233,662
1936	63	61,882,926	5,019	7,309,955	3,932,634	66,555,885	85,802,363	15,313,844
1937	57	64,280,260	5,137	8,246,843	4,450,005	80,401,880	98,454,014	13,602,129
PRODUCTS FROM IMPORTED CLAYS								
1933	18	4,220,768	536	471,742	111,144	288,379	1,205,052	805,529
1934	19	4,161,435	713	672,754	184,735	515,465	1,923,218	1,223,018
1935	20	4,449,314	895	864,212	187,180	530,735	2,174,977	1,457,062
1936	20	4,216,334	1,079	1,001,047	214,762	708,576	2,906,432	1,983,094
1937	19	4,457,109	1,218	1,265,913	286,499	971,497	3,599,181	2,341,185
SAND-LIME BRICK								
1933	6	789,962	67	62,584	13,814	37,934	116,367	64,619
1934	6	781,444	78	65,996	20,172	51,316	174,069	102,581
1935	6	608,899	71	58,700	17,048	43,083	154,950	94,819
1936	5	598,510	75	71,021	17,838	55,998	189,668	115,832
1937	5	547,991	81	72,219	20,095	63,285	197,921	114,541
STONE DRESSING								
1933	212	5,491,171	821	841,425	87,562	691,523	2,162,650	1,383,569
1934	218	5,194,702	881	886,809	90,874	834,323	2,402,474	1,482,277
1935	222	5,180,887	1,060	1,174,229	107,836	1,010,999	3,079,118	1,960,283
1936	227	5,766,308	1,245	1,357,808	127,151	1,070,902	3,309,911	2,111,858
1937	229	5,213,431	1,159	1,352,566	122,209	1,142,885	3,371,242	2,106,148
MISCELLANEOUS NON-METALLIC MINERAL PRODUCTS								
1933	33	7,296,350	416	426,885	153,826	897,258	2,728,572	1,677,488
1934	33	7,034,696	481	494,486	179,721	1,202,820	3,874,347	2,491,806
1935	35	7,456,803	639	690,428	184,930	1,485,435	4,237,500	2,567,135
1936	38	7,934,204	862	976,154	311,529	2,006,984	5,469,441	3,150,928
1937	47	8,951,098	1,051	1,286,676	420,739	2,752,716	7,835,144	4,661,689
Total for all Industries Listed Above								
1933	532	203,985,884	13,827	16,444,569	7,407,021	69,077,701	120,153,756	43,669,034
1934	551	207,985,940	15,967	19,651,843	8,162,196	81,508,517	112,147,666	52,476,863
1935	573	205,326,293	16,591	20,919,479	8,499,511	84,451,456	148,933,557	53,979,490
1936	588	199,426,925	17,842	22,426,632	9,333,295	95,742,425	162,283,264	57,207,544
1937	685	203,967,239	19,652	25,487,312	10,607,924	115,050,321	188,968,040	63,309,795

Table 1.—Principal Statistics for the Manufactures of the Non-Metallic Minerals, by Industries, 1933-1937—Concluded

Years	Number of plants	Capital employed \$	Average number of employees	Salaries and wages \$	Cost of fuel and electricity at works \$	Cost of materials at works \$	Gross selling value of products at works \$	Net value of production \$
<b>PRODUCTS FROM DOMESTIC CLAYS</b>								
1933.....	157	24,211,880	1,312	1,101,893	377,321	.....	2,262,835	1,885,514
1934.....	149	23,046,807	1,572	1,262,977	558,732	.....	2,680,410	2,121,678
1935.....	139	20,502,006	1,728	1,387,924	618,995	60,583	3,012,563	2,332,985
1936.....	140	19,863,431	1,775	1,498,148	695,001	71,353	3,471,027	2,704,673
1937.....	143	20,427,232	2,287	2,094,792	1,032,755	103,568	4,516,850	3,380,536
<b>CEMENT</b>								
1933.....	12	54,403,379	740	781,746	982,087	.....	4,536,935	3,554,848
1934.....	11	53,413,000	860	1,000,686	1,206,550	.....	5,667,946	4,461,396
1935.....	9	52,454,004	924	1,027,416	1,227,410	394,264	5,580,043	3,958,369
1936.....	9	53,343,991	1,052	1,196,664	1,576,142	592,929	6,908,192	4,739,121
1937.....	9	54,180,672	1,083	1,373,444	1,904,418	540,915	9,095,867	6,650,534
<b>LIME</b>								
1933.....	60	8,920,042	696	480,833	473,125	.....	2,432,306	1,959,181
1934.....	58	8,497,895	737	535,492	606,335	.....	2,745,797	2,139,462
1935.....	54	5,707,391	756	556,049	686,186	124,251	2,925,791	2,115,354
1936.....	57	6,106,901	799	640,322	743,663	96,316	3,335,970	2,495,091
1937.....	57	4,931,831	872	781,274	871,131	167,827	3,824,917	2,785,959
<b>SALT</b>								
1933.....	9	3,708,358	400	473,420	191,373	.....	1,939,874	1,748,501
1934.....	9	3,711,598	469	551,998	236,257	.....	1,654,953	1,718,696
1935.....	10	3,776,333	473	597,785	175,240	38,700	1,880,978	1,607,038
1936.....	9	3,856,187	506	640,044	181,502	31,195	1,773,144	1,500,447
1937.....	9	4,001,568	543	653,136	183,117	75,947	1,799,465	1,540,401
<b>Total for Industries Listed Above</b>								
1933.....	238	91,213,659	3,148	2,837,892	2,023,966	.....	11,171,950	9,148,014
1934.....	227	88,669,300	3,638	3,360,153	2,667,874	.....	13,019,106	10,411,232
1935.....	212	82,439,731	3,881	3,569,171	2,767,831	617,798	13,399,375	10,073,716
1936.....	215	83,170,510	4,132	3,975,778	3,196,308	791,793	15,488,333	11,500,232
1937.....	218	83,511,303	4,785	4,902,646	3,901,421	888,257	19,237,108	14,357,430
<b>GRAND TOTAL OF MANUFACTURES OF NON-METALLIC MINERALS</b>								
1933.....	779	295,139,543	16,975	18,282,401	9,436,927	69,077,701	131,325,706	52,817,078
1934.....	778	295,755,110	19,605	22,414,996	16,770,670	81,568,547	155,196,712	62,918,095
1935.....	787	287,960,329	20,472	21,518,633	11,207,442	85,072,234	162,332,932	66,653,236
1936.....	803	282,596,335	21,974	26,102,110	12,529,603	96,531,218	177,771,597	68,767,776
1937.....	823	287,473,542	23,837	30,389,958	14,599,315	115,938,578	208,205,138	77,667,225

NOTE.—Data for cement, lime, salt and products from domestic clays are also included in the figures for the mining industry.

Table 2.—Principal Statistics for the Manufactures of the Non-Metallic Minerals, by Provinces, 1933-1937

Years	Number of plants	Capital employed \$	Average number of employees	Salaries and wages \$	Cost of fuel and electricity at works \$	Cost of materials at works \$	Gross selling value of products at works \$	Net value of production \$
PRINCE EDWARD ISLAND AND NOVA SCOTIA								
1933.....	25	16,390,550	841	903,389	520,390	5,738,244	8,691,565	2,432,931
1934.....	25	14,840,241	991	1,022,839	563,569	6,131,747	9,292,916	2,597,600
1935.....	25	15,303,962	996	1,259,864	806,063	6,774,705	11,322,797	3,742,029
1936.....	26	13,750,705	1,125	1,320,063	833,279	7,358,279	11,030,985	2,839,427
1937.....	28	15,930,703	1,257	1,543,096	929,813	10,140,832	12,783,915	1,713,270
NEW BRUNSWICK								
1933.....	24	1,253,730	171	140,198	56,231	82,810	489,715	350,674
1934.....	21	1,223,463	180	138,587	55,936	175,153	658,412	427,323
1935.....	22	1,215,860	182	144,211	58,424	104,057	554,741	392,260
1936.....	22	1,527,633	247	189,976	74,219	199,560	784,175	510,396
1937.....	24	1,584,338	264	229,170	87,390	243,148	947,490	616,952
QUEBEC								
1933.....	153	87,444,301	3,861	4,363,708	2,504,234	15,881,001	33,082,232	14,606,907
1934.....	163	83,066,417	4,900	5,640,441	3,353,096	19,797,837	41,850,840	18,699,907
1935.....	170	82,408,019	4,937	5,885,360	3,303,275	23,062,601	44,205,812	17,749,936
1936.....	162	80,494,004	5,236	6,279,598	4,112,188	26,927,064	50,108,988	19,069,736
1937.....	172	82,836,298	5,900	7,530,714	4,509,848	34,336,797	61,309,188	22,372,543
ONTARIO								
1933.....	416	130,400,826	9,328	10,734,070	5,229,511	30,560,836	63,362,581	27,572,234
1934.....	420	136,834,145	10,529	12,155,538	5,551,679	35,666,887	72,087,644	30,869,078
1935.....	416	128,385,218	11,132	13,411,703	5,530,405	35,551,221	74,272,897	33,191,271
1936.....	431	128,581,326	11,894	14,320,997	5,829,572	40,477,428	81,878,508	35,571,508
1937.....	435	132,441,820	12,857	16,571,648	7,162,365	47,251,189	94,994,715	40,581,161
MANITOTA								
1933.....	37	12,711,993	432	423,868	152,264	1,109,997	2,650,599	1,388,338
1934.....	36	13,164,505	478	498,835	248,542	1,466,480	3,355,102	1,640,080
1935.....	37	14,193,378	609	589,093	297,809	1,675,983	3,803,305	1,829,513
1936.....	37	14,861,086	596	610,835	309,494	1,658,103	4,202,693	2,235,096
1937.....	37	12,790,659	651	675,599	323,649	1,671,818	4,370,924	2,375,457
SASKATCHEWAN								
1933.....	24	6,488,312	391	487,177	248,752	4,307,582	5,651,693	1,095,359
1934.....	26	5,962,671	480	585,542	220,482	4,618,188	6,156,076	1,317,406
1935.....	30	6,255,176	514	614,598	273,062	4,215,286	5,917,537	1,429,189
1936.....	33	6,025,394	554	703,023	315,804	5,304,924	6,915,357	1,294,629
1937.....	37	6,359,907	608	805,362	396,128	6,058,679	8,029,403	1,574,596
ALBERTA								
1933.....	35	14,060,763	754	850,350	245,691	5,001,951	6,705,981	1,458,339
1934.....	33	14,153,024	931	1,086,963	328,905	7,106,806	10,494,253	3,058,542
1935.....	33	14,487,218	996	1,230,222	362,751	6,733,552	9,373,291	2,840,988
1936.....	37	13,817,679	1,084	1,345,204	415,601	6,375,004	9,516,834	2,726,229
1937.....	34	12,061,358	1,056	1,327,645	382,897	6,614,045	10,867,020	3,870,078
BRITISH COLUMBIA								
1933.....	56	26,389,068	1,197	1,378,741	473,854	6,395,280	10,691,340	3,822,206
1934.....	54	26,510,674	1,116	1,286,251	447,861	6,545,449	11,301,469	4,308,159
1935.....	54	25,711,498	1,106	1,383,602	485,653	6,954,849	12,318,552	4,878,050
1936.....	55	23,537,718	1,238	1,532,714	639,446	8,233,856	13,334,057	4,460,755
1937.....	56	23,468,459	1,244	1,706,724	717,255	9,022,070	14,902,493	4,563,165
CANADA								
1933.....	770	295,139,543	16,975	19,282,401	9,430,927	69,677,701	131,325,706	52,817,078
1934.....	778	293,755,110	19,605	22,114,996	10,770,070	81,568,547	155,196,712	62,918,095
1935.....	787	287,960,329	20,172	21,518,633	11,267,142	85,072,254	162,332,932	66,063,236
1936.....	803	282,596,555	21,974	26,402,410	12,529,663	96,534,218	177,771,597	68,797,776
1937.....	823	287,473,542	23,837	30,389,958	11,599,345	115,938,578	208,205,148	77,667,225

## MANUFACTURES OF NON-METALLIC MINERALS

Table 3.—Historical Summary for the Manufactures of the Non-Metallic Minerals, 1919-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1919.....	630	185,105,024	19,436	21,710,204	7,860,780	49,670,040	107,303,444	40,872,624
1920.....	773	213,773,173	26,021	31,819,558	14,035,120	71,502,291	150,465,813	64,928,402
1921.....	755	221,270,883	21,892	26,562,672	11,936,173	65,291,775	133,580,311	56,352,363
1922.....	812	230,488,004	21,473	25,414,553	11,280,407	60,671,305	134,693,912	62,742,200
1923.....	796	235,293,833	24,343	27,494,515	12,460,736	66,630,352	137,567,128	58,476,040
1924.....	799	226,227,309	22,643	27,752,174	15,416,879	59,758,885	132,219,445	57,043,681
1925.....	878	229,150,494	22,784	28,043,405	13,752,859	62,202,189	137,371,068	61,416,020
1926.....	803	251,028,657	24,354	30,107,628	14,215,600	79,239,842	166,750,419	73,294,971
1927.....	849	268,367,971	24,860	31,905,498	15,116,972	82,851,218	167,033,638	69,065,448
1928.....	831	287,042,184	20,683	34,728,590	15,415,168	88,978,217	195,404,310	91,010,925
1929.....	843	316,692,818	29,257	38,958,390	18,135,350	112,573,103	229,774,300	99,065,847
1930.....	849	321,084,124	27,428	36,196,714	15,971,448	103,539,472	203,262,420	83,751,500
1931.....	870	314,950,411	22,455	29,211,421	13,082,311	75,644,990	168,367,553	79,640,252
1932.....	784	299,928,971	18,040	21,797,578	10,361,463	71,597,611	136,697,732	54,738,658
1933.....	770	285,139,543	16,975	19,282,401	9,430,927	69,077,701	131,325,706	52,817,078
1934.....	778	295,755,140	19,605	22,414,996	10,770,070	81,508,547	155,196,712	62,919,095
1935.....	787	287,960,329	20,472	24,518,653	11,207,442	85,072,254	162,332,932	66,053,236
1936.....	803	282,590,535	21,974	26,402,410	12,529,603	96,534,218	177,771,597	68,707,776
1937.....	823	287,473,542	23,837	30,389,958	14,599,346	115,938,578	208,205,148	77,667,225

Data for 1919 to 1936 have been revised to exclude the aerated waters industry.

Table 4.—Establishments Grouped According to Gross Production, Number of Employees and Capital Employed, 1937

	Number of plants	Capital employed	Number of employees	Gross selling value of products at works
		\$		\$
(a) Production				
Under \$5,000.....	224	2,265,578	449	546,386
\$5,000—\$10,000.....	121	1,936,296	430	864,947
10,001—25,000.....	156	4,967,701	1,036	2,336,789
25,001—50,000.....	93	7,455,826	1,224	3,307,193
50,001—100,000.....	78	15,082,709	1,732	5,627,675
100,001—250,000.....	65	17,256,459	2,663	10,785,245
250,001—500,000.....	26	14,997,641	1,745	9,190,345
500,001—1,000,000.....	24	39,565,441	2,534	17,467,750
1,000,001—5,000,000.....	24	106,233,029	6,084	56,879,000
Over \$5,000,000.....	12	77,712,862	5,940	101,193,818
<b>Total.....</b>	<b>823</b>	<b>287,473,542</b>	<b>23,837</b>	<b>208,205,148</b>
(b) Employees				
1 or 2.....	237	1,833,611	323	864,140
3—10.....	296	8,910,904	1,554	6,399,459
11—20.....	110	16,084,038	1,632	8,978,691
21—50.....	86	23,378,171	2,801	13,207,123
51—100.....	34	29,490,568	2,389	14,500,848
101—250.....	37	98,235,225	5,865	67,413,776
251—500.....	12	59,901,140	4,211	51,772,390
Over 500.....	5	48,639,879	5,062	45,067,716
<b>Total.....</b>	<b>823</b>	<b>287,473,542</b>	<b>23,837</b>	<b>208,205,148</b>
(c) Capital				
Under \$25,000.....	437	3,688,596	1,463	4,042,221
\$25,000—\$100,000.....	179	9,466,402	2,189	7,986,997
100,001—500,000.....	125	25,453,737	3,981	19,008,135
500,001—1,000,000.....	31	21,923,439	2,493	12,947,791
Over \$1,000,000.....	51	226,941,368	13,711	164,220,004
<b>Total.....</b>	<b>823</b>	<b>287,473,542</b>	<b>23,837</b>	<b>208,205,148</b>

Table 5.—Principal Statistics for the Manufactures of the Non-Metallic Minerals, by Industries and by Provinces, 1937, with Totals for 1936 and 1935

NOTE.—According to the Statistics Act, the Bureau is not authorized to publish statistics which will in any way reveal the operations of individual concerns. Consequently, in the following table the number of plants is shown by provinces and by industries, but other data have been omitted in cases where only 1 or 2 concerns are involved. The total for each province, however, includes data for the industries in which there were only 1 or 2 plants in operation.

Provinces and industries	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
<b>PRINCE EDWARD ISLAND AND NOVA SCOTIA—</b>								
Asbestos products.....	1							
Cement products.....	1							
Coke and gas.....	2							
Lime.....	2							
Petroleum products.....	1							
Products from domestic clays.....	5	971,394	184	141,754	73,200	2,514	406,846	331,132
Salt.....	1							
Stone dressing.....	13	160,921	47	46,280	2,530	49,601	146,816	94,485
Miscellaneous.....	2							
<b>Total.....</b>	<b>28</b>	<b>15,830,763</b>	<b>1,257</b>	<b>1,543,096</b>	<b>929,813</b>	<b>10,140,832</b>	<b>12,783,915</b>	<b>1,713,270</b>
<b>NEW BRUNSWICK—</b>								
Cement products.....	3	19,739	4	1,620	155	1,984	8,493	6,354
Coke and gas.....	1							
Glass.....	1							
Lime.....	4	165,982	84	78,429	38,730	4,300	150,362	107,332
Petroleum products.....	1							
Products from domestic clays.....	5	263,458	79	54,692	26,710	1,209	123,876	95,957
Stone dressing.....	7	80,268	33	30,760	2,406	17,681	75,417	55,330
Miscellaneous.....	2							
<b>Total.....</b>	<b>24</b>	<b>1,584,338</b>	<b>264</b>	<b>229,170</b>	<b>87,390</b>	<b>243,148</b>	<b>947,490</b>	<b>616,952</b>
<b>QUEBEC—</b>								
Abrasive products.....	1							
Asbestos products.....	6	1,411,039	332	318,929	72,131	550,404	1,227,285	604,760
Cement products.....	25	1,231,444	241	214,559	17,417	519,966	967,724	430,341
Cement.....	2							
Coke and gas.....	4	12,055,904	633	1,020,370	862,199	3,176,005	10,072,569	2,034,365
Glass.....	18	6,245,619	1,333	1,510,735	464,353	1,483,629	4,995,111	3,047,129
Lime.....	22	1,474,444	290	245,857	257,241	26,623	909,116	625,252
Petroleum products.....	8	24,247,079	1,212	2,117,224	1,513,148	26,680,351	33,906,272	5,712,773
Products from domestic clays.....	21	5,910,736	532	481,861	247,074	23,776	1,053,153	782,303
Products from imported clays.....	4	1,523,790	257	312,937	78,816	200,978	829,901	550,107
Sand-lime brick.....	1							
Stone dressing.....	46	1,124,196	269	300,778	29,388	242,724	691,420	419,308
Miscellaneous.....	14	3,853,115	283	357,313	131,972	867,940	2,217,235	1,217,323
<b>Total.....</b>	<b>172</b>	<b>82,836,298</b>	<b>5,900</b>	<b>7,530,714</b>	<b>4,599,848</b>	<b>34,336,797</b>	<b>61,369,188</b>	<b>22,372,543</b>
<b>ONTARIO—</b>								
Abrasive products.....	15							
Asbestos products.....	6	565,276	110	137,837	18,956	254,177	642,654	369,621
Cement products.....	66	2,136,477	529	523,100	37,069	891,536	2,018,530	1,080,925
Cement.....	3	19,201,291	407	510,991	814,235	193,884	3,657,067	2,648,948
Coke and gas.....	19	52,099,768	2,459	3,477,059	1,435,278	10,380,104	23,554,869	11,739,487
Glass.....	48	7,967,599	2,158	2,463,052	546,928	3,764,534	8,353,266	4,041,804
Lime.....	19	1,817,581	250	269,793	469,692	21,886	2,152,644	1,061,066
Petroleum products.....	14	20,444,475	2,129	3,360,737	1,592,353	24,751,152	28,842,214	2,498,709
Products from domestic clays.....	82	9,439,675	1,027	971,782	571,058	66,738	2,033,845	1,396,049
Products from imported clays.....	14	2,912,019	959	950,976	207,853	769,946	2,760,718	1,783,059
Salt.....	7	3,033,644	398	541,265	147,086	53,888	1,539,599	1,338,625
Sand-lime brick.....	4							
Stone dressing.....	121	2,835,211	613	738,212	71,768	696,087	1,924,360	1,156,505
Miscellaneous.....	17	2,936,188	559	693,092	210,446	1,306,816	4,044,371	2,527,109
<b>Total.....</b>	<b>435</b>	<b>132,441,820</b>	<b>12,857</b>	<b>16,571,648</b>	<b>7,162,365</b>	<b>47,251,189</b>	<b>94,994,715</b>	<b>40,581,161</b>

Table 5.—Principal Statistics for the Manufactures of the Non-Metallic Minerals, by Industries and by Provinces, 1937, with Totals for 1936 and 1935—Continued

Provinces and industries	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
	f	\$		\$	\$	\$	\$	\$
<b>MANITOBA—</b>								
Cement products.....	2							
Cement.....	1							
Coke and gas.....	2							
Glass.....	3	79,862	22	25,634	1,915	10,288	42,359	30,156
Lime.....	4	601,071	97	67,635	44,822	43,130	215,165	127,213
Petroleum products.....	3	614,858	66	74,834	38,150	991,665	1,569,130	539,315
Products from domestic clays.....	5	206,549	58	38,708	14,348	390	95,531	80,793
Salt.....	1							
Stone dressing.....	13	243,401	58	55,689	4,549	33,540	115,574	77,485
Miscellaneous.....	3	575,212	43	50,569	10,429	72,027	463,214	380,758
<b>Total.....</b>	<b>37</b>	<b>12,790,659</b>	<b>651</b>	<b>675,599</b>	<b>323,649</b>	<b>1,671,818</b>	<b>4,370,924</b>	<b>2,375,457</b>
<b>SASKATCHEWAN—</b>								
Products from imported clays.....	1							
Cement products.....	2							
Petroleum products.....	17	4,697,033	463	670,500	349,850	5,937,890	7,659,551	1,371,811
Products from domestic clays.....	5	836,706	43	46,062	13,419	1,157	115,330	100,754
Stone dressing.....	10	154,058	37	38,032	3,183	33,949	100,638	63,506
Miscellaneous.....	2							
<b>Total.....</b>	<b>37</b>	<b>6,359,907</b>	<b>608</b>	<b>805,362</b>	<b>396,128</b>	<b>6,058,679</b>	<b>8,029,403</b>	<b>1,574,596</b>
<b>ALBERTA—</b>								
Cement products.....	2							
Cement.....	1							
Coke and gas.....	1							
Glass.....	1							
Lime.....	3	209,654	22	26,727	9,266	16,137	93,478	68,075
Petroleum products.....	8	3,863,406	410	642,974	197,588	5,768,122	8,373,725	2,410,015
Products from domestic clays.....	10	1,895,534	214	186,961	30,919	3,100	338,638	304,616
Stone dressing.....	5	243,662	34	45,646	2,543	16,735	109,940	90,662
Miscellaneous.....	3	100,973	21	21,538	3,945	47,365	104,608	53,298
<b>Total.....</b>	<b>34</b>	<b>12,061,358</b>	<b>1,056</b>	<b>1,327,645</b>	<b>382,897</b>	<b>6,611,045</b>	<b>10,867,020</b>	<b>3,870,078</b>
<b>BRITISH COLUMBIA—</b>								
Cement products.....	8	167,384	34	38,805	2,135	132,842	246,295	111,318
Cement.....	2							
Coke and gas.....	4	12,265,870	313	449,758	174,774	705,901	2,417,251	1,536,576
Glass.....	6	109,642	36	34,592	1,303	43,890	96,005	50,812
Lime.....	3	593,039	81	43,041	29,317	51,814	154,037	72,906
Petroleum products*.....	5	5,270,813	377	643,669	303,556	8,455,693	10,398,479	1,739,430
Products from domestic clays.....	10	903,160	170	172,972	56,027	4,681	349,640	288,932
Stone dressing.....	14	371,714	68	87,169	5,842	52,568	207,277	148,876
Miscellaneous.....	4	269,861	48	69,745	14,104	138,387	309,584	357,093
<b>Total*.....</b>	<b>56</b>	<b>23,468,459</b>	<b>1,244</b>	<b>1,706,724</b>	<b>717,255</b>	<b>9,622,070</b>	<b>14,902,493</b>	<b>4,563,163</b>
<b>Canada, 1937—</b>								
Abrasive products.....	16	7,151,369	1,289	1,995,589	1,222,529	4,351,854	14,174,351	8,599,968
Asbestos products.....	13	2,003,639	451	464,882	91,232	812,639	1,896,677	992,786
Cement products.....	199	3,695,565	840	801,021	57,511	1,568,870	3,299,341	1,674,950
Cement.....	9	51,159,672	1,083	1,373,444	1,904,418	5,019,915	9,095,862	6,650,334
Coke and Gas.....	33	91,911,250	1,027	5,709,569	2,906,492	17,217,957	41,702,929	21,578,880
Glass.....	77	15,250,801	3,799	4,288,031	1,030,993	8,768,238	14,437,259	7,637,519
Lime.....	57	4,931,831	822	281,274	87,131	167,827	3,821,917	2,785,959
Petroleum products.....	57	61,280,266	5,137	8,246,843	4,450,005	59,401,880	99,454,014	13,602,129
Products from domestic clays.....	143	20,427,232	2,287	2,094,792	1,032,755	103,568	4,516,839	3,380,536
Products from imported clays.....	19	4,157,109	1,218	1,265,913	286,499	971,197	3,599,181	2,311,185
Salt.....	9	4,801,368	543	653,116	184,117	75,947	1,799,169	1,540,401
Sand-lime brick.....	5	547,691	81	72,219	20,095	63,285	197,921	114,541
Stone dressing.....	229	5,213,131	1,159	1,352,566	122,209	1,142,885	3,371,242	2,106,148
Miscellaneous.....	47	8,951,098	1,051	1,286,676	420,739	2,752,716	7,965,144	4,661,689
<b>Total.....</b>	<b>823</b>	<b>287,473,542</b>	<b>23,837</b>	<b>30,389,958</b>	<b>14,590,345</b>	<b>115,938,578</b>	<b>208,205,148</b>	<b>77,667,225</b>

\* Includes 1 petroleum refinery in the Northwest Territories.



Table 5.—Principal Statistics for the Manufactures of the Non-Metallic Minerals, by Industries and by Provinces, 1937, with Totals for 1936 and 1935—Concluded

Provinces and industries	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
<b>Canada, 1936—</b>								
Abrasive products	15	6,241,502	1,149	1,528,184	967,236	3,164,252	10,631,533	6,500,045
Asbestos products	13	1,955,676	372	376,574	79,290	622,530	1,293,909	592,089
Cement products	97	3,053,745	602	569,209	50,036	761,021	1,713,317	900,290
Cement	9	53,313,991	1,052	1,196,664	1,576,412	592,929	6,908,192	1,739,121
Coke and Gas	42	93,088,722	4,116	5,714,483	2,781,045	16,585,571	39,871,898	20,505,282
Glass	68	14,687,958	3,323	3,522,157	851,774	4,208,706	11,091,762	6,034,282
Lime	57	6,106,901	799	640,322	743,663	96,316	3,335,970	2,485,991
Petroleum products	63	61,883,926	5,019	7,309,955	3,932,634	66,555,885	88,802,363	15,313,844
Products from domestic clays	140	19,863,431	1,775	1,496,148	695,001	71,353	3,471,027	2,704,673
Products from imported clays	20	4,216,334	1,079	1,001,047	211,762	708,576	2,906,432	1,983,094
Salt	9	3,856,187	506	640,644	181,502	31,195	1,775,144	1,560,447
Sand-lime brick	5	598,510	75	71,021	17,838	55,998	189,668	115,832
Stone dressing	227	5,766,308	1,245	1,357,808	127,151	1,070,802	3,309,911	2,111,858
Miscellaneous	38	7,934,204	862	976,184	311,529	2,006,934	5,469,441	3,150,928
<b>Total</b>	<b>803</b>	<b>282,596,535</b>	<b>21,974</b>	<b>26,402,410</b>	<b>12,529,603</b>	<b>96,534,218</b>	<b>177,771,597</b>	<b>68,707,776</b>
<b>Canada, 1935—</b>								
Abrasive products	15	5,291,916	976	1,314,272	782,553	2,684,406	8,643,930	5,176,971
Asbestos products	13	1,703,301	327	323,854	66,793	518,994	1,130,282	514,495
Cement products	94	3,024,286	519	451,625	37,086	459,296	1,154,138	657,756
Cement	9	52,451,004	924	1,027,416	1,227,410	394,264	5,580,043	3,958,369
Coke and gas	44	98,939,160	4,107	5,627,864	2,432,111	15,233,519	38,474,789	20,809,159
Glass	68	14,168,375	3,135	3,291,074	837,025	3,618,175	9,933,348	5,478,148
Lime	54	5,707,391	756	556,049	686,486	124,251	2,925,791	2,115,354
Petroleum products	58	64,707,454	4,856	7,453,224	3,817,049	58,869,814	79,950,525	17,233,662
Products from domestic clays	139	20,502,006	1,728	1,387,924	618,955	60,583	3,012,563	2,332,985
Products from imported clays	20	4,449,314	895	864,212	187,180	530,735	2,174,977	1,457,062
Salt	10	3,776,333	473	597,785	175,240	38,700	1,896,978	1,667,038
Sand-lime brick	6	608,899	71	58,700	17,018	43,083	154,950	94,819
Stone dressing	222	5,180,882	1,066	1,174,229	107,836	1,010,999	3,075,118	1,960,283
Miscellaneous	35	7,156,803	639	690,428	184,930	1,485,435	4,227,300	2,567,135
<b>Total</b>	<b>787</b>	<b>287,960,329</b>	<b>20,472</b>	<b>24,518,653</b>	<b>11,207,442</b>	<b>85,072,254</b>	<b>162,332,932</b>	<b>66,653,236</b>

Table 6.—Capital Employed in the Manufactures of the Non-Metallic Minerals in Canada, by Industries and by Provinces, 1936-1937

NOTE.—In cases where there were only 1 or 2 plants in an industry in any province the statistics for the industry cannot be shown separately and have been omitted from the following table. However, the total for each province includes data for industries in which there were only 1 or 2 concerns in operation. For the distribution of plants by industries and by provinces—See Table 5.

Provinces and industries	1937			Total 1937	Total 1936
	Present value of lands, buildings, machinery, tools and other equipment	Inventory value of materials on hand, finished products and stocks in process	Cash, bills and accounts receivable, prepaid expenses, etc.		
	\$	\$	\$	\$	\$
<b>PRINCE EDWARD ISLAND AND NOVA SCOTIA—</b>					
Products from domestic clays.....	785,484	134,714	51,100	971,294	908,612
Stone dressing.....	68,800	52,821	39,300	160,921	124,162
<b>Total.....</b>	<b>10,646,765</b>	<b>4,396,867</b>	<b>887,131</b>	<b>15,930,763</b>	<b>13,750,785</b>
<b>NEW BRUNSWICK—</b>					
Cement products.....	14,198	2,861	2,680	19,739	.....
Lime.....	119,377	22,335	24,250	165,962	239,694
Products from domestic clays.....	198,783	34,046	30,629	263,458	266,627
Stone dressing.....	45,725	17,613	16,930	80,268	72,453
<b>Total.....</b>	<b>1,009,914</b>	<b>144,550</b>	<b>429,874</b>	<b>1,584,338</b>	<b>1,527,633</b>
<b>QUEBEC—</b>					
Asbestos products.....	596,708	428,439	385,892	1,411,039	1,440,159
Cement products.....	937,046	128,284	166,114	1,231,444	855,940
Coke and gas.....	9,348,429	1,942,949	764,526	12,055,904	12,652,318
Glass.....	3,828,525	1,271,304	1,145,790	6,245,619	5,191,633
Lime.....	1,118,320	102,800	253,324	1,474,444	1,682,912
Petroleum products.....	12,563,123	11,541,060	142,896	24,247,079	21,022,130
Products from domestic clays.....	5,106,092	490,080	314,564	5,910,736	5,504,590
Products from imported clays.....	1,151,076	270,662	102,052	1,523,790	1,577,874
Stone dressing.....	737,671	285,569	100,956	1,124,196	1,015,058
Miscellaneous.....	2,607,049	864,487	381,579	3,853,115	3,721,963
<b>Total.....</b>	<b>58,968,566</b>	<b>18,233,013</b>	<b>5,614,719</b>	<b>82,836,298</b>	<b>80,494,994</b>
<b>ONTARIO—</b>					
Asbestos products.....	295,547	189,211	80,518	565,276	490,728
Cement products.....	1,350,515	329,536	456,426	2,136,477	1,677,657
Coke and gas.....	42,152,186	5,687,277	4,260,325	52,099,788	53,385,545
Glass.....	4,798,946	1,485,246	1,683,407	7,967,599	7,803,399
Lime.....	1,595,672	202,694	19,215	1,817,581	2,434,765
Petroleum products.....	13,127,243	6,962,450	354,782	20,444,475	20,861,563
Products from domestic clays.....	6,981,097	1,029,131	1,429,447	9,439,675	9,416,389
Products from imported clays.....	1,703,366	690,558	518,095	2,912,019	2,614,463
Salt.....	2,200,609	412,318	420,717	3,033,644	2,909,954
Stone dressing.....	1,810,785	552,053	472,373	2,835,211	3,521,175
Miscellaneous.....	1,529,689	761,593	644,876	2,936,158	2,749,876
<b>Total.....</b>	<b>97,533,693</b>	<b>21,140,496</b>	<b>13,767,631</b>	<b>132,441,820</b>	<b>128,581,326</b>
<b>MANITOBA—</b>					
Glass.....	48,700	19,123	11,839	79,662	.....
Lime.....	563,625	37,446	.....	601,071	1,090,293
Petroleum products.....	279,495	190,312	145,051	614,858	497,039
Products from domestic clays.....	121,640	21,088	63,824	206,549	219,279
Stone dressing.....	67,757	99,834	75,810	243,401	269,280
Miscellaneous.....	399,210	90,249	85,753	575,212	.....
<b>Total.....</b>	<b>11,205,777</b>	<b>777,532</b>	<b>807,350</b>	<b>12,790,659</b>	<b>14,861,066</b>
<b>SASKATCHEWAN—</b>					
Petroleum products.....	2,237,232	2,204,887	254,914	4,697,033	4,833,294
Products from domestic clays.....	732,951	60,901	42,794	836,706	871,074
Stone dressing.....	64,432	39,571	50,055	154,058	150,438
<b>Total.....</b>	<b>3,620,366</b>	<b>2,350,477</b>	<b>389,664</b>	<b>6,359,997</b>	<b>6,025,394</b>

Table 6.—Capital Employed in the Manufactures of the Non-Metallic Minerals in Canada, by Industries and by Provinces, 1936-1937—Concluded

Provinces and industries	1937			Total 1937	Total 1936
	Present value of lands, buildings, machinery, tools and other equipment	Inventory value of materials on hand, finished products and stocks in process	Cash, bills and accounts receivable, prepaid expenses, etc.		
	\$	\$	\$	\$	\$
<b>ALBERTA—</b>					
Lime.....	168,175	12,394	29,085	209,654	295,817
Petroleum products.....	1,857,429	1,783,115	222,862	3,863,406	5,260,904
Products from domestic clays.....	1,471,300	249,198	175,030	1,895,534	1,873,767
Stone dressing.....	128,304	32,820	82,538	243,662	257,868
Miscellaneous.....	152,003	21,353	17,617	190,973	.....
<b>Total.....</b>	<b>8,516,643</b>	<b>2,483,635</b>	<b>1,061,020</b>	<b>12,061,358</b>	<b>13,817,679</b>
<b>BRITISH COLUMBIA—</b>					
Cement products.....	136,653	10,287	20,444	167,384	332,630
Coke and gas.....	11,606,255	282,631	376,984	12,265,870	12,263,119
Glass.....	31,302	39,391	38,949	109,642	71,723
Lime.....	314,175	73,506	205,958	593,639	430,140
Petroleum products*.....	2,493,655	2,557,314	219,844	5,270,813	5,553,666
Products from domestic clays.....	675,854	147,791	79,535	903,180	804,143
Stone dressing.....	272,856	32,145	66,713	371,714	355,874
Miscellaneous.....	161,992	50,080	57,789	269,861	290,642
<b>Total*.....</b>	<b>18,551,751</b>	<b>3,503,712</b>	<b>1,412,906</b>	<b>23,468,459</b>	<b>23,537,718</b>
<b>Canada—</b>					
Abrasive products.....	3,416,068	2,181,608	1,553,693	7,151,369	6,241,502
Asbestos products.....	913,323	617,650	472,686	2,003,659	1,955,676
Cement products.....	2,545,132	485,569	664,859	3,695,565	3,053,745
Cement.....	47,324,681	2,150,776	4,675,215	54,150,672	53,343,991
Coke and gas.....	75,829,759	9,619,807	6,461,681	91,911,250	93,088,722
Glass.....	9,649,731	3,067,912	3,033,158	15,750,801	14,687,098
Lime.....	3,945,344	464,655	531,832	4,931,831	6,106,901
Petroleum products.....	24,991,745	27,913,931	1,371,590	64,280,266	61,883,926
Products from domestic clays.....	16,073,201	2,167,009	2,187,032	20,427,232	19,863,431
Products from imported clays.....	2,869,442	963,520	621,117	4,457,109	4,216,431
Salt.....	3,118,733	424,893	447,912	4,001,568	3,856,187
Sand-lime brick.....	472,504	21,984	43,203	547,691	598,510
Stone dressing.....	3,196,330	1,112,426	904,675	5,213,431	5,766,308
Miscellaneous.....	5,707,417	1,848,602	1,395,079	8,951,098	7,931,204
<b>Total.....</b>	<b>210,053,415</b>	<b>53,050,342</b>	<b>24,369,785</b>	<b>287,473,542</b>	<b>282,596,535</b>

\*Includes 1 petroleum refinery in the Northwest Territories.

Table 7.—Employees, Salaries and Wages in the Manufactures of the Non-Metallic Minerals, by Industries and by Provinces, 1936-1937

NOTE.—In cases where there were only 1 or 2 plants in an industry in any province, the statistics for the industry cannot be shown separately and have been omitted from the following table. However the total for each province includes data for the industries in which there were only 1 or 2 plants in operation. For the distribution of plants by provinces and by industries see Table 4.

Provinces and industries	Average number of employees				Total employees	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
					\$	\$	\$	
<b>PRINCE EDWARD ISLAND, AND NOVA SCOTIA—</b>								
Products from domestic clay	8	2	154		164	22,283	119,471	141,754
Stone dressing	11	1	35		47	15,730	30,550	46,280
<b>Total</b>	<b>113</b>	<b>27</b>	<b>1,117</b>		<b>1,257</b>	<b>297,668</b>	<b>1,245,428</b>	<b>1,543,096</b>
<b>NEW BRUNSWICK—</b>								
Lime	6	2	76		84	16,631	61,798	78,429
Products from domestic clay	8	1	70		79	11,106	43,586	54,692
Stone dressing	8	3	21	1	33	12,055	18,705	30,760
<b>Total</b>	<b>37</b>	<b>9</b>	<b>217</b>	<b>1</b>	<b>264</b>	<b>58,735</b>	<b>170,435</b>	<b>229,170</b>
<b>QUEBEC—</b>								
Asbestos products	51	5	249	27	332	86,563	232,366	318,929
Cement products	43	2	196		241	48,771	164,788	214,559
Coke and gas	184	36	413		633	401,893	618,477	1,020,370
Glass	130	40	1,007	156	1,333	332,202	1,178,533	1,510,735
Lime	22	2	266		290	30,640	215,217	245,857
Petroleum products	172	15	1,025		1,212	470,286	1,646,938	2,117,224
Products from domestic clay	61	2	409		532	112,496	369,365	481,861
Products from imported clay	27	7	212	11	257	66,502	246,435	312,937
Stone dressing	84	5	180		269	120,061	180,715	300,776
Miscellaneous	48	10	202	23	283	112,460	244,853	357,313
<b>Total</b>	<b>850</b>	<b>125</b>	<b>4,708</b>	<b>217</b>	<b>5,900</b>	<b>1,838,123</b>	<b>5,692,591</b>	<b>7,530,714</b>
<b>ONTARIO—</b>								
Asbestos products	20	10	80		110	61,680	76,157	137,837
Cement products	89	12	423	5	529	135,658	387,442	523,100
Coke and gas	514	183	1,760	2	2,459	1,023,704	2,453,355	3,477,059
Glass	210	73	1,717	158	2,158	459,946	2,003,106	2,463,052
Lime	18	4	228		250	31,256	238,537	269,793
Petroleum products	328	53	1,742	6	2,129	890,703	2,470,034	3,360,737
Products from domestic clay	85	19	923		1,027	200,617	770,865	971,482
Products from imported clay	67	32	677	183	959	175,099	775,877	950,976
Salt	80	38	280		398	242,498	298,767	541,265
Stone dressing	183	20	407	3	613	294,334	443,878	738,212
Miscellaneous	66	15	474	4	559	160,420	532,672	693,092
<b>Total</b>	<b>1,891</b>	<b>322</b>	<b>10,082</b>	<b>362</b>	<b>12,857</b>	<b>4,351,482</b>	<b>12,226,166</b>	<b>16,571,648</b>
<b>MANITOBA—</b>								
Coke and gas								
Glass	8	1	10	3	22	13,598	12,036	25,634
Lime	6		91		97	9,757	57,878	67,635
Petroleum products	17	4	46		66	34,593	40,241	74,834
Products from domestic clay	6		52		58	14,800	23,908	38,708
Stone dressing	17	3	38		58	24,471	31,218	55,689
Miscellaneous	6	1	36		43	16,736	33,833	50,569
<b>Total</b>	<b>112</b>	<b>35</b>	<b>501</b>	<b>3</b>	<b>651</b>	<b>216,199</b>	<b>459,406</b>	<b>675,599</b>
<b>SASKATCHEWAN—</b>								
Petroleum products	104	15	342	2	463	211,627	458,873	670,500
Products from domestic clay	8		35		43	16,370	29,692	46,062
Stone dressing	16	1	20		37	19,467	18,565	38,032
<b>Total</b>	<b>149</b>	<b>19</b>	<b>439</b>	<b>2</b>	<b>608</b>	<b>261,301</b>	<b>544,061</b>	<b>805,362</b>
<b>ALBERTA—</b>								
Lime	3		19		22	5,900	20,827	26,727
Petroleum products	60	10	340		410	169,949	473,025	642,974
Products from domestic clay	40	3	171		214	60,863	126,098	186,961
Stone dressing	10	3	19	2	34	22,245	23,401	45,646
Miscellaneous	5		16		21	9,424	12,114	21,538
<b>Total</b>	<b>136</b>	<b>20</b>	<b>882</b>	<b>18</b>	<b>1,056</b>	<b>314,612</b>	<b>1,013,033</b>	<b>1,327,615</b>

Table 7.—Employees, Salaries and Wages in the Manufactures of the Non-Metallic Minerals, by Industries and by Provinces, 1936-1937—Concluded

Provinces and industries	Average number of employees				Total employees	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
					\$	\$	\$	
<b>BRITISH COLUMBIA—</b>								
Cement products.....	11	1	21	1	34	19,112	19,693	
Coke and gas.....	55	2	256		313	112,488	337,270	
Glass.....	8	2	26		36	10,390	24,202	
Lime.....	8	2	71		81	13,411	29,630	
Petroleum products.....	76	15	285	1	377	198,824	444,845	
Products from domestic clay	16	2	152		170	33,056	139,916	
Stone dressing.....	21	2	44	1	68	36,547	60,622	
Miscellaneous.....	5		43		48	10,044	59,701	
<b>Total.....</b>	<b>221</b>	<b>28</b>	<b>992</b>	<b>3</b>	<b>1,244</b>	<b>486,786</b>	<b>1,219,938</b>	
<b>Canada, 1937—</b>								
Abrasive products.....	186	59	1,043	1	1,289	575,319	1,329,270	
Asbestos products.....	72	15	337	27	451	150,213	314,639	
Cement products.....	152	17	665	6	840	215,917	588,977	
Cement.....	84	6	983		1,083	211,728	1,161,666	
Coke and gas.....	836	253	2,936	2	4,027	1,690,716	4,018,823	
Glass.....	393	132	2,981	301	3,807	847,463	3,441,568	
Lime.....	64	10	798		872	109,193	673,079	
Petroleum products.....	810	129	4,189	9	5,137	2,156,901	6,089,942	
Products from domestic clays.....	232	29	2,026		2,287	471,891	1,622,901	
Products from imported clays.....	84	39	891	194	1,218	241,601	1,024,312	
Salt.....	86	41	416		543	260,753	392,383	
Sand-lime brick.....	14	1	66		81	20,089	52,130	
Stone dressing.....	350	38	764	7	1,159	544,312	897,654	
Miscellaneous.....	154	27	843	27	1,051	329,068	957,698	
<b>Total.....</b>	<b>3,509</b>	<b>784</b>	<b>18,938</b>	<b>606</b>	<b>23,837</b>	<b>7,824,906</b>	<b>22,565,952</b>	
<b>Canada, 1936—</b>								
Abrasive products.....	188	59	902		1,149	583,954	1,024,240	
Asbestos products.....	50	15	284	23	372	125,220	251,354	
Cement products.....	121	12	461	5	602	173,869	395,350	
Cement.....	79	5	988		1,072	173,001	1,022,663	
Coke and gas.....	958	315	2,838	5	4,116	2,023,881	3,690,692	
Glass.....	318	99	2,637	269	3,323	701,163	2,821,054	
Lime.....	64	9	726		799	90,288	550,034	
Petroleum products.....	823	146	4,041	9	5,019	2,038,360	5,271,595	
Products for domestic clays.....	202	27	1,546		1,775	390,737	1,107,411	
Products from imported clays.....	103	38	742	196	1,079	244,608	756,439	
Salt.....	82	40	347	37	586	225,170	415,474	
Sand-lime brick.....	14	1	66		75	18,621	52,400	
Stone dressing.....	328	44	864	5	1,245	499,316	858,292	
Miscellaneous.....	121	28	690	23	862	277,582	698,597	
<b>Total.....</b>	<b>3,454</b>	<b>838</b>	<b>17,110</b>	<b>572</b>	<b>21,974</b>	<b>7,485,905</b>	<b>18,916,505</b>	

## MANUFACTURES OF NON-METALLIC MINERALS

Table 8.—Wage-earners Employed in the Manufactures of the Non-Metallic Minerals, by Months and by Industries, 1937, with Totals for 1936

Months	Abrasive products	Asbestos products	Cement products	Cement	Products from domestic clays	Coke and gas	Glass	Products from imported clays
January.....	1,000	331	420	757	891	2,826	3,404	1,004
February.....	1,027	336	436	784	919	2,835	3,301	1,003
March.....	1,076	336	495	847	1,150	2,848	3,176	1,018
April.....	1,127	340	623	991	1,540	2,902	3,288	1,075
May.....	1,178	386	744	985	2,484	3,005	3,408	1,114
June.....	1,181	399	845	1,090	2,827	3,078	3,512	1,145
July.....	1,205	372	798	1,095	2,888	3,011	3,473	1,150
August.....	1,192	383	811	1,090	2,938	2,993	3,473	1,189
September.....	1,168	390	774	1,086	2,661	3,035	3,451	1,202
October.....	1,155	376	810	1,082	2,438	2,956	3,077	1,151
November.....	1,124	375	646	1,004	2,011	2,929	3,076	1,055
December.....	1,121	368	616	947	1,481	2,858	3,161	1,023
<b>Average for 1937.....</b>	<b>1,044</b>	<b>364</b>	<b>671</b>	<b>983</b>	<b>2,026</b>	<b>2,938</b>	<b>3,314</b>	<b>1,085</b>
<b>Average for 1936.....</b>	<b>902</b>	<b>307</b>	<b>466</b>	<b>968</b>	<b>1,546</b>	<b>2,843</b>	<b>2,906</b>	<b>938</b>

Months	Lime	Petroleum products	Salt	Sand-lime brick	Stone dressing	Miscellaneous	Total
January.....	632	3,754	348	38	434	770	16,609
February.....	685	3,834	370	45	407	761	16,743
March.....	698	3,994	376	57	501	812	17,384
April.....	788	4,165	401	82	699	839	18,860
May.....	863	4,310	429	83	740	872	20,601
June.....	878	4,364	427	82	868	898	21,594
July.....	892	4,529	452	71	910	871	21,723
August.....	839	4,476	444	83	925	912	21,748
September.....	868	4,425	451	77	946	948	21,482
October.....	874	4,327	437	64	995	950	20,692
November.....	821	4,230	456	62	934	985	19,768
December.....	690	4,025	371	48	775	848	18,332
<b>Average for 1937.....</b>	<b>798</b>	<b>4,198</b>	<b>416</b>	<b>66</b>	<b>771</b>	<b>870</b>	<b>19,544</b>
<b>Average for 1936.....</b>	<b>726</b>	<b>4,050</b>	<b>384</b>	<b>60</b>	<b>873</b>	<b>713</b>	<b>17,682</b>

Table 9.—Wage-Earners Employed in the Manufactures of the Non-Metallic Minerals, by Months and by Provinces, 1937, with Totals 1936

Months	Prince Edward Island	Nova Scotia	New Brunsw- wick	Quebec	Ontario	Mani- toba	Saskat- chewan	Alberta	British Colum- bia	Canada
January.....	7	1,006	125	3,928	9,320	377	295	733	818	16,609
February.....	7	1,021	133	4,021	9,336	378	270	755	822	16,743
March.....	11	1,030	154	4,226	9,464	425	327	824	923	17,384
April.....	11	1,060	199	4,543	10,214	453	455	962	963	18,860
May.....	8	1,131	280	5,213	10,934	536	579	956	964	20,601
June.....	8	1,139	282	5,511	11,391	613	562	982	1,106	21,594
July.....	8	1,203	273	5,650	11,305	635	519	1,032	1,098	21,723
August.....	8	1,199	271	5,742	11,294	609	518	1,037	1,070	21,748
September.....	8	1,173	272	5,593	11,234	619	485	995	1,103	21,482
October.....	8	1,142	248	5,245	11,130	550	460	913	996	20,692
November.....	8	1,121	208	5,064	10,629	411	422	868	1,037	19,768
December.....	8	1,062	171	4,563	10,041	388	389	725	985	18,332
<b>Average for 1937.....</b>	<b>9</b>	<b>1,108</b>	<b>218</b>	<b>4,925</b>	<b>10,444</b>	<b>504</b>	<b>441</b>	<b>900</b>	<b>995</b>	<b>19,544</b>
<b>Average for 1936.....</b>	<b>7</b>	<b>988</b>	<b>199</b>	<b>4,205</b>	<b>9,493</b>	<b>447</b>	<b>427</b>	<b>906</b>	<b>1,010</b>	<b>17,682</b>

## MANUFACTURES OF NON-METALLIC MINERALS

Table 10.—Fuel and Electricity Used in the Manufactures of the Non-Metallic

NOTE.—Figures for coke, fuel oil and manufactured gas include amounts used in

Industries	Bituminous coal		Anthracite coal	Lignite coal	Coke
	From Canadian mines	Imported		From Canadian mines	
	Tons	Tons	Tons	Tons	Tons
Abrasive products—	Quantity	173	6,782	390	89
	\$	1,317	44,219	3,646	794
Asbestos products—	Quantity	4,050	20	9	10
	\$	24,306	105	105	105
Cement products—	Quantity	1,666	1,992	122	20
	\$	10,890	13,370	1,493	100
Cement—	Quantity	145,791	90,925		
	\$	760,706	513,417		
Products from domestic clays—	Quantity	26,197	83,241	1,350	1,552
	\$	153,285	555,462	11,510	3,156
Coke and gas—	Quantity	7,901	7,899	25	269
	\$	30,426	41,093	250	807
Glass—	Quantity	24,382	20,814	241	
	\$	133,493	148,534	2,390	
Products from imported clays—	Quantity	913	22,859	6	
	\$	5,506	162,629	103	
Lime—	Quantity	37,588	67,647	111	84
	\$	224,911	339,817	619	311
Petroleum products—	Quantity	365	28,378	190	
	\$	2,240	129,953	1,409	
Salt—	Quantity		23,607	3,812	7,503
	\$		106,106	17,059	25,471
Sand-lime brick—	Quantity	105	2,226		
	\$	526	13,398		
Stone dressing—	Quantity	308	1,397	143	
	\$	2,469	8,940	1,793	
Miscellaneous—	Quantity	3,937	7,772	734	28,661
	\$	22,152	47,525	5,164	29,610
<b>Canada, 1937</b> .....	<b>Quantity</b>	<b>253,376</b>	<b>365,559</b>	<b>7,133</b>	<b>38,089</b>
	<b>\$</b>	<b>1,372,287</b>	<b>2,124,574</b>	<b>45,541</b>	<b>59,455</b>
<b>Canada, 1936</b> .....	<b>Quantity</b>	<b>222,675</b>	<b>280,151</b>	<b>7,370</b>	<b>6,596</b>
	<b>\$</b>	<b>1,123,390</b>	<b>1,600,096</b>	<b>44,355</b>	<b>22,799</b>



Minerals, by Kinds and by Industries, 1937, with Totals for 1936

the producing companies' own works for fuel or for heating stills, ovens and retorts.

Gasoline	Kerosene	Fuel oil	Wood	Gas		Other fuel	Electricity	Total
				Manufactured	Natural			
Imp. gals.	Imp. gals.	Imp. gals.	Cords	M cu. ft.	M cu. ft.	\$	K.W.H.	\$
516	130	181,328	1	822	2,082		419,282,048	
131	23	12,066	3	667	1,503	1	1,158,159	1,222,529
156	1,331	374,576		281			2,772,393	
39	213	25,360		269			40,750	31,252
6,047	364	240	74	658	45		754,189	
1,635	82	23	348	560	44	7,470	20,783	57,511
108,493	2,418	15,982	61				61,045,600	
20,713	462	1,863	228				606,969	1,964,418
52,337	3,235	39,029	31,177		878,233		10,315,203	
11,264	779	4,034	116,599		29,672	686	141,420	1,632,755
14,267		3,342	12	15,316,006			47,557,208	
2,086		145	71	1,825,372		7,125	268,038	2,906,092
1,767	600	1,790,328	23	19,462	1,046,783		34,195,802	
470	105	119,049	146	16,659	373,276	7,575	227,218	1,630,993
6,403	176	525,230	53	376	81,739		3,254,764	
1,464	24	39,075	280	315	33,568		32,040	286,499
38,923	1,590	550,554	46,078				8,604,644	
8,665	189	24,060	134,499			4	48,358	871,131
176,412	36,622	54,899,224	433	6,199,338	1,095,926		55,153,049	
16,804	2,815	2,111,836	1,397	1,442,999	98,829	213,288	419,513	4,456,065
2,918	250	169,043					2,754,560	
517	63	16,398					17,293	163,117
							314,370	
							6,171	20,095
7,390	1,566	68,540	708	148	2,970		5,175,879	
1,923	135	4,296	2,977	138	1,572	640	90,419	122,209
2,480	46	593,891	8	103,975	6,928		98,117,891	
534	13	41,967	47	10,357	2,206		246,468	420,739
418,109	48,328	59,211,307	78,628	21,641,066	3,114,706		749,297,600	
66,245	4,963	2,400,172	256,895	3,297,336	540,670	236,789	3,323,599	11,599,345
191,730	6,663	57,895,218	62,325	20,314,124	2,750,001		656,689,734	
37,915	1,179	2,214,437	199,749	2,923,678	461,326	25,709	2,923,837	12,529,603

## MANUFACTURES OF NON-METALLIC MINERALS

Table 11.—Fuel and Electricity Used in the Manufactures of the

NOTE.—Figures for coke, fuel oil and manufactured gas include amounts used in

Provinces	Bituminous coal		Anthracite coal	Lignite coal	Coke
	From Canadian mines	Imported		From Canadian mines	
	Tons	Tons	Tons	Tons	Tons
1936					
Prince Edward Island.....	Quantity				
	\$				
Nova Scotia.....	Quantity	24,482			6,083
	\$	90,176			36,245
New Brunswick.....	Quantity	2,744		51	1,006
	\$	12,776		510	6,980
Quebec.....	Quantity	145,462	30,938	1,470	24,215
	\$	773,020	216,569	10,732	90,030
Ontario.....	Quantity	3,837	248,468	5,827	139,194
	\$	21,980	1,375,619	32,875	709,635
Manitoba.....	Quantity	14,911	720	17	1,434
	\$	116,427	7,315	187	9,851
Saskatchewan.....	Quantity	1,475	3		547
	\$	10,109	21		2,215
Alberta.....	Quantity	11,617			3
	\$	59,355			16
British Columbia.....	Quantity	18,147	22	5	2
	\$	89,547	572	51	22
<b>Canada.....</b>	<b>Quantity</b>	<b>222,675</b>	<b>286,151</b>	<b>7,370</b>	<b>6,596</b>
	<b>\$</b>	<b>1,175,390</b>	<b>1,699,996</b>	<b>44,355</b>	<b>22,799</b>
1937					
Prince Edward Island.....	Quantity				
	\$				
Nova Scotia.....	Quantity	17,601	20		7,126
	\$	77,946	105		39,444
New Brunswick.....	Quantity	3,150		25	1,011
	\$	16,475		250	7,070
Quebec.....	Quantity	151,837	51,580	2,247	23,217
	\$	828,058	353,234	18,118	91,042
Ontario.....	Quantity	30,006	313,646	4,859	131,614
	\$	154,467	1,767,682	27,161	703,805
Manitoba.....	Quantity	14,342	287		1,146
	\$	112,205	2,896		7,540
Saskatchewan.....	Quantity	1,567	2		871
	\$	10,756	19		2,640
Alberta.....	Quantity	13,147		2	
	\$	64,274		12	
British Columbia.....	Quantity	21,726	24		1
	\$	108,106	638		6
<b>Canada.....</b>	<b>Quantity</b>	<b>253,376</b>	<b>365,559</b>	<b>7,133</b>	<b>38,089</b>
	<b>\$</b>	<b>1,372,287</b>	<b>2,124,574</b>	<b>45,541</b>	<b>59,455</b>

British Columbia totals include 1 petroleum refinery in the Northwest Territories.

Non-Metallic Minerals, by Kinds and by Provinces, 1936-1937

producing companies' own works for fuel or for heating stills, ovens and retorts.

Gasoline	Kerosene	Fuel oil	Wood	Gas		Other fuel	Electricity	Total
				Manu- factured	Natural			
Imp. gals.	Imp. gals.	Imp. gals.	Cords	M cu. ft.	M cu. ft.	\$	K.W.H.	\$
		1,600						200
		200						
4,723	240	8,161,245	1,425	2,545,867			11,050,394	
1,265	60	317,696	4,681	288,549			94,407	833,079
3,045		74,731	11,081		218		687,083	
732		5,030	34,887		99	1,334	11,771	74,219
50,555	3,067	19,871,236	14,918	7,729,140			227,819,358	
10,210	505	758,039	46,426	1,317,090		5,827	884,040	4,112,188
100,186	1,671	15,746,763	20,856	7,108,634	948,980		377,513,039	
16,017	286	612,448	73,484	1,042,573	343,084	17,939	1,582,732	5,829,572
10,106	420	676,360	5,364	89,903			16,976,041	
3,187	94	41,298	23,974	24,034			62,581	309,494
1,112	694	4,263,063	73	252,013			3,258,493	
324	140	172,886	276	64,809		207	50,121	315,804
5,067	508	1,812,393	460	306,426	1,800,803		10,183,763	
1,441	93	32,636	1,890	49,616	118,143	4	132,407	415,601
16,936	3	7,285,827	8,148	2,282,141			9,201,563	
3,839	1	254,204	14,031	137,007		698	107,778	639,446
<b>191,730</b>	<b>6,683</b>	<b>57,983,218</b>	<b>62,325</b>	<b>20,314,124</b>	<b>2,750,001</b>		<b>656,689,734</b>	
<b>37,915</b>	<b>1,179</b>	<b>2,214,437</b>	<b>199,749</b>	<b>2,923,678</b>	<b>461,326</b>	<b>25,709</b>	<b>2,925,837</b>	<b>12,529,603</b>
		1,500						195
		195						
13,944	3,776	7,998,315	1,669	3,087,567			12,192,489	
2,113	393	329,542	5,037	370,018			105,020	929,619
4,570		98,076	13,176		595		524,562	
1,082		6,317	44,547		253	1,445	9,951	87,390
102,605	4,345	20,247,435	14,520	7,256,989			241,157,038	
19,937	762	840,987	47,777	1,419,005		13,905	967,023	4,599,848
216,041	31,109	15,830,059	26,880	8,191,161	1,150,827		453,198,442	
28,566	2,264	656,255	97,689	1,203,726	417,424	218,578	1,884,748	7,162,365
7,702		626,869	8,513	147,971			13,105,601	
2,246		37,267	34,879	38,341			58,407	323,619
8,677	5,928	5,245,591	374	358,299			3,395,675	
1,204	773	214,223	884	82,350		1,544	52,154	306,128
32,164	1,904	1,218,147	630	242,083	1,961,784		11,713,415	
5,149	464	26,114	2,514	36,945	122,693		124,732	382,897
31,737	1,266	7,945,315	12,866	2,356,896	1,500		14,010,398	
5,948	247	289,272	23,568	146,951	300	1,317	121,564	717,255
<b>418,109</b>	<b>48,328</b>	<b>59,211,307</b>	<b>78,268</b>	<b>21,641,066</b>	<b>3,114,706</b>		<b>749,297,600</b>	
<b>66,245</b>	<b>4,903</b>	<b>2,406,172</b>	<b>256,895</b>	<b>3,297,336</b>	<b>546,676</b>	<b>236,789</b>	<b>3,323,599</b>	<b>14,599,345</b>

Table 12.—Power Equipment for the Manufactures of Non-Metallic Mineral Products, by Classes and by Industries, 1937, with Totals for 1936

Industries	Steam engines and turbines	Diesel engines	Gasoline, gas and oil engines	Hydraulic turbines or water wheels	Total primary power	Electric motors run by purchased power	Total	Electric motors run by primary power in same plant	Boilers
Abrasive products. No.			1		1	825	826		10
H.P.			26		26	7,971	7,997		691
Asbestos Products. No.						345	345		8
H.P.						3,167	3,167		1,108
Cement products. No.	6		32		38	281	319		23
H.P.	103		190		293	2,534	2,827		1,415
Cement. No.	3	2	35		40	1,249	1,289	10	14
H.P.	57	535	1,629		2,218	71,081	73,299	756	456
Coke and gas. No.	279	1	6	1	287	1,043	1,330	119	106
H.P.	14,603	42	195	6	14,846	22,865	37,711	2,273	23,740
Glass. No.	1		3		4	1,151	1,151		25
H.P.	100		409		509	13,660	14,169		1,709
Lime. No.	9	4	13		26	296	322	44	18
H.P.	255	376	395		1,056	5,977	7,033	556	1,267
Petroleum products. No.	411	5	17		433	1,163	1,596		149
H.P.	15,966	935	421		17,322	24,222	41,514		30,945
Products from domestic clays. No.	63	10	52		125	535	660	21	71
H.P.	5,105	800	1,248		7,153	10,628	23,781	481	8,089
Products from imported clays. No.	3		1		4	304	308	24	15
H.P.	415		23		438	1,860	2,298	284	1,068
Salt. No.	30	5	4		39	55	91	135	13
H.P.	2,513	600	29		3,142	514	3,656	1,521	3,950
Sand-line brick. No.						35	35		8
H.P.						813	813		895
Stone dressing. No.	6	1	15	1	23	698	721	1	9
H.P.	120	17	352	25	514	9,669	10,183	5	605
Miscellaneous. No.	5		6		11	761	772	43	25
H.P.	1,195		170		1,365	10,055	11,420	660	2,465
<b>Total 1937. No.</b>	<b>816</b>	<b>28</b>	<b>185</b>	<b>2</b>	<b>1,031</b>	<b>8,741</b>	<b>9,772</b>	<b>397</b>	<b>494</b>
<b>H.P.</b>	<b>40,462</b>	<b>3,305</b>	<b>5,884</b>	<b>31</b>	<b>48,882</b>	<b>191,016</b>	<b>239,898</b>	<b>6,516</b>	<b>76,403</b>
<b>Total 1936. No.</b>	<b>861</b>	<b>27</b>	<b>160</b>	<b>2</b>	<b>1,050</b>	<b>8,452</b>	<b>9,502</b>	<b>374</b>	<b>518</b>
<b>H.P.</b>	<b>40,445</b>	<b>2,883</b>	<b>4,306</b>	<b>26</b>	<b>47,660</b>	<b>189,503</b>	<b>237,163</b>	<b>5,863</b>	<b>85,140</b>

Table 13.—Power Equipment, Showing Ordinarily in Use Separately from in Reserve or Idle, 1937

Kind	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse-power	Number of units	Total rated horse-power
Steam engines and steam turbines	698	33,757	118	6,705
Diesel engines	24	3,143	4	162
Gasoline, gas and oil engines, other than diesel engines	158	4,108	27	976
Hydraulic turbines or water wheels	1	25	1	6
<i>Total primary equipment</i>	<i>881</i>	<i>41,033</i>	<i>160</i>	<i>7,849</i>
Electric motors run by purchased power	8,160	178,979	581	12,037
<b>Total</b>	<b>9,041</b>	<b>220,012</b>	<b>731</b>	<b>19,886</b>
Electric motors run by above primary units	390	6,299	7	217
Boilers	429	66,089	65	10,314

Table 14.—Power Equipment for the Manufactures of Non-Metallic Mineral Products, by Classes and by Provinces, 1936 and 1937

Provinces	Steam engines and turbines	Diesel engines	Gasoline, gas and oil engines	Hydraulic turbines or water wheels	Total primary power	Electric motors run by purchased power	Total	Electric motors run by primary power in same plant	Boilers
<b>1936</b>									
Prince Edward Island.....	No. 1				1		1		
	H.P. 16				16		16		
Nova Scotia.....	No. 23				35	217	252	26	28
	H.P. 3,584	1,420	59	3	5,063	6,911	11,974	612	6,887
New Brunswick.....	No. 3				6	61	67		6
	H.P. 217		25		242	788	1,030		513
Quebec.....	No. 321	1	21		343	2,325	2,668	1	100
	H.P. 12,064	40	701		12,805	69,727	82,532	110	21,831
Ontario.....	No. 338	2	86	1	427	4,362	4,789	298	251
	H.P. 18,599	175	2,009	20	20,803	77,112	97,915	3,925	39,393
Manitoba.....	No. 21	3	21		45	260	305	22	17
	H.P. 371	489	716		1,576	8,969	10,545	863	2,085
Saskatchewan.....	No. 13	2	7		22	198	220	12	33
	H.P. 1,000	225	40		1,265	2,105	3,370	48	3,700
Alberta.....	No. 61	5	6		72	437	509	2	34
	H.P. 3,292	45	396		3,733	10,799	14,532	15	4,618
British Columbia.....	No. 81	4	13	1	99	592	691	13	46
	H.P. 1,318	473	390	6	2,167	13,092	15,249	265	3,546
<b>Canada</b> .....	No. 861	27	160	2	1,050	8,452	9,502	374	518
	H.P. 40,445	2,883	4,306	26	47,660	189,543	237,163	5,863	85,140
<b>1937</b>									
Prince Edward Island.....	No. 1				1		1		
	H.P. 16				16		16		
Nova Scotia.....	No. 24	11	3	1	39	217	256	27	26
	H.P. 3,659	1,484	39	25	5,207	6,969	12,176	627	6,567
New Brunswick.....	No. 5		5		10	67	77	30	7
	H.P. 287		100		387	600	987	218	650
Quebec.....	No. 307	2	21		330	2,350	2,680	6	89
	H.P. 11,463	420	700		12,583	69,822	82,405	590	13,617
Ontario.....	No. 332	2	97		431	4,637	5,068	284	243
	H.P. 18,528	175	2,213		20,916	76,177	97,092	3,775	39,426
Manitoba.....	No. 18	3	22		43	267	310	22	16
	H.P. 281	489	719		1,489	8,875	10,364	863	2,160
Saskatchewan.....	No. 19	2	11		32	190	222	12	36
	H.P. 2,275	225	52		2,552	2,179	4,731	48	3,800
Alberta.....	No. 29	4	7		40	403	443	3	29
	H.P. 2,672	20	645		3,337	10,322	13,659	130	4,403
British Columbia.....	No. 82	4	18	1	105	640	745	13	48
	H.P. 1,297	492	600	6	2,395	16,072	18,467	265	5,780
<b>Canada</b> .....	No. 816	28	185	3	1,031	8,741	9,772	397	494
	H.P. 40,462	3,365	5,034	31	48,882	191,016	239,896	6,516	76,403

Table 15.—Alphabetical List of Materials used in All Industries classified under the Manufactures of Non-Metallic Minerals, 1936-1937

	Industry number (See page 32)	Unit of measure	1936		1937	
			Quantity	Cost at works	Quantity	Cost at works
				\$		\$
Abrasive grains, artificial (fused alumina and silicon carbide, etc.)	1	lb.	5,333,695	310,355	4,727,354	406,479
Abrasive grains, natural (corundum, silica, flint, garnet, etc.)	1	lb.	431,089	24,387	726,374	41,907
Acid, sulphuric, 66° Bé	5-10	lb.	62,749,317	525,703	69,444,226	535,776
Arsenic	7	ton	114	8,791	150	11,418
Asbestos cloth, strips and tape	2	lb.	35,096	14,207	87,761	22,924
Asbestos fibre, crude	2	lb.	9,084,553	149,649	11,788,087	209,871
Asbestos millboard and lumber	2	lb.	112,800	13,470	104,181	11,139
Asbestos paper, corrugated and plain	2	lb.	147,136	6,947	123,913	5,444
Asbestos yarn	2	lb.	216,992	58,214	295,470	77,579
Asphalt	17	gal.	1,279,371	104,814	2,339,201	169,002
Bauxite and pure alumina	1	ton	67,681	1,493,571	102,843	2,200,551
Benzol for blending	10	gal.	359,748	54,045	1,949,894	310,461
Bonding and bushing materials for abrasive wheels—						
Clay bonds	1	lb.	530,712	17,038	739,025	22,511
Elastic mixture	1	lb.	18,542	4,264	51,760	9,846
Bakelite and synthetic resins	1	lb.	65,820	24,563	107,544	37,926
Lead for bushings	1	lb.	50,503	3,087	70,648	4,655
Brass wire	2				61,424	18,419
Borax	7	ton			1,431	82,933
Carbon scrap for electrodes	17	ton	2,190	31,770	1,851	21,432
Celluloid and other plastics	6			50,725		128,721
Cement, Portland	2-4	bbl.	131,385	293,815	391,233	819,917
Cinders	4	cu. yds.	22,773	16,294	27,857	21,421
Clay used in gypsum wallboard	16	ton	321	678	20	382
Clay, fire, imported	12-17	ton	10,897	68,904		164,305
Clays, other, imported	12	ton	18,980	167,955	9,644	151,751
Coal (not for fuel)—						
For fused alumina	1	ton	770	4,138	1,140	5,928
For silicon carbide	1	ton	7,459	44,708	6,416	38,519
Coal (anthracite) for foundry facings	17	ton	8,341	79,485	10,979	104,564
Coal (lignite) for foundry facings	17	ton			34,440	31,880
Coal (bituminous) for foundry facings	17	ton	13,155	67,761	12,954	64,230
Coal (bituminous) for coke and gas making (not for fuel)—						
Canadian	5	ton	1,057,099	4,278,820	1,154,315	4,198,788
Imported	5	ton	2,301,399	10,704,663	2,425,635	11,458,224
Coke for manufacture of mineral wool	2	ton	1,268	13,418	1,208	13,083
Coke for gas making (not for fuel)—						
Purchased	5	ton	4,573	43,311	3,907	36,620
Companies' own make	5	ton	92,665	664,429	92,515	662,053
Coke (not for fuel)—						
For fused alumina	1	ton	3,333	17,568	5,910	30,416
For silicon carbide	1	ton	24,745	332,010	25,734	345,241
Coke, buckwheat	17	ton			17,848	109,283
Coke, petroleum	17	ton	31,664	313,360	24,453	364,864
Compounding materials used in petroleum refineries	10			479,767		652,084
Cotton cloth, yarn and waste	2			51,893		68,286
Cotton cloth for abrasive paper	1			91,329		103,599
Cullet	7	ton	830	7,277	23,094	215,725
Electrodes used in making artificial abrasives	1	ton	1,064	134,605	1,580	203,155
Electrodes, scrap, used in making new electrodes	17	ton	1,641	99,716	4,335	69,737
Feldspar	1-7-12	ton	5,537	97,261	5,555	100,072
Flint	12	ton	2,305	20,722	3,032	44,648
Fluorspar	7	ton	71	2,360	91	3,008
Fuller's earth and clays	10	ll.	18,907,295	243,164	18,843,458	240,309
Glass blanks for cut glass	6			90,941		137,884
Glass, figured and cathedral	6	sq. ft.	81,252	16,644	90,237	19,853
Glass, plate for bevelling, silvering, laminating, etc.	6			1,056,732		1,794,876
Glass, sheet and window, for bevelling, silvering, laminating, etc.	6	sq. ft.	646,605	79,609	1,862,738	195,515
Glass tubing	6			30,049		29,756
Glazing materials, n.e.s.	6			21		17,461
Glue	1-10	lb.	24,000	1,361	378,697	64,039
Graphite	17	ton	166	6,746	157	7,120
Gravel	4	cu. yd	31,376	26,329	50,191	64,677
Gypsum, crude	16	ton	17,057	70,011	18,568	79,122
Hair	16	lb.	170,398	14,380	192,000	20,339
Hardware for insulators	12			117,663		263,093
Iron borings for manufacture of artificial abrasives	1	ton	5,987	49,089	10,025	107,827

Table 15.—Alphabetical List of Materials used in All Industries classified under the Manufactures of Non-Metallic Minerals, 1936-1937—Concluded

	Industry number (See page 32)	Unit of measure	1936		1937	
			Quantity	Cost at works	Quantity	Cost at works
				\$		\$
Lead naphthalate.....	10	lb.	127,557	23,252	354,653	48,245
Lead, zinc and copper.....	6	lb.	92,554	10,073	98,399	14,150
Lenses, rough and semi-finished.....	6			88,333		120,203
Lime.....	4-5-7-14	ton	14,607	124,134	15,800	144,415
Litharge.....	10	lb.	349,315	24,644	474,545	40,747
Mica, amber, India splittings, India and amber, cut or uncut.....	17	lb.	16,227	7,790	42,068	16,675
Mineral slag.....	2	ton	3,074	21,450	4,278	29,896
Naphtha, absorption gasoline, etc., from Canadian wells.....	10	Imp. gal.	25,976,212	1,958,019	24,285,100	1,807,469
Oil, crude, in its natural state, imported for refining.....	10	Imp. gal.	1,243,670,584	59,366,819	1,343,556,580	69,734,631
Oil, crude, in its natural state, from Canadian wells, for refining.....	10	Imp. gal.	16,816,099	1,260,988	65,719,569	3,792,682
Oil used for enriching water gas.....	5	Imp. gal.	3,907,255	277,467	4,017,360	299,922
Oil used for making oil gas.....	5-17	Imp. gal.	635,122	53,572	642,789	55,398
Oil, wash and absorbing.....	5	Imp. gal.	261,734	30,636	228,336	26,550
Oil, linseed.....	9-17	gal.	35,906	24,216	56,478	40,451
Oil, mineral and other, n.e.s.....	9	gal.	872,998	221,410	946,210	264,681
Oxide, or purifying materials used in coke and gas plants.....	5	ton		41,291		40,414
Paints and enamels.....	4-17					
Paper.....	16	lb.	7,904,626	184,223	10,002,000	245,330
Paper, Kraft, for abrasive paper.....	1			6,381		91,698
Pitch.....	17	ton	5,963	96,707	8,463	140,318
Plaster of Paris.....	16	ton	72,233	359,755	82,811	436,723
Polishing and grinding materials.....	6			32,992		45,059
Phenol.....	10			31,490		38,736
Repair and renewal materials.....	7			642,171		754,558
Retarder.....	16	lb.	339,040	10,718	364,000	13,295
Rubber, and rubber sheets.....	2	lb.	36,071	3,152	94,525	19,474
Salt.....	1	ton	337	2,671	338	2,786
Sand (except silica sand).....	4-14	cu. yd.	81,548	78,578	219,085	225,948
Sawdust and shavings.....	1-16	ton	9,296	31,843	9,488	28,872
Silica sand.....	1-7	ton	112,631	549,343	127,507	594,627
Silver nitrate.....	6	lb.	2,359	16,375	5,397	26,632
Sodium carbonate (soda ash).....	5-7-10	ton	26,111	673,232	31,467	817,455
Sodium hydroxide (caustic soda).....	5-10	lb.	3,488,106	124,954	6,322,491	144,409
Solder.....	6	lb.	4,106	1,285	7,321	1,825
Starch and paste.....	16	lb.	324,000	25,934	376,000	31,070
Steel for reinforcing.....	4	ton	2,358	112,607		71,756
Steel, other.....	4-12	ton		53,267		15,822
Stone for cutting and dressing.....	15			917,898		975,623
Stone, crushed.....	4	cu. yd.	18,090	24,593	101,395	170,535
Sulphur.....	10	lb.	131,338	4,631	190,956	6,776
Tallow and grease.....	9	lb.	317,484	21,301	268,632	23,655
Tar for making electrodes.....	17	Imp. gal.	114,161	7,194	170,065	11,044
Tetraethyl fluid.....	10			1,615,262		2,136,547
Tripoli.....	17	ton	68	2,550	74	2,245
Water used in coke and gas plants.....	5			12,859		16,950
Wax.....	17	lb.		9,831		12,087
Process supplies used in domestic clays, cement, lime and salt industries.....	3-8-11-13			791,793		888,257
Containers.....	1,2,4,6,7,9,10,12,16			1,572,333		1,778,761
All other materials.....	All industries			2,169,964		2,240,230
<b>Total.....</b>				<b>96,534,218</b>		<b>115,938,578</b>

Table 16.—Alphabetical List of Products made in All Industries classified under the Manufactures of the Non-Metallic Minerals, in Canada, 1936 and 1937

NOTE.—The asterisks\*\* indicate that the commodity was reported by only 1 or 2 concerns and that the figures, therefore, cannot be shown separately in accordance with the provisions of the Statistics Act. The figure (1) indicates that the statistics given in this table do not represent the total Canadian output as there was also a production in other industrial groups.

Products	Industry number (See page 32)	Unit of measure	1936		1937	
			Quantity	Gross selling value at works	Quantity	Gross selling value at works
				\$		\$
Abrasive cloth, coated.....	1	..	..	..	..	..
Abrasive paper, coated.....	1	..	..	..	..	..
Abrasive wheels, and segments.....	1	..	..	862,283	..	1,165,406
Adhesive tape (1).....	1	..	..	..	..	..
Alumina, fused, crude.....	1	ton	59,533	5,762,217	86,604	8,435,371
Ammonia liquor.....	5	lb. NH <sub>3</sub>	1,779,748	17,797	1,618,661	16,187
Ammonium sulphate (1).....	5	lb.	53,656,457	582,816	59,576,866	663,556
Asbestos boiler and pipe covering.....	2	ft.	1,757,798	162,216	2,028,782	212,341
Asbestos brake linings, moulded and woven.....	2	ft.	2,558,192	392,309	3,713,044	580,467
Asbestos clutch facings.....	2	no.	..	91,147	557,916	126,124
Asbestos gaskets and tape.....	2	lb.	33,655	21,216	39,380	23,167
Asbestos packings of all kinds.....	2	lb.	257,780	113,821	433,083	131,213
Asbestos paper.....	2	lb.	1,844,768	78,796	2,413,150	85,437
Asbestos products, not elsewhere specified, including shingles, yarn, blackboards, dryer felts, etc.....	2	..	..	191,144	..	412,862
Asphalt, petroleum.....	10	Imp. gal.	34,885,653	3,033,667	56,862,183	4,340,738
Asphalt road emulsions.....	17	gal.	2,281,748	258,973	3,085,267	342,361
Benzol (motor fuel).....	5	Imp. gal.	2,935,917	473,948	2,980,697	590,302
Boiler compounds (1).....	9	lb.	..	..	139,000	9,730
Boron carbide.....	1	..	..	..	..	..
Brick, clay—						
Soft mud process—Face.....	11	M	6,097	111,378	9,904	175,544
Soft mud process—Common.....	11	M	24,180	302,690	23,636	316,534
Stiff mud process (wirecut)—Face.....	11	M	36,218	575,765	37,610	735,615
Stiff mud process (wirecut)—Common.....	11	M	35,592	484,078	55,089	755,630
Dry Press—Face.....	11	M	8,961	165,924	12,565	233,542
Dry Press—Common.....	11	M	10,241	100,785	14,136	152,062
Fancy or ornamental including special shapes, embossed, and enamelled brick.....	11	M	25	1,374	55	2,972
Sewer brick.....	11	M	418	6,778	175	2,777
Paving brick.....	11	M	116	3,149	3	131
Brick, cement.....	4	M	2,877	63,032	..	146,522
Brick, sand-lime.....	4-14	M	11,456	119,707	11,690	129,154
Building blocks, of cement, hollow.....	4	M	..	315,141	..	380,008
Building blocks, sand-lime.....	14	M	573	55,411	851	67,091
Calcium boride.....	1	..	..	..	..	..
Cement, high temperature (1).....	1-12-17	..	..	82,694	..	87,329
Cement laundry tubs.....	4	..	..	113,547	..	39,180
Cement, Portland.....	3	bbbl.	4,508,718	0,908,192	6,168,971	9,095,867
Cement products, other, including burial vaults and slabs, ready-mixed concrete, etc.....	4	..	..	240,510	..	1,536,738
Cement stucco.....	4	..	..	23,492	..	23,452
Cinder blocks.....	4-14	M	1,779	179,244	1,949	208,149
Clay—						
Bentonite.....	11	ton	120	180	163	1,971
Fireclay.....	11	ton	2,437	17,639	4,123	26,081
Kaolin.....	11	ton	..	..	..	..
Coke from gas retorts.....	5	ton	243,689	2,324,775	222,306	2,137,661
Coke from by-product and bee-hive ovens.....	5	ton	2,017,352	13,963,230	2,187,638	15,813,440
Coke breeze from gas retorts.....	5	ton	13,294	41,274	13,520	45,037
Coke breeze from by-product and bee-hive ovens.....	5	ton	130,458	330,729	146,918	469,930
Coke, petroleum.....	10	ton	64,706	393,160	62,015	380,140
Core compound.....	17	ton	558	19,198	553	24,943
Crayons, wax and chalk (1).....	17	..	..	..	..	..
Electrodes, carbon and graphite.....	17	..	..	..	..	..
Facings, foundry and partings.....	17	ton	4,144	68,977	..	85,098
Ferrosilicon (1).....	1	ton	6,935	81,295	7,396	94,824
Fillers, non-metallic, ground (1).....	17	..	..	..	..	..
Firebrick and stove-linings from imported clays—						
Rigid.....	12	ton	..	330,602	18,023	395,155
Plastic.....	12	ton	1,811	59,618	2,359	80,134
Firebrick from domestic clay.....	11	M	2,548	118,923	2,950	142,827
Fireclay blocks and shapes from domestic clay.....	11	..	..	65,171	..	75,431
Frit, porcelain enamelling.....	17	..	..	..	..	..
Gas made—						
Retort coal gas.....	5	M cu. ft.	5,341,977	..	4,042,958	..
Coke oven gas.....	5	M cu. ft.	30,175,970	..	32,636,734	..
Water gas.....	5	M cu. ft.	1,979,566	..	2,271,127	..
Producer gas.....	5	M cu. ft.	6,790,407	..	6,158,814	..
Total gas made.....	5	M cu. ft.	44,293,980	..	46,009,633	..



Table 16.—Alphabetical List of Products made in All Industries classified under the Manufactures of the Non-Metallic Minerals, in Canada, 1936 and 1937—Continued

Products	Industry number (See page 32)	Unit of measure	1936		1937	
			Quantity	Gross selling value at works	Quantity	Gross selling value at works
				\$		\$
Gas sold.....	5	M cu. ft.	15,279,272	14,751,970	15,289,839	14,732,531
Gas used in heating ovens or retorts in coke or gas plants.....	5	M cu. ft.	16,665,381	2,165,284	18,330,349	2,429,972
Gas used in associated metallurgical works.....	5	M cu. ft.	10,181,379	1,324,475	10,652,774	1,398,776
Gas otherwise accounted for, but not sold.....	5	M cu. ft.	519,077	102,671	235,652	62,057
Gas, not accounted for.....	5	M cu. ft.	1,795,319	1,463,265	1,622,708	1,299,473
Gas, still, from petroleum refineries.....	10	M cu. ft.	6,083,549	1,268,556	6,199,110	1,442,749
Gasoline.....	10	Imp. gal.	567,659,276	50,586,950	640,299,876	58,568,348
Glass, bent plate.....	6	.....	.....	4,583	.....	27,975
Glass, bent sheet.....	6	.....	.....	6,827	.....	14,885
Glass, bevelled or polished edge plates.....	6	.....	.....	254,179	.....	332,634
Glass, bevelled or polished edge sheets.....	6	.....	.....	167,418	.....	35,933
Glass, chipped or etched plate.....	6	.....	.....	8,765	.....	11,990
Glass, chipped or etched sheet.....	6	.....	.....	25,012	.....	14,714
Glass, cut (tumblers, fruit bowls, etc.).....	6	.....	.....	187,374	.....	206,469
Glass, leaded, including memorial windows.....	6	.....	.....	110,348	.....	160,407
Glass, plate mirrors.....	6	.....	.....	711,705	.....	836,936
Glass, plate signs.....	6	.....	.....	5,980	.....	29,752
Glass, pressed and blown.....	7	.....	.....	7,717,407	.....	9,331,245
Glass, sheet mirrors.....	6	.....	.....	40,790	.....	82,990
Glass, sheet signs.....	6	.....	.....	20,247	.....	23,981
Glass vials and chemical glassware.....	6	.....	.....	91,168	.....	99,995
Glass products, not elsewhere specified, including non-shatterable glass, framed mirrors, auto windshields, prismatic glassware, store fronts, etc.....	6	.....	.....	1,295,575	.....	2,487,594
Granite, cut and polished for building purposes.....	15	.....	.....	330,306	.....	179,557
Graphite, artificial.....	1-17	ton	1,707	73,090	1,010	48,338
Grease, lubricating.....	9-10	lb.	12,255,482	643,681	14,818,912	643,842
Gypsum products, including blocks, wallboard, wall plasters, tile, acoustical plasters.....	16	.....	.....	1,866,478	.....	2,525,507
Haydite blocks and slabs.....	4	.....	..	..	..	..
Insulators, porcelain.....	12	.....	..	..	..	..
Kerosene.....	10	Imp. gal.	28,986,616	2,611,596	26,349,649	2,398,568
Lenses, optical.....	6	.....	.....	345,424	.....	462,861
Lime, hydrated.....	8	ton	76,902	545,998	82,815	572,534
Lime, quick.....	8-17	ton	410,623	2,843,185	490,422	3,316,755
Limestone, for building.....	15	.....	.....	514,375	.....	438,450
Magnesia, fused.....	1	.....	..	..	..	..
Marble chips and dust.....	15	.....	.....	12,807	.....	10,419
Marble, cut and polished, for building purposes.....	15	.....	.....	175,834	.....	347,405
Mica products, including flexible mica plate, mica tubes, amber mica, heater plate, etc.....	17	.....	..	..	..	..
Monuments, lettered only.....	15	.....	.....	410,640	.....	356,629
Monuments, granite, cut and polished.....	15	.....	.....	1,317,005	.....	1,468,895
Monuments and bases, limestone.....	15	.....	.....	35,162	.....	117,404
Monuments, marble, cut and polished.....	15	.....	.....	150,629	.....	176,101
Naphthalene.....	5	Imp. gal.	22,331	2,657	25,009	2,614
Oil, core (1).....	17	gal.	67,943	40,265	91,302	63,183
Oil, fuel and gas.....	10	Imp. gal.	498,317,618	18,703,560	544,109,039	21,455,275
Oils, light (except toluol and xylol), from coke and gas plants.....	5	Imp. gal.	2,840,484	239,379	3,799,583	305,932
Oils, lubricating.....	9-10	Imp. gal.	20,439,316	4,219,815	23,867,529	4,579,182
Oil, fish (1).....	9	.....	.....	..	..	..
Oils, miscellaneous.....	9-10	lb.	815,973	8,291	.....	.....
Petroleum spirits, including engine distillate, V.M. & P., or solvent naphtha.....	10	Imp. gal.	42,241,524	3,656,350	41,650,422	3,896,453
Pipe, drain, sewer, water and culvert, of cement.....	4	.....	.....	432,424	.....	377,086
Pintsch oil gas.....	5-17	.....	..	..	..	..
Pipe, sewer, of clay, including flue linings, copings, etc.....	11-12	.....	.....	675,150	.....	905,890
Plugs, rubber (1).....	12	.....	..	..	..	..
Pottery, glazed or unglazed.....	11-12	.....	.....	223,915	.....	236,896
Pulpstones, artificial.....	1	.....	..	..	..	..
Refractories (silicon carbide, firesand, etc.).....	1	ton	2,411	38,800	1,110	73,205
Salt.....	13	ton	391,316	1,773,144	458,957	1,799,465
Sanitary earthenware, enamelled.....	12	.....	..	..	..	..
Silicon carbide, crude.....	1	ton	23,805	2,299,602	25,644	2,808,016
Soap, soft, and soap chips (1).....	9	lb.	.....	30,437	.....	37,505
Sockets and plugs, porcelain (1).....	12	no.	.....	..	..	..

Table 16.—Alphabetical List of Products made in All Industries classified under the Manufactures of the Non-Metallic Minerals, in Canada, 1936 and 1937—Concluded

Products	Industry number (See below)	Unit of measure	1936		1937	
			Quantity	Gross selling value at works	Quantity	Gross selling value at works
				\$		\$
Stone, artificial.....	4			133,629		188,021
Stones, sharpening, and files.....	1			89,524		95,317
Tableware, china.....	12		..	..	..	..
Tar.....	5-10	Imp. gal.	27,142,269	1,352,916	27,927,729	1,495,843
Textolite and cold moulded goods (1).....	12		..	..	..	..
Tile, drain, from domestic clay.....	11	M	8,148	214,590	11,391	298,970
Tile, floor.....	12		..	..	..	..
Tile, wall.....	12		..	..	..	..
Tile, structural (from domestic clay)—						
Hollow blocks, including fireproofing and load-bearing tile.....	11	ton	58,501	467,860	64,526	533,843
Roofing tile.....	11	ton	52,730	2,139	60,542	3,302
Floor tile (quarries).....	11	sq. ft.	97,738	13,798	73,191	12,169
Ceramic or glazed tile.....	11		..	..	..	..
Tiles, made in abrasives industry.....	1		..	..	..	..
Toluol and xylo.....	5	Imp. gal.	724,982	280,123	731,408	270,557
Wax and candles.....	10	lb.	11,347,091	413,887	11,696,221	451,428
Wool, mineral.....	2		..	..	..	..
Products reported by only 1 or 2 firms, as indicated by ..	1-2-4 9-12-17			7,315,891		8,558,036
All other products.....	All industries			1,105,537		1,483,464
Repairs and custom work.....	4-6-9-15-17			90,533		87,558
<b>Total.....</b>				<b>177,771,597</b>		<b>208,205,148</b>

## KEY TO NUMBERED INDUSTRIES

Industries	Industry number
Artificial abrasives and abraasive products.....	1
Asbestos products.....	2
Cement.....	3
Cement products.....	4
Coke and gas.....	5
Glass:—	
Plate, cut and ornamental.....	6
Pressed and blown.....	7
Lime.....	8
Petroleum products:—	
Lubricating oils and greases.....	9
Petroleum refining.....	10
Products from domestic clays.....	11
Products from imported clays.....	12
Salt.....	13
Sand-lime brick.....	14
Stone, monumental and ornamental.....	15
Miscellaneous:—	
Gypsum products.....	16
Non-metallic mineral products, n.e.s.....	17

## CHAPTER TWO

## THE ARTIFICIAL ABRASIVES AND ABRASIVE PRODUCTS INDUSTRY

The value of all products made by the artificial abrasives manufacturers in Canada during 1937 was 33 per cent greater than in 1936 and higher than in any other year on record. The gross factory value for the industry was \$14,174,351 in 1937 compared with \$10,631,533 in 1936, \$8,643,930 in 1935, and \$8,961,951 in 1929.

Sixteen establishments made artificial abrasives and abrasive products in 1937, 15 being in Ontario and 1 in Quebec. The average number of employees was 1,289 and payments in salaries and wages totalled \$1,995,589. Expenditures for manufacturing materials amounted to \$4,351,854, and \$1,222,529 was paid out for fuel and electricity. Capital employed totalled \$7,511,369 of which \$3,416,068 represented the present value of plants and equipment.

Artificial abrasives were made in 5 works in Ontario and 1 in Quebec. The output of these works was valued at \$12,193,254 including 25,644 tons of crude silicon carbide at \$2,808,016; 86,604 tons of crude fused alumina at \$8,435,371, and other products and by-products such as ferrosilicon, firesand, fused magnesia, refractory brick and cements, boron carbide, boron carbide shapes, artificial graphite, etc. One of these works also made abrasive wheels and sharpening stones. An average of 965 persons were employed and salaries and wages totalled \$1,519,063.

Ten other plants were occupied chiefly in making abrasive products such as wheels, paper, cloth, pulpstones and sharpening stones; 8 made wheels, segments, files, etc., and 2 made abrasive cloth and paper. The value of all products made in these establishments was \$1,981,097. The number of employees was 324 and payments for salaries and wages amounted to \$476,526.

The exports of crude artificial abrasives totalled 112,922 tons valued, for export purposes, at \$6,544,454 during the calendar year 1937, all of the Canadian output being shipped to the United States for grinding and grading. The exports of abrasive wheels were valued at \$141,214 in 1937.

The imports of crushed or ground artificial grains were appraised at \$699,020 in 1937, and the imports of manufactured grinding wheels were valued at \$106,232.

Table 17.—Principal Statistics, 1921-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1921.....	10	4,118,733	272	414,095	21,042	492,887	1,138,166	624,237
1922.....	11	4,947,736	374	470,990	34,385	856,945	1,529,388	938,058
1923.....	11	5,432,397	703	991,914	578,384	2,074,656	5,930,830	3,277,790
1924.....	12	5,550,930	634	900,849	518,677	1,804,975	5,628,653	3,245,001
1925.....	13	6,160,392	598	853,458	506,705	2,006,618	5,909,318	3,395,995
1926.....	11	6,398,369	622	929,755	599,744	2,093,434	6,081,822	3,388,644
1927.....	11	6,563,689	627	955,134	604,751	1,999,148	6,106,794	3,472,895
1928.....	12	7,317,105	691	1,048,521	644,557	2,169,428	7,122,588	4,308,603
1929.....	12	6,683,533	828	1,270,898	873,068	2,905,928	8,961,951	5,182,955
1930.....	13	6,251,425	799	1,156,641	815,901	2,313,310	6,450,351	3,321,140
1931.....	14	6,070,652	691	982,820	640,815	1,709,983	4,857,914	2,507,116
1932.....	14	5,865,031	386	519,013	480,601	449,624	1,489,555	659,330
1933.....	14	5,176,927	572	705,729	481,152	1,338,879	3,550,456	1,730,425
1934.....	14	5,109,861	861	1,091,992	697,028	2,317,552	7,414,553	4,400,273
1935.....	15	5,281,916	976	1,314,272	782,553	2,684,406	8,643,930	5,176,971
1936.....	15	6,241,502	1,149	1,528,194	967,236	3,164,252	10,631,533	6,500,045
1937.....	16	7,511,369	1,289	1,995,589	1,222,529	4,351,854	14,174,351	8,599,968
Per cent change 1937 from 1936.....	+6.7	+14.6	+12.2	+30.6	+26.4	+37.5	+33.3	+32.3

## MANUFACTURES OF NON-METALLIC MINERALS

Table 18.—Capital Employed, 1936 and 1937

	1936	1937
	\$	\$
Present value of lands, buildings, machinery and equipment.....	2,997,891	3,416,068
Inventory value of materials and finished products on hand and stocks in process.....	2,046,944	2,181,608
Operating capital (cash, bills and accounts receivable, etc.).....	1,196,667	1,553,693
<b>Total.....</b>	<b>6,241,502</b>	<b>7,151,369</b>

Table 19.—Employees, Salaries and Wages, 1936 and 1937

	1936	1937
Number of employees:—		
On salaries—Male.....	188	186
Female.....	59	59
On wages—Male.....	902	1,043
Female.....		1
<b>Total employees.....</b>	<b>1,149</b>	<b>1,289</b>
Salaries.....\$	503,954	575,319
Wages.....\$	1,024,240	1,420,270
<b>Total salaries and wages.....\$</b>	<b>1,528,194</b>	<b>1,995,589</b>

Table 20.—Wage-earners, by Months, 1936 and 1937

(On the 15th of each month)

Months	1936	1937
	No.	No.
January.....	847	1,000
February.....	839	1,027
March.....	872	1,076
April.....	866	1,127
May.....	842	1,178
June.....	898	1,181
July.....	911	1,205
August.....	948	1,192
September.....	954	1,168
October.....	951	1,155
November.....	944	1,124
December.....	974	1,121
<b>Average.....</b>	<b>902</b>	<b>1,289</b>

Table 21.—Fuel and Electricity Used, 1936 and 1937

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	short ton	222	1,476	173	1,317
Imported.....	short ton	5,568	36,739	6,782	44,219
Anthracite coal (for fuel only).....	short ton	405	4,259	390	3,646
Coke (for fuel only).....	short ton	86	75	89	794
Fuel oil.....	Imp. gal.	159,024	9,640	181,328	12,066
Gas—Manufactured.....	M cu. ft.	925	617	822	667
Natural.....	M cu. ft.	1,829	1,305	2,082	1,503
Other fuel.....			45		158
Electricity purchased.....	K. W. H.	352,271,105	912,398	419,282,048	1,158,159
<b>Total.....</b>			<b>967,236</b>		<b>1,222,529</b>

Table 22.—Power Equipment, 1936 and 1937

	1936		1937	
	No. of units	Total rated horse-power	No. of units	Total rated horse-power
Gasoline Engines—Ordinarily in use.....	•		1	26
Electric motors run by purchased power—				
Ordinarily in use.....	675	6,703	661	6,696
In reserve or idle.....	77	805	89	1,010
<b>Total</b> .....	<b>752</b>	<b>7,508</b>	<b>751</b>	<b>7,706</b>
Electric motors run by regenerated power—Ordinarily in use.....			75	265
Boilers—Ordinarily in use.....	11	550	10	691
In reserve or idle.....	1	75		

Table 23.—Materials Used in Manufacturing, 1936 and 1937

Materials	1936		1937	
	Quantity	Cost at works	Quantity	Cost at works
	short tons	\$	short tons	\$
Bauxite and pure alumina.....	67,681	1,493,571	102,843	2,200,551
Coal (not for fuel)—For fused alumina.....	770	4,138	1,140	5,928
For silicon carbide.....	7,459	44,708	6,416	38,519
Coke (not for fuel)—For fused alumina.....	3,333	17,568	5,910	30,416
For silicon carbide.....	24,745	332,010	25,734	345,241
Electrodes.....	1,084	134,605	1,580	203,155
Feldspar.....	36	999	53	1,503
Iron borings.....	5,987	49,089	10,025	107,827
Salt.....	337	2,671	338	2,786
Sawdust.....	8,845	28,086	9,277	26,431
Silica sand.....	44,455	217,496	45,240	211,899
Artificial abrasive grains.....	2,667	310,355	2,364	406,479
Natural abrasive grains—Garnets.....	101	17,849	164	28,951
Other.....	114	6,538	200	12,956
Bonding and bushing materials—				
(a) Clay bonds.....	265	17,038	379	22,511
(b) Elastic mixture.....	9	4,264	26	9,846
(c) Bakelite and other synthetic resins.....	33	24,503	54	37,926
(d) Lead for bushings.....	25	3,087	35	4,655
Cotton cloth.....		91,329		103,599
Kraft and rope paper.....		6,381		119,223
Containers, boxes, packages, etc.....		25,992		46,063
All other materials.....		331,902		385,389
<b>Total</b> .....		<b>3,164,252</b>		<b>4,351,854</b>

Table 24.—Products Manufactured, 1936 and 1937

Products	1936		1937	
	Quantity	Gross selling value at works	Quantity	Gross selling value at works
	short tons	\$	short tons	\$
Crude silicon carbide.....	23,805	2,299,602	25,044	2,808,016
Fused alumina.....	59,533	5,762,217	86,604	8,435,371
Silicon carbide firesand, etc.....	2,411	38,800	703	11,192
Abrasive wheels and segments.....		862,283		1,165,406
Sharpening stones and files.....		89,524		95,317
Other products*.....		1,579,107		1,659,049
<b>Total</b> .....		<b>10,631,533</b>		<b>14,174,351</b>

\* Includes ferrosilicon, abrasive cloth, abrasive paper, tiles, artificial pulpstones, artificial graphite, boron carbide, boron carbide shapes, fused magnesia, refractory cements, fused silica, firebrick, adhesive tape etc.

Table 25.—Production of Crude Silicon Carbide and Fused Alumina, 1923-1937

Years	Silicon carbide		Fused alumina		Total	
	Quantity	Gross selling value at works	Quantity	Gross selling value at works	Quantity	Gross selling value at works
	short tons	\$	short tons	\$	short tons	\$
1923	12,660	1,382,747	32,201	3,620,497	44,861	5,003,244
1924	15,207	1,773,864	29,822	3,170,205	45,029	4,944,069
1925	16,945	1,864,009	30,337	3,281,708	47,282	5,145,717
1926	17,958	1,732,942	34,649	3,423,526	52,607	5,156,468
1927	17,333	1,901,910	35,086	3,230,928	52,419	5,132,838
1928	19,008	2,098,109	39,413	3,786,112	58,421	5,884,312
1929	21,592	2,577,033	53,857	4,974,789	75,449	7,551,822
1930	22,778	2,111,476	42,894	3,376,908	65,672	5,488,384
1931	10,754	1,060,712	35,781	3,007,307	46,535	4,068,019
1932	3,164	269,405	6,658	427,628	9,822	697,033
1933	7,887	765,192	20,967	1,726,191	28,854	2,491,383
1934	16,398	1,858,740	44,596	3,955,837	60,994	5,814,573
1935	18,475	1,788,657	51,194	4,735,019	69,669	6,523,676
1936	23,805	2,299,602	69,533	5,762,217	93,338	8,061,819
1937	25,644	2,808,010	80,604	8,435,371	112,248	11,243,387

Table 26.—Production of Artificial Abrasive Wheels and Segments (\*), 1923-1937

Years	Gross selling value at works	Years	Gross selling value at works
	\$		\$
1923	566,426	1931	347,345
1924	425,384	1932	293,528
1925	426,341	1933	336,647
1926	619,124	1934	569,764
1927	634,007	1935	785,777
1928	847,489	1936	862,283
1929	819,884	1937	1,165,406
1930	546,276		

\* Sharpening stones and artificial pulpstones not included.

Table 27.—Imports into Canada and Exports of Abrasives, 1936 and 1937

	1936		1937	
	Quantity	Value	Quantity	Value
		\$		\$
<b>IMPORTS</b>				
Artificial abrasives, crushed or ground, when imported for use in Canadian manufactures		520,655		699,020
Diamond dust or bort, and black diamonds for borers		2,429,480		4,630,037
Emery in bulk, crushed or ground		43,535		60,030
Grinding wheels, manufactured by the bonding together of either natural or artificial abrasives		85,545		106,232
Grinding stones or blocks manufactured by the bonding together of either natural or artificial abrasives		7,339		16,353
Grindstones, not mounted, and not less than 36 inches in diameter. No.	1,013	122,028	1,587	157,699
Grindstones, n.o.p.	5,180	6,908	7,133	11,306
Pumice and pumice stone, lava and calcareous tufa, not further manufactured than ground		21,275		26,238
Sand paper, glass, tint and emery paper or emery cloth		85,398		80,521
Manufactures of emery or of artificial abrasives, n.o.p.		55,305		62,864
Diatomaceous earth or infusorial earth (kieselguhr), ground or unground. Cwt.	57,031	78,687	43,940	63,917
<b>Total</b>		<b>3,456,215</b>		<b>5,914,217</b>
<b>EXPORTS</b>				
Grindstones, manufactured		1,688		135
Abrasives—				
Natural, n.o.p., in ore or bulk, crushed or ground* Cwt.	9,661	15,200	8,422	13,153
Artificial, crude, including carborundum Cwt.	1,703,721	5,132,041	2,258,435	6,544,454
Artificial, made up into wheels, stones, etc.		129,431		141,214
<b>Total</b>		<b>5,278,360</b>		<b>6,698,956</b>

\* Including infusorial earth, rotten stone, tripoli, etc.

## Directory of Firms in the Artificial Abrasives and Abrasive Products Industry, 1937

Names	Addresses	Products
<b>(a) Artificial Abrasives</b>		
Abrasive Co. of Canada, Ltd., The.....	858 Burlington St. E., Hamilton, Ont.	Fused alumina; ferrosilicon.
Canadian Carborundum Co., Ltd.....	H.O.—P.O. Box 65, Niagara Falls, Ont. Plants—Shawinigan Falls, P.Q. Niagara Falls, Ont.	Crude silicon carbide; crude fused alumina; ferrosilicon; firebrick; refractory cement, firecland.
Exolon Company, The.....	H.O.—Blasdel, N. Y., U.S.A..... Plant—Thorold, Ont.	Crude silicon carbide; crude fused alumina; ferrosilicon; graphite; firecland; calcium boride.
Lionite Abrasives, Ltd.....	H.O.—P.O. Box 3, Niagara Falls, Ont. Plant—Stanley St., Niagara Falls, Ont.	Crude fused alumina; ferrosilicon.
Norton Company.....	H.O.—Worcester, Mass., U.S.A..... Plant—Chippawa, Ont.	Crude fused alumina; crude silicon carbide; crude boron carbide; boron carbide shapes; periclase, (fused magnesia); ferrosilicon.
<b>(b) Abrasive Products</b>		
Brantford Grinding Wheel Co., Ltd.....	186 Pearl St., Brantford, Ont.....	Abrasive wheels.
Canada Sand Papers, Limited.....	H.O.—Box 260, Preston, Ont..... Plant—Plattsville, Ont.	Abrasive cloth; abrasive paper.
Canadian Carborundum Co., Ltd.....	Niagara Falls, Ont.....	Abrasive wheels; sharpening stones and files.
Canadian Durex Abrasives, Limited.....	154 Pearl St., Toronto, Ont..... Plant—Brantford, Ont.	Abrasive cloth; abrasive paper; adhesive tape and processed materials.
Canadian Hart Grinding Wheel Co.....	491 Dundas St., Galt, Ont.....	Abrasive wheels and segments; sharpening stones and files.
Dominion Abrasive Wheel Co., Ltd.....	49 Main St., Mimico, Ont.....	Abrasive wheels and segments; sharpening stones and files.
Empire Abrasives, The.....	24 Lewis St., Brantford, Ont.....	Abrasive wheels; sharpening stones and files.
Lion Grinding Wheels, Limited.....	192 Pearl St., Brockville, Ont.....	Abrasive wheels; sharpening files and stones.
Norton Company of Canada, Limited.....	3 Beach Road, Hamilton, Ont.....	Abrasive wheels; artificial pulpstones; tiles; sharpening stones and files.
Ontario Abrasive Wheels, Limited.....	Prescott, Ont.....	Abrasive wheels; sharpening stones and files.
Wright Abrasives, The.....	54 Alonson St., Hamilton, Ont.....	Abrasive wheels; sharpening stones and files.

**Primary Production** (From the *Annual Report on the Mineral Production of Canada*)—**Natural Abrasives.**—Nine firms in Canada produced natural abrasives during 1937; 3 were in Ontario, 3 in British Columbia, 2 in Nova Scotia, and 1 in New Brunswick. Production amounted to \$40,035.

**Grindstones, Pulpstones and Scythestones.**—Quarries for the production of these products are located at Shediac, Stonehaven, and in the parish of Derby, New Brunswick, also in Pictou county, Nova Scotia, also on the northwest end of Gabriola Island, British Columbia.

Production in 1937 included shipments from one plant in each of these three provinces and totalled 412 tons valued at \$21,429.

Pulpstones are used in magazine grinders in Canadian pulp mills but as deposits containing thick beds of the proper quality sandstones are scarce in Canada, this country supplies only a very small percentage of the number annually. Artificial pulpstones made of silicon carbide or fused alumina segments are gradually replacing the natural stones.

**Volcanic Dust.**—No production has been reported since 1934. This material is used as an abrasive base in scouring and cleaning compounds. Deposits occur in Saskatchewan, Alberta and British Columbia.

**Diatomite.**—Shipments of diatomite were made in 1937 from deposits located at New Annan, Nova Scotia, in Muskoka district, Ontario, and Quesnel, British Columbia. Diatomite is used as a filter aid, for insulation purposes, concrete admixture, and as a silver polish base. Six firms were producing in 1937 when production totalled 643 tons valued at \$18,606.

**Corundum.**—Corundum mining practically ceased in Canada with the commercial production of artificial abrasives by the electric furnace. The last recorded output of the mineral in the Dominion was in 1921 when grain corundum amounting to 403 tons valued at \$55,965 was exported to the United States. Corundum crystals are found in an area including several townships in Renfrew and Hastings counties in the province of Ontario. The commercial production of corundum began in this part of Ontario about 1900 with shipments reaching a maximum in 1906.

**Garnets.**—No commercial production of garnets has been reported in Canada for several years. During 1935 a garnetiferous rock was crushed and screened in a mill located at Labelle, Quebec; the product was marketed for sandblasting. In 1936 a small amount of development work was done on a garnet deposit located in Joly township, Labelle County, Quebec, but in 1937 mining equipment was installed and a small shipment of garnet rock was made for testing purposes. A deposit of garnets in Ashby township, Ontario, was operated during 1923 and 1,250 tons of garnet concentrates and crude garnets were shipped to Niagara Falls, N.Y., for use as an abrasive material; there was also a shipment of 360 tons of garnets from this same deposit in 1924 and in 1937 a small test shipment was made to the Industrial Minerals Laboratories of the Bureau of Mines at Ottawa.

Table 28.—Production of Natural Abrasives in Canada, 1936 and 1937

Province	Diatomite		Pulstones		Sharpening stones		Grindstones	
	Tons	\$	Tons	\$	Tons	\$	Tons	\$
1936								
Nova Scotia.....	565	11,300					70	2,242
New Brunswick.....					122	4,872	290	13,110
Ontario.....	40	2,000						
British Columbia.....	10	350	87	4,500				
<b>Total.....</b>	<b>615</b>	<b>13,650</b>	<b>87</b>	<b>4,500</b>	<b>122</b>	<b>4,872</b>	<b>360</b>	<b>15,352</b>
1937								
Nova Scotia.....	481	15,392			29	4,012	8	403
New Brunswick.....					45	135	243	12,004
Ontario.....	38	1,868						
British Columbia.....	124	1,346	87	4,875				
<b>Total.....</b>	<b>643</b>	<b>18,606</b>	<b>87</b>	<b>4,875</b>	<b>74</b>	<b>4,147</b>	<b>251</b>	<b>12,407</b>



CHAPTER THREE

THE ASBESTOS PRODUCTS INDUSTRY

Production in the asbestos products industry during 1937 was valued at \$1,896,677, an increase of 47 per cent over the total of \$1,293,909 reported for the previous year. Among the principal products made from asbestos during the year under review were brake linings at \$580,487; boiler and pipe covering at \$212,341; packings at \$131,213; clutch facings at \$126,124; paper at \$85,437; gaskets at \$23,167; cloth at \$6,795, and other asbestos lines made by one or two firms such as dryer felt, shingles and yarn. Other products made by firms in this industry included rockwool, hydraulic brake hose and packings of rubber, duck and flax.

In 1937 there were 13 factories occupied chiefly in making asbestos goods, 6 being located in Quebec, 6 in Ontario, and 1 in Nova Scotia. Capital employed amounted to \$2,003,659 and work was given to a monthly average of 451 people who received \$464,882 in salaries and wages. These firms also expended \$812,639 for materials used in manufacturing processes and \$91,252 for fuel and electricity.

Table 29.—Principal Statistics, 1925-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1925.....	12	2,624,260	250	282,382	62,640	783,063	1,344,097	498,304
1926.....	14	2,773,433	270	321,865	64,288	750,007	1,530,094	704,899
1927.....	13	2,860,945	300	358,959	73,495	797,975	1,603,300	791,830
1928.....	14	3,064,164	345	421,448	72,421	925,661	2,050,432	1,052,350
1929.....	12	2,949,712	351	359,433	80,962	1,348,460	2,286,638	857,276
1930.....	11	2,316,645	306	401,490	77,082	1,337,025	2,301,924	897,817
1931.....	13	1,112,141	240	302,638	57,339	729,771	1,308,183	521,073
1932.....	13	2,682,882	279	280,953	67,732	559,673	1,067,601	440,396
1933.....	11	1,777,975	222	208,580	55,031	331,062	757,626	371,533
1934.....	11	1,391,873	228	233,379	46,488	387,074	910,983	477,421
1935.....	13	1,703,301	327	323,854	66,793	518,994	1,130,282	544,495
1936.....	13	1,955,676	372	376,574	79,290	622,539	1,293,909	592,089
1937.....	13	2,003,659	451	464,882	91,252	812,639	1,896,677	992,786
Per cent change 1937 from 1936.....		+2.5	+21.2	+23.5	+15.1	+30.5	+48.6	+66.7

Table 30.—Principal Statistics, by Provinces, 1936 and 1937

Province	Num-ber of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
<b>1936</b>								
Quebec.....	6	1,440,159	271	257,264	64,588	449,272	853,334	339,474
Nova Scotia.....	1	515,517	101	119,310	14,702	173,258	440,575	232,615
Ontario.....	6							
<b>Canada.....</b>	<b>13</b>	<b>1,955,676</b>	<b>372</b>	<b>376,574</b>	<b>79,290</b>	<b>622,539</b>	<b>1,293,909</b>	<b>592,089</b>
<b>1937</b>								
Quebec.....	6	1,411,039	332	318,929	72,131	550,404	1,227,285	604,750
Nova Scotia.....	1	592,620	119	145,953	19,121	262,235	669,392	388,036
Ontario.....	6							
<b>Canada.....</b>	<b>13</b>	<b>2,003,659</b>	<b>451</b>	<b>464,882</b>	<b>91,252</b>	<b>812,639</b>	<b>1,896,677</b>	<b>992,786</b>

Table 31.—Establishments, Grouped According to Production, Number of Employees and Capital Employed, 1937

	Number of plants	Capital employed	Number of employees	Gross selling value of products at works
		\$		\$
(a) Production				
Under \$5,000.....	3	36,368	6	8,364
\$5,000—\$50,000.....	4	286,285	19	58,226
Over \$50,000.....	6	1,681,006	426	1,830,087
<b>Total</b> .....	<b>13</b>	<b>2,003,659</b>	<b>451</b>	<b>1,896,677</b>
(b) Employees				
1 or 2.....	3	258,600	5	17,592
3 to 10.....	4	64,053	20	48,998
Over 10.....	6	1,681,006	426	1,830,087
<b>Total</b> .....	<b>13</b>	<b>2,003,659</b>	<b>451</b>	<b>1,896,677</b>
(c) Capital				
Under \$25,000.....	5	54,927	14	28,222
Over \$25,000.....	8	1,948,732	437	1,868,455
<b>Total</b> .....	<b>13</b>	<b>2,003,659</b>	<b>451</b>	<b>1,896,677</b>

Table 32.—Capital Employed, by Provinces, 1936 and 1937

Province	Present value of land, buildings, fixtures, machinery and tools	Inventory value of materials on hand, finished products and stocks in process	Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
	\$	\$	\$	\$
1936				
Quebec.....	925,653	263,769	250,737	1,440,159
Other provinces.....	281,696	147,205	86,810	515,517
<b>Canada</b> .....	<b>1,207,349</b>	<b>410,974</b>	<b>337,533</b>	<b>1,955,876</b>
1937				
Quebec.....	596,708	428,439	385,892	1,411,039
Other provinces.....	316,615	189,211	86,794	592,620
<b>Canada</b> .....	<b>913,323</b>	<b>617,650</b>	<b>472,686</b>	<b>2,003,659</b>

Table 33.—Employees, Salaries and Wages, by Provinces, 1936 and 1937

Province	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
1936								
Quebec.....	35	6	210	22	271	68,034	189,230	257,264
Other provinces.....	17	9	74	1	101	57,186	62,124	119,310
<b>Canada</b> .....	<b>52</b>	<b>15</b>	<b>284</b>	<b>23</b>	<b>372</b>	<b>125,220</b>	<b>251,354</b>	<b>376,574</b>
1937								
Quebec.....	51	5	249	27	332	86,563	232,366	318,929
Other provinces.....	21	10	88	.....	119	63,680	82,273	145,953
<b>Canada</b> .....	<b>72</b>	<b>15</b>	<b>337</b>	<b>27</b>	<b>451</b>	<b>150,243</b>	<b>314,639</b>	<b>464,882</b>

**Table 34.—Wage-earners, by Months, 1936 and 1937**  
(On the 15th of each month)

Month	1936			1937		
	Male	Female	Total	Male	Female	Total
	No.	No.	No.	No.	No.	No.
January.....	260	19	279	306	25	331
February.....	266	19	285	311	25	336
March.....	268	20	288	312	24	336
April.....	280	22	302	314	26	340
May.....	291	25	316	360	26	386
June.....	292	27	319	370	29	399
July.....	270	23	293	345	27	372
August.....	269	23	292	354	29	383
September.....	299	23	322	362	28	390
October.....	310	23	333	347	29	376
November.....	300	26	326	346	29	375
December.....	307	26	333	338	30	368
<b>Average.....</b>	<b>284</b>	<b>23</b>	<b>307</b>	<b>337</b>	<b>27</b>	<b>364</b>

**Table 35.—Regular Hours Worked per Week by Wage-earners, 1936 and 1937**  
(Overtime not included)

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	7.2	3.1	49-50 hours.....	7.2	1.7
41-43 hours.....	1.6	4.6	51-54 hours.....		0.7
44 hours.....	24.4	22.4	55 hours.....	16.3	21.0
45-47 hours.....	0.3	0.5	60 hours and over.....	43.0	5.3
48 hours.....		40.7			

**Table 36.—Fuel and Electricity Used, 1936 and 1937**

Kind	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Anthracite coal.....	short ton	6	64	9	105
Bituminous coal—Canadian.....	short ton	3,557	21,233	4,050	24,306
Imported.....	short ton			20	105
Coke.....	short ton	6	60	10	105
Gasoline.....	Imp. gal.	156	39	156	39
Fuel oil.....	Imp. gal.	316,147	20,813	374,576	25,360
Kerosene.....	Imp. gal.	225	38	1,331	213
Gas—Manufactured.....	M cu. ft.	286	278	281	269
Electricity purchased.....	K.W.H.	2,293,636	36,765	2,772,393	40,750
<b>Total.....</b>	<b>\$</b>		<b>79,290</b>		<b>91,252</b>

**Table 37.—Power Equipment, 1936 and 1937**

	1936		1937	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Electric motors—Ordinarily in use.....	286	2,825	344	3,162
In reserve or idle.....	5	103	1	5
<b>Total.....</b>	<b>291</b>	<b>2,928</b>	<b>345</b>	<b>3,167</b>
Stationary boilers—Ordinarily in use.....	8	918	8	1,103
In reserve or idle.....	1	200		
<b>Total.....</b>	<b>9</b>	<b>1,118</b>	<b>8</b>	<b>1,103</b>

## MANUFACTURES OF NON-METALLIC MINERALS

Table 38.—Materials Used in Manufacturing, 1936 and 1937

Material	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Asbestos fibre, crude.....	lb.	9,084,553	149,649	11,788,087	209,871
Asbestos cloth.....	lb.	16,060	4,689	30,477	10,073
Asbestos paper, corrugated and plain.....	lb.	147,136	6,947	123,913	5,444
Asbestos sheets and strips.....	lb.	19,036	9,518	57,284	12,851
Asbestos yarn.....	lb.	216,992	58,214	295,470	77,579
Cotton cloth and yarn.....	\$		51,893		68,286
Rubber and rubber sheets.....	lb.	36,071	3,152	94,525	19,474
Containers and packing material.....	\$		69,842		81,566
All other materials.....	\$		288,626		327,495
<b>Total.....</b>	<b>\$</b>		<b>622,530</b>		<b>812,639</b>

Table 39.—Products Manufactured, 1936 and 1937

Product	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Asbestos brake linings—Moulded.....	ft.	1,603,835	252,417	2,263,300	391,919
Other.....	ft.	954,357	130,892	1,449,744	188,568
Asbestos boiler and pipe covering.....	ft.	1,757,708	162,216	2,028,782	212,341
Asbestos cloth.....	lb.	11,940	4,200	10,806	6,795
Asbestos clutch facings.....	No.		91,147	557,916	126,124
Asbestos gaskets.....	lb.	33,655	21,216	39,380	23,167
Asbestos packings of all kinds.....	lb.	257,780	113,821	433,083	131,213
Asbestos paper.....	lb.	1,844,768	78,706	2,413,150	85,437
All other products*.....	\$		430,204		731,113
<b>Total.....</b>	<b>\$</b>		<b>1,293,909</b>		<b>1,896,677</b>

\*Includes products made by 1 firm such as rockwool, asbestos dryer felt, hydraulic brake hose, asbestos shingles, asbestos yarn, packings of rubber, duck and flax, etc.

Table 40.—Production of Asbestos Brake Linings, Pipe Coverings and Packings, 1925-1937

Year	Asbestos brake linings	Asbestos boiler and pipe coverings	Asbestos packings
	\$	\$	\$
1925.....	272,217	179,717	187,916
1926.....	279,783	232,963	184,515
1927.....	326,072	277,339	204,376
1928.....	439,431	376,399	213,904
1929.....	555,739	406,395	234,595
1930.....	459,616	283,312	197,001
1931.....	321,664	178,611	144,983
1932.....	309,942	83,904	87,682
1933.....	316,938	65,725	91,597
1934.....	458,147	99,948	78,860
1935.....	439,904	136,917	107,824
1936.....	392,309	162,216	113,821
1937.....	580,487	212,341	131,213

Table 41.—Imports into Canada and Exports of Asbestos, 1936 and 1937

	1936		1937	
	Tons	\$	Tons	\$
<b>IMPORTS</b>				
Asbestos brake and clutch lining.....		321,163		365,033
Asbestos packing.....	84	60,978	76	65,963
Asbestos in any form other than crude, and all manufactures of, n.o.p.....		506,640		718,061
<b>Total.....</b>		<b>888,781</b>		<b>1,149,057</b>
<b>EXPORTS</b>				
Asbestos— Total.....	136,547	7,391,517	196,511	10,972,852
To—United Kingdom.....	6,817	405,712	14,093	910,350
United States.....	77,091	4,052,187	98,190	5,347,488
Australia.....	2,055	103,271	3,042	150,919
Belgium.....	8,058	455,828	15,743	920,061
France.....	6,968	473,406	9,376	614,979
Germany.....	12,811	987,125	17,699	1,301,571
Italy.....	136	11,444	2,683	205,627
Japan.....	21,200	856,167	33,934	1,544,561
Netherlands.....	149	5,634	522	20,741
Spain.....	201	11,182		
Poland and Danzig.....	302	21,684	238	21,795
Sweden.....			768	46,547
Asbestos sand and waste— Total.....	157,678	2,567,343	194,530	3,242,457
To—United Kingdom.....	4,566	84,711	6,357	119,605
United States.....	146,081	2,359,527	176,708	2,913,183
Belgium.....	1,606	27,364	3,009	82,722
France.....	967	18,747	857	16,757
Germany.....	3,547	71,365	5,205	95,718
Netherlands.....	110	2,233	451	8,118
Japan.....	181	3,496	1,017	21,487
Asbestos manufactures, including asbestos roofing— Total.....		175,038		330,061
To—United Kingdom.....		86,589		144,785
United States.....		935		1,879
Newfoundland.....		6,818		16,069
Australia.....		30,106		90,995
Argentina.....		6,536		9,047
Brazil.....		11,511		18,613
Chile.....		2,331		1,424
Colombia.....		2,372		2,855
Mexico.....		9,857		8,252
Peru.....		2,949		2,869
<b>Total Asbestos Exports.....</b>		<b>10,133,898</b>		<b>14,545,370</b>
To—United Kingdom.....		577,012		1,183,740
United States.....		6,403,649		8,262,550

**Primary Production.—The Asbestos Mining Industry** (From the *Annual Report on the Mineral Production of Canada*).—Canadian asbestos production during 1937 totalled 410,026 short tons valued at \$14,505,791 compared with 301,287 short tons and \$9,958,183 in the preceding year. The output of the mineral in 1937 was the greatest ever recorded in the history of the Canadian asbestos mining industry, and as in former years, came almost entirely from the Eastern Townships in the Province of Quebec. An interesting feature of the industry in 1937 was the recording of a relatively small production of asbestos in Northern Ontario; this was the first commercial output of the mineral to be credited to this province in several years.

World production of asbestos has realized a continuous increase from 203,000 metric tons in 1932 to 503,000 metric tons in 1936, the most recent year for which complete data are made available by the League of Nations. As an asbestos producer Canada retains a premier world position, the output of the three principal producing countries in 1936 being—Canada, 273,300 metric tons; Russia, 125,100 metric tons, and Southern Rhodesia, 51,100 metric tons.

The average value for all grades of asbestos shipped from Canadian mines in 1937 was \$35.38 per ton compared with \$33.05 in 1936. The average value for fibres increased from \$48.65 per

ton in 1936 to \$51.11 in 1937; the average value of shorts at \$16.13 was practically the same as in 1936 while the average value per ton of the relatively small tonnage of crudes sold declined from \$299.93 in 1936 to \$246.47 in 1937.

Exports of asbestos, including manufactures thereof, from Canada in 1937 were valued at \$14,545,370, or an increase of 43.53 per cent over 1936; of the 1937 shipments those consigned to the United States were appraised at \$8,262,550 and those to the United Kingdom at \$1,183,740, lesser quantities going to Australia, Belgium, France, Germany, and various other countries.

The number of Canadian asbestos mining companies reported as active in 1937 totalled 10; capital employed in the industry amounted to \$21,249,676; employees numbered 3,842 against 2,647 in 1936, and salaries and wages distributed aggregated \$4,232,507 compared with \$2,642,924 in the preceding year.

The Bureau of Mines of the province of Quebec reported that asbestos mining in 1937 had not only recovered its past activity but had a year of unprecedented prosperity. This is very gratifying, particularly in that the Quebec asbestos industry is now in its sixtieth year of production, the first shipment of the mineral from Thetford Mines having been made in 1878 from a mine which is still prominent and in full production. All asbestos mines in Quebec were particularly active during the whole of 1937. The general trend of asbestos mining, in the Thetford-Black Lake region, is to replace the open cast and cable derrick methods by underground mining, the hoisting of the rock being done through vertical shafts equipped with electric hoists. This is a consequence of the success achieved by the Asbestos Corporation in the introduction of the "block caving" method of mining at the King mine, inaugurated in 1932.

In Bannockburn township of the Matachewan district in Northern Ontario the construction of an asbestos mill was commenced by the Rahn Lake Mines Corporation, Ltd. The property of this company was active throughout the year and a small shipment of crude asbestos was reported.

Canadian asbestos as produced commercially in Quebec is of the chrysotile or serpentine variety and is of a high quality. Reserves of milling grade asbestos rock have been reported as sufficient for many years of commercial fibre production.

Table 42.—Principal Statistics of the Asbestos Mining Industry in Canada, 1936 and 1937

	1936	1937
Number of firms.....	10	10
Capital employed..... \$	18,877,326	21,249,676
Number of employees—		
On salaries.....	195	321
On wages.....	2,452	3,521
Total number of employees.....	2,647	3,842
Salaries and wages—		
Salaries..... \$	330,565	522,213
Wages..... \$	2,312,359	3,710,294
Total..... \$	2,642,924	4,232,507
Selling value of products (a)..... \$	9,960,539	14,509,092
Cost of fuel and electricity (purchased)..... \$	979,193	1,346,434
Cost of process supplies (b)..... \$	1,420,282	2,729,801
Net value of sales..... \$	7,561,064	10,432,857

(a) Includes value of sand and gravel.

(b) Explosives, drill steel, etc.

Table 43.—Producers' Sales (\*) of Asbestos, 1936 and 1937

	1936		1937	
	Short tons	Value	Short tons	Value
		\$		\$
Crudes.....	3,440	790,971	(b)3,846	947,917
Fibres.....	133,288	6,483,946	200,247	10,235,820
Shorts.....	164,559	2,683,206	205,933	3,322,054
<b>Total.....</b>	<b>301,287</b>	<b>9,958,183</b>	<b>410,026</b>	<b>14,505,791</b>
Sand, gravel and stone (waste rock only) (a).....	3,103	2,356	3,980	3,301

(\*) All from the province of Quebec in 1935 and 1936.  
 (a) This production is included under the sand and gravel industry.  
 (b) Includes 1 ton valued at \$250 produced in Ontario.

	1936 Tons	1937 Tons
Quantity of rock mined.....	4,692,004	6,477,805
Quantity of rock milled.....	3,568,992	5,440,607

Table 44.—Sales or Shipments of Asbestos, from Canadian Mines, 1926-1937

Year	Short tons	Value	Year	Short tons	Value
		\$			\$
1926.....	279,403	10,099,423	1932.....	122,977	3,030,721
1927.....	274,778	10,821,013	1933.....	158,367	5,211,177
1928.....	273,033	11,238,360	1934.....	155,980	4,930,326
1929.....	306,055	13,172,581	1935.....	210,467	7,054,614
1930.....	242,114	8,390,163	1936.....	301,287	9,958,183
1931.....	164,296	4,812,886	1937.....	410,026	14,506,791

Directory of Firms in the Asbestos Products Industry, 1937

Names of Firms and Location of Plants	Main Products, 1937
Guilford's Limited, June St., Halifax, N.S.....	Asbestos boiler and pipe coverings, packings, gaskets, and cements: eel grass insulation.
Asbestosos Corporation, Limited, St. Lambert, Montreal, P.Q.....	Asbestos brake linings, clutch facings, packings and brake blocks.
Asten-Hill Ltd., Valleyfield, P.Q.....	Asbestos dryer felts.
Modern School Furniture Ltd., 2035 Desjardins St., Montreal, P.Q.....	Asbestos blackboards.
Atlas Asbestos Company Limited, 110 McGill St., Montreal, P.Q.....	Asbestos gaskets and cloth.
Canadian Johns-Manville Co. Ltd., Asbestos, P.Q.....	Asbestos brake linings, boiler and pipe covering, millboard, gaskets, clutch facings, packings, paper, shingles, refractory cements, yarn, etc., and mineral wool.
Philip Carey Company Limited, Lennoxville, P.Q.....	Asbestos boiler and pipe covering, paper, millboard.
Beldam's Asbestos Packing & General Mfg. Co. Ltd., Toronto, Ont.....	Asbestos gaskets.
Canadian Raybestos Co. Ltd., 280 Perry St., Peterboro, Ont.....	Asbestos brake linings, clutch facings, packings and gaskets: brass rivets, rubber hose.
Eureka Mineral Wool & Asbestos Co., 102 Adelaide St. W., Toronto, Ont.....	Asbestos boiler and pipe covering, gaskets and cement.
Garlock Packing Company, 200 Queen St. N., Hamilton, Ont.....	Asbestos packings and gaskets; rubber, duck and flax packings.
Hamilton Engine & Packing Co., 56 Alanson St., Hamilton Ont.....	Asbestos boiler and pipe covering, gaskets and cloth.
Wild, Arthur C., 38 Hiron Ave., Toronto, Ont.....	Asbestos boiler and pipe covering, corrugated paper, felt pipe covering.

## CHAPTER FOUR

## CEMENT

Sales of Portland cement by Canadian producers in 1937 totalled 6,168,971 barrels valued at \$9,095,867 compared with 4,508,718 barrels at \$6,908,192 in 1936. The volume of sales and apparent consumption of cement in the Dominion during 1937 were the largest since 1931, in which year sales and consumption totalled 10,161,678 barrels and 10,085,986 barrels, respectively. The all-time high records in quantity and value of sales occurred in 1929 in which year producers' shipments totalled 12,284,081 barrels valued at \$19,337,235.

Reflected in the increased output of cement in 1937 by the four Canadian cement companies is the fact that all branches of the construction industry in Canada experienced better conditions during the year than have existed since 1931. According to the "MacLean Building Review", contracts awarded in Canada in 1937 amounted to \$224,056,700, an increase of 37.8 per cent over the 1936 total of \$162,588,000.

During the year under review, cement plants were operated in the provinces of Quebec, Ontario, Manitoba, Alberta, and British Columbia and of the total quantity of cement shipped by producers in 1937, 42.97 per cent came from Ontario plants, and 41.79 per cent from those located in the province of Quebec. Of the nine cement plants in production during 1937, seven employed the wet process of manufacture and one, the dry method; in addition, a single Canadian cement plant produced finished cement from purchased clinker.

Raw materials consumed by the industry in 1937 included 1,465,168 tons of limestone, 33,691 tons of gypsum, 9,281 tons of sand, 195,877 tons of clay, and 444 tons of pyrites. Electricity purchased during the year totalled 61,045,600 kilo-watt hours valued at \$606,969 and coal consumed included 145,791 short tons of Canadian bituminous valued at \$760,766 and 90,925 short tons of imported bituminous at \$513,417. The total value of all fuels and electricity amounted to \$1,904,418 compared with \$1,576,142 in the preceding year.

In 1937 capital employed by the industry, and representing value of plants, stocks on hand, etc., was reported at \$51,150,672, employees totalled 1,083, and salaries and wages aggregated \$1,373,444. Process supplies, other than fuels, consumed in 1937 were valued at \$540,915 and the net value of sales was estimated at \$6,650,534.

Imports into Canada in 1937 of Portland cement, including hydraulic or water lime, totalled 61,082 barrels valued at \$134,113 compared with 39,867 barrels at \$107,180 in 1936. Imports of cement manufactures in 1937 were appraised at \$45,744 compared with \$7,141 in the preceding year. Exports of Portland cement in 1937 totalled 72,568 barrels valued at \$82,978 as against 68,929 barrels at \$56,909 in 1936.

Table 45.—Principal Statistics, 1920-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of process supplies	Gross selling value of products at works	Net value of production
	No.	\$	No.	\$	\$	\$	\$	\$
1920.....	13	44,941,686	2,301	3,757,041	3,457,796	.....	14,798,070	11,340,274
1921.....	14	49,160,180	2,751	3,443,884	2,788,820	.....	14,185,143	11,406,323
1922.....	11	41,573,737	1,753	2,315,240	2,457,456	.....	15,438,481	12,981,025
1923.....	10	38,284,494	1,842	2,551,784	2,809,414	.....	15,064,961	12,255,247
1924.....	10	36,766,574	1,837	2,531,622	2,872,711	.....	13,398,411	10,525,700
1925.....	11	38,081,583	1,926	2,511,400	2,848,904	.....	14,046,704	11,197,800
1926.....	12	41,380,000	2,340	3,052,662	3,424,156	.....	13,013,283	9,589,127
1927.....	12	40,509,319	2,270	3,143,932	3,546,000	.....	14,391,937	10,845,937
1928.....	11	47,678,841	2,407	3,405,385	3,872,108	.....	16,739,163	12,867,055
1929.....	11	50,881,818	2,546	3,523,595	4,347,219	.....	19,337,235	14,990,016
1930.....	11	50,210,737	2,317	3,172,198	4,120,367	.....	17,713,067	13,592,700
1931.....	12	57,378,436	1,820	2,432,950	3,280,870	.....	15,826,243	12,545,373
1932.....	12	55,294,814	1,216	1,344,772	1,701,125	.....	6,930,721	5,229,596
1933.....	12	54,403,379	740	781,746	982,087	.....	4,536,935	3,554,848
1934.....	11	53,413,000	860	1,009,686	1,206,550	.....	5,667,946	4,461,396
1935.....	9	52,454,004	924	1,027,416	1,227,410	394,264	5,580,043	3,058,369
1936.....	9	53,343,991	1,052	1,196,664	1,576,142	592,929	6,908,192	4,739,121
1937.....	9	54,150,672	1,083	1,373,444	1,904,418	540,915	9,095,867	6,650,534
Per cent change 1937 from 1936.....		+1.5	+2.9	+14.7	+20.8	-9.0	+31.7	+40.3



Table 46.—Number and Capacity of Kilns, and Tonnage of Limestone and Gypsum used, 1930-1937

Years	Number of firms	Number of plants	Number of kilns in use	Total daily capacity	Limestone used	Gypsum used	Sand used	Clay used	Pyrites used
				brls.	tons	tons	tons	tons	tons
1930.....	5	11	57	37,522	2,925,399	74,227	•	•	•
1931.....	5	12	44	42,422	2,489,147	56,677	•	•	•
1932.....	6	12	47	43,922	1,141,376	27,538	•	•	•
1933.....	6	12	41	43,922	616,304	13,319	•	•	•
1934.....	5	11	41	43,922	806,546	19,172	•	•	•
1935.....	4	9	20	32,650	814,443	21,611	5,047	•	•
1936.....	4	9	19	33,000	1,180,358	25,447	8,549	94,943	•
1937.....	4	9	18	33,900	1,405,168	33,691	9,291	195,877	444

\*Data not recorded.

Table 47.—Capital Employed, by Classes, 1931-1937

Years	Present value of lands, buildings, fixtures, machinery and tools	Inventory value of materials on hand, finished products and stocks in process	Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
	\$	\$	\$	\$
1931.....	50,132,019	3,194,045	4,051,472	57,378,436
1932.....	49,881,915	2,886,829	2,526,070	55,294,814
1933.....	49,207,078	2,279,641	2,916,660	51,103,379
1934.....	48,113,855	2,227,548	3,071,597	53,113,000
1935.....	46,975,337	1,920,195	3,558,472	52,454,004
1936.....	48,296,483	2,108,093	2,939,415	53,343,991
1937.....	47,324,681	2,150,776	4,675,215	54,150,672

Table 48.—Employees, Salaries and Wages, 1931-1937

Years	Average number of employees				Total	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
					\$	\$	\$	
1931.....	110	11	1,699		1,820	268,434	2,104,516	2,432,950
1932.....	96	7	1,113		1,216	213,891	1,130,881	1,344,772
1933.....	80	5	655		740	160,680	621,066	781,746
1934.....	79	5	776		860	161,118	848,568	1,009,686
1935.....	74	4	846		924	150,587	876,829	1,027,416
1936.....	79	5	968		1,052	173,001	1,023,663	1,196,664
1937.....	94	6	983		1,053	211,778	1,161,666	1,373,444

Table 49.—Wage-earners, by Months, 1936 and 1937  
(On the 15th of each month)

Months	1936	1937	
		Quarry	Mill
January.....	765	66	691
February.....	748	55	729
March.....	816	65	782
April.....	1,027	128	865
May.....	1,124	117	868
June.....	1,061	136	954
July.....	1,084	140	955
August.....	1,038	140	950
September.....	1,049	139	947
October.....	1,048	141	941
November.....	983	129	935
December.....	860	81	866
<b>Average.....</b>	<b>968</b>	<b>983</b>	

Table 50.—Regular Hours Worked per Week by Wage-earners, 1936 and 1937  
(Overtime not excluded)

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	5.2	2.8	51-53 hours.....	1.2	0.9
41-43 hours.....			54 hours.....	5.1	4.1
44 hours.....	22.8	18.3	55 hours.....	1.5	
45-47 hours.....	2.2	0.1	56-59 hours.....	11.2	11.0
48 hours.....	38.4	47.8	60 hours.....	9.1	10.7
49-50 hours.....	0.1	0.1	More than 60 hours.....	3.2	4.2

Table 51.—Power Equipment, 1936 and 1937

	1936		1937	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and steam turbines.....	3	113	3	57
Diesel engines.....	2	516	2	535
Gasoline, gas and oil engines (except diesel).....	34	1,567	35	1,626
<b>Total primary equipment.....</b>	<b>39</b>	<b>2,196</b>	<b>40</b>	<b>2,218</b>
Electric motors operated by purchased power.....	1,164	69,203	1,249	71,081
<b>Total.....</b>	<b>1,203</b>	<b>71,399</b>	<b>1,289</b>	<b>73,299</b>
Electric motors run by primary units shown above.....	10	756	10	756
Stationary boilers.....	15	587	14	456

Table 52.—Power Equipment, showing Ordinarily in Use separately from In Reserve or Idle, 1937

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and steam turbines.....	1	7	2	50
Diesel engines.....	2	535		
Gasoline, gas and oil engines, other than diesel engines.....	32	1,479	3	147
Hydraulic turbines or water wheels.....				
Electric motors operated by purchased power.....	1,230	69,964	19	1,117
<b>Total.....</b>	<b>1,265</b>	<b>71,985</b>	<b>24</b>	<b>1,314</b>
Electric motors operated by above primary units.....	10	756		
Stationary boilers.....	11	392	3	64

Table 53.—Fuel and Electricity Used, 1936 and 1937

Kinds	Unit of measure	1936		1937	
		Quantity	Value	Quantity	Value
			\$		\$
Bituminous coal—Canadian.....	short ton	119,903	635,631	145,791	760,766
Imported.....	short ton	66,460	367,740	90,925	513,417
Gasoline.....	Imp. gal.	94,015	17,564	108,493	20,713
Kerosene.....	Imp. gal.	2,931	517	2,418	462
Fuel oil and diesel oil.....	Imp. gal.	13,569	1,478	15,982	1,863
Wood (cords of 128 cu. ft.).....	cord			61	228
Electricity purchased.....	K.W.H.	62,038,700	553,212	61,045,600	606,969
<b>Total.....</b>			<b>1,576,142</b>		<b>1,904,418</b>

Table 54.—Production, Factory Sales, Imports and Exports of Portland Cement, 1936 and 1937

	1936		1937	
	Barrels	Value	Barrels	Value
		\$		\$
Output.....	4,939,030		6,142,934	
Sold or used.....	4,508,718	6,908,192	6,168,971	9,095,807
Stocks on hand December 31.....	1,832,380		1,806,343	
<b>IMPORTS—</b>				
Portland cement and hydraulic or water lime.....	39,867	107,180	61,082	134,113
Manufactures.....		7,141		45,744
<b>Total Imports.....</b>		<b>114,321</b>		<b>179,857</b>
<b>EXPORTS—</b>				
Portland cement.....	68,929	56,909	72,568	82,978
<b>APPARENT CONSUMPTION.....</b>	<b>4,479,656</b>		<b>6,157,485</b>	

1 barrel=350 pounds.

Table 55.—Producers' Sales of Cement, by Provinces, 1935-1937

Provinces	1935		1936		1937	
	Barrels	Value	Barrels	Value	Barrels	Value
		\$		\$		\$
Quebec.....	1,751,012	2,472,008	2,093,130	2,945,074	2,578,623	3,537,798
Ontario.....	1,243,836	1,752,148	1,542,463	2,180,895	2,650,652	3,657,067
Manitoba.....	266,457	604,857	348,042	783,095	328,518	745,736
Alberta.....	219,555	436,914	243,534	482,197	267,106	531,541
British Columbia.....	167,226	314,116	261,649	516,931	344,072	623,726
<b>Canada.....</b>	<b>3,648,086</b>	<b>5,586,043</b>	<b>4,508,718</b>	<b>6,908,192</b>	<b>6,168,971</b>	<b>9,095,867</b>

Table 56.—Average Selling Price per Barrel of Cement, F.O.B. Works, 1931-1937

Year	High	Low	Year	High	Low
1931.....	2.60	1.28	1935.....	2.79	1.25
1932.....	2.55	1.25	1936.....	2.68	1.25
1933.....	2.55	1.25	1937.....	2.68	1.25
1934.....	2.36	1.25			

Table 57.—Factory Sales of Cement, 1917-1937

Years	Barrels	Gross selling value at works	Years	Barrels	Gross selling value at works
1917.....	4,768,488	7,724,246	1928.....	11,023,928	16,739,163
1918.....	3,591,481	7,076,503	1929.....	12,284,081	19,337,235
1919.....	4,995,257	9,802,433	1930.....	11,032,538	17,713,306
1920.....	6,651,980	14,798,070	1931.....	10,161,658	15,826,243
1921.....	5,752,885	14,195,143	1932.....	4,498,721	6,930,721
1922.....	6,943,972	15,438,481	1933.....	3,007,432	4,536,935
1923.....	7,543,589	15,064,661	1934.....	3,783,226	5,667,946
1924.....	7,498,624	13,398,411	1935.....	3,648,086	5,580,043
1925.....	8,116,597	14,046,704	1936.....	4,508,718	6,908,192
1926.....	8,707,021	13,013,283	1937.....	6,168,971	9,095,867
1927.....	10,065,865	14,391,937			

Table 58.—Imports into Canada and Exports of Cement, by Principal Countries, 1936 and 1937

	1936		1937	
	Quantity	Value	Quantity	Value
	cwt.	\$	cwt.	\$
<b>IMPORTS—</b>				
Cement, Portland, and hydraulic or water lime—				
From—United Kingdom.....	82,517	48,011	72,368	46,726
United States.....	37,406	47,602	37,154	51,660
Belgium.....	16,823	9,533	102,056	34,659
Other countries.....	2,790	2,034	2,209	1,068
Total.....	139,536	107,180	213,787	134,113
Cement manufactures, n.o.p.....		7,141		45,744
<b>Total Imports.....</b>		<b>114,321</b>		<b>179,857</b>
<b>EXPORTS—</b>				
Cement, Portland—				
To—United Kingdom.....				
United States.....	8,665	7,172	6,903	5,981
Trinidad and Tobago.....	38,794	8,752	72,619	23,064
British Guiana.....	20,854	5,826	25,689	9,464
Other British West Indies.....	54,363	13,443	51,840	17,523
Newfoundland.....	58,812	8,369	27,380	8,942
Colombia.....			23,750	6,243
Peru.....	23,687	3,942	28,403	6,216
Other countries.....	36,078	9,405	17,405	5,545
<b>Total Exports.....</b>	<b>241,243</b>	<b>56,969</b>	<b>253,969</b>	<b>82,978</b>

Table 59.—World's Production of Cement, 1929, 1936 and 1937

(Taken from the *Statistical Year Book of the League of Nations*)

NOTE.—This table covers, as far as possible, both natural and artificial (Portland, etc.) cements. Cement is made by burning a mixture of calcareous and argillaceous materials and grinding the resulting clinker. For natural cement, the mixture used is found as such in nature; for artificial cements, the constituents are mixed in the desired proportions.

(Metric tons—000's omitted)

Countries	1929	1936	1937
Africa.....	760	1,346	1,500
Algeria.....	58	67	.....
Belgian Congo.....	60	21	.....
Egypt.....	180	335	330
Morocco (French).....	65	100	156
Mozambique.....	21	12	.....
Tunis.....	.....	49	56
Union of South Africa.....	1376	702	840
North America.....	31,426	20,291	21,175
Canada.....	1,945	784	975
United States.....	29,481	19,507	20,200
Caribbean (Mexico)†.....	225	286	.....
South America.....	*650	1,780	.....
Argentina.....	350	869	1,010
Brazil.....	96	483	.....
Chile.....	145	248	313
Colombia.....	.....	105	.....
Peru.....	49	75	83
Asia*.....	5,570	7,470	*8,400
China†.....	185	187	.....
India.....	570	977	1,142
Netherland Indies.....	149	.....	.....
French Indo-China.....	184	149	235
Japan and colonies.....	4,274	5,456	6,034
Palestine.....	69	165	158
Philippines.....	76	133	.....
Siam.....	82	62	77
Syria and Lebanon.....	.....	190	250
U. S. S. R.....	2,367	5,845	.....
Europe*.....	34,190	*37,500	.....
Germany <sup>3</sup> .....	7,039†	11,689	.....
Saar.....	167†	.....	.....
Austria.....	582	369	.....
Belgium <sup>4</sup> .....	3,248	2,350	.....
Bulgaria.....	151	122	154
Denmark.....	799	792	676
Spain.....	1,820	.....	.....
Estonia.....	62	50	69
Finland.....	278	351	.....
France.....	5,787	4,272	.....
Greece.....	155	277	.....
Hungary.....	403	215	.....
Italy.....	3,497	3,859	4,258
Latvia.....	40	98	118
Norway.....	319	301	*340
Netherlands.....	210	401	441
Poland.....	1,008	1,048	1,284
Portugal.....	88	245	254
Roumania.....	317	376	389
United Kingdom.....	4,766	6,700	7,300
Sweden.....	570	795	.....
Czechoslovakia*.....	1,250	1,050	.....
Turkey.....	65	178	.....
Yugoslavia.....	874	643	591
Oceania(*) <sup>(2)</sup> .....	920	850	.....
Australia‡.....	720	656	.....
<b>*Total.....</b>	<b>75,886</b>	<b>75,966</b>	.....

\*Estimate. †Twelve months ending June 30.

‡Country not included in the totals.

1 China: total shipments from "Customs ports", excluding Manchuria.

2 Europe, Oceania: total includes estimate for other countries not mentioned.

3 Germany: 1929, German Cement Association.

4 Belgium: artificial cement.

## Directory of Portland Cement Plants, 1937

Name of Company	Head Office Address	Location of Plant
QUEBEC— Canada Cement Company, Ltd.....	Box 290, Station B, Montreal.....	Hull and Montreal East.
ONTARIO— Canada Cement Company, Ltd..... St. Marys Cement Co. Ltd.....	Box 290, Station B, Montreal, P.Q.... 357 Bay St., Toronto.....	Belleville, Lakefield* and Port Colborne, St. Marys. St. Marys.
MANITOBA— Canada Cement Company, Ltd.....	Box 290, Station B, Montreal, P.Q....	Fort Whyte and Steep Rock.
ALBERTA— Canada Cement Company, Ltd.....	Box 290, Station B, Montreal, P.Q....	Exshaw.
BRITISH COLUMBIA— British Columbia Cement Co. Ltd..... Coast Cement Co. Ltd.....	805 Government St., Victoria..... Granville Island, Vancouver.....	Bamberton and Tod Inlet. Granville Island.

\*Idle in 1937.

## CHAPTER FIVE

## THE CEMENT PRODUCTS INDUSTRY

Production of manufactured cement products in Canada during 1937 was valued at \$3,299,331. This output was the best reported for the industry since 1931 when the value amounted to \$3,807,188 and it was almost double the total of \$1,713,347 reported for 1936. The increase over last year, however, was due chiefly to the inclusion, for the first time, of the output of ready-mixed concrete which formerly was not classed as a manufactured product. The output of ready-mixed concrete in 1937 was valued at \$1,230,451.

A total of 109 plants operated in this industry during 1937, there being 66 in Ontario, 25 in Quebec, 8 in British Columbia, 3 in New Brunswick, 1 in Nova Scotia, and 2 in each of Manitoba, Saskatchewan and Alberta. Many of these works were quite small, there being 51 with outputs of less than \$5,000 each while 44 were in the \$5,000 to \$50,000 group and only 14 were above \$50,000. The Ontario plants accounted for 61 per cent of the total production; establishments in Quebec contributed 30 per cent, and works in British Columbia accounted for more than 7 per cent, the remaining 2 per cent being distributed among New Brunswick, Nova Scotia, Manitoba, Saskatchewan and, Alberta.

Products of the industry included hollow building blocks of cement worth \$380,008, cement pipe of all kinds at \$377,806, cinder blocks at \$208,149, artificial stone at \$188,021, cement bricks at \$146,522, and such other lines as ready-mixed cement, haydite blocks and slabs, burial vaults, garden furniture, etc.

Data presented for this industry cover manufacturing only and do not include figures for the cement work done on the building of bridges, dams, foundations, etc.; this type of work has been covered in the annual survey of construction.

Table 60.—Principal Statistics, 1920-1937

Provinces	Number of operating plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1920.....	93	1,358,712	386	474,112	28,304	596,352	1,527,590	902,934
1921.....	108	1,416,813	441	406,745	26,991	555,915	1,433,253	850,347
1922.....	124	1,553,160	391	372,268	21,794	533,335	1,281,004	725,875
1923.....	118	1,664,580	421	458,745	25,242	596,654	1,505,528	883,632
1924.....	116	1,673,758	455	425,078	26,419	493,270	1,257,871	738,182
1925.....	107	2,594,736	819	697,716	40,442	730,296	2,020,239	1,249,501
1926.....	185	2,857,762	922	778,662	70,815	880,041	2,544,242	1,593,386
1927.....	151	2,671,273	872	936,053	56,576	912,686	2,063,065	1,093,893
1928.....	151	4,140,543	1,262	1,466,508	73,825	1,261,653	4,136,955	2,801,477
1929.....	153	5,024,497	1,347	1,608,238	84,130	1,502,952	4,419,415	2,832,335
1930.....	146	5,157,051	1,252	1,414,043	86,188	1,261,910	3,718,704	2,370,606
1931.....	157	5,081,227	1,166	1,296,250	83,032	1,245,483	3,807,188	2,478,673
1932.....	118	4,461,574	710	684,371	57,072	697,483	1,771,297	1,016,742
1933.....	83	3,545,805	460	392,941	42,482	625,525	1,596,998	928,991
1934.....	88	3,285,150	489	405,028	42,107	444,274	1,042,258	555,877
1935.....	94	3,024,286	519	451,625	37,176	459,296	1,154,138	657,666
1936.....	97	3,053,745	602	569,209	50,036	763,021	1,713,347	900,290
1937.....	109	3,695,565	840	804,024	57,511	1,566,870	3,299,331	1,674,950
Per cent change 1937 from 1936.....	+12.4	+21.0	+39.5	+41.3	+14.9	+105.3	+96.7	+86.1

## MANUFACTURES OF NON-METALLIC MINERALS

Table 61.—Principal Statistics, by Provinces, 1936 and 1937

Provinces	Number of operating plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
<b>1936</b>							
Nova Scotia.....	1	19,702	9	3,856	124	3,906	11,373
New Brunswick.....	2						
Quebec.....	22	895,940	125	104,364	14,954	103,109	260,035
Ontario.....	59	1,677,657	387	371,300	28,242	461,383	1,100,315
British Columbia.....	8	332,630	56	68,912	6,368	179,411	291,713
Manitoba.....	2	127,816	25	20,777	348	15,212	49,911
Saskatchewan.....	1						
Alberta.....	2						
<b>Canada.....</b>	<b>91</b>	<b>3,053,745</b>	<b>602</b>	<b>569,299</b>	<b>60,036</b>	<b>763,021</b>	<b>1,713,347</b>
<b>1937</b>							
New Brunswick.....	3	19,739	4	1,620	155	1,984	8,493
Quebec.....	25	1,231,444	241	214,559	17,417	519,966	967,724
Ontario.....	66	2,136,477	520	523,100	37,069	891,536	2,018,530
British Columbia.....	8	167,384	34	38,805	2,135	132,842	246,295
Nova Scotia.....	1	140,521	32	25,940	735	20,542	58,289
Manitoba.....	2						
Saskatchewan.....	2						
Alberta.....	2						
<b>Canada.....</b>	<b>109</b>	<b>3,695,565</b>	<b>840</b>	<b>804,024</b>	<b>57,511</b>	<b>1,566,870</b>	<b>3,299,331</b>

Table 62.—Size of Establishments, according to Production, Number of Employees, and Capital Employed, 1937

	Number of plants	Capital employed	Average number of employees	Gross selling value of products at works
		\$		\$
<b>(a) Production</b>				
Under \$5,000.....	51	387,828	85	117,766
\$ 5,000 to \$10,000.....	16	210,116	65	108,846
\$10,001 to \$25,000.....	16	382,484	113	228,697
\$25,001 to \$50,000.....	12	586,680	143	397,722
Over \$50,000.....	14	2,128,457	434	2,446,300
<b>Total.....</b>	<b>109</b>	<b>3,695,565</b>	<b>840</b>	<b>3,299,331</b>
<b>(b) Employees</b>				
1 or 2.....	46	352,073	63	111,809
3 to 10.....	43	935,837	234	780,215
11 to 20.....	11	572,041	154	550,937
Over 20.....	9	1,835,614	389	1,856,310
<b>Total.....</b>	<b>109</b>	<b>3,695,565</b>	<b>840</b>	<b>3,299,331</b>
<b>(c) Capital</b>				
Under \$25,000.....	79	561,298	258	526,346
\$25,000 to \$100,000.....	18	840,666	169	717,467
Over \$100,000.....	12	2,293,601	413	2,055,518
<b>Total.....</b>	<b>109</b>	<b>3,695,565</b>	<b>840</b>	<b>3,299,331</b>



Table 63.—Capital Employed, by Provinces, 1936 and 1937

Provinces	Present value of lands, buildings, fixtures, machinery and tools	Inventory value of materials on hand, finished products and stocks in process	Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
	\$	\$	\$	\$
<b>1936</b>				
Nova Scotia and New Brunswick.....	12,898	5,020	1,184	19,702
Quebec.....	708,142	105,561	82,237	895,940
Ontario.....	1,022,775	340,840	314,042	1,677,657
British Columbia.....	176,444	14,451	141,735	332,639
Other provinces.....	95,856	10,511	21,449	127,816
<b>Canada.....</b>	<b>2,916,115</b>	<b>476,983</b>	<b>560,647</b>	<b>3,953,745</b>
<b>1937</b>				
New Brunswick.....	14,198	2,861	2,680	19,739
Quebec.....	937,046	128,284	166,114	1,231,444
Ontario.....	1,350,515	329,536	456,426	2,136,477
British Columbia.....	138,653	10,287	20,444	167,384
Other provinces.....	106,725	14,601	19,195	140,521
<b>Canada.....</b>	<b>2,545,137</b>	<b>485,569</b>	<b>664,859</b>	<b>3,695,565</b>

Table 64.—Employees, Salaries and Wages, by Provinces, 1936 and 1937

Provinces	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female			\$	\$
<b>1936</b>								
Nova Scotia and New Brunswick.....	2		7		9	1,300	2,556	3,856
Quebec.....	30	1	84		125	37,582	66,782	104,364
Ontario.....	69	9	304	5	387	105,561	265,739	371,300
British Columbia.....	17	1	38		56	20,910	48,002	68,912
Other provinces.....	6	1	18		25	8,506	12,271	20,777
<b>Canada.....</b>	<b>124</b>	<b>12</b>	<b>461</b>	<b>5</b>	<b>602</b>	<b>173,859</b>	<b>395,350</b>	<b>569,209</b>
<b>1937</b>								
New Brunswick.....			4		4		1,620	1,620
Quebec.....	43	2	196		241	49,771	164,788	214,559
Ontario.....	89	12	423	5	529	135,658	387,442	523,100
British Columbia.....	11	1	21	1	34	19,112	19,693	38,805
Other provinces.....	9	2	21		32	11,406	14,534	25,940
<b>Canada.....</b>	<b>152</b>	<b>17</b>	<b>665</b>	<b>6</b>	<b>840</b>	<b>215,947</b>	<b>598,077</b>	<b>804,024</b>

Table 65.—Wage-earners, by Months, 1936 and 1937

(On the 15th of each month)

Months	1936			1937		
	Male	Female	Total	Male	Female	Total
January.....	261	4	265	414	6	420
February.....	292	4	296	430	6	436
March.....	366	4	370	489	0	495
April.....	430	5	435	617	0	623
May.....	513	5	518	738	6	744
June.....	534	5	539	839	6	845
July.....	566	6	572	792	6	798
August.....	577	0	583	805	6	811
September.....	555	6	561	768	6	774
October.....	526	0	532	804	6	810
November.....	511	6	517	641	5	646
December.....	392	6	398	611	5	616
<b>Average.....</b>	<b>461</b>	<b>5</b>	<b>466</b>	<b>665</b>	<b>6</b>	<b>671</b>

Table 66.—Regular Hours Worked per Week by Wage-earners, 1936 and 1937  
(Overtime not included)

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	11.6	10.9	51-53 hours.....	2.7	1.5
41-43 hours.....	0.4	1.5	54 hours.....	20.9	15.2
44 hours.....	9.8	16.3	55 hours.....	0.1	2.2
45-47 hours.....	4.9	2.3	56-59 hours.....	4.3	1.8
48 hours.....	17.9	19.0	60 hours or over.....	14.8	21.0
49-50 hours.....	12.6	8.3			

Table 67.—Fuel and Electricity Used, 1936 and 1937

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	short ton	1,818	12,142	1,666	10,890
Imported.....	short ton	1,301	8,760	1,902	13,370
Anthracite coal.....	short ton	107	1,224	122	1,493
Lignite coal.....	short ton	3	16	20	100
Coke.....	short ton	108	929	86	713
Gasoline.....	Imp. gal.	6,825	1,682	6,047	1,035
Kerosene or coal oil.....	Imp. gal.	358	72	364	82
Fuel oil.....	Imp. gal.	1,453	149	240	23
Wood.....	cord	76	332	74	348
Gas—Manufactured.....	M cu. ft.	513	385	658	560
Natural.....	M cu. ft.	50	32	45	44
Other fuel.....	\$		273		7,470
Electricity purchased.....	K.W.H.	1,060,821	24,034	754,189	20,783
<b>Total.....</b>	<b>\$</b>		<b>50,036</b>		<b>57,511</b>

Table 68.—Power Equipment, 1936 and 1937

Kind	1936		1937	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and turbines.....	6	115	6	103
Gasoline engines.....	23	141	32	190
<b>Total primary equipment.....</b>	<b>29</b>	<b>256</b>	<b>38</b>	<b>293</b>
Electric motors run by purchased power.....	264	2,619	281	2,534
<b>Total.....</b>	<b>293</b>	<b>2,875</b>	<b>319</b>	<b>2,827</b>
Stationary boilers.....	18	955	23	1,415

Table 69.—Power Equipment showing Ordinarily in Use separately from In Reserve or Idle, 1937

Kind	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and steam turbines.....	6	103		
Gasoline engines.....	31	188	1	2
<b>Total primary equipment.....</b>	<b>37</b>	<b>291</b>	<b>1</b>	<b>2</b>
Electric motors run by purchased power.....	266	2,412	15	122
<b>Total.....</b>	<b>303</b>	<b>2,703</b>	<b>16</b>	<b>124</b>
Stationary boilers.....	21	1,391	2	24

Table 70.—Materials Used in Manufacturing, 1936 and 1937

Material	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Portland cement.....	brl.	130,050	291,181	391,233	819,917
Quicklime.....	ton	46	1,450	80	1,584
Sand.....	cu. yd.	47,029	55,092	179,622	196,822
Gravel.....	cu. yd.	31,376	26,329	50,191	64,877
Crushed stone.....	cu. yd.	18,090	24,593	101,395	170,535
Cinders.....	cu. yd.	22,773	16,294	27,857	21,421
Reinforcing steel.....	ton	2,358	112,607	.....	71,756
Other materials.....	\$	.....	221,501	.....	213,448
Boxes, crates, lumber, etc.....	\$	.....	13,974	.....	6,710
<b>Total.....</b>	<b>\$</b>	.....	<b>763,021</b>	.....	<b>1,566,870</b>

Table 71.—Materials Used in Manufacturing, by Provinces, 1937

Material	Quebec	Ontario	British Columbia	Other Provinces	Canada
	\$	\$	\$	\$	\$
Portland cement.....	264,783	457,181	86,484	11,469	819,917
Quicklime.....	328	22	1,033	291	1,584
Sand.....	94,811	72,201	26,902	2,908	196,822
Gravel.....	1,293	60,576	160	2,648	64,877
Crushed stone.....	117,051	51,223	2,167	94	170,535
Cinders.....	2,535	18,886	.....	.....	21,421
Reinforcing steel.....	9,503	56,738	2,834	2,681	71,756
Other materials.....	27,868	172,620	11,008	1,952	213,448
Boxes, crates, lumber, etc.....	1,794	2,089	2,254	573	6,710
<b>Total.....</b>	<b>519,966</b>	<b>891,536</b>	<b>132,842</b>	<b>72,526</b>	<b>1,566,870</b>

Table 72.—Products Manufactured, 1936 and 1937

Products	1936		1937	
	Quantity	Selling value at works	Quantity	Selling value at works
		\$		\$
Cement bricks.....	M 2,877	63,032	.....	146,522
Cement hollow building blocks, etc.....	.....	315,141	.....	380,008
Cement drain pipe, sewer pipe, water pipe and culvert tile.....	.....	432,424	.....	377,806
Artificial stone.....	.....	133,629	.....	188,021
Cement laundry tubs.....	.....	113,547	.....	39,180
Cinder blocks.....	M 1,543	167,350	1,949	208,149
Cement stucco.....	.....	23,492	.....	23,452
All other products(*).....	.....	464,732	.....	1,936,193
<b>Total.....</b>	<b>\$</b>	<b>1,713,347</b>	.....	<b>3,299,331</b>

(\*) Includes data for haydite blocks and slabs, burial vaults, garden furniture, etc. The 1937 value includes \$1,230,451 for ready-mixed concrete which formerly was not classed as a manufactured product.

Table 73.—Products Manufactured, by Provinces, 1937

Products	Quebec	Ontario	British Columbia	Other Provinces	Canada
	Cement bricks.....	16,638	129,567	.....	317
Cement hollow building blocks, etc.....	100,297	265,976	4,961	8,774	380,008
Cement drain pipe, sewer pipe, water pipe and culvert tile.....	95,412	228,150	24,832	28,692	377,806
Artificial stone.....	92,478	77,712	1,006	16,825	188,021
Cement laundry tubs.....	.....	29,650	9,530	.....	39,180
Cinder blocks.....	17,874	190,275	.....	.....	208,149
Cement stucco.....	6,550	.....	8,688	8,214	23,452
All other products.....	638,475	1,097,200	197,278	3,960	1,936,193
<b>Total.....</b>	<b>967,724</b>	<b>2,018,530</b>	<b>246,295</b>	<b>66,782</b>	<b>3,299,331</b>

## MANUFACTURES OF NON-METALLIC MINERALS

Table 74.—Output of Principal Cement Products, 1930-1937

Years	Cement hollow building blocks	Cement sewer pipe, water pipe, drain pipe and culvert tile	Cement bricks	Artificial stone	Cinder blocks
	\$	\$	\$	\$	\$
1920.....	852,304	457,312	.....	69,382	.....
1921.....	511,283	463,091	11,375	71,741	Not
1922.....	596,063	378,818	75,742	27,725	specified
1923.....	652,420	432,602	70,502	53,326	.....
1924.....	523,326	473,719	53,066	77,484	.....
1925.....	859,706	596,256	40,261	256,118	.....
1926.....	1,066,901	647,798	53,412	479,287	.....
1927.....	941,194	766,269	94,302	473,051	89,145
1928.....	1,158,508	1,294,076	40,007	1,173,645	192,358
1929.....	902,413	1,546,376	178,257	1,134,328	306,228
1930.....	802,604	1,181,943	129,409	877,650	273,097
1931.....	709,976	1,373,136	30,763	824,056	231,782
1932.....	194,750	921,244	58,057	226,057	80,322
1933.....	179,052	1,014,443	8,655	101,548	39,617
1934.....	231,901	202,345	13,949	86,511	76,684
1935.....	277,923	305,203	17,178	148,486	102,615
1936.....	315,141	432,424	63,032	193,629	167,350
1937.....	380,008	377,806	146,522	188,021	208,149

## Directory of Firms in the Cement Products Industry, 1937

Names of Firms	Location of Plants
<b>NOVA SCOTIA—</b>	
Kentville Concrete Products Co.....	Meadow Road, Kentville.
<b>NEW BRUNSWICK—</b>	
Blakony & Son, Ltd.....	806 Main St., Moncton.
Hartland Cement Block Co., Ltd.....	Hartland.
Scott Concrete Works.....	Barker's Point.
Eastern Cement Products Ltd.....	111 Princess St., Saint John.
Pelletier, Alfred B.....	St. Basile.
<b>QUEBEC—</b>	
Anderson, James.....	Beebe.
Arco Stone Company, Ltd.....	2565 Belanger St., Montreal.
Art Stone Limited.....	5701 De Normandie St., Montreal.
Atlas Stone Co.....	2435 Holt St., Montreal.
Bilodeau, L. Alfred.....	144 Renaud Ave., Quebec.
Brunet, R.....	Ormstown.
Daigle, T.....	Rue Daigle, Sherbrooke.
Desco Stone Limited.....	3851 Courtrai Ave., Montreal.
Duntile Company Ltd.....	6905 Chamrinald Ave., Montreal.
Genest, Emile.....	St. Basile, Co. Portneuf.
Giguere, Limoges.....	1392 Beaubien St. E., Montreal.
Gilbert, L.....	Pointe Chaire.
Grandmaison, F. M.....	5081 Herbyville St., Montreal.
Guilbault Frères & Co.....	Ste. Elizabeth, Co. Joliette.
Industries Economiques Ltée.....	20 Aberdeen St., LaSalle.
Lallamie & Bourassa.....	484 Laviolette St., St. Jerome.
La Cie des Produits de Ciment.....	St. Jerome, Co. Terrebonne.
La Societe de Constructions Modernes.....	27 St. Sacrement St., Chicoutimi.
Montreal Dual Mixed Concrete Ltd.....	Ottawa St., Montreal.
Paquette, Emile.....	6824 Briand St., Montreal.
Pizzagalli Terrazzo Tile Mfg. Co., Ltd.....	105 Jean Talon St. W., Montreal.
Potier & Frères.....	8645 Casgrain St., Montreal.
Pressure Pipe Co. of Canada, Ltd.....	Head of Colbrooke Ave., Montreal.
Ready-Mix Concrete Ltd.....	660 St. Catherine St. W., Montreal.
Remy, Georges.....	St. Cesaire.
St. Louis, Napoleon.....	Ste. Ursule.
Taillefer, Elie.....	St. Polycarpe.
Tisserand, Felix.....	6936 Des Ecoles St., Montreal.
<b>ONTARIO—</b>	
Aristocrat Mfg. Co., Ltd.....	7 Fraser Ave., Toronto, 2.
Ashman, T. J., & Son.....	520 Grosvenor St., London.
Babreck Supply Co.....	Wallaceburg.
Baird Barton Stone.....	225 MacPherson Ave., Toronto.
Barr, William.....	1856 Yonge St., Toronto.
Boyd Bros.....	Osgoode.
Brannagh & Bowen Co.....	81 Peter St., Toronto.
Bruns, J.....	22 Savoy Ave., East York (Toronto).
Brown, A. E.....	215 Spruce St., Sudbury.
Brown, D. L.....	272 Cedar St., Sudbury.
Burwell, C. H.....	Tillsonburg.
Calder, James.....	Fergus.
Campbell, John.....	181 Emery St., London.
Canada Block & Tile Co., Ltd.....	70 Verona St., Toronto, 9.

## Directory of Firms in the Cement Products Industry, 1937—Concluded

Names of Firms	Location of Plants
<b>ONTARIO (concluded)</b>	
Canadian Concrete Products Co., Ltd.	Belleville.
Cawley, John	Westport.
Century Concrete Vault Ltd.	Industrial St., Leaside.
Clemens & Miller	Lincoln St. W., Welland.
Concrete Pipe Ltd.	198 Riddell St., Woodstock.
Concrete Pipe Ltd.	400 Old Park Road, Toronto.
Cooksville Co., Ltd.	Cooksville.
Cooper Concrete Block & Supply Co., Ltd.	1001 Roselawn Ave., Fairbank.
Cross Supplies & Paving Ltd.	1272 Windsor Ave., Windsor.
Dell, E. E.	Aylmer.
Dominion Concrete Co., Ltd.	Kemptville.
Dominion Concrete Co., Ltd.	Prescott.
Dual Mixed Concrete and Materials Ltd.	Fleet and Bathurst Sts., Toronto.
Dundas Concrete Block Co., Ltd.	400 Scurlet Road, Toronto.
D. W. S. Concrete Products Limited.	640 Dufferin St., Toronto.
Economy Fuel Co.	100 Wallace Ave., Hamilton.
Fairbank Block & Supply Co., Ltd.	318 Hopewell Ave., Toronto.
Fletcher, J. H.	Fonthill.
Florry, A., & Son (Scarlett Road Block Co.)	16 Scarlett Rd., Toronto.
Frazier Dumtily Co., Ltd.	Clyde Ave., Westboro.
Frid Bros. Ltd.	Main W. and Mucklin Sts., Hamilton.
Garnett, Thos., & Sons	Barrett St., Port Hope.
Grace Builders' Supplies Ltd.	291 S. Christina St., Sarnia.
Grimo, Frank	1500 Ferry St., Niagara Falls.
Hall, J. H.	George St. N., Peterborough.
Hayley, Hurry	Hurdman Road, Ottawa.
Hill, John D.	1512 Dufferin Place, Windsor.
Hunt, J. W.	Queen St., Mount Forest.
Jackson, Jas. H.	19 Orchard St., London.
Johnston, J. H.	124 Holborne Ave., London.
Kilbourne, H., & Son	145 Wharncliffe Rd. S., London.
Kitchener Concrete Block Co.	R. R. No. 2, Kitchener.
Leaside Block and Tile Ltd.	Industrial St., Leaside.
Leblond, J.	61 Hanna St., Eastview.
Logz, Stanley	712 Oxford St., London.
London Cement Burial Vault Works	687 Little Grey St., London.
McClelland, R. J.	378 Brook St., Kingston.
Miller, A.	50 Harvey St., Chatham.
Northern Cement B. B. & Tile Co.	Timmins.
Nuttall, Wm. A.	948 Hamilton St., Preston.
Ontario Ready Mix Concrete Ltd.	Ottawa and Toronto.
Peerless Construction Co.	2367 Lillian St., Windsor.
Peerless Stone Ltd.	510 Rhodes Ave., Toronto.
Pinchin, R.	Clarkson.
Red-D-Mix Concrete Ltd.	501 Main St. W., Hamilton.
Rideau Concretes Ltd.	River Road, Eastview.
Robinson, Ernest	R. R. No. 3, Mitchell.
Ross, Chas., & Son	Dunnville.
Ross, H. A.	69 St. Julian St., London.
Russello, Howard	Leamington.
Sarnia Cement Products Co., Ltd.	Albert St., Point Edward.
Sauve, Dennis	Belle River.
Schmidt, J. T.	R. R. 1, Waterloo.
Schultz, John	64 Kent Ave., Kitchener.
Shoemaker, Allen	R. R. 4, Kitchener.
Superior Stone Limited	528 Victoria St., Kitchener.
Tack, Henry	Adelaide and Victoria Sts., London.
Tooke, Thos.	57 Government Rd., Kirkland Lake.
Toronto Brick Company Ltd.	Ormskirk Ave., Village of Swansea.
Toronto Concrete Burial Vault Co.	Islington.
Wattenworth, Chas. W.	Beamsville.
White, Homer, & Co.	Spring St., Picton.
Willowdale Block Co.	Willowdale.
Woolatt Fuel & Supply Co., Ltd.	2171 Ottawa St., Walkerville.
Young Bros.	Ridgeway.
<b>MANITIBA—</b>	
Dominion Stucco Co., Ltd.	Sargent and St. James, Winnipeg.
Lo's Stone Works Limited	St. Mary's Road, Norwood.
<b>SASKATCHEWAN—</b>	
Concrete Products Ltd.	Fifth and St. John Sts., Regina.
Precast Concrete Co.	826 Dewdney Ave., Regina.
<b>ALBERTA—</b>	
Bell, T. A.	122-3rd Ave. E., Calgary.
Concrete Products & Supplies	Rifle Range, East Calgary.
<b>BRITISH COLUMBIA—</b>	
B.C. Concrete Co., Ltd.	77th and Oak Sts., Vancouver.
Canadian Stucco Products	Granville Island, Vancouver.
Dawson Art Stone Works	294 East 1st Ave., Vancouver.
Diethers Ltd.	Granville Island, Vancouver.
Hunter, George	2613 East 22nd Ave., Vancouver.
Pearlsette Mfg. Co., Ltd.	1002 Mainland St., Vancouver.
Sanderson, Warren	1780 Broadway E., Vancouver.
Williams Concrete Co., Ltd.	1401 Main St., Vancouver.
Vancouver Cement Products	7991 Granville St., Vancouver.

## CHAPTER SIX

## THE COKE AND GAS INDUSTRY

Production from coke and gas plants during 1937 amounted to \$41,702,929 at factory prices. This value exceeded by 4.5 per cent the former record of \$39,910,443 established in 1929 and it was 4.6 per cent above the 1936 total of \$39,871,898. Output during the year under review included 2,570,385 tons of coke with a factory selling value of \$18,466,068; 46,131,322 M cubic feet of gas valued at \$19,922,809, and other products worth \$3,314,052.

Thirty coke and gas works were operated in 1937, including 8 by-product plants, 2 bee-hive plants, and 20 retort coal and water gas plants. Seventeen of these works were located in Ontario, 4 in British Columbia, 3 in Quebec, 2 in Manitoba, 2 in Nova Scotia, and 1 in each of New Brunswick and Alberta. In addition to these manufacturers, 3 gas distributing companies—1 in Quebec and 2 in Ontario—have been included in this industry. These companies purchase coke-oven gas from the producers and distribute it for domestic and commercial use and data covering their operations have been included to round out the figures for the industry; in other cases the manufacturers also distribute the gas which they make. The 8 small plants which make Pintsch oil gas for lighting railway cars have been dropped from this group.

Output of coke from gas retorts, by-product ovens, and beehive ovens totalled 2,570,385 tons in 1937 compared with 2,404,793 tons in 1936 and 2,257,604 tons in 1935; the by-product and beehive ovens produced 2,334,556 tons and gas retorts made 235,829 tons. In addition, 62,015 tons of petroleum coke were recovered as a by-product in the petroleum refining industry.

Data on the distribution of coke (except petroleum coke) by the producers show that 974,274 tons were sold for domestic use, 892,609 tons were used in metallurgical works operated by the producing companies, 245,393 tons were used in the producing coke plants for fuel or for making water gas, and 517,519 tons were sold for other uses. The total distribution of 2,629,795 tons included about 39,000 tons drawn from stock.

Imports of coke made from coal dropped to 417,733 tons in 1937 from 612,858 tons in 1936 while exports advanced to 36,959 tons from 18,215 tons. Imports of petroleum coke during this period advanced to 119,503 tons from 88,602 tons and exports (including re-exports) declined to 35,663 tons from 49,957 tons.

Production of manufactured gas amounted to 46,009,633 M cubic feet of which 38,790,787 M cubic feet were from by-product ovens and 7,218,846 M cubic feet from gas plants. Sales of gas by the producers totalled 15,289,839 M cubic feet of which 8,700,475 M cubic feet were from by-product ovens and 6,589,364 M cubic feet were from gas works. Most of the remaining gas was used as a fuel in the producing plants or in their associated metallurgical works. These figures do not include 52,209 M cubic feet of Pintsch oil gas for lighting railway cars, 5,779,059 M cubic feet of still gas recovered at petroleum refineries, and some blast furnace and producer gas which was recovered and used by the producers but for which no records are available.

The number of customers served with manufactured gas in 1937 was 476,965, the number of active meters was 501,677, the length of distributing mains was 3,729 miles, and the average calorific value of the gas sold ranged from 450 to 533 B.T.U. per cubic foot.

Table 75.—Distribution of Coke and Gas Manufacturing Plants, by Provinces, 1937

Provinces	Coke plants		Gas plants			Total
	By-product coke ovens	Bee-hive ovens	Retort coal gas only	Water gas only	Retort coal gas and water gas	
Nova Scotia.....	1		1			2
New Brunswick.....			1			1
Quebec.....	1		1	1		3
Ontario.....	4		6	5	2	17
Manitoba.....	1		1			2
Alberta.....		1				1
British Columbia.....	1		1		1	4
<b>Canada.....</b>	<b>8</b>	<b>2</b>	<b>11</b>	<b>6</b>	<b>3</b>	<b>30</b>

Table 76.—Size of Establishments, According to Quantity of Gas Produced, 1937

	M cubic feet	Number of plants*	Total production
			M cu. ft.
Under 10,000.....		3	12,755
10,000— 50,000.....		8	208,491
50,001— 100,000.....		3	214,124
100,001— 175,000.....		4	646,608
175,001—1,000,000.....		3	1,361,577
1,000,001—6,000,000.....		3	13,600,782
Over 6,000,000.....		4	29,965,296
<b>Total.....</b>		<b>28</b>	<b>46,009,633</b>

\*Excluding 2 bee-hive ovens which did not recover gas.

Table 77.—Principal Statistics, 1921-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1921.....	55	56,963,580	3,465	5,207,765	38,638	21,575,494	32,987,013	11,372,881
1922.....	54	59,979,550	3,640	4,691,598	291,225	14,710,836	26,425,797	11,423,736
1923.....	50	66,020,937	3,619	4,644,208	211,515	20,461,947	33,500,785	12,833,323
1924.....	50	67,134,020	4,178	5,736,343	3,831,249	13,652,092	28,540,186	11,056,845
1925.....	50	70,035,105	4,387	5,943,339	2,342,523	13,290,920	28,894,777	13,261,334
1926.....	50	74,343,166	4,293	5,897,273	1,652,598	15,970,181	33,526,334	15,903,555
1927.....	48	84,011,030	4,146	5,869,119	1,972,122	16,614,903	34,044,749	15,457,724
1928.....	45	92,145,190	3,914	5,608,779	2,073,736	17,164,246	34,708,447	15,470,465
1929.....	43	94,749,062	3,902	5,938,814	2,628,714	18,517,214	39,910,443	18,764,515
1930.....	41	89,987,235	3,970	5,884,802	2,384,300	17,082,364	36,592,859	17,126,195
1931.....	41	95,872,858	4,006	5,616,763	1,962,266	13,894,061	31,249,460	15,393,133
1932.....	42	93,534,495	3,639	4,897,746	2,223,414	12,241,698	29,812,650	15,347,538
1933.....	42	94,225,478	3,528	4,606,308	2,606,590	12,729,075	29,936,975	14,601,310
1934.....	*44	99,297,395	4,278	5,648,969	2,783,049	15,237,031	38,272,020	20,251,940
1935.....	*44	98,939,160	4,107	5,627,861	2,432,111	15,233,519	38,474,789	20,809,159
1936.....	*42	93,088,722	4,116	5,714,483	2,781,045	16,585,571	39,871,898	20,505,282
1937.....	†33	91,911,250	4,027	5,709,569	2,906,092	17,217,957	41,702,929	21,578,880
Per cent change 1937 from 1936.....		-1.2	-2.1	-0.1	+4.5	+3.8	+4.6	+5.2

\*Includes 3 companies which purchased coke oven gas from the manufacturers and distributed it to customers.

†Plants which made Pintsch oil gas for railway car lighting have been excluded from the 1937 statistics; in previous years 8 such plants were included, the distribution by provinces being as follows—New Brunswick, 1; Quebec, 1; Ontario, 2; Manitoba, 1; Saskatchewan, 1; Alberta, 1; British Columbia, 1.

## MANUFACTURES OF NON-METALLIC MINERALS

Table 78.—Principal Statistics by Sub-groups, 1933-1937

Years	Number of companies	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
<b>Coke (By-product and Bee-hive)</b>							
		\$		\$	\$	\$	\$
1933.....	*13	51,562,853	1,316	1,738,250	1,940,032	9,581,030	17,987,418
1934.....	*13	56,282,977	2,083	2,772,265	2,154,814	11,899,252	20,547,174
1935.....	*13	57,622,800	2,084	2,940,341	1,675,503	12,064,977	20,927,436
1936.....	*13	55,352,751	2,306	3,294,227	2,051,914	13,833,456	29,458,063
1937.....	*13	56,410,667	2,314	3,325,958	2,243,977	14,614,177	31,913,459
<b>Gas (Retort and Water Gas)</b>							
1933.....	32	42,062,623	2,210	2,868,058	606,558	3,148,045	11,949,557
1934.....	31	43,014,418	2,195	2,870,704	628,235	3,337,779	11,724,846
1935.....	31	41,316,360	2,023	2,687,520	756,608	3,168,542	11,547,353
1936.....	29	37,735,971	1,810	2,420,256	729,131	2,752,085	10,413,835
1937.....	†20	35,494,583	1,713	2,383,611	662,115	2,603,760	9,789,470
<b>Total—Coke and Gas</b>							
1933.....	45	94,325,476	3,526	4,606,308	2,606,590	12,729,075	29,936,975
1934.....	44	99,297,395	4,278	5,618,969	2,783,019	15,237,031	38,272,020
1935.....	44	98,939,160	4,107	5,627,861	2,432,111	15,233,519	38,474,789
1936.....	42	93,088,722	4,116	5,714,483	2,781,015	16,585,571	39,871,898
1937.....	33	91,911,250	4,027	5,709,569	2,906,092	17,217,957	41,702,929

\*Includes 3 companies which purchased coke oven gas from the manufacturers and distributed it to customers.

†Plants which made Pintsch oil gas for railway car lighting have been excluded from the 1937 statistics; in previous years 8 such plants were included, the distribution by provinces being as follows—New Brunswick, 1; Quebec, 1; Ontario, 2; Manitoba, 1; Saskatchewan, 1; Alberta, 1; British Columbia, 1.

Table 79.—Principal Statistics, by Provinces, 1936 and 1937

Provinces	Number of companies	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
<b>1936</b>							
		\$		\$	\$	\$	\$
Nova Scotia and New Brunswick...	4	8,470,793	364	379,083	296,846	2,166,401	3,272,478
Quebec.....	5	12,652,318	800	1,261,939	853,928	3,124,228	10,226,647
Ontario.....	22	53,385,545	2,449	3,407,555	1,379,130	9,942,259	22,562,214
Manitoba, Saskatchewan and Alberta.....	6	6,316,947	211	272,082	68,464	745,529	1,542,133
British Columbia.....	5	12,263,119	292	393,824	182,677	607,154	2,268,429
<b>Canada.....</b>	<b>42</b>	<b>93,088,722</b>	<b>4,116</b>	<b>5,714,483</b>	<b>2,781,045</b>	<b>16,585,571</b>	<b>39,871,898</b>
<b>1937†</b>							
Nova Scotia and New Brunswick...	3	9,119,640	391	469,172	364,761	2,202,755	4,236,623
Quebec.....	4	12,055,904	633	1,020,370	862,199	3,176,005	10,072,569
Ontario.....	19	52,099,768	2,459	3,477,059	1,435,278	10,380,104	23,554,869
Manitoba and Alberta.....	3	6,370,068	231	293,210	69,080	753,192	1,421,617
British Columbia.....	4	12,265,870	313	449,758	174,774	705,901	2,417,261
<b>Canada.....</b>	<b>33</b>	<b>91,911,250</b>	<b>4,027</b>	<b>5,709,569</b>	<b>2,906,092</b>	<b>17,217,957</b>	<b>41,702,929</b>

†Plants which made Pintsch oil gas for railway car lighting have been excluded from the 1937 statistics; in previous years 8 such plants were included, the distribution by provinces being as follows—New Brunswick, 1; Quebec, 1; Ontario, 2; Manitoba, 1; Saskatchewan, 1; Alberta, 1; British Columbia, 1.



Table 80.—Size of Establishments, According to Production, Employees and Capital Employed, 1937

	Number of companies	Capital employed	Average number of employees	Gross selling value of products at works
		\$		\$
<b>(a) Production</b>				
\$ 25,000 and under .....	4	166,980	18	55,899
\$ 25,001 to \$ 50,000 .....	6	1,231,535	83	266,328
\$ 50,001 to \$ 100,000 .....	4	2,230,733	84	326,130
\$100,001 to \$ 250,000 .....	4	3,102,697	150	694,930
\$250,001 to \$ 500,000 .....	4	5,574,425	223	1,393,112
\$500,001 to \$1,000,000 .....	2	6,845,822	255	1,459,742
Over \$1,000,000 .....	9	72,759,058	3,214	37,506,788
<b>Total</b> .....	<b>33</b>	<b>91,911,250</b>	<b>4,027</b>	<b>41,702,929</b>
<b>(b) Employees (Number)</b>				
1 to 10 .....	6	465,157	37	139,780
11 to 20 .....	5	1,788,033	73	295,193
21 to 100 .....	11	10,063,180	448	2,297,426
101 to 250 .....	7	34,300,954	1,257	18,436,912
Over 250 .....	4	45,243,926	2,212	20,533,618
<b>Total</b> .....	<b>33</b>	<b>91,911,250</b>	<b>4,027</b>	<b>41,702,929</b>
<b>(c) Capital Employed</b>				
Under \$100,000 .....	5	263,634	28	108,015
\$100,001 to \$ 500,000 .....	7	1,992,063	131	569,121
\$500,001 to \$1,000,000 .....	7	4,492,956	206	1,079,859
Over \$1,000,000 .....	14	85,162,597	3,662	39,945,934
<b>Total</b> .....	<b>33</b>	<b>91,911,250</b>	<b>4,027</b>	<b>41,702,929</b>

Table 81.—Capital Employed, by Classes and by Provinces, 1936 and 1937

Provinces	Present value of land, buildings, fixtures, and machinery	Inventory value of materials on hand, stocks in process, and finished products	Operating capital (cash, bills and accounts receivable, prepaid, expenses, etc.)	Total capital employed
	\$	\$	\$	\$
<b>1936</b>				
Nova Scotia and New Brunswick .....	6,641,060	1,036,919	792,814	8,470,793
Quebec .....	9,659,224	1,864,826	1,128,268	12,652,319
Ontario .....	42,219,781	5,611,063	5,554,701	53,385,545
Manitoba, Saskatchewan and Alberta .....	6,100,096	91,228	125,623	6,316,947
British Columbia .....	11,588,807	331,203	343,109	12,263,119
<b>Canada</b> .....	<b>76,208,968</b>	<b>8,935,233</b>	<b>7,944,515</b>	<b>93,088,722</b>
<b>1937</b>				
Nova Scotia and New Brunswick .....	6,669,691	1,544,533	905,416	9,119,640
Quebec .....	9,348,429	1,942,949	764,526	12,055,964
Ontario .....	42,152,166	5,687,277	4,260,325	52,099,768
Manitoba and Alberta .....	6,053,218	162,417	154,433	6,370,068
British Columbia .....	11,606,255	282,631	376,984	12,265,870
<b>Canada</b> .....	<b>75,829,759</b>	<b>9,619,807</b>	<b>6,461,684</b>	<b>91,911,250</b>

Table 82.—Employees, Salaries and Wages, by Provinces, 1936 and 1937

Provinces	Average number of employees				Total	Salaries \$	Wages \$	Total salaries and wages \$
	On salaries		On wages					
	Male	Female	Male	Female				
1936								
Nova Scotia and New Brunswick..	42	9	313		364	52,522	326,561	379,083
Quebec.....	298	86	415	1	800	723,582	538,357	1,261,939
Ontario.....	528	193	1,724	4	2,449	1,059,558	2,347,997	3,407,555
Manitoba, Saskatchewan and Alberta.....	42	24	145		211	82,730	189,352	272,082
British Columbia.....	48	3	241		292	105,489	288,335	393,824
<b>Canada.....</b>	<b>958</b>	<b>315</b>	<b>2,838</b>	<b>5</b>	<b>4,116</b>	<b>2,023,881</b>	<b>3,690,602</b>	<b>5,714,483</b>
1937								
Nova Scotia and New Brunswick..	42	8	341		391	69,367	399,805	469,172
Quebec.....	184	36	413		633	401,893	618,477	1,020,370
Ontario.....	514	183	1,780	2	2,459	1,023,704	2,453,355	3,477,059
Manitoba and Alberta.....	41	24	166		231	83,294	209,916	293,210
British Columbia.....	55	2	256		313	112,488	337,270	449,758
<b>Canada.....</b>	<b>836</b>	<b>233</b>	<b>2,936</b>	<b>2</b>	<b>4,027</b>	<b>1,690,746</b>	<b>4,018,823</b>	<b>5,709,569</b>

Table 83.—Wage-earners, by Months, 1936 and 1937

(On 15th of each month)

Months	1936			1937		
	Male	Female	Total	Male	Female	Total
January.....	2,795	4	2,799	2,824	2	2,826
February.....	2,829	4	2,833	2,833	2	2,835
March.....	2,725	4	2,729	2,846	2	2,848
April.....	2,746	4	2,750	2,900	2	2,902
May.....	2,834	4	2,838	3,003	2	3,005
June.....	2,941	4	2,945	3,075	3	3,078
July.....	2,938	4	2,942	3,008	3	3,011
August.....	2,879	6	2,885	2,990	3	2,993
September.....	2,847	4	2,851	3,032	3	3,035
October.....	2,847	4	2,851	2,953	3	2,956
November.....	2,871	2	2,873	2,928	3	2,929
December.....	2,805	2	2,807	2,858	3	2,858
<b>Average.....</b>	<b>2,836</b>	<b>5</b>	<b>2,843</b>	<b>2,836</b>	<b>2</b>	<b>2,838</b>

Table 84.—Regular Hours Worked per Week by Wage-earners, 1936 and 1937

(Overtime not included)

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	3.9	5.6	51-53 hours.....	2.0	1.8
41-43 hours.....	2.0	13.3	54 hours.....	3.5	5.7
44 hours.....	10.9	6.8	55 hours.....	0.6	0.5
45-47 hours.....	4.9	2.1	56-59 hours.....	12.0	13.1
48 hours.....	45.8	42.6	60 hours and over.....	7.7	5.2
49-50 hours.....	6.7	3.5			

Table 85.—Fuel and Electricity Used, 1936 and 1937

NOTE.—Includes fuel for boilers, benches, retorts, etc., but does not include coal, coke, etc., charged to ovens, retorts or water gas sets.

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian	short ton	15,347	46,303	7,901	30,426
Imported	short ton	11,421	62,247	7,899	41,093
Anthracite coal	short ton	1,244	7,194	25	250
Lignite coal—Canadian	short ton	421	1,263	269	807
Coke (all made in users' works)	short ton	153,416	752,777	150,276	730,679
Gasoline	Imp. gal.	21,976	3,385	14,267	2,086
Fuel oil	Imp. gal.	2,419	98	3,342	145
Wood	cord	2	11	12	71
Gas—Manufactured (all made in users' works)	M cu. ft.	14,102,204	1,628,673	15,316,006	1,825,372
Natural	M cu. ft.	4,000	800		
Other fuel	\$		13,558		7,125
Electricity purchased	K.W.H.	49,327,570	264,736	47,557,208	268,038
<b>Total</b>	\$		<b>2,781,045</b>		<b>2,906,692</b>

Table 86.—Power Equipment, 1936 and 1937

	1936		1937	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and turbines	288	14,640	279	14,603
Diesel engines	1	42	1	42
Gasoline, gas and oil engines (except diesel)	6	195	6	195
Hydraulic turbines or water wheels	1	6	1	6
<b>Total primary equipment</b>	<b>296</b>	<b>14,883</b>	<b>287</b>	<b>14,846</b>
Electric motors run by purchased power	1,033	22,837	1,043	22,865
<b>Total</b>	<b>1,329</b>	<b>37,720</b>	<b>1,330</b>	<b>37,711</b>
Electric motors run by primary units shown above	116	2,258	119	2,273
Stationary boilers	137	33,338	106	23,740

Table 87.—Power Equipment, 1937, showing Ordinarily in Use separately from In Reserve or Idle

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and turbines	177	9,338	102	5,265
Diesel engines			1	42
Gasoline, gas and oil engines (except diesel)	1	7	5	188
Hydraulic turbines or water wheels			1	6
<b>Total primary equipment</b>	<b>178</b>	<b>9,345</b>	<b>109</b>	<b>5,501</b>
Electric motors run by purchased power	793	18,560	250	4,305
<b>Total</b>	<b>971</b>	<b>27,905</b>	<b>359</b>	<b>9,806</b>
Electric motors run by primary units shown above	119	2,273		
Stationary boilers	73	15,744	33	7,996

Table 88.—Materials Used in Coke and Gas Plants, 1936 and 1937

Materials	Unit of measure	1936		1937	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Bituminous coal carbonized in ovens or retorts—					
(a) Canadian	short ton	1,057,099	4,278,820	1,154,315	4,198,788
(b) Imported	short ton	2,298,240	10,682,891	2,423,243	11,440,385
Bituminous coal for making water gas—					
Imported	short ton	3,159	21,772	2,392	17,839
Coke for gas-making—					
(a) Purchased	short ton	4,573	43,311	3,907	36,620
(b) Companies' own make	short ton	92,865	664,429	92,515	662,053
Oil used for enriching water gas	Imp. gal.	3,907,255	277,487	4,017,360	299,922
Oil used for making oil gas	Imp. gal.	635,122	53,572		
Absorbing and wash oil	Imp. gal.	261,734	30,686	228,336	26,550
Caustic soda	pound	683,065	17,270	551,619	12,481
Lime	ton	2,361	16,900	2,735	27,529
Water	\$		12,859		16,950
Oxide or purifying materials	ton		41,291		40,414
Sulphuric acid, 66° B $\acute{e}$	pound	38,939,799	312,270	46,357,679	328,521
All other materials	\$		132,033		109,905
<b>Total</b>	<b>\$</b>		<b>16,585,571</b>		<b>17,217,957</b>

Table 89.—Materials Used in Coke and Gas Plants, by Areas, 1937

Materials	Unit of measure	Eastern Provinces		Ontario		Western Provinces	
		Quantity	Cost at works \$	Quantity	Cost at works \$	Quantity	Cost at works \$
Bituminous coal carbonized in ovens and retorts—							
(a) Canadian	short ton	853,949	3,162,021	6,028	28,313	294,838	1,012,454
(b) Imported	short ton	338,361	1,681,434	2,058,185	9,519,178	26,197	235,773
Bituminous coal for making water gas—							
Imported	short ton	500	4,000	1,892	13,839		
Coke for gas-making—							
(a) Purchased	short ton	528	5,544	3,379	31,076		
(b) Companies' own make	short ton	30,911	235,851	37,037	252,321	24,567	173,881
Oil used for enriching water gas	Imp. gal.	140,400	11,232	3,565,473	270,694	311,487	17,996
Oil used for making oil gas	Imp. gal.						
Absorbing and wash oil	Imp. gal.	122,518	15,165	86,937	10,014	18,881	1,371
Caustic soda	pound	228,126	3,453	323,493	9,028		
Lime	ton	2,145	22,123	590	5,406		
Water	\$		8,878		7,786		286
Oxide or purifying materials	ton		13,918		22,947		3,549
Sulphuric acid, 66° B $\acute{e}$	pound	20,928,022	131,671	25,429,657	196,850		
All other materials	\$		83,470		12,652		13,783
<b>Total</b>	<b>\$</b>		<b>5,378,760</b>		<b>10,380,104</b>		<b>1,459,933</b>

Table 90.—Products Made in Coke and Gas Plants, 1936 and 1937

Products	Unit of measure	1936		1937	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
			\$		\$
<b>Gas made—</b>					
Retort coal gas.....	M cu. ft.	5,341,977		4,942,958	
Coke oven gas.....	M cu. ft.	30,175,976		32,636,734	
Producer gas.....	M cu. ft.	6,796,467		6,158,814	
Water gas.....	M cu. ft.	1,979,566		2,271,127	
Oil gas.....	M cu. ft.	51,372			
<b>Total gas made.....</b>	<b>M cu. ft.</b>	<b>44,345,358</b>		<b>46,009,633</b>	
<b>Gas sold or used—</b>					
Gas sold.....	M cu. ft.	15,321,832	15,163,664	15,289,839	14,732,531
Gas used in own plants.....	M cu. ft.	16,665,381	2,165,284	18,330,349	2,429,972
Gas used in associated metallurgical works.....	M cu. ft.	10,181,379	1,324,475	10,652,774	1,398,776
Gas otherwise accounted for but not sold.....	M cu. ft.	519,077	102,671	235,652	62,057
Gas not accounted for.....	M cu. ft.	1,795,319	1,463,265	1,622,708	1,299,473
<b>Total gas sold or used.....</b>	<b>M cu. ft.</b>	<b>44,482,988</b>	<b>20,219,359</b>	<b>46,131,322</b>	<b>19,922,809</b>
<b>Coke made—</b>					
Coke from by-product or bee-hive ovens.....	short ton	2,017,352	13,963,230	2,187,638	15,813,440
Coke from gas retorts.....	short ton	243,689	2,324,775	222,309	2,137,661
Coke breeze from by-product ovens.....	short ton	130,458	380,729	146,918	469,930
Coke breeze from gas retorts.....	short ton	13,294	41,274	13,520	45,037
<b>Total coke.....</b>	<b>short ton</b>	<b>2,404,793</b>	<b>16,710,008</b>	<b>2,570,385</b>	<b>18,466,068</b>
<b>Other products—</b>					
Tar.....	Imp. gal.	26,804,438	1,340,754	27,789,567	1,440,578
Ammonia liquor.....	lb. N.H. <sub>3</sub>	1,779,748	17,797	1,618,661	16,187
Ammonia sulphate.....	pound	53,656,457	582,816	59,576,866	683,556
Benzol.....	Imp. gal.	2,935,917	473,948	2,980,697	590,302
Toluol and xylol.....	Imp. gal.	724,982	280,123	731,408	270,557
Other light oils.....	Imp. gal.	2,862,815	242,036	3,824,692	308,546
All other products.....	\$		5,057		4,326
<b>Grand total.....</b>	<b>\$</b>		<b>39,871,888</b>		<b>41,702,929</b>

Table 91.—Products Made in Coke and Gas Plants, by Areas, 1937

Products	Unit of measure	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Alberta and British Columbia	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works	Quantity	Gross selling value at works
Gas made—			\$		\$		\$
Retort coal gas	M cu. ft.	484,481		4,268,346		190,131	
Coke oven gas	M cu. ft.	12,041,284		18,472,769		2,122,691	
Producer gas	M cu. ft.	3,955,100				2,203,714	
Water gas	M cu. ft.	68,800		2,196,591		5,736	
Oil gas	M cu. ft.						
<b>Total gas made</b>	<b>M cu. ft.</b>	<b>16,549,665</b>		<b>24,937,706</b>		<b>4,522,262</b>	
Gas sold or used—							
Gas sold	M cu. ft.	4,977,258	5,586,403	8,493,068	7,199,917	1,819,513	1,946,211
Gas used in own plants	M cu. ft.	7,085,534	976,912	8,793,525	1,281,191	2,451,290	171,869
Gas used in associated metallurgical works	M cu. ft.	3,864,511	415,603	6,788,263	983,173		
Gas otherwise accounted for but not sold	M cu. ft.	722	575	234,630	61,182	300	300
Gas not accounted for	M cu. ft.	621,483	592,158	750,532	457,088	250,693	250,227
<b>Total gas sold or used</b>	<b>M cu. ft.</b>	<b>16,549,508</b>	<b>7,571,651</b>	<b>25,060,018</b>	<b>9,982,551</b>	<b>4,521,796</b>	<b>2,368,607</b>
Coke made—							
Coke from by-product or bee-hive ovens	short ton	754,596	5,158,061	1,241,539	9,364,975	191,503	1,290,404
Coke from gas retorts	short ton	17,642	131,479	196,752	1,960,020	7,915	46,162
Coke breeze from by-product ovens	short ton	77,574	247,242	56,579	167,586	12,765	55,102
Coke breeze from gas retorts	short ton	3,310	11,260	9,464	30,384	746	3,383
<b>Total coke</b>	<b>short ton</b>	<b>853,122</b>	<b>5,548,042</b>	<b>1,504,334</b>	<b>11,522,965</b>	<b>212,929</b>	<b>1,395,061</b>
Other products—							
Fat	Imp. gal.	9,988,575	457,116	16,535,960	908,262	1,265,032	75,200
Other products	\$		732,383		1,141,091		
<b>Grand total</b>	<b>\$</b>		<b>11,309,192</b>		<b>23,554,869</b>		<b>3,838,868</b>

Table 92.—Production of Bee-Hive, By-product and Gas-Retort Coke, by Kinds, 1919-1937

Years	Bee-hive and by-product coke		Gas retort coke		Total	
	Quantity	Gross selling value at works	Quantity	Gross selling value at works	Quantity	Gross selling value at works
	short tons	\$	short tons	\$	short tons	\$
1919	1,276,443	9,821,998	398,589	2,251,744	1,675,032	12,073,742
1920	1,270,322	11,524,091	437,881	3,875,093	1,708,203	15,399,184
1921	1,011,847	11,049,369	452,152	3,091,814	1,463,999	14,111,183
1922	700,098	5,560,183	532,548	3,492,307	1,232,646	9,052,490
1923	1,109,989	10,236,524	498,309	3,695,960	1,668,298	13,932,484
1924	985,305	7,268,713	451,607	3,164,234	1,436,912	10,432,947
1925	1,079,526	7,442,103	467,213	3,040,738	1,546,739	10,482,841
1926	1,555,962	10,232,775	471,096	3,073,150	2,027,058	13,305,925
1927	1,582,662	10,165,035	443,776	2,799,177	2,026,438	12,961,212
1928	1,980,591	12,353,588	333,536	2,182,123	2,314,127	14,535,711
1929	2,372,220	15,938,466	305,352	2,009,192	2,677,571	17,917,658
1930	2,062,764	13,592,418	323,230	2,259,829	2,385,994	15,852,247
1931	1,512,381	10,157,011	320,319	2,262,730	1,832,700	12,419,711
1932	1,331,170	9,085,716	306,531	3,008,789	1,637,701	12,091,505
1933	1,500,448	9,847,600	271,716	2,618,595	1,772,164	12,166,195
1934	1,948,294	13,481,930	295,126	2,379,827	2,243,420	15,861,757
1935	1,902,844	13,121,614	294,760	2,739,545	2,257,604	15,861,159
1936	2,147,810	14,343,959	256,983	2,366,049	2,404,793	16,710,008
1937	2,334,556	16,288,370	235,829	2,182,098	2,570,385	18,466,068

Table 93.—Production of Bee-Hive, By-product and Gas-Retort Coke, by Provinces, 1919-1937

Years	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Alberta, and British Columbia		Canada	
	Quantity	Gross selling value at works	Quantity	Gross selling value at works	Quantity	Gross selling value at works	Quantity	Gross selling value at works
	short tons	\$	short tons	\$	short tons	\$	short tons	\$
1919	567,778	4,700,079	986,833	6,301,069	120,421	1,072,595	1,675,032	12,073,712
1920	604,642	6,053,228	882,257	6,834,357	221,304	2,611,001	1,708,203	15,399,184
1921	413,420	3,005,746	858,951	9,166,758	191,628	1,938,679	1,463,999	14,111,183
1922	454,678	2,439,591	603,219	4,893,672	174,749	1,719,227	1,232,646	9,652,490
1923	599,458	4,905,506	882,341	7,189,816	186,499	1,837,162	1,668,298	13,932,484
1924	420,535	2,753,354	857,528	6,161,144	158,849	1,518,419	1,436,912	10,432,917
1925	504,956	2,755,147	830,839	5,967,333	210,944	1,760,361	1,546,739	10,482,841
1926	646,929	3,205,348	1,144,493	8,208,124	235,636	1,832,453	2,037,058	13,305,925
1927	561,918	2,815,912	1,260,355	8,542,888	204,185	1,605,312	2,036,438	12,964,212
1928	703,297	3,926,491	1,443,512	9,332,026	167,318	1,270,294	2,314,127	14,555,711
1929	850,452	5,259,446	1,624,854	11,112,809	202,245	1,575,465	2,677,581	17,917,658
1930	880,911	4,361,204	1,516,080	10,021,292	189,003	1,469,751	2,385,994	15,852,247
1931	538,126	3,887,746	1,113,509	7,163,526	181,065	1,368,469	1,832,700	12,419,711
1932	403,330	3,115,737	1,087,122	7,876,841	147,249	1,101,827	1,737,701	12,094,505
1933	445,755	2,840,433	1,153,509	8,429,660	172,900	1,196,102	1,772,164	12,466,195
1934	654,305	4,369,150	1,388,709	10,200,363	200,406	1,292,244	2,424,420	15,861,757
1935	730,469	4,738,191	1,334,081	9,868,953	193,054	1,254,015	2,257,604	16,861,159
1936	775,270	4,055,468	1,441,833	10,807,611	187,690	1,246,929	2,404,793	16,710,008
1937	853,122	5,548,042	1,504,334	11,522,965	212,029	1,395,061	2,570,385	18,466,068

Table 94.—Production of Bee-Hive, By-product and Gas-Retort Coke, by Months, 1929-1937

(In thousands of short tons)

Month	1929	1930	1931	1932	1933	1934	1935	1936	1937
January	221	225	171	151	150	195	200	212	218
February	202	204	165	144	128	169	181	198	198
March	228	224	179	156	139	192	198	202	221
April	220	213	169	143	122	185	180	190	214
May	231	210	169	129	134	185	185	200	218
June	221	193	155	119	136	179	180	199	210
July	225	182	139	127	145	183	176	193	212
August	227	182	132	121	150	189	175	191	214
September	220	170	126	127	156	188	180	189	208
October	233	185	140	131	173	204	205	212	218
November	224	185	144	143	174	199	206	208	217
December	226	213	144	147	165	175	192	211	222
<b>Total</b>	<b>2,678</b>	<b>2,386</b>	<b>1,833</b>	<b>1,638</b>	<b>1,772</b>	<b>2,243</b>	<b>2,258</b>	<b>2,405</b>	<b>2,570</b>
Monthly average	223	199	153	137	148	187	188	200	214

Table 95.—Bituminous Coal Charged to Coke Ovens and Gas Retorts, 1919-1937

Years	Bee-hive and by-product ovens		Gas retorts		Total
	Canadian	Imported	Canadian	Imported	
1919	850,305	1,015,700	581,750		2,447,761
1920	960,148	977,364	648,618		2,586,130
1921	586,185	910,845	655,789		2,152,819
1922	487,907	565,496	641,875		1,695,278
1923	736,818	970,206	728,011		2,433,035
1924	584,394	826,613	681,480		2,092,397
1925	598,280	930,738	723,394		2,252,412
1926	938,134	1,254,966	80,923	620,360	2,894,283
1927	809,135	1,431,345	68,894	555,935	2,865,309
1928	829,157	1,876,502	80,382	413,118	3,199,159
1929	872,884	2,378,507	88,507	372,387	3,712,285
1930	640,167	2,097,921	96,299	356,656	3,191,043
1931	468,838	1,576,881	96,044	390,773	2,532,536
1932	351,960	1,413,328	97,304	354,420	2,217,012
1933	557,249	1,488,492	46,768	373,452	2,465,961
1934	803,321	1,836,668	40,982	435,133	3,116,104
1935	943,240	1,734,650	45,914	(*)412,539	3,136,343
1936	1,008,841	1,951,515	48,258	(*)349,884	3,358,498
1937	1,106,706	2,106,960	48,109	(*)318,175	3,579,950

(\*) Includes 3,261 tons used in making water gas in 1935, 3,159 tons in 1936, and 2,392 tons in 1937.

## MANUFACTURES OF NON-METALLIC MINERALS

Table 96.—Bituminous Coal Charged to Coke Ovens and Gas Retorts, by Provinces, 1919-1937

Years	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Alberta and British Columbia		Total
	Canadian	Imported	Canadian	Imported	Canadian	Imported	
			(Short tons)				
1919	946,019		1,319,943		181,799		2,447,761
1920	991,332		1,260,336		334,462		2,586,130
1921	653,598		1,219,398		279,823		2,152,819
1922	588,217		851,177		255,884		1,695,278
1923	910,081		1,248,549		270,405		2,435,035
1924	751,551		1,104,980		235,866		2,092,397
1925	797,545		1,122,898		332,059		2,252,412
1926	750,775	244,805		1,559,427	268,282	70,994	2,894,283
1927	633,158	218,411		1,701,060	244,871	67,809	2,865,309
1928	696,605	340,896	9,424	1,890,181	203,510	58,543	3,199,159
1929	734,221	466,433		2,206,338	227,170	78,123	3,112,285
1930	515,793	433,414		1,963,195	220,673	57,968	3,191,643
1931	338,072	414,179		1,516,819	228,810	36,656	2,532,536
1932	271,496	295,114	105	1,435,964	177,063	36,670	2,317,012
1933	384,175	256,088	5,700	1,584,052	214,142	21,806	2,465,961
1934	556,628	359,210	700	1,911,920	286,075	671	3,116,104
1935	708,873	324,342	600	1,820,847	279,681		3,156,343
1936	765,143	328,216	15,684	1,973,183	275,672		3,358,496
1937	853,949	338,861	6,028	2,060,077	294,838	26,197	3,579,950

Table 97.—Bee-Hive, By-product and Gas-Retort Coke Made Available for Consumption in Canada, 1902-1937

Years	Output	Imports	*Exports	Coke made available for consumption
		(Short tons)		
1902	502,043	268,140	62,568	705,615
1903	561,318	258,703	32,608	787,413
1904	554,083	239,310	102,463	690,930
1905	700,488	470,486	116,071	1,054,903
1906	782,055	501,942	37,003	1,246,991
1907	842,003	624,649	70,617	1,396,035
1908	858,257	426,971	58,708	1,226,520
1909	862,011	661,425	74,067	1,449,369
1910	902,715	737,088	57,971	1,581,832
1911	935,651	751,389	9,852	1,677,188
1912	1,411,229	628,174	57,744	1,981,659
1913	1,530,499	723,906	98,235	2,186,170
1914	1,023,860	553,046	67,838	1,509,068
1915	1,170,473	637,857	35,869	1,772,461
1916	1,469,741	757,116	48,539	2,178,318
1917	1,245,862	970,106	23,585	2,192,373
1918	1,250,744	1,165,590	29,612	2,386,722
1919	1,675,032	383,374	14,709	2,043,697
1920	1,708,263	586,406	39,536	2,255,073
1921	1,463,999	228,030	20,907	1,671,122
1922	1,232,646	336,270	19,831	1,549,085
1923	1,668,298	733,604	34,407	2,367,495
1924	1,436,912	521,725	23,144	1,935,493
1925	1,546,739	852,427	25,578	2,373,588
1926	2,027,058	988,034	41,699	2,973,393
1927	2,026,438	772,235	74,109	2,721,564
1928	2,314,127	1,090,029	25,058	3,349,098
1929	2,677,581	1,226,853	25,208	3,879,226
1930	2,385,994	1,061,040	29,801	3,417,233
1931	1,832,700	733,274	20,905	2,545,069
1932	1,637,701	651,802	15,469	2,271,634
1933	1,772,164	644,075	5,199	2,411,040
1934	2,243,420	930,221	7,396	3,166,245
1935	2,257,604	532,926	20,649	2,769,881
1936	2,404,793	612,858	18,215	2,999,436
1937	2,570,385	417,733	36,959	2,951,159

\*Prior to 1925 exports of petroleum coke were included.



Table 98.—Bee-Hive, By-product and Gas-Retort Coke Sold and Used by Producers during 1936 and 1937, and Stocks on Hand at End of 1937

	Coke	Breeze	Total
	(Short tons)		
1936			
Coke actually used by reporting companies—			
In coke or gas plant.....	192,840	54,904	247,744
In associated metallurgical works.....	625,861	55,228	681,089
Coke sold—			
For domestic use.....	1,153,093	36,696	1,189,789
For other uses.....	353,642	27,801	381,443
<b>Total</b> .....	<b>2,325,436</b>	<b>174,627</b>	<b>2,500,063</b>
1937			
Coke actually used by reporting companies—			
In coke or gas plant.....	187,519	57,874	245,393
In associated metallurgical works.....	842,454	50,155	892,609
Coke sold—			
For domestic use.....	956,428	17,846	974,274
For other uses.....	477,701	39,818	517,519
<b>Total</b> .....	<b>2,464,102</b>	<b>165,693</b>	<b>2,629,795</b>
Stocks on hand at end of year.....	228,785	16,936	245,721

Table 99.—Coal Carbonized, Coke Produced, and Distribution of Coke by Manufacturers, 1937

	Bee-hive and by-product plants	Gas retort plants	Total for coke producing plants
	short tons	short tons	short tons
Coal carbonized—			
Canadian.....	1,106,706	47,609	1,154,315
Imported.....	2,106,960	316,283	2,423,243
<b>Total</b> .....	<b>3,213,666</b>	<b>363,892</b>	<b>3,577,558</b>
Coke made—			
Coke.....	2,187,638	222,309	2,409,947
Breeze.....	146,918	13,520	160,438
<b>Total</b> .....	<b>2,334,556</b>	<b>235,829</b>	<b>2,570,385</b>
Coke yield..... %	72.6	64.8	71.9
Coke used in coke or gas plants—			
Coke.....	52,645	134,874	187,519
Breeze.....	55,609	2,265	57,874
<b>Total</b> .....	<b>108,254</b>	<b>137,139</b>	<b>245,393</b>
Coke used in associated metallurgical works—			
Coke.....	842,454		842,454
Breeze.....	50,155		50,155
<b>Total</b> .....	<b>892,609</b>		<b>892,609</b>
Coke sold for domestic use—			
Coke.....	836,727	119,701	956,428
Breeze.....	7,398	10,448	17,846
<b>Total</b> .....	<b>844,125</b>	<b>130,149</b>	<b>974,274</b>
Coke sold for other purposes—			
Coke.....	478,674	1,027	477,701
Breeze.....	39,161	657	39,818
<b>Total</b> .....	<b>515,835</b>	<b>1,684</b>	<b>517,519</b>
<b>Total coke sold and used—</b>			
Coke.....	<b>2,298,500</b>	<b>255,692</b>	<b>2,464,102</b>
Breeze.....	<b>152,323</b>	<b>13,370</b>	<b>165,693</b>
<b>Total</b> .....	<b>2,360,823</b>	<b>269,072</b>	<b>2,629,795</b>
Stocks on December 31, 1937—			
Coke.....	177,480	51,305	228,785
Breeze.....	15,766	1,170	16,936
<b>Total</b> .....	<b>193,246</b>	<b>52,475</b>	<b>245,721</b>

## MANUFACTURES OF NON-METALLIC MINERALS

Table 100.—Imports of Coke into Canada, by Ports of Entry, 1936 and 1937

(Tons of 2,000 pounds)

Port	Source	1936		1937	
		Made from coal	Made from petroleum	Made from coal	Made from petroleum
<b>PRINCE EDWARD ISLAND</b>					
<b>NOVA SCOTIA—</b>					
Bridgewater	United States	28			
Halifax	Great Britain	4,593		2,465	
	Germany	2,151		9,231	
New Glasgow	United States	462		819	64
<b>Total Nova Scotia</b>		<b>7,234</b>		<b>12,515</b>	<b>64</b>
<b>NEW BRUNSWICK—</b>					
Bathurst	United States	24			
<b>Total New Brunswick</b>		<b>24</b>			
<b>QUEBEC—</b>					
Chicoutimi	United States	108	22,797	4,375	29,146
Montreal	United States	2,133	1,858	1,352	
	Germany	19,660			
Quebec	United States	159		212	
Rock Island	United States	19			
Shawinigan Falls	United States	309	333	822	285
Sherbrooke	United States			79	
Sutton	United States	1			
Three Rivers	United States		10,610	7,442	11,983
	Great Britain	3,388			
<b>Total Quebec</b>		<b>25,777</b>	<b>35,628</b>	<b>14,282</b>	<b>41,414</b>
<b>ONTARIO—</b>					
Amherstburg	United States	8,348		10,393	
Belleville	United States	1,192		710	62
Bowmanville	United States	399		294	
Brantford	United States	9,398	52	7,757	71
Brockville	United States	217			
Chatham	United States	7,109	50	10,827	58
Cobourg	United States	476		585	
Collingwood	United States	230		124	
Cornwall	United States	26			
Fort Erie	United States	4,289		1,531	
Fort Frances	United States	115	39	28	
Galt	United States	4,023		2,512	18
Gananoque	United States	67	32		
Goderich	United States	1,119		177	
Guelph	United States	6,997		4,275	63
Hamilton	United States	10,956	121	15,581	354
Ingersoll	United States	462		364	
Kingston	United States	1,297		1,493	
Kitchener	United States	5,452	151	3,887	198
Lindsay	United States	888		679	
London	United States	19,382	1,619	10,517	499
Midland	United States	2,454		3,096	23
Morrisburg	United States	3		29	
Napanee	United States	76		50	
Niagara Falls	United States	18,672	364	11,752	7,207
North Bay	United States	476		597	
Orillia	United States	932		1,572	
Oshawa	United States	6,592		815	
Ottawa	United States	1,018		898	
Owen Sound	United States	12,152		7,414	
Paris	United States	73	27	74	
Peterborough	United States	995		759	3
Pieton	United States	124			
Port Hope	United States	956	96	994	
St. Catharines	United States	14,344	9,466	10,407	6,951
St. Thomas	United States	11,484	151	7,439	167
Sarnia	United States	8,287		5,530	
Sault Ste. Marie	United States	58			
Simcoe	United States	432		257	
Stratford	United States	3,260		1,941	34

Table 100.—Imports of Coke into Canada, by Ports of Entry, 1936 and 1937—Concluded  
(Tons of 2,000 pounds)

Port	Source	1936		1937	
		Made from coal	Made from petroleum	Made from coal	Made from petroleum
<b>ONTARIO—Concluded</b>					
Sudbury	United States	36			
Tillsonburg	United States	522		211	
Toronto	United States	189,464	223	70,769	106
Trenton	United States	99	27	7,464	
Wallaceburg	United States	2,984		4,116	
Welland	United States	112,611	38,893	77,746	60,760
Whitby	United States	37			
Windsor	United States	66,300	1,014	71,681	825
Woodstock	United States	1,693	81	1,394	153
Fort William	United States	22,523		17,328	
Port Arthur	United States	20		23	
<b>Total Ontario</b>		<b>561,118</b>	<b>52,466</b>	<b>376,696</b>	<b>77,582</b>
<b>MANITOBA—</b>					
Brandon	United States	52			
Emerson	United States			20	
Grtna	United States	108		79	
Winnipeg	United States	15,267		13,010	
<b>Total Manitoba</b>		<b>15,427</b>		<b>13,109</b>	
<b>SASKATCHEWAN—</b>					
Regina	United States			35	
<b>Total Saskatchewan</b>				<b>35</b>	
<b>ALBERTA</b>					
<b>BRITISH COLUMBIA—</b>					
Nelson	United States		45		
New Westminster	United States		146	66	191
	Great Britain	70			
Trail	United States		45	28	
Vancouver	United States	104	322	16	242
	Great Britain	1,420		302	
	Germany	738			
	Belgium	562			
Victoria	United States		10		10
	Great Britain	383		1,182	
	Belgium			108	
<b>Total British Columbia</b>		<b>3,277</b>	<b>568</b>	<b>1,702</b>	<b>443</b>
<b>Canada</b>	<b>Great Britain</b>	<b>9,854</b>		<b>3,949</b>	
	<b>United States</b>	<b>579,893</b>	<b>88,602</b>	<b>404,115</b>	<b>119,503</b>
	<b>Germany</b>	<b>22,519</b>		<b>9,231</b>	
	<b>Belgium</b>	<b>562</b>		<b>108</b>	
<b>Total Canada</b>		<b>612,858</b>	<b>88,602</b>	<b>417,733</b>	<b>119,503</b>

Table 101.—Exports of Canadian Coke, by Ports of Exit, 1936 and 1937

(Tons of 2,000 pounds)

	1936		1937	
	Made from coal	Made from petroleum	Made from coal	Made from petroleum
PRINCE EDWARD ISLAND.....				
NOVA SCOTIA—				
Halifax.....		89		45
North Sydney.....	76		4	
Sydney.....	448		184	
<b>Total—Nova Scotia</b> .....	<b>524</b>	<b>89</b>	<b>188</b>	<b>45</b>
NEW BRUNSWICK—				
McAdam Junction.....			1	
Woodstock.....	11		5	
<b>Total—New Brunswick</b> .....	<b>11</b>		<b>6</b>	
QUEBEC—				
Coaticook.....	110		292	
Huntingdon.....	86	637	31	1,560
Lake Megantic.....	252		300	
Montreal.....	73		75	
St. Johns.....		3,082	1	2,979
Sutton.....	30		69	
<b>Total—Quebec</b> .....	<b>551</b>	<b>3,719</b>	<b>768</b>	<b>4,539</b>
ONTARIO—				
Fort Erie.....		3,141		4,832
Niagara Falls.....		7,554		7,461
Sault Ste. Marie.....	94		26	
St. Catharines.....		45		90
<b>Total—Ontario</b> .....	<b>94</b>	<b>10,740</b>	<b>26</b>	<b>12,383</b>
MANITOBA—				
Emerson.....	9		3	
<b>Total—Manitoba</b> .....	<b>9</b>		<b>3</b>	
SASKATCHEWAN.....				
ALBERTA—				
Coutta.....			21	
Lethbridge.....	21			
<b>Total—Alberta</b> .....	<b>21</b>		<b>21</b>	
BRITISH COLUMBIA—				
Cranbrook.....	10,550		26,969	
Ferne.....	30			
New Westminster.....	119		719	
Vancouver.....	300		7,953	
Victoria.....			306	
<b>Total—British Columbia</b> .....	<b>17,005</b>		<b>35,947</b>	
CANADA—Total.....	<b>18,215</b>	<b>14,548</b>	<b>36,959</b>	<b>16,967</b>
Re-Exports.....		<b>21,115</b>		<b>32,990</b>

Table 102.—Production of Petroleum Coke, 1929-1937

Year	Made for own use		Made for sale		Total	
	Tons	Selling value at works	Tons	Selling value at works	Tons	Selling value at works
		\$		\$		\$
1929.....	25,408	140,230	84,108	465,753	109,516	605,983
1930.....	23,538	124,363	68,549	392,945	92,087	517,308
1931.....	20,029	96,676	52,310	280,660	72,339	372,336
1932.....	19,278	104,181	53,787	293,755	73,065	397,936
1933.....	20,079	115,400	54,646	322,379	74,725	437,779
1934.....	9,293	57,961	52,467	200,512	61,760	258,473
1935.....	8,348	21,256	63,843	372,723	72,191	393,979
1936.....	2,629	11,687	62,077	381,473	64,796	393,160
1937.....	2,381	8,942	59,634	371,198	62,015	380,140

NOTE.—Petroleum coke is not included in coke production figures given for the coke and gas industry.

Table 103.—Sales of Petroleum Coke, in Canada, 1936 and 1937

(As fuel only, not as material)

(Taken from "Petroleum Fuels in Canada" 1937, published by the Department of Mines and Resources)

Area	Fuel for Domestic heating*	Fuel for Industrial heating†	Total short tons	Inventory December 31*
1936				†
Maritimes.....	404	6	410	38
Quebec.....	258	1,708	1,966	28,914
Ontario.....	36,030	593	36,623	51,801
Western provinces.....	1,681	5,016	6,697	1,298
Canadian.....	36,687	7,263	43,950	20,781
Imported.....	1,686	60	1,746	61,270
<b>Total, 1936.....</b>	<b>38,373</b>	<b>7,323</b>	<b>45,696</b>	<b>82,051</b>
1937				
Maritimes.....	402	13	415	Nil
Quebec.....	131	1,265	1,396	39,780
Ontario.....	40,232	632	40,864	68,237
Western provinces.....	1,373	4,139	5,512	1,078
Canadian.....	40,563	6,049	46,612	7,414
Imported.....	1,575	—	1,575	101,681
<b>Total, 1937.....</b>	<b>42,138</b>	<b>6,049</b>	<b>48,187</b>	<b>109,095</b>

\*As reported by coal dealers, distributors, and importers; inventory also includes stocks at refineries. †Industrial tonnage consists mostly of amounts used in refineries as fuel. †Revised.

Table 104.—Total Production of Coke (Including Petroleum Coke) in Canada, 1935-1937

		Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba, Saskatchewan, Alberta and British Columbia	Canada
(Short tons)						
1935						
Coke and gas industry.....	Tons	332,409	398,060	1,334,081	193,054	2,257,604
	\$	1,803,487	2,034,704	9,868,953	1,254,015	15,861,159
Petroleum refining industry.....	Tons	530	2,690	53,845	15,126	72,191
	\$	1,962	14,978	320,004	57,035	393,979
<b>Total.....</b>	<b>Tons</b>	<b>332,939</b>	<b>400,750</b>	<b>1,387,926</b>	<b>208,180</b>	<b>2,329,795</b>
	<b>\$</b>	<b>1,805,449</b>	<b>2,049,682</b>	<b>10,188,957</b>	<b>1,311,050</b>	<b>16,255,138</b>
1936						
Coke and gas industry.....	Tons	379,861	395,409	1,441,833	187,690	2,404,793
	\$	1,894,628	2,760,840	10,807,611	1,246,029	16,710,008
Petroleum refining industry.....	Tons	448	3,168	55,667	5,423	61,706
	\$	1,897	15,523	349,776	25,964	393,160
<b>Total.....</b>	<b>Tons</b>	<b>380,309</b>	<b>398,577</b>	<b>1,497,500</b>	<b>193,113</b>	<b>2,469,499</b>
	<b>\$</b>	<b>1,896,525</b>	<b>2,776,363</b>	<b>11,157,387</b>	<b>1,272,893</b>	<b>17,103,168</b>
1937						
Coke and gas industry.....	Tons	451,799	401,323	1,504,334	212,929	2,570,385
	\$	2,652,431	2,895,611	11,522,965	1,395,061	18,466,068
Petroleum refining industry.....	Tons	373	2,246	56,556	2,840	62,015
	\$	1,504	8,499	357,078	13,059	380,140
<b>Total.....</b>	<b>Tons</b>	<b>452,172</b>	<b>403,569</b>	<b>1,560,890</b>	<b>215,769</b>	<b>2,632,400</b>
	<b>\$</b>	<b>2,653,935</b>	<b>2,904,110</b>	<b>11,880,043</b>	<b>1,408,120</b>	<b>18,846,208</b>

Table 105.—Apparent Consumption of Coke (Including Petroleum Coke) in Canada, by Provinces, 1933-1937

	Prince Edward Island, Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba, Saskat- chewan, Alberta and British Columbia	Canada
	(Short tons)				
<b>Apparent consumption—1933</b> .....	229,557	363,336	1,813,755	191,210	2,597,888
1934.....	253,057	421,619	2,171,231	215,368	3,061,305
1935.....	332,577	424,329	2,032,985	200,449	2,990,310
1936					
Production.....	380,309	398,577	1,497,500	193,113	2,169,499
Add—Declines in producers' stocks.....	50	57,778	19,892	18,675	96,401
	380,365	456,355	1,517,392	211,788	2,565,900
Add—Imports entered for consumption.....	5,107	48,212	658,210	19,272	730,801
	385,472	504,567	2,175,602	231,060	3,296,701
Deduct—Exports and re-exports.....	624	4,270	31,949	17,035	53,878
<b>Apparent consumption</b> .....	<b>384,848</b>	<b>500,297</b>	<b>2,143,653</b>	<b>214,025</b>	<b>3,242,823</b>
1937					
Production.....	452,172	403,569	1,560,890	215,769	2,632,400
Add—Declines in producers' stocks.....		10,564	28,677		39,241
	452,172	414,133	1,589,567	215,769	2,671,641
Deduct—Surpluses in producers' stocks.....	875		2,796		3,671
	451,297	414,133	1,589,567	212,973	2,667,970
Add—Imports entered for consumption.....	7,061	69,003	500,424	15,350	591,838
	458,358	483,136	2,089,991	228,323	3,259,808
Deduct—Exports and re-exports.....	239	5,307	45,399	35,971	86,916
<b>Apparent consumption</b> .....	<b>458,119</b>	<b>477,829</b>	<b>2,044,592</b>	<b>192,352</b>	<b>3,172,892</b>

NOTE.—The imports "entered for consumption" represent tonnages cleared from customs' ports. The tonnages entered under this heading differ slightly from actual imports.

Table 106.—Analysis of Coke Consumption in Canada, by Principal Areas, 1935-1937

	Prince Edward Island, Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba, Saskat- chewan, Alberta and British Columbia	Canada
	(Short tons)				
<b>1935</b>					
Furnace charges.....	240,785	16,563	577,200	98,131	922,679
Manufacturing material.....	229	79,419	132,455	4,435	216,538
Industrial fuel.....	32,036	53,633	265,333	35,754	386,756
Available for domestic use (by difference).....	59,527	274,714	1,057,997	72,129	1,461,367
<b>Apparent consumption</b> .....	<b>332,577</b>	<b>424,329</b>	<b>2,032,985</b>	<b>200,449</b>	<b>2,990,310</b>
1936					
Furnace charges.....	300,129	20,718	652,353	76,793	1,049,993
Manufacturing material.....	281	101,343	141,635	27,688	270,947
Industrial fuel.....	34,032	46,328	247,621	17,416	345,397
Available for domestic use (by difference).....	50,406	331,008	1,102,044	92,128	1,576,486
<b>Apparent consumption</b> .....	<b>384,848</b>	<b>500,297</b>	<b>2,143,653</b>	<b>214,025</b>	<b>3,242,823</b>
1937					
Furnace charges.....	358,425	33,087	878,234	68,599	1,338,345
Manufacturing material.....	337	118,959	178,300	36,059	333,661
Industrial fuel.....	38,990	50,581	228,758	11,145	327,388
Available for domestic use (by difference).....	60,457	275,198	761,294	76,549	1,173,498
<b>Apparent consumption</b> .....	<b>458,119</b>	<b>477,829</b>	<b>2,044,592</b>	<b>192,352</b>	<b>3,172,892</b>

NOTES.—1. Figures showing the tonnage of coke available for domestic use are obtained by difference and include the coke used for purposes other than specified in these tables.

2. No allowance has been made for changes during the year in stocks of coke held by dealers or users.

3. No allowance has been made for interprovincial shipments of coke.

4. Consumption figures for 1937 are not yet available.

Table 107.—Production and Sales of Manufactured Gas, 1929-1937

Years	From by-product and gas plants			Production of still gas from petroleum refineries
	Production **	Sales		
		Quantity	Income from sales	
	M cu. ft.	M cu. ft.	\$	M cu. ft.
1929.....	38,925,086	17,649,371	13,316,684	3,140,187
1930.....	35,927,532	17,713,477	13,471,629	3,529,319
1931.....	30,542,961	17,111,432	13,010,733	5,161,905
1932.....	27,264,587	17,083,631	12,805,039	3,836,413
1933.....	29,125,295	15,893,248	11,839,345	3,505,405
1934.....	40,125,201	15,409,927	15,796,750	3,772,746
1935.....	39,721,010	15,398,952	15,358,572	5,154,885
1936.....	44,345,358	15,321,832	15,163,664	6,083,549
1937.....	46,009,633	15,289,839	14,732,531	6,199,110

\*\*Does not include some blast furnace and producers' gas which is recovered and used by the producers but for which no records are available.

Table 108.—Sales of Manufactured Gas, Number of Customers and Mileage of Pipe Lines, 1936 and 1937

Areas	Number of customers	Number of active meters	Gas sales		Mileage of pipe lines	Approximate population served by mains
			M cu. ft.	\$		
<b>1936</b>						
Eastern provinces.....	191,184	238,654	5,096,719	5,729,935	975.9	1,611,000
Ontario.....	222,695	216,180	8,453,005	7,115,981	1,997.3	1,218,556
Western provinces.....	62,795	66,537	1,729,548	1,906,054	811.4	481,267
<b>Total.....</b>	<b>476,677</b>	<b>521,371</b>	<b>15,279,272</b>	<b>14,751,970</b>	<b>3,784.6</b>	<b>3,310,823</b>
<b>1937</b>						
Eastern provinces.....	192,980	220,798	4,977,256	5,586,403	981	1,571,000
Ontario.....	220,226	212,417	8,493,068	7,199,917	1,964	1,202,394
Western provinces.....	63,759	68,462	1,819,513	1,946,211	784	500,267
<b>Total.....</b>	<b>476,965</b>	<b>501,677</b>	<b>15,289,839</b>	<b>14,732,531</b>	<b>3,729</b>	<b>3,279,661</b>

Table 109.—Prices of Manufactured Fuel Gas Used for Domestic Consumption in Specified Cities in Canada, 1930 to 1937

Net price per 1,000 cu. ft. as at the end of each year (exclusive of meter rent or other service charges)

	1930	1931	1932	1933	1934	1935	1936	1937
	\$	\$	\$	\$	\$	\$	\$	\$
<b>NOVA SCOTIA—</b>								
Halifax.....	1.90	1.90	1.90	1.90	1.90	b1.20/1.90	1.20/1.90	1.20/1.90
<b>NEW BRUNSWICK—</b>								
St. John.....	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
<b>QUEBEC—</b>								
Montreal.....	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Quebec.....	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Sherbrooke.....	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
<b>ONTARIO—</b>								
Belleville.....	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Brookville.....	1.38	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Cuciph.....	1.00	1.00	0.90	0.70	0.65	0.95	0.65	0.65
Hamilton (a).....	1.00	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Kingston.....	1.35	1.30	1.25	1.25	1.25	1.25	1.25	1.25
Kitchener.....	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.85
London.....	1.05	1.05	1.05	1.05	1.05	(c) 1.05		
Oshawa.....	1.45	1.45	1.45	1.76	1.76	1.76	1.76	1.76
Ottawa (b).....	1.20-1.26	1.20-1.26	1.20-1.26	1.20-1.26	1.20-1.26	1.02-1.26	1.20-1.26	1.20-1.26
Owen Sound.....	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Peterborough.....	1.39	1.30	1.30	1.30	1.30	1.30	1.30	1.30
St. Thomas.....	1.40	1.40	1.00	1.00	1.15	1.15	1.40	1.40
Sault Ste. Marie.....	1.65	1.65	1.60	1.60	1.54	1.54	1.54	1.54
Stratford.....	1.75	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Toronto.....	0.85	0.80	0.80	0.80	0.80	0.80	0.80	0.90
Waterloo.....	1.20	1.20	1.20	1.15	1.15	1.15	1.15	1.15
<b>MANITIBA—</b>								
Winnipeg.....	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47
<b>BRITISH COLUMBIA—</b>								
New Westminster.....	1.55	1.55	1.77	1.77	1.77	1.77	1.77	1.73
Vancouver.....	1.40	1.40	1.62	1.62	1.62	1.62	1.62	1.58
Victoria.....	1.75	1.75	1.75	1.75	1.75	1.71	1.71	1.71

(a) Hamilton has been included with the manufactured gas companies, as the volume of natural gas distributed there is comparatively small.

(b) First price for general service; second price optional domestic rate.

(c) Manufactured gas discontinued after September 23. Natural gas rate at end of 1935, \$1.40.

Table 110.—Production of Crude Coal Tar, by Provinces, 1934-1937

Province	1934	1935	1936	1937
	(Imperial gallons)			
Nova Scotia and New Brunswick.....	3,627,952	4,739,689	5,495,946	6,337,281
Quebec.....	4,035,935	3,790,498	3,807,070	3,651,294
Ontario.....	17,020,006	16,037,490	16,470,215	16,535,960
Manitoba.....	334,840	327,679	330,314	410,161
British Columbia.....	821,988	791,134	700,893	854,871
<b>Canada.....</b>	<b>25,840,781</b>	<b>25,686,490</b>	<b>26,804,438</b>	<b>27,789,567</b>

Table 111.—Production, Imports and Exports of Ammonium Sulphate, 1929-1937

Year	Production*		Imports		Exports	
	Short tons	\$	Short tons	\$	Short tons	\$
1929.....	34,141	1,293,953	1,723	80,019	24,489	909,510
1930.....	23,893	936,417	3,423	137,607	12,010	386,710
1931.....	28,354	706,197	12,830	369,254	5,627	167,477
1932.....	57,770	983,077	13,811	280,026	38,741	701,707
1933.....	82,534	1,437,749	4,156	100,415	62,383	1,081,392
1934.....	76,292	1,398,251	11,046	245,372	57,704	1,144,164
1935.....	67,302	1,473,675	4,280	94,222	45,055	977,552
1936.....	98,483	1,883,088	5,729	148,956	83,835	1,802,818
1937.....	57,621	1,782,364	3,230	82,440	56,485	1,212,258

\*Includes output of synthetic ammonium sulphate in the Fertilizers Industry.



Table 112.—Summary of Coke-making and Gas-making Equipment, 1937

Type of ovens, retorts, etc.	In use		In reserve or idle		Total	
	Number	Annual capacity	Number	Annual capacity	Number	Annual capacity
	(Capacity given in tons of coal carbonized)					
Bee-hive ovens.....	212	162,500	1,072	525,000	1,284	687,500
By-product ovens.....	458	2,575,127	150	775,000	608	3,350,127
Vertical gas retorts.....	154	264,552	66	60,650	220	325,202
Horizontal gas retorts.....	300	133,843	24	9,410	324	143,253
Water gas sets.....	17		20		37	
Producers.....	15		11		26	

**Primary Production—Natural Gas.**—(From the Annual Report on the *Mineral Production of Canada*).—Output of natural gas was higher in 1937 than in the previous year by 15 per cent in quantity and 8 per cent in value. The figures for 1937 were 32,380,991 M cu. ft. valued at \$11,674,802 as against 28,113,348 M cu. ft. worth \$10,762,243 in 1936.

Table 113.—Principal Statistics of the Natural Gas Industry, 1936 and 1937

	1936	1937
Number of gas wells.....	3,191	3,268
Number of firms.....	227	218
Capital employed.....	\$ 77,666,568	75,611,107
Number of employees—On salary.....	797	787
On wages.....	1,278	1,241
<b>Total.....</b>	<b>2,075</b>	<b>2,028</b>
Salaries and wages—Salaries.....	\$ 1,137,506	1,142,020
Wages.....	\$ 1,319,412	1,346,105
<b>Total.....</b>	<b>2,456,918</b>	<b>2,488,125</b>
Cost of fuel, electricity and process supplies.....	\$ 79,034	98,880
Selling value of products.....	\$ 10,762,243	11,674,802

Table 114.—Production of Natural Gas in Canada, by Provinces, 1936 and 1937

Provinces	1936		1937	
	M cu. ft.	Value	M cu. ft.	Value
		\$		\$
New Brunswick.....	606,246	298,819	576,671	283,922
Ontario.....	10,006,743	6,052,294	10,746,334	6,588,798
Manitoba.....	600	180	600	180
Saskatchewan.....	90,839	33,985	100,380	35,130
Alberta.....	17,407,820	4,376,720	20,955,506	4,766,437
Northwest Territories.....	1,100	245	1,500	335
<b>Canada.....</b>	<b>28,113,348</b>	<b>10,762,243</b>	<b>32,380,991</b>	<b>11,674,802</b>

Table 115.—Prices of Natural Fuel Gas Used for Domestic Consumption in Specified Cities in Canada, 1930 to 1937

Net price per 1,000 cu. ft. (exclusive of meter rent or other service charges)

(Where double quotations are shown, the first figure is the regular rate, and the second figure is the summer rate; single quotations apply to the end of the year)

	1930	1931	1932	1933	1934	1935	1936	1937
	\$	\$	\$	\$	\$	\$	\$	\$
<b>NEW BRUNSWICK—</b>								
Moncton.....	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
<b>ONTARIO—</b>								
Brantford.....	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Chatham.....	0.50-0.75	0.50-0.75	0.50-0.75	1.36	1.36	1.36	1.36	1.36
Galt.....	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
London*.....							1.40	1.40
Niagara Falls.....	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Port Colborne.....	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
St. Catharines.....	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Sarnia.....	0.55-0.80	0.55-0.80	0.55-0.80	0.55-0.80	0.55-0.80	0.55-0.80	0.55-0.80	0.55-0.80
Welland.....	1.00-1.30	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Windsor.....	0.55-0.80	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Woodstock.....	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
<b>ALBERTA—</b>								
Calgary.....	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Edmonton.....	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Medicine Hat.....	0.237	0.237	0.237	0.237	0.237	0.237	0.237	0.237

\*Changed to natural gas September 23, 1935.

## Directory of Firms in the Coke and Gas Industry, 1937

Names of firms and location of plants	Coke and gas making equipment, including reserve equipment. (Rated annual capacity in tons of coal carbonized or in cubic feet of gas produced given in brackets.)
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## Coke Plants

## (a) BY-PRODUCT

Dominion Steel and Coal Corp. Ltd., Sydney, N.S.....	<b>In use</b> —120 Koppers horizontal ovens (542,000 tons); <b>In reserve or idle</b> —60 Koppers horizontal ovens (270,000 tons).
Montreal Coke & Manufacturing Co. (Montreal Light, Heat & Power Consolidated), (3) Montreal, P.Q.....	<b>In use</b> —59 Koppers Becker type horizontal ovens (560,275 tons); 2 Koppers Kerpely Ring type producers (6,351,000 M cu. ft.); <b>In reserve or idle</b> —2 Koppers Kerpely ring type producers (6,351,000 M cu. ft.); 5 Water Gas sets (8,000,000 M cu. ft.).
Algoma Steel Corporation Ltd. (Great Northern Gas Co. Ltd.) (3), Sault Ste. Marie, Ont.....	<b>In use</b> —103 Wilputte ovens (660,000 tons) and 55 Koppers ovens (355,000 tons).
Hamilton By-Product Coke Ovens, Ltd. (United Gas & Fuel Co. Ltd.) (3), Hamilton, Ont.....	<b>In use</b> —25 Semet-Sulvay ovens (175,000 tons), and 35 Wilputte ovens (240,000 tons).
Ottawa Gas Co. (3), Ottawa, Ont.....	<b>In use</b> —18 vertical ovens, intermittent type (37,500 tons) underfired by built-in producers; <b>In reserve or idle</b> —1 water gas set (365,000 M cu. ft.).
Steel Company of Canada, Limited, Hamilton, Ont.....	<b>In use</b> —80 Wilputte ovens (641,232 tons).
Winnipeg Electric Company (3), Winnipeg, Man.....	<b>In use</b> —17 Koppers Becker type horizontal ovens (84,500 tons); 1 Kopper Kerpely producer for heating benches; <b>In reserve or idle</b> —1 Western Gas Improvement Co. water gas set (1,460,000 M cu. ft.).
B.C. Electric Power & Gas Co. Ltd., (2) (3) Vancouver, B.C.....	<b>In use</b> —36 vertical Chamber ovens (56,620 tons); 3 external mechanical producers for Chamber oven plants; <b>In reserve or idle</b> —64 Glover West continuous vertical retorts (57,000 tons); 8 internal step grate producers for continuous vertical plant; 2 water gas generators (1,095,000 M cu. ft.).

NOTE.—Names of gas distributing companies in brackets.

(2) Indicates carburetted water gas was distributed.

(3) Indicates coke oven gas was distributed for domestic and commercial use.

## (b) BEE-HIVE

International Coal & Coke Co. Ltd., Coleman, Alberta.....	<b>In use</b> —104 bee-hive ovens (109,500 tons).
Crows Nest Pass Coal Co. Ltd., Michel, B.C.....	<b>In use</b> —108 bee-hive ovens (53,000 tons); <b>In reserve or idle</b> —1,072 bee-hive ovens (525,000 tons).

## Directory of Firms in the Coke and Gas Industry, 1937—Concluded

Names of firms and location of plants	Coke and gas making equipment, including reserve equipment. (Rated annual capacity in tons of coal carbonized or in cubic feet of gas produced given in brackets.)
<b>Illuminating and Fuel Gas plants—concluded</b>	
(a) RETORT COAL GAS AND CARBURETTED WATER GAS—concluded	
Nova Scotia Light & Power Co. Ltd. (1), Halifax, N.S.	<b>In use</b> —12 Glover-West continuous vertical retorts (18,000 tons).
New Brunswick Power Company (1), Saint John, N.B.	<b>In use</b> —12 Russell horizontal retorts (3,100 tons); <b>In Reserve or Idle</b> —6 Russell horizontal retorts (1,550 tons).
City of Sherbrooke Gas and Electricity Dept. (2), Sherbrooke, P.Q.	<b>In use</b> —Western Gas water gas set (146,000 M cu. ft.); <b>In reserve or Idle</b> —1 Western Gas water gas set (146,000 M cu. ft.).
Quebec Power Company (Gas Division) (1), Quebec, P.Q.	<b>In use</b> —12 Woodall-Duckham vertical continuous retorts (25,300 tons); <b>In reserve or Idle</b> —1 Western Gas water gas set and 2 U.G.I. water gas sets.
Barrie Water, Light & Gas Commission (2), Barrie, Ont.	<b>In use</b> —1 vertical water gas set; <b>In reserve or Idle</b> —1 vertical water gas set.
Board of Light & Heat Commission (1), Guelph, Ont.	<b>In use</b> —6 Glover-West vertical continuous retorts (9,000 tons); <b>In reserve or Idle</b> —2 Glover-West vertical ovens (3,650 tons) and 2 Shell Lowe water gas sets (328,500 M cu. ft.).
Brockville Public Utilities Commission (2), Brockville, Ont. Consumers Gas Company of Toronto (1) (2), Toronto, Ont.	<b>In use</b> —2 water gas sets (81,250 M cu. ft.); <b>In use</b> —104 Glover-West vertical retorts (190,000 tons); 220 Drakes Ltd. horizontal retorts (112,420 tons); 8 Lowe Principal water gas sets.
Hydro Electric Power Commission, Ontario (1), Cobourg, Ont.	<b>In use</b> —9 horizontal retorts (1,004 tons).
Belleville Public Utilities Commission (1), Belleville, Ont.	<b>In use</b> —4 Glover-West continuous vertical retorts (5,900 tons).
Ontario Shore Gas Co. Ltd. (2), Oshawa, Ont.	<b>In use</b> —2 water gas sets.
Peterborough Utilities Commission (2), Peterborough, Ont.	<b>In use</b> —1 Merrifield Pearson water gas set (300,000 M cu. ft.); <b>In reserve or Idle</b> —1 Merrifield Pearson water gas set (300,000 M cu. ft.).
Port Hope Gas Co. Ltd. (1), Port Hope, Ont.	<b>In use</b> —4 horizontal gas retorts (400 tons); <b>In reserve or Idle</b> —6 horizontal gas retorts (500 tons).
Public Utilities Commission (2), Kingston, Ont.	<b>In use</b> —1 Merrifield-Westcott water gas set (90,000 M cu. ft.); <b>In reserve or Idle</b> —1 Merrifield-Westcott water gas set (70,000 M cu. ft.).
Public Utilities Commission (1) (2), Kitchener, Ont.	<b>In use</b> —3 horizontal retorts (5,790 tons); 1 water gas set (219,000 M cu. ft.); <b>In reserve or Idle</b> —2 horizontal retorts (3,860 tons); 1 water gas set (219,000 M cu. ft.).
Public Utilities Commission (1), Owen Sound, Ont.	<b>In use</b> —12 horizontal retorts (2,420 tons).
Public Utility Commission (1), Stratford, Ont.	<b>In use</b> —12 horizontal retorts (5,000 tons); <b>In reserve or Idle</b> —6 horizontal retorts (2,500 tons).
Manitoba Power Commission (1), Brandon, Man.	<b>In use</b> —12 Russell Mfg. Co. retorts (1,400 tons); 12 Kerr-Murray retorts (1,300 tons).
Victorian Gas Company, Ltd. (1) (2), Victoria, B.C.	<b>In use</b> —16 Glover-West vertical retorts (16,352 tons); <b>In reserve or Idle</b> —1 Humphrey & Glasgow water gas set (182,500 M cu. ft.).
Corporation City of Nelson (1), Nelson, B.C.	<b>In use</b> —4 horizontal retorts (1,000 tons); <b>In reserve or Idle</b> —4 horizontal retorts (1,000 tons).

NOTE.—(1) Indicates that retort coal gas was distributed to customers.

(2) Indicates that carburetted water gas was distributed.

## CHAPTER SEVEN

## THE GLASS INDUSTRY

Production from the glass industry in 1937 amounted to \$14,437,250, this value being greater than in any other year excepting 1929 when the record of \$15,507,442 was reached. This year's total was 30 per cent over the 1936 figure which in turn was 11.7 per cent over 1935.

A total of 77 factories were engaged in the production of glass and glass products during 1937. These establishments reported fixed and working capital at \$15,750,801 and gave employment to a monthly average of 3,799 persons who were paid \$4,289,031 in salaries and wages. Purchased materials for use in manufacturing cost \$5,768,738 and expenditures for fuel and electricity amounted to \$1,030,993.

Pressed and blown glass was produced in 5 plants of which 2 were in Quebec, 2 in Ontario and 1 in Alberta. This branch of the industry had an output worth \$9,331,215 against \$7,717,407 in 1936, a gain of 21 per cent. Production consisted of bottles, jars, etc. Sheet glass and plate glass are not made in Canada.

The cutting, bevelling and ornamental section of this industry included all plants which were occupied in bevelling, cutting or working glass to produce mirrors, bevelled or polished edged plate glass, laminated and other safety glass, lenses, cut glassware, chemical glassware, glass signs, show cases, etc. The number of plants operating in this division totalled 72, distributed across Canada as follows:— 46 in Ontario, 16 in Quebec, 6 in British Columbia, 3 in Manitoba, and 1 in New Brunswick. Production from these works was valued at \$5,106,005 in 1937, a gain of 51 per cent compared with \$3,377,355 in the previous year.

Imports of glass and glassware into Canada during the calendar year 1937 were appraised at \$8,541,800, a gain of 25 per cent over the \$6,807,985 imported in the preceding twelve-month period. For the same periods exports advanced to \$951,059 from \$269,740 and re-exports to \$31,280 from \$22,898.

Table 116.—Principal Statistics, 1920-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1920	52	13,057,183	4,039	4,887,520	1,354,101	4,604,534	13,795,690	7,837,055
1921	48	13,725,482	3,097	3,621,768	1,485,165	3,974,358	11,461,932	6,002,409
1922	45	15,053,327	2,984	3,369,854	1,064,974	3,287,091	8,842,588	5,555,497
1923	46	14,892,372	3,350	3,778,802	1,365,903	3,714,515	11,098,026	6,017,608
1924	48	13,304,814	3,137	3,666,213	1,255,190	3,667,860	10,776,816	5,853,966
1925	52	12,694,338	2,778	3,291,912	1,101,808	4,029,035	10,117,604	4,986,761
1926	52	11,432,823	3,033	3,443,644	1,143,180	4,884,559	11,670,269	5,642,530
1927	54	12,736,057	3,120	3,876,959	1,243,311	5,257,950	14,164,086	7,662,825
1928	59	12,694,882	3,219	3,878,165	1,061,341	4,791,486	13,565,354	7,712,527
1929	60	16,289,364	3,948	4,740,676	1,323,150	5,355,156	15,507,442	8,829,136
1930	62	15,962,392	3,388	4,205,566	990,891	4,213,885	12,191,752	6,986,976
1931	66	14,873,963	2,956	3,564,192	822,094	3,586,570	9,937,411	5,528,747
1932	63	14,281,044	2,608	2,968,887	765,685	3,155,579	8,469,895	4,548,631
1933	66	13,207,586	2,579	2,586,370	717,701	2,950,300	7,830,795	4,162,785
1934	67	13,808,243	3,001	3,176,204	893,488	3,549,677	9,790,871	5,347,706
1935	68	14,168,575	3,135	3,291,074	837,025	3,618,175	9,933,348	5,478,148
1936	68	14,687,098	3,323	3,522,157	851,774	4,208,706	11,094,762	6,034,282
1937	77	15,750,801	3,799	4,289,031	1,030,993	5,768,738	14,437,250	7,637,519
Per cent change, 1937 from 1936	+13.2	+7.2	+14.3	+21.2	+21.0	+37.1	+30.1	+26.6

Table 117.—Principal Statistics, by Provinces, 1936 and 1937

Provinces	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	
<b>1936</b>							2,252,013
Quebec.....	12	5,494,633	1,058	1,141,402	364,163	1,049,286	3,632,790
Ontario.....	46	7,803,399	2,013	2,117,123	471,322	2,751,307	6,680,308
British Columbia.....	6	71,713	22	23,620	1,327	21,046	62,464
New Brunswick.....	1						
Manitoba.....	2	1,317,353	230	240,006	14,962	386,467	719,200
Alberta.....	1						
<b>Canada.....</b>	<b>68</b>	<b>14,687,098</b>	<b>3,323</b>	<b>3,522,157</b>	<b>851,774</b>	<b>4,208,706</b>	<b>11,044,762</b>
<b>1937</b>							
Quebec.....	18	6,245,619	1,333	1,510,735	464,353	1,483,629	4,995,111
Ontario.....	48	7,967,599	2,158	2,463,052	546,928	3,764,534	8,353,266
British Columbia.....	6	109,642	36	34,592	1,303	43,890	96,005
New Brunswick.....	1						
Manitoba.....	3	1,427,941	272	280,652	18,409	470,685	992,868
Alberta.....	1						
<b>Canada.....</b>	<b>77</b>	<b>15,750,801</b>	<b>3,799</b>	<b>4,289,031</b>	<b>1,030,993</b>	<b>5,768,738</b>	<b>14,437,250</b>

Table 118.—Capital Employed, by Provinces, 1936 and 1937

Provinces	Present value of lands, buildings, machinery tools and other equipment	Inventory value of materials, supplies and finished products on hand and stocks in process	Operating capital (cash, bills and accounts receivable, etc.)	Total capital employed
	\$	\$	\$	\$
<b>1936</b>				
Quebec.....	3,503,698	1,074,330	916,605	5,494,633
Ontario.....	4,525,676	1,552,679	1,725,044	7,803,399
British Columbia.....	16,275	29,455	25,983	71,713
Other provinces.....	933,091	182,928	201,334	1,317,353
<b>Canada.....</b>	<b>8,978,740</b>	<b>2,839,392</b>	<b>2,868,966</b>	<b>14,687,098</b>
<b>1937</b>				
Quebec.....	3,828,525	1,271,304	1,145,790	6,245,619
Ontario.....	4,798,946	1,485,246	1,683,407	7,967,599
British Columbia.....	31,302	39,391	38,949	109,642
Other provinces.....	990,958	271,971	165,012	1,427,941
<b>Canada.....</b>	<b>9,649,731</b>	<b>3,067,912</b>	<b>3,033,158</b>	<b>15,750,801</b>

Table 119.—Principal Statistics, According to Production, Number of Employees, and Capital Employed, 1937

	Number of plants	Capital employed	Average number of employees	Gross selling value of products at works
(a) Production				
Under \$5,000	12	\$ 202,315	39	\$ 33,859
\$ 5,000 to \$ 10,000	10	140,607	46	64,929
\$ 10,001 to \$ 25,000	17	494,822	123	278,060
\$ 25,001 to \$ 50,000	15	541,689	251	531,071
\$ 50,001 to \$100,000	8	443,871	151	576,838
\$100,001 to \$250,000	7	1,045,340	445	1,161,926
Over \$250,000	8	12,882,157	2,744	11,800,567
<b>Total</b>	<b>77</b>	<b>15,750,801</b>	<b>3,799</b>	<b>14,437,250</b>
(b) Employees				
1 or 2	8	93,509	13	30,583
3 to 10	30	589,102	148	418,005
11 to 20	19	926,948	248	751,484
21 to 50	10	715,011	343	1,238,915
Over 50	10	13,426,231	3,047	11,998,263
<b>Total</b>	<b>77</b>	<b>15,750,801</b>	<b>3,799</b>	<b>14,437,250</b>
(c) Capital				
Under \$25,000	33	317,859	187	423,519
\$ 25,001 to \$100,000	31	1,406,179	533	1,594,670
\$100,001 to \$500,000	7	1,512,308	373	2,841,821
Over \$500,000	6	12,514,455	2,706	9,577,240
<b>Total</b>	<b>77</b>	<b>15,750,801</b>	<b>3,799</b>	<b>14,437,250</b>

Table 120.—Employees, Salaries and Wages, by Provinces, 1936 and 1937

Provinces	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
1936								
Quebec	101	32	807	118	1,058	\$ 261,733	\$ 879,669	\$ 1,141,402
Ontario	196	60	1,622	135	2,013	390,308	1,726,815	2,117,123
British Columbia	5	2	14	1	22	8,320	15,306	23,626
Other provinces	16	5	104	15	230	40,742	199,264	240,006
<b>Canada</b>	<b>318</b>	<b>99</b>	<b>2,637</b>	<b>269</b>	<b>3,323</b>	<b>701,103</b>	<b>2,821,054</b>	<b>3,522,157</b>
1937								
Quebec	130	40	1,007	156	1,333	332,202	1,178,533	1,510,735
Ontario	210	73	1,717	120	2,126	459,946	2,003,100	2,463,052
British Columbia	8	2	26	32	68	10,390	24,202	34,592
Other provinces	17	5	231	19	272	44,925	235,727	280,652
<b>Canada</b>	<b>365</b>	<b>120</b>	<b>2,981</b>	<b>333</b>	<b>3,799</b>	<b>847,463</b>	<b>3,441,568</b>	<b>4,289,031</b>

Table 121.—Wage-earners, by Months, 1936 and 1937

(On the 15th of each month)

Months	1936			1937		
	Male	Female	Total	Male	Female	Total
January	2,292	249	2,541	3,095	309	3,404
February	2,298	253	2,551	2,963	338	3,301
March	2,440	230	2,676	2,819	357	3,176
April	2,584	261	2,845	2,973	315	3,288
May	2,865	289	3,154	3,072	336	3,408
June	2,881	301	3,182	3,169	343	3,512
July	2,843	298	3,141	3,135	338	3,473
August	2,785	282	3,067	3,131	342	3,473
September	2,761	278	3,039	3,092	359	3,451
October	2,573	266	2,839	2,748	329	3,077
November	2,610	294	2,910	2,759	317	3,076
December	2,739	301	3,040	2,841	320	3,161
<b>Average</b>	<b>2,637</b>	<b>269</b>	<b>2,906</b>	<b>2,981</b>	<b>333</b>	<b>3,314</b>

Table 112.—Regular Hours Worked per Week by Wage-earners, 1936 and 1937  
(Overtime not included)

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	3.7	1.4	51-53 hours.....	1.1	3.1
41-43 hours.....	16.0	0.3	54 hours.....	4.9	4.4
44 hours.....	9.8	11.4	55 hours.....	8.3	7.6
45-47 hours.....	3.9	4.4	56-59 hours.....	1.7	1.8
48 hours.....	28.2	43.2	60 hours and over.....	16.4	17.7
49-50 hours.....	6.0	4.6			

Table 123.—Fuel and Electricity Used, 1936 and 1937

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	short ton	21,974	123,907	24,382	133,493
Imported.....	short ton	16,448	114,331	20,814	148,534
Anthracite coal.....	short ton	333	3,007	241	2,390
Coke.....	short ton	104	1,044	189	2,078
Gasoline.....	Imp. gal.	850	304	1,767	470
Fuel oil.....	Imp. gal.	1,039,054	75,447	1,790,328	119,049
Kerosene.....	Imp. gal.			600	105
Wood.....	cord	30	192	23	146
Gas—Manufactured.....	M cu. ft.	15,222	12,694	19,462	16,659
Natural.....	M cu. ft.	887,897	316,804	1,046,783	373,276
Other fuel.....	\$		9,108		7,575
Electricity purchased.....	K.W.H.	28,299,010	194,936	34,195,802	227,218
<b>Total</b> .....	<b>\$</b>		<b>851,774</b>		<b>1,030,993</b>

Table 124.—Power Equipment, 1936 and 1937

Kind	1936		1937	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and turbines.....	1	100	1	100
Gasoline, gas and oil engines.....	2	300	3	409
Total primary equipment.....	3	400	4	509
Electric motors run by purchased power.....	1,042	13,335	1,151	13,660
<b>Total</b> .....	<b>1,045</b>	<b>13,735</b>	<b>1,155</b>	<b>14,169</b>
Stationary boilers.....	23	1,542	25	1,709

Table 125.—Power Equipment showing Ordinarily in Use separately from In Reserve or Idle, 1937

Kind	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and turbines.....	1	100		
Gasoline, gas and oil engines.....			3	409
Total primary equipment.....	1	100	3	409
Electric motors run by purchased power.....	1,097	12,597	54	1,063
<b>Total</b> .....	<b>1,098</b>	<b>12,697</b>	<b>57</b>	<b>1,472</b>
Stationary boilers.....	22	1,444	3	265

Table 126.—Materials Used in Manufacturing, 1936 and 1937

Material	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
<b>CUT AND BEVELLED GLASS DIVISION—</b>					
Figured and cathedral glass, leaded glass, etc.	sq. ft.	81,252	16,644	90,237	19,853
Glass blanks for making cut glass			90,941		137,884
Glass tubing			30,049		29,756
Plate glass used for bevelling, silvering, laminating, etc., and bevelled or polished edged plates			1,056,732		1,794,876
Sheet glass used for bevelling, silvering, laminating, etc., and bevelled or polished edge sheets			92,213		210,001
Rough blanks for lenses			88,333		120,203
Grinding and polishing materials			32,982		45,059
Celluloid and other plastics			50,725		128,721
Lead, zinc and copper	lb.	92,554	10,073	98,399	14,150
Solder	lb.	4,106	1,285	7,321	1,825
Silver nitrate	lb.	2,359	16,375	5,397	26,932
Containers, boxes, packages, etc.			4,915		7,788
All other materials			161,641		82,822
Total	\$		1,652,908		2,619,870
<b>PRESSED AND BLOWN GLASS DIVISION—</b>					
Borax	short ton	(a)	(a)	1,431	82,933
Cullet	short ton	830	7,277	23,094	215,725
Lime	short ton	8,348	73,272	8,173	81,141
Limestone	short ton	(a)	(a)	2,559	15,522
Silica sand	short ton	68,176	331,844	82,267	382,728
Containers, boxes, packages, etc.			550,121		685,543
All other materials, including soda ash, feldspar, etc.			1,593,284		1,685,276
Total	\$		2,555,798		3,148,868
<b>Grand total</b>	\$		<b>4,208,706</b>		<b>5,768,738</b>

(a) Not specified separately in 1936.

Table 127.—Products Manufactured, 1936 and 1937

Products	Selling value at works	
	1936	1937
	\$	\$
<b>CUT AND BEVELLED GLASS DIVISION—</b>		
Bent plate glass	4,563	27,975
Bevelled or polished edge plate	254,179	332,634
Chipped or etched plate glass	8,765	11,990
Plate glass signs	5,980	29,752
Plate glass mirrors	711,705	836,936
Bent sheet glass	6,827	14,885
Bevelled or polished edge sheet glass	167,418	35,933
Chipped or etched sheet glass	25,612	14,714
Sheet glass signs	20,247	23,981
Sheet glass mirrors	40,790	82,990
Leaded glass, including memorial windows	110,348	160,407
Cut glass (tumblers, bowls, etc.)	187,374	266,469
Optical lenses	345,424	462,861
Druggists' and chemical glassware	91,168	99,995
Receipts from repair work	24,393	28,779
All other products, including laminated and safety glass	1,372,562	2,075,704
Total	3,377,355	5,106,005
<b>PRESSED AND BLOWN GLASS DIVISION—</b>		
Pressed and blown glass	7,717,407	9,331,245
<b>Grand total</b>	<b>11,094,762</b>	<b>14,437,250</b>



Table 128.—Imports into Canada and Exports of Glass and Glassware, 1936 and 1937

Commodities	1936	1937
<b>IMPORTS</b>		
Glass plates or discs, rough cut or unwrought, for use in the manufacture of optical instruments	\$ 104,569	147,006
Glass carboys or demijohns, bottles, n.o.p., decanters, flasks, jars, and phials	\$ 1,013,621	1,213,405
Glass tableware, cut, pressed, moulded or crystal, blown glass tableware, other cut glass ware and glass balls	\$ 972,995	1,138,911
Incandescent lamp bulbs and glass tubing for use in the manufacture of incandescent lamps	\$ 524,075	528,650
Lamp chimneys, glass shades or globes	\$ 215,637	166,539
Lenses, glass, n.o.p.	\$ 137,123	93,131
Common and colourless window glass	sq. ft. 37,313,377	47,007,536
	\$ 938,850	1,307,307
Glass, cut to size, for the manufacture of dry plates for photographic purposes, when imported by the manufacturers of such dry plates, for use exclusively in the manufacture thereof in their own factories	\$ 759	915
Plate glass, not bevelled, in sheets or panes, not exceeding 7 sq. ft. each, n.o.p.	sq. ft. 3,445,547	4,749,012
	\$ 938,479	1,376,830
Plate glass, not bevelled, in sheets or panes, exceeding 7 sq. ft. each and not exceeding 25 sq. ft. each, n.o.p.	sq. ft. 672,300	603,595
	\$ 212,485	212,140
Plate glass, n.o.p.	sq. ft. 592,251	724,115
	\$ 220,510	280,585
High thermal shock resisting glassware (From May 1, 1936)	\$ 88,865	194,550
Glass in sheets and bent plate glass, n.o.p.	\$ 293,216	430,584
Laminated glass, sheet or plate, and manufactures thereof, n.o.p.	\$ 3,527	4,728
Ornamental figured and enamelled coloured glass, and memorial or other ornamental window glass, n.o.p.	\$ 23,675	36,464
Painted or vitrified, chipped, figured, enamelled and obscured white glass	\$ 13,946	12,577
Stained or ornamental glass windows	\$ 3,195	16,310
Silver glass, bevelled or not, framed or not framed	\$ 107,954	137,657
Articles of glass, not plate or sheet, designed to be cut or mounted	\$ 148,247	195,159
Glass eyes for human use	\$ 3,552	6,796
Photographic dry plates	\$ 25,984	19,023
Spectacles, eye glasses and ground or finished spectacle or eye-glass lenses	\$ 124,639	111,995
Manufactures of glass, n.o.p.	\$ 682,081	900,638
<b>Total Imports</b>	<b>\$ 6,807,985</b>	<b>8,541,800</b>
<b>EXPORTS</b>		
Glass and glassware, n.o.p.	\$ 269,740	951,059
<b>Total Exports</b>	<b>\$ 269,740</b>	<b>951,059</b>
<b>RE-EXPORTS</b>		
<b>Total</b>	<b>\$ 22,896</b>	<b>31,280</b>

## Directory of Firms Included in the Glass Industry in Canada, 1937

## (a) Pressed and Blown Glass

Names of firms	Location of plants
<b>QUEBEC—</b>	
Consumers' Glass Company, Limited	2nd Avenue, Ville St. Pierre.
Dominion Glass Company, Ltd.	2376 Wellington St., Montreal.
<b>ONTARIO—</b>	
Dominion Glass Company, Ltd.	Hamilton and Wallaceburg.
<b>ALBERTA—</b>	
Dominion Glass Company, Ltd.	Redcliff.

## (b) Cut and Bevelled Glass

<b>NEW BRUNSWICK—</b>	
Murray & Gregory, Ltd.	Falls View Ave., Saint John.
<b>QUEBEC—</b>	
Acme Glass Co.	1311 Bonaventure St., Montreal.
Commercial Optical Co.	209 Coberne St. E., Montreal.
Consolidated Plate Glass Co. of Canada, Ltd.	635 St. Paul St. E., Montreal.
Dominion Rock Crystal Co. Reg'd.	1118 St. Catherine St. W., Montreal.
Empire Glass Works	1185 Montcalm St., Montreal.

## Directory of Firms Included in the Glass Industry in Canada, 1937—Concluded

(b) Cut and Bevelled Glass—concluded

Names of firms	Location of plants
<b>QUEBEC—Concluded</b>	
Hobbs Manufacturing Co. Ltd.	894 St. James St. W. and 689 Notre Dame St., Montreal.
Jelly, E. H., & Co.	542 Beaudry St., Montreal.
Lafayette Glass Co.	1560 Craig St. E., Montreal.
La Vitrierie Modern	305 St. Francois St., Quebec.
Lepine, Engr.	109 St. Marguerite St., Quebec.
McLaren, James, Co.	360 Recollet St., Montreal.
O'Shea, J. P., & Co.	929 Ferrault Lane, Montreal.
Phillips Cut Glass Co. Ltd.	2251 Papineau Ave., Montreal.
Pilkington Bros. (Canada) Ltd.	929 Busby Lane, Montreal.
Star Glass Co.	485 Sherbrooke St. W., Montreal.
<b>ONTARIO—</b>	
Advance Glass and Mirror Co. Ltd.	92 Adelaide St. E., Toronto.
Bausch & Lomb Optical Co. Ltd.	388 Yonge St., Toronto.
Bennett Glass Co. Ltd.	1004 Walker Road, Windsor.
Bent Glass Specialties Co.	Rear 120 Geary Ave., Toronto.
Bullas Glass Co.	136 Ontario St. S., Kitchener.
Canadian Plate & Window Glass Ltd.	93 Don Roadway, Toronto.
Canadian Tumbler Co. Ltd.	63 Front St. E., Toronto.
Capital Glass & Paint Co. Ltd.	433 Cooper St., Ottawa.
Central Ornamental Glass Co.	83 McCaul St., Toronto.
Clapperton & Sons, Ltd.	23 River St., Toronto.
Colonial Art Glass Co.	384 Bank St., Ottawa.
Consolidated Optical Co. Ltd.	257 Coleman St., Belleville.
Consolidated Plate Glass Co. of Canada, Ltd.	241 Spadina Ave., Toronto.
Crystal Glass Co.	174 Mutual St., Toronto.
Dundas Plate Glass Co. Ltd.	31 Adelaide St. W., Dundas.
Duplicate Safety Glass Co. of Canada, Ltd.	First and Prospect Sts., Oshawa.
Duplicate (Windsor) Ltd.	Walker Road, Windsor.
Excelsior Plate Glass Co. Ltd.	189 Queen St. E., Toronto.
Gitson Bifocal Co.	24 Hayter St., Toronto.
Glass & Mirrors Co.	175 King St., Stratford.
Holoplane Co. Ltd.	385 Yonge St., Toronto.
Hill, Arthur E., & Co.	168 Seaton St., Toronto.
Hobbs Manufacturing Co. Ltd.	London, Ottawa and Toronto.
Holiday Flint Glass Works of Toronto.	17 Hillcrest Park, Toronto.
Hughes, W. J.	212 Wychwood Ave., Toronto.
Imperial Optical Company	21 Dundas Square, Toronto.
Johns, O. H., Glass Co. Ltd.	219 Broadview Ave., Toronto.
K. W. Optical Co.	251 King St. W., Kitchener.
London Glass & Mirror Co.	71 Dundas St., London.
Lyon, N. T., Glass Co. Ltd.	141 Church St., Toronto.
Luxfer Prism Company, Ltd.	162 Parliament St., Toronto.
McCausland, Robert, Ltd.	218 John St., Toronto.
Ningara Glass Co.	39 King St., St. Catharines.
Ontario Plate Glass Ltd.	13 Park St. N., Hamilton.
Palmer Thermometer Co. Ltd.	172 King St. E., Toronto.
Phillips, W. E., Company, Ltd.	First Ave., Oshawa.
Pringle & London.	146 Jarvis St., Toronto.
Queen City Glass Co. Ltd.	243 Victoria St., Toronto.
Reeves Glass Co.	501 Richmond St., London.
Richards Glass Co. Ltd.	102 Atlantic Ave., Toronto.
Scott Glass and Mirror Co.	1182 Yonge St., Toronto.
Supreme Art Glass & Mirror Works	61 Vue St., Hamilton.
Tait Plate & Window Glass Company.	71 Victoria St., Kitchener.
X. L. Glass Company.	59 King St. W., Hamilton.
York Glass Co. Ltd.	328 Carlaw Ave., Toronto.
<b>MANITOBA—</b>	
Canada Cut Glass	120 Fort St., Winnipeg.
Consolidated Plate Glass Co. of Canada, Ltd.	375 Balmoral St., Winnipeg.
Hobbs Manufacturing Co. Ltd.	360 Princess St., Winnipeg.
<b>ALBERTA—</b>	
Capital Glass & Beveling Works Ltd.	9812 Jasper Ave., Edmonton.
<b>BRITISH COLUMBIA—</b>	
Bogardus Wickens, Ltd.	1000 Homer St., Vancouver.
Frazer, J., Glass Works	2132 Granyille St., Vancouver.
Holt, W., & Son	426 Second Ave. W., Vancouver.
Kingsway Glass Co. Ltd.	385 Kingsway, Vancouver.
Regal Art Glass Works	1471 Broadway W., Vancouver.
Western Glass Co. Ltd.	158 W. Cordova St., Vancouver.

## CHAPTER EIGHT

## THE LIME INDUSTRY

Production of quick and hydrated lime during 1937 by Canadian producers totalled 549,353 short tons valued at \$3,824,917 compared with 468,401 tons at \$3,335,970 in the preceding year. The tonnage as recorded represents both sales and consumption of lime by producers and the output in 1937 as thus defined, was the largest since the all time high record of 674,087 tons in 1929. The 1937 total included 466,538 short tons of quick lime valued at \$3,252,383 and 82,815 short tons of hydrated lime at \$572,534. Ontario and Quebec are Canada's largest lime producing provinces, the output in these provinces during 1937 being respectively, 294,467 short tons worth \$2,152,644 and 156,313 tons at \$909,116.

The consumption of lime as a chemical in industrial plants and processes has been increasing rapidly during recent years. In 1937 the statistical returns made by the Canadian lime industry revealed that 466,796 short tons of lime valued at \$3,112,147 were shipped as chemical to smelters, steel mills, calcium carbide plants, gold mines, pulp and papermills, glass works and various other consumers. Of the quantity used in such plants during 1937, the pulp and paper mills absorbed 132,045 short tons, iron and steel mills 43,790 tons, gold mines 37,209 tons and sugar refineries 11,625 tons.

The prices per ton for quick and hydrated lime in 1937 were respectively \$6.97 and \$6.45 as compared with \$8.25 and \$11.81 in 1927.

The number of active firms in 1937 totalled 52, of which 21 were located in the province of Quebec and 16 in Ontario. The remainder of the firms conducted lime-burning operations in Nova Scotia, New Brunswick, Manitoba, Alberta and British Columbia. Capital employed by the entire industry in 1937 was reported at \$4,931,831; employees totalled 872, salaries and wages distributed aggregated \$781,274; \$871,131 were expended for fuel and electricity and the cost of explosives and various other process supplies was recorded at \$167,827.

Imports of lime into Canada during 1937 totalled 10,033,100 pounds valued at \$32,379 as compared with 1,876,300 pounds at \$12,036 in 1936. Exports of lime during 1937 amounted to 20,746,700 pounds appraised at \$85,489 compared with 23,322,800 at \$97,574 in the preceding year.

Hydrated or specially prepared slake lime is marketed in the form of fine powder usually in 50 pound multi-wall paper bags. Quick lime is sold in the lump, pebble, crushed and pulverized forms. Lump lime and pebble lime are sold in bulk or packed in barrels; crushed lime (1 inch and under) and pulverized lime (ground to minus 20 mesh and in some plants to minus 50 mesh) are sold in air-tight, multi-wall paper bags.

Table 129.—Principal Statistics, 1920-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of process supplies at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1920	57	4,760,007	1,028	1,291,801	912,309		3,818,553	2,906,244
1921	66	4,990,969	931	949,906	698,992		2,781,197	2,082,205
1922	82	4,984,910	1,110	1,013,486	725,168		3,165,005	2,439,837
1923	56	6,050,954	1,197	1,191,416	953,709		3,266,608	2,312,899
1924	49	5,165,964	927	970,672	740,878		3,178,541	2,437,663
1925	62	5,154,046	1,006	960,434	762,814		3,387,652	2,624,838
1926	60	5,825,809	1,106	1,082,854	788,980		3,781,484	2,992,504
1927	60	6,200,481	1,132	1,133,708	826,436		3,923,389	3,096,952
1928	54	6,952,079	1,218	1,316,115	912,395		4,534,568	3,622,173
1929	53	7,404,677	1,382	1,393,092	1,183,313		5,908,610	4,725,297
1930	50	8,816,879	1,086	1,087,778	880,354		4,038,698	3,152,344
1931	60	7,289,990	799	785,868	612,278		2,764,415	2,152,137
1932	60	6,823,949	677	575,072	535,433		2,394,537	1,859,104
1933	60	8,920,042	896	480,833	473,125		2,432,306	1,959,181
1934	58	8,497,895	737	535,492	600,335		2,745,797	2,139,462
1935	54	8,707,391	756	556,040	839,636	124,251	2,925,701	1,901,904
1936	57	6,106,901	799	640,322	743,663	96,316	3,335,970	2,495,991
1937	57	4,931,831	872	781,274	871,131	167,827	3,824,917	2,785,959
Per cent change, 1937 from 1936		-19.2	+9.1	+22.0	+17.1	+75.0	+14.7	+11.6

## MANUFACTURES OF NON-METALLIC MINERALS

Table 130.—Principal Statistics, by Provinces, 1936 and 1937

Provinces	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of process supplies at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
1936							
Nova Scotia and New Brunswick.....	6	263,034	121	103,531	55,366	8,012	247,246
Quebec.....	22	1,682,912	262	199,578	217,842	25,794	718,585
Ontario.....	19	2,434,705	230	215,211	394,058	15,493	1,946,060
Manitoba.....	4	1,090,293	79	53,065	44,124	44,059	211,035
Alberta.....	3	205,817	24	24,569	7,470	.....	78,259
British Columbia.....	3	430,140	83	44,368	24,803	2,958	134,785
<b>Canada.....</b>	<b>57</b>	<b>6,106,901</b>	<b>799</b>	<b>640,322</b>	<b>743,663</b>	<b>96,316</b>	<b>3,335,970</b>
1937							
Nova Scotia and New Brunswick.....	6	235,442	132	128,221	60,793	8,237	300,477
Quebec.....	22	1,474,444	290	245,857	257,241	26,623	909,116
Ontario.....	19	1,817,581	250	269,793	469,692	21,886	2,152,644
Manitoba.....	4	601,071	97	67,635	44,822	43,130	215,165
Alberta.....	3	209,654	22	26,727	9,266	16,137	93,478
British Columbia.....	3	593,639	81	43,041	29,317	51,814	154,037
<b>Canada.....</b>	<b>57</b>	<b>4,931,831</b>	<b>872</b>	<b>781,274</b>	<b>871,131</b>	<b>167,827</b>	<b>3,824,917</b>

Table 131.—Establishments, Grouped According to Production, Number of Employees and Capital Employed, 1937

	Number of plants	Capital employed	Average number of employees	Gross selling value of products at works
		\$		\$
(a) Production				
Under \$5,000.....	25	178,098	36	37,726
\$ 5,000—\$ 10,000.....	3	188,395	14	20,778
\$ 10,001—\$ 25,000.....	7	47,295	50	110,150
\$ 25,001—\$ 50,000.....	4	454,252	77	132,641
\$ 50,001—\$100,000.....	10	1,437,236	281	760,462
\$100,001—\$250,000.....	4	490,672	176	713,629
Over \$250,000.....	4	2,135,883	238	2,049,531
<b>Total.....</b>	<b>57</b>	<b>4,931,831</b>	<b>872</b>	<b>3,824,917</b>
(b) Employees				
1 to 10.....	39	799,925	120	790,826
11 to 20.....	6	1,178,158	77	1,169,530
21 to 50.....	8	1,469,813	321	1,215,742
Over 50.....	4	1,483,935	354	648,819
<b>Total.....</b>	<b>57</b>	<b>4,931,831</b>	<b>872</b>	<b>3,824,917</b>
(c) Capital				
Under \$25,000.....	36	221,402	184	850,073
\$25,000—\$100,000.....	5	301,766	45	74,357
Over \$100,000.....	16	4,408,661	643	2,900,487
<b>Total.....</b>	<b>57</b>	<b>4,931,831</b>	<b>872</b>	<b>3,824,917</b>

Table 132.—Capital Employed, by Classes and by Provinces, 1936 and 1937

Provinces	Present value of lands, buildings, fixtures, machinery and tools	Inventory value of materials on hand, finished products and stocks in process	Cash bills and accounts receivable, prepaid expenses, etc.	Total capital employed
	\$	\$	\$	\$
<b>1936</b>				
Nova Scotia and New Brunswick	212,541	19,603	30,890	263,034
Quebec	1,411,247	120,542	151,123	1,682,912
Ontario	2,239,906	169,279	25,520	2,434,705
Manitoba	998,355	26,817	65,121	1,090,293
Alberta	166,302	10,308	29,207	205,817
British Columbia	336,117	44,644	49,379	430,140
<b>Canada</b>	<b>5,364,468</b>	<b>391,193</b>	<b>351,240</b>	<b>6,106,901</b>
<b>1937</b>				
Nova Scotia and New Brunswick	185,377	25,815	24,250	235,442
Quebec	1,118,320	102,800	253,324	1,474,444
Ontario	1,595,672	202,694	19,215	1,817,581
Manitoba	513,625	37,446		601,071
Alberta	168,175	12,394	29,085	209,654
British Columbia	314,175	73,506	205,958	593,639
<b>Canada</b>	<b>3,945,344</b>	<b>454,655</b>	<b>531,832</b>	<b>4,931,831</b>

Table 133.—Employees, Salaries and Wages, by Provinces, 1936 and 1937

Provinces	Average number of employees				Salaries	Wages	Total salaries and wages	
	On salaries		On wages					Total
	Male	Female	Male	Female				
<b>1936</b>								
Nova Scotia and New Brunswick	8	2	111		121	16,322	87,209	103,531
Quebec	20	1	241		262	25,972	173,606	199,578
Ontario	17	2	211		230	26,767	188,444	215,211
Manitoba	6		73		79	9,280	43,785	53,065
Alberta	3	1	20		24	3,495	21,074	24,569
British Columbia	10	3	70		83	8,452	35,916	44,368
<b>Canada</b>	<b>64</b>	<b>9</b>	<b>726</b>		<b>799</b>	<b>99,288</b>	<b>559,934</b>	<b>649,222</b>
<b>1937</b>								
Nova Scotia and New Brunswick	7	2	123		132	17,231	110,990	128,221
Quebec	22	2	266		290	30,640	215,217	245,857
Ontario	18	4	228		250	31,256	238,537	269,793
Manitoba	6		91		97	9,757	57,878	67,635
Alberta	3		19		22	5,900	20,827	26,727
British Columbia	8	2	71		81	13,411	29,630	43,041
<b>Canada</b>	<b>64</b>	<b>10</b>	<b>798</b>		<b>872</b>	<b>108,195</b>	<b>673,079</b>	<b>781,274</b>

Table 134.—Wage-earners, by Months, 1936 and 1937

(On the 15th of each month)

Months	1936			1937		
	Quarry	Kiln	Total	Quarry	Kiln	Total
January	240	363	603	235	397	632
February	240	354	594	251	434	685
March	254	376	630	269	429	698
April	281	428	709	305	453	758
May	293	477	770	323	540	863
June	318	509	827	328	550	878
July	306	483	789	327	565	892
August	293	465	758	328	511	839
September	293	463	756	308	560	868
October	308	489	797	284	590	874
November	273	475	748	273	548	821
December	263	422	685	250	440	690
<b>Average</b>	<b>282</b>	<b>444</b>	<b>726</b>	<b>293</b>	<b>505</b>	<b>798</b>

Table 135.—Regular Hours Worked per Week by Wage-earners, 1936 and 1937  
(Overtime not included)

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	1.9	3.3	51-53 hours.....	6.0	1.7
41-43 hours.....	2.4	.....	54 hours.....	4.8	8.5
44 hours.....	5.7	7.6	55 hours.....	12.3	4.1
45-47 hours.....	0.2	1.7	56-59 hours.....	22.3	5.5
48 hours.....	40.9	34.1	60 hours and over.....	.....	28.2
49-50 hours.....	3.5	5.3			

Table 136.—Fuel and Electricity Used, 1936 and 1937

Kind	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal—Canadian.....	short ton	32,960	\$ 178,648	37,588	\$ 224,911
Imported.....	short ton	53,904	282,908	67,647	339,817
Anthracite coal.....	short ton	120	708	111	619
Lignite coal—Canadian.....	short ton	85	318	84	311
Coke.....	short ton	11,532	81,857	12,211	89,698
Gasoline (excluding vehicle fuel).....	imp. gal.	29,088	6,441	38,923	8,665
Kerosene.....	imp. gal.	211	54	1,590	189
Fuel oil and Diesel oil.....	imp. gal.	468,402	21,420	550,554	24,060
Wood.....	cord	40,341	120,072	46,078	134,499
Gas—Manufactured.....	M cu. ft.				
Natural.....	M cu. ft.				
Other fuel.....					4
Electricity purchased.....	k.w.h.	8,410,745	51,239	8,604,644	48,358
<b>Total</b> .....			<b>743,663</b>		<b>871,131</b>
Electricity generated for own use.....	k.w.h.		531,242		556,628

Table 137.—Power Equipment, 1936 and 1937

Kinds	1936		1937	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines.....	11	500	9	285
Diesel engines.....	3	329	4	376
Gasoline, gas and oil engines (other than diesel).....	17	448	13	395
Hydraulic turbines or water wheels.....	1	20		
<b>Total primary equipment</b> .....	<b>32</b>	<b>1,297</b>	<b>26</b>	<b>1,056</b>
Electric motors run by purchased power.....	276	5,789	296	5,977
<b>Total</b> .....	<b>308</b>	<b>7,086</b>	<b>322</b>	<b>7,033</b>
Electric motors run by above primary units.....	42	539	44	556
Stationary boilers.....	13	990	18	1,267

Table 138.—Power Equipment Showing Ordinarily in Use Separately from In Reserve or Idle, 1937

Kinds	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and turbines.....	8	260	1	25
Diesel engines.....	4	376		
Gasoline, gas and oil engines (other than diesel).....	13	395		
Hydraulic turbines or water wheels.....				
<b>Total primary equipment</b> .....	<b>25</b>	<b>1,031</b>	<b>1</b>	<b>25</b>
Electric motors run by purchased power.....	282	5,492	14	485
<b>Total</b> .....	<b>307</b>	<b>6,523</b>	<b>15</b>	<b>510</b>
Electric motors run by above primary units.....	43	549	1	7
Stationary boilers.....	17	1,192	1	75

Table 139.—Production of Lime in Canada, by Provinces, 1936 and 1937

Provinces	Quicklime sold or used		Hydrated lime sold or used		Total	
	Quantity	Gross selling value at kilns	Quantity	Gross selling value at kilns	Quantity	Gross selling value at kilns
	Tons	\$	Tons	\$	Tons	\$
1936						
Nova Scotia and New Brunswick.....	26,167	193,742	7,339	53,504	33,506	247,246
Quebec.....	99,311	592,833	33,943	125,752	133,254	718,585
Ontario.....	219,943	1,674,851	26,650	271,209	246,593	1,946,060
Manitoba and Alberta.....	26,193	208,083	4,696	80,311	30,889	289,294
British Columbia.....	19,885	119,563	4,274	15,222	24,159	134,785
<b>Canada.....</b>	<b>391,499</b>	<b>2,789,972</b>	<b>76,902</b>	<b>545,998</b>	<b>468,401</b>	<b>3,335,970</b>
1937						
Nova Scotia and New Brunswick.....	28,919	235,804	8,667	64,673	37,586	300,477
Quebec.....	118,040	778,216	38,273	130,900	156,313	909,116
Ontario.....	268,304	1,874,405	26,163	278,239	294,467	2,152,644
Manitoba and Alberta.....	28,476	232,249	4,772	76,394	33,248	308,643
British Columbia.....	22,799	131,709	4,940	22,328	27,739	154,037
<b>Canada.....</b>	<b>466,538</b>	<b>3,252,383</b>	<b>82,815</b>	<b>572,534</b>	<b>549,353</b>	<b>3,824,917</b>

Table 140.—Production of Lime Showing Purpose for Which Used, 1936 and 1937

	1936		1937	
	Quantity	Gross selling value at works	Quantity	Gross selling value at works
	Short tons	\$	Short tons	\$
(a) QUICK LIME				
Building trades—				
Finishing lime.....	1,970	19,140	3,293	31,041
Masons' lime.....	14,999	112,945	13,344	111,202
Sand-lime brick.....	7,248	45,386	7,275	46,244
Agriculture.....	1,129	5,985	592	4,410
Chemical—				
Smelters.....	2,981	27,045	3,487	31,986
Iron and steel mills.....	(u) 31,886	232,344	(u) 38,040	296,079
Cyanide mills.....	29,951	222,117	36,314	243,252
Pulp and paper mills.....	87,990	506,810	98,552	568,300
Glass works.....	6,377	44,310	7,687	53,893
Sugar refineries.....	14,438	118,364	11,513	105,791
Fertilizers.....	367	2,569	286	2,286
Tanneries.....	3,534	25,962	3,340	23,627
Insecticides.....	970	6,790	1,029	7,041
Other chemical works.....	171,946	1,312,763	221,619	1,590,225
Dealers—Uses unspecified.....	13,907	88,492	18,584	125,547
Other consumers.....	2,301	18,980	1,583	11,457
<b>Total quick lime.....</b>	<b>391,499</b>	<b>2,789,972</b>	<b>466,538</b>	<b>3,252,383</b>
(b) HYDRATED LIME				
Building trades—				
Finishing lime.....	20,912	259,129	15,358	196,704
Masons' lime.....	7,248	56,170	4,329	33,869
Agriculture.....	4,905	30,048	5,221	34,326
Chemical—				
Smelters.....	1,078	5,639	1,353	8,332
Iron and steel mills.....	3,318	10,249	5,750	18,283
Cyanide mills.....	3,033	15,019	895	5,865
Pulp and paper mills.....	28,805	112,809	33,493	125,292
Glass works.....				
Sugar refineries.....	406	2,169	112	896
Fertilizers.....	150	1,080	598	5,533
Tanneries.....	585	5,052	834	7,413
Insecticides.....	398	4,487	49	381
Other chemical uses.....	1,611	14,678	1,845	17,670
Dealers—Uses unspecified.....	3,086	19,028	11,985	110,695
Other consumers.....	1,367	10,431	1,283	7,275
<b>Total hydrated lime.....</b>	<b>76,902</b>	<b>545,998</b>	<b>82,815</b>	<b>572,534</b>
<b>Grand total.....</b>	<b>468,401</b>	<b>3,335,970</b>	<b>549,353</b>	<b>3,824,917</b>

(u) Includes calcined dolomite used as a refractory material.

## MANUFACTURES OF NON-METALLIC MINERALS

Table 141.—Production of Lime in Canada, 1922-1937

Years	Tons	Gross selling value at kilns	Years	Tons	Gross selling value at kilns
		\$			\$
1922	314,054	3,165,005	1930	490,802	4,038,698
1923	351,236	3,266,608	1931	344,785	2,764,415
1924	319,793	3,178,541	1932	320,650	2,394,537
1925	358,979	3,387,652	1933	323,540	2,432,306
1926	413,901	3,781,484	1934	368,113	2,745,797
1927	444,753	3,923,388	1935	405,419	2,925,791
1928	508,889	4,534,568	1936	468,401	3,335,970
1929	674,087	5,908,610	1937	549,353	3,824,917

Table 142.—Production, Imports and Exports of Lime, 1934-1937

	1934		1935		1936		1937	
	Tons	Value	Tons	Value	Tons	Value	Tons	Value
		\$		\$		\$		\$
Production	368,113	2,745,797	405,419	2,925,791	468,401	3,335,970	549,353	3,824,917
Imports	327	5,118	635	9,181	938	12,036	5,016	32,379
Exports	10,675	151,983	5,230	50,296	11,666	97,574	10,373	85,489

List of Concerns in the Lime Industry, 1937

Names of operators	Head office addresses	Location of plants
<b>NOVA SCOTIA—</b>		
Dominion Steel & Coal Corp., Ltd. (b)	Sydney	Sydney.
Eastern Lime Co., Ltd. (a)	Windsor	Windsor.
<b>NEW BRUNSWICK—</b>		
Bathurst Power and Paper Co., Ltd. (a)	Bathurst	Bathurst.
Purdy & Green, Ltd. (a)	323 Main St., Saint John	Saint John.
Randolph & Baker, Ltd. (a) (b)	Randolph	Randolph.
Snowflake Lime, Ltd. (a) (b)	3 Poktiok Rd., Saint John	Saint John.
<b>QUEBEC—</b>		
Arnaud & Beaudry	Joliette	Joliette.
Boivin, Arthur	Pont Rouge	Pont Rouge.
Canada Lime & Stone, Ltd.	St. Marc des Carrières	St. Marc des Carrières.
Carswell, Robt. B.	Bryson	Bryson.
Côté, Xavier (a)	Métabetchouan	Métabetchouan.
Desmond, Gaspard	St. Cuthbert	St. Cuthbert.
Dominion Lime, Ltd. (a)	Lime Ridge	Lime Ridge.
Filion, Narcisse	St. Joachim	St. Joachim.
Gagné, Octave	St. Ulric	St. Ulric.
Héon and Héon	St. Louis de Champlain	St. Louis de Champlain.
Lalumière, Joseph	St. Dominique de Bagot	St. Dominique de Bagot.
La Trappe de N. D. de Mistassine (a)	Village des Pères	St. Eugene d'Argentanay.
Limoges, Henri (a)	552 Pouport St., Montreal	St. Michel.
Mercure, C. (a)	9 rue St. Denis, St. Hyacinthe	St. Dominique de Bagot.
National Stone & Lime Co. (a)	5181 rue Décelles, Montreal	St. Marc des Carrières.
Shawinigan Chemicals, Ltd. (a)	107 Craig St., Montreal	Shawinigan Falls.
Standard Lime Co., Ltd. (a)	Joliette	St. Paul de Joliette, St. Marc des Carrières.
St. Michel Lime Co. (a)	Ville St. Michel	Ville St. Michel.
Trottier, David	St. Marc des Carrières	St. Marc des Carrières.
Vileneuve, R. (a)	St. Jérôme	St. Jérôme.



## List of Concerns in the Lime Industry, 1937—Concluded

Names of operators	Head office addresses	Location of plants
<b>ONTARIO—</b>		
Bell, Harry.....	R. R. 4, Chesley.....	Grey Co.
Brown's Lime Works..... (b)	491 Ninth Ave. E., Owen Sound.....	Owen Sound.
Brunner, Mond Canada, Limited..... (a)	Canadian Bank of Commerce Bldg., Toronto.....	Amherstburg district.
Cameron, W. M..... (a)	Carleton Place.....	Carleton Place.
Canada and Dominion Sugar Co., Ltd..... (a)	Chatham.....	Chatham.
Canada Lime Co..... (a)	Colobonk.....	Victoria Co.
Canadian Gypsum Co., Ltd..... (a)	1221 Bay St., Toronto.....	Guelph.
Chalmers Lime Works..... (b)	Owen Sound.....	Owen Sound.
Dominion Rock Products, Ltd..... (a)	941 Dominion Square Bldg., Mont- real.....	Eganville.
Electro Metallurgical Co. of Canada, Ltd. (a)	Canada Life Bldg., Toronto.....	Welland.
Gypsum, Lime & Alabastine, Canada, Ltd. (a)	Paris.....	Beuchville, Hespeler, and Milton.
(b)	Beuchville.....	Beuchville.
Innerkip Lime & Stone Co., Ltd..... (a)	Renfrew.....	Renfrew Co.
Jamieson Lime Co..... (a)	1908 Royal Bank Bldg., Toronto.....	Niagara Falls.
North American Cyanamid, Ltd..... (a)	Box 46, Rockwood.....	Eramosa Tp.
Rockwood Lime Co..... (b)	Eganville.....	Fourth Chute.
Shane Lime and Charcoal Co., Ltd..... (a)		
<b>MANITOWA—</b>		
Gillis Quarries, Ltd..... (a) (b)	Richard & Spruce Sts., Winnipeg.....	Garson, Poplarfield.
Gypsum, Lime & Alabastine, Canada, Ltd. (a)	Paris.....	Winnipeg.
(b)	812 Boyd Bldg., Winnipeg.....	Spearhill, Stonewall.
Winnipeg Supply & Fuel Co., Ltd..... (a) (b)		
<b>ALBERTA—</b>		
Canadian Sugar Factories, Ltd..... (a)	Raymond.....	Raymond.
Loders Lime Co., Ltd..... (a)	Kananaskis.....	Kananaskis.
Summit Lime Works..... (a)	Box 273, Lethbridge.....	Lethbridge district.
<b>BRITISH COLUMBIA—</b>		
Lyon, F.....	Hedley.....	Hedley.
Pacific Lime Co., Ltd..... (a)	744 West Hastings St., Vancouver.....	Texada Island.
Pacific Mills, Ltd..... (a)	Raymur Ave., Vancouver.....	Ocean Falls.

(a) Use calcium or high calcium limestone.

(h) Use dolomite or dolomite limestone.

\* Operates for Kelowna Exploration Co., Ltd.

## CHAPTER NINE

## THE PETROLEUM PRODUCTS INDUSTRY

Statistics for the Petroleum Products Industry cover all establishments in Canada which were occupied chiefly in—(a) the refining of crude oil to produce gasoline, fuel oil, etc., and (b) the blending or compounding of lubricating oils and greases.

Forty-four refineries and 13 blending plants, or a total of 57 works, reported under this category in 1937 and the aggregate value of production was \$98,454,014, an increase of 15 per cent over the total of \$85,802,363 for the 63 operating establishments in 1936.

The output figure for 1937 included \$97,701,954 for petroleum refineries and \$752,060 for concerns engaged in blending oils and greases. The principal statistics for each of these groups and for the industry as a whole are tabulated below and the detailed figures for each division are recorded separately in the succeeding pages of this report.

Table 143.—Principal Statistics of the Petroleum Products Industry, 1933-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
<b>Petroleum refining—</b>							
1933	37	67,566,886	4,551	6,041,230	3,130,719	48,916,966	69,803,721
1934	42	86,450,496	4,876	6,274,799	3,117,697	58,659,492	75,785,677
1935	45	64,012,045	4,771	7,046,675	3,939,424	58,415,916	79,176,081
1936	50	61,307,820	4,936	7,193,148	3,927,321	66,219,148	85,172,981
1937	44	63,759,579	5,047	8,126,583	4,444,878	79,093,972	97,701,954
<b>Compounding oils and greases—</b>							
1933	10	626,968	77	100,715	7,000	270,791	464,544
1934	9	570,545	81	104,427	6,837	309,523	551,836
1935	13	695,409	85	106,549	7,625	453,898	774,444
1936	13	576,106	84	116,807	5,313	336,737	629,382
1937	13	520,687	90	120,260	5,427	407,908	752,060
<b>Total—</b>							
1933	47	68,193,854	4,628	6,141,945	3,137,719	49,187,757	76,268,265
1934	51	67,021,041	4,957	6,379,226	3,121,531	56,969,015	76,337,513
1935	58	61,707,454	4,856	7,153,221	3,847,049	58,869,814	79,950,525
1936	63	61,883,926	5,019	7,309,955	3,932,611	66,555,885	85,802,363
1937	57	64,290,266	5,137	8,216,843	4,450,065	80,401,880	98,451,014
Per cent change, 1937 from 1936.	-9.5	+3.9	+2.3	+12.8	+13.2	+20.8	+14.7

Table 144.—Principal Statistics of the Petroleum Products Industry, by Provinces, 1937

Provinces	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
<b>1936</b>							
Quebec	7	21,022,130	1,067	1,670,562	1,383,766	20,753,097	27,504,940
Ontario	14	20,861,503	2,054	2,917,761	1,278,164	21,729,194	26,532,661
Manitoba	4	497,039	68	74,378	40,941	951,886	1,477,159
Saskatchewan	18	4,853,294	466	606,919	298,216	5,246,588	6,638,204
Alberta	12	5,260,904	488	721,058	237,560	5,646,597	7,410,882
British Columbia	5	5,442,752	401	651,387	263,654	7,074,784	9,205,427
Other provinces	3	3,946,304	465	667,909	430,333	5,153,739	7,033,090
<b>Canada</b>	<b>63</b>	<b>61,883,926</b>	<b>5,019</b>	<b>7,309,955</b>	<b>3,932,611</b>	<b>66,555,885</b>	<b>85,802,363</b>
<b>1937</b>							
Quebec	8	24,247,079	1,212	2,117,224	1,513,148	26,680,351	33,906,272
Ontario	14	20,444,475	2,129	3,360,737	1,592,353	24,751,152	28,842,214
Manitoba	3	614,858	66	74,834	38,150	991,065	1,569,130
Saskatchewan	17	4,697,033	463	670,500	349,850	5,937,890	7,659,551
Alberta	8	3,883,406	410	642,974	197,588	5,766,122	8,373,725
British Columbia	4	5,114,725	370	631,779	302,384	8,398,981	10,430,368
Other provinces	3	5,298,690	487	748,795	456,532	7,875,719	7,672,754
<b>Canada</b>	<b>57</b>	<b>64,290,266</b>	<b>5,137</b>	<b>8,216,843</b>	<b>4,450,065</b>	<b>80,401,880</b>	<b>98,451,014</b>

Table 145.—Size of Establishments, According to Production, Number of Employees, and Capital Employed, 1937

	Number of plants	Capital employed	Number of employees	Gross selling value of products at works
		\$		\$
<b>(a) Production</b>				
Under \$25,000.....	8	209,017	30	123,890
\$ 25,000 to \$ 50,000.....	8	208,672	39	296,559
\$ 50,001 to \$ 100,000.....	10	965,548	88	764,682
\$ 100,001 to \$ 250,000.....	9	840,716	106	1,445,265
\$ 250,001 to \$ 500,000.....	4	1,281,261	106	1,458,562
\$ 500,001 to \$1,000,000.....	4	5,311,671	95	3,325,302
\$1,000,001 to \$5,000,000.....	6	10,050,893	725	16,183,327
Over \$5,000,000.....	8	45,412,488	3,948	74,856,427
<b>Total.....</b>	<b>57</b>	<b>64,280,266</b>	<b>5,137</b>	<b>98,454,014</b>
<b>(b) Number of employees</b>				
1 or 2.....	2	21,254	3	40,981
3 to 10.....	25	1,498,636	150	1,552,209
11 to 20.....	11	5,074,694	150	3,010,054
21 to 50.....	5	2,222,301	161	2,811,016
51 to 100.....	3	2,791,941	201	5,785,548
101 to 250.....	6	22,796,215	900	31,896,072
Over 250.....	5	29,875,225	3,572	53,358,134
<b>Total.....</b>	<b>57</b>	<b>64,280,266</b>	<b>5,137</b>	<b>98,454,014</b>
<b>(c) Capital employed</b>				
Under \$25,000.....	9	106,483	30	221,013
\$ 25,000 to \$ 100,000.....	22	1,339,079	196	1,885,055
\$100,001 to \$1,000,000.....	12	4,479,038	284	5,787,729
Over \$1,000,000.....	14	58,355,666	4,627	90,560,217
<b>Total.....</b>	<b>57</b>	<b>64,280,266</b>	<b>5,137</b>	<b>98,454,014</b>

**Petroleum Refining.**—The 44 petroleum refineries which operated during 1937 were distributed as follows— 17 in Saskatchewan, 8 in Alberta, 5 in Ontario, 5 in Quebec, 3 in Manitoba, 3 in British Columbia, and 1 in each of Nova Scotia, New Brunswick, and the Northwest Territories. Compared with 1936 there was a gain of 1 refinery in Quebec and a loss of 4 in Alberta, 1 in Saskatchewan, 1 in Manitoba and 1 in British Columbia, while in the other provinces the number remained unchanged. The operating refineries had a combined capacity of 168,220 barrels of crude oil per day distributed by provinces, as follows— Quebec, 68,500 barrels, or 40.7 per cent of the total; Ontario, 40,500 barrels, or 24.1 per cent; British Columbia, 19,500 barrels, or 11.6 per cent; Saskatchewan, 16,070 barrels, or 9.6 per cent; Nova Scotia, 11,000 barrels, or 6.6 per cent; Alberta, 9,800 barrels, or 5.8 per cent; Manitoba, 2,450 barrels, or 1.5 per cent; New Brunswick, 250 barrels, or 0.1 per cent; and the Northwest Territories, 150 barrels, or 0.1 per cent. Fifteen establishments reported cracking units in use with aggregate capacity of about 80,450 barrels per day. The location, type and capacity of each of these refineries is recorded in the Directory at the end of this report.

In 1937 the operating refineries used 1,343,577,025 gallons of imported crude oil and 90,004,669 gallons of crude oil, naphtha and absorption gasoline from Canadian wells, a total of 1,433,581,694 gallons which was equal to about 66.7 per cent of refinery capacity. About 69.4 per cent, or 994,441,071 gallons, was imported from the United States, 24.3 per cent or 349,135,949 gallons was brought in from other countries, and 6.3 per cent or 90,004,669 gallons was from Canadian sources. The total cost at the refineries of all crude oil and naphtha charged to stills during the year was \$75,335,600. Stocks of crude and naphtha held at the refineries at the end of the year totalled 133,033,933 gallons.

Gasoline production in 1937 amounted to 640,299,876 gallons of which 361,900,397 gallons were made by the straight run process and 278,399,479 gallons by cracking. In addition, the refineries used for blending purposes a total of 47,514,563 gallons of imported casinghead gasoline which was not included in the production figures. The gallonage of gasoline made in 1937 was the highest on record, being 13 per cent greater than the output in 1936. The value of the 1937 production was \$58,568,348 at refinery prices. Stocks held at the refineries at the end of the year

included 88,948,091 gallons of straight run and cracked gasoline and 7,030,185 gallons of imported casinghead, the latter for blending purposes only.

Imports of gasoline, including casinghead, during 1937 amounted to 72,478,101 gallons which, with the production of 640,299,876 plus the declines in refinery stocks of 820,659 gallons and less the exports of 4,322,972 gallons, made an apparent consumption in Canada of 709,275,664 gallons for the year. This figure agrees fairly well with the gross sales of 718,620,111 gallons reported to the provincial governments under the Gasoline Tax Acts. The gross sales figure for Alberta, it is known, includes Turner Valley naphtha and absorption gasoline which was sold direct from the wells or separators to the consumers, the absorption gasoline which was used for blending purposes at refineries, and also engine distillates which were used for auto or tractor use, but these amounts were not included in the gasoline production figures and were not taken into account when calculating the apparent consumption. Reports from oil well operators in Alberta indicate that about 2.6 million gallons of naphtha and absorption gasoline were sold direct to consumers during 1937 and that 3.2 million gallons of absorption gasoline were used for blending direct without being charged to refinery stills, while the tractor and engine distillate made in Alberta refineries amounted to 9,971,529 gallons. The inclusion of these amounts would raise the apparent consumption by 15.8 million gallons.

Production in Canadian refineries of fuel and gas oils (excluding any made and used for cracking purposes) totalled 544,109,039 gallons of which 489,185,282 gallons were for sale and 54,923,757 gallons for use as fuel in the refineries. Imports aggregated 49,315,477 gallons and exports amounted to 11,050,735 gallons. Refinery stocks at the end of the year were about 85,076,516 gallons or 18,566,691 gallons less than in 1936. The apparent consumption in Canada, as calculated from the above figures, was 563,807,090 gallons.

The output of tractor and engine distillate was 30,319,024 gallons in 1937 and imports amounted to 1,451,292 gallons. Stocks at refineries increased 580,997 gallons. The apparent Canadian consumption was 31,189,319 gallons.

Refinery production of lubricating oils was 22,952,802 gallons and the output from blending plants was 914,727 gallons, making a total production in Canada of 23,867,529 gallons. By adding to this figure the imports of 15,331,130 gallons and the decline in refinery stocks of 426,473 gallons, an estimate of 39,625,132 gallons is obtained as the apparent Canadian consumption in 1937.

Production of lubricating grease in refineries was 13,899,436 pounds and in blending plants, 902,251 pounds, a total of 14,801,687 pounds. The latter quantity plus imports of 5,858,947 pounds indicates a consumption in Canada of 20,660,634 pounds for all purposes in 1937.

Capital employed in the Petroleum Refining Industry in 1937 was reported at \$63,759,579 of which \$34,761,597 was the value placed on land, buildings and equipment. The average number of employees was 5,047 and payments to these workers in salaries and wages was \$8,126,583. Materials used in refining operations cost \$79,993,972, fuel and electricity cost \$4,444,878, and products were valued at \$97,701,954 at the works.

Table 146.—Number and Total Capacity of Petroleum Refineries in Operation in Canada, 1934-1937

Provinces	1934		1935		1936		1937	
	Number	Capacity in barrels of crude per day	Number	Capacity in barrels of crude per day	Number	Capacity in barrels of crude per day	Number	Capacity in barrels of crude per day
Nova Scotia.....	1	11,000	1	11,000	1	11,000	1	11,000
New Brunswick.....	1	100	1	100	1	250	1	250
Quebec.....	5	61,500	4	59,500	4	65,500	5	68,500
Ontario.....	7	39,850	7	39,900	5	39,500	5	40,500
Manitoba.....	3	2,100	4	2,450	4	2,650	3	2,450
Saskatchewan.....	10	12,850	14	14,190	18	15,250	17	16,070
Alberta.....	10	14,150	9	14,850	12	16,860	8	9,800
British Columbia.....	4	17,700	4	18,200	4	20,000	3	19,500
Northwest Territories.....	1	150	1	150	1	150	1	150
<b>Canada.....</b>	<b>42</b>	<b>159,400</b>	<b>45</b>	<b>160,350</b>	<b>50</b>	<b>171,160</b>	<b>44</b>	<b>168,229</b>

NOTE.—1 barrel=35 Imperial gallons.

Table 147.—Principal Statistics of the Petroleum Refining Industry, 1921-1937

Years	Number of refineries	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
1921	11	55,630,864	3,911	6,003,659	4,429,308	35,850,653	51,565,403
1922	13	61,253,400	3,498	5,391,285	4,227,615	38,129,880	56,495,821
1923	14	60,288,861	4,195	5,531,569	4,054,846	36,435,306	45,571,506
1924	17	53,095,784	3,603	5,623,978	3,580,032	36,669,292	48,677,347
1925	13	49,461,900	3,655	5,621,898	3,433,017	37,814,303	49,802,615
1926	17	56,476,449	3,698	5,782,589	3,580,049	50,783,871	70,570,240
1927	16	55,442,193	3,802	6,078,226	3,628,842	52,743,530	63,979,849
1928	16	55,811,418	4,252	6,803,234	3,440,578	57,033,185	82,448,392
1929	15	69,887,267	4,883	7,984,786	3,745,956	76,289,182	98,384,180
1930	15	69,077,982	5,030	8,003,357	3,859,083	71,307,879	90,809,711
1931	20	67,288,556	4,058	6,110,068	3,371,118	60,353,423	75,588,425
1932	24	68,882,376	4,058	5,897,811	3,338,648	52,029,471	71,360,324
1933	37	67,566,886	4,551	6,041,230	3,130,719	48,916,966	69,803,721
1934	42	66,450,496	4,876	6,274,799	3,117,697	56,659,492	75,785,677
1935	45	64,012,045	4,771	7,046,675	3,839,424	53,415,916	79,176,081
1936	50	61,307,820	4,935	7,193,148	3,927,321	66,219,148	85,172,981
1937	44	63,759,579	5,047	8,126,583	4,444,878	79,993,972	97,701,954
Per cent change, 1937 from 1936...	-12.0	+4.0	+2.3	+13.0	+13.2	+20.8	+14.7

Table 148.—Principal Statistics of the Petroleum Refining Industry, by Provinces, 1936 and 1937

Provinces	Number of refineries	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
<b>1936</b>							
Quebec	4	20,930,076	1,047	1,643,660	1,381,421	20,693,843	27,407,809
Ontario	5	20,383,516	2,002	2,829,509	1,275,340	21,456,194	26,008,188
Manitoba	4	497,039	68	74,378	40,941	951,896	1,477,159
Saskatchewan	18	4,853,294	466	606,919	298,216	5,240,588	6,638,204
Alberta	12	5,260,904	488	721,058	237,560	5,646,597	7,410,882
British Columbia	4	5,436,087	399	649,724	263,510	7,070,301	9,197,649
Other provinces	3	3,946,304	465	667,900	430,333	5,153,739	7,033,090
<b>Canada</b>	<b>50</b>	<b>61,307,820</b>	<b>4,935</b>	<b>7,193,148</b>	<b>3,927,321</b>	<b>66,219,148</b>	<b>85,172,981</b>
<b>1937</b>							
Quebec	5	24,142,108	1,189	2,086,440	1,510,618	26,612,750	33,794,238
Ontario	5	20,032,311	2,065	3,272,974	1,590,177	24,414,845	28,209,955
Manitoba	3	614,858	66	74,834	38,150	991,665	1,569,130
Saskatchewan	17	4,697,033	463	670,500	349,850	5,937,890	7,659,551
Alberta	8	3,863,406	410	642,974	197,588	5,766,122	8,373,725
British Columbia	3	5,111,173	367	630,066	301,963	8,394,951	10,422,601
Other provinces	3	5,298,690	487	748,795	456,632	7,875,719	7,672,754
<b>Canada</b>	<b>44</b>	<b>63,759,579</b>	<b>5,047</b>	<b>8,126,583</b>	<b>4,444,878</b>	<b>79,993,972</b>	<b>97,701,954</b>

Table 149.—Capital Employed in the Petroleum Refining Industry, 1936 and 1937

Provinces	Present value of lands, buildings, machinery and equipment	Inventory value of finished products and materials on hand and stocks in process	Operating capital (cash, bills and accounts receivable, etc.)	Total capital employed
	\$	\$	\$	\$
1936				
Quebec.....	12,388,740	7,928,277	613,059	20,930,076
Ontario.....	12,479,859	7,577,618	326,039	20,383,516
Manitoba.....	259,582	150,952	86,505	497,039
Saskatchewan.....	2,687,380	1,959,856	206,058	4,853,291
Alberta.....	1,939,334	3,056,932	264,638	5,260,901
British Columbia.....	3,132,594	1,924,928	379,165	5,436,687
Other provinces.....	1,784,953	2,070,739	90,612	3,916,304
<b>Canada.....</b>	<b>34,672,442</b>	<b>24,669,302</b>	<b>1,966,076</b>	<b>61,307,820</b>
1937				
Quebec.....	12,495,659	11,529,930	116,519	21,142,108
Ontario.....	12,965,897	6,856,918	209,496	20,032,311
Manitoba.....	279,495	190,312	145,051	614,858
Saskatchewan.....	2,237,232	2,204,887	254,914	4,697,033
Alberta.....	1,857,429	1,783,115	222,862	3,863,406
British Columbia.....	2,436,077	2,535,268	139,828	5,111,173
Other provinces.....	2,489,808	2,696,153	112,729	5,298,690
<b>Canada.....</b>	<b>34,761,597</b>	<b>27,796,583</b>	<b>1,201,399</b>	<b>63,759,579</b>

Table 150.—Employees in Petroleum Refineries, Salaries and Wages, 1936 and 1937

Provinces	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
					\$	\$	\$	
1936								
Quebec.....	153	18	876		1,047	367,742	1,255,918	1,643,660
Ontario.....	302	56	1,638	6	2,002	789,035	2,040,474	2,829,509
Manitoba.....	19	2	47		68	33,001	41,377	74,378
Saskatchewan.....	86	15	364	1	466	189,624	417,295	606,919
Alberta.....	94	14	380		488	201,166	519,892	721,058
British Columbia.....	70	13	316		399	181,518	468,206	649,724
Other provinces.....	54	17	393	1	465	165,490	502,410	667,900
<b>Canada.....</b>	<b>778</b>	<b>135</b>	<b>4,014</b>	<b>8</b>	<b>4,935</b>	<b>1,947,576</b>	<b>5,245,572</b>	<b>7,193,148</b>
1937								
Quebec.....	163	12	1,014		1,189	449,583	1,636,857	2,086,440
Ontario.....	293	47	1,720	5	2,065	822,077	2,450,897	3,272,974
Manitoba.....	17	4	45		66	34,593	40,241	74,834
Saskatchewan.....	104	15	342	2	463	211,627	458,873	670,500
Alberta.....	60	10	340		410	169,949	473,025	642,974
British Columbia.....	71	15	281		367	192,221	437,845	630,066
Other provinces.....	55	17	414	1	487	185,809	562,986	748,795
<b>Canada.....</b>	<b>763</b>	<b>120</b>	<b>4,156</b>	<b>8</b>	<b>5,047</b>	<b>2,063,859</b>	<b>6,060,724</b>	<b>8,126,583</b>

Table 151.—Number of Wage-earners in Petroleum Refineries, by Months, 1937

(On the 15th of each month)

Months	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Other Provinces	Canada
January.....	865	1,540	40	278	322	275	402	3,722
February.....	932	1,585	41	249	324	271	398	3,800
March.....	989	1,625	39	297	326	288	397	3,961
April.....	989	1,688	43	383	346	285	400	4,131
May.....	1,053	1,710	53	416	347	276	420	4,375
June.....	1,060	1,746	48	390	346	317	424	4,331
July.....	1,116	1,805	48	378	362	306	454	4,193
August.....	1,094	1,805	51	377	387	303	449	4,412
September.....	1,080	1,846	49	359	365	280	429	4,388
October.....	1,028	1,859	49	348	338	262	407	4,281
November.....	1,024	1,801	42	330	338	261	399	4,195
December.....	962	1,733	40	322	284	255	396	3,992
<b>Average.....</b>	<b>1,014</b>	<b>1,725</b>	<b>45</b>	<b>344</b>	<b>340</b>	<b>291</b>	<b>415</b>	<b>4,164</b>

**Table 152.—Regular Hours Worked per Week by Wage-earners, 1937**  
(Overtime not included)

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	72.8	76.8	51-53 hours.....	0.4	1.2
41-43 hours.....	1.1	1.6	54 hours.....	1.0	0.8
44 hours.....	3.4	2.0	55 hours.....	0.1	0.2
45-47 hours.....	0.9	0.3	56-59 hours.....	0.5	2.0
48 hours.....	16.4	12.3	60 hours and over.....	2.5	1.8
49-50 hours.....	0.9	1.0			

**Table 153.—Fuel(\*) and Electricity Used in Petroleum Refineries, 1936 and 1937**

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal—Canadian.....	short ton	63	\$ 329	353	\$ 2,084
Imported.....	short ton	20,372	91,591	28,305	129,107
Coke, including petroleum coke.....	short ton	14,497	45,598	2,369	8,922
Gasoline.....	imp. gal.	4,038	691	175,412	16,554
Kerosene or coal oil.....	imp. gal.	687	77	36,622	2,815
Fuel oil.....	imp. gal.	54,552,661	1,997,039	54,899,224	2,111,836
Wood.....	cord	72	262	371	839
Gas—Manufactured, including still gas.....	M cu. ft.	6,091,049	1,270,055	6,199,110	1,442,748
Natural.....	M cu. ft.	1,036,750	92,698	1,095,926	98,829
Other fuel.....	\$		1,572		213,288
Electricity purchased.....	K.W.H.	55,031,480	427,409	55,077,721	417,626
<b>Total.....</b>	<b>\$</b>		<b>3,927,321</b>		<b>4,444,878</b>
Electricity generated for own use.....	K.W.H.	399,225			

\*Includes fuel oil, still gas, petroleum coke, etc., produced in the refineries and used by the producers for heating stills, buildings, etc., or for power purposes.

**Table 154.—Power Equipment in Petroleum Refineries, 1936 and 1937**

	1936		1937	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and turbines.....	444	16,604	409	15,958
Diesel engines.....	5	935	5	935
Gasoline, gas and oil engines (other than diesel).....	15	217	18	436
<b>Total primary equipment.....</b>	<b>464</b>	<b>17,756</b>	<b>432</b>	<b>17,329</b>
Electric motors run by purchased power.....	1,185	24,294	1,140	24,112
<b>Total.....</b>	<b>1,649</b>	<b>42,050</b>	<b>1,572</b>	<b>41,441</b>
Stationary boilers.....	157	31,679	148	30,937

**Table 155.—Power Equipment in Petroleum Refineries, 1937, showing 'Ordinarily in Use' separately from 'In Reserve or Idle'**

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines and turbines.....	405	15,503	4	455
Diesel engines.....	5	935		
Gasoline, gas and oil engines (other than diesel).....	16	418	2	18
<b>Total primary equipment.....</b>	<b>426</b>	<b>16,856</b>	<b>6</b>	<b>473</b>
Electric motors run by purchased power.....	1,124	23,575	16	537
<b>Total.....</b>	<b>1,550</b>	<b>40,431</b>	<b>22</b>	<b>1,010</b>
Stationary boilers.....	144	30,747	4	190

Table 156.—Materials Used in Petroleum Refineries, 1936 and 1937

Materials	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Crude oil (under 60° A.P.I.) in its natural state, from Canadian wells.....	Imp. gal.			65,719,569	3,792,682
Crude naphtha (60° A.P.I. and over) in its natural state, from Canadian wells.....	Imp. gal.	42,792,311	3,219,007	6,026,194	467,393
Absorption gasoline, etc., from Canadian wells (run to stills).....	Imp. gal.			18,258,906	1,340,076
Crude oil, in its natural state, imported (run to stills)—					
(a) From United States.....	Imp. gal.	906,642,075	46,026,181	994,420,631	53,060,003
(b) From other countries.....	Imp. gal.	337,028,509	13,340,038	349,135,949	16,674,628
Crude oil, not in its natural state (run to stills)—					
(a) From United States.....	Imp. gal.			20,445	818
Benzol for blending.....	Imp. gal.	359,748	54,045	1,949,894	310,461
Sulphuric acid, 66° Bé.....	pound	22,809,518	213,433	23,086,547	204,255
Sulphur.....	pound	131,338	4,631	190,956	6,776
Caustic soda.....	pound	3,705,041	107,684	5,770,872	131,928
Soda ash.....	pound	290,677	6,350	347,273	7,289
Litharge.....	pound	349,315	24,644	474,545	40,747
Fullers' earth and clay.....	pound	18,907,295	243,104	18,843,458	240,309
Compounding materials.....	\$		479,767		652,084
Tetraethyl fluid.....	\$		1,580,695		2,136,547
Other materials.....	\$		257,249		254,299
Shipping containers.....	\$		601,660		673,687
<b>Total.....</b>	<b>\$</b>		<b>66,219,148</b>		<b>79,993,972</b>

Table 157.—Materials Used in Petroleum Refineries, by Provinces, 1937

Materials	Unit of measure	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Other Provinces
Crude oil (under 60° A.P.I.) in its natural state, from Canadian wells.....	Imp. gal.		5,789,224	71,094	16,683,797	42,147,819		1,027,635
	\$		375,181	5,821	1,047,363	2,282,379		81,938
Crude naphtha (60° A.P.I. and over) in its natural state, from Canadian wells.....	Imp. gal.					6,026,194		
	\$					467,393		
Absorption gasoline, etc., from Canadian wells (run to stills).....	Imp. gal.				353,736	17,905,170		
	\$				41,215	1,298,861		
Crude oil, in its natural state, imported (run to stills)—								
(a) From United States.....	Imp. gal.	301,370,442	376,028,891	10,559,287	64,761,694	26,339,737	183,639,537	31,721,043
	\$	15,910,111	21,451,421	967,868	4,661,194	1,298,016	6,966,743	1,804,650
(b) From other countries.....	Imp. gal.	195,337,557					22,223,761	131,574,631
	\$	9,667,122					1,231,239	5,776,267
Benzol for blending.....	Imp. gal.	1,275,300	618,849	34,659	377	2,940	2,311	15,458
	\$	199,946	92,998	7,625	168	1,506	1,065	7,150
Sulphuric acid 66° Bé.....	pound	661,059	18,172,884	51,560	821,782	2,494,944	884,338	
	\$	5,982	154,322	1,702	12,991	20,415	8,843	
Sulphur.....	pound	23,216	19,231	145	31,732	116,632		
	\$	706	473	7	1,299	4,291		
Caustic soda.....	pound	1,467,240	2,414,989	16,845	310,226	546,041	299,053	716,478
	\$	31,559	39,201	878	11,825	19,556	9,282	19,624
Soda ash.....	pound	15,670	122,400	600	157,263	29,900	18,520	2,920
	\$	284	1,951	18	3,467	755	743	61
Litharge.....	pound	14,426	40,078	2,526	83,976	330,917	1,737	885
	\$	912	3,062	231	8,259	28,063	138	62
Fullers' earth and clay.....	pound	4,153,740	11,749,695	300	918,900	163,550	65,010	1,792,263
	\$	53,448	149,264	15	10,369	1,760	935	24,518
Compounding materials.....	\$		639,863				12,201	
Tetraethyl fluid.....	\$	649,991	807,449		96,236	310,366	133,073	139,432
Other materials.....	\$	50,269	131,047		28,967	21,386	9,591	13,847
Shipping containers.....	\$	42,410	568,593	7,500	14,534	11,355	21,125	8,170
<b>Total.....</b>	<b>\$</b>	<b>26,612,756</b>	<b>24,414,845</b>	<b>991,665</b>	<b>5,937,890</b>	<b>5,766,122</b>	<b>8,394,961</b>	<b>7,875,719</b>

(\$=Cost of works)



Table 158.—Products Made in Petroleum Refineries, 1936 and 1937

Products	Unit of measure	1936		1937	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
			\$		\$
<b>MADE FOR SALE—</b>					
Gasoline—Straight run*	Imp. gal.	316,046,838	29,768,074	361,722,399	33,473,233
By cracking process	Imp. gal.	251,436,449	21,800,125	278,362,079	25,073,645
Stove oil (40°-42-5° A.P.I.)	Imp. gal.			18,014,276	826,880
Gas and light fuel oil (20°-40° A.P.I., except diesel)	Imp. gal.			100,585,222	4,754,065
Diesel fuel oil (all fuel oil sold under this name)	Imp. gal.	443,747,191	16,708,183	41,503,283	1,808,621
Residual fuel oil (10°-20° A.P.I.)	Imp. gal.			329,082,501	11,953,010
Tractor and engine distillate	Imp. gal.	33,280,176	2,963,582	30,319,024	2,915,840
V.M. and P. or solvent naphtha	Imp. gal.	8,959,588	692,553	11,326,568	980,207
Kerosene	Imp. gal.	28,913,144	2,606,158	26,308,522	2,395,293
Lubricating oil	Imp. gal.	19,665,009	3,754,454	22,875,067	3,996,812
Lubricating grease	Imp. gal.	11,399,546	527,979	13,899,436	511,426
Asphalt	Imp. gal.	34,860,569	3,031,466	56,811,878	4,336,778
Petroleum coke	short ton	62,077	381,473	59,634	371,198
Other products	\$		425,079		479,038
<b>Total made for sale</b>	<b>\$</b>		<b>81,659,106</b>		<b>93,876,046</b>
<b>MADE FOR OWN USE—</b>					
Gasoline—Straight run	Imp. gal.	160,738	16,960	177,998	17,643
By cracking process	Imp. gal.	15,251	1,821	37,400	3,827
Gas and light fuel oil (20°-40° A.P.I.)	Imp. gal.			239,631	11,835
Residual fuel oil (10°-20° A.P.I.)	Imp. gal.	54,570,427	1,995,397	54,684,126	2,100,864
Kerosene	Imp. gal.	73,472	5,438	41,127	3,275
Lubricating oil	Imp. gal.	53,308	12,115	77,735	13,719
Tar	pound	304,045	12,162	1,381,625	55,265
Asphalt	Imp. gal.	25,084	2,201	50,305	3,960
Petroleum coke	short ton	2,629	11,687	2,381	8,942
Still gas	M cu. ft.	6,083,549	1,268,556	6,199,110	1,442,749
Other products	\$		187,538		103,753
<b>Total made for own use</b>	<b>\$</b>		<b>3,513,875</b>		<b>3,825,832</b>
<b>Grand total</b>	<b>\$</b>		<b>85,172,981</b>		<b>97,701,854</b>
Fuel and gas oils made for use in cracking process	Imp. gal.	1383,325,710		535,969,764	

\*Includes Turner Valley naphtha and natural gasoline run to refinery stills but does not include the imported casinghead gasoline which was used for blending at the refineries.

†Not including 1,568,388 gallons of heavy naphtha.

Table 159.—Products Made in Petroleum Refineries, by Provinces, 1937

Products	Unit of measure	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Other Provinces
MADE FOR SALE								
Gasoline—(a) Straight run.....	Imp. gal. \$	132,408,373 11,417,740	90,388,293 7,371,352	4,468,666 816,924	26,405,756 3,410,364	42,607,163 4,679,116	41,691,507 4,166,347	23,752,641 1,611,390
(b) By cracking process.....	Imp. gal. \$	117,325,672 11,560,003	112,274,566 8,928,856	..... .....	13,648,861 1,609,144	12,712,155 1,392,086	2,330,478 242,174	20,070,347 1,341,382
Fuel oil and gas oil.....	Imp. gal. \$	177,057,847 6,954,105	81,688,382 3,610,993	3,113,023 57,463	12,598,056 264,900	10,222,916 537,148	145,361,175 5,141,322	59,143,883 2,404,746
Tractor and engine distillate.....	Imp. gal. \$	1,453,531 108,803	4,083,648 277,227	2,013,900 238,379	12,798,416 1,266,769	9,971,529 1,024,602	..... .....	..... .....
V.M. & P. or solvent naphtha.....	Imp. gal. \$	4,189,710 348,517	4,174,508 313,585	148,513 26,055	..... .....	857,004 104,247	1,537,676 159,789	419,157 28,014
Kerosene.....	Imp. gal. \$	2,772,385 228,313	8,372,978 617,323	392,119 57,463	2,826,789 356,361	3,628,946 468,322	607,012 77,529	7,708,293 589,962
Lubricating oil.....	Imp. gal. \$	528,970 87,062	21,450,731 3,755,316	88,226 1,922,310	42,598 81,385	..... .....	626,439 88,979	180,701 22,857
Grease.....	pound \$	..... 429,934	11,975,690 .....	1,922,310 81,385	..... .....	1,436 107	..... .....	..... .....
Asphalt.....	Imp. gal. \$	23,384,268 1,718,406	9,383,646 737,648	..... .....	2,386,664 178,643	2,266,569 174,510	3,491,653 273,292	15,899,088 1,254,279
Petroleum coke.....	ton \$	981 3,713	56,124 355,614	..... .....	..... .....	2,169 10,419	..... .....	360 1,452
Wax and candles.....	pound \$	..... 451,416	11,695,902 .....	451,416 .....	6,300 .....	..... .....	..... .....	..... .....
Other products.....	\$	.....	3,852	6,300	.....	17,470	.....	.....
Total made for sale.....	\$	32,426,782	26,859,116	1,534,004	7,358,449	8,294,181	10,149,432	7,254,082
MADE FOR OWN USE								
Gasoline—(a) Straight run.....	Imp. gal. \$	27,255 3,219	98,222 7,378	7,000 1,120	7,607 882	19,526 2,987	9,185 954	9,203 1,103
(b) By cracking process.....	Imp. gal. \$	..... .....	37,400 3,827	..... .....	..... .....	..... .....	..... .....	..... .....
Fuel oil and gas oil.....	Imp. gal. \$	17,570,451 665,671	15,109,349 593,442	601,017 34,006	5,227,933 212,515	1,246,042 27,224	7,263,035 260,331	7,905,930 319,510
Kerosene.....	Imp. gal. \$	..... 2,219	31,643 2,219	..... .....	5,057 597	1,925 241	536 68	1,966 150
Lubricating oil.....	Imp. gal. \$	7,757 1,277	57,957 10,875	..... .....	..... .....	..... .....	2,982 424	9,039 1,143
Tar.....	Imp. gal. \$	..... .....	1,381,625 55,265	..... .....	..... .....	..... .....	..... .....	..... .....
Petroleum coke.....	ton \$	1,265 4,786	432 1,464	..... .....	671 2,640	..... .....	..... .....	13 52
Still gas.....	M cu. ft. \$	2,609,075 692,052	2,407,572 523,821	..... .....	358,299 82,350	242,083 36,945	51,405 11,127	530,676 96,454
Other products.....	\$	451	152,548	.....	2,118	12,147	265	260
Total made for own use.....	\$	1,367,456	1,350,839	35,126	301,102	79,544	273,169	418,672
<b>Grand total</b> .....	\$	<b>33,794,238</b>	<b>28,209,955</b>	<b>1,569,130</b>	<b>7,659,551</b>	<b>8,373,725</b>	<b>10,422,601</b>	<b>7,672,754</b>
Fuel and gas oils made for use in cracking process.....	Imp. gal.	178,324,464	219,434,110	.....	26,875,675	17,955,105	8,845,095	85,535,315

(\$=Gross selling value at works.)

Table 160.—Stocks on Hand at the Refineries at the End of 1937

	Stocks on hand at refineries on December 31, 1937		Increase or decrease over December 31, 1936
	Imp. gal.	Imp. gal.	
Crude oil and naphtha, in its natural state, from Canadian wells.....	5,595,033	+ 4,230,280	
Absorption gasoline, etc., from Canadian wells.....	742,594	+ 580,751	
Crude oil, imported—in its natural state.....	126,637,925	+ 7,950,663	
not in its natural state.....	58,411	+ 14,388	
Gasoline (excluding imported casinghead or Canadian absorption gasoline).....	88,948,091	+ 820,659	
Stove oil (40°-42.5° A.P.I.).....	7,079,889	+ 51,946	
Gas and light fuel oil (20°-40° A.P.I., excepting diesel).....	24,426,131	+ 2,499,408	
Diesel fuel oil.....	3,533,843	+ 1,103,393	
Residual fuel oil (10°-20° A.P.I.).....	50,036,753	+14,911,944	
Tractor and engine distillate.....	6,369,713	+ 580,997	
Kerosene.....	9,320,878	+ 1,191,994	
Lubricating oils.....	4,362,316	+ 426,473	
Petroleum coke..... short tons	2,087	- 1,448	

Table 161.—Casinghead Gasoline Imported and Used for Blending at the Refineries, 1936 and 1937

	1936	1937
Imported natural casinghead gasoline received at the refinery during the year..... Imp. gal.	39,821,264	50,009,753
..... \$	3,439,723	4,515,157
Imported natural casinghead gasoline used for blending during the year..... Imp. gal.	41,208,973	47,514,563
Total stocks of imported natural casinghead gasoline at the end of the year..... Imp. gal.	5,231,507	7,030,185

(b) **Lubricating Oils and Greases.**—In 1937 reports were received from 13 factories which were engaged chiefly in compounding lubricating oils and greases; 9 were in Ontario, 3 in Quebec, and 1 in British Columbia.

Capital employed in 1937 was given at \$520,687; the average number of employees was 90; payments for salaries and wages totalled \$120,260; materials for compounding, containers for the finished products, and process supplies cost \$407,908; and the value of all products was \$752,060, including \$568,651 for lubricating oils, \$131,766 for lubricating greases, and \$51,643 for miscellaneous products.

Including the production from refineries, the total Canadian output of lubricating oils in 1937 was 23,867,529 gallons valued at \$4,579,182 compared with 20,439,318 gallons valued at \$4,219,815 in 1936. The total production of lubricating greases was 14,801,687 pounds at \$643,192 in 1937 as against 12,245,346 pounds at \$643,241 in 1936.

Table 162.—Principal Statistics of the Lubricating Oils and Greases Industry, 1921-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
1921.....	5	1,933,724	103	178,955	10,343	778,923	1,367,012
1922.....	6	800,629	57	101,398	4,172	283,311	539,742
1923.....	6	738,843	62	116,751	6,236	381,300	709,028
1924.....	8	700,010	66	125,727	6,500	423,419	733,720
1925.....	8	1,118,649	83	153,148	14,113	446,721	959,512
1926.....	6	701,676	55	109,810	4,746	388,288	626,071
1927.....	7	693,371	54	110,000	4,614	316,391	548,971
1928.....	9	720,196	67	119,346	7,204	350,656	673,780
1929.....	10	1,373,192	95	168,839	8,999	572,757	1,024,134
1930.....	13	1,256,399	104	186,773	8,861	492,550	977,494
1931.....	12	847,725	64	104,677	7,481	264,319	570,219
1932.....	7	593,484	58	82,870	7,003	207,916	337,433
1933.....	10	626,968	77	100,715	7,000	270,791	464,544
1934.....	9	570,545	81	104,427	6,837	309,523	551,836
1935.....	13	695,409	85	106,549	7,825	453,898	774,444
1936.....	13	576,106	84	116,807	5,313	336,737	629,382
1937.....	13	520,687	90	120,260	5,127	407,908	752,060

Table 163.—Principal Statistics of the Lubricating Oils and Greases Industry, by Provinces, 1936 and 1937

Provinces	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
<b>1936</b>							
Ontario.....	9	477,987	62	88,252	2,824	273,000	524,473
Quebec.....	3	98,119	22	28,555	2,489	63,737	104,909
British Columbia.....	1						
<b>Canada.....</b>	<b>13</b>	<b>576,106</b>	<b>84</b>	<b>116,807</b>	<b>5,313</b>	<b>336,737</b>	<b>629,382</b>
<b>1937</b>							
Ontario.....	9	412,164	64	87,763	2,176	336,307	632,259
Quebec.....	3	108,523	26	32,497	2,951	71,601	119,801
British Columbia.....	1						
<b>Canada.....</b>	<b>13</b>	<b>520,687</b>	<b>90</b>	<b>120,260</b>	<b>5,127</b>	<b>407,908</b>	<b>752,060</b>

Table 164.—Capital Employed in the Lubricating Oils and Greases Industry, 1936 and 1937

Provinces	Value of lands, buildings, machinery and equipment	Inventory value of materials and finished products on hand and stocks in process	Operating capital (cash, bills receivable, etc.)	Total capital employed
	\$	\$	\$	\$
1936				
Ontario.....	188,052	181,650	108,285	477,987
Other provinces.....	67,700	12,275	18,144	98,119
<b>Canada.....</b>	<b>255,752</b>	<b>193,925</b>	<b>126,429</b>	<b>576,106</b>
1937				
Ontario.....	161,346	105,532	145,286	412,164
Other provinces.....	68,802	11,816	27,905	108,523
<b>Canada.....</b>	<b>230,148</b>	<b>117,348</b>	<b>173,191</b>	<b>520,687</b>

Table 165.—Employees, Salaries and Wages in the Lubricating Oils and Greases Industry, 1936 and 1937

Provinces	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
1936								
Ontario.....	36	8	17	1	62	71,186	17,066	88,252
Other provinces.....	9	3	10		22	19,598	8,957	28,555
<b>Canada.....</b>	<b>45</b>	<b>11</b>	<b>27</b>	<b>1</b>	<b>84</b>	<b>90,784</b>	<b>26,023</b>	<b>116,807</b>
1937								
Ontario.....	35	6	22	1	64	68,626	19,137	87,763
Other provinces.....	12	3	11		26	22,416	10,081	32,497
<b>Canada.....</b>	<b>47</b>	<b>9</b>	<b>33</b>	<b>1</b>	<b>90</b>	<b>91,042</b>	<b>29,218</b>	<b>120,260</b>

Table 166.—Number of Wage-earners in the Lubricating Oils and Greases Industry, by Months, 1936 and 1937

Months	Ontario		Other Provinces		Canada	
	1936	1937	1936	1937	1936	1937
January.....	13	21	10	11	23	32
February.....	12	22	9	12	21	34
March.....	15	22	11	11	26	33
April.....	17	22	11	9	28	31
May.....	19	24	10	11	29	35
June.....	18	23	10	10	28	33
July.....	19	24	9	12	28	36
August.....	19	22	11	12	30	34
September.....	19	23	11	14	30	37
October.....	19	23	11	13	30	36
November.....	20	23	9	12	29	35
December.....	18	22	11	11	29	33
<b>Average.....</b>	<b>18</b>	<b>23</b>	<b>10</b>	<b>11</b>	<b>28</b>	<b>34</b>

Table 167.—Regular Hours Worked per Week by Wage-earners, 1936 and 1937  
(Overtime not included)

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	36.4	5.2	49-50 hours.....	6.1	23.7
44 hours.....	24.2	29.0	51-53 hours.....		29.0
45-47 hours.....	9.1	7.9	55 hours.....	12.1	
48 hours.....	12.1	5.2			

Table 168.—Fuel and Electricity Used in the Lubricating Oils and Greases Industry, 1936 and 1937

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Coal, anthracite.....	short ton	22	310	190	1,409
Coal, bituminous—Canadian.....	short ton			12	156
Coal, bituminous—Imported.....	short ton	390	2,671	73	846
Gasoline.....	Imp. gal.			1,000	250
Wood.....	cord	53	477	62	528
Manufactured gas.....	M cu. ft.	214	217	228	251
Electricity purchased.....	K.W.H.	73,315	1,638	75,328	1,657
<b>Total.....</b>	<b>\$</b>		<b>5,313</b>		<b>5,127</b>

Table 169.—Power Equipment in the Lubricating Oils and Greases Industry, 1936 and 1937

	1936		1937	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines.....	2	8	2	8
Total primary equipment (all in use).....	2	8	2	8
Electric motors run by purchased power.....	15	49	22	95
<b>Total.....</b>	<b>17</b>	<b>57</b>	<b>24</b>	<b>103</b>
Stationary boilers.....	3	118	1	

Table 170.—Materials Used in the Lubricating Oils and Greases Industry, 1936 and 1937

Materials	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Compounding stocks (mineral oils, animal oils, etc.).....	Imp. gal.	833,954	210,210	960,960	277,669
Tallow and grease.....	pound	317,484	21,301	268,632	23,665
All other materials.....	\$		68,867		30,084
Shipping containers.....	\$		36,359		76,490
<b>Total.....</b>	<b>\$</b>		<b>336,737</b>		<b>407,968</b>

Table 171.—Products Made in the Lubricating Oils and Greases Industry, 1936 and 1937

Products	Unit of measure	1936		1937	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
			\$		\$
Greases, lubricating.....	pound	845,800	115,262	902,251	131,786
Oils, lubricating.....	gal.	721,001	453,246	914,727	568,651
Soaps and soap powders.....	pound		30,437		37,505
All other products.....	\$		30,437		14,138
<b>Total.....</b>	<b>\$</b>		<b>629,382</b>		<b>752,080</b>

Table 172.—Imports into Canada and Exports of Petroleum, Asphalt and Their Products, 1936 and 1937

Tariff Item Number	Item	Unit of measure	1936		1937	
			Quantity	Value	Quantity	Value
				\$		\$
	(A) IMPORTS					
7151	Oil, imported by miners or mining companies or concerns, for use in the concentration of ores of metals in their own concentrating establishments.	Imp. gal.	105,052	83,470	66,545	24,116
	Crude petroleum, gas oils, other than naphtha, benzine and gasoline, lighter than -8235 but not less than -775 specific gravity at 60° temperature (to April 30, 1936).....	Imp. gal.	10,366	682		
	Crude petroleum in its natural state, -7900 specific gravity or heavier at 60° temperature when imported by oil refiners to be refined in their own factories (to April 30, 1936).....	Imp. gal.	220,312,360	6,881,369		
7153	Crude petroleum not subjected to any other process than natural weathering and removal of foreign matter and water, when imported by oil refiners to be refined in their own factories, -8155 specific gravity (42-0° A.P.I.) or heavier at 60° Fahrenheit (from May 1, 1936).....	Imp. gal.	1,021,840,007	32,159,052	1,354,072,089	40,286,372
7157	Crude petroleum not subjected to any other process than natural weathering and removal of foreign matter or water, when imported by oil refiners to be refined in their own factory, lighter than -8155 specific gravity (42-0° A.P.I.) at 60° Fahrenheit (from May 1, 1936).....	Imp. gal.	9,341,344	418,526	7,276,223	363,266
7154	Petroleum tops; blends of petroleum tops or petroleum products with crude petroleum; all the foregoing -7249 specific gravity (63-7° A.P.I.) or heavier at 60° Fahrenheit when imported by oil refiners to be refined.....	Imp. gal.	69,202	3,864	270	36
	Petroleum (not including crude petroleum imported to be refined, or illuminating or lubricating oils) -8235 specific gravity or heavier at 60° Fahrenheit (fuel oil) (to April 30, 1936).....	Imp. gal.	4,954,374	187,056		
7158	Crude petroleum, n.o.p. (from May 1, 1936).....	Imp. gal.	2,661,344	78,294	666,901	27,979
7156	Fuel oil, re-warehoused for ships' stores.....	Imp. gal.	24,048,703	692,951	24,369,010	750,118
	Illuminating oils composed wholly or in part of the products of petroleum, coal, shale or lignite, costing more than thirty cents per gallon (to April 30, 1936).....	Imp. gal.	970	372		
7162	Coal oil and kerosene lighter than -8236 specific gravity at 60° temperature, n.o.p. ....	Imp. gal.	1,360,721	116,057	2,415,350	181,742
7163	Engine distillate -8017 specific gravity or heavier at 60° temperature.....	Imp. gal.	1,220,037	93,158	1,451,292	105,832
7164	Gasoline lighter than -8236 specific gravity at 60° temperature.....	Imp. gal.	19,077,873	1,643,152	25,725,505	2,301,672
7165	Natural casinghead, compression or absorption gasoline, lighter than -6690 specific gravity (80-0° A.P.I.) at 60° Fahrenheit, when imported by refiners of crude petroleum for blending with gasoline wholly produced in Canada.....	Imp. gal.	41,909,359	2,594,533	46,752,596	3,086,462
7166	Lubricating oils, composed wholly or in part of petroleum, and costing less than 25 cents per gallon.....	Imp. gal.	11,049,911	1,738,131	10,630,033	1,666,625
7167	Lubricating oils, n.o.p. ....	Imp. gal.	3,247,038	1,208,579	4,701,097	1,746,108
7168	All other oils, n.o.p. ....	Imp. gal.	338,791	84,265	150,865	68,422
7169	Products of petroleum, n.o.p., -8236 specific gravity (40-3° A.P.I.) or heavier at 60° Fahrenheit (from May 1, 1936).....	Imp. gal.	16,089,423	602,123	24,946,467	939,719
7181	Grease, axle.....	pound	4,050,846	262,226	5,858,047	342,386
7182	Vaseline and all similar preparations of petroleum, for toilet, medicinal or other purposes.....	\$		303,149		254,251
7183	Paraffine wax.....	pound	4,291,834	184,450	6,394,336	279,822
7184	Paraffine wax candles.....	pound	195,458	33,873	270,349	37,290
	Naphtha and products of petroleum, n.o.p., lighter than -8235 specific gravity at 60° temperature (to April 30, 1936).....	Imp. gal.	603,004	56,088		
7185	Products of petroleum, n.o.p., lighter than -8236 specific gravity at 60° temperature (from May 1, 1936).....	Imp. gal.	1,532,122	143,520	3,702,706	342,440
7170	Petroleum oil, -8236 specific gravity or heavier at 60° temperature for use exclusively in the manufacture of petroleum white oils (from August 25, 1937).....	Imp. gal.			76,085	9,630
7186	Liquefied petroleum gases for heating, cooking or illuminating purposes when imported in containers (from May 1, 1936).....	\$		4,953		9,852
7141	Asphaltum or asphalt, solid.....	cwt.	125,048	145,527	166,732	184,175
	Asphalt, not solid.....	Imp. gal.	37,810	4,518		
7143	Asphalt oil for paving purposes only.....	Imp. gal.	42,497	3,250	67,637	4,099
	Coke, petroleum.....	ton	88,241	667,116	119,291	849,530
	<b>Total Petroleum, Asphalt and Their Products.....</b>	\$		<b>50,394,304</b>		<b>59,861,942</b>

Table 172.—Imports into Canada and Exports of Petroleum, Asphalt and their Products, 1936 and 1937—Concluded

Item	Unit of measure	1936		1937	
		Quantity	Value	Quantity	Value
<b>(b) Exports</b>					
Oil, petroleum, crude.....	Imp. gal.	216	9		
Oil, coal and kerosene, refined.....	Imp. gal.	631,681	93,267	890,309	93,039
Oil, gasoline and naphtha.....	Imp. gal.	3,378,983	509,150	4,300,115	400,800
Fuel oil.....	Imp. gal.	19,412,825	654,928	11,048,568	474,628
Oil, mineral, n.o.p.....	Imp. gal.	614,332	181,777	1,174,183	319,280
Wax, mineral.....	cwt.	375	1,830	2,249	7,710
Coke, petroleum.....	ton	14,548	250,195	16,967	235,990
<b>Total Petroleum and Its Products.....</b>	<b>\$</b>		<b>1,691,156</b>		<b>1,531,447</b>
<b>(c) RE-EXPORTS</b>					
Gasoline.....	Imp. gal.	20,797	2,781	22,857	4,506
Fuel oil.....	Imp. gal.			2,167	269
Oil, mineral, n.o.p.....	Imp. gal.	4,146	2,048	13,389	12,515
Wax, mineral.....	cwt.	585	1,306	21	297
Petroleum coke.....	ton	21,115	328,386	32,990	559,678
<b>Total Re-Exports.....</b>	<b>\$</b>		<b>334,521</b>		<b>577,365</b>

Table 173.—Imports into Canada of Petroleum, Asphalt and their Products, by Provinces, 1937

NOTE.—For descriptions of tariff item numbers see Table 172.

Province	No. 7141	No. 7143	No. 7151	No. 7153	No. 7154	No. 7156	No. 7157	No. 7158
	cwt.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.
Nova Scotia.....	48		9	161,853,234		533	44	230
New Brunswick.....								
Quebec.....	37,188		870	558,317,110			8,382	25,728
Ontario.....	83,757	60,187	17,334	345,531,186				24,929
Manitoba.....	1,730		5,041	9,345,849			1,250,642	102,345
Saskatchewan.....	16,012			37,266,893			6,001,521	117,466
Alberta.....	97			36,077,339	270		14,934	384,329
British Columbia.....	27,900	7,650	43,291	205,680,478		24,368,477	700	11,874
<b>Canada.....</b>	<b>166,732</b>	<b>67,837</b>	<b>66,545</b>	<b>1,354,072,089</b>	<b>270</b>	<b>24,369,010</b>	<b>7,276,223</b>	<b>666,961</b>
<b>Provinces</b>								
	No. 7162	No. 7163	No. 7164	No. 7165	No. 7166	No. 7167	No. 7168	
	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.
Prince Edward Island.....						4,918	46	12
Nova Scotia.....	5,855	1,452	7,418	8,760,817	115,390	155,187	1,314	
New Brunswick.....	47,604	350	69,425		80,003	93,368	474	
Quebec.....	199,328	174	4,455,976	21,458,000	1,330,045	592,065	44,620	
Ontario.....	634,861	463,038	8,138,586	2,303,621	5,188,200	2,103,976	80,678	
Manitoba.....	130,227	39,282	560,397	1,919,378	1,962,864	416,563	6,705	
Saskatchewan.....	41,314	26,203	1,800,268	470,866	233,304	252,844	96	
Alberta.....	5,876	918,461	6,661,026		474,018	226,110	5,226	
British Columbia.....	1,350,485	2,332	3,972,409	11,839,814	1,241,291	869,938	11,740	
<b>Canada.....</b>	<b>2,415,350</b>	<b>1,451,292</b>	<b>25,725,505</b>	<b>46,752,596</b>	<b>10,630,633</b>	<b>4,701,697</b>	<b>150,865</b>	
<b>—</b>								
	No. 7169	No. 7181	No. 7182	No. 7183	No. 7184	No. 7185	No. 7186	
	Imp. gal.	lb.	\$	lb.	lb.	Imp. gal.	\$	
Prince Edward Island.....								
Nova Scotia.....	14,078	197,055	1,237	1,153,600	1,184	5,635	84	
New Brunswick.....	3,250	23,678	2,160	365,155	282	8,975		
Quebec.....	5,378,687	483,034	64,542	2,430,048	63,357	540,411	6,405	
Ontario.....	565,888	3,509,474	140,403	1,353,824	113,718	2,771,931	967	
Manitoba.....	35,591	77,571	24,158	79,711	21,388	47,755		
Saskatchewan.....	77,964	89,324			175	21,986		
Alberta.....	201,167	208,154	2,439	510	1,349	107,557		
British Columbia.....	18,669,902	1,270,657	19,312	1,011,388	68,896	198,456	2,396	
<b>Canada.....</b>	<b>24,946,467</b>	<b>5,858,947</b>	<b>254,251</b>	<b>6,394,236</b>	<b>270,349</b>	<b>3,767,796</b>	<b>6,852</b>	

Table 174.—Consumption of Crude Oil in Petroleum Refineries in Canada, 1918-1937

Years	Crude oil used	Years	Crude oil used
	Imp. gal.		Imp. gal.
1918	261,742,274	1928	849,933,770
1919	301,006,553	1929	1,072,828,496
1920	295,576,527	1930	1,064,434,974
1921	373,469,418	1931	1,074,788,038
1922	394,139,055	1932	930,114,055
1923	408,810,739	1933	1,044,210,850
1924	467,144,534	1934	1,109,510,343
1925	445,115,694	1935	1,196,411,443
1926	585,466,329	1936	1,286,462,895
1927	716,369,890	1937	1,433,581,694

Table 175.—Consumption of Crude Oil in Petroleum Refineries Showing Canadian and Imported, Separately, 1926-1937

Years	Canadian (a)	Imported (b)	Total
	Imp. gal.	Imp. gal.	Imp. gal.
1926	12,203,286	573,263,043	585,466,329
1927	15,632,271	700,737,619	716,369,890
1928	20,324,814	829,608,956	849,933,770
1929	37,338,402	1,035,490,094	1,072,828,496
1930	51,522,864	1,012,912,110	1,064,434,974
1931	49,068,529	1,025,719,509	1,074,788,038
1932	37,340,321	892,773,734	930,114,055
1933	32,404,139	1,011,806,711	1,044,210,850
1934	41,461,763	1,068,048,580	1,109,510,343
1935	40,785,473	1,155,625,970	1,196,411,443
1936	42,792,311	1,243,670,584	1,286,462,895
1937	90,004,669	1,343,577,025	1,433,581,694

(a) Includes the crude naphtha and natural gasoline from the Turner Valley field which was run to refinery stills.

(b) Includes reduced crude.

Table 176.—Refinery Production of Gasoline in Canada, 1926-1937

Years	Straight run	By cracking	Total	Per cent of total made by cracking
	Imp. gal.	Imp. gal.	Imp. gal.	
1926	152,307,473	69,839,231	222,146,704	31
1927	184,818,378	73,731,346	258,549,724	29
1928	226,954,319	117,175,542	344,129,861	34
1929	303,973,918	132,646,696	436,620,614	30
1930	276,284,656	169,314,761	445,599,417	38
1931	278,292,873	191,632,502	469,925,375	41
1932	207,823,273	192,113,405	399,936,678	48
1933	267,086,230	155,850,563	422,936,793	47
1934	294,080,092	166,773,271	460,853,363	36
1935	292,520,425	221,195,579	513,716,004	43
1936	316,207,576	251,451,700	567,659,276	44
1937	361,900,397	278,399,479	640,299,876	43

Table 177.—Average Wholesale Tank Wagon Prices for Gasoline (Medium Grade) Fuel Oil, Etc., by Months, 1937

Months	Halifax	Montreal	Toronto	Winnipeg	Regina	Calgary	Vancouver
Gasoline—	\$	\$	\$	\$	\$	\$	\$
January	0-160	0-125	0-150	0-212	0-228	0-210	0-150
February	0-160	0-130	0-160	0-212	0-225	0-210	0-150
March	0-160	0-130	0-160	0-212	0-225	0-210	0-150
April	0-160	0-130	0-160	0-212	0-225	0-210	0-150
May	0-160	0-130	0-160	0-212	0-225	0-210	0-150
June	0-160	0-140	0-160	0-212	0-225	0-210	0-160
July	0-160	0-150	0-160	0-212	0-225	0-210	0-160
August	0-160	0-150	0-160	0-212	0-225	0-210	0-160
September	0-160	0-150	0-160	0-212	0-225	0-200	0-160
October	0-160	0-150	0-160	0-205	0-225	0-200	0-160
November	0-160	0-150	0-160	0-205	0-225	0-200	0-160
December	0-160	0-150	0-160	0-205	0-215	0-185	0-160
Yearly average	0-160	0-140	0-155	0-210	0-224	0-205	0-156
Kerosene	0-185	0-175	0-170	0-207	0-220	0-214	0-230
Fuel oil, light			0-084				
Lubricating oils (Atlantic red oil)			0-303				



Table 178.—Apparent Consumption in Canada of Gasoline, Fuel Oil, Engine Distillate, Kerosene and Lubricating Oil, 1935, 1936 and 1937

	Fuel and gas oils (a)	Gasoline (c)	Lubricating oils	Kerosene	Tractor and engine distillate
	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.
<b>1935</b>					
Production .....	(b)469,909,708	513,716,004	19,219,297	31,833,717	39,431,237
Plus imports .....	49,277,712	68,032,212	13,251,270	1,272,487	83,962
Less exports and re-exports .....	519,247,420	581,748,216	32,470,567	33,106,204	39,515,199
	8,359,049	3,368,728		806,802	
Plus decline in refinery stocks .....	510,888,371	578,379,488	32,470,567	32,299,402	39,515,199
			330,056		
Less increase in refinery stocks .....	510,888,371	578,379,488	32,800,623	32,299,402	39,515,199
	5,044,245	14,238,716		1,130,640	1,485,049
<b>Apparent consumption</b> .....	<b>505,844,126</b>	<b>564,140,772</b>	<b>32,900,623</b>	<b>31,168,762</b>	<b>38,030,150</b>
<b>1936</b>					
Production .....	(b)498,317,618	567,659,276	20,439,318	28,986,616	33,280,176
Plus imports .....	45,092,500	60,987,262	14,296,949	1,361,691	1,220,037
Less exports and re-exports .....	543,410,118	628,646,538	34,736,267	30,348,307	34,500,213
	19,412,825	3,399,780		631,681	
Plus decline in refinery stocks .....	523,997,293	625,246,758	34,736,267	29,716,626	34,500,213
	8,288,296		87,457	1,422,359	844,307
Less increase in refinery stocks .....	532,285,589	625,246,758	34,823,724	31,138,985	35,344,520
		8,569,821			
<b>Apparent consumption</b> .....	<b>532,285,589</b>	<b>616,676,937</b>	<b>34,923,724</b>	<b>31,138,985</b>	<b>35,344,520</b>
<b>1937</b>					
Production .....	(b)544,109,039	640,299,876	23,867,529	26,349,649	30,319,024
Plus imports .....	49,315,477	72,478,101	15,331,130	2,415,350	1,451,292
Less exports and re-exports .....	593,424,516	712,777,977	39,198,659	28,764,999	31,770,316
	11,050,735	4,322,972		890,309	
Plus decline in refinery stocks .....	582,373,781	708,455,005	39,198,659	27,874,690	31,770,316
		820,659	426,473		
Less increase in refinery stocks .....	582,373,781	709,275,664	39,625,132	27,874,690	31,770,316
	18,566,691			1,191,994	580,997
<b>Apparent consumption</b> .....	<b>563,807,090</b>	<b>709,275,664</b>	<b>39,625,132</b>	<b>26,682,696</b>	<b>31,189,319</b>

(a) Import figures for fuel oil include amounts brought in "ex-warehoused for ships' stores". This item covers fuel oil imported in bond for use in fueling vessels at Canadian ports and, as there is no corresponding export item, such quantities might properly be omitted when compiling figures of Canadian consumption. In 1935, the amount under this item was 18,389,862 gallons, in 1936, 24,048,703 gallons, and in 1937, 24,369,010 gallons.

(b) Exclusive of fuel oil for cracking operations but including fuel oil used by refineries for power or heating purposes.

(c) Production figures for gasoline do not include absorption gasoline or Turner Valley naphtha sold to consumers at the wells. These gallonages, however, are probably included in the gross sales of gasoline as compiled from taxes paid to the Alberta Government (Table 184); engine and tractor distillate is also taxable in this province.

Table 179.—Apparent Consumption of Fuel Oil, Gasoline, Kerosene, Engine Distillate, and Lubricating Oils, 1920-1937

(Computed from Production, Imports, Exports and Refinery Stocks)\*

Years	Fuel and gas oils	Gasoline	Engine distillate	Kerosene	Lubricating oils
	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.
1920.....	216,707,656	94,334,133		67,883,829	29,564,092
1921.....	185,729,965	159,379,748		68,160,649	29,286,776
1922.....	172,744,361	184,068,277		78,722,847	25,161,654
1923.....	246,280,451	172,889,742		70,073,769	25,318,579
1924.....	253,104,267	232,324,241		65,214,433	23,975,888
1925.....	272,861,288	246,986,374		48,774,434	24,235,590
1926.....	299,069,417	300,949,380		61,759,997	28,182,731
1927.....	387,344,567	363,927,380		57,585,207	31,404,944
1928.....	435,327,021	483,798,833	Not available	58,049,530	35,781,341
1929.....	516,271,783	606,934,668		52,516,909	41,851,437
1930.....	513,137,434	601,736,656		47,130,034	34,394,696
1931.....	488,371,080	565,266,046		46,543,627	29,270,337
1932.....	460,366,156	505,231,853		54,534,585	26,128,986
1933.....	481,688,950	463,176,444		42,362,473	30,557,493
1934.....	503,060,605	524,622,641		42,727,528	26,933,794
1935.....	505,844,126	564,140,772	38,030,150	31,168,762	32,800,623
1936.....	532,285,589	616,676,937	35,344,520	31,138,985	34,823,724
1937.....	563,807,090	709,275,664	31,189,319	26,682,696	39,625,132

\* No record of refinery stocks prior to 1931.

## MANUFACTURES OF NON-METALLIC MINERALS

Table 180.—Sales of Gasoline (\*) in Canada, by Provinces, 1933-1937

(Compiled from returns under the Provincial Gasoline Tax Acts)

Provinces	1933	1934	1935	1936	1937
	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.
Prince Edward Island.....	2,518,812	2,639,850	2,832,750	3,088,910	3,420,163
Nova Scotia.....	18,634,875	20,016,109	22,274,254	25,247,957	29,144,357
New Brunswick.....	12,574,097	13,640,325	15,185,003	17,477,029	21,947,202
Quebec.....	87,077,418	93,511,483	102,177,506	109,835,482	128,394,645
Ontario.....	228,415,717	252,976,407	272,680,687	282,827,724	324,858,959
Manitoba.....	24,868,846	27,678,221	28,448,689	30,561,665	34,635,432
Saskatchewan.....	31,837,173	36,784,519	39,166,282	45,966,233	46,278,251
Alberta.....	40,323,781	45,194,297	47,442,690	60,387,814	75,166,087
British Columbia.....	38,689,475	42,337,785	43,410,411	45,723,037	54,775,015
<b>Total Gross Sales.....</b>	<b>484,940,194</b>	<b>534,779,002</b>	<b>573,618,272</b>	<b>624,115,851</b>	<b>718,620,111</b>
<b>Refunds.....</b>	<b>63,244,154</b>	<b>57,868,513</b>	<b>73,214,746</b>	<b>91,260,543</b>	<b>115,217,399</b>
<b>Total Net Sales.....</b>	<b>421,696,040</b>	<b>476,910,489</b>	<b>500,403,526</b>	<b>532,855,308</b>	<b>603,402,712</b>

\* Includes some naphtha, tractor distillate, etc.

Table 181.—Gross Sales of Gasoline in Canada, by Months, 1933-1937

(Gross Sales—sold for all purposes)

Months	1933	1934	1935	1936	1937
	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.
January.....	27,343,444	24,299,551	26,412,185	27,728,100	33,788,537
February.....	22,440,854	22,197,254	24,057,084	23,879,349	30,987,636
March.....	26,293,775	26,157,726	28,183,675	28,416,716	38,871,176
April.....	30,595,956	35,442,889	39,048,308	41,868,840	50,979,732
May.....	43,093,015	46,309,399	50,769,767	57,754,193	68,420,444
June.....	48,992,755	53,587,109	59,172,138	65,611,294	73,709,571
July.....	56,589,081	61,877,965	67,158,062	70,395,637	80,023,053
August.....	61,942,393	63,314,862	64,425,724	75,456,062	84,022,269
September.....	60,480,329	63,568,981	70,584,557	74,486,006	79,135,342
October.....	43,390,893	56,460,241	59,636,448	64,363,792	71,172,611
November.....	35,557,572	46,855,265	47,013,876	51,305,992	61,183,652
December.....	28,180,127	34,707,760	37,156,508	42,789,870	46,329,098
<b>Total.....</b>	<b>484,940,194</b>	<b>534,779,002</b>	<b>573,618,272</b>	<b>624,115,851</b>	<b>718,620,111</b>

Table 182.—Gross Monthly Sales of Gasoline in Canada, by Months and by Provinces, 1937, and Totals for 1936

(in thousands of gallons)

Months	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
January.....	128	1,330	811	5,795	17,786	1,341	906	2,828	2,864	33,789
February.....	72	1,182	711	5,306	16,357	1,149	698	2,743	2,770	30,988
March.....	88	1,387	895	5,921	20,381	1,323	1,198	4,054	3,634	38,871
April.....	195	1,787	965	7,693	22,883	1,876	4,442	7,093	4,043	50,977
May.....	332	2,812	1,844	11,366	29,288	2,916	6,182	8,778	4,902	68,420
June.....	399	3,030	2,494	12,901	31,698	3,523	5,716	7,648	5,301	73,710
July.....	447	3,501	2,901	15,173	35,717	3,921	5,294	7,072	5,997	80,023
August.....	471	3,660	3,075	15,867	36,729	4,292	6,039	7,742	6,157	84,022
September.....	414	3,171	2,727	14,747	33,898	4,876	5,582	8,101	5,619	79,135
October.....	368	2,749	2,393	13,121	30,539	3,952	4,581	8,461	5,008	71,172
November.....	322	2,505	1,873	11,130	27,249	3,264	3,712	6,639	4,484	61,184
December.....	184	2,030	1,268	8,369	22,334	2,213	1,928	4,007	3,996	46,329
<b>Total for 1937.....</b>	<b>3,426</b>	<b>29,144</b>	<b>21,947</b>	<b>128,395</b>	<b>324,859</b>	<b>34,636</b>	<b>46,278</b>	<b>75,166</b>	<b>54,775</b>	<b>718,620</b>
<b>Total for 1936.....</b>	<b>3,089</b>	<b>25,248</b>	<b>17,477</b>	<b>109,835</b>	<b>282,828</b>	<b>36,562</b>	<b>45,966</b>	<b>60,388</b>	<b>48,723</b>	<b>624,116</b>

**Table 183.—Net Sales of Gasoline in Canada, by Provinces, 1933-1937**  
(Net Sales—Gallons sold on which no refunds have been granted, chiefly for motor vehicles)

Provinces	1933	1934	1935	1936	1937
	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.	Imp. gal.
Prince Edward Island.....	2,101,204	2,201,905	2,104,901	2,484,445	2,814,779
Nova Scotia.....	15,843,685	17,190,498	19,526,958	22,322,829	23,966,685
New Brunswick.....	11,062,961	11,741,220	13,053,857	15,042,044	19,119,043
Quebec.....	80,511,245	88,223,973	94,251,686	103,662,080	121,732,952
Ontario.....	214,397,088	239,500,357	255,632,086	260,721,064	301,997,891
Manitoba.....	21,797,740	25,983,163	26,497,237	28,578,031	32,665,795
Saskatchewan.....	19,241,325	27,015,504	25,210,670	29,308,886	24,753,482
Alberta.....	27,277,911	32,525,148	30,261,287	32,861,958	33,762,330
British Columbia.....	29,462,881	32,528,721	33,865,044	37,873,971	42,589,755
<b>Canada.....</b>	<b>421,696,040</b>	<b>476,910,489</b>	<b>500,463,526</b>	<b>532,855,205</b>	<b>603,492,712</b>

**Table 184.—Revenues from Gasoline Taxes, by Provinces, 1934-1937**

Provinces	1934	1935	1936	1937*
	\$	\$	\$	\$
Prince Edward Island.....	174,485	178,687	200,854	269,232
Nova Scotia.....	1,303,046	1,422,542	1,760,209	2,006,489
New Brunswick.....	852,199	1,006,421	1,149,129	1,439,096
Quebec.....	5,127,448	5,666,442	6,272,064	7,078,230
Ontario.....	13,828,051	15,021,994	16,049,857	17,644,164
Manitoba.....	1,770,900	1,795,900	2,051,200	2,270,660
Saskatchewan.....	1,715,053	1,862,300	1,951,834	1,937,553
Alberta.....	1,960,349	2,048,272	2,380,088	2,610,211
British Columbia.....	2,323,322	2,530,087	2,717,201	3,118,312
<b>Canada.....</b>	<b>29,054,853</b>	<b>31,532,645</b>	<b>34,532,436</b>	<b>38,373,947</b>

\* 1937 data are subject to revision.

**Table 185.—Dates when Gasoline Acts Became Effective and Rates of Tax**

Provinces	Dates gasoline tax rates became effective	Rates per gallon
		(*)
		cents
Prince Edward Island.....	May 1, 1924.....	2
	March 31, 1926.....	3
	May 1, 1928.....	5
	May 2, 1932.....	6
	April 15, 1933.....	8
Nova Scotia.....	April 23, 1932.....	10
	March 15, 1926.....	3
	March 11, 1927.....	5
	April 1, 1932.....	6
	May 1, 1934.....	8
New Brunswick.....	March 15, 1938.....	10
	April 30, 1926.....	3
	December 1, 1928.....	5
	April 1, 1932.....	7
	April 1, 1934.....	8
Quebec.....	March 20, 1938.....	10
	April 1, 1924.....	2
	April 1, 1925.....	3
	April 1, 1928.....	5
	December 17, 1931.....	6
Ontario.....	May 11, 1925.....	3
	March 27, 1929.....	5
	March 25, 1932.....	6
Manitoba.....	April 27, 1923.....	1
	March 5, 1925.....	3
	April 14, 1930.....	5
Saskatchewan.....	May 7, 1932.....	7 (refund 5 cents)
	May 1, 1928.....	3
	April 1, 1930.....	5
Alberta.....	May 1, 1932.....	6 (refund 5 cents) (†)
	April 1, 1935.....	7 (refund 7 cents)
	April 30, 1922.....	2
British Columbia.....	June 1, 1929.....	6 (refund 4 cents)
	April 1, 1933.....	6 (refund 5 cents)
	April 1, 1935.....	7 (refund 6 cents)
	December 21, 1923.....	3
	March 25, 1930.....	5 (refund 5 cents)
	April 18, 1932.....	7 (refund 6 cents)

(\*) When gasoline is used by farm tractors, fishing boats and for other stipulated uses, the total tax paid is refunded except in the western provinces where only a portion is refunded, as noted.

(†) Effective January 1, 1933.

Table 186.—Registrations(\*) of Motor Vehicles in Canada, 1904-1937

Years	Number	Years	Number
1904.....	535	1921.....	464,805
1905.....	565	1922.....	509,352
1906.....	1,447	1923.....	575,985
1907.....	2,148	1924.....	645,263
1908.....	3,054	1925.....	724,048
1909.....	4,809	1926.....	832,268
1910.....	9,158	1927.....	939,651
1911.....	21,783	1928.....	1,069,343
1912.....	36,429	1929.....	1,187,331
1913.....	54,380	1930.....	1,232,489
1914.....	74,246	1931.....	1,200,668
1915.....	95,284	1932.....	1,113,533
1916.....	128,328	1933.....	1,083,178
1917.....	203,502	1934.....	1,129,532
1918.....	276,893	1935.....	1,176,126
1919.....	342,433	1936.....	1,240,124
1920.....	408,790	1937 (**)	1,319,702

(\*) Includes motor cycles, road tractors and government and municipal motor vehicles.

(\*\*) Data for 1937 are subject to revision.

Table 187.—Registrations of Motor Vehicles in Canada, by Provinces, 1933-1937

Provinces	1933	1934	1935	1936	1937
	No.	No.	No.	No.	No.
Prince Edward Island.....	6,940	7,206	8,231	7,632	8,011
Nova Scotia.....	40,648	41,932	43,952	46,179	50,048
New Brunswick.....	26,867	29,094	31,227	33,402	36,780
Quebec.....	160,012	165,526	170,644	181,628	197,917
Ontario.....	520,353	542,245	564,076	590,226	623,918
Manitoba.....	68,590	70,430	70,660	74,940	80,860
Saskatchewan.....	84,944	91,461	94,792	102,270	105,064
Alberta.....	86,041	89,369	93,870	97,468	100,434
British Columbia.....	88,554	92,021	98,411	106,079	116,341
Yukon.....	229	248	263	300	329
<b>Canada.....</b>	<b>1,083,178</b>	<b>1,129,532</b>	<b>1,176,126</b>	<b>1,240,124</b>	<b>1,319,702</b>

Table 188.—Registrations of Motor Vehicles in Canada, by Types, 1937

Provinces	Passenger cars	Taxi-cabs	Motor trucks	Motor buses	Motor cycles	Ambulances, hearses, etc.	Total
	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island.....	6,993		970	5	21	22	8,011
Nova Scotia.....	39,900		9,015	72	303	758	50,018
New Brunswick.....	29,937		6,273	92	174	304	36,780
Quebec.....	156,688	4,629	32,572	645	2,526	857	197,917
Ontario.....	541,802		76,714	820	4,582		623,918
Manitoba.....	65,519	228	14,300	173	640		80,860
Saskatchewan.....	83,644	261	20,597	75	487		105,064
Alberta.....	81,365	348	18,080	94	547		100,434
British Columbia.....	91,549		22,075	340	1,813	564	116,341
Yukon.....	149		133	4	9	34	329
<b>Canada.....</b>	<b>1,097,546</b>	<b>5,466</b>	<b>200,729</b>	<b>2,329</b>	<b>11,102</b>	<b>2,539</b>	<b>1,319,702</b>

Table 189.—Tractors, Automobiles and Gasoline Engines on Canadian Farms, 1931, and on Farms in the Prairie Provinces, 1936

Provinces	Tractors	Motor trucks	Automobiles	Gasoline engines
	No.	No.	No.	No.
<b>1931</b>				
Prince Edward Island.....	176	369	3,885	4,193
Nova Scotia.....	424	1,704	10,297	2,846
New Brunswick.....	289	1,126	10,425	4,505
Quebec.....	2,417	5,152	26,877	36,251
Ontario.....	18,993	14,586	125,718	45,380
Manitoba.....	14,366	3,290	25,588	17,557
Saskatchewan.....	43,308	10,938	65,094	38,549
Alberta.....	23,985	7,319	42,817	26,938
British Columbia.....	1,402	3,947	10,585	3,544
<b>Canada.....</b>	<b>105,340</b>	<b>48,401</b>	<b>321,284</b>	<b>179,765</b>
<b>1936</b>				
Manitoba.....	14,685	3,299	22,980	16,915
Saskatchewan.....	42,051	10,338	54,469	39,193
Alberta.....	24,913	7,657	39,222	30,029

NOTE.—1931 figures from the last decennial Census of Canada; 1936 figures from the last quinquennial Census of the Prairie Provinces.

Table 190.—Petroleum Fuels Marketed in Canada, by Provinces, 1933-1937

(Calendar years—Million Imperial gallons)

NOTE.—Figures taken from "Petroleum Fuels in Canada" issued by the Bureau of Mines, Department of Mines and Resources, Ottawa.

Provinces	Fuel oil (x)	Kerosene	Gasoline motor fuel	Total (x)	Per cent
<b>1937</b>					
New Brunswick and Prince Edward Island.....	10	2	25	37	3
Nova Scotia.....	32	3	29	64	5
Quebec.....	140	5	129	274	21
Ontario.....	114	7	325	446	35
Manitoba.....	21	4	35	60	5
Saskatchewan.....	22	5	46	73	6
Alberta and Northwest Territories.....	14	3	75	92	7
British Columbia and Yukon.....	180	1	55	236	18
<b>Total.....</b>	<b>533</b>	<b>30</b>	<b>719</b>	<b>1,282</b>	
Per cent.....	42	2	56		100
<b>1936</b>					
New Brunswick and Prince Edward Island.....	11	2	20	33	3
Nova Scotia.....	30	3	25	58	5
Quebec.....	139	5	110	254	22
Ontario.....	105	8	283	396	34
Manitoba.....	13	4	31	48	4
Saskatchewan.....	19	7	46	72	6
Alberta and Northwest Territories.....	16	4	60	80	7
British Columbia and Yukon.....	166	1	49	216	19
<b>Total.....</b>	<b>499</b>	<b>34</b>	<b>624</b>	<b>1,157</b>	
Per cent.....	43	3	54		100
<b>Total—1935.....</b>	<b>447</b>	<b>35</b>	<b>574</b>	<b>1,056</b>	
Per cent.....	42	3	55		100
<b>Total—1934.....</b>	<b>425</b>	<b>36</b>	<b>535</b>	<b>996</b>	
Per cent.....	42	4	54		100
<b>Total—1933.....</b>	<b>368</b>	<b>42</b>	<b>484</b>	<b>894</b>	
Per cent.....	42	4	54		100

(x) Data exclude fuel oil consumed in oil refineries.

Table 191.—Comparative Summary of Fuel Oil Deliveries, by Provinces, 1933-1937

(Prepared from distributors' and importers' reports—Imperial gallons—Calendar years)

NOTE.—Figures taken from "Petroleum Fuels in Canada" issued by the Bureau of Mines, Department of Mines and Resources, Ottawa.

Areas	Product of Canadian refineries	Product of foreign refineries (importations)	Total fuel oil delivered (x)	Respective percentages of total			(a) Inventory December 31
				%	%	%	
<b>1937</b>							
New Brunswick and Prince Edward Island	10,460,632		10,460,632	2.0		2.0	3,154,972
Nova Scotia	32,187,414		32,187,414	6.0		6.0	9,694,749
Quebec	134,140,731	5,444,738	139,585,469	25.2	1.0	26.2	62,342,313
Ontario	112,683,414	1,294,680	113,978,094	21.2	0.2	21.4	57,629,907
Manitoba	20,591,333	244,325	20,835,658	3.9		3.9	2,290,627
Saskatchewan	21,715,794	57,107	21,772,901	4.1		4.1	10,051,399
Alberta (and N.W.T.)	13,408,290	509,483	14,007,773	2.5	0.2	2.7	3,287,220
British Columbia (and Yukon)	140,323,032	39,409,647	179,732,679	26.3	7.4	33.7	28,334,156
<b>Total</b>	<b>485,510,640</b>	<b>47,049,940</b>	<b>532,560,620</b>	<b>91.2</b>	<b>8.8</b>	<b>100.0</b>	<b>176,785,343</b>
<b>1936</b>							
New Brunswick and Prince Edward Island	11,345,388		11,345,388	2.3		2.3	2,797,708
Nova Scotia	30,071,253	48,096	30,119,349	6.0		6.0	5,894,825
Quebec	129,664,238	9,391,792	139,056,030	26.0	1.9	27.9	46,549,405
Ontario	104,480,621	656,132	105,136,753	20.9	0.2	21.1	53,536,405
Manitoba	12,977,087	392,608	13,369,695	2.6	0.1	2.7	2,958,119
Saskatchewan	18,591,025	93,182	18,684,207	3.7		3.7	12,729,081
Alberta (and N.W.T.)	14,332,464	1,327,414	15,659,878	2.8	0.3	3.1	3,159,305
British Columbia (and Yukon)	126,100,537	39,744,945	165,845,482	25.3	7.9	33.2	25,109,292
<b>Total</b>	<b>447,562,613</b>	<b>51,654,169</b>	<b>499,216,782</b>	<b>89.6</b>	<b>10.4</b>	<b>100.0</b>	<b>152,734,140</b>
<b>Total—1935</b>	<b>381,054,569</b>	<b>65,972,158</b>	<b>447,026,727</b>	<b>85.2</b>	<b>14.8</b>	<b>100.0</b>	<b>156,210,763</b>
<b>Total—1934</b>	<b>367,443,454</b>	<b>57,437,192</b>	<b>424,880,646</b>	<b>86.5</b>	<b>13.5</b>	<b>100.0</b>	<b>150,149,250</b>
<b>Total—1933</b>	<b>391,231,406</b>	<b>67,395,737</b>	<b>458,627,143</b>	<b>81.7</b>	<b>18.3</b>	<b>100.0</b>	<b>111,547,323</b>

Fuel oil of all grades heavier than 42° A.P.I., processed from petroleum.

(a) Inventory at refineries, warehouses, jobbers' and large consumers' storages.

(x) Data exclude gallonages which were produced and used in Canadian refineries for fuel.

(xx) Revised.

Table 192.—Fuel Oil Deliveries: Specific Uses, by Provinces, 1933-1937

(As reported by distributors and importers—Imperial gallons—Calendar years)

NOTE.—Figures taken from "Petroleum Fuels in Canada" issued by the Bureau of Mines, Department of Mines and Resources, Ottawa.

Area	Domestic and Building heating		Industrial (manufacturers') heating and for power	Tractor fuel oil, not lubricant	Railways principally locomotive fuel	Bunkering includes distributors' tankers	Total deliveries	Per cent of yearly total
	Number Domestic customers	Quantity						
<b>1937</b>								
N.B. and P.E.I.	1,814	3,141,515	3,233,715	25,690	111,911	3,947,801	10,460,632	2.0
Nova Scotia	4,404	5,934,349	7,046,635	4,047	37,383	19,165,000	32,187,414	6.0
Quebec	10,471	39,095,611	34,338,745	972,205	1,820,228	63,358,680	139,585,469	26.2
Ontario	23,479	39,650,575	57,032,657	6,875,543	3,130,150	7,480,169	113,978,094	21.4
Manitoba	913	2,079,592	2,149,490	15,409,009	1,178,912	18,665	20,835,658	3.9
Saskatchewan	230	1,009,752	10,657,495	9,952,581	153,073		21,772,901	4.1
Alberta and N.W.T.	25	357,237	2,640,892	5,410,750	5,503,624	95,270	14,007,773	2.7
British Columbia and Yukon	8,983	26,454,452	45,346,719	145,763	40,690,396	67,095,349	179,732,679	33.7
<b>Total—1937</b>	<b>59,319</b>	<b>117,723,053</b>	<b>162,416,348</b>	<b>38,595,588</b>	<b>52,634,677</b>	<b>161,169,924</b>	<b>532,560,620</b>	<b>100.0</b>
<b>Total—1936</b>	<b>48,846</b>	<b>111,909,055</b>	<b>138,171,436</b>	<b>30,069,376</b>	<b>51,946,801</b>	<b>167,128,114</b>	<b>499,216,782</b>	<b>100.0</b>
<b>Total—1935</b>	<b>45,444</b>	<b>109,152,778</b>	<b>119,595,016</b>	<b>34,292,063</b>	<b>46,991,493</b>	<b>137,055,377</b>	<b>447,026,727</b>	<b>100.0</b>
<b>Total—1934</b>	<b>53,290</b>	<b>109,743,672</b>	<b>95,099,427</b>	<b>22,395,115</b>	<b>50,737,946</b>	<b>146,994,486</b>	<b>424,880,646</b>	<b>100.0</b>
<b>Total—1933</b>	<b>53,221</b>	<b>99,796,758</b>	<b>83,657,518</b>	<b>12,670,942</b>	<b>43,489,378</b>	<b>129,012,547</b>	<b>458,627,143</b>	<b>100.0</b>

Fuel oil includes all oils heavier than 42° A.P.I. processed from petroleum. Amounts recorded respectively for domestic, industrial, and tractor purposes were for actual CONSUMPTION within the areas indicated; those recorded under railways and bunkering were taken from, or accepted at delivery points within these areas, but were consumed by carriers where required.

**Table 193.—Comparative Summary of Kerosene Deliveries, by Provinces, 1933-1937**

Prepared from distributors' and importers' reports—Imperial gallons—Calendar years)

Note.—Figures taken from "Petroleum Fuels in Canada" issued by the Bureau of Mines, Department of Mines and Resources, Ottawa.

Areas	Product of Canadian refineries	Product of foreign refineries (importations)	Total kerosene delivered	Respective percentages of total			Inventory December 31
				%	%	%	
<b>1937</b>							
N.B. and P.E.I.	1,802,757	42,533	1,845,290	6.0	0.2	6.2	480,694
Nova Scotia	2,648,953	93	2,649,046	8.8	.....	8.8	3,052,272
Quebec	5,138,103	189,225	5,327,328	17.2	0.6	17.8	3,234,369
Ontario	6,181,234	538,255	6,719,489	20.7	1.8	22.5	5,431,759
Manitoba	3,312,723	129,849	3,442,572	11.1	0.4	11.5	824,192
Saskatchewan	5,273,918	66,522	5,340,440	17.7	0.2	17.9	2,956,156
Alberta	3,143,913	91,995	3,235,908	10.5	0.3	10.8	2,036,137
British Columbia	725,164	610,637	1,335,801	2.4	2.1	4.5	604,205
<b>Total—1937</b>	<b>28,226,465</b>	<b>1,649,100</b>	<b>29,875,774</b>	<b>94.4</b>	<b>5.6</b>	<b>100.0</b>	<b>18,619,784</b>
<b>1936</b>							
N.B. and P.E.I.	2,244,810	27,059	2,271,869	6.6	0.1	6.7	770,214
Nova Scotia	3,170,901	.....	3,170,901	9.3	.....	9.3	598,510
Quebec	4,411,203	148,245	4,559,448	13.0	0.4	13.4	3,605,497
Ontario	7,123,934	695,482	7,819,416	20.9	2.1	23.0	7,324,676
Manitoba	3,515,167	71,705	3,586,872	10.3	0.2	10.5	1,234,716
Saskatchewan	7,473,967	68,131	7,542,098	22.0	0.2	22.2	3,830,340
Alberta	3,608,094	174,927	3,783,021	10.6	0.5	11.1	1,438,029
British Columbia	842,817	451,753	1,294,570	2.5	1.3	3.8	406,457
<b>Total—1936</b>	<b>32,390,893</b>	<b>1,637,302</b>	<b>34,028,195</b>	<b>95.2</b>	<b>4.8</b>	<b>100.0</b>	<b>19,208,439</b>
<b>Total—1935</b>	<b>33,816,722</b>	<b>1,560,904</b>	<b>35,317,626</b>	<b>95.8</b>	<b>4.2</b>	<b>100.0</b>	<b>21,431,620</b>
<b>Total—1934</b>	<b>33,712,200</b>	<b>2,464,183</b>	<b>36,176,383</b>	<b>93.2</b>	<b>6.8</b>	<b>100.0</b>	<b>21,638,320</b>
<b>Total—1933</b>	<b>40,768,555</b>	<b>1,610,353</b>	<b>41,748,908</b>	<b>97.5</b>	<b>2.5</b>	<b>100.0</b>	<b>19,774,223</b>

**Table 194.—Kerosene Deliveries: Specific Uses, by Provinces, 1934-1937**

(Data include all oils ranging approximately between 42° and 47° A.P.I.—Imperial gallons—Calendar years)

Figures taken from "Petroleum Fuels in Canada" issued by the Bureau of Mines, Department of Mines and Resources, Ottawa.

Provinces	For domestic heating, cooking and lighting purposes	For fuel in tractors	For other general usage	Total Deliveries	Per cent of total	Used by Railways (x)	Inventory December 31
<b>1937</b>							
N.B. and P.E.I.	1,844,885	.....	405	1,845,290	6.2	149,715	480,694
Nova Scotia	2,646,820	.....	2,226	2,649,046	8.8	.....	3,052,272
Quebec	5,135,113	.....	192,215	5,327,328	17.8	60,857	3,234,369
Ontario	5,408,504	900,533	410,452	6,719,489	22.5	123,543	5,431,759
Manitoba	1,473,541	1,945,832	23,199	3,442,572	11.5	117,555	824,192
Saskatchewan	3,041,149	2,286,449	12,842	5,340,440	17.9	150,969	2,956,156
Alberta	1,972,447	1,198,153	65,208	3,235,808	10.8	118,311	2,036,137
British Columbia	809,367	12,373	514,061	1,335,801	4.6	75,390	604,205
<b>Total—1937</b>	<b>22,331,826</b>	<b>6,343,340</b>	<b>1,320,608</b>	<b>29,895,774</b>	<b>100.0</b>	<b>796,340</b>	<b>18,619,784</b>
Per cent	74.7	21.2	4.1	.....	.....	(2.7)	.....
<b>1936</b>							
N.B. and P.E.I.	2,271,804	.....	65	2,271,869	6.7	141,031	770,214
Nova Scotia	3,167,042	3,859	.....	3,170,901	9.3	.....	598,510
Quebec	4,492,646	.....	66,802	4,559,448	13.4	61,832	3,605,497
Ontario	6,735,732	548,320	535,358	7,819,416	23.0	140,863	7,324,676
Manitoba	1,239,683	2,284,981	62,208	3,586,872	10.5	119,527	1,234,716
Saskatchewan	2,800,103	4,729,863	12,132	7,542,098	22.2	152,871	3,830,340
Alberta	1,241,372	2,517,748	23,901	3,783,021	11.1	125,773	1,438,029
British Columbia	738,046	14,834	541,690	1,294,570	3.8	112,234	406,457
<b>Total—1936</b>	<b>22,686,428</b>	<b>10,099,611</b>	<b>1,242,156</b>	<b>34,028,195</b>	<b>100.0</b>	<b>854,131</b>	<b>19,208,439</b>
Per cent	66.7	29.7	3.6	.....	.....	(2.5)	.....
<b>Total—1935</b>	<b>22,964,849</b>	<b>9,383,694</b>	<b>2,969,683</b>	<b>35,317,626</b>	<b>100.0</b>	<b>767,460</b>	<b>21,431,620</b>
Per cent	65.0	26.6	8.4	.....	.....	(2.2)	.....
<b>Total—1934</b>	<b>23,891,483</b>	<b>8,864,482</b>	<b>3,420,418</b>	<b>36,176,383</b>	<b>100.0</b>	<b>796,956</b>	<b>21,638,320</b>
Per cent	66.0	24.5	9.5	.....	.....	(2.2)	.....

(x) Coal oil and long-time burning oil used principally by the railways for signals, lanterns, lamps, and other small lighting; the amounts shown are included in first column.

Table 195.—Sales of Petroleum Coke, Calendar Years, 1933-1937

(As fuel only, not as material)

(Figures taken from "Petroleum Fuels in Canada" issued by the Bureau of Mines, Department of Mines and Resources, Ottawa)

Area	Fuel for Domestic heating (x)	Fuel for Industrial heating (a)	Total	Inventory December 31 (x)
1937				
(Short tons)				
Maritimes.....	402	13	415	
Quebec.....	131	1,205	1,336	39,780
Ontario.....	40,232	632	40,864	68,237
Western Provinces.....	1,373	4,139	5,512	1,078
Canadian.....	40,563	6,049	46,612	7,414
Imported.....	1,575		1,575	101,681
<b>Total—1937.....</b>	<b>42,138</b>	<b>6,049</b>	<b>48,187</b>	<b>109,095</b>
1936				
Maritimes.....	404	6	410	38
Quebec.....	258	1,708	1,966	28,914
Ontario.....	36,030	593	36,623	51,801
Western Provinces.....	1,681	5,016	6,697	1,298
Canadian.....	36,687	7,263	43,950	20,781
Imported.....	1,686	60	1,746	61,270
<b>Total—1936.....</b>	<b>38,373</b>	<b>7,323</b>	<b>45,696</b>	<b>82,051</b>
<b>Total—1935.....</b>	<b>63,413</b>	<b>16,476</b>	<b>79,889</b>	<b>85,144</b>
<b>Total—1934.....</b>	<b>39,200</b>	<b>17,555</b>	<b>56,755</b>	<b>48,169</b>
<b>Total—1933.....</b>	<b>54,632</b>	<b>27,571</b>	<b>82,203</b>	<b>33,876</b>

(x) As reported by coal dealers, distributors, and importers; inventory also includes stocks at refineries.

(a) Industrial tonnage consists mostly of amounts used in refineries as fuel.

## Directory of Operating Petroleum Refineries in Canada, 1937

Name of company	Location of refinery	Crude oil capacity	Type of refinery	Cracking plant	
				Type	Capacity
		Bbbs. per 24 hours			Bbbs. per 24 hours
NOVA SCOTIA— Imperial Oil Limited.....	Imperial.....	11,000	S-C	Tube and tank.....	7,000
NEW BRUNSWICK— New Brunswick Gas & Oilfields Ltd.....	Weldon.....	200-300	S		
QUEBEC— British American Oil Refineries Ltd.....	Montreal East.....	12,000	S-C	Liquid and vapour phase.....	6,000
General Petroleum Refineries.....	Pointe-aux-Trembles.....	2,000	S		
Imperial Oil Limited.....	Montreal East.....	30,000	S-C	Tube and tank.....	12,000
McColl-Frontenac Oil Co. Limited.....	Montreal East.....	18,000	S-C	2 Jenkins units.....	
Shell Oil Company of Canada Ltd.....	Montreal East.....	6,500	S-C	1 Kellogg unit.....	12,500
				Dubbs Selective.....	4,250
ONTARIO— British American Oil Refineries Ltd., The.....	Toronto.....	5,000	S-C	Liquid and vapour phase.....	3,000
Canadian Oil Refineries Limited.....	Petrolia.....	3,500	S-C	Liquid phase.....	1,000
Good Rich Refining Co. Ltd.....	Port Credit.....	2,000	S-C	Dubbs.....	700
Imperial Oil Limited.....	Sarnia.....	25,000	S-C	Tube and tank.....	15,000
McColl-Frontenac Oil Co. Limited.....	Toronto.....	5,000	S-C	2 Jenkins units.....	
				1 Gyro unit.....	3,500
MANITOBA— North Star Oil Limited.....	St. Boniface.....	1,000	S		
Radio Oil Refineries Ltd.....	East Kildonan.....	1,200	S		
Trump Oil Company Limited.....	Morris.....	250	S		



Directory of Operating Petroleum Refineries in Canada, 1937—Concluded

Name of company	Location of refinery	Crude oil capacity	Type of refinery	Cracking plant	
				Type	Capacity
		Bbls. per 24 hours			Bbls. per 24 hours
<b>SASKATCHEWAN—</b>					
British American Oil Refineries Ltd., The	Moose Jaw	4,000	S-C	Liquid and vapour phase	2,000
Carrot River Oil Refineries Ltd.	Melfort	270	S		
Consumers Co-Operative Refineries Ltd.	Regina	500	S		
Eaton Refining Co. Ltd.	Eaton	300	S		
Globe Oil Sales Co.	Shaunavon	300	S		
Hi-Way Refineries Limited	Regina	200	S		
Hi-Way Refineries Limited	Regina	500	S		
Hi-Way Refineries Limited	Moose Jaw	200	S		
Hi-Way Refineries Limited	Prince Albert	200	S		
Hi-Way Refineries Limited	Saskatoon	200	S		
Hi-Way Refineries Limited	Swift Current	200	S		
Hi-Way Refineries Limited	Weyburn	200	S		
Home Oil and Refining Co. Ltd.	Humboldt	300	S		
Imperial Oil Limited	Regina	7,000	S-C	Tube and tank	3,800
Northern Petroleum Corporation, Ltd.	Kamsack	200	S		
Rosetown Hi-Way Refinery Limited	Rosetown	250	S		
Sterling Refineries Ltd.	Yorkton	750	S		
Natural Sodium Products Ltd.	Expanse	1,000	S		
<b>ALBERTA—</b>					
British American Oil Refineries Ltd., The	Coutts	2,500	S-C	Liquid and vapour phase	1,200
Fraser, J. W., Refining Company	Wainwright	50	S		
Gas and Oil Products Limited	Hartell	100	S		
Gold Standard Oils Ltd.	Wainwright	300	S		
Huff Refinery Company Limited	Lethbridge	500	S		
Imperial Oil Limited	Calgary	6,000	S-C	Tube and tank	3,000
Lion Refining Company	Calgary	250	S		
Oughton Bros.	Turner Valley	100	S		
<b>BRITISH COLUMBIA—</b>					
Imperial Oil Limited	Ioco	13,000	S-C	Tube and tank	5,500
Shell Oil Company of British Columbia Ltd.	Vancouver	4,000	S		
Standard Oil Company of British Columbia	Vancouver	2,500	S		
<b>NORTHWEST TERRITORIES—</b>					
Northwest Company Ltd.	Fort Norman	150	S		

S=Skimming. C=Cracking.

Directory of Plants Engaged in the Compounding of Lubricating Oils and Greases in Canada, 1937

Name of company	Location of plant
<b>QUEBEC—</b>	
Chapman, L. I. & W. H.	4 Levis Street, Hull.
Economic Products Ltd.	6508 Durocher Avenue, Outremont.
Union Products	1150 Conway Street, Montreal.
<b>ONTARIO—</b>	
Campbell Grease Company	414 Eastern Avenue, Toronto.
Horsley, R. W., Ltd.	284 St. Helens Ave., Toronto.
Hollingshead, R. M., Co. of Canada, Ltd.	Bowmanville.
Houghton, E. C., & Co. of Canada, Ltd.	185 Dufferin St., Toronto.
Kendall Refining Company of Canada, Ltd.	35 Fraser Ave., Toronto.
Ontario Lubricating Co. Ltd.	120 Chatham St., Hamilton.
Ontario Gasoline & Oil Ltd.	45 Dickens Ave., Toronto.
Tide Water Oil Co. of Canada, Ltd.	201 Weston Road S., Toronto.
Queant Oil Products Ltd.	Industrial St., Leaside.
<b>BRITISH COLUMBIA—</b>	
Canada Grease Works Ltd.	280 East 6th Avenue, Vancouver.

**Primary Production.—Crude Petroleum** (From the Annual Report on the Mineral Production of Canada).—Output of crude petroleum increased to 2,943,750 barrels valued at \$5,399,353 in 1937 from 1,500,374 barrels worth \$3,421,767 in 1936, the gain being almost entirely in the Turner Valley field in Alberta.

Table 196.—Principal Statistics of the Crude Petroleum Industry, 1936 and 1937

	1936	1937
Number of oil wells.....	2,266	2,328
Number of firms.....	258	280
Capital employed.....	\$ 33,289,876	42,147,521
Number of employees—On salary.....	165	217
On wages.....	887	1,403
<b>Total.....</b>	<b>1,052</b>	<b>1,620</b>
Salaries and wages—Salaries.....	\$ 263,313	356,893
Wages.....	\$ 1,035,279	1,983,466
<b>Total.....</b>	<b>\$ 1,298,592</b>	<b>2,340,359</b>
Cost of fuel, electricity and process supplies.....	\$ 510,016	471,187
Selling value of products.....	\$ 3,421,767	5,399,353

Table 197.—Production of Crude Petroleum, 1936 and 1937

One barrel=35 Imperial gallons

Provinces	1936		1937	
	Barrels	Value	Barrels	Value
		\$		\$
New Brunswick.....	17,112	24,075	18,080	25,496
Ontario—				
Petrolia and Enniskillen.....	59,092	124,088	57,960	123,531
Oil Springs.....	31,795	69,947	33,853	75,580
Moore Township.....	3,200	6,720	2,253	4,805
Sarnia Township.....	584	1,226	445	949
Plympton Township.....	248	521	237	505
Rothwell Township.....	36,534	76,719	40,425	86,229
West Dover.....	15,536	32,625	10,498	22,388
Onondaga.....	262	609	728	1,908
Mosa Township.....	8,182	17,182	8,686	18,524
Brooke.....			773	1,649
Dunwich.....	307	645	303	646
Raleigh and Tilbury East.....	1,126	2,364	2,471	5,270
Thamesville.....	458	962	683	1,457
Dawn and Euphemis.....	8,171	17,159	5,890	12,559
<b>Total for Ontario.....</b>	<b>165,495</b>	<b>350,767</b>	<b>165,205</b>	<b>356,000</b>
Alberta—				
Turner Valley.....	1,281,248	2,989,447	2,721,218	4,932,051
Red Coulee-Border-Kebo.....	16,185	19,143	13,782	16,008
Wainwright-Skiff.....	14,935	11,340	14,085	12,943
<b>Total for Alberta.....</b>	<b>1,312,368</b>	<b>3,019,930</b>	<b>2,749,085</b>	<b>4,961,002</b>
Northwest Territory.....	5,399	26,993	11,371	56,855
<b>Canada.....</b>	<b>1,500,374</b>	<b>3,421,767</b>	<b>2,943,750</b>	<b>5,399,353</b>

## CHAPTER TEN

## PRODUCTS FROM DOMESTIC CLAYS

Statistics for the Clay and Clay Products industry are recorded under two headings, the first as reviewed in the present chapter, covering products made from domestic clays and the second, as reviewed in Chapter Eleven, covering the manufacture of products from imported clays.

A total of 162 plants representing a total capital investment of \$24,884,341 operated in the domestic and imported clay products industries during 1937, in which year the two industries provided employment for 3,505 persons whose earnings totalled \$3,360,705. The combined production in 1937 was valued at \$8,116,040 compared with \$6,377,459 in 1936.

The gross value of domestic clay products totalled \$4,516,859 in 1937; this representing an increase of 30.13 per cent over 1936 and bringing the total value to the highest point since 1931. Ontario and Quebec continued as the Dominion's largest producers of materials manufactured from Canadian clays; of the total value of production in 1937, products from plants in Ontario were reported at \$2,033,845 while shipments by firms operating in Quebec totalled \$1,053,153. Commercial production of domestic clay products in 1937 was reported in every province except Prince Edward Island and the Territories.

Especially reflecting the better conditions recently experienced by all branches of the construction industry was an increase of 32.87 per cent in volume and 35.82 per cent in value in the production of building brick as compared with 1936. During the trade expansion of the late twenties Canadian production of building brick reached 458,630 M valued at \$8,003,358 in 1929 while the all-time high record in building brick output was realized in 1912 when sales totalled 894,372 M at \$8,620,229. The industrial depression during the early part of the past decade and, to a lesser extent, the increasing competition from other building materials were largely responsible for the drastic decline in the consumption of brick immediately following 1929 and it is gratifying to note that the industry has realized steady and unbroken annual increases in brick production since 1933.

Drain tile and sewer pipe production in 1937 was valued at \$1,089,180, an increase of 35.63 per cent over than in 1936 and the production of refractories from Canadian clays was considerably greater than for some years past. In 1937 fireclay and fireclay blocks and shapes were commercially produced in Nova Scotia, New Brunswick, Saskatchewan and British Columbia, while firebrick from domestic clays was manufactured in Saskatchewan, Alberta and British Columbia.

Production of pottery in Canada from domestic clays totalled \$232,209 in 1937 compared with \$218,402 in 1936 and \$356,093 in 1928, the year which showed the greatest production of Canadian pottery ever recorded. Also indicative of the recovery in building was a production in 1937 of 64,526 tons of hollow blocks valued at \$533,843, this being the largest output of the material since 1931; these particular clay products were produced in all provinces with the exception of Prince Edward Island. There is no recorded commercial production of clay products in the Territories. For several years past a relatively small tonnage of bentonite has been produced in British Columbia and it is noteworthy that in 1937 the Dominion commercial output of this clay was increased by the production of 132 tons from deposits located in the province of Manitoba. The Bureau of Mines, Ottawa, reports that bentonite, both crude and activated, is often marketed and distributed under a variety of trade names which tend to conceal its identity, even being sold as "common clay"; it is thus difficult to obtain accurate figures of the amounts imported and consumed in Canada.

China clay has been produced commercially in Canada only from the vicinity of St. Remi d'Amherst, Papineau county, Quebec. Production has been spasmodic for some years. A group of open pits and mines was operated for several years prior to 1923. In 1931 a property in this area was developed mainly for the production of silica, but a small amount of china clay was also produced. The Bureau of Mines, Ottawa, states that in 1937 fresh development work was undertaken in this area, when, under new management, a shaft was sunk into the kaolinized

quartzite deposit to a depth of 200 feet. A mill was being installed for the production of washed china clay and washed silica. Deposits of high-grade, white-burning clays occur on the Mattagami, Abitibi, and Missinaibi Rivers in Northern Ontario; some of these clays are classed as ball clays and others as china clays. Ball clays of high bond strength occur in extensive deposits in Southern Saskatchewan.

The number of firms comprising the domestic clay products industry of Canada and which were reported as active in 1937 totalled 137 compared with 133 in 1936. Census records show 426 brick and tile producers in Canada during 1871 and 343 in 1886.

Capital employed by the entire industry in 1937 totalled \$20,427,232; 143 plants were recorded as in production and \$2,094,792 were distributed as salaries and wages to 2,287 employees. The industry in 1937 consumed fuel and electricity valued at \$1,032,755 and process supplies used were appraised at \$103,568. Included with the fuels consumed in 1937 were 26,197 short tons of Canadian bituminous coal, 83,241 short tons of imported bituminous coal, 31,177 cords of wood and 878,233 thousand cubic feet of natural gas.

Imports into Canada of brick, clays and other clay products in 1937 were valued at \$9,108,976 compared with \$7,351,148 in 1936; of the imports in 1937 those from the United Kingdom totalled \$4,166,926 and those from the United States, \$4,217,650. Exports of clay products from Canada were valued at \$596,970 in 1937 as against \$526,856 in the preceding year.

Table 198.—Principal Statistics, 1922-1937

Provinces	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of process supplies at works	Gross selling value at works	Net value of production
		\$		\$	\$	\$	\$	\$
1922	232	31,168,903	4,681	4,752,341	1,969,092		11,438,456	9,469,364
1923	221	32,294,371	4,730	5,011,700	2,067,115		10,483,016	7,815,901
1924	210	29,810,994	4,120	4,041,318	1,879,094		9,215,077	7,315,983
1925	190	27,760,864	4,136	4,034,075	1,909,591		9,529,691	7,620,100
1926	200	28,152,062	4,305	4,346,687	2,080,054		10,357,323	8,277,269
1927	194	30,437,607	4,776	4,769,307	2,088,724		11,173,189	9,084,465
1928	186	32,473,203	5,195	5,181,398	2,294,350		12,381,718	10,087,368
1929	196	34,190,056	5,530	5,719,014	2,920,384		13,904,643	10,984,259
1930	203	33,430,777	5,026	4,961,130	1,922,606		10,593,578	8,670,912
1931	189	33,819,164	3,259	3,541,250	1,486,438		7,841,288	6,354,850
1932	164	25,347,582	1,740	1,576,586	579,803		3,650,218	3,070,415
1933	157	24,211,880	1,312	1,101,893	377,321		2,262,835	1,885,514
1934	149	23,046,807	1,572	1,262,977	558,732		2,680,410	2,121,678
1935	139	20,502,006	1,725	1,387,924	618,995	60,583	3,012,563	2,332,985
1936	140	19,863,431	1,775	1,498,148	695,001	71,353	3,471,027	2,704,673
1937	143	20,427,232	2,287	2,094,792	1,032,755	103,568	4,516,859	3,380,536
% change 1937 from 1936		+2.8	+28.8	+39.8	+48.6	+45.1	+30.1	+24.9

Table 199.—Principal Statistics, by Provinces, 1936 and 1937

Provinces	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of process supplies at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
<b>1936</b>							
Nova Scotia	5	908,162	125	107,871	58,773	603	355,254
New Brunswick	5	266,027	77	46,713	20,652	480	102,256
Quebec	21	5,504,590	423	313,882	169,803	15,967	691,765
Ontario	85	9,410,389	727	649,477	357,874	46,924	1,573,936
Manitoba	4	219,279	47	39,256	8,813	667	55,564
Saskatchewan	3	871,074	33	37,147	11,429	776	95,584
Alberta	9	1,873,767	204	180,999	27,973	3,533	315,777
British Columbia	8	804,143	139	122,803	39,684	2,403	280,891
<b>Canada</b>	<b>140</b>	<b>19,863,431</b>	<b>1,775</b>	<b>1,498,148</b>	<b>695,001</b>	<b>71,353</b>	<b>3,471,027</b>
<b>1937</b>							
Nova Scotia	5	971,394	164	141,754	73,200	2,514	406,846
New Brunswick	5	263,458	79	54,692	26,710	1,209	123,876
Quebec	21	5,910,736	532	481,861	247,074	23,776	1,053,183
Ontario	82	9,439,675	1,027	971,782	571,058	66,738	2,033,845
Manitoba	5	206,549	58	38,708	14,348	390	95,531
Saskatchewan	5	836,706	43	46,062	13,419	1,157	115,330
Alberta	10	1,895,534	214	186,961	30,919	3,103	338,635
British Columbia	10	903,180	170	172,972	56,027	4,681	349,640
<b>Canada</b>	<b>143</b>	<b>20,427,232</b>	<b>2,287</b>	<b>2,094,792</b>	<b>1,032,755</b>	<b>103,568</b>	<b>4,516,859</b>

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Table 200.—Capital Employed, by Classes and by Provinces, 1936 and 1937

Provinces	Present value of lands, buildings, fixtures machinery and tools	Inventory value of materials on hand, finished products and stocks in process	Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
	\$	\$	\$	\$
1936				
Nova Scotia.....	721,090	182,456	24,616	908,162
New Brunswick.....	202,018	31,079	32,330	266,027
Quebec.....	4,223,030	987,869	313,691	5,504,590
Ontario.....	7,262,187	892,439	1,261,783	9,416,389
Manitoba.....	140,750	33,557	44,972	219,279
Saskatchewan.....	738,288	55,742	77,044	871,074
Alberta.....	1,404,427	274,771	194,569	1,873,767
British Columbia.....	622,270	103,694	78,179	804,143
<b>Canada.....</b>	<b>15,314,640</b>	<b>2,521,607</b>	<b>2,027,184</b>	<b>19,863,431</b>
1937				
Nova Scotia.....	785,484	134,714	51,196	971,394
New Brunswick.....	198,783	34,046	30,629	263,458
Quebec.....	5,106,092	490,080	314,564	5,910,736
Ontario.....	6,981,097	1,029,131	1,429,447	9,439,675
Manitoba.....	121,640	21,088	63,821	206,549
Saskatchewan.....	732,951	60,961	42,794	836,706
Alberta.....	1,471,300	249,198	175,036	1,895,534
British Columbia.....	675,854	147,791	79,535	903,180
<b>Canada.....</b>	<b>16,073,201</b>	<b>2,167,009</b>	<b>2,187,022</b>	<b>20,427,232</b>

Table 201.—Employees, Salaries and Wages, by Provinces, 1936 and 1937

Provinces	Average number of employees				Total	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
1936					\$	\$	\$	
Nova Scotia.....	4		121		125	11,534	96,337	107,871
New Brunswick.....	7	1	69		77	10,146	36,567	46,713
Quebec.....	53	5	365		423	85,715	228,167	313,882
Ontario.....	82	18	627		727	171,910	477,567	649,477
Manitoba.....	6		41		47	10,000	29,256	39,256
Saskatchewan.....	7		26		33	15,619	21,528	37,147
Alberta.....	29	1	174		204	59,109	121,890	180,999
British Columbia.....	14	2	123		139	26,704	96,099	122,803
<b>Canada.....</b>	<b>202</b>	<b>27</b>	<b>1,546</b>		<b>1,775</b>	<b>390,737</b>	<b>1,107,411</b>	<b>1,498,148</b>
1937								
Nova Scotia.....	8	2	154		164	22,283	119,471	141,754
New Brunswick.....	8	1	70		79	11,106	43,586	54,692
Quebec.....	61	2	469		532	112,496	369,365	481,861
Ontario.....	85	19	923		1,027	200,917	770,865	971,782
Manitoba.....	6		52		58	14,800	23,908	38,708
Saskatchewan.....	8		35		43	16,370	29,692	46,062
Alberta.....	40	3	171		214	60,863	126,098	186,961
British Columbia.....	16	2	152		170	33,056	139,916	172,972
<b>Canada.....</b>	<b>232</b>	<b>29</b>	<b>2,026</b>		<b>2,287</b>	<b>471,891</b>	<b>1,622,901</b>	<b>2,094,792</b>

## MANUFACTURES OF NON-METALLIC MINERALS

Table 202.—Establishments, Grouped According to Production, Employees and Capital Employed, 1937

	Number of plants	Capital employed	Average number of employees	Gross selling value of products at works
(a) Production				
		\$		\$
Under \$5,000.....	52	1,026,368	155	109,904
\$ 5,000-\$ 10,000.....	23	567,601	125	169,247
\$ 10,001-\$ 25,000.....	28	1,899,948	307	404,022
\$ 25,001-\$ 50,000.....	13	2,111,766	219	451,000
\$ 50,001-\$100,000.....	17	6,669,275	559	1,186,948
\$100,001-\$500,000.....	10	8,152,274	919	2,195,740
<b>Total.....</b>	<b>143</b>	<b>20,427,232</b>	<b>2,287</b>	<b>4,516,859</b>
(b) Employees				
1 or 2.....	43	263,162	61	102,600
3-10.....	42	1,565,801	229	317,156
11-20.....	26	3,021,340	359	664,926
21-50.....	21	6,780,561	648	1,331,271
Over 50.....	11	8,796,328	980	2,100,906
<b>Total.....</b>	<b>143</b>	<b>20,427,232</b>	<b>2,287</b>	<b>4,516,859</b>
(c) Capital				
Under \$25,000.....	70	541,417	213	288,475
\$25,000-\$100,000.....	32	1,808,847	363	571,087
\$100,001-\$500,000.....	31	6,013,313	874	1,788,416
\$500,001-\$1,000,000.....	6	4,062,920	405	935,271
Over \$1,000,000.....	4	8,000,735	432	933,610
<b>Total.....</b>	<b>143</b>	<b>20,427,232</b>	<b>2,287</b>	<b>4,516,859</b>

Table 203.—Wage-Earners, by Months, 1936 and 1937

(On the 15th of each month)

Months	1936	1937
	No.	No.
January.....	694	891
February.....	725	919
March.....	727	1,150
April.....	969	1,540
May.....	1,770	2,454
June.....	2,208	2,827
July.....	2,400	2,888
August.....	2,276	2,038
September.....	2,260	2,661
October.....	1,911	2,438
November.....	1,301	2,011
December.....	1,047	1,481
<b>Average.....</b>	<b>1,516</b>	<b>2,026</b>

Table 204.—Regular Hours Worked per Week by Wage-Earners, 1936 and 1937

(Overtime not included)

Regular hours per week	Percent of wage-earners		Regular hours per week	Percent of wage-earners	
	1936	1937		1936	1937
40 or less.....	7.7	4.5	51-53.....	1.2	1.5
41-43.....	0.5	0.5	54.....	14.4	12.7
44.....	11.9	13.6	55.....	5.0	7.5
45-47.....	3.3	1.3	56-59.....	7.8	9.5
48.....	15.9	15.1	60 and over.....	24.1	26.2
49-50.....	8.2	7.6			

Table 205.—Fuel and Electricity Used, 1936 and 1937

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	short ton	20,728	119,396	26,197	153,285
Imported.....	short ton	52,936	348,565	83,241	555,402
Anthracite coal—From United States.....	short ton	600	4,124	1,067	9,153
Other.....	short ton	186	1,016	283	2,357
Lignite coal.....	short ton	520	1,992	1,552	3,156
Coke.....	short ton	337	3,025	506	4,558
Gasoline.....	Imp. gal.	25,203	5,463	52,337	11,264
Kerosene or coal oil.....	Imp. gal.	858	169	3,235	779
Fuel oil.....	Imp. gal.	15,567	1,808	39,029	4,034
Wood.....	cord	21,363	76,283	31,177	116,899
Gas—Natural.....	M cu. ft.	763,315	26,457	878,233	29,672
Electricity purchased.....	K.W.H.	7,765,144	106,058	10,315,203	141,420
Other fuel.....	\$		665		686
<b>Total</b> .....	\$		<b>695,001</b>		<b>1,032,755</b>
Electricity generated for own use.....	K.W.H.	169,399		265,604	

Table 206.—Power Equipment, 1936 and 1937

	1936		1937	
	Number of units	Total horse power	Number of units	Total horse power
Steam engines and steam turbines.....	61	5,382	63	5,105
Diesel engines.....	9	405	10	800
Gasoline, gas and oil engines, other than diesel.....	43	1,069	52	1,248
<b>Total primary equipment</b> .....	<b>113</b>	<b>6,856</b>	<b>125</b>	<b>7,153</b>
Electric motors—operated by purchased power.....	535	17,495	535	16,628
<b>Total</b> .....	<b>648</b>	<b>24,351</b>	<b>660</b>	<b>23,781</b>
Electric motors run by above primary units.....	18	226	21	461
Stationary boilers.....	74	6,707	71	6,089

Table 207.—Power Equipment Showing Ordinarily in Use separately from In Reserve or Idle, 1937

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and steam turbines.....	61	4,970	2	135
Diesel engines.....	9	725	1	75
Gasoline, gas and oil engines (except diesel).....	42	1,050	10	198
<b>Total primary equipment</b> .....	<b>112</b>	<b>6,745</b>	<b>13</b>	<b>408</b>
Electric motors run by purchased power.....	492	14,640	43	1,988
<b>Total</b> .....	<b>604</b>	<b>21,385</b>	<b>56</b>	<b>2,396</b>
Electric motors run by above primary units.....	20	351	1	110
Stationary boilers.....	64	5,509	7	680

Table 208.—Factory Sales of Domestic Clay and Clay Products, 1936 and 1937

Products	Unit of measure	Factory sales or shipments			
		1936		1937	
		Quantity	\$	Quantity	\$
Clay—Fullers' earth.....	ton				
Bentonite.....	ton	*120	180	163	1,971
Fireclay.....	ton	2,437	17,639	4,123	26,081
Kaolin (china clay).....	ton				
Fireclay blocks and shapes.....	\$		65,171		75,431
Firebrick.....	M	2,548	118,923	2,950	142,827
Brick—Soft mud process—Face.....	M	6,097	111,378	9,904	175,544
Common.....	M	24,180	302,690	23,636	316,534
Stiff mud process (wire cut)—Face.....	M	30,218	575,765	37,610	735,615
Common.....	M	35,592	484,078	55,689	755,630
Dry press—Face.....	M	8,961	165,924	12,565	233,542
Common.....	M	10,241	100,785	14,136	152,662
Fancy or ornamental brick (including special shapes, embossed and enamelled brick).....	M	25	1,374	55	2,972
Sewer brick.....	M	418	6,778	175	2,777
Paving brick.....	M	116	3,149	3	131
Structural tile—					
Hollow blocks (including fireproofing and load-bearing tile).....	ton	58,501	467,860	64,526	533,843
Roofing tile.....	No.	52,730	2,139	60,542	3,302
Floor tile (quarries).....	Sq. ft.	97,738	13,798	73,191	12,169
Ceramic or glazed floor and wall tile.....	\$				
Drain tile.....	M	8,148	214,590	11,391	295,970
Sewer pipe (including copings, flue linings, etc.).....	\$		588,485		(b)790,210
Pottery, glazed or unglazed (including coarse earthenware, stoneware, flower pots, and all other pottery).....	\$		218,402		232,209
Other products.....	\$		11,919		24,439
<b>Total.....</b>	<b>\$</b>		<b>3,471,027</b>		<b>4,516,859</b>

\*Partly used for experimental purposes.

(b) Includes value of clay conduits.

NOTE.—In addition to the clays recorded in this table, there were 185,877 tons of ordinary clay consumed in Canada during 1937 in the production of Portland cement; the corresponding consumption in 1936 was 94,943 short tons.

Table 209.—Factory Sales of Products from Domestic Clays, by Provinces, 1934-1937

Provinces	1934	1935	1936	1937
	\$	\$	\$	\$
Nova Scotia.....	157,158	270,478	355,254	406,846
New Brunswick.....	59,897	62,478	102,256	123,876
Quebec.....	632,322	593,102	891,765	1,053,153
Ontario.....	1,281,006	1,370,225	1,573,939	2,033,845
Manitoba.....	37,916	74,755	55,564	95,531
Saskatchewan.....	90,997	98,150	95,584	115,330
Alberta.....	246,677	320,679	315,777	338,638
British Columbia.....	194,437	216,636	290,891	349,640
<b>Canada.....</b>	<b>2,680,410</b>	<b>3,012,563</b>	<b>3,471,027</b>	<b>4,516,859</b>

Table 210.—Factory Sales of Fireclay, Firebrick and Fireclay Blocks and Shapes, from Domestic Clays, 1927-1937

Years	Fireclay		Firebrick		Fireclay blocks and shapes	Years	Fireclay		Firebrick		Fireclay blocks and shapes
	Quantity	Value	Quantity	Value			Value	Quantity	Value	Quantity	
	tons	\$	M	\$	\$		tons	\$	M	\$	\$
1927.....	5,070	35,961	3,588	246,266	100,659	1932.....	900	11,826	1,580	71,757	75,209
1928.....	5,123	35,284	4,919	234,400	105,091	1933.....	1,421	11,273	1,547	73,226	80,625
1929.....	5,041	35,226	5,196	251,043	130,411	1934.....	1,043	12,598	2,109	101,219	62,388
1930.....	2,870	25,975	3,789	177,608	147,309	1935.....	2,272	15,574	1,817	90,149	71,344
1931.....	1,233	14,857	2,248	107,597	83,039	1936.....	2,437	17,639	2,548	118,923	65,171
						1937.....	4,123	26,081	2,950	142,827	75,431



Table 211.—Factory Sales of Fireclay, Firebrick, and Fireclay Blocks and Shapes from Domestic Clays, by Provinces, 1937

Province	Fireclay		Firebrick		Fireclay blocks and shapes
	Tons	\$	M	\$	
Nova Scotia	2,660	8,208			753
New Brunswick	42	1,660			800
Saskatchewan	771	6,881	522	27,010	63,106
Alberta			10	474	
British Columbia	650	9,332	2,418	115,343	10,772
<b>Canada</b>	<b>4,123</b>	<b>26,081</b>	<b>2,950</b>	<b>142,827</b>	<b>75,431</b>

Note.—Firebrick and fireclay shapes were made also in the Imported Clay Products Industry; see Table 233.

Table 212.—Production of Pottery from Domestic Clays in Canada, 1927-1937

Years	Value	Years	Value
	\$		\$
1927	307,057	1933	202,500
1928	356,093	1934	223,733
1929	323,194	1935	220,711
1930	294,866	1936	218,402
1931	257,125	1937	232,209
1932	244,861		

Table 213.—Production (Sales) of Pottery from Domestic Clays, by Provinces, 1936 and 1937

Province	1936	1937
	\$	\$
New Brunswick	29,529	32,805
Ontario	51,507	54,581
Alberta	134,491	135,245
British Columbia	2,875	9,578
<b>Canada</b>	<b>218,402</b>	<b>232,209</b>

Note.—Pottery was made also in the Imported Clay Products Industry; see Table 232.

Table 214.—Factory Sales of Building Brick in Canada, 1927-1937

Years	Soft mud process		Stiff mud process (wire cut)		Dry press		Fancy or ornamental brick	Sewer brick	Total
	Face	Common	Face	Common	Face	Common			
1926	M 28,235	78,158	101,028	94,046	30,423	19,450	462	6,546	358,348
	\$ 556,573	1,145,490	2,146,362	1,624,055	651,236	260,598	24,057	117,194	6,525,565
1927	M 16,190	70,554	95,480	150,222	39,753	14,617	620	10,997	398,439
	\$ 325,968	1,091,274	2,024,064	2,239,180	833,570	187,062	29,372	210,643	6,911,131
1928	M 17,532	93,260	101,717	144,404	36,657	24,294	599	2,888	421,301
	\$ 349,847	1,328,981	2,247,472	2,182,307	748,301	337,096	28,763	59,010	7,281,777
1929	M 26,624	77,399	114,093	170,840	38,591	26,131	187	4,765	458,630
	\$ 538,090	1,195,511	2,469,417	2,509,451	813,461	368,039	12,795	96,588	8,003,358
1930	M 11,350	56,487	99,284	105,225	29,434	16,915	339	804	319,838
	\$ 247,220	861,805	2,135,871	1,480,965	604,197	208,495	27,649	15,299	5,581,501
1931	M 5,476	41,177	77,135	81,930	20,149	8,688	335	2,253	237,143
	\$ 116,316	619,357	1,752,947	1,205,404	423,357	107,213	20,773	43,692	4,289,119
1932	M 8,188	12,801	30,197	40,753	5,522	4,248	125	643	100,177
	\$ 108,582	182,372	664,756	638,922	119,547	46,762	6,237	12,156	1,779,334
1933	M 2,482	12,389	19,602	23,594	4,544	3,916	630	243	67,700
	\$ 41,737	156,769	412,367	356,498	101,252	44,377	7,824	3,093	1,124,517
1934	M 4,904	14,256	23,800	30,317	6,005	6,440	43	307	86,072
	\$ 76,247	183,585	494,341	424,131	130,392	66,616	2,625	5,992	1,383,929
1935	M 6,695	21,197	25,289	32,334	8,454	6,381	13	175	100,538
	\$ 122,215	259,504	500,066	437,123	175,042	55,253	728	5,230	1,555,167
1936	M 6,097	24,180	30,218	35,592	8,961	10,241	25	418	115,732
	\$ 111,378	302,090	575,765	484,078	165,924	100,785	1,374	6,778	1,748,772
1937	M 9,904	23,636	37,610	55,689	12,565	14,136	55	175	153,770
	\$ 175,544	316,534	735,015	755,630	233,542	152,662	2,972	2,777	2,375,276

## MANUFACTURES OF NON-METALLIC MINERALS

Table 215.—Factory Sales of Building Brick\*, by Provinces, 1936-1937

Provinces	1934		1935		1936		1937	
	M	\$	M	\$	M	\$	M	\$
Nova Scotia.....	3,780	50,387	4,285	61,221	5,971	76,008	5,282	74,800
New Brunswick.....	1,908	28,484	1,689	27,718	2,203	32,120	4,529	66,409
Quebec.....	29,231	401,000	28,384	439,143	33,583	516,248	53,853	825,596
Ontario.....	39,846	713,953	48,896	822,764	55,959	907,678	66,363	1,113,521
Manitoba.....	2,144	33,563	3,763	56,207	2,922	47,970	5,533	85,421
Saskatchewan.....	265	4,176	477	7,529	777	19,175	371	5,793
Alberta.....	5,910	49,552	9,761	84,759	10,382	84,169	11,556	94,326
British Columbia.....	2,988	42,814	3,283	55,826	3,875	65,404	6,283	109,350
<b>Canada.....</b>	<b>86,072</b>	<b>1,383,929</b>	<b>100,538</b>	<b>1,555,167</b>	<b>115,732</b>	<b>1,748,772</b>	<b>153,770</b>	<b>2,375,276</b>

\* Includes fancy and sewer brick.

Table 216.—Factory Sales of Sewer Pipe, Copings, Flue Linings, etc., in Canada, 1927-1937

Years	Value	Years	Value
	\$		\$
1927.....	1,475,875	1933.....	354,458
1928.....	1,723,644	1934.....	436,433
1929.....	2,005,887	1935.....	481,559
1930.....	1,721,815	1936.....	588,485
1931.....	1,508,809	1937.....	790,210
1932.....	813,224		

Table 217.—Factory Sales of Drain Tile in Canada, 1927-1937

Years	Quantity	Value	Years	Quantity	Value
	M	\$		M	\$
1927.....	22,259	598,098	1933.....	10,057	222,829
1928.....	22,629	656,054	1934.....	7,325	180,553
1929.....	25,000	720,316	1935.....	7,124	205,336
1930.....	25,291	687,070	1936.....	8,148	214,590
1931.....	12,518	328,410	1937.....	11,391	298,970
1932.....	7,385	186,670			

Table 218.—Factory Sales of Drain Tile and Sewer Pipe, in Canada, by Provinces, 1936 and 1937

Provinces	1936			1937		
	Drain tile		†Sewer pipe	Drain tile		†Sewer pipe
	M	\$	\$	M	\$	\$
Nova Scotia.....	135	3,876	230,130	70	2,991	279,136
New Brunswick.....	771	35,392		366	17,261	355
Quebec.....	438	13,714	26,659	464	13,950	43,415
Ontario.....	6,000	131,041	235,238	9,605	233,258	338,895
Manitoba.....	64	3,691		58	3,524	
Alberta.....	27	1,751	67,604	44	2,200	85,490
British Columbia.....	713	25,325	28,854	784	25,786	42,919
<b>Canada.....</b>	<b>8,148</b>	<b>214,590</b>	<b>598,485</b>	<b>11,391</b>	<b>298,970</b>	<b>790,210</b>

† Includes copings, flue linings, etc.

Table 219.—Production of Structural Tile in Canada, 1929-1937

Years	Hollow blocks (x)		Roofing tile		Floor tile (quarries)	
	Short tons	\$	No.	\$	Sq. ft.	\$
1929.....	221,800	2,214,384	35,075	4,628	307,400	70,186
1930.....	165,359	1,667,783	3,056	356	179,786	56,230
1931.....	105,635	1,046,634	6,935	720	107,499	31,415
1932.....	48,118	421,672	48,939	3,900	94,316	21,502
1933.....	26,747	160,059	20,469	1,136	91,495	14,297
1934.....	31,136	244,122	44,115	1,852	80,356	17,491
1935.....	(a) 47,195	344,608	82,015	3,668	51,765	7,629
1936.....	58,501	467,860	52,730	2,139	97,738	13,798
1937.....	64,526	533,843	60,542	3,302	73,191	12,169

Table 220.—Production of Structural Tile in Canada, by Provinces, 1937

Provinces	Hollow blocks (x)		Roofing tile		Floor tile (quarries)	
	Short tons	\$	No.	\$	Sq. ft.	\$
Nova Scotia.....	4,471	40,898				
New Brunswick.....	589	4,586				
Quebec.....	20,016	169,632				
Ontario.....	32,864	262,988	36,152	2,117	70,329	11,708
Manitoba.....	638	5,432				
Saskatchewan.....	775	7,553				
Alberta.....	2,841	20,903				
British Columbia.....	2,332	21,851	24,390	1,185	2,862	461
<b>Canada.....</b>	<b>64,526</b>	<b>533,843</b>	<b>60,542</b>	<b>3,302</b>	<b>73,191</b>	<b>12,169</b>

(x) Including fireproofing and load-bearing tile.  
 (a) In addition there was produced \$615 worth of ceramic tile.

Table 221.—Production (Sales) of Bentonite and Kaolin, 1928-1937

Years	Bentonite (x)		Kaolin (a)	
	Tons	\$	Tons	\$
1928.....	20	100	5	25
1929.....				
1930.....	74	1,398		
1931.....	187	935		
1932.....	7	178		
1933.....	55	1,363		
1934.....	63	1,578	48	504
1935.....	41	781	170	1,520
1936.....	(b) 120	180		
1937.....	163	1,971		

(x) All from British Columbia 1928-1936 inclusive; in 1937 includes 132 tons at \$1,154 produced in Manitoba and 31 tons at \$817 in British Columbia.

(a) All from Quebec. (b) Partly for experimental purposes.

Table 222.—Imports into Canada and Exports of Clay and Clay Products, 1936 and 1937

	1936		1937	
	Quantity	\$	Quantity	\$
<b>IMPORTS—</b>				
Building brick..... ton	2,544	24,310	1,477	18,485
Building blocks and fireproofing tile..... \$		7,274		17,121
Clays—China..... cwt.	833,807	342,654	1,103,891	445,073
Fire..... \$	1,398,931	192,640	1,590,207	250,393
Pipe..... \$		2,793		4,910
Other clays, n.o.p..... \$		238,159		224,160
Zirconium silicate..... \$		2,547		2,065
Zirconium oxide..... \$		23,133		32,668
Drain tile, unglazed..... \$		22		2,705
Drain, sewer pipe and earthenware fittings therefor, chimney linings or vents, chimney tops or inverted blocks, glazed or unglazed, n.o.p..... \$		15,297		20,322
Tiles or blocks of earthenware or stone prepared for mosaic flooring..... \$		46,377		44,809
Tiles, earthenware, for roofing purposes..... \$		6,120		13,621
Tiles, earthenware, n.o.p..... \$		132,305		138,033
Insulators, electric, porcelain..... \$		67,596		113,102
Pottery and chinaware..... \$		3,672,587		4,170,558
Brick, fire, other, valued at not less than \$100 per M, rectangular shaped; the dimensions of each not to exceed 125 cubic inches; for use exclusively in the construction or repair of a furnace, kiln, etc..... \$		93,293		143,160
Brick, fire, n.o.p., for use exclusively in the construction or repair of a furnace, kiln, or other equipment of a manufacturing establishment (not made in Canada)..... \$		357,733		449,301
Firebrick, n.o.p..... \$		608,749		989,603
Firebrick, chrome..... \$		68,082		103,287
Magnesite brick (fire)..... \$		568,565		653,507
Silica brick (containing not less than 90 per cent silica)..... \$		261,974		539,253
Paving brick..... ton	1,216	11,122	1,615	13,547
Artificial teeth, not mounted..... \$		337,252		387,024
Baths, bathtubs, basins, laundry tubs, etc., of earthenware, cement or clay, n.o.p..... \$		90,614		151,264
Ceramic insulator cores, not further manufactured than burned and glazed, printed or decorated or not, and without fittings, when imported by manufacturers of spark plugs for use exclusively in the manufacture of spark plugs in their own factories (x)..... \$		54,516		4,646
Saggars (a)..... \$				38,839
Crucibles, clay or sand..... \$		54,162		137,460
Other manufactures of clay, n.o.p..... \$		70,992		
<b>Total..... \$</b>		<b>7,351,148</b>		<b>9,108,976</b>
<b>From—United Kingdom..... \$</b>		<b>3,573,639</b>		<b>4,166,926</b>
<b>    United States..... \$</b>		<b>3,110,926</b>		<b>4,217,650</b>
<b>EXPORTS—</b>				
Building brick..... M	666	11,590	1,155	20,972
Clay—Unmanufactured..... Cwt.	3,297	2,600	1,320	3,111
Manufactures of..... \$		36,803		69,505
Earthenware..... \$		82,936		60,565
Porcelain insulators..... \$		392,927		442,817
<b>Total..... \$</b>		<b>526,856</b>		<b>586,970</b>

**List of Establishments that Shipped Brick, Tile, Sewer Pipe, etc., Made from Domestic Clays, 1937**

Name of Firm	Head Office Address	Plant Location
<b>NOVA SCOTIA—</b>		
Brooks, Stephen, & Sons (a).....	Box 359, New Glasgow.....	New Glasgow.
MacIntyre, A. D. (a).....	11 Sheriff Ave., Sydney.....	Sydney.
Miller, James B.....	Elmsdale.....	Lantz Siding.
Shaw, L. E., Ltd.....	8 Prince St., Halifax.....	Lantz Siding.
Standard Clay Products Ltd.....	St. Johns, P.Q.....	New Glasgow.
<b>NEW BRUNSWICK—</b>		
Little River Brick Co. Ltd.....	Little River, Saint John.....	Little River.
Ryan, M., & Son, Ltd.....	Fredericton.....	Fredericton.
Shaw, L. E., Ltd.....	8 Prince St., Halifax, N.S.....	Chipman.
Tondreau, Adelard.....	Bathurst.....	Bathurst.

List of Establishments that Shipped Brick, Tile, Sewer Pipe, etc., Made from Domestic Clays, 1937—Continued

Name of Firm	Head Office Address	Plant Location
<b>QUEBEC—</b>		
Ascot Tile & Brick Co. Ltd.	Ascot Corner	Richmond Co.
Begin, Olivier	R. R. 1, Petite Rivière	Petite Rivière.
Bourbeau, Geo., & fils.	R. R. 1, Danville	Kingsey Falls.
Canada China Clay Ltd.	85 Richmond St. W., Toronto, Ont.	St. Remi d'Amherst.
Champlain Brick Ltd.	56 rue de la Chapelle, Quebec	Beauport-Est.
Chicoutimi Brick Co. Ltd.	Chicoutimi	Chicoutimi.
Citadel Brick Ltd.	14 St. Joseph St., Quebec	L'Islet Station, Boischatel.
Cote, Albert	Victoriaville	Victoriaville.
Crite, Freddy	St. Tite	St. Tite.
Desmarais, S. E., & Co.	Richmond	Richmond.
Duquette, Isidore	Box 626, East Angus	Compton Co.
Gaulin, E.	Princeville	Princeville.
Hodgins, David T.	Box 114, Shawville	Clarendon Tp.
LaPrairie Co. Inc.	660 St. Catherine St. W., Montreal	LaPrairie Co., Delson.
Lotbiniere Brick Co.	Deschailions	Deschailions.
Montreal Terra Cotta Ltd.	1010 St. Catherine St. W., Montreal	Lakeside.
Puget Brick Co. Ltd.	L'Islet Station	L'Islet Station.
Potvin, Alphonse	Deschailions	Deschailions.
St. Lawrence Brick Co. Ltd.	1010 St. Catherine St. W., Montreal	LaPrairie.
Scott Brick Co.	Scott Junction	Dorchester Co.
Standard Clay Products Ltd.	Box 189, St. Johns	St. Johns.
<b>ONTARIO—</b>		
Barnes, Wm. R., Company Ltd.	243 Cumberland Ave., Hamilton	Hamilton.
Belle River Brick & Tile Co.	Belle River	Essex County.
Brampton Pressed Brick Co. Ltd.	Brampton	Peel County.
Broadwell, B., & Son	Box 537, Kingsville	Essex County.
Canadian Pressed Brick Co. Ltd.	Kenilworth Ave. S., Hamilton	Hamilton.
Casenore, R., & Son	Shallow Lake	Shallow Lake.
Chapman Bros.	145 Dawes Road, Toronto	E. York Tp.
Construction Materials Ltd.	New Toronto	Etobicoke Tp.
Cooksville Co. Ltd.	46 Bloor St. W., Toronto	Cooksville.
Coults, Geo. & Son	Theedford	Lambton Co.
Curtin, F., Estate	R. R. 4 Lindsay	Victoria Co.
Curtis Bros.	Box 809, Peterborough	Otonabee Tp.
Deller, A., & Sons	R. R. 4, Brownsville	Oxford Co.
Deller Bros.	R. R. 2, Norwich	Oxford Co.
Deller, Wm. H.	R. R. 4, Thorndale	W. Nissouri Tp.
Doehard Brick, Tile & Terra Cotta Works.	Arnprior	Arnprior.
Donaldson, Thos. Geo.	R. R. 1, Greenock	Culross Tp.
Douglas & Douglas	Wilkesport	Lambton Co.
Dover Brick and Tile Works.	Chatham	Dover Tp.
Elliott, Chas.	Bluevale	Huron Co.
Elliott, Jas. Jr.	Sault Ste. Marie	Korah Tp.
Elliott, Wm.	Glenannan	Bruce Co.
Fletcher Brick and Tile	Fletcher	Kent Co.
Fort William Brick Co.	Fort William	Fort William.
Frid Bros. Ltd.	Main West and Macklin Sts., Hamilton	Hamilton, Lanark Co.
Godfrey, Thos., & Co.	Carleton Place	Lanark Co.
Gornall Brick & Tile Works.	Powassan	S. Hinsworth Tp.
Grimsbey Brick & Tile Co.	Grimsbey	Grimsbey.
Hamilton Pressed Brick Co. Ltd.	211 Kensington Ave. S., Hamilton	Wentworth Co.
Harper Brick Works	348 Greenwood Ave., Toronto	Toronto.
Hill, Aaron	Essex	Essex.
Hill, Albert W.	R. R. 1, Coatsworth	Tilbury E. Tp.
Hitch, D. A.	Box 236, Ridgeway	Howard Tp.
Hitch, Thos.	Box 554, St. Thomas	St. Thomas.
Holder, Mrs. J. H., & Sons	Dutton	Elgin Co.
Howlett, Fred W., & Sons, Ltd.	Box 3, Petrolia	Petrolia, Brigdon.
Huntsville Brick Works	Box 308, Huntsville	Muskoka
Interprovincial Brick Co. Ltd.	46 Bloor St. W., Toronto	Chinquacouey Tp., Nassagaweya Tp.
Jackson, W. B., Brick & Tile	Brantford	Brantford.
Jamieson Lime Co.	Renfrew	Renfrew.
Janes, D. A.	Mt. Brydges	Middlesex Co.
Jasperson Brick & Tile Co.	Kingsville	Coatsworth.
Jervis, W. J.	R. R. 3, Dorchester	N. Dorchester.
Johnson, Jas., Estate of	Petabroke	Stafford Tp.
Kochel Bros.	Box 3, St. Clements	St. Clements.
Lindsay, Earl & Sons	R. R. 2, Wallaceburg	Kent Co.
McComb, Chester	R. R. 2, London	Middlesex Co.
McCornick, Thos. L.	R. R. 5, Watford	Lambton Co.
Milton Brick Ltd.	170 Bloor St. W., Toronto	Milton.
Moulton, J.	R. R. 2, Holyrood	Greenock Tp.
Napanee Brick & Tile Works	R. R. 3, Napanee	Lennox Co.
National Fireproofing Co. of Canada, Ltd.	96 Bloor St. W., Toronto	Wentworth Co.
National Sewer Pipe Co., Ltd.	Aldershot	E. Flamboro Tp., Aldershot, Ham- ilton, Swansea.
New Liskeard Brick Works	Box 74, New Liskeard	New Liskeard.
Ontario Brick and Tile Plant (Government)	Parliament Bldgs., Toronto	Mimico.

**List of Establishments that Shipped Brick, Tile, Sewer Pipe, etc., Made from Domestic Clays, 1937—Concluded**

Name of Firm	Head Office Address	Plant Location
<b>ONTARIO—Concluded</b>		
O'Reilly, T. E.	320 Bay St., Ottawa	Carleton Co.
Ottawa Brick & Terra Cotta Co. Ltd.	Billings Bridge	Carleton Co.
Ott Brick & Tile Mfg. Co. Ltd.	Kitchener	Kitchener
Owens Sound Brick Co. Ltd.	Owen Sound	Owen Sound
Paxton, Fred R.	St. Catharines	St. Catharines
Phinn, Geo. A.	St. James Park, London	Middlesex Co.
Phippan & Son	Duques Road, Box 11, Coleman	E. York Tp.
Richardson, J., & Son	Kerwood	Kerwood
Rollins, D. W.	136 Dundas St., Belleville	Thurlow Tp.
Snelgrove, A.	Beaverton	Beaverton
Sproat & Sproat	R. R. 4, Seaforth	Tuckersmith Tp.
Standard Brick Co.	500 Greenwood Ave., Toronto	Toronto
Superior Brick & Tile Co. Ltd.	Port William	Paipooze Tp.
Thomson, Ralph	Henrym	S. Grey Tp.
Tope Construction Co.	Main St. W., Hamilton	Hamilton
Toronto Brick Co. Ltd.	897 Bay St., Toronto	Toronto, York Tp.
Wagstaff Brick & Tile Yard	R. R. 4, Lindsay	Victoria Co.
Wallace, M. J., & Son	Toronto General Trusts Corp., 253 Bay St., Toronto	Widdifield Tp.
Wein, Aaron	Crediton	Huron Co.
Weitzel, John E.	R. R. No. 1, Tavistock	E. Zorra Tp.
Wright, Geo., & Sons	Comber	Comber
<b>MANITOBA—</b>		
Alsip Brick, Tile & Lumber Co. Ltd.	537 Portage Ave., Winnipeg	Winnipeg
O'Day, J. E. (b)	971 McMillan Ave., Winnipeg	Winnipeg
Snyder Brick Yards Ltd.	Portage la Prairie	Portage la Prairie
Spencer, E. H.	R. R. 1, Morden	Morden
Wardrop, D. M.	Whitemouth	Whitemouth
Wolke, Peter (b)	Morden	Morden
<b>SASKATCHEWAN—</b>		
Alberta Clay Products Co. Ltd.	Box 672, Medicine Hat, Alberta	Willows, Ravenscrag and Eastend
Bruno Clay Works Ltd.	Saskatoon	Bruno
Dominion Fire Brick and Clay Products Ltd. (a)	Box 90, Moose Jaw	Claybank
International Clay Products Ltd.	Box 399, Estevan	Estevan, Prince Albert
Midlund, H.	Willow Bunch	Willow Bunch
<b>ALBERTA—</b>		
Acme Brick Co. Ltd.	123 Alberta Block, Edmonton	Cannell
Alberta Clay Products Co. Ltd.	Box 672, Medicine Hat	Medicine Hat, Dunmore
Gunderson Brick & Coal Co. Ltd.	Redcliff	Redcliff
Johanson, Knut	Grand Prairie	Grande Prairie
Little, J. B., & Sons Ltd.	1920-100th Ave., Edmonton	Edmonton
Medicine Hat Brick & Tile Co. Ltd.	Medicine Hat	Medicine Hat
Redcliff Pressed Brick Co. Ltd. (a)	Redcliff	Redcliff
Redcliff Premier Brick Co. Ltd.	Redcliff	Redcliff
<b>BRITISH COLUMBIA—</b>		
Baker Brick & Tile Co. Ltd.	3191 Douglas St., Victoria	Victoria
Clayburn Co. Ltd. (a)	850 W. Hastings St., Vancouver	Kilgard
Gabriola Shale Products Ltd.	1304 Broud St., Victoria	Gabriola Island
Gorse, Percy A.	Salmon Arm	Kamloops
Gypsum, Lime and Alabastine, Canada, Ltd. (b)	Paris, Ontario	Port Mann
Haug, Wm., & Son	Kelowna	Kelowna
Kilgard Firebrick Co. Ltd. (a)	2521 Maple St., Vancouver	Kilgard
Port Haney Brick Co. Ltd.	846 Howe St., Vancouver	Port Haney
Richmond, Geo. W., and Co. (a)	2635 W. 15th Ave., Vancouver	Kilgard
Vancouver Brick & Tile Ltd.	Ft. Columbia Ave., Vancouver	New Westminster and Sullivan

(a) Includes production of refractories. (b) Produces bentonite.

**List of Establishments that Shipped Stoneware and Pottery Made from Domestic Clays, 1937**

<b>NEW BRUNSWICK—</b>		
The Foley Pottery Ltd. (a)	Saint John	Saint John
<b>ONTARIO—</b>		
The Foster Pottery Co.	Main St. W., Hamilton	Hamilton
London Pottery Mfg. Co.	95 Rectory St., London	London
<b>ALBERTA—</b>		
Alberta Potteries, Ltd.	Redcliff	Redcliff
Medalta Potteries Ltd.	620 Third St. W., Calgary	Medicine Hat
<b>BRITISH COLUMBIA—</b>		
B. C. Clay Products Co.	3439 Euclid Ave., Vancouver	Vancouver

(a) Includes production of refractories.

CHAPTER ELEVEN

PRODUCTS FROM IMPORTED CLAYS

This industry covers the operations of the factories in Canada which were occupied chiefly in making ceramic products from imported clays. The commodities made in these plants during 1937 included high tension insulators, enamelled sanitary ware, china tableware, firebricks, wall tile, refractory cements, pottery, and electrical porcelains such as sockets, plugs, etc.

Nineteen plants reported in this group in 1937 and their output valued at \$3,599,181 was 24 per cent higher than last year's total of \$2,906,432, the latter figure in turn being 33 per cent greater than the \$2,174,977 of 1935. Capital employed in this industry amounted to \$4,457,109 and the average number of workers was 1,218. Salaries and wages amounted to \$1,265,913, the cost of materials used in manufacturing processes was \$971,497, and expenditures for fuel and electricity totalled \$286,499.

Table 223.—Principal Statistics, 1924-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1924.....	12	1,677,533	489	567,143	141,491	535,793	1,879,760	1,202,485
1925.....	12	2,762,951	552	653,211	170,339	326,023	1,741,745	1,245,383
1926.....	12	2,849,558	597	783,448	194,903	520,218	2,039,514	1,324,393
1927.....	13	2,834,820	652	843,635	185,779	567,510	2,088,238	1,334,940
1928.....	14	3,068,562	696	891,125	195,716	708,571	2,458,801	1,554,514
1929.....	15	3,472,052	872	1,112,881	220,910	992,150	3,373,038	2,159,878
1930.....	15	4,069,965	841	1,052,286	196,135	834,181	2,978,143	1,947,827
1931.....	14	4,320,382	832	958,900	176,902	695,706	2,455,738	1,583,130
1932.....	16	4,297,767	715	797,269	143,779	400,441	1,590,411	1,040,191
1933.....	18	4,220,768	536	471,742	111,144	288,379	1,205,052	805,529
1934.....	19	4,161,435	713	672,754	184,735	515,465	1,923,218	1,223,018
1935.....	20	4,449,314	895	884,212	187,180	530,735	2,174,977	1,457,062
1936.....	20	4,216,334	1,079	1,001,047	214,762	708,576	2,906,432	1,983,094
1937.....	19	4,457,109	1,218	1,265,913	286,499	971,497	3,599,181	2,341,185
Per cent change 1937 from 1936.....	-5.0	+5.7	+12.9	+26.4	+33.4	+37.1	+23.8	+18.1

Table 224.—Principal Statistics, by Provinces, 1936 and 1937

Provinces	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross Selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1936								
Ontario.....	15	2,614,463	883	784,361	155,231	575,091	2,280,058	1,555,736
Quebec.....	4	1,601,871	196	216,686	59,531	183,485	620,374	427,358
Saskatchewan.....	1							
<b>Canada.....</b>	<b>20</b>	<b>4,216,334</b>	<b>1,079</b>	<b>1,001,047</b>	<b>214,762</b>	<b>708,576</b>	<b>2,906,432</b>	<b>1,983,094</b>
1937								
Ontario.....	14	2,912,019	959	950,976	207,683	769,946	2,760,718	1,783,089
Quebec.....	4	1,545,090	259	314,937	78,816	201,551	838,463	558,096
Saskatchewan.....	1							
<b>Canada.....</b>	<b>19</b>	<b>4,457,109</b>	<b>1,218</b>	<b>1,265,913</b>	<b>286,499</b>	<b>971,497</b>	<b>3,599,181</b>	<b>2,341,185</b>

Table 225.—Capital Employed, by Provinces, 1936 and 1937

Province	Present value of land, buildings, machinery and tools	Inventory value of materials and finished products on hand and stocks in process	Operating capital (cash, bills and accounts receivable, etc.)	Total capital employed
	\$	\$	\$	\$
<b>1936</b>				
Ontario.....	1,489,021	676,473	448,969	2,614,463
Quebec.....	1,274,127	192,663	135,081	1,601,871
Saskatchewan.....				
<b>Canada.....</b>	<b>2,763,148</b>	<b>869,136</b>	<b>584,050</b>	<b>4,216,334</b>
<b>1937</b>				
Ontario.....	1,703,366	690,558	518,095	2,912,019
Quebec.....	1,166,076	272,962	106,052	1,545,090
Saskatchewan.....				
<b>Canada.....</b>	<b>2,869,442</b>	<b>963,520</b>	<b>624,147</b>	<b>4,457,109</b>

Table 226.—Establishments, Grouped According to Production Values, Number of Employees, and Capital Employed, 1937

	Number of plants	Capital employed	Number of employees	Gross selling value of products at works
		\$		\$
<b>(a) Production—</b>				
Under \$10,000.....	4	62,765	9	23,482
\$10,001-\$100,000.....	6	800,161	118	320,116
\$100,001-\$250,000.....	5	788,458	350	877,582
Over \$250,000.....	4	2,805,725	741	2,378,001
<b>Total.....</b>	<b>19</b>	<b>4,457,109</b>	<b>1,218</b>	<b>3,599,181</b>
<b>(b) Employees—</b>				
10 and under.....	5	71,865	14	39,125
11-20.....	3	295,577	52	190,743
21-50.....	4	790,692	113	421,458
Over 50.....	7	3,298,975	1,039	2,947,855
<b>Total.....</b>	<b>19</b>	<b>4,457,109</b>	<b>1,218</b>	<b>3,599,181</b>
<b>(c) Capital—</b>				
Under \$25,000.....	4	46,748	12	34,438
\$25,000-\$500,000.....	12	1,893,989	699	1,693,597
Over \$500,000.....	3	2,516,372	537	1,901,146
<b>Total.....</b>	<b>19</b>	<b>4,457,109</b>	<b>1,218</b>	<b>3,599,181</b>

Table 227.—Employees, Salaries and Wages, by Provinces, 1936 and 1937

Provinces	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
						\$	\$	\$
<b>1936</b>								
Ontario.....	73	31	589	190	883	184,053	600,308	784,361
Quebec.....	30	7	153	6	196	60,555	156,131	216,686
Saskatchewan.....								
<b>Canada.....</b>	<b>103</b>	<b>38</b>	<b>742</b>	<b>196</b>	<b>1,079</b>	<b>244,608</b>	<b>756,439</b>	<b>1,001,047</b>
<b>1937</b>								
Ontario.....	67	32	677	183	959	175,099	775,877	950,976
Quebec.....	27	7	214	11	259	66,502	248,435	314,937
Saskatchewan.....								
<b>Canada.....</b>	<b>94</b>	<b>39</b>	<b>891</b>	<b>194</b>	<b>1,218</b>	<b>241,601</b>	<b>1,024,312</b>	<b>1,265,913</b>



Table 228.—Wage-earners, by Months, 1936 and 1937  
(On 15th of each month)

Month	1936			1937		
	Male	Female	Total	Male	Female	Total
January.....	622	185	807	823	181	1,004
February.....	605	177	782	825	178	1,003
March.....	626	189	815	835	183	1,018
April.....	640	188	828	890	185	1,075
May.....	640	180	826	928	186	1,114
June.....	644	177	821	952	193	1,145
July.....	694	182	876	962	194	1,156
August.....	704	184	888	986	203	1,189
September.....	724	204	928	991	211	1,202
October.....	759	216	975	939	212	1,151
November.....	787	213	1,000	854	201	1,055
December.....	795	217	1,012	829	194	1,023
<b>Average.....</b>	<b>742</b>	<b>196</b>	<b>938</b>	<b>891</b>	<b>194</b>	<b>1,085</b>

Table 229.—Fuel and Electricity Used, 1936 and 1937

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Coal, anthracite.....	short ton	41	437	6	103
Coal, bituminous—Canadian.....	short ton	838	5,531	913	5,596
Imported.....	short ton	17,554	117,155	22,859	162,629
Coke.....	short ton	1,050	9,975	1,210	11,495
Gasoline.....	Imp. gal.	100	24	6,403	1,464
Kerosene.....	Imp. gal.	155	22	176	24
Fuel oil.....	Imp. gal.	410,459	29,381	525,230	39,075
Wood.....	cord	50	341	53	280
Gas—Manufactured.....	M cu. ft.	360	289	376	315
Natural.....	M cu. ft.	46,831	19,637	81,739	33,568
Electricity purchased.....	K.W.H.	3,495,984	31,970	3,254,764	32,040
<b>Total.....</b>			<b>214,762</b>		<b>286,499</b>

Table 230.—Power Equipment, 1936 and 1937

	1936		1937	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines.....	3	440	3	415
Gasoline, gas and oil engines.....	1	23	1	23
<b>Total primary equipment.....</b>	<b>4</b>	<b>463</b>	<b>4</b>	<b>438</b>
Electric motors run by purchased power.....	260	1,725	304	1,860
<b>Total.....</b>	<b>264</b>	<b>2,188</b>	<b>308</b>	<b>2,298</b>
Electric motors run by above primary units.....	21	242	24	284
Stationary boilers.....	14	943	15	1,068

Table 231.—Materials Used in the Imported-clay Products Industry, 1936 and 1937

Materials	1936		1937	
	Short tons	Total cost at works	Short tons	Total cost at works
		\$		
Imported clays—Ball clay.....	2,449	41,438	3,701	62,119
China clay.....	2,894	44,942	3,321	66,361
Fireclay.....	21,593	124,623	26,242	151,932
Saggar clay.....	586	4,467	918	9,096
Other imported clays.....	2,092	14,473	1,704	14,175
Canadian clays.....	1	11	2,692	3,870
Feldspar.....	1,572	28,521	2,428	46,068
Silica and ground quartz.....	2,305	26,722	3,032	44,648
Talc.....			110	1,460
Other glazing materials.....	21	11,596		17,461
Insulator hardware.....		117,663		263,693
Shipping containers and packing materials.....		59,797		73,510
All other materials.....		234,323		217,704
<b>Total.....</b>		<b>768,576</b>		<b>971,497</b>

Table 232.—Products Made in the Imported-Clay Products Industry, 1936 and 1937

Products	1936	1937
	Gross selling value at works	Gross selling value at works
	\$	\$
Firebrick and stove linings—Rigid.....	330,602	395,155
Plastic.....	59,618	80,134
High temperature cements.....	24,961	35,219
High tension porcelain insulators, china sanitaryware, clay sewer pipe, floor and wall tile, pottery, china tableware, etc. (Separate figures cannot be shown for these items as there were only one or two producers in each case.)	2,491,251	3,068,673
<b>Total.....</b>	<b>2,906,432</b>	<b>3,599,181</b>

NOTE.—Clay firebrick, floor tile, sewer pipe and pottery are also made in Canada from domestic clays (See Tables 210 to 212). High temperature cements and refractory bricks are made also by concerns in other industries (See Tables 233 and 235).

Table 233.—Total Production in Canada of Rigid Firebrick (x) and Fireclay Blocks and Shapes, 1929-1937

Year	From domestic clays			From imported clays	Total
	Fireclay blocks and shapes	Firebrick		Rigid firebrick and stove linings	
		\$	M	\$	\$
1929.....	130,411	5,196	251,043	362,360	743,814
1930.....	147,309	3,759	177,608	298,945	623,862
1931.....	83,039	2,248	107,597	280,588	471,224
1932.....	75,209	1,580	71,757	212,838	359,804
1933.....	80,625	1,547	73,226	220,484	374,335
1934.....	62,388	2,109	101,219	275,472 (x)	439,079
1935.....	71,344	1,817	90,149	314,825 (x)	476,318
1936.....	65,171	2,548	118,923	330,602	514,696
1937.....	75,431	2,950	142,827	441,341	659,599

(x) Includes some refractory brick made in the other industries but does not include refractory silica brick (See Table 234).

Table 234.—Total Production in Canada of Silica Brick, 1929-1937

Year	Quantity	Selling value at works
	M	\$
1929.....	3,951	173,581
1930.....	2,418	97,379
1931.....	900	35,746
1932.....	93	4,304
1933.....	636	23,185
1934.....	2,528	85,945
1935.....	2,461	96,194
1936.....	2,393	97,285
1937.....	3,744	181,128

Table 235.—Total Production in Canada of High Temperature Cements, 1932-1937  
(From all industries)

Year	Short tons	Selling value at works
		\$
1932.....		118,402
1933.....	1,405	101,488
1934.....	2,119	142,290
1935.....	2,218	136,502
1936.....	2,420	153,303
1937.....	2,387	147,711

List of Firms-Included in the Imported-Clay Products Industry, 1937

Names of firms and location of plants	Products made, 1937
Canada Firebrick Company, Ltd., 4741 St. Ambroise St., Montreal, P.Q.....	Firebrick.
Canada Vitrified Products Limited, 675 Talbot St., St. Thomas, Ont.....	Sewer pipe; flue linings.
Canadian General Electric Co., Ltd., 262 Townsend St., Peterborough, Ont.....	Porcelain sockets, plugs, etc.; textolite parts; high tension insulators.
Canadian Ohio Brass Company, Ltd., Niagara Falls, Ont.....	High tension insulators.
Canadian Porcelain Company Ltd., Paradise Road, Hamilton, Ont.....	High tension insulators.
Canadian Potteries Ltd., St. Johns, P.Q.....	Vitreous china sanitaryware.
Dominion Fire Brick & Clay Products Ltd., P.O. Box 99, Moose Jaw, Sask.....	Firebrick; high temperature cements.
Frontenac Floor and Wall Tile Co., Ltd., P.O. Box 178, Kingston, Ont.....	Floor tile; wall tile; ground feldspar.
Green, A. P., Firebrick Company, Ltd., Commercial St., Leaside, Ont.....	Plastic firebrick; high temperature cements.
Hamilton Potteries Limited, 100 Locke St. S., Hamilton, Ont.....	Insulators; firebrick, porcelain dies.
National Refractories Limited, Port Robinson, Ont.....	Firebrick.
Ontario Refractories Limited, Fort Erie, Ont.....	Firebrick.
Plibrico Jointless Firebrick Ltd., Lake Shore Road, New Toronto, Ont.....	Plastic firebrick; high temperature cements; stove lining.
Robinson Clay Product Co. of Canada, Ltd., 127 Shaftesbury Ave., Toronto, Ont.....	High temperature cements.
Smith Potteries, 373 King St. W., Oshawa, Ont.....	Art pottery.
Sovereign Pottery Ltd., 282 Sherman St. N., Hamilton, Ont.....	China dinnerware.
Standard Clay Products Ltd., St. Johns, P.Q.....	Vitrified clay sewer pipes; firebrick.
Turner, C. B., & Co., Regd., Mimico, Ont.....	Furnace lining.
Walker-Hind-Sutherland Refractories Ltd., 309 St. Ferdinand St., Montreal, P.Q.....	Refractory cements; plastic firebrick.

## CHAPTER TWELVE

## THE SALT INDUSTRY

Salt production in 1937 totalled 458,957 short tons valued at \$1,799,465 compared with 391,316 short tons worth \$1,773,144 in 1936. This represented an increase of 17.3 per cent in quantity and 1.5 per cent in value, the tonnage shipped or used being the greatest on record. In 1937 salt was produced in Nova Scotia, Ontario and Manitoba and of the total Canadian output Ontario producers accounted for 407,701 short tons valued at \$1,539,599.

Nine firms produced salt in Canada during 1937 and, capital employed amounted to \$4,001,568, employees numbered 543, salaries and wages aggregated \$653,136, and the net value of production was recorded at \$1,540,401.

Consumption of salt in the manufacture of chemicals continues to increase and the chemical industry is now the largest single consumer of this commodity in Canada. In 1937 the tonnage of salt used only by primary producers of the mineral, for the manufacture of chemicals, was 205,149 as against 165,882 during 1936. Factories in the fish canning and curing industries used 20,317 short tons of salt in 1937 and in the same period a tonnage of 6,149 was consumed in the pulp and paper mills of Canada.

Soil stabilization with salt and clay, for the foundation of highways and for a surface veneer for gravel roads, is now firmly established and the use of salt for this purpose is increasing steadily.

Salt imported into Canada in 1937 totalled 116,460 short tons valued at \$466,190 and of this quantity, 38,643 tons at \$106,703 were specified as material for use in the sea and gulf fisheries. Exports of salt during 1937 amounted to 9,329 short tons appraised at \$61,522 and of these shipments, 6,363 tons were consigned to the United States. Imports in 1937 of muriate of potash as a fertilizer, together with various other potassium compounds, amounted to 100,669,121 pounds valued at \$1,548,199; caustic soda imports during the same period totalled 12,939,268 pounds; those of soda bicarbonate were recorded at 12,835,249 pounds and liquid or gaseous chlorine imports totalled 7,947,320 pounds.

Salt production in Nova Scotia represents the output of the Malagash rock salt mine located on the Malagash Peninsula, Cumberland county. According to the Department of Public Works and Mines, Nova Scotia, the Malagash Salt Co. Ltd. in 1937 had the largest production in the history of its operations, in spite of curtailment of operations forced upon them during the early months by a serious breakdown of part of the diesel plant. All work was confined to the Lucas seam levels between levels 20 and 13. A complete survey of the mine with underground contours along the Lucas seam, together with diamond drilling, were carried out by the Department in order to pick up extensions of salt bodies. Considerable experimental work with the use of salt in the sub-grades of permanent highways has been carried out.

In Ontario, Manitoba, Saskatchewan and Alberta, salt is obtained from brine wells. Production in Ontario comes entirely from the southern part of the province where, in 1937, brines were processed by the Dominion Salt Co. Ltd., Goderich Salt Co. Ltd., Warwick Pure Salt Co. Ltd., Western Canada Flour Mills Co. Ltd., Canadian Industries Limited, and Brunner, Mond Canada, Limited.

Caustic soda, chlorine and hydrochloric acid are now manufactured by Canadian Industries Limited from salt obtained from the company's wells located at Sandwich. This company operates chemical plants at Windsor and Cornwall and in June, 1937, commenced the erection of a caustic soda-chlorine plant at Shawinigan Falls, Quebec. The Brunner, Mond Canada, Limited, located at Amherstburg, Ontario, manufactured soda ash from natural brine; calcium chloride is also recovered as a by-product by this company.

In Manitoba the Neepawa Salt Ltd., conducted continuous operations during 1937 at its Neepawa plant; a copper-lined steam-driven centrifuge has been installed by this company and the salt is now put through this machine directly from the grainers.

According to a report issued by the Bureau of Mines, Ottawa, exploratory drilling was carried on in the vicinity of Thunder Hill on the Saskatchewan-Manitoba boundary, southwest of Swan River, also some interest was shown during the latter part of the year in the salt springs on the west shore of Lake Winnipegosis, Manitoba. A new company, the Northern Salt Syndicate, is planning to erect a small plant on some springs near the mouth of the Red Deer River where it runs into Lake Winnipegosis.

At Fort McMurray, Alberta, Industrial Minerals Ltd., in December, 1937, completed the erection of a plant for the production of salt from brines obtained from rock salt deposits; open pans are being employed for the evaporation of the brine and a number of grades of salt will be produced; shipments from this property commenced during the first six months of 1938.

The Bureau of Mines, Ottawa, also reports that the extent of the salt basin in New Brunswick, south of Moncton, was further determined when the New Brunswick Gas and Oilfields, Ltd., in drilling for oil at Weldon, N.B., encountered nearly 900 feet of salt formation consisting of beds of rock salt interbanded with narrow beds of anhydrite or silt.

Near Amherst, Cumberland county, Nova Scotia, a well put down by Imperial Oil Limited, in search for oil and gas, encountered 3,200 feet of alternating beds of salt, anhydrite, dolomite, limestone and shale, the salt constituting 45 per cent of the whole.

It is also interesting to note that potassium chloride occurs in a number of definite bands in the salt deposit at Malagash, Nova Scotia.

Table 236.—Principal Statistics, 1920-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of process supplies	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1920	9	2,221,600	327	459,381	533,850		1,544,724	1,010,844
1921	13	2,267,708	330	411,832	527,013		1,673,685	1,146,672
1922	11	2,205,184	371	432,261	369,000		1,628,323	1,259,323
1923	12	2,406,992	368	412,597	356,704		1,713,516	1,356,722
1924	12	2,479,563	364	431,618	342,118		1,774,780	1,032,662
1925	13	2,563,508	402	407,487	315,368		1,410,607	1,095,329
1926	12	2,782,728	384	482,651	324,012		1,480,149	1,155,537
1927	11	3,194,802	376	499,967	287,200		1,614,667	1,327,407
1928	10	4,422,922	455	539,775	252,468		1,495,971	1,243,503
1929	8	4,576,543	424	516,453	249,664		1,578,086	1,328,422
1930	8	4,685,549	381	455,539	197,313		1,694,631	1,497,318
1931	7	4,196,927	363	446,984	184,001		1,904,149	1,720,148
1932	7	3,865,008	345	455,049	176,836		1,947,551	1,770,715
1933	9	3,708,358	400	473,420	191,373		1,939,874	1,748,501
1934	9	3,711,598	469	551,998	236,257		1,954,953	1,718,696
1935	10	3,776,333	473	597,785	175,240	38,700	1,880,978	1,559,204
1936	9	3,856,187	506	640,644	181,502	31,195	1,773,144	1,560,447
1937	9	4,001,568	543	659,136	183,117	75,947	1,799,465	1,540,401
% change 1937 from 1936		+3.8	+7.3	+1.9	+0.9	+143.3	+1.5	-1.3

Table 237.—Capital Employed, 1930-1937

Years	Present value of lands, buildings, fixtures, machinery and tools	Inventory value of materials and finished products on hand and stocks in process	Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
	\$	\$	\$	\$
1930	3,975,855	284,887	424,807	4,685,549
1931	3,392,506	270,614	533,807	4,196,927
1932	3,055,911	244,125	504,972	3,805,008
1933	2,810,371	294,590	503,397	3,708,358
1934	2,917,000	332,368	462,230	3,711,598
1935	3,008,181	318,701	449,451	3,776,333
1936	3,056,741	331,513	467,933	3,856,187
1937	3,118,733	434,893	447,942	4,001,568

## MANUFACTURES OF NON-METALLIC MINERALS

Table 238.—Employees, Salaries and Wages, 1930-1937

Years	Average number of employees				Total	Salaries \$	Wages \$	Total salaries and wages \$
	On salaries		On wages					
	Male	Female	Male	Female				
1930.....	42	10	290	39	381	107,637	347,902	455,539
1931.....	41	16	268	38	363	112,479	334,505	446,984
1932.....	46	16	246	37	345	133,449	321,600	455,049
1933.....	46	17	299	38	400	144,454	328,966	473,420
1934.....	53	18	360	38	469	164,685	387,314	551,998
1935.....	71	30	372	.....	473	193,135	404,650	597,785
1936.....	82	40	347	37	506	225,170	415,474	640,644
1937.....	86	41	416	.....	543	260,753	392,383	653,136

Table 239.—Wage-earners, by Months, 1935-1937

(On the 15th of each month)

Month	1935	1936	1937
January.....	336	340	348
February.....	311	301	370
March.....	356	362	376
April.....	324	379	401
May.....	400	380	429
June.....	396	396	427
July.....	390	413	452
August.....	385	413	444
September.....	391	418	451
October.....	357	423	437
November.....	392	427	456
December.....	383	356	371
<b>Average.....</b>	<b>372</b>	<b>384</b>	<b>416</b>

Table 240.—Regular Hours Worked per Week, by Wage-Earners, 1936 and 1937

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 or less.....	3.5	2.5	51-53.....	0.9	0.9
41-43.....	0.7	0.5	54.....	6.5	6.0
44.....	1.7	22.2	55.....	1.5	10.7
45-47.....	.....	0.2	56-59.....	9.3	9.3
48.....	45.8	23.6	60 and over.....	27.9	22.0
49-50.....	2.2	2.1			

Table 241.—Fuel and Electricity Used, 1936 and 1937

Kind	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Anthracite coal.....	short ton	3,670	16,253	3,812	17,059
Bituminous coal—Canadian.....	short ton	2,600	13,000	.....	.....
Imported.....	short ton	24,709	113,117	23,607	106,106
Lignite coal.....	short ton	4,885	16,545	7,503	25,471
Coke.....	short ton	.....	.....	26	210
Gasoline.....	Imp. gal.	3,560	596	2,918	517
Kerosene.....	Imp. gal.	476	102	250	63
Fuel oil.....	Imp. gal.	147,704	13,874	169,043	16,398
Wood.....	cord	50	150	.....	.....
Electricity purchased.....	K.W.H.	593,030	7,805	2,754,500	17,293
<b>Total.....</b>	<b>\$</b>	<b>3,970,673</b>	<b>181,502</b>	<b>4,054,875</b>	<b>183,117</b>
Electricity generated for own use.....	K.W.H.	.....	.....	.....	.....

Table 242.—Power Equipment, 1936 and 1937

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1936				
Steam engines and steam turbines.....	33	2,378	1	25
Diesel engines.....	3	555	2	45
Gasoline, gas and oil engines (except diesel).....	1	10	3	19
Total primary equipment.....	37	2,943	6	89
Electric motors run by purchased power.....	39	404	1	40
<b>Total</b> .....	<b>76</b>	<b>3,347</b>	<b>7</b>	<b>129</b>
Electric motors operated by above primary units.....	152	1,682	5	100
Stationary boilers.....	8	3,362	6	650
1937				
Steam engines and steam turbines.....	27	2,438	3	75
Diesel engines.....	3	555	2	45
Gasoline, gas and oil engines (except diesel).....	1	10	3	19
Total primary equipment.....	31	3,003	8	139
Electric motors run by purchased power.....	52	468	3	46
<b>Total</b> .....	<b>83</b>	<b>3,471</b>	<b>11</b>	<b>185</b>
Electric motors operated by above primary units.....	130	1,421	5	100
Stationary boilers.....	7	3,300	6	650

Table 243—Production of Salt by Grades, 1936 and 1937

Grade	1936			1937		
	Manu- factured	Sold	Value of salt sold*	Manu- factured	Sold	Value of salt sold*
	Tons	Tons	\$	Tons	Tons	\$
Table, dairy and pressed blocks.....	77,428	76,567	867,215	78,641	76,908	810,090
Common, fine.....	81,648	83,095	358,776	104,203	104,988	404,598
Common, coarse.....	27,477	28,162	218,176	22,858	23,678	182,228
Highway salt.....	(a)	(a)	(a)	1,969	1,969	6,229
Land salt.....	1,061	1,046	3,780	42	89	468
Other grades.....	38,364	36,564	159,315	45,695	46,198	190,705
Brine for chemical works (salt equivalent sold or used).....	165,882	165,882	165,882	205,149	205,149	205,149
<b>Total</b> .....	<b>391,858</b>	<b>391,316</b>	<b>1,773,144</b>	<b>458,557</b>	<b>458,957</b>	<b>1,799,465</b>
Value of containers.....			527,647			534,551
<b>Grand total</b> .....	<b>391,858</b>	<b>391,316</b>	<b>2,300,791</b>	<b>458,557</b>	<b>458,957</b>	<b>2,334,016</b>

\*Not including containers.

(a) Not shown separately prior to 1937.

Table 244.—Total Production of Salt for Years Specified, 1886-1937

Year	Tons	\$	Year	Tons	\$
1886.....	62,359	227,195	1928.....	299,445	1,495,971
1890.....	43,754	198,857	1929.....	330,264	1,578,086
1895.....	52,376	160,455	1930.....	271,695	1,694,631
1900.....	62,055	279,458	1931.....	259,047	1,904,149
1905.....	67,340	320,858	1932.....	263,543	1,947,551
1910.....	84,092	409,624	1933.....	280,115	1,939,874
1915.....	119,900	600,226	1934.....	321,753	1,954,953
1917.....	138,909	1,047,792	1935.....	360,343	1,880,978
1921.....	164,658	1,673,085	1936.....	391,316	1,773,144
1926.....	262,547	1,480,149	1937.....	458,957	1,799,465
1927.....	268,672	1,614,667			

Table 245.—Production of Salt, by Provinces, 1928-1937

Year	Nova Scotia		Ontario		Manitoba		Saskatchewan	
	Tons	\$	Tons	\$	Tons	\$	Tons	\$
1928	19,604	118,342	279,841	1,377,629				
1929	27,819	157,662	302,445	1,420,424				
1930	23,058	136,226	248,637	1,558,405				
1931	27,718	143,761	231,329	1,760,388				
1932	31,897	150,708	231,138	1,789,751	508	7,092		
1933	34,278	161,889	244,107	1,755,087	1,499	18,388	231	4,510
1934	42,886	191,917	276,751	1,734,196	1,664	20,137	452	8,703
1935	38,701	161,659	320,003	1,698,508	1,538	18,765	101	2,046
1936	38,774	183,915	350,044	1,587,078	2,498	32,151		
1937	47,865	216,401	407,701	1,539,599	3,391	43,465		

Table 246.—Available Statistics on the Consumption of Salt, by Industries, 1936 and 1937

Industries	1936		1937	
	Quantity used	Cost at works	Quantity used	Cost at works
	Pounds	\$	Pounds	\$
Fish canning and curing (factories only)	53,532,600	256,651	40,634,000	208,510
Slaughtering and meat packing	70,680,249	398,025	80,296,715	460,248
Acids, alkalies and salts—Brine (salt content) and dry salt	386,228,680	318,824	475,552,413	383,549
Soaps	5,480,103	36,474	4,017,429	14,958
Dyeing, cleaning and laundry work	3,723,761	32,333	5,038,703	35,439
Dyeing and finishing of textiles	1,331,421	8,694	2,086,511	8,330
Artificial ice	1,984,906	8,559	1,998,376	7,176
Abrasives—artificial	674,000	2,671	676,000	2,786
Waterworks	1,300,000		1,600,000	
Leather tanneries	11,356,421	42,462	9,480,760	39,288
Pulp and paper mills	11,100,000	57,655	12,298,000	63,787
Stock and poultry foods	2,744,000	21,200	3,454,000	22,505
Bread and other bakery products	13,796,760	131,811	16,919,700	150,569
Fruit and vegetable preparations	8,747,050	56,257	9,547,982	63,585
Biscuits, confectionery, etc.	1,538,040	14,187	1,551,300	13,056
Foods, breakfast	1,621,266	11,518	1,693,494	11,864
Sausage and sausage casings	1,606,404	9,753	655,897	6,311
Ice cream industry	1,409,275	11,275	1,314,500	10,516
Breweries	278,393	2,194	602,351	8,355
Malt and malt products	249,975	1,534	261,119	1,370
Coffee, tea and spices	162,993	2,007	308,491	3,036
Macaroni, vermicelli, etc.	49,671	504	78,796	728
Ice cream cones	2,079	17	4,127	30
Foods, miscellaneous	782,936	7,421	823,172	8,581

Table 247.—Salt Produced for Chemical Purposes, 1925-1937

Year	Tons (2000 lb.)	Per cent of total salt output	Year	Tons (2000 lb.)	Per cent of total salt output
1925	93,500	40	1932	90,242	37
1926	113,020	43	1933	104,740	37
1927	115,995	43	1934	124,132	39
1928	135,138	45	1935	145,433	40
1929	168,327	51	1936	165,882	42
1930	114,737	42	1937	205,149	45
1931	97,958	38			

Table 248.—Imports into Canada and Exports of Salt, 1927-1937

Years	Exports		Imports	
	Quantity	Value	Quantity	Value
	Tons	\$	Tons	\$
1927	1,212	22,793	176,761	1,082,080
1928	2,930	36,399	189,025	1,122,068
1929	9,359	70,762	176,566	836,820
1930	8,758	74,397	128,385	660,803
1931	6,126	55,110	130,890	751,938
1932	5,627	36,248	102,033	595,954
1933	5,335	43,461	135,620	651,237
1934	6,597	48,097	138,794	586,033
1935	9,045	51,239	128,247	526,740
1936	5,549	46,601	108,923	460,998
1937	9,329	61,522	116,460	466,190



Table 249.—Imports into Canada and Exports of Salt, 1936 and 1937

	1936		1937	
	Short tons	Value	Short tons	Value
<b>IMPORTS—</b>		\$		\$
Salt, for use of the sea or gulf fisheries.....	31,967	99,214	38,643	106,703
Salt, in bulk, n.o.p.....	43,129	148,404	48,186	168,998
Salt, n.o.p., in bags, barrels, etc.....	33,785	212,423	29,576	189,286
Salt, table, made by an admixture of other ingredients, when containing not less than 90 per cent of pure salt.....	42	957	55	1,203
<b>Total.....</b>	<b>108,923</b>	<b>460,998</b>	<b>116,460</b>	<b>466,190</b>
<b>EXPORTS—Total.....</b>	<b>5,549</b>	<b>46,601</b>	<b>9,329</b>	<b>61,522</b>

## List of Firms in the Salt Industry, 1937

Name of firm	Head office	Location of plant
<b>NOVA SCOTIA—</b>		
Malagash Salt Co. Ltd.....	196 Provost St., New Glasgow.....	Malagash.
<b>ONTARIO—</b>		
Brunner, Mond Canada, Ltd.....	Canadian Bank of Commerce Bldg., Toronto.....	Amherstburg.
Canadian Industries Limited.....	P.O. Box 10, Montreal, P.Q.....	Windsor.
The Dominion Salt Co. Ltd.....	Sarnia.....	Sarnia.
Goderich Salt Co. Ltd.....	Goderich.....	Goderich.
Warwick Pure Salt Co. Ltd.....	R.R. 5, Watford.....	Lambton Co.
Western Canada Flour Mills Co. Ltd.....	287 MacPherson Ave., Toronto.....	Goderich.
<b>MANITOWA—</b>		
Neepawa Salt Ltd.....	P.O. Box 10, Montreal, P.Q.....	Neepawa.
<b>ALBERTA—</b>		
Industrial Minerals Ltd.....	Bank of Toronto Bldg., Edmonton..	Waterways.

## CHAPTER THIRTEEN

## THE SAND-LIME BRICK INDUSTRY

Only 5 factories in Canada manufactured sand-lime building brick during 1937; 4 in Ontario and 1 in Quebec. The value of products made in these works, including brick, building blocks and some ready-mixed mortar, was \$197,921 in 1937 compared with \$189,668 for the same works in 1936.

Output of sand-lime brick in 1937 was reported at 11,363 M valued at \$125,880 at factory prices, a slight decline in quantity but an increase in value when compared with the 1936 production of 11,456 M at \$119,707. Production of sand-lime building blocks increased to 851 M at \$67,091 from 573 M at \$55,411 in 1936.

The average number of employees in this industry during 1937 was 81, including 15 on salaries and 66 on wages. The number of wage-earners fluctuated from 38 in January to 83 in May, 77 in September, and 48 in December. Payments for salaries and wages totalled \$72,219 in 1937, as against \$71,021 in 1936.

Table 250.—Principal Statistics, 1920-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1920	11	1,295,486	194	267,273	62,036	124,365	693,641	507,240
1921	10	1,372,253	223	232,913	43,320	139,008	662,744	480,416
1922	11	1,224,808	223	287,705	58,258	291,903	858,807	508,646
1923	8	1,042,619	225	285,248	50,810	218,118	807,960	629,032
1924	12	1,346,239	236	248,045	61,237	181,260	619,946	377,449
1925	10	960,729	239	257,116	62,044	130,555	854,055	661,456
1926	10	1,082,577	218	223,599	50,119	197,400	629,672	382,153
1927	11	1,586,064	254	300,318	67,410	258,777	939,911	613,718
1928	11	1,916,060	281	362,311	92,749	322,027	112,466	697,690
1929	12	2,356,726	304	341,065	68,039	264,465	953,726	621,222
1930	11	2,165,362	225	265,094	51,478	215,921	671,301	403,902
1931	11	1,490,453	183	207,570	43,461	191,572	540,390	305,357
1932	6	759,211	75	74,521	14,872	49,106	153,716	89,738
1933	6	789,962	67	62,584	13,814	37,934	116,367	64,619
1934	6	781,444	78	65,996	20,172	51,316	174,068	102,581
1935	6	608,899	71	58,700	17,048	43,083	154,950	94,819
1936	5	598,510	75	71,021	17,838	55,998	189,668	115,832
1937	5	547,091	81	72,219	20,095	63,285	197,921	114,541
% change 1937 from 1936		-8.5	+8.0	+1.7	+12.7	+13.0	+4.4	-1.1

Table 251.—Capital Employed, by Classes, 1930-1937

Years	Present value of lands, buildings, machinery, tools and other equipment	Inventory value of materials on hand, finished products and stocks in process	Operating capital (cash, bills and accounts receivable, etc.)	Total capital employed
	\$	\$	\$	\$
1930	1,509,096	194,735	461,531	2,165,362
1931	1,094,871	77,384	318,198	1,490,453
1932	665,688	32,923	60,600	759,211
1933	691,591	36,513	61,858	789,962
1934	672,106	43,950	65,388	781,444
1935	511,450	47,744	49,705	608,899
1936	521,270	31,587	45,658	598,510
1937	472,504	31,984	43,203	547,691

Table 252.—Employees, Salaries and Wages, 1930-1937

Years	Average number of employees					Salaries \$	Wages \$	Total salaries and wages \$
	On salaries		On wages		Total			
	Male	Female	Male	Female				
1930.....	21	1	203	.....	225	61,663	203,431	265,094
1931.....	23	1	159	.....	183	58,831	148,739	207,570
1932.....	10	1	64	.....	75	23,000	51,521	74,521
1933.....	13	.....	54	.....	67	24,414	38,170	62,584
1934.....	13	1	64	.....	78	17,966	48,030	65,996
1935.....	13	1	57	.....	71	16,038	42,662	58,700
1936.....	14	1	60	.....	75	18,621	52,400	71,021
1937.....	14	1	66	.....	81	20,089	52,130	72,219

Table 253.—Wage-earners, by Months, 1936 and 1937

(On the 15th of each month)

Months	1936	1937	Months	1936	1937
January.....	32	38	July.....	98	71
February.....	29	45	August.....	76	83
March.....	35	57	September.....	64	77
April.....	49	82	October.....	72	64
May.....	77	83	November.....	70	62
June.....	79	82	December.....	40	48
			Average.....	66	66

Table 254.—Fuel and Electricity Used, 1936 and 1937

Kinds	Unit of Measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Coal, bituminous—Canadian.....	short ton	83	438	105	526
Imported.....	short ton	1,972	11,190	2,226	13,398
Electricity purchased.....	k.w.h.	317,618	6,210	314,370	6,171
<b>Total</b> .....			17,838		20,095

Table 255.—Power Equipment, 1936 and 1937

Kinds	1936		1937	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Primary equipment.....				
Electric motors run by purchased power.....	128	896	35	813
<b>Total</b> .....	128	896	35	813
Stationary boilers.....	7	910	8	895

Table 256.—Materials Used in Manufacturing, 1936 and 1937

Materials	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Quicklime.....	ton	3,853	32,512	4,812	34,161
Sand.....	cu. yd.	34,719	23,486	39,463	20,124
<b>Total.....</b>			<b>55,998</b>		<b>63,285</b>

Table 257.—Products Made, 1936 and 1937

Products		1936		1937	
		Quantity	Selling value at works	Quantity	Selling value at works
			\$		\$
Sand-lime brick.....	M	11,450	119,707	11,363	125,880
Sand-lime building blocks.....	M	573	55,411	851	67,091
Other products(x).....			14,550		4,950
<b>Total.....</b>			<b>189,668</b>		<b>197,921</b>

(x) Includes cinder blocks and ready-mixed concrete.

Table 258.—Production of Sand-Lime Brick in Canada, 1920-1937

Years	Quantity	Selling value at works
	M	\$
1920.....	39,204	683,641
1921.....	43,457	562,744
1922.....	52,749	851,007
1923.....	60,080	897,960
1924.....	55,873	618,946
1925.....	68,869	854,055
1926.....	50,282	600,409
1927.....	72,804	864,911
1928.....	82,271	1,038,510
1929.....	78,361	953,726
1930.....	52,770	567,022
1931.....	46,003	469,793
1932.....	10,819	131,440
1933.....	8,541	91,468
1934.....	12,744	135,588
1935.....	10,522	120,307
1936.....	11,456	119,707
1937.....	11,363	125,880

Directory of Firms in the Sand-Lime Brick Industry, 1937

Names of Companies	Location of Plants
Standard Lime Company Limited.....	1595 St. Grégoire St., Montreal, P.Q.
Harbour Brick Company Limited.....	Fleet & Bathurst Sts., Toronto, Ont.
Hinde Bros.....	Mount Dennis, Ont.
Toronto Brick Company Ltd.....	Victoria Park Ave., Toronto, Ont.
York Sandstone Brick Company Ltd.....	447 Victoria Park Ave., Toronto, Ont.

## CHAPTER FOURTEEN

## THE MONUMENTAL AND ORNAMENTAL STONE INDUSTRY

The stone industry in Canada consists of two main divisions—(a) The Stone Quarrying Industry, including quarries and dressing works operated in conjunction with quarries, and (b) The Monumental and Ornamental Stone Industry, comprising the operations of firms having no quarries, but who operate dressing works where stone for building and monumental purposes is cut, polished or otherwise finished. Statistics for the second of these divisions are given in detail herewith. Detailed data for the first division are included under the mining industry and do not come within the scope of this report, although a number of tables relating to this phase of the industry are shown as a supplement to the present chapter.

In 1937 there were 229 stone dressing works which were not operated in conjunction with the producers' own quarries. These works were occupied chiefly in cutting and polishing rough stone purchased from Canadian quarries or imported from foreign countries to produce finished monuments or dressed stone for building purposes. Gross production from these establishments was valued at \$3,371,242 in 1937 compared with \$3,309,911 in 1936. Output from the 121 plants in Ontario totalled \$1,924,360 or 57 per cent of the total for Canada, and production from the 46 works in Quebec amounted to \$691,420 or 20 per cent of the Dominion total.

The average number of employees in this industry in 1937 was 1,159 compared with 1,245 in 1936 and payments in salaries and wages were \$1,352,566, as against \$1,357,808 in 1936.

The cost of rough stone and other materials used in manufacturing was \$1,142,885 in 1937 as against \$1,070,902 in 1936.

Output value of building stone was still much below the levels of pre-depression years. In 1937 the total value of dressed building stone, including that produced in both the primary and secondary industries, was \$1,536,607 compared with \$1,654,034 in 1936, and \$2,094,843 in 1935.

The total value of dressed stone for monumental and ornamental purposes was \$1,983,775 in 1937, \$1,734,278 in 1936 and \$1,732,601 in 1935.

The Canadian stone industry as a whole in 1937 included the operations of 647 plants with a total capital investment of \$18,070,968. Production during the year was valued at \$9,045,508 which included the value of the quarry output and the value added by manufacturing in the secondary stone industry. Salaried employees and wage-earners employed in 1937 numbered 4,057 persons and their combined earnings amounted to \$3,928,910.

The total imports of stone during 1937 were valued at \$1,151,373 compared with \$864,952 in 1936. Exports of Canadian stone were appraised at \$250,593 in 1937 and \$106,870 in 1936.

Table 259.—Principal Statistics of the Monumental and Ornamental Stone Industry, 1920-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1920.....	176	4,181,670	1,166	1,688,242	18,571	1,781,031	5,205,888	3,406,284
1921.....	173	3,971,172	1,207	1,652,837	15,857	1,478,097	4,540,028	3,046,074
1922.....	208	5,027,935	1,273	1,809,444	19,532	1,844,548	4,968,467	3,104,407
1923.....	210	5,073,618	1,278	1,842,963	20,170	1,683,126	5,025,093	3,321,707
1924.....	210	4,944,269	1,344	1,887,462	95,791	1,441,753	4,730,572	3,193,028
1925.....	214	5,015,729	1,202	1,811,512	96,929	1,964,817	5,355,997	3,294,251
1926.....	232	5,443,767	1,491	2,175,223	106,492	1,859,964	5,799,690	3,833,234
1927.....	228	5,758,806	1,514	2,255,638	112,895	1,798,672	5,606,984	3,695,417
1928.....	222	6,305,519	1,680	2,578,707	105,833	2,460,900	7,176,035	4,609,302
1929.....	230	7,107,162	1,803	3,048,084	138,508	2,788,934	6,224,060	5,296,618
1930.....	226	7,468,687	1,919	3,044,877	147,459	2,759,870	6,355,605	5,448,276
1931.....	223	6,880,835	1,436	2,145,023	136,135	1,770,559	5,939,372	4,082,678
1932.....	206	5,828,109	1,003	1,200,214	108,053	928,572	2,961,914	1,925,289
1933.....	212	5,461,171	821	841,425	87,562	891,523	2,162,650	1,383,565
1934.....	218	5,194,702	881	886,809	90,874	834,323	2,407,474	1,482,277
1935.....	222	5,180,887	1,066	1,174,229	107,636	1,010,999	3,079,118	1,960,283
1936.....	227	5,760,308	1,245	1,357,808	127,151	1,070,902	3,309,911	2,111,858
1937.....	229	5,213,431	1,159	1,352,566	122,209	1,142,885	3,371,242	2,106,148
Per cent change, 1937 from 1936.....	+0.9	-9.6	-6.9	-0.4	-3.9	+6.7	+1.8	-0.3

## MANUFACTURES OF NON-METALLIC MINERALS

Table 260.—Principal Statistics, by Provinces, 1936-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
1936							
Prince Edward Island.....	2	48,050	9	9,205	200	9,507	27,033
Nova Scotia.....	9	76,112	27	25,431	1,957	39,131	98,681
New Brunswick.....	6	72,453	28	24,424	1,618	14,810	52,541
Quebec.....	47	1,015,058	306	273,802	31,434	181,093	598,388
Ontario.....	121	3,521,175	625	738,802	72,258	655,373	1,863,491
Manitoba.....	14	269,280	64	57,799	3,592	48,180	139,391
Saskatchewan.....	9	150,438	42	46,043	3,937	43,769	134,002
Alberta.....	5	257,808	32	38,353	2,335	12,957	90,634
British Columbia.....	14	355,874	112	143,531	9,820	66,082	305,750
<b>Canada.....</b>	<b>227</b>	<b>5,766,308</b>	<b>1,245</b>	<b>1,357,808</b>	<b>127,151</b>	<b>1,070,902</b>	<b>3,309,911</b>
1937							
Prince Edward Island.....	2	54,439	11	10,457	195	12,120	35,035
Nova Scotia.....	11	106,482	36	35,823	2,335	37,472	111,581
New Brunswick.....	7	80,268	33	30,760	2,406	17,081	75,417
Quebec.....	46	1,124,196	269	300,778	29,388	242,724	691,420
Ontario.....	121	2,835,211	613	738,212	71,788	696,087	1,924,260
Manitoba.....	13	243,401	58	55,689	4,549	33,540	115,574
Saskatchewan.....	10	154,058	37	38,032	3,183	33,949	100,638
Alberta.....	5	243,662	34	45,946	2,543	16,735	109,940
British Columbia.....	14	371,714	68	97,169	5,842	52,508	207,277
<b>Canada.....</b>	<b>229</b>	<b>5,213,431</b>	<b>1,159</b>	<b>1,352,566</b>	<b>122,299</b>	<b>1,142,885</b>	<b>3,371,242</b>

Table 261.—Capital Employed, 1936 and 1937

Provinces	Present value of land, buildings, fixtures, machinery and tools	Inventory value of materials on hand, finished products and stocks in process	Operating capital (cash, bills and accounts receivable, prepaid expenses, etc.)	Total capital employed
	\$	\$	\$	\$
1936				
Prince Edward Island.....	13,000	22,350	12,700	48,050
Nova Scotia.....	40,750	14,433	20,929	76,112
New Brunswick.....	41,265	19,133	12,054	72,453
Quebec.....	672,424	248,857	93,777	1,015,058
Ontario.....	2,373,456	532,986	614,733	3,521,175
Manitoba.....	80,035	109,611	79,634	269,280
Saskatchewan.....	61,917	37,544	50,977	150,438
Alberta.....	145,117	38,024	74,127	257,868
British Columbia.....	259,833	38,035	58,006	355,874
<b>Canada.....</b>	<b>3,687,795</b>	<b>1,061,573</b>	<b>1,016,937</b>	<b>5,766,308</b>
1937				
Prince Edward Island.....	13,000	29,800	11,639	54,439
Nova Scotia.....	55,800	23,021	27,661	106,482
New Brunswick.....	45,725	17,613	16,930	80,268
Quebec.....	737,671	285,569	100,956	1,124,196
Ontario.....	1,810,785	552,053	472,373	2,835,211
Manitoba.....	67,757	99,834	75,810	243,401
Saskatchewan.....	64,432	39,571	50,055	154,058
Alberta.....	128,304	32,820	82,538	243,662
British Columbia.....	272,856	32,145	66,713	371,714
<b>Canada.....</b>	<b>3,196,330</b>	<b>1,112,426</b>	<b>904,675</b>	<b>5,213,431</b>

Table 262.—Size of Establishments According to Production, Number of Employees and Capital Employed, 1937

	Number of plants	Capital employed	Number of employees	Selling value of products at works
(a) Production		\$		\$
Under \$5,000	75	396,058	117	222,048
\$ 5,000 to \$ 10,000	59	620,925	151	425,560
\$ 10,001 to \$ 25,000	62	1,142,911	302	913,803
\$ 25,001 to \$ 50,000	22	1,423,504	283	789,729
\$ 50,001 to \$100,000	7	874,542	174	501,821
Over \$100,000	4	755,491	132	518,281
<b>Total</b>	<b>229</b>	<b>5,213,431</b>	<b>1,159</b>	<b>3,371,242</b>
(b) Number of employees				
1 or 2	105	659,441	149	483,863
3 to 10	97	1,739,682	458	1,298,352
11 to 20	18	1,478,947	268	771,363
Over 20	9	1,335,361	284	817,664
<b>Total</b>	<b>229</b>	<b>5,213,431</b>	<b>1,159</b>	<b>3,371,242</b>
(c) Capital employed				
Under \$25,000	185	1,655,171	500	1,321,693
\$25,000 to \$100,000	31	1,464,780	335	931,117
Over \$100,000	13	2,093,480	318	1,015,432
<b>Total</b>	<b>229</b>	<b>5,213,431</b>	<b>1,159</b>	<b>3,371,242</b>

Table 263.—Employees, Salaries and Wages, by Provinces, 1936 and 1937

Provinces	Average number of employees				Total	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
					\$	\$	\$	
1936								
Prince Edward Island	2		7		9	3,500	5,705	9,205
Nova Scotia	6	1	20		27	9,600	15,831	25,431
New Brunswick	8	3	16	1	28	9,932	14,492	24,424
Quebec	68	4	234		306	96,738	177,064	273,802
Ontario	179	24	419	3	625	287,045	451,575	738,620
Manitoba	15	7	42		64	21,728	36,071	57,799
Saskatchewan	15	1	20		42	18,551	28,092	46,643
Alberta	10	3	19		32	18,285	20,098	38,383
British Columbia	25	1	85	1	112	34,137	109,394	143,531
<b>Canada</b>	<b>328</b>	<b>44</b>	<b>868</b>	<b>5</b>	<b>1,245</b>	<b>499,516</b>	<b>858,292</b>	<b>1,357,808</b>
1937								
Prince Edward Island	2		9		11	3,000	7,457	10,457
Nova Scotia	9	1	26		36	12,730	23,093	35,823
New Brunswick	8	3	21	1	33	12,055	18,705	30,760
Quebec	84	5	180		269	120,063	180,715	300,778
Ontario	183	20	407	3	613	294,334	443,878	738,212
Manitoba	17	3	38		58	24,471	31,218	55,689
Saskatchewan	16	1	20		37	19,467	18,565	38,032
Alberta	10	3	19	2	34	22,245	23,401	45,646
British Columbia	21	2	44	1	68	36,547	60,622	97,169
<b>Canada</b>	<b>350</b>	<b>38</b>	<b>764</b>	<b>7</b>	<b>1,159</b>	<b>544,912</b>	<b>807,654</b>	<b>1,352,566</b>

Table 264.—Wage-earners, by months, 1936 and 1937

(On the 15th of each month)

Months	1936			1937		
	Male	Female	Total	Male	Female	Total
January.....	540	2	542	431	3	434
February.....	544	2	546	404	3	407
March.....	704	2	706	497	4	501
April.....	823	4	827	694	5	699
May.....	927	3	930	733	7	740
June.....	1,047	4	1,051	861	7	868
July.....	1,155	4	1,159	897	13	910
August.....	1,136	4	1,140	917	8	925
September.....	1,047	5	1,052	939	7	946
October.....	961	4	965	988	7	995
November.....	798	3	801	928	6	934
December.....	638	2	640	770	5	775
<b>Average.....</b>	<b>868</b>	<b>5</b>	<b>873</b>	<b>764</b>	<b>7</b>	<b>771</b>

Table 265.—Regular Hours Worked per Week, by Wage-earners, 1936 and 1937

(Overtime not included)

Regular hours worked per week	Percent of wage-earners		Regular hours worked per week	Percent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	23.9	22.9	51-53 hours.....	4.6	2.9
41-43 hours.....	1.1	1.2	54 hours.....	2.3	2.4
44 hours.....	33.4	28.6	55 hours.....	5.0	3.5
45-47 hours.....	3.8	5.2	56-59 hours.....	3.2	4.7
48 hours.....	12.7	14.4	60 hours and over.....	4.7	9.1
49-50 hours.....	5.3	5.1			

Table 266.—Fuel and Electricity Used in the Monumental and Ornamental Stone Industry, 1936 and 1937

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Bituminous coal—Canadian.....	short ton	541	4,341	308	2,469
Imported.....	short ton	172	1,632	1,397	8,946
Anthracite coal.....	short ton	566	5,014	143	1,793
Lignite coal.....	short ton	29	245		
Coke.....	short ton	179	1,779	740	6,901
Gasoline.....	imp. gal.	4,691	1,402	7,390	1,923
Kerosene or coal oil.....	imp. gal.	44	8	1,568	135
Fuel oil.....	imp. gal.	195,168	11,878	68,540	4,296
Wood.....	cord	281	1,630	708	2,977
Gas—Manufactured.....	M. cu. ft.	64	60	148	138
Natural.....	M. cu. ft.	2,525	1,533	2,970	1,572
Other fuel.....	x x x		591		640
Electricity purchased.....	k. w. h.	5,688,797	97,038	5,175,879	90,419
<b>Total.....</b>	<b>x x x</b>		<b>127,151</b>		<b>122,269</b>



Table 267.—Power Equipment, 1936 and 1937

Kinds	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1936				
Steam engines and steam turbines.....	4	60		
Diesel engines.....	2	56		
Gasoline, gas and oil engines (except diesel).....	8	140		
Hydraulic turbines and water wheels.....				
<b>Total primary equipment.....</b>	<b>14</b>	<b>262</b>		
Electric motors run by purchased power.....	714	10,211	32	465
<b>Total.....</b>	<b>728</b>	<b>10,473</b>	<b>32</b>	<b>465</b>
Stationary boilers.....	5	105		
1937				
Steam engines and steam turbines.....	6	120		
Diesel engines.....	1	17		
Gasoline, gas and oil engines (except diesel).....	14	342	1	10
Hydraulic turbines and water wheels.....	1	25		
<b>Total primary equipment.....</b>	<b>22</b>	<b>504</b>	<b>1</b>	<b>10</b>
Electric motors run by purchased power.....	653	8,784	45	885
<b>Total.....</b>	<b>675</b>	<b>9,288</b>	<b>46</b>	<b>895</b>
Stationary boilers.....	7	355	2	250

Table 268.—Materials Used, 1936 and 1937

Materials	Cost at works	
	1936	1937
	\$	\$
Rough stone (granite, marble, etc.)—From Canadian quarries.....		492,237
Imported.....	917,898	304,008
Monuments, cut and polished, for lettering only.....		171,265
Silica sand or ground quartz.....	153,004	6,605
All other materials.....		168,770
<b>Total.....</b>	<b>1,070,902</b>	<b>1,142,885</b>

Table 269.—Products Made, 1936 and 1937

Products	Total selling value at works	
	1936	1937
	\$	\$
Granite, cut and polished—(a) Monuments.....	1,317,005	1,468,895
(b) For building purposes.....	330,306	179,557
Marble, cut and polished—(a) Monuments.....	150,629	176,101
(b) For building purposes.....	175,834	347,405
Marble chips and dust.....	12,807	10,419
Limestone—(a) Monuments and bases.....	35,162	117,404
(b) For building purposes.....	514,375	438,450
Finished monuments, lettered only.....	410,640	358,629
Other products.....	299,827	220,623
Repairs and custom work (re-lettering, etc.).....	63,326	55,759
<b>Total.....</b>	<b>3,309,911</b>	<b>3,371,243</b>

## MANUFACTURES OF NON-METALLIC MINERALS

Table 270.—Products Made, by Provinces, 1936 and 1937

	Granite		Marble			Limestone		Fin- ished monu- ments, lettered only	Other products	Total
	Monu- ments	For build- ing purposes	Monu- ments	For build- ing purposes	Marble chips and dust	Monu- ments and bases	For build- ing purposes			
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Prince Edward Island—</b>										
1936.....	7,900	30	12,800	23				6,280		27,633
1937.....	9,000	67	17,400					8,568		35,835
<b>Nova Scotia—</b>										
1936.....	63,801		11,631	200		2,953		19,038	1,058	98,681
1937.....	59,888	89	14,040	737		2,954	31,669		2,198	111,581
<b>New Brunswick—</b>										
1936.....	48,231	1,100		620		140		2,180	270	52,541
1937.....	70,367	1,000	1,340			1,430		1,030	250	75,417
<b>Quebec—</b>										
1936.....	321,039	117,068	19,715	48,759	1,047	3,190	40,621	19,691	27,258	598,398
1937.....	316,326	53,507	29,598	101,979	2,800	3,745	119,457	23,277	40,731	691,420
<b>Ontario—</b>										
1936.....	699,148	37,159	60,015	36,107	210	18,041	435,754	289,282	287,775	1,863,491
1937.....	800,638	25,913	65,075	187,649		100,577	266,483	204,542	213,483	1,924,360
<b>Manitoba—</b>										
1936.....	51,485	210	3,949	33,531	5,658	1,368	9,872	32,146	1,172	139,391
1937.....	48,563	1,554	6,674	19,200	350	1,150	3,711	31,217	3,155	115,574
<b>Saskatchewan—</b>										
1936.....	42,616	1,455	20,716	2,087	840	7,320	18,128	9,170	31,670	134,002
1937.....	41,773	1,933	23,883	958	229	4,850	5,430	14,113	7,469	100,638
<b>Alberta—</b>										
1936.....	40,110	4,000	14,072	4,000	5,031	2,150	10,000	9,401	1,870	90,634
1937.....	48,103	6,000	15,389	5,000	7,040	2,498	10,500	12,212	3,198	109,940
<b>British Columbia—</b>										
1936.....	42,675	169,284	7,731	50,507	21			23,452	12,080	365,750
1937.....	74,237	89,494	2,696	31,882		200	1,200	1,670	5,898	207,277
<b>Canada—</b>										
1936.....	1,317,005	339,306	150,629	175,834	12,907	35,162	514,375	419,640	363,153	3,209,911
1937.....	1,468,895	179,557	176,191	347,465	19,419	117,464	438,450	356,629	276,382	3,371,242

Table 271.—Total Production in Canada of Dressed Building Stone, 1925-1937

Years	Granite		Marble		Limestone		Sand- stone from quarries	Total
	From quar- ries	From dressing works	From quar- ries	From dressing works	From quar- ries	From dressing works		
	\$	\$	\$	\$	\$	\$	\$	\$
1925.....	236,651	73,376	223,840	573,602	378,194	1,909,212	18,114	3,412,989
1926.....	190,711	74,792	4,500	644,945	662,211	1,969,755	13,036	3,559,959
1927.....	267,194	83,877		673,126	716,929	1,713,445	8,784	3,463,355
1928.....	667,050	314,553	340,585	883,076	702,081	2,861,336	18,000	5,786,681
1929.....	746,537	465,155	347,256	1,621,112	944,491	2,739,504	92,500	6,956,585
1930.....	1,189,120	902,519	687,115	1,339,108	1,416,277	2,706,390	286,972	8,527,501
1931.....	1,011,499	1,032,202	576,458	1,054,952	1,085,767	1,372,121	686,616	6,819,615
1932.....	336,632	79,136	188,743	339,027	348,187	636,294	20,560	1,919,199
1933.....	114,318	40,224	27,377	73,445	111,235	281,074	19,300	666,973
1934.....	216,574	35,957		137,902	173,536	280,279	5,500	843,748
1935.....	403,651	184,033	16,000	130,227	425,247	837,985	97,400	2,094,843
1936.....	171,858	330,306	104,738	175,834	189,064	514,375	167,859	1,654,634
1937.....	252,346	179,557	18,297	347,405	248,659	438,450	51,893	1,536,607

Table 272.—Total Production in Canada of Dressed Monumental and Ornamental Stone, 1925-1937

Years	Granite		Marble		Limestone		Total
	From quarries	From dressing works	From quarries	From dressing works	From quarries	From dressing works	
	\$	\$	\$	\$	\$	\$	
1925	188,513	1,387,658	292,621	754	154,488	2,021,034	
1926	196,820	1,619,206	466,648	376,859	3,908	2,757,887	
1927	147,510	1,728,293	449,717	420,651	1,523	2,441,958	
1928	125,744	1,718,988	9,700	404,058	2,237	2,393,133	
1929	149,810	1,815,463	391,947	4,722	325,876	2,687,818	
1930	111,504	1,815,143	350,323	3,577	319,472	2,600,019	
1931	251,379	1,584,099	257,668	6,300	43,584	2,143,630	
1932	196,071	1,164,283	180,323	2,532	43,652	1,586,861	
1933	215,616	1,111,354	200,313	2,868	30,370	1,560,321	
1934	244,286	1,271,009	24,342	108,201	3,488	1,738,362	
1935	277,568	1,258,414	158,249	1,680	26,090	1,732,601	
1936	231,482	1,317,005	160,629	.....	35,162	1,731,278	
1937	218,140	1,468,898	900	176,101	2,335	1,983,775	

\* Sandstone.

Table 273.—Imports into Canada and Exports of Stone, by Kinds, 1936 and 1937

	1936		1937	
	Tons	Value	Tons	Value
		\$		\$
<b>IMPORTS—</b>				
Curling stones and handles.....Pair	618	13,354	669	14,710
Building stone, other than marble or granite, sawn on more than two sides, but not sawn on more than four sides.....	.....	.....	.....	.....
Building stone, other than marble or granite, planed, turned, cut, or further manufactured than sawn on four sides.....	87	9,222	8	314
Flagstone, sandstone, and all building stone, not hammered, sawn or chiselled.....	3,049	20,446	5,818	34,479
Flagstone and building stone, other than marble or granite, sawn on not more than two sides.....	460	3,456	1,202	8,479
Granite, rough, not hammered or chiselled.....	.....	70,667	.....	80,273
Granite, sawn only.....	.....	7,094	.....	11,022
Granite, monuments.....	.....	17,628	.....	16,732
Granite, manufactures of, n.o.p.....	.....	4,733	.....	6,908
Marble, rough, not hammered or chiselled.....	.....	15,765	.....	16,729
Marble, sawn or sand rubbed, not polished.....	.....	24,107	.....	31,991
Marble, not further manufactured than sawn for tombstones.....	.....	11,715	.....	12,655
Marble, manufactures of, n.o.p.....	.....	15,774	.....	15,327
*Ornamental or decorative marble (not chips), unicolour or variegated, of colours or texture not produced in Canada; rough or dressed, etc., for church interiors.....	.....	.....	.....	12,561
Paving blocks of stone.....	.....	20	.....	22
Refuse stone, not sawn, hammered or chiselled.....	304,440	184,481	592,593	348,319
Slate roofing.....Square	1,426	12,294	2,162	18,711
Slate pencils and school writing slates.....	.....	8,524	.....	5,790
Slate mantels and manufactures of slate, n.o.p.....	.....	13,337	.....	30,270
Chalk, china, Cornwall or cliff stone and mica schist.....	.....	32,253	.....	55,558
Mineral wool.....	1,196	101,582	1,015	81,050
Whiting, gilders' whiting and Paris white.....	12,498	121,017	11,992	126,015
Manufactures of stone, n.o.p.....	.....	17,055	.....	25,170
Lithographic stones not engraved.....	.....	186	.....	266
Chalk prepared.....	.....	8,219	.....	6,873
Pumice and pumice stone, lava and calcareous tufa, not further manufactured than ground.....	.....	21,275	.....	26,238
Grindstones, not mounted, and not less than 36 inches in diameter.....No.	1,013	122,028	1,587	157,699
Burrstones, rough, in blocks.....No.	158	570	24	1,232
Ganister.....	4,097	8,140	2,405	5,980
<b>Total</b> .....		<b>864,352</b>		<b>1,151,373</b>
<b>EXPORTS—</b>				
Crushed stone.....	49,728	90,924	132,066	233,824
Granite and marble, unwrought.....	1,156	8,788	1,234	11,408
Freestone, limestone, and other building stone, unwrought.....	571	2,090	659	1,380
Dressed stone of all kinds.....	.....	3,380	.....	3,846
Grindstones, manufactured.....	.....	1,688	.....	135
<b>Total</b> .....		<b>106,870</b>		<b>250,593</b>

\* From February 26, 1937.

**Primary Production—The Stone Quarrying Industry.**—Shipments of stone from Canadian quarries during 1937 amounted to 6,935,612 short tons, valued at \$6,939,360 compared with 4,982,912 short tons at \$5,134,153 in 1936. The value for 1937 was the greatest since 1932, the advance being due chiefly to the revival in construction and the recent expansion in the activities of chemical and metallurgical industries.

Of all primary stone shipped during 1937, limestone, totalling 5,542,806 tons, accounted for 79.9 per cent; granite, at 1,135,099 tons, accounted for 16.4 per cent; sandstone, at 235,165 tons for 3.4 per cent; and marble, at 21,642 tons, for 0.3 per cent.

Ontario's quarries accounted for 60.9 per cent of the total tonnage, and Quebec's operators for 28.2 per cent. Limestone was produced in all provinces except Prince Edward Island and Saskatchewan; granite in all but Prince Edward Island, Saskatchewan and Alberta; sandstone in all but Prince Edward Island, Manitoba and Saskatchewan; and marble in Quebec and Ontario only.

The 418 firms engaged in stone quarrying during 1937 reported a capital investment of \$12,857,537. The number of employes was 2,898, and salaries and wages amounted to \$2,576,344

**Table 274.—Principal Statistics of the Stone Quarrying Industry (\*) in Canada, 1936 and 1937**

	1936	1937
Number of firms.....	426	418
Capital employed.....	\$ 11,899,852	12,857,537
Number of employes—On salary.....	254	284
On wages.....	2,258	2,614
<b>Total.....</b>	<b>2,512</b>	<b>2,898</b>
Salaries and wages—Salaries.....	\$ 360,471	427,624
Wages.....	1,682,745	2,148,720
<b>Total.....</b>	<b>\$ 2,043,216</b>	<b>2,576,344</b>
Gross selling value of products at works.....	\$ 5,134,153	6,939,360
Cost of fuel and electricity.....	\$ 396,965	472,006
Process supplies used.....	\$ 444,739	613,542

\*Includes statistics for slate.

**Table 275.—Production of Stone from Canadian Quarries by Kinds Showing Purposes for Which Used, 1937**

For use as follows:	Slate	Granite (b)	Limestone (a)	Marble	Sandstone	Total
<b>1937</b>						
<b>Building Stone—</b>						
Rough..... tons		6,925	15,317	129	4,297	26,668
\$		51,110	98,634	5,939	19,492	175,175
Dressed..... tons		6,257	14,624	275	1,274	22,430
\$		252,346	248,659	18,297	51,893	571,195
<b>Monumental and ornamental stone—</b>						
Rough..... tons		5,587	128	125		5,840
\$		48,520	4,992	3,438		56,950
Dressed..... tons		2,375	65		21	2,461
\$		218,140	2,335		900	221,375
Flagstone..... tons		8	238		2,898	3,144
\$		75	1,507		7,352	8,934
Curbstone..... tons		796	50			846
\$		3,085	500			3,585
Paving blocks..... tons		547			10	557
\$		4,792			110	4,902
Lining open—hearth furnaces..... tons			764			764
\$			1,688			1,688
<b>Chemical—</b>						
Flux in iron and steel plants..... tons			200,932			200,932
\$			150,146			150,146
Flux in smelters..... tons			144,810			144,810
\$			116,634			116,634
Glass factories..... tons			510	4,000		4,510
\$			785	14,000		14,785
Pulp and paper mills..... tons			199,433	1,460		200,893
\$			218,292	1,169		219,461
Sugar refineries..... tons			28,902			28,902
\$			30,664			30,664
Other chemical uses..... tons			113,900			113,900
\$			94,627			94,627

Table 275. Production of Stone from Canadian Quarries by Kinds Showing Purposes for Which Used, 1937—Concluded

For use as follows:	Slate	Granite (b)	Limestone (a)	Marble	Sandstone	Total
<b>Pulverized stone—</b>						
Whiting..... tons			639	4,775		5,414
Asphalt filler..... tons			1,281	3,157		4,438
Dusting coal mines..... tons			10,344			10,344
Agricultural purposes..... tons			26,475			26,475
Crushed stone for making artificial stone..... tons			829			829
Roofing granules..... tons			3,320			3,320
Stucco dash..... tons			111,428	1,200		112,628
Terrazzo chips..... tons			128,671	2,400		131,071
Rock wool..... tons			60	2,011		2,071
Poultry grit..... tons			300	8,835		9,135
Stucco dash..... tons	370	10,710				11,080
Terrazzo chips..... tons	4,216	85,715				89,931
Rock wool..... tons	21	20	906	1,153		2,102
Poultry grit..... tons	150	200	3,916	5,687		9,953
Stucco dash..... tons			215	2,031		2,246
Terrazzo chips..... tons			1,419	9,239		10,658
Rock wool..... tons				2,388		2,388
Poultry grit..... tons				10,999		10,999
Stucco dash..... tons			5,322			5,322
Terrazzo chips..... tons			5,439			5,439
Rock wool..... tons						
Poultry grit..... tons	414	458,331	179,287		61,554	699,586
Stucco dash..... tons	471	431,758	125,703		50,521	699,453
<b>Crushed stone—</b>						
Concrete aggregate..... tons		103,726	1,387,624	232	6,173	1,497,655
Road metal..... tons		153,656	1,052,727	182	7,616	1,214,181
Railroad ballast..... tons		138,985	2,877,534	1,863	150,744	3,169,136
Other uses..... tons		182,288	2,136,746	5,253	197,793	2,522,080
Concrete aggregate..... tons		400,822	233,232		8,194	642,248
Road metal..... tons		395,748	166,664		8,194	570,666
Railroad ballast..... tons		95	15,811			15,906
Other uses..... tons		682	51,838			52,520
<b>Total Canada (a)</b> ..... tons	<b>900</b>	<b>1,135,099</b>	<b>5,542,806</b>	<b>21,642</b>	<b>235,165</b>	<b>6,935,612</b>
	<b>5,519</b>	<b>1,827,433</b>	<b>4,673,942</b>	<b>88,595</b>	<b>343,871</b>	<b>6,939,369</b>

(a) Does not include limestone used in Canadian lime and cement industries, but includes marl used for agricultural purposes.  
 (b) Includes all igneous rock.

Table 276.—Production of Stone from Canadian Quarries, by Kinds and by Provinces, 1936 and 1937

Province	Slate	Granite (b)	Limestone (a)	Marble	Sandstone	Total
<b>1936</b>						
Nova Scotia..... tons		66,507	20,860		167,205	254,572
New Brunswick..... tons		99,855	36,365		239,100	375,329
Quebec..... tons		1,485	53,781		4,165	59,431
Ontario..... tons		73,784	55,564		4,410	133,758
Manitoba..... tons		137,912	1,265,243	17,866	92,228	1,513,259
Alberta..... tons		855	1,058,547	138,294	102,388	1,729,367
British Columbia..... tons		260	2,205,902	4,765	3,436	2,706,660
<b>Canada</b> ..... tons	<b>2,080</b>	<b>582,603</b>	<b>1,773,764</b>	<b>29,204</b>	<b>10,805</b>	<b>2,398,456</b>
		185	49,261	60		49,506
		2,038	69,837	90		71,965
			13,876		40	13,916
			26,188		3,200	29,388
		184	243,427	175	18,434	364,755
	2,479	131,750	123,607	2,110	135,944	395,890
<b>Canada</b> ..... tons	<b>1,247</b>	<b>941,743</b>	<b>3,731,548</b>	<b>22,946</b>	<b>285,568</b>	<b>4,982,912</b>
	<b>5,414</b>	<b>1,319,313</b>	<b>3,143,872</b>	<b>169,695</b>	<b>495,856</b>	<b>5,134,153</b>
<b>1937</b>						
Nova Scotia..... tons		16,430	24,398		137,893	178,721
New Brunswick..... tons		50,966	35,914		192,218	279,098
Quebec..... tons		936	51,829		4,603	57,468
Ontario..... tons		74,961	55,600		8,480	139,041
Manitoba..... tons		414	1,653,556	14,957	70,726	1,958,396
Alberta..... tons		471	1,474,653	61,348	65,424	2,213,021
British Columbia..... tons		300	3,582,175	6,685	8,680	4,223,000
<b>Canada</b> ..... tons	<b>2,258</b>	<b>769,860</b>	<b>2,841,469</b>	<b>27,247</b>	<b>22,934</b>	<b>3,663,763</b>
		138	41,053			41,191
		1,796	63,432			65,228
			13,182		43	13,225
			24,935		2,254	27,189
		186	176,513		13,220	463,611
	2,790	318,725	177,939		52,561	552,015
<b>Canada</b> ..... tons	<b>900</b>	<b>1,135,099</b>	<b>5,542,806</b>	<b>21,642</b>	<b>235,165</b>	<b>6,935,612</b>
	<b>5,519</b>	<b>1,827,433</b>	<b>4,673,942</b>	<b>88,595</b>	<b>343,871</b>	<b>6,939,369</b>

NOTE.—Not included in the limestone statistics are 1,180,358 tons of limestone consumed in the cement industry in 1936 and 1,465,168 tons in 1937. Limestone used in the Canadian lime industry is not included; it is estimated that approximately 800,000 tons of limestone were burned in the manufacture of lime in 1936, and about 980,000 tons in 1937.

(a) Includes dolomite, also marl for agricultural purposes.  
 (b) All igneous rocks included.

## Directory of Firms in the Monumental and Ornamental Stone Industry, 1937

NOTE.—These dressing works are operated separately from the quarries.

Names of companies	Location of plants
<b>PRINCE EDWARD ISLAND—</b>	
Beck, Vere & Son.....	Main St., Montague.
Chandler & Bell.....	Malpeque Road, Charlottetown.
<b>NOVA SCOTIA—</b>	
Coughlan, James S.....	Simpson's Siding, Halifax.
Dauphinee, A. T.....	Horton St., Yarmouth.
Gray, W. F.....	108 Gerrish St., Halifax.
Keddy, C. L., Monument Works.....	171 Kempt Rd., Halifax.
Keltie, Robert & Son.....	687 Barrington St., Halifax.
Nixon's Monumental Works.....	R. R. 3, Middleton.
Rottler, A. A.....	Main St., Kentville.
Steele, John D., & Sons.....	Commercial St., North Sydney.
Tingley, Harold.....	13 Merkel St., Halifax.
Tingley, J. A., Granite Works.....	Amherst.
Truro Marble & Granite Works.....	907 Prince St., Truro.
<b>NEW BRUNSWICK—</b>	
Kane, M. T., & Co., Ltd.....	Westmoreland Rd., Saint John.
Miramichi Granite & Marble Works.....	Chatham.
Moore, John, & Sons.....	130 Carlston St., Fredericton.
O'Brien & Baldwin.....	St. George.
St. Stephen Granite Works.....	Queen St., St. Stephen.
Sherrard, T. F. & Son.....	135 Victoria St., Moncton.
Stultz., Chester E.....	Rothsday Ave., St. John.
<b>QUEBEC—</b>	
Beaudet & Frenette Ltée.....	Mont Joli.
Beaulieu, Elzéar.....	Ste. Hélène, Kamouraska.
Berson, L., & Son.....	3896 St. Lawrence Blvd., Montreal.
Brault, Z.....	1 Champlain St., Valleyfield.
Brodie's Ltd.....	9th Ave., Iberville.
Brunet, A.....	Ormstown.
Brunet, J., Limitée.....	4485 Chemin Cote des Neiges, Montreal.
Caron, E.....	Ste. Anne de Beausé.
Chabot, J. Ray.....	Scott Junction, Co. Dorchester.
Chaussé, Edouard & Fils.....	57 rue Aberdeen, Sherbrooke.
Côté, Valère.....	187 First Ave., Quebec.
Crete, James.....	178 Sophie St., Sorel.
Dalegerio, F.....	4588 Chemin Cote des Neiges, Montreal.
Daudelin, Napoleon.....	92 St. Antoine St., St. Hyacinthe.
Delwaide & Goffin.....	16 rue du Havre, Chicoutimi.
Ducharme, J. Maurice.....	257 Notre Dame St., Victoriaville.
Dugas, Joseph.....	191 St. Charles Borrome, Joliette.
Duseault, Théo, & Cie.....	Mont Laurier.
Fortin, Dollard.....	St. David de Levis.
Gignac, Azarias.....	St. Alban.
Gingras, Roch.....	Ste. Foye.
Godin & Delisle.....	1253 St. Valier St., Quebec.
Gordon Stone Monument Reg'd.....	4374 St. Lawrence Blvd., Montreal.
Gosselin, Arsène.....	Cote de la Station, Beauceville Est.
Gosselin, Oscar.....	Lake Megantic (Frontenac Co.).
Hansford, Frank.....	14 Baldwin St., Contrecook.
Hawkins, S.....	1116 Bleury St., Montreal.
Hurtubise, Albert.....	6752 Sherbrooke St. E., Montreal.
Lachute Marble & Granite Works.....	Main St., Lachute.
Lafrenaye, Louis.....	Rivière du Loup.
Lasalle Stone Co. Ltd.....	Lalleur Ave., Ville La Salle.
National Granite Works Ltd.....	Iberville.
Paquin, Laurent.....	1043 Blvd. des Forges, Three Rivers.
Poulin, P. A.....	222 Champlain St., St. Jean.
Quinlan Cut Stone Ltd.....	Bois Franc Rd., Cartierville.
Robertson, Fred.....	Beche Jet.
Rolland, J. A.....	1285 rue St. Valier, Quebec.
Savard, J. Bte.....	Ste. Anne de la Perade.
Servais, René.....	1035 Des Forges Blvd., Three Rivers.
Smith Bros. Memorial Art Ltd.....	1195 Ducharme St., Montreal.
Smith Marble & Cons. Co. Ltd.....	207 Van Horne Ave., Montreal.
Sutton Marble & Granite Co.....	Sutton.
Thompson, T. C.....	270 Wellington St. S., Sherbrooke.
Thuot & Denicourt.....	87 Fourth St., Iberville.
Todoré & Bigras.....	3275 Desautels St., Montreal.
Tremblay, Geo. E.....	113 Ninth Ave., Iberville.
<b>ONTARIO—</b>	
Allan Bros.....	11 Cambridge St., Lindsay.
Alpaugh, J., & Sons.....	St. Andrews St., Fergus.
Ambroise, L., & Son (West End Monumental Works).....	58 Alma St., Guelph.
Austin, P. O.....	44 Corborne St., Simcoe.
Bayne, D. M.....	Kemptville.
Beaver Marble & Granite.....	Brook St. W., Uxbridge.
Bounsall, A. H.....	Division St., Bowmanville.
Bawden Marble & Granite.....	782 Second Ave. E., Owen Sound.
Bowers, Chas. Henry.....	226 King St., Prescott.
Bradfield, W., & Son.....	335 Main St., Simcoe.

Directory of Firms in the Monumental and Ornamental Stone Industry, 1937—  
Continued

Names of companies	Location of plants
<b>ONTARIO—Continued</b>	
Brampton Monument Works.....	68 Queen St. W., Brampton.
Brantford Monument Works.....	Cor. Gray and Market Sts., Brantford.
Braun, Casper (Estate of).....	16 Andrew St., Kitchener.
Brockville Cemetery Memorial Works.....	R. R. 3, Brockville.
Brown, R., & Son.....	376 Sparks St., Ottawa.
Brown, Geo., Monumental Works.....	473 Bronson Ave., Ottawa.
Campbell, A. C.....	21 Bridge St. W., Belleville.
Canadian Cut Stone Co.....	5 Isabella St., Ottawa.
Chapman, Wm. E.....	Seaforth.
Clarke, D., & Co.....	1044 Howard Ave., Windsor.
Cobourg Granite & Marble Works.....	King St., Cobourg.
Colby, C. H. (Chatham Marble & Granite Works).....	39 Market Square, Chatham.
Collingwood Granite & Marble Works.....	Simcoe St., Collingwood.
Corley, A. C.....	Main St., Brighton.
Coughlin Monumental Works.....	216 Hunter St. W., Peterborough.
Creber Son & Co.....	1333 St. Clair Ave. W., Toronto.
Cresswell, W. H.....	187 Kent St., Lindsay.
Cunningham & Pryde.....	Main St., Exeter.
Dillon, Joseph.....	55 Stone St., Gannanogue.
Doyle, J. E.....	269 Eighth St. E., Owen Sound.
Elgin Memorial Work.....	20 Elgin St., St. Thomas.
Excelsior Granite & Marble Works.....	163 Pitt St. E., Windsor.
Fulton Bros.....	393 Princess St., Kingston.
Froats, George & Co.....	Argyle St., Renfrew.
Galt Monumental Works.....	62 Water St. N., Galt.
Gladstone & Ross.....	388 East Brock St., Fort William.
Goldberg Bros.....	153 St. Patrick St., Toronto.
Geard, A. W.....	925 Burton St. E., Hamilton.
Guelph Marble and Granite Works.....	Elora Rd., Guelph.
Hardwick, H. G., and Son.....	30 Ottawa St. N., Hamilton.
Hayes Bros. Co.....	290 Klock Ave., North Bay.
Hibberd, Arthur, Cut Stone.....	195 Melita Ave., Toronto.
Humberstone Cut Stone & Monumental Works.....	590 King St., Humberstone.
Ideal Monument Works.....	R. R. 4, Springbank Drive, London.
Insulation Products.....	Todmorden P. O.
Isaac, James, & Son.....	30 Dupont St., Toronto.
Johnston & Cranston.....	1849 Yonge St., Toronto.
Jones & Stevens.....	277 Rideau St., Ottawa.
Jones, W. A., & Sons.....	Main St. W., Picton.
Keimp and Ronald.....	Listowel.
Kilvington Bros. Ltd.....	1357 St. Clair Ave. W., Toronto.
Kitchener Monumental Works.....	311 King St. E., Kitchener.
Lake Superior Granite & Marble Works.....	111 Wellington St. W., Sault Ste. Marie.
Laings Memorials.....	16 Elma St., Cornwall.
Laurin, J. P.....	95 George St., Ottawa.
Leamington Granite & Marble Works.....	75 Erie St. N., Leamington.
Lethbridge Art Memorials.....	144 King St. W., Oshawa.
Lloyd, Oscar P.....	Smith's Falls.
London Marble & Granite Co. Ltd.....	493 Richmond St., London.
Luesby, George W.....	178 Main St., Newmarket.
Majury, L.....	Paisley, Ont.
Martel & Son.....	Main St., Vankleek Hill.
McCallum Granite Co. Ltd.....	395 Princess St., Kingston.
McIntosh Granite Co.....	1119 Yonge St., Toronto.
McIntyre, George.....	60 Danforth Ave., Toronto.
McKay Cut Stone Co.....	65 Shalmar Ave., Forest Hill Village.
McMillan Granite Co. Ltd.....	105 Ontario St., Sarnia.
Memorial Company of Toronto.....	2290 Bloor St. W., Toronto.
Middleton Marble & Granite Co. Ltd.....	122 Main St. E., Hamilton.
Monumental Art Co.....	2168 Dundas St. W., Toronto.
Napanee Memorial Granite Works.....	Dundas St., Napanee.
Niagara Cut Stone Co. Ltd.....	Buttrey St., Niagara Falls.
Nichol, John.....	Acton.
Nicholsons Cut Stone Ltd.....	Copeland St., Leaside.
Nobbs, E. E.....	William St. at C.P.R., London.
Ontario Marble Co. Ltd.....	Maria St., Peterborough.
Orillia Monument Co.....	252 Coldwater Rd. W., Orillia.
Patterson & Cornelius.....	428 Queenston Rd., St. Catharines.
Pierce & Co.....	295 Lorne St. S., Sudbury.
Pine Hills Monument Co.....	Danforth & Kennedy, Scarboro Jct.
Pollard & Miller.....	715 Queen St. E., Sault Ste. Marie.
Pollock & Ingham.....	151 Main St., Galt.
Porterfield & Colquhoun.....	Mitchell.
Port Hope Monument Works.....	Ontario St., Port Hope.
Rhodes Memorials Ltd.....	Cayuga.
Richardson, R. H.....	Victoria St., Hanover.
Rigg Bros.....	605 Queen St., Niagara Falls.
Rivercourt Memorial Co.....	300 Don Mills Road, Toronto.
Ritchie Cut Stone Co. Ltd.....	New Toronto St., New Toronto.
Ritchie Stone Co.....	51 Catherine St., Ottawa.
Rock Wool Corp. (Canada) Ltd.....	38 Elgin St., Brantford.
Rueh, L. J., and Son.....	38 Avondale Ave., Stratford.
Rutledge, S. H.....	Broadway Ave., Orangeville.
Sanderson, R. J., Marble Co.....	33 Peter St. S., Orillia.
Sharp Bros.....	516 Kenilworth St. N., Hamilton.
Skelton, E. J., and Son.....	Yonge St., Walkerton.

**Directory of Firms in the Monumental and Ornamental Stone Industry, 1937—  
Concluded**

Name of companies	Location of plants
<b>ONTARIO—Concluded</b>	
Smith, M., Granite Works.....	Merrickville.
Smith Memorial Works.....	1539 Main St. E., Hamilton.
Smith Monument Co.....	349 Weston Road, Toronto.
Smyth & Son.....	344 Wellington St., London.
Spotton, R. A.....	Wingham.
Spun Rock Wools Ltd.....	65 Ormond St., Thorold.
Standard Stone Co. Ltd.....	1704 Howard Ave., Windsor.
Steud, Arthur, Cut Stone Co. Ltd.....	Frid St., Hamilton.
Steiners's Monuments.....	321 College St., Toronto.
Stubbs & Gibson.....	Morrisburg and Winchester.
Strathroy Granite & Marble Co. Ltd.....	Strathroy.
Sudbury Memorial Works.....	453 Annley St., Sudbury.
Taub Monuments.....	497 Bathurst St., Toronto.
Telephone City Memorial Works.....	59 Colborne St., Brantford.
Terrell, Walter.....	356 Hopewell Ave., Toronto.
Thomas, Geo., & Son.....	Industrial St., Leaside.
Thomson Monument Co. Ltd., The.....	862 Dupont St., Toronto.
Trenton Marble & Granite Works.....	Cor. Front and Ford Sts., Trenton.
Twin City Monument Co.....	King St. E., Kitchener.
Wardell Monumental Works.....	2096 Dundas St. W., Toronto.
Widdicombe, B.....	5 Bond St., St. Catharines.
Wideman, L. C., & Son.....	Stouffville.
Wilcox Granite Co.....	Plains Road, Hamilton.
Williamson, W. A., & Sons.....	William St., Gananoque.
Williscroft, B. A.....	868 Third Ave. E., Owen Sound.
<b>MANITOBA—</b>	
Allen & Grants.....	405 Youville St., St. Boniface.
Brunet, Joseph O.....	26 Lyndale Drive, Norwood.
Brooke, J. H., & Sons.....	266 Main St., Winnipeg.
Campbell Bros.....	90 Hespeler Ave., Winnipeg.
Fort Rouge Monumental Works.....	465 Giertrude Ave., Winnipeg.
Gauthier, Joseph.....	5544 Des Meurons St., St. Boniface.
Guinn & Simpson Co. Ltd.....	52 Tupper St. N., Portage la Prairie.
MacIntyre, A. L.....	361 Bannatyne Ave., Winnipeg.
Memorial Marble & Tile Co. Ltd.....	1180 Wall St., Winnipeg.
Neepawa Marble & Granite Works.....	Neepawa.
Peirson, C. H.....	201 Sixth St., Brandon.
Somerville & Co.....	1417 Rosser Ave., Brandon.
Wheeldon & Sons.....	1055 Main St., Winnipeg.
<b>SASKATCHEWAN—</b>	
Best Monumental Co.....	721 Caribou St. W., Moose Jaw.
Modern Monumental Shop.....	10th Ave. and Halifax St., Regina.
Molaro Marble & Stone Works.....	404 Ontario Ave., Saskatoon.
Moose Jaw Marble & Granite Works Ltd.....	706 Athabasca St. E., Moose Jaw.
Regina Monumental Co.....	2537 Railway St., Regina.
Saskatchewan Marble & Construction Co. Ltd.....	140 Sixth St. E., Prince Albert.
Saskatoon Granite & Marble Works Ltd.....	137 Ave. A North, Saskatoon.
Western Granite, Marble & Stone Co. Ltd.....	714 Second Ave. North, Saskatoon.
Yorkton Monumental Works.....	20 Agricultural Ave., Yorkton.
Young, Alex., Ltd.....	Searsh St. and Fourth Ave., Regina.
<b>ALBERTA—</b>	
Alberta Granite, Marble & Stone Co. Ltd.....	10702-101st St., Edmonton.
Hart, Albert J.....	1821 Second St. E., Calgary.
Lethbridge Monumental & Tile Works.....	325 Eighth St. S., Lethbridge.
McDonald Granite Co. Ltd.....	2313 Second St. E., Calgary.
North West Granite & Marble Co.....	8537-109th St., Edmonton.
<b>BRITISH COLUMBIA—</b>	
Allan, A. S., & Co. Ltd.....	880 Beach Ave., Vancouver.
Art Monument Co. Ltd.....	602 Kingsway, Vancouver.
Bertram Marble and Granite Works.....	4880 Fraser Ave., Vancouver.
Burnaby Monumental Works.....	2655 Patterson Ave., Burnaby.
Continental Marble Co. Ltd.....	1002 Georgia St. E., Vancouver.
Forster Monumental Works.....	5528 Fraser St., Vancouver.
Kingsway Monumental Works.....	3070 Kingsway St., Vancouver.
McDonald, J. A. & C. H., Ltd.....	1571 Main St., Vancouver.
Millins, C. E. J.....	Pine St. and Comox Id., Nanaimo.
Mortimer, J., & Son.....	George Rd. and Government St., Victoria.
Patterson & Chandler.....	5498 Fraser St., Vancouver.
Stewart Monumental Works Ltd.....	1401 May St., Victoria.
Westaway Monumental Works.....	143 Columbia St. E., New Westminster.
Wiley Monument Works.....	4695 Fraser Ave., Vancouver.



CHAPTER FIFTEEN

THE MISCELLANEOUS NON-METALLIC MINERAL PRODUCTS INDUSTRY

Statistics for this industry cover the operations of those factories which manufactured articles from non-metallic minerals but which, because of the nature of their products, could not be allotted to any of the special industries in this group as reviewed in separate chapters.

During 1937 there were 47 plants in this miscellaneous industry of which 9 made gypsum products, 8 made Pintsch oil gas for lighting railway cars, 8 made foundry facings, partings, core oils and refractory cements; 4 made asphalt emulsion, 3 made insulation materials from peat moss, 2 made graphite and carbon electrodes, 2 made briquettes from coal and the following lines were made, each in one plant—enamel frit, lime from imported stone, mica plate, ground fillers from non-metallic rock, imitation brick siding, wax crayons, tailors' wax chalk, toilet seats and battery boxes, roofing cements, abrasive pads, and diamond saw teeth.

The 47 plants operating in this industry during 1937 valued at \$7,835,144, an increase of 43 per cent over the \$5,469,411 reported for 1936. They had a capital investment in Canada of \$8,951,098 and afforded employment to a monthly average of 1,051 people who received \$1,286,676 in salaries and wages. Their expenditure for processing materials totalled \$2,752,716 and their fuel and power bill amounted to \$420,739.

Of the 47 plants, 17 in Ontario had an output worth \$4,044,371; 14 in Quebec had \$2,217,235; 3 in Manitoba had \$463,214; 4 in British Columbia had \$309,584 and 3 in Alberta had \$104,608. The balance of \$696,132 was produced by 2 firms in each of Nova Scotia, New Brunswick and Saskatchewan.

Table 277.—Distribution of Plants, by Provinces and Principal Groups, 1937

Provinces	Gypsum products	Carbon electrodes	Foundry facings and supplies	Mica products	Asphalt emulsions	Pintsch Gas	Miscellaneous	Total
Nova Scotia.....	1						1	2
New Brunswick.....	1					1		2
Quebec.....	1	1	2	1	3		5	14
Ontario.....	2	1	6		1	2	5	17
Manitoba.....	2						1	3
Saskatchewan.....							1	1
Alberta.....	1						1	2
British Columbia.....	1				1	1	1	4
<b>Canada.....</b>	<b>9</b>	<b>2</b>	<b>8</b>	<b>1</b>	<b>5</b>	<b>8</b>	<b>14</b>	<b>47</b>

Table 278.—Principal Statistics, 1922-1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works	Net value of production
		\$		\$	\$	\$	\$	\$
1922.....	15	1,406,379	997	251,084	39,575	461,707	1,186,151	684,869
1923.....	27	1,830,006	2,154	500,932	60,941	804,359	2,216,501	1,351,201
1924.....	22	1,108,129	1,133	428,127	45,543	562,170	1,363,251	755,538
1925.....	22	2,161,704	718	518,437	85,622	680,238	2,068,865	1,333,005
1926.....	20	2,528,488	930	696,906	120,860	910,079	2,530,836	1,488,997
1927.....	20	6,767,534	965	774,643	418,751	1,583,667	4,124,510	2,122,092
1928.....	17	8,331,500	995	1,117,773	315,887	1,790,404	4,799,640	2,693,349
1929.....	23	9,747,157	982	1,224,582	262,094	2,035,905	6,000,097	3,702,098
1930.....	24	11,107,039	784	925,140	262,890	1,730,577	4,174,602	2,217,195
1931.....	31	8,427,102	582	715,468	219,061	1,203,543	3,727,158	2,305,634
1932.....	31	7,561,645	531	531,444	161,407	872,048	2,793,709	1,726,254
1933.....	33	7,296,330	416	426,585	153,826	597,258	2,728,572	1,677,488
1934.....	33	7,034,696	481	494,486	179,721	1,202,520	3,874,347	2,491,806
1935.....	35	7,456,803	639	690,428	184,930	1,485,435	4,237,500	2,567,135
1936.....	38	7,934,204	862	876,184	311,529	2,006,984	5,469,441	3,150,828
1937.....	47	8,951,098	1,051	1,286,676	420,739	2,752,716	7,835,144	4,061,089
% change 1937 from 1936.....	+23.7	+12.8	+21.9	+31.9	+35.0	+37.2	+43.3	+48.0

Table 279.—Principal Statistics, by Provinces, 1936 and 1937

Years	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity at works	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
<b>1936</b>							
Quebec.....	12	3,771,963	233	249,049	107,508	559,287	1,416,690
Ontario.....	16	2,749,876	501	578,244	170,445	1,063,750	2,996,331
British Columbia.....	3	280,642	25	46,305	4,005	92,480	219,403
Other provinces (x).....	7	1,131,723	103	102,586	28,671	291,467	837,017
<b>Canada.....</b>	<b>38</b>	<b>7,931,204</b>	<b>862</b>	<b>976,184</b>	<b>311,529</b>	<b>2,006,981</b>	<b>5,469,441</b>
<b>1937</b>							
Quebec.....	14	3,853,115	283	357,313	131,972	867,940	2,217,235
Ontario.....	17	2,936,158	559	693,092	210,446	1,306,816	4,044,371
Manitoba.....	3	575,212	43	50,569	10,429	72,027	463,214
Alberta.....	3	190,973	21	21,538	3,045	47,365	104,608
British Columbia.....	4	269,861	48	69,745	14,104	138,387	309,584
Other provinces (x).....	6	1,125,779	97	94,419	49,843	320,181	696,132
<b>Canada.....</b>	<b>47</b>	<b>8,951,098</b>	<b>1,051</b>	<b>1,286,676</b>	<b>429,739</b>	<b>2,752,716</b>	<b>7,835,144</b>

(x) For 1936 includes data for 1 firm in New Brunswick and 2 in each of Nova Scotia, Manitoba and Alberta. For 1937 includes data for 2 firms in each of Nova Scotia, New Brunswick and Saskatchewan.

Table 280.—Size of Establishments According to Production, Number of Employees, Capital Employed, 1937

	Number of plants	Capital employed	Average number of employees	Gross selling value of products at works
		\$		\$
<b>Production—</b>				
Under \$10,000.....	5	76,019	9	29,374
\$ 10,001 to \$ 25,000.....	8	188,776	48	125,705
\$ 25,001 to \$ 50,000.....	7	398,195	37	221,412
\$ 50,001 to \$100,000.....	10	957,528	143	652,847
\$100,001 to \$500,000.....	13	2,725,512	282	2,378,388
Over \$500,000.....	4	4,605,068	532	4,427,418
<b>Total.....</b>	<b>47</b>	<b>8,951,098</b>	<b>1,051</b>	<b>7,835,144</b>
<b>Employees—</b>				
1 to 3.....	8	233,922	18	96,353
4 to 10.....	17	819,759	108	747,387
11 to 25.....	13	1,600,055	210	1,447,783
26 to 50.....	6	2,083,084	212	1,683,435
Over 50.....	3	4,214,278	503	3,860,186
<b>Total.....</b>	<b>47</b>	<b>8,951,098</b>	<b>1,051</b>	<b>7,835,144</b>
<b>Capital Employed—</b>				
Under \$25,000.....	9	119,845	32	82,027
\$ 25,001 to \$100,000.....	23	1,282,289	239	1,295,948
\$100,001 to \$500,000.....	11	2,819,651	233	2,485,233
Over \$500,000.....	4	4,720,313	547	3,960,936
<b>Total.....</b>	<b>47</b>	<b>8,951,098</b>	<b>1,051</b>	<b>7,835,144</b>

Table 281.—Capital Employed, by Classes and by Provinces, 1936 and 1937

Provinces	Present value of land, buildings, fixtures and machinery	Inventory value of materials on hand, stocks in process, and finished products	Operating capital (cash, bills and accounts receivable, prepaid expenses, etc.)	Total
	\$	\$	\$	\$
1936				
Quebec.....	2,747,510	737,201	287,252	3,771,963
Ontario.....	1,569,671	625,669	554,536	2,749,876
British Columbia.....	126,618	79,264	74,760	280,642
Other provinces.....	796,063	159,975	175,685	1,131,723
<b>Canada.....</b>	<b>5,239,862</b>	<b>1,602,109</b>	<b>1,092,233</b>	<b>7,934,204</b>
1937				
Quebec.....	2,607,049	864,487	381,579	3,853,115
Ontario.....	1,529,689	761,593	644,876	2,936,158
Manitoba.....	398,210	90,249	85,753	575,212
Alberta.....	152,003	21,353	17,617	190,973
British Columbia.....	161,992	50,080	57,789	269,861
Other provinces.....	857,474	60,840	207,465	1,125,779
<b>Canada.....</b>	<b>5,707,417</b>	<b>1,848,602</b>	<b>1,385,079</b>	<b>8,951,098</b>

Table 282.—Employees, Salaries and Wages, by Provinces, 1936 and 1937

Provinces	Average number of employees				Total	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
1936								
Quebec.....	38	9	168	18	233	86,281	162,768	249,049
Ontario.....	64	18	414	5	501	152,259	425,985	578,244
British Columbia.....	3		22		25	5,490	40,815	46,305
Other provinces.....	16	1	86		103	33,557	69,029	102,586
<b>Canada.....</b>	<b>121</b>	<b>28</b>	<b>690</b>	<b>23</b>	<b>862</b>	<b>277,587</b>	<b>698,597</b>	<b>976,184</b>
1937								
Quebec.....	48	10	202	23	283	112,400	244,853	357,253
Ontario.....	66	15	474	4	559	160,420	532,672	693,092
Manitoba.....	6	1	36		43	16,736	33,633	50,369
Alberta.....	5		16		21	9,424	12,114	21,538
British Columbia.....	5		43		48	10,044	59,701	69,745
Other provinces.....	24	1	72		97	19,984	74,435	94,419
<b>Canada.....</b>	<b>154</b>	<b>27</b>	<b>843</b>	<b>27</b>	<b>1,051</b>	<b>329,068</b>	<b>957,608</b>	<b>1,286,676</b>

Table 283.—Wage-earners, by Months, 1936 and 1937

(On the 15th of each month)

Months	1936			1937		
	Male	Female	Total	Male	Female	Total
January.....	628	22	650	745	25	770
February.....	610	20	630	731	30	761
March.....	637	23	660	778	34	812
April.....	647	21	668	800	39	839
May.....	717	22	739	833	39	872
June.....	728	20	748	857	41	898
July.....	771	22	793	855	16	871
August.....	721	25	746	888	24	912
September.....	724	24	748	926	22	948
October.....	750	29	779	917	33	950
November.....	756	27	783	953	32	985
December.....	729	29	758	825	23	848
<b>Average.....</b>	<b>690</b>	<b>23</b>	<b>713</b>	<b>843</b>	<b>27</b>	<b>870</b>

Table 284.—Regular Hours Worked per Week, by Wage-earners, 1936 and 1937  
(Overtime not included)

Regular hours worked per week	Per cent of wage-earners		Regular hours worked per week	Per cent of wage-earners	
	1936	1937		1936	1937
40 hours or less.....	30.7	4.4	51-53 hours.....	1.3	0.9
41-43 hours.....	9.7	35.4	54 hours.....	2.1	1.3
44 hours.....	14.1	8.8	55 hours.....	1.6	0.6
45-47 hours.....	1.4	2.0	56-59 hours.....	4.1	6.2
48 hours.....	15.7	25.7	60 hours and over.....	8.0	8.7
49-50 hours.....	11.3	6.0			

Table 285.—Fuel and Electricity Used, 1936 and 1937

Kinds	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Coal—anthracite.....	short ton	70	745	734	5,104
Coal—bituminous—Canadian.....	short ton	2,043	11,015	3,937	22,152
Imported.....	short ton	6,853	41,444	7,772	47,525
Coal—lignite.....	short ton	653	2,422	28,661	29,610
Coke.....	short ton	149	1,322	1,200	14,696
Gasoline.....	Imp. gal.	1,042	303	2,480	534
Kerosene.....	Imp. gal.	225	45	46	13
Fuel oil.....	Imp. gal.	571,571	31,412	593,891	41,967
Wood.....	Wood	4	12	8	47
Gas—manufactured.....	M cu. ft.	103,287	10,410	103,975	10,357
natural.....	M cu. ft.	6,804	2,060	6,928	2,206
Electricity.....	K.W.H.	80,025,779	210,339	98,117,891	246,468
<b>Total.....</b>	x x x		<b>311,529</b>		<b>420,739</b>
Electricity generated for own use.....	K.W.H.	251,200		302,076	

Table 286.—Power Equipment, 1936 and 1937

	1936		1937	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and steam turbines.....	4	60	5	1,195
Gasoline, gas and oil engines.....	7	171	6	170
Total primary power.....	11	251	11	1,365
Electric motors run by purchased power.....	721	9,705	701	10,055
<b>Total.....</b>	<b>732</b>	<b>9,956</b>	<b>712</b>	<b>11,420</b>
Electric motors run by power generated in plant.....	10	60	43	660
Stationary boilers.....	17	1,505	25	2,465

Table 287.—Power Equipment, Subdivided between Ordinarily in Use and In Reserve or Idle, 1937

Description	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines.....	2	785	3	410
Gasoline, gas and oil engines.....	6	170		
Total primary power.....	8	955	3	410
Electric motors run by purchased power.....	742	9,755	19	300
<b>Total.....</b>	<b>750</b>	<b>10,710</b>	<b>22</b>	<b>710</b>
Electric motors run by power generated in plant.....	43	660		
Stationary boilers.....	23	2,355	2	110

Table 288.—Materials Used, 1936 and 1937

Materials	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
Gypsum products group—			\$		\$
Gypsum, crude.....	short ton	17,057	70,011	18,568	79,122
Gypsum, calcined (plaster of Paris).....	short ton	72,233	359,755	82,811	436,723
Paper.....	short ton	3,952	184,223	5,001	245,330
Starch and paste.....	short ton	162	25,934	188	31,070
Hair.....	short ton	85	14,380	96	20,339
Retarder.....	short ton	165	10,718	182	13,295
Sawdust or shavings.....	short ton	402	3,747	211	2,441
Containers, etc.....	x x x		80,785		92,606
All other materials.....	x x x		49,246		81,642
<b>Total</b> .....	x x x		<b>798,799</b>		<b>1,002,568</b>
Miscellaneous group—					
Asphalt.....	Imp. gal.	1,279,371	104,814	2,339,201	169,002
Coal, anthracite.....	short ton	8,341	79,485	10,979	104,564
Coal, bituminous.....	short ton	13,155	67,761	12,954	64,230
Coke, petroleum.....	short ton	31,664	313,360	24,453	364,964
Coke, other.....	short ton			17,848	109,283
Coal and coke screenings.....	short ton			10,777	70,000
Scrap carbon and electrode butts.....	short ton	2,190	31,776	6,187	91,169
Graphite.....	short ton	156	6,746	157	7,120
Linseed oil.....	Imp. gal.	35,516	23,916	41,728	30,463
Mica.....	pound	16,227	7,790	42,068	16,675
Oil for making oil gas.....	Imp. gal.			642,789	55,398
Pitch.....	short ton	5,963	96,707	8,463	140,318
Tar.....	Imp. gal.	114,161	7,194	170,065	11,044
Other materials.....	x x x		432,256		481,120
Containers and packing material.....	x x x		36,380		34,798
<b>Total</b> .....	x x x		<b>1,208,185</b>		<b>1,750,148</b>
<b>Grand Total</b> .....	x x x		<b>2,006,984</b>		<b>2,752,716</b>

Table 289.—Products Made, 1936 and 1937

Products	Unit of measure	1936		1937	
		Quantity	Cost at works	Quantity	Cost at works
Gypsum products group—			\$		\$
Gypsum wallboard.....	sq. ft.	42,863,567	996,308	58,319,517	1,372,476
Gypsum hard wall plasters.....	short ton	57,138	804,973	63,786	877,840
All other products (1).....	x x x		169,601		275,191
<b>Total</b> .....	x x x		<b>1,970,882</b>		<b>2,525,507</b>
Miscellaneous group—					
Asphalt emulsion.....	Imp. gal.	2,281,748	258,973	3,085,267	342,361
Foundry facings and partings.....	x x x		68,977		85,098
Core oil.....	Imp. gal.	67,943	40,205	91,302	63,183
Core compound.....	short ton	558	19,198	553	24,943
Refractory cements.....	x x x		46,455		52,110
Oil gas (Pintsch gas).....	M cu. ft.		(1)	43,788	431,932
Peat moss, boards and pads.....	x x x		54,165		83,582
All other products (2).....	x x x		3,010,526		4,226,428
<b>Total</b> .....	x x x		<b>3,498,559</b>		<b>5,369,637</b>
<b>Grand Total</b> .....	x x x		<b>5,469,441</b>		<b>7,835,144</b>

(1) Includes gypsum tile, gypsum blocks, etc.

(2) Includes carbon electrodes, enamel frit, graphite electrodes, colouring oxides, crayons, tailors' chalk, abrasive pads, mica plates and tubes, etc.

(a) Included in the coke and gas industry in 1936.

**Primary Production—The Gypsum Mining and Quarrying Industry.**—Production of gypsum in Canada during 1937 totalled 1,047,187 short tons valued at \$1,540,483 as compared with 833,822 short tons at \$1,278,971 in 1936. The tonnage shipped or used in 1937 was the greatest since 1930 and its value was the largest recorded since 1931. Output in 1937 included 51,147 tons of lump or mine run; 902,217 tons of crushed; 916 tons of fine ground and 92,907 tons of calcine. The average value per ton of lump gypsum, including anhydrite, was \$1.30 in 1937; crushed grades averaged \$1.07 per ton; fine ground \$6.24 and calcined material \$5.45.

Increases in the value of shipments as compared with 1936 were realized in Nova Scotia, New Brunswick, Ontario, Manitoba and British Columbia, the five gypsum producing provinces; corresponding increases in the tonnage of gypsum sold were recorded for each of these provinces with the exception of New Brunswick, where producers reported a relatively small decrease in the quantity of the mineral sold or consumed. Nova Scotia is the greatest producer of gypsum in Canada with the output in 1937 totalling 926,796 tons or 88.5 per cent of the entire Canadian output.

In 1937 the number of firms reporting production numbered 9 and the gypsum quarries and mines in operation totalled 13. Some of the Canadian gypsum mining companies confine their operations in the Dominion to the production and shipment of crude gypsum or anhydrite, while others, in addition to marketing various grades of crude gypsum, produce a calcine for sale or for consumption in their own gypsum products plants.

Capital employed by gypsum producing firms, reported as active, totalled \$6,902,222 in 1937; employees aggregated 602; salaries and wages paid amounted to \$595,396 and the total value of fuel, purchased electricity and process supplies consumed was recorded at \$263,077.

Gypsum is exported from Canada almost entirely in the crude form; during 1937 exports totalled 841,191 short tons valued at \$960,711 as compared with 650,377 tons and \$756,010 in 1936; of the 1937 exports, 735,125 short tons worth \$851,518 went to the United States and 103,602 short tons valued at \$106,443 to the United Kingdom.

**Table 290.—Principal Statistics of the Gypsum Mining and Quarrying Industry, 1936 and 1937**

	1936	1937
Number of firms.....	9	8
Capital employed..... \$	8,954,664	6,902,222
Number of employees—On salaries.....	84	61
On wages.....	450	541
<b>Total.....</b>	<b>514</b>	<b>602</b>
Salaries and wages—Salaries..... \$	88,786	110,372
Wages..... \$	351,511	485,024
<b>Total..... \$</b>	<b>440,297</b>	<b>595,396</b>
Cost of fuel and electricity at works..... \$	140,678	156,115
Selling value of products at works..... \$	1,278,971	1,540,483

**Table 291.—Production in Canada, Imports and Exports of Gypsum, 1936 and 1937**

	1936		1937	
	Quantity	Value	Quantity	Value
Shipments by grades—	Tons	\$	Tons	\$
Crude (1)—Lump or mine run.....	47,628	58,954	51,147	66,237
Crushed.....	709,326	794,002	902,217	961,776
Fine ground.....	738	4,108	916	5,716
Calcined gypsum (2).....	76,130	421,907	92,907	506,754
<b>Total.....</b>	<b>833,822</b>	<b>1,278,971</b>	<b>1,047,187</b>	<b>1,540,483</b>
Shipments by provinces—				
Nova Scotia.....	729,019	808,294	926,796	978,288
New Brunswick.....	38,470	123,560	36,906	131,727
Ontario.....	40,191	182,783	53,780	233,895
Manitoba.....	12,064	87,076	13,941	88,095
British Columbia.....	14,078	77,258	15,764	108,478
<b>Total.....</b>	<b>833,822</b>	<b>1,278,971</b>	<b>1,047,187</b>	<b>1,540,483</b>
Total gypsum mined and quarried (1).....	841,116		1,151,064	
Total gypsum calcined (2).....	95,655		119,677	
Imports—				
Gypsum, crude (sulphate of lime).....	4	150	56	610
Gypsum, ground, not calcined.....	340	9,548	333	11,940
Plaster of Paris or gypsum, calcined, and prepared wall plaster.....	813	19,661	1,380	28,092
<b>Total.....</b>	<b>1,157</b>	<b>29,359</b>	<b>1,769</b>	<b>40,642</b>
Exports—				
Gypsum or plaster, crude.....	650,377	756,010	*841,191	960,711
Plaster of Paris, ground, and prepared wall plaster.....	752	19,280	1,234	29,552
<b>Total.....</b>	<b>651,129</b>	<b>775,290</b>	<b>842,425</b>	<b>990,263</b>

(1) Includes some anhydrite quarried in Nova Scotia.

(2) Does not include gypsum calcined in manufacturing plants located in Montreal and Calgary.

\* 735,125 tons at \$851,518 to United States and 103,602 tons at \$106,443 to United Kingdom.

**The Mica Mining Industry.**—Production of new mica in Canada during 1937 totalled 945 short tons valued at \$133,731 compared with 801 short tons at \$74,556 in the preceding year. The tonnage shipped in 1937 was the largest since 1934 and its value the greatest since 1927. Of the 945 short tons comprising the 1937 output, 667 short tons valued at \$10,468 represented scrap and ground mica, 53 tons at \$12,090 rough cobbled grades, 102 short tons at \$66,852 knife-trimmed grades, 87 short tons at \$11,826 thumb-trimmed mica, and 36 tons of splittings valued at \$32,495.

**Table 292.—Principal Statistics of the Mica Mining Industry, 1936 and 1937**

	1936	1937		
		Quebec	Ontario	Canada*
Number of firms.....	22	28	6	34
Capital employed..... \$	221,800	116,265	34,304	150,569
Number of employees—On salary.....	3	8	1	9
On wages.....	98	187	3	190
<b>Total.....</b>	<b>101</b>	<b>195</b>	<b>4</b>	<b>199</b>
Salaries and wages—Salaries..... \$	3,565	5,591	2,175	7,766
Wages.....	40,985	88,176	1,605	89,781
<b>Total..... \$</b>	<b>44,550</b>	<b>93,767</b>	<b>3,780</b>	<b>97,547</b>
Selling value of products (gross)..... \$	74,556	124,594	9,137	133,731
Cost of fuel and electricity.....	1,351	3,768		3,768
Cost of process supplies used.....	3,473	13,728	50	13,778
Selling value of products (net)..... \$	69,732	107,098	9,087	116,185

\* Does not include data for one operator in British Columbia for which statistics are not available.

**Table 293.—Production of Mica in Canada, by Provinces, Imports and Exports, 1936 and 1937**

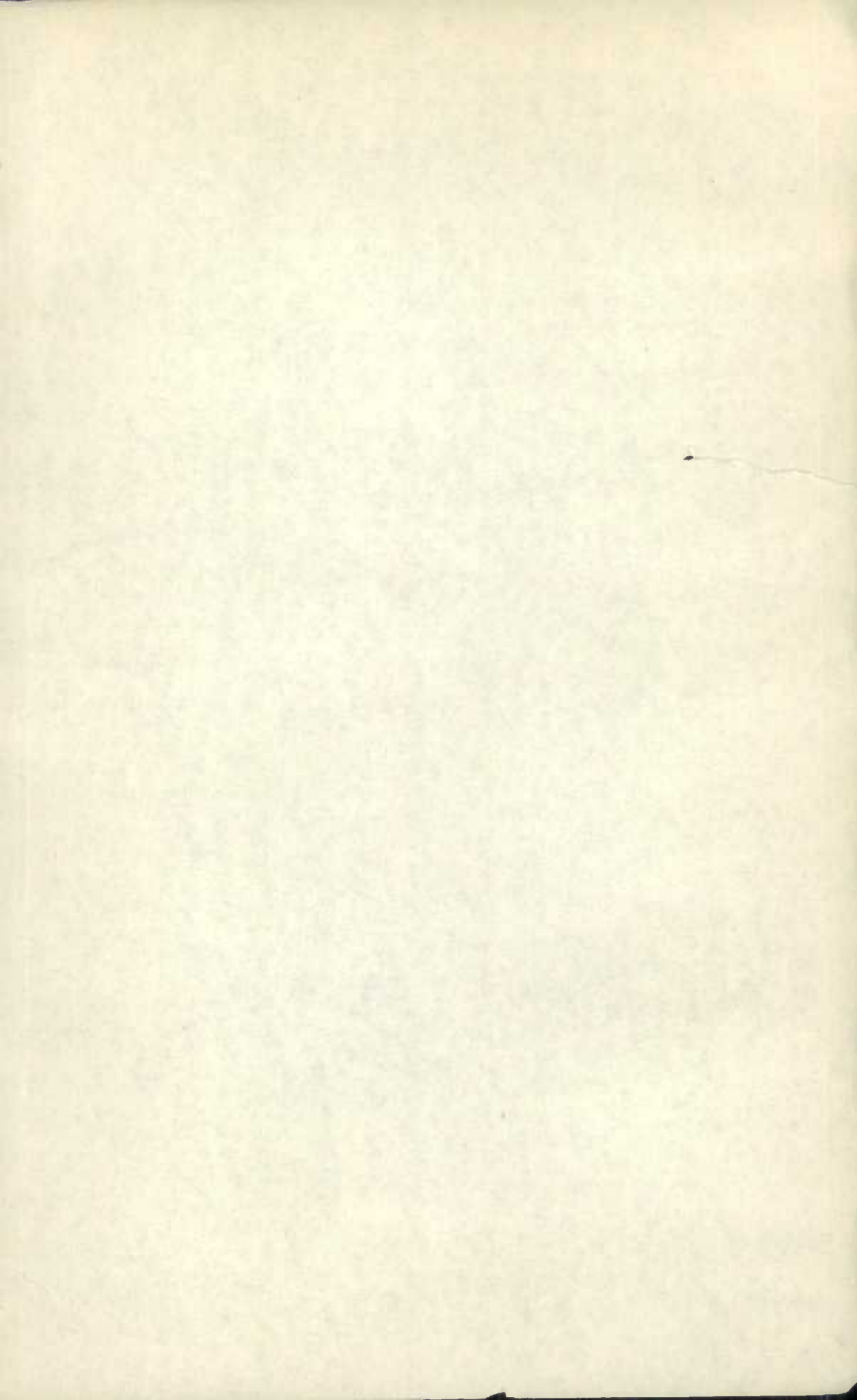
	1936		1937	
	Pounds	Value	Pounds	Value
		\$		\$
<b>Production (Sales)—</b>				
Quebec.....	544,214	63,123	1,092,105	124,594
Ontario.....	1,057,343	11,433	798,271	9,137
British Columbia.....			(a)	(a)
<b>Total.....</b>	<b>1,601,557</b>	<b>74,556</b>	<b>1,890,376</b>	<b>133,731</b>
<b>Imports—</b>				
Mica and manufactures of, n.o.p.—				
From—United Kingdom.....		15,491		9,298
United States.....		45,790		52,654
British India.....		12,412		21,165
Germany.....		3,761		408
Other countries.....		368		71
<b>Total.....</b>		<b>77,822</b>		<b>83,596</b>
Chalk, china, Cornwall or cliff stone and mica schist.....		32,253		55,558
<b>Exports—</b>				
Mica, rough cobbled, knife-trimmed and thumb-trimmed—				
To United Kingdom.....	103,200	62,350	127,700	77,332
United States.....	61,200	7,659	113,500	19,675
Other countries.....	3,900	1,465	13,200	1,897
Mica, scrap and waste—				
To United States.....	2,473,600	14,152	2,443,300	13,042
Mica splittings—				
To United Kingdom.....	5,100	1,415		
United States.....	21,800	8,916	131,600	56,970
Other countries.....			1,000	444
Mica plate and manufactures of (micanite).....		1,343		2,410
<b>Total.....</b>		<b>87,300</b>		<b>121,720</b>

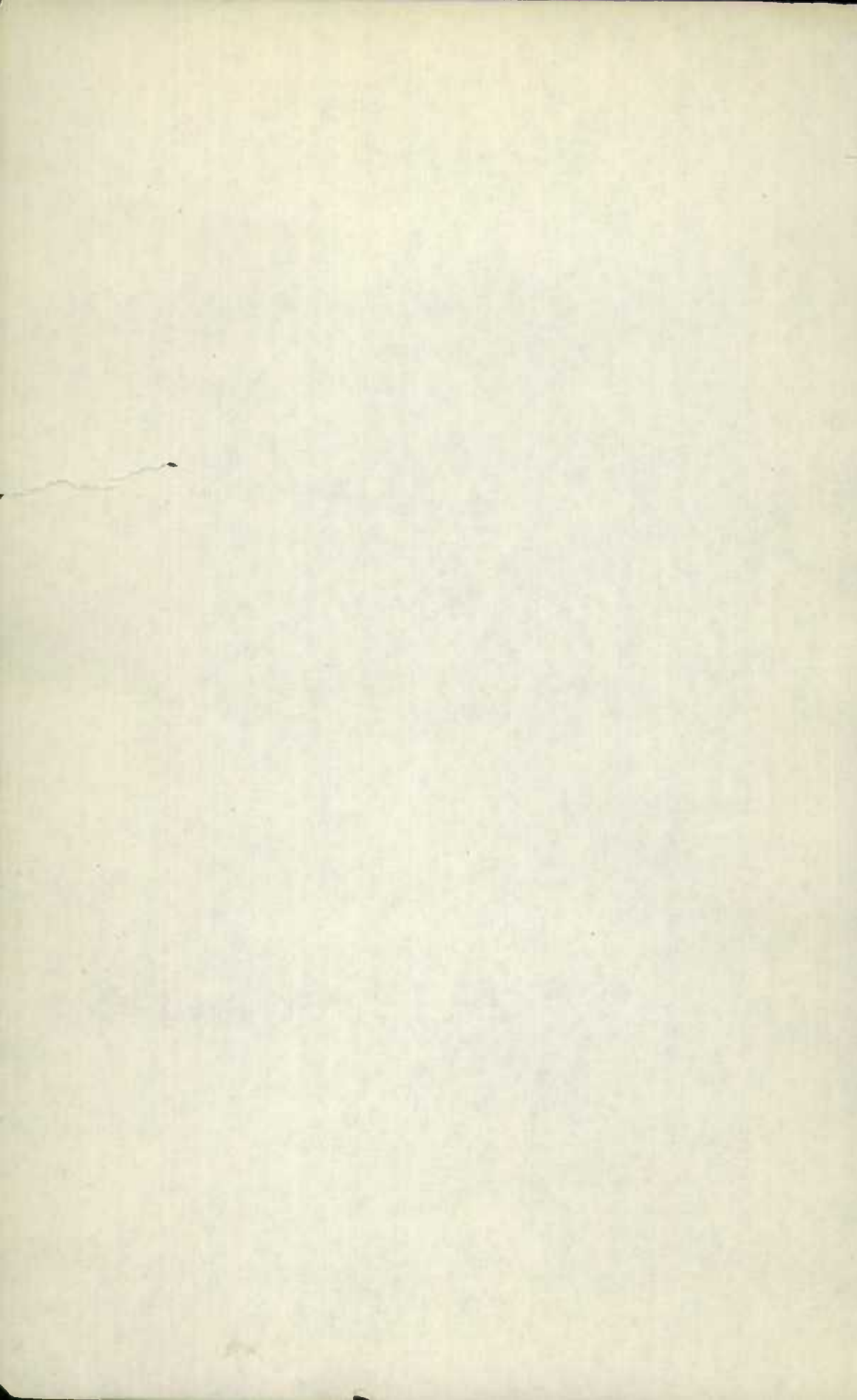
(a) 70 tons of fine flake muscovite were reported by the Department of Mines and Resources as being shipped in 1937, but no official statistics are available.

## List of Firms in the Miscellaneous Non-Metallic Mineral Products Industry in Canada, 1937

Name of Firm	Location of Plant	Principal Products
Aluminum Co. of Can. Ltd.	Arvida, Que.	Carbon electrodes, Soderberg paste.
Anderson, Geo., & Co. of Canada Ltd.	4211 St. Ambrose St., Montreal, Que.	Diamond saw teeth.
Bitumen Products Corp.	3590 St. Patrick St., Montreal, Que.	Asphalt emulsion.
Canada Crayon Co. Ltd.	Lindsay, Ont.	Chalk and wax crayons.
Canadian Battery & Bonalite Co.	1587 McDougall Ave., Windsor, Ont.	Toilet seats, battery boxes, truck parts.
Canadian Bitumuls Co. Ltd.	Marion Ave., Montreal, Que., 13 Industrial, Leaside, Ont., Patrick St., N. Vancouver, B.C.	Asphalt emulsion.
Canadian Botfield Refractories Co. Ltd.	171 Eastern Ave., Toronto, Ont.	Refractory cements.
Canadian Foundry Supplies & Equipment Ltd.	4295 Richelieu St., Montreal, Que., 37 Niagara St., Toronto, Ont.	Foundry facings and partings, core oils and compounds, refractory cements.
Canadian Gypsum Co. Ltd. (H.O. 1221 Bay St., Toronto, Ont.)	Hillsborough, N.B., Hagersville Ont.	Gypsum wall board, tile and wall plaster.
Colas Roads Ltd.	Ville St. Pierre, Que.	Asphalt emulsions.
C-R Company Ltd.	Lynmour, B.C.	Asphalt.
Dibble Coal Co. Ltd.	398 Eastern Ave., Toronto, Ont.	Coal and coke briquettes.
Dominion Briquettes & Chemicals Ltd.	Taylorton, Sask.	Cresote, coal briquettes.
Dominion Steel & Coal Corp. Ltd.	Sydney, N.S.	Lime from imported stone.
Electro Metallurgical Co. of Canada Ltd.	Welland, Ont.	Carbon electrodes, graphite electrodes, graphite powder.
Ferro Enamelling Co. of Can. Ltd.	629 Wellington St., Ottawa, Ont.	Porcelain enamel, frit, colour oxides.
Gypsum, Lime & Alabastine, Canada, Ltd. (H.O., Paris, Ont.)	Montreal, Que., Caledonia, Ont., Winnipeg, Man., E. Calgary, Alta., New Westminster, B.C.	Gypsum wallboard, tile blocks, wall plaster, rockwool, etc.
Hamilton Facing Mill Co. Ltd.	Hess St. N., Hamilton, Ont.	Foundry facings and partings, core compounds, paint graphite, etc.
Insulated Building Materials Ltd.	101 Johnson St., Sarnia, Ont.	Imitation brick siding.
Insulation Ltd.	Isle Verte, Que.	Peat moss.
Mica Co. of Can. Ltd.	2 Lois St., Hull, Que.	Mica plate and tubes, etc.
Milloy, M.	5578 Hadley St., Montreal.	Wax chalk.
Morval Products Co. Ltd.	378 King St. E., Hamilton.	Abrasive pads, etc.
Mosstex Ltd.	10728 402nd Ave., Edmonton, Alta.	Insulating materials (peat moss).
Peterson Core Oil & Mfg. Co. of Canada Ltd.	35 Dunbar Ave., Hamilton, Ont.	Core oil.
Pintsch Compressing Co. Inc. (H.O.—New Haven, Conn., U.S.A.)	McAdam, N.B., Montreal, Que., North Bay, Ont., Toronto, Ont., Winnipeg, Man., Moose Jaw, Sask., Edmonton, Alta., Vancouver, B.C.	Oil gas.
Quigley Co. of Can. Ltd.	191-20th Ave., LaSalle, Que.	Refractory cements and protective coatings.
Stevens, Frederic B., of Canada Ltd.	1262 McDougall St., Windsor, Ont.	Foundry facings, core oil, buffing compositions.
Thivierge, E.	5930-1st Ave., Rosemount, Montreal, Que.	Roofing cement.
Western Gypsum Products Ltd.	Winnipeg, Man.	Gypsum wallboard and tile, hard-wall plaster, stucco, insulation.
Western Peat Co. Ltd.	Lulu Island, B.C.	Peat moss, sphagnum pads.
Wilkinson Foundry Facing & Supply Co. Ltd.	81 Florence St., Toronto, Ont.	Foundry facings and partings, core oils and compounds, etc.
Windsor Plaster Co. Ltd.	Windsor, N.S.	Hardwall plaster.
Pulverized Products Ltd.	4820 Fourth Ave., Rosemount, Que.	Filters from non-metallic rock.







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Text and tables showing for Canada, and for each of the coal-producing provinces, historical and current data on output, tonnage lost, disposition of coal from the mines, domestic and foreign shipments, exports and imports by ports, consumption of coal, prices, employment, salaries and wages paid, power equipment, capital investment, etc.

#### *ANNUAL BULLETINS—*

**Metals—**The Gold Mining Industry in Canada, which includes Alluvial Gold Mining, Auriferous Quartz Mining, Copper-Gold-Silver Mining, and tables showing Canadian and world production of Gold.—The Silver Mining Industry in Canada, which includes Silver-Cobalt-Arsenic Mining, Silver-Lead-Zinc Mining, and tables showing Canadian and world production of Arsenic, Cobalt, Lead, Silver and Zinc.—The Nickel-Copper Mining, Smelting and Refining Industry, which includes Canadian and world production of Nickel.—The Canadian and World Production of Copper.—Metals of the Platinum Group.—The Production of Miscellaneous Metals, including Antimony, Beryl, Bismuth, Cadmium, Chromite, Lithium, Manganese, Mercury, Molybdenite, Radium, Selenium, Tin, Titanium, Tungsten.—The Non-Ferrous Smelting and Refining Industry.

**Non-Metals.—**Abrasives—Asbestos—Coal—Feldspar—Gypsum—Iron Oxides—Mica—Natural Gas—Petroleum—Quartz—Salt—Talc and Soapstone—Miscellaneous Non-Metallic Minerals, including Actinolite, Barytes, Bituminous Sands, Fluorspar, Graphite, Magnesite, Bog Manganese, Mineral Waters, Phosphate, Silica Brick, Sodium Carbonate, Sodium Sulphate, Sulphur (Pyrites).

**Structural Materials.—**Cement—Clay and Clay Products—Lime—Sand and Gravel—Stone.

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