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

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MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA

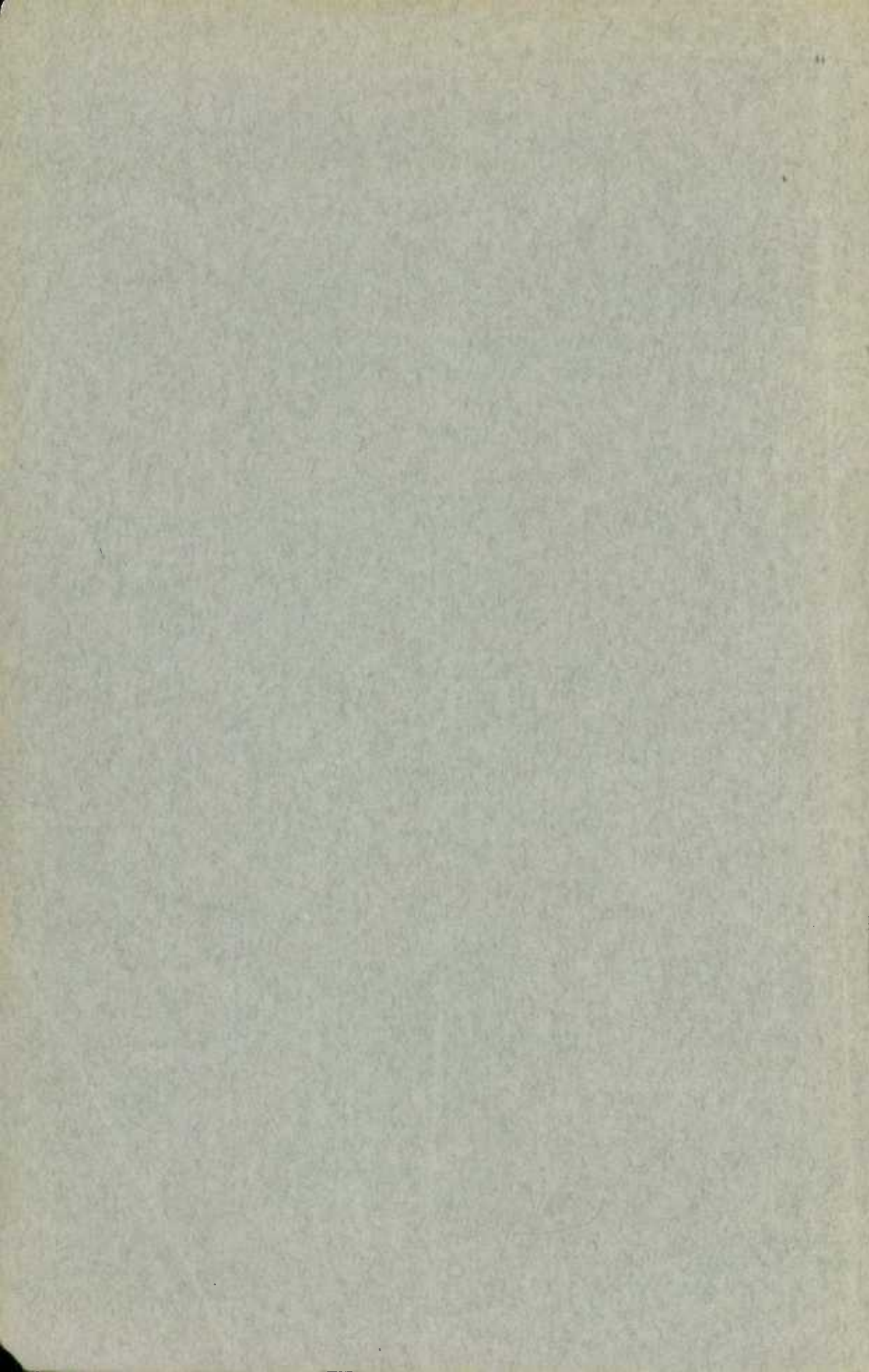
1940 and 1941

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



OTTAWA
EDMOND CLOUTIER
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1944

Price, 50 cents



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NOTES ON STATISTICS OF PRODUCTION

In the collection of production data, the Dominion Bureau of Statistics makes 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 Vermicelli; 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; Woodenware; Lumber; Planing Mills; Sash and Door Factories; Hardwood Flooring; Coffins and Caskets; Trees and Shoe Findings; Handles; Spools and Wood Turning; Boat building.
- (5) **Iron and Steel and Their Products**, including—Primary Iron and Steel (Pig Iron, Ferro-Alloys, Steel and Rolled Products); Iron Castings; Heating and Cooking Apparatus; Boilers, Tanks and Platework; 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 Work; Machine Shops.
- (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; Stone Products; Artificial Abrasives and Abrasive Products; Gypsum Products; Miscellaneous Non-Metallic Mineral Products.
- (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) Plastics 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 Furnishing; 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 fifteen 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) Gypsum products; (15) 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 operations 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 were rented the concerns were instructed to estimate the values of 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 last work-day of each month. The average for the year in a single establishment was calculated by

EXPLANATORY NOTES—Concluded

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.

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 the 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.—Owing to censorship regulations, the details of imports and exports are not available for publication until after the war.

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.

Statistics given herein give details for the years 1940 and 1941 and bring up to date, in printed form, the yearly records which were started in 1919.

The importance of this group of industries is indicated by the gross production value in 1941 of \$324,289,898 and the average employment of 28,829 workers. The increase in production over 1940 amounted to 27 per cent.

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 9) and of products (Table 10) provide 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.

Owing to printing restrictions the lists of operators in the various industries have been omitted from this report. This information may be obtained by writing direct to the Bureau.

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. Losee, B.Sc., Chief of the Branch.

S. A. CUDMORE,
Dominion Statistician

DOMINION BUREAU OF STATISTICS,
OTTAWA, SEPTEMBER 30, 1943.

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MANUFACTURES OF THE NON-METALLIC MINERALS IN CANADA, 1941

CHAPTER ONE

GENERAL REVIEW

Production in 1941 by the manufacturing industries in Canada which used non-metallic minerals as their principal materials amounted to \$324,289,898 at factory prices, an increase of 26.9 per cent over the corresponding 1940 value of \$255,624,328.

In 1941 the number of operating factories in this group was 772, distributed by provinces as follows:—Ontario, 385; Quebec, 171; British Columbia, 53; Alberta, 43; Manitoba, 41; Saskatchewan, 30; New Brunswick, 22; Nova Scotia, 25; Prince Edward Island, 1; and the Northwest Territories, 1. Capital employed rose to \$325,032,038 in 1941 from \$309,092,155 in 1940; the average number of employees increased to 28,829 from 25,415 and payments for salaries and wages amounted to \$42,376,214, as against \$34,897,235.

Each industry in this group showed a substantial increase in output value in 1941 as compared with 1940. The percentage gains were as follows:—Abrasive products, 66.7; asbestos products, 70.5; cement products, 14.4; cement, 10.1; coke and gas, 8.8; glass, 46.3; gypsum products, 11.9; lime, 22.3; petroleum products, 28.1; products from imported clays, 19.2; products from domestic clays, 19.3; salt, 15.9; sand-lime brick, 34.8; stone products, 8.1; and the miscellaneous industry, 52.7.

Imports into Canada of non-metallic minerals and their products totalled \$189,953,788 in 1941 as compared with \$161,198,044 in 1940. Exports were appraised at \$46,781,716 during 1941 as against \$36,861,428 in the previous year.

MANUFACTURES OF NON-METALLIC MINERALS

Table 1.—Principal Statistics for the Manufactures of the Non-Metallic Minerals, by Industries, 1937-1941

Year	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 ARRASIVES AND ABRASIVE PRODUCTS								
1937	16	7,151,369	1,289	1,995,589	1,222,529	4,351,854	14,174,351	8,599,968
1938	16	6,754,670	1,141	1,602,771	830,813	2,657,393	9,579,705	6,091,499
1939	16	7,179,801	1,099	1,630,889	777,654	2,971,056	9,275,143	5,529,433
1940	16	8,120,898	1,439	2,261,495	1,208,439	4,693,981	15,324,693	9,422,273
1941	15	9,833,950	2,075	3,530,751	1,821,337	7,650,413	25,556,330	16,084,580
ASBESTOS PRODUCTS								
1937	13	2,003,659	451	464,882	91,252	812,639	1,896,677	992,786
1938	13	1,701,302	403	433,964	107,436	614,207	1,531,118	809,475
1939	14	2,003,516	415	497,324	99,711	724,424	1,783,993	959,858
1940	13	2,317,225	476	591,982	120,352	1,150,499	2,556,278	1,279,427
1941	11	3,459,185	772	959,268	169,358	1,866,795	4,359,217	2,323,004
CEMENT PRODUCTS								
1937	109	3,095,565	840	804,024	57,511	1,566,870	3,299,331	1,674,950
1938	118	3,476,396	834	796,902	97,023	1,452,169	3,200,419	1,651,227
1939	122	3,731,652	951	961,143	115,038	1,608,179	3,716,692	1,903,475
1940	128	4,362,184	1,145	1,300,985	170,084	2,407,552	5,303,560	2,725,924
1941	122	4,148,160	1,222	1,407,120	198,471	2,511,415	6,070,677	3,360,791
COKE AND GAS								
1937	33	91,911,250	4,027	5,709,569	2,906,092	17,217,957	41,702,929	21,578,880
1938	33	93,337,572	3,930	5,799,502	2,842,320	16,693,643	39,721,530	20,275,567
1939	33	94,925,764	4,063	5,851,614	3,430,393	16,726,445	39,029,570	18,872,732
1940	31	96,748,283	4,095	6,376,465	3,968,934	21,037,329	46,673,660	21,667,397
1941	31	97,894,349	4,290	6,532,103	4,561,590	23,907,878	60,818,720	22,349,252
GLASS								
1937	77	15,750,801	3,799	4,289,031	1,030,993	5,768,738	14,437,250	7,637,519
1938	77	15,333,941	3,429	3,987,826	898,006	4,648,477	12,649,957	7,103,474
1939	78	16,534,181	3,372	3,948,603	888,316	4,559,732	12,529,050	7,081,002
1940	73	17,388,129	3,685	4,454,815	901,409	5,217,347	14,417,663	8,208,907
1941	80	19,719,438	4,649	6,062,919	1,356,749	7,687,353	21,109,323	12,056,221
GYPSUM PRODUCTS								
1937	9	2,756,165	243	232,244	109,770	1,002,568	2,525,507	1,522,939
1938	9	2,823,184	245	289,583	118,936	1,123,950	2,715,894	1,473,008
1939	9	3,660,233	307	321,596	129,889	1,240,763	3,174,137	1,803,485
1940	9	3,151,533	302	425,023	157,299	1,630,819	4,110,795	2,322,677
1941	9	3,431,883	374	464,776	191,685	1,941,052	4,601,093	2,468,356
PETROLEUM PRODUCTS								
1937	57	64,280,260	5,137	8,246,843	4,450,005	80,401,880	98,454,014	13,602,129
1938	59	62,620,908	4,675	7,873,040	4,683,217	76,410,516	97,003,347	15,900,614
1939	53	66,381,189	4,766	7,890,247	4,578,699	74,465,600	104,578,517	35,534,218
1940	49	76,581,743	5,156	8,808,537	5,751,495	94,800,121	122,212,800	21,600,784
1941	49	82,475,508	5,406	10,326,846	7,268,690	125,982,237	159,635,495	23,384,558
PRODUCTS FROM IMPORTED CLAYS								
1937	19	4,457,100	1,218	1,265,913	286,499	971,497	3,599,181	2,341,185
1938	21	4,690,300	1,163	1,194,509	229,517	795,956	3,048,888	2,023,414
1939	20	4,661,821	1,097	1,150,712	237,718	792,767	2,971,979	1,941,494
1940	21	5,359,190	1,381	1,573,810	302,773	1,084,669	4,503,791	3,116,319
1941	22	5,469,188	1,640	2,017,532	388,106	1,331,608	5,371,853	3,652,139
SAND-LIME BRICK								
1937	5	547,601	81	72,219	20,095	63,285	197,921	114,541
1938	6	542,648	68	62,425	16,004	52,876	153,763	84,883
1939	5	382,745	74	73,885	19,587	60,187	212,223	126,440
1940	5	385,930	103	116,442	28,039	116,983	319,909	173,987
1941	6	454,035	139	164,802	39,019	142,042	431,359	249,081
STONE PRODUCTS								
1937	229	5,213,431	1,159	1,352,566	122,209	1,142,885	3,371,242	2,106,148
1938	234	5,172,014	1,201	1,560,931	138,259	1,371,650	3,902,774	2,492,865
1939	190	4,991,636	1,257	1,458,780	139,438	1,259,547	3,805,089	2,407,004
1940	182	4,697,903	1,061	1,236,825	133,417	1,188,112	3,592,623	2,276,094
1941	174	4,297,208	987	1,296,534	137,842	1,244,013	3,883,496	2,501,641
MISCELLANEOUS NON-METALLIC MINERAL PRODUCTS								
1937	38	6,194,933	808	1,054,432	310,969	1,750,148	5,309,637	3,138,750
1938	48	7,296,524	945	1,175,122	309,257	2,146,288	5,880,096	3,424,551
1939	49	7,979,460	975	1,232,707	333,982	2,217,698	6,465,545	3,913,865
1940	57	12,360,765	1,355	1,719,862	403,779	3,129,764	8,740,561	5,207,018
1941	44	15,179,925	1,386	2,094,624	672,132	5,607,150	13,352,187	7,072,905
Total for all Industries Listed Above								
1937	665	203,962,239	19,052	25,387,312	10,607,921	115,050,321	188,968,040	63,309,795
1938	634	203,719,359	18,094	21,776,575	10,270,788	107,786,125	179,387,191	61,330,578
1939	584	212,422,998	18,376	25,917,509	10,750,425	106,722,398	187,542,838	70,070,015
1940	589	231,473,781	20,258	28,866,011	13,242,929	136,512,576	227,758,333	78,000,837
1941	563	246,352,935	22,910	31,917,275	16,805,879	179,872,856	292,180,750	95,502,015

Table 1.—Principal Statistics for the Manufactures of the Non-Metallic Minerals by Industries, 1937-1941—Concluded

Year	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 \$
PRODUCTS FROM DOMESTIC CLAYS								
1937	143	20,427,232	2,287	2,094,792	1,032,755	103,568	4,516,859	3,380,536
1938	152	18,068,542	2,242	2,110,233	939,190	114,659	4,536,084	3,482,235
1939	149	17,940,742	2,165	2,161,688	998,683	108,815	5,151,236	4,043,738
1940	143	17,146,443	2,557	2,675,251	1,282,593	139,635	6,344,547	4,922,319
1941	142	17,377,553	2,881	3,227,785	1,561,326	207,247	7,575,336	5,806,763
CEMENT								
1937	9	54,150,672	1,083	1,373,444	1,904,418	540,915	9,005,867	6,650,534
1938	8	52,299,046	1,034	1,306,331	1,764,427	529,157	8,241,350	5,947,766
1939	8	51,251,358	1,001	1,297,542	1,705,981	532,059	8,511,211	6,273,172
1940	8	50,870,276	1,052	1,515,766	2,347,730	1,943,491	13,006,643	8,715,422
1941	8	51,108,294	1,235	1,860,931	2,897,383	2,146,825	14,323,372	9,279,164
LIME								
1937	57	4,931,831	872	781,274	871,131	167,827	3,824,917	2,786,959
1938	53	4,881,214	867	795,068	826,230	113,759	3,542,652	2,602,663
1939	59	4,802,983	937	849,468	944,502	107,510	4,003,514	2,951,502
1940	55	5,107,739	902	1,003,671	1,424,047	177,499	5,194,555	3,593,009
1941	50	4,633,946	1,105	1,321,571	2,008,142	188,387	6,357,941	4,161,412
SALT								
1937	9	4,001,568	543	653,136	183,117	75,947	1,799,465	1,540,401
1938	9	4,270,799	562	786,720	278,711	30,369	1,912,913	1,603,833
1939	9	4,447,204	547	741,736	276,267	*508,511	2,957,982	2,173,204
1940	9	4,993,914	586	836,506	321,589	539,179	3,322,250	2,461,482
1941	9	5,559,307	668	1,018,652	450,291	725,675	3,852,499	2,676,533
Total for Industries Listed Above								
1937	218	83,511,303	4,785	4,902,646	3,991,421	888,257	19,237,108	14,357,430
1938	222	79,519,601	4,705	4,998,352	3,808,558	787,914	18,232,999	13,636,497
1939	225	78,442,287	4,650	5,050,434	3,925,433	1,256,894	20,623,943	15,441,616
1940	215	77,618,372	5,157	6,031,194	5,375,959	2,799,801	27,867,995	19,692,232
1941	209	78,679,160	5,889	7,428,939	8,917,142	3,268,144	32,109,148	21,923,872
GRAND TOTAL OF MANUFACTURES OF NON-METALLIC MINERALS								
1937	823	287,471,512	23,837	30,389,958	14,599,345	115,938,578	208,205,148	77,667,225
1938	856	283,268,960	22,799	29,774,937	14,079,316	108,574,069	197,620,490	74,967,075
1939	869	280,865,285	23,026	30,067,931	14,675,858	107,979,292	208,166,781	85,511,631
1940	804	309,092,155	25,415	34,897,235	48,618,829	139,312,380	255,624,328	97,691,069
1941	772	325,032,038	28,829	42,376,214	23,723,021	183,140,990	324,289,898	117,425,887

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

Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, advertising, etc.

* Value of containers was not included prior to 1939.

MANUFACTURES OF NON-METALLIC MINERALS

Table 2.—Principal Statistics for the Manufactures of the Non-Metallic Minerals, by Provinces, 1937-1941

Year	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								
1937	27	15,930,703	1,257	1,543,096	929,813	10,140,832	12,783,915	1,713,270
1938	28	15,614,141	1,078	1,441,954	732,455	7,806,069	11,093,931	2,465,407
1939	27	15,806,344	1,108	1,512,652	735,957	7,811,740	12,619,544	4,071,847
1940	25	18,038,524	1,199	1,798,855	1,189,592	13,353,816	18,161,541	3,618,133
1941	26	19,511,411	1,342	2,082,178	1,392,469	18,046,298	21,486,918	2,047,851
NEW BRUNSWICK								
1937	24	1,584,338	264	229,170	87,390	243,148	947,490	616,952
1938	20	1,478,693	231	205,839	78,476	251,515	936,147	606,156
1939	20	1,859,339	244	220,338	86,658	288,507	1,096,175	721,010
1940	23	1,512,692	261	254,455	104,113	352,013	1,349,507	893,381
1941	22	1,584,203	261	272,736	129,618	393,608	1,405,695	882,469
QUEBEC								
1937	172	82,836,298	5,900	7,530,714	4,599,848	34,336,797	61,309,188	22,372,543
1938	175	84,647,581	5,589	7,283,265	4,767,056	32,811,271	58,883,761	21,305,434
1939	172	85,557,172	5,706	7,230,590	4,885,677	31,638,660	62,400,851	25,876,514
1940	180	89,878,087	6,228	8,263,728	5,941,984	38,290,857	68,151,940	23,949,099
1941	171	93,302,152	7,383	10,417,402	7,835,523	53,072,764	90,549,465	29,641,178
ONTARIO								
1937	435	132,441,820	12,857	16,571,648	7,162,365	47,251,189	94,994,715	40,581,161
1938	452	126,189,638	12,221	16,133,593	6,435,771	42,798,485	80,290,368	37,056,112
1939	412	128,353,668	12,120	16,181,931	6,901,148	42,594,462	89,405,845	39,910,235
1940	401	136,698,624	13,585	19,006,535	8,734,974	57,498,699	116,645,783	50,412,110
1941	385	146,061,501	15,437	23,211,335	11,353,599	76,664,526	151,156,954	63,138,829
MANITOBA								
1937	37	12,790,659	651	675,599	323,649	1,671,818	4,370,924	2,375,457
1938	41	13,880,066	693	723,099	375,397	1,874,314	4,540,339	2,290,628
1939	39	13,764,765	707	751,577	343,096	2,251,126	4,723,051	2,128,829
1940	40	15,259,289	787	867,390	460,276	2,649,733	6,216,524	3,106,515
1941	41	15,618,680	849	1,032,705	595,609	3,314,358	7,098,305	3,188,338
SASKATCHEWAN								
1937	37	6,359,907	608	805,362	396,128	6,058,679	8,029,403	1,574,596
1938	33	5,755,230	537	765,077	474,568	6,839,473	9,917,792	2,603,751
1939	33	6,290,789	589	810,572	495,730	6,818,732	10,590,238	3,275,776
1940	31	6,670,382	618	906,050	609,952	8,238,731	12,373,508	3,524,825
1941	30	7,129,025	615	1,088,557	651,035	9,739,173	15,097,977	4,707,769
ALBERTA								
1937	34	12,061,358	1,056	1,327,645	382,897	6,614,045	10,867,020	3,870,078
1938	45	12,704,229	1,142	1,451,555	513,980	7,018,083	11,973,190	4,441,127
1939	46	16,002,876	1,233	1,608,469	620,098	7,350,835	13,541,250	5,570,317
1940	46	16,987,612	1,418	1,901,650	845,474	8,050,616	15,948,792	7,052,702
1941	43	17,474,085	1,545	2,103,419	901,892	10,223,768	19,213,240	8,087,580
BRITISH COLUMBIA AND NORTHWEST TERRITORIES								
1937	56	23,468,459	1,244	1,706,724	717,255	9,622,070	14,902,493	4,563,168
1938	63	22,999,382	1,308	1,770,545	701,643	9,084,859	13,984,962	4,198,460
1939	60	23,230,352	1,319	1,751,807	607,494	9,225,230	13,789,827	3,957,103
1940	58	24,046,945	1,319	1,898,572	732,514	10,907,915	18,776,733	5,136,304
1941	54	24,350,981	1,397	2,167,882	863,276	11,696,195	18,281,344	5,731,873
CANADA								
1937	823	287,473,542	23,837	39,389,958	14,599,345	115,938,578	298,205,148	77,667,225
1938	856	283,268,960	22,799	29,774,927	14,079,346	108,574,069	197,620,490	74,967,075
1939	809	290,865,285	23,026	30,067,834	14,675,858	107,979,292	208,166,781	85,511,631
1940	804	309,892,155	23,415	34,897,235	18,618,879	139,312,380	255,624,328	97,693,069
1941	772	325,632,038	28,829	42,376,214	23,723,021	183,140,990	324,289,898	117,425,887

Table 3.—Historical Summary of the Manufactures of the Non-Metallic Minerals, 1919 to 1941

Year	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	49,872,624
1920	773	213,773,172	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	230,486,004	21,473	25,414,553	11,280,407	60,671,305	134,693,912	62,742,200
1923	796	235,203,833	24,343	27,494,515	12,460,736	66,630,352	137,567,128	58,476,040
1924	796	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	893	251,028,657	24,354	30,107,628	14,215,606	79,239,842	166,750,416	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	26,683	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	295,139,543	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	62,918,095
1935	787	287,960,329	20,472	24,518,653	11,207,442	85,072,254	162,332,931	60,053,236
1936	803	282,596,535	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	14,599,345	115,988,578	208,205,148	77,667,225
1938	856	283,268,960	22,709	29,774,927	14,079,346	108,574,069	197,620,490	74,967,075
1939	809	290,865,285	23,026	31,067,934	14,675,858	107,979,292	208,166,781	85,511,631
1940	804	309,092,165	25,415	34,897,235	18,618,879	139,312,380	255,624,328	97,693,069
1941	772	325,032,038	28,829	42,376,214	23,723,021	183,140,990	324,289,898	117,425,887

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

Table 4.—Distribution of Plants Engaged in the Manufacture of Non-Metallic Mineral Products, by Industries and by Provinces, 1941

Industry	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada
Abrasive products				2	13					15
Asbestos products		1		6	5					12
Cement products		1	2	30	68	2	4	6	9	122
Cement				2	3	1		1	1	8
Coke and gas		2	1	5	16	2		1	4	31
Glass			1	19	49	4		2	5	80
Gypsum products		1	1	1	2	2		1	1	9
Lime		2	4	16	17	4		4	3	50
Petroleum products		1	1	7	15	4	9	7	4	*49
Products from domestic clays		6	6	26	74	4	5	12	9	142
Products from imported clays				4	17		1			22
Salt		1			6	1		1		9
Sand-lime brick				1	4	1				6
Stone products	1	9	5	40	77	14	9	6	12	173
Miscellaneous		1	1	13	18	2	2	2	5	44
Total	1	25	22	172	384	41	30	43	53	*772

* Total includes one refinery in Northwest Territories.

Table 5.—Capital Employed in the Manufactures of the Non-Metallic Minerals in Canada, by Industries, 1940 and 1941

Industry	Present value of land, 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.	Total
	\$	\$	\$	\$
1940				
Abrasive products.....	3,451,260	2,743,510	1,926,128	8,120,898
Asbestos products.....	956,167	684,783	676,275	2,317,225
Cement products.....	2,347,830	779,362	1,234,983	4,362,184
Cement.....	44,073,448	1,737,339	4,559,489	50,370,276
Coke and gas.....	77,769,804	12,632,907	6,345,572	96,748,283
Glass.....	9,569,835	3,414,398	4,412,806	17,396,129
Gypsum products.....	1,729,301	484,390	937,833	3,151,533
Lime.....	3,875,231	693,396	539,112	5,107,739
Petroleum products.....	36,679,583	37,418,297	2,483,865	76,581,745
Products from domestic clays.....	12,508,144	1,917,755	2,720,524	17,146,443
Products from imported clays.....	2,993,034	997,279	1,368,877	5,359,190
Salt.....	3,638,011	409,635	946,268	4,993,914
Sand-lime brick.....	299,458	39,758	46,714	386,930
Stone products.....	2,861,346	972,642	863,915	4,697,903
Miscellaneous.....	5,946,062	3,198,245	3,216,458	12,360,765
Total*	209,689,511	68,123,725	32,278,919	309,092,155
1941				
Abrasive products.....	3,815,821	3,681,135	2,336,994	9,833,950
Asbestos products.....	1,324,626	949,343	1,185,216	3,459,185
Cement products.....	2,347,202	665,316	1,135,651	4,148,169
Cement.....	42,985,940	2,368,644	5,753,730	51,108,294
Coke and gas.....	78,178,093	12,585,231	7,131,025	97,894,349
Glass.....	10,333,200	4,056,529	5,329,709	19,719,438
Gypsum products.....	1,668,647	526,925	1,236,311	3,431,883
Lime.....	3,434,027	717,770	492,149	4,643,946
Petroleum products.....	37,957,010	40,032,560	4,485,938	82,475,508
Products from domestic clays.....	12,047,696	2,079,735	3,230,122	17,357,553
Products from imported clays.....	2,800,235	1,218,265	1,450,688	5,469,188
Salt.....	3,800,064	527,100	1,232,143	5,559,307
Sand-lime brick.....	348,421	44,592	61,022	454,035
Stone products.....	2,071,552	903,823	721,833	4,297,208
Miscellaneous.....	5,875,598	3,187,193	6,107,234	15,170,025
Total*	209,608,132	73,544,161	41,879,745	325,032,038

* Includes one petroleum refinery in the Northwest Territories.

Table 6.—Employees, Salaries and Wages in the Manufactures of the Non-Metallic Minerals, by Industries, 1940 and 1941

Industry	Average number of employees				Total employees	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
1940								
Abrasive products.....	205	81	1,148	5	1,439	\$ 690,791	\$ 1,570,794	\$ 2,261,495
Asbestos products.....	72	19	341	44	476	188,184	403,798	591,982
Cement products.....	205	25	908	7	1,145	394,312	905,673	1,300,985
Cement.....	79	4	969	.....	1,052	191,548	1,324,218	1,515,766
Coke and gas.....	855	299	2,939	2	4,095	1,812,356	4,564,109	1,376,465
Glass.....	374	137	2,685	489	3,685	973,978	3,480,837	1,511,815
Gypsum products.....	27	3	332	.....	363	60,129	364,894	425,023
Lime.....	67	10	885	.....	962	127,943	875,728	1,003,671
Petroleum products.....	865	161	4,117	13	5,156	2,599,142	6,209,395	8,808,537
Products from domestic clays.....	261	35	2,261	.....	2,557	605,913	2,069,338	2,675,251
Products from imported clays.....	127	53	938	203	1,361	361,970	1,211,640	1,573,610
Salt.....	80	40	436	30	586	299,521	586,985	886,506
Sand-lime brick.....	15	1	87	.....	103	28,677	87,765	116,442
Stone products.....	293	33	729	6	1,061	439,860	796,965	1,236,825
Miscellaneous.....	182	36	1,103	34	1,355	452,277	1,267,585	1,719,862
Total	3,707	937	10,878	893	25,115	9,228,601	25,670,631	34,597,235
1941								
Abrasive products.....	230	107	1,705	33	2,075	\$ 842,368	\$ 2,688,383	\$ 3,530,751
Asbestos products.....	103	29	567	73	772	261,330	727,038	988,368
Cement products.....	213	34	965	10	1,222	456,027	1,030,493	1,486,520
Cement.....	79	8	1,148	.....	1,235	190,771	1,070,100	1,260,871
Coke and gas.....	897	291	3,102	.....	4,299	1,873,179	4,658,024	6,531,203
Glass.....	406	176	3,264	802	4,649	1,237,478	4,825,441	6,062,919
Gypsum products.....	25	4	345	.....	374	66,430	398,346	464,776
Lime.....	76	16	1,013	.....	1,105	150,195	1,170,876	1,321,571
Petroleum products.....	874	190	4,326	16	5,106	2,824,299	7,502,447	10,326,746
Products from domestic clays.....	241	41	2,599	.....	2,881	602,549	2,625,286	3,227,835
Products from imported clays.....	160	62	1,132	296	1,640	408,621	1,608,911	2,017,532
Salt.....	106	42	490	30	668	361,661	566,991	1,018,652
Sand-lime brick.....	16	1	122	.....	139	32,321	132,481	164,802
Stone products.....	269	33	681	4	967	414,830	881,704	1,296,534
Miscellaneous.....	168	42	1,133	43	1,366	467,075	1,627,549	2,094,624
Total	3,863	1,076	22,592	1,298	28,829	10,160,331	32,215,880	42,376,214

Table 7.—Fuel and Electricity Used in the Manufactures of the Non-Metallic Minerals, 1940 and 1941

NOTE.—Figures for coke, fuel oil and manufactured gas include amounts used in producing companies' own works for fuel or for heating stills, ovens and retorts.

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	ton	330,276	2,051,574	311,097	2,115,682
Imported.....	ton	368,038	2,172,803	577,236	3,761,359
Anthracite coal.....	ton	10,433	69,625	6,547	61,698
Lignite coal.....	ton	12,943	45,469	23,329	79,530
Coke.....	ton	175,562	1,277,307	178,520	1,238,992
Gasoline.....	imp. gal.	1,048,768	216,685	1,492,725	350,532
Kerosene.....	imp. gal.	22,980	4,550	51,026	6,506
Fuel oil.....	imp. gal.	72,106,728	3,046,623	81,012,699	3,847,876
Wood.....	cord	96,214	345,813	110,787	419,325
Gas—Manufactured.....	M cu. ft.	30,877,208	4,713,216	33,124,478	6,309,455
Natural.....	M cu. ft.	6,608,441	869,499	5,637,337	630,997
Other fuel.....			233,354		262,220
Electricity purchased.....	k. w. h.	847,858,825	3,572,361	1,136,203,667	4,638,819
Total			18,618,879		23,723,021

Table 8.—Power Equipment Used in the Manufactures of Non-Metallic Minerals, 1940 and 1941

Kind	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1940				
Steam engines and steam turbines.....	772	37,105	153	7,590
Diesel engines.....	35	3,349	2	340
Gasoline, gas and oil engines, other than Diesel.....	249	8,742	28	1,061
Hydraulic turbines or water wheels.....	5	300	1	6
Electric motors run by purchased power.....	10,036	189,331	889	22,710
Total	11,097	238,827	1,073	31,707
Electric motors run by above primary units.....	563	10,387	1	10
Stationary boilers.....	407	68,409	92	19,537
1941				
Steam engines and steam turbines.....	766	40,446	146	7,549
Diesel engines.....	46	3,526	7	90
Gasoline, gas and oil engines, other than Diesel.....	267	8,854	27	1,285
Hydraulic turbines or water wheels.....	1	15	1	6
Electric motors run by purchased power.....	10,786	200,132	879	23,917
Total	11,866	252,973	1,060	32,847
Electric motors run by above primary units.....	620	11,076	7	237
Stationary boilers.....	404	68,199	95	18,962

Table 9.—Alphabetical List of Materials Used in All Industries classified under the Manufactures of Non-Metallic Minerals, 1940 and 1941

Item No.	Material	Industry number (See page 18)	Unit of measure	1940		1941	
				Quantity	Cost at works	Quantity	Cost at works
				\$		\$	
1	Abrasive grains, artificial (fused alumina and silicon carbide)	1	lb.	8,552,727	562,679	13,905,602	1,000,140
2	Abrasive grains, natural (corundum, silica, flint, garnet, etc.)	1	lb.	757,888	44,370	1,068,346	74,401
3	Acid, sulphuric, 66° B \bar{e}	5-11	lb.	89,478,892	734,064	77,010,333	788,321
4	Arsenic	7	ton	125	8,447	359,008	14,133
5	Asbestos cloth, strips and tape	2	lb.	107,518	45,538	159,831	66,468
6	Asbestos, fibre, crude	2	lb.	12,454,956	229,824	25,098,664	446,301
7	Asbestos millboard and lumber	2	.....	112,245	18,672	152,069	28,683
8	Asbestos paper, corrugated and plain	2	lb.	532,115	19,316	779,548	22,037
9	Asbestos yarn	2	lb.	401,313	133,006	449,523	170,136
10	Asphalt	2-17	ton	13,034	233,370	14,423	305,564
11	Bakelite, (except item 17)	6-2-13	.....	.....	50,214	.....	130,594
12	Bauxite and pure alumina	1	ton	100,163	2,369,165	151,815	4,010,127
13	Benzol for blending	11	gal.	1,743,161	274,700	4,753,866	568,575
	Bonding and bushing materials for abrasive wheels—						
14	Clay bonds	1	lb.	1,001,491	29,960	907,607	40,479
15	Elastic mixtures	1	lb.	29,887	11,022	30,928	6,489
16	Silicate (quantity in equivalent solid form)	1	lb.	10,130	362	14,374	623
17	Bakelite and synthetic resins	1-2	lb.	371,042	130,168	215,784	76,936
18	Lead for bushings	1	lb.	53,269	3,035	113,203	6,307
19	Brass and zinc wire	2	.....	48,593	13,140	74,298	23,210
20	Borax	7	ton	2,328,393	77,666	2,959,792	112,794
21	Carbon scrap, and electrodes, scrap	17	ton	8,821	132,332	23,069	356,992
22	Celluloid and other plastics	6	.....	.....	108,477	.....	103,023
23	Cement, Portland	4-15	bri.	625,238	1,262,188	649,089	1,318,355
24	Cinders	4-15	cu. yd.	59,834	46,010	.....	49,639
25	Clay used in gypsum wallboard	8	ton	70	1,106	128	2,341
26	Clay, Canadian, all kinds	4-13-17	.....	.....	26,282	.....	26,805
27	Clay, fire, imported	13-17	ton	34,153	203,744	39,558	279,648
28	Clays, other, imported	11-13	ton	12,416	159,409	9,387	184,562
	Coal (not for fuel)—						
29	For fused alumina	1	ton	326	1,992	345	2,182
30	For silicon carbide	1	ton	4,749	30,961	8,345	60,258
31	Anthracite for foundry facings	17	ton	11,883	122,709	15,041	168,435
32	Lignite for foundry facings	17	ton	86,822	89,427	119,545	123,131
33	Bituminous for foundry facings	17	ton	26,966	159,843	51,981	342,903
	Coal, bituminous for coke and gas making (not for fuel)—						
34	Canadian	5	ton	1,418,671	6,048,615	1,434,215	6,237,832
35	Imported	5	ton	2,702,278	13,316,391	2,887,629	15,839,816
36	Coke for the manufacture of mineral wool	2-16	ton	.....	65,456	.....	80,384
	Coke for gas making (not for fuel)—						
37	Purchased	5	ton	7,334	71,921	7,447	75,197
38	Companies' own make	5	ton	77,984	532,257	84,331	630,176
	Coke (not for fuel)—						
39	For fused alumina	1	ton	5,830	34,466	8,859	55,065
40	For silicon carbide	1	ton	27,202	337,011	32,759	413,273
41	Coke, petroleum	17	ton	52,805	908,552	146,535	2,168,342
42	Compounding materials used in petroleum refineries	11	.....	.....	945,628	.....	1,386,825
43	Cotton cloth, yarn and waste	2	.....	.....	113,761	.....	139,276
44	Cotton cloth for abrasive paper	1	.....	.....	121,226	.....	172,727
45	Cullet	7	ton	8,922	84,885	20,167	159,662
46	Electrodes used in making artificial abrasives	1	ton	1,607	193,715	2,335	286,685
47	Feldspar	1-7-13	ton	3,723	78,588	4,326	94,030
48	Flint	13	ton	.....	.....	.....	.....
49	Fluorspar	7-17	ton	140	6,353	212	8,556
50	Filler's earth and clays	11	lb.	23,828,666	406,185	30,155,750	571,010
51	Glass, bevelled or polished edge plates	6	.....	.....	34,502	.....	33,185
52	Glass, bevelled or polished edge sheets	6	.....	.....	21,841	.....	16,900
53	Glass blanks for cut glass	6	.....	.....	166,708	.....	310,743
54	Glass, figured and cathedral	6	.....	.....	21,879	.....	17,838
55	Glass, plate, for bevelling, silvering, laminating, etc.	6	.....	.....	726,563	.....	1,066,629
56	Glass, sheet, and window, for bevelling, silvering, laminating, etc.	6	.....	.....	369,969	.....	573,462
57	Glass tubing	6	.....	.....	91,097	.....	54,313
58	Glazing materials, n.e.s.	13	.....	.....	35,773	.....	37,742
59	Glue	1-8	lb.	535,552	84,070	.....	146,857
60	Graphite	17	ton	234	15,024	583	41,514
61	Gravel	4-15	cu. yd.	134,801	148,540	112,857	135,523
62	Gypsum, calcined (Plaster of Paris)	8	ton	125,917	660,502	157,488	628,325
63	Gypsum, crude	8	ton	21,611	75,946	30,978	112,158

Table 9.—Alphabetical List of Materials Used in All Industries classified under the Manufactures of Non-Metallic Minerals, 1940 and 1941—Continued

Item No.	Material	Industry number (See page 18)	Unit of measure	1940		1941	
				Quantity	Cost at works	Quantity	Cost at works
				\$		\$	
64	Hair.....	8	ton	111	17,933	122	23,293
65	Hardware for insulators.....	13			238,076		230,375
66	Iron borings for the manufacture of artificial abrasives.....	1	ton	9,427	108,351	13,550	172,713
67	Lead, zinc and copper.....	6					15,842
68	Lenses, rough and semi-finished.....	6			167,548		279,439
69	Limé.....	4-5-7-15	ton	18,561	166,412	22,469	206,750
70	Litharge.....	5-11	lb.	323,510	26,121	274,779	23,983
71	Mica.....	17	lb.	58,116	24,240	54,437	28,845
72	Mineral slag.....	2	ton				
73	Naphtha, absorption gasoline, etc.....	11	Imp. gal.	9,538,212	572,518	10,065,382	643,969
74	Nepheline syenite.....	7	ton	4,233	69,019	5,834	94,091
75	Oil, crude, in its natural state, imported for refining.....	11	Imp. gal.	1,442,354,770	71,517,048	1,680,121,613	95,255,422
76	Oil, crude, in its natural state, from Canadian wells, for refining.....	11	Imp. gal.	293,601,299	13,651,059	342,774,192	17,627,799
77	Oil used for enriching water gas.....	5	Imp. gal.	4,229,239	282,041	5,204,117	329,986
78	Oil, used for making oil gas.....	17	Imp. gal.	624,711	51,462	674,600	58,993
79	Oil, wash and absorbing.....	5	Imp. gal.	220,038	27,743	255,503	30,926
80	Oil, linseed.....	10-17	Imp. gal.	43,698	34,611	84,596	33,708
81	Oil, mineral and other, n.e.s.....	10-17	Imp. gal.	1,127,478	373,390	4,601,482	882,278
82	Oxide, iron.....	5	ton	5,417	42,491	8,574	36,480
83	Paper.....	8	ton	9,056	491,035		864,092
84	Paper, kraft, for abrasive paper.....	1			15,905		82,787
85	Pitch.....	17	ton	18,864	343,679	37,179	706,681
86	Polishing and grinding materials.....	6			50,550		96,043
87	Phenol.....	11		203,150	31,270	470,309	69,308
88	Resin.....	17			7,519		9,639
89	Repair and renewal materials.....	7			926,099		1,003,158
90	Retarder.....	8	ton	267	20,329	286	23,330
91	Rubber and rubber sheets.....	2	lb.	123,263	27,001	186,034	46,026
92	Salt cake.....	7	lb.	287,036	2,966	1,111,335	11,379
93	Salt.....	1	ton	393	4,002	413	4,280
94	Sand (except silica sand).....	4-15	cu. yd.	299,968	348,414	333,987	335,285
95	Sawdust and shavings.....	1-8	ton	8,863	27,294	9,880	33,594
96	Silica sand.....	1-7-13-16-17			727,348		1,062,310
97	Silver nitrate.....	6			28,106		33,995
98	Sodium carbonate (soda ash).....	5-7-11	ton	29,559	746,685	44,157	1,084,869
99	Selenium.....	7	lb.	3,102	5,287	4,211	7,047
100	Sodium hydroxide (caustic soda).....	5-11-17	lb.	7,705,013	211,196	8,766,434	238,908
101	Solder.....	6			3,606		3,606
102	Starch and paste.....	2-8	lb.	891,020	40,294	2,331,955	108,514
103	Steel for reinforcing.....	4			151,186		145,580
104	Steel, other.....	4-11-13			49,171		40,740
105	Stone for cutting and dressing.....	16			616,522		558,942
106	Stone monuments (for lettering only).....	16			99,114		73,799
107	Stone, crushed.....	4	ton	212,209	212,729	219,025	231,714
108	Sulphur.....	11	lb.	122,131	3,110	102,634	2,649
109	Talc.....	13-17	ton	3,756	19,248	4,007	23,155
110	Tallow and grease.....	10	lb.	279,422	22,499	266,470	22,356
111	Tar for making electrodes.....	17	Imp. gal.	172,107	13,414	217,688	18,532
112	Tetraethyl fluid.....	11			4,309,173		3,944,940
113	Tripoli.....	17	ton	83	2,220	95	2,620
114	Water used in coke and gas plants.....	5			20,917		18,836
115	Wax.....	17	lb.		18,774		22,746
116	Process supplies used in domestic clays, cement, lime, and salt industries.....				1,588,630		1,352,016
117	Containers.....	All industries			3,463,850		4,903,681
118	All other materials.....	All industries			4,241,926		7,574,337
Total					139,312,386		183,140,990

Table 10.—Alphabetical List of Products made in All Industries classified under the Manufactures of Non-Metallic Minerals in Canada, 1940 and 1941

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.

The letters "n.e.s." mean "not elsewhere specified".

Item No	Product	Industry number (See key on page 18)	Unit of measure	1940		1941	
				Quantity	Gross selling value at works	Quantity	Gross selling value at works
				\$		\$	
1	Abrasive cloth, coated	1		..	..	..	..
2	Abrasive paper, coated	1		..	..	..	..
3	Abrasive wheels and segments	1		1,838,558		3,713,303	
4	Adhesive tape (1)	1		..	..	..	..
5	Alumina, fused, crude	1	ton	85,336	8,240,815	130,881	13,665,811
6	Ammonia liquor	5		..	..	..	..
7	Ammonium sulphate (1)	5	lb.	70,986,981	952,014	70,783,432	1,036,095
8	Asbestos boiler and pipe covering	2	ft.	2,671,445	250,701	4,122,646	611,431
9	Asbestos brake linings, moulded and woven	2	ft.	4,573,238	883,911	5,870,809	1,371,791
10	Asbestos clutch facings	2	no.	611,529	166,406	716,978	199,846
11	Asbestos gaskets and tape	2	lb.	43,087	23,904	55,638	31,618
12	Asbestos packings of all kinds	2	lb.	422,118	160,484	519,533	224,870
13	Asbestos paper	2	lb.	1,926,257	87,355	4,177,131	130,367
14	Asbestos products, n.e.s., including shingles, yarn, blackboards, dryer felts, etc.	2		..	595,085	..	1,164,827
15	Asphalt, petroleum	11	Imp. gal.	60,581,013	5,232,406	72,814,745	6,173,925
16	Asphalt road emulsions	17	Imp. gal.	3,224,659	418,430	3,644,304	493,920
17	Benzol (motor fuel)	5	Imp. gal.	5,614,458	715,981	6,031,137	723,608
18	Boiler compounds (1)	10	lb.	171,164	12,034	182,038	14,661
19	Boron carbide	1		..	..	..	..
	Brick, clay—						
20	Soft mud process—face	12	M	15,946	323,634	14,288	285,260
21	Soft mud process—common	12	M	40,395	611,750	30,664	455,385
22	Stiff mud process (wirecut)—face	12	M	41,552	903,636	52,419	1,218,632
23	Stiff mud process (wirecut)—common	12	M	52,777	738,416	69,750	1,043,832
24	Dry press—face	12	M	14,932	333,717	15,621	363,908
25	Dry press—common	12	M	24,870	351,335	25,448	386,097
26	Fancy or ornamental, including special shapes, embossed and enamelled brick	12	M	47	2,477	36	2,100
27	Sewer brick	12	M	694	12,222	644	10,279
28	Paving brick	12	M	19	819	120	7,312
29	Brick, cement	4		..	52,610	..	187,874
30	Brick, sand-lime	15	M	17,405	100,423	19,223	230,030
31	Briquesettes, red (1)	17		..	316,200	..	453,691
32	Building blocks of cement, hollow	4-15		..	956,140	..	912,523
33	Building blocks, sand-lime	15		..	..	..	..
34	Carbon brushes (for motors)	17		..	..	..	..
35	Cements, high temperature	1-13-17		..	443,957	..	340,926
36	Cement laundry tubs	4		9,931	68,267	10,977	106,778
37	Cement, Portland	3		..	13,006,643	..	14,323,372
38	Cement products, other, including burial vaults and slabs, ready mixed concrete, etc.	4		..	2,210,098	..	483,834
39	Cement stucco	4		..	8,026	..	9,628
40	Cinder blocks	4-15	M	..	307,293	..	417,087
	Clay—						
41	Bentonite	12-17	ton	2,117	27,160	2,769	29,311
42	Fireclay	12	ton	4,881	30,564	5,431	35,475
43	Kaolin	12	ton	..	..	2	30
44	Coke from gas retorts	5	ton	268,509	2,323,609	280,728	2,362,880
45	Coke from by-product and bee-hive ovens	5	ton	2,559,332	18,974,117	2,680,771	21,808,129
46	Coke breeze from gas retorts	5	ton	21,012	39,601	17,393	40,548
47	Coke breeze from by-product ovens	5	ton	166,541	600,534	166,853	676,466
48	Coke, petroleum	11	ton	68,334	441,590	70,840	493,338
49	Core compounds and core oil	17		..	90,185	..	120,990
50	Crayons, wax and chalk (1)	17		..	..	..	..
51	Electrodes, carbon and graphite	17		..	4,114,812	..	7,031,761
52	Facings and partings, foundry	17		..	110,358	..	177,410
53	Ferrosilicon (1)	1	ton	8,354	100,910	10,489	124,383
54	Fillers, non-metallic, ground (1)	17		..	155,025	..	147,195
	Firebrick and stove-linings from imported clays—						
55	Rigid	13	ton	21,032	534,943	25,766	661,633
56	Plastic	13	ton	3,302	146,904	4,596	193,093
57	Firebrick from domestic clay	12	M	3,167	165,525	3,642	183,897
58	Firebrick, other (also see refractories)	1-17		..	7,884	..	11,290
59	Fireclay blocks and shapes from domestic clay	12		..	85,127	..	190,497
60	Frit, porcelain enamelling	17		..	..	..	..

Table 10.—Alphabetical List of Products made in All Industries classified under the Manufactures of Non-Metallic Minerals in Canada, 1940 and 1941—Continued

Item No.	Product	Industry number (See key on page 18)	Unit of measure	1940		1941	
				Quantity	Gross selling value at works	Quantity	Gross selling value at works
				\$		\$	
Gas made (in coke and gas plants)—							
61	Retort coal gas	5	M cu. ft.	5,453,621		5,662,989	
62	Coke oven gas	5	M cu. ft.	38,496,043		40,143,240	
63	Water gas	5	M cu. ft.	1,870,126		2,498,003	
64	Producer gas	5	M cu. ft.	9,292,731		9,415,890	
65	Propane gas	5	M cu. ft.			8,691	
	Total gas made	5	M cu. ft.	55,112,521		57,728,803	
66	Gas sold (by coke and gas plants)	5	M cu. ft.	15,392,723	14,803,049	16,931,434	15,888,723
67	Gas used in heating ovens or retorts in coke or gas plants	5	M cu. ft.	22,877,703	2,805,974	23,489,119	3,052,823
68	Gas used in associated metallurgical works	5	M cu. ft.	13,185,237	1,629,944	13,352,389	1,636,603
69	Gas otherwise accounted for (by coke and gas plants) but not sold	5	M cu. ft.	2,128,931	101,301	2,335,672	122,761
70	Gas not accounted for (by coke and gas plants)	5	M cu. ft.	1,520,578	1,250,201	1,368,490	856,218
71	Gas, Pintach oil	17			474,068		522,614
72	Gas, still, from petroleum refineries	11	M cu. ft.	8,706,834	2,164,514	9,971,268	3,109,920
73	Gasoline	11	Imp. gal.	779,983,106	71,226,944	857,924,454	90,281,169
74	Glass, bent plate	6			14,146		30,270
75	Glass, bent sheet	6			77,209		65,596
76	Glass, bevelled or polished edge plates	6			204,049		181,393
77	Glass, bevelled or polished edge sheets	6			7,310		40,612
78	Glass, chipped or etched plate	6			7,886		13,358
79	Glass, chipped or etched sheet	6			9,170		22,078
80	Glass, cut (tumblers, fruit bowls)	6			316,907		613,534
81	Glass, leaded (including memorial windows)	6			100,683		101,400
82	Glass, plate mirrors	6			790,708		1,153,979
83	Glass, plate signs	6			3,402		51,584
84	Glass, pressed and blown	7			9,734,651		14,577,033
85	Glass, sheet mirrors	6			243,926		468,508
86	Glass, sheet signs	6			620		833
87	Glass, vials and chemical glassware	6			135,094		187,918
88	Glass products, n.e.s., including non-shatterable glass, framed mirrors, auto windshields, prismatic glassware, store fronts, etc.	6			1,809,160		2,051,291
89	Granite, cut and polished for building purposes	16			159,427		92,899
90	Graphite, artificial	1-17					
91	Grease, lubricating	10-11	lb.	10,511,391	724,633	16,608,438	1,047,127
92	Gypsum products, including blocks, wall-board, wall plasters, tile, acoustical plasters	8			3,649,302		4,601,093
93	Haydite products, all kinds	4			338,016		620,358
94	Insulators, high tension, porcelain	13			1,336,289		1,642,110
95	Kerosene	11	Imp. gal.	25,973,459	2,389,620	26,799,838	2,745,759
96	Lenses, optical	6			712,183		932,057
97	Lime, hydrated (I)	9	ton	92,927	772,707	137,021	1,070,230
98	Lime, quick	9-17	ton	655,323	4,492,600	758,605	5,377,298
99	Limestone, for building	16			448,441		384,265
100	Magnesia, fused	1					
101	Marble chips and dust	16			14,005		22,326
102	Marble, cut and polished for building purposes	16			218,271		148,294
103	Mica products, including flexible mica plate, mica tubes, amber mica, heater plate, etc.	17			76,050		101,250
104	Monuments, lettered only	16			132,775		120,681
105	Monuments, granite, cut and polished	16			1,416,298		1,582,016
106	Monuments and bases, limestone	16			29,861		31,820
107	Monuments, marble, cut and polished	16			167,805		186,269
108	Naphthalene	5	Imp. gal.	55,514	10,823	89,332	23,282
109	Oil, creosote (1)	17			21,717		26,000
110	Oil, fuel and gas	11	Imp. gal.	114,911,807	5,757,887	135,422,680	7,517,184
111	Oils, light (except toluol and xylol), from coke and gas plants	5	Imp. gal.	662,405	65,189	51,882	7,621
112	Oils, lubricating	10-11	Imp. gal.	30,006,720	6,422,534	58,008,499	8,082,750
113	Oils, fuel, residual	11	Imp. gal.	501,093,834	19,481,795	597,070,977	25,924,915
114	Oil, stove	11	Imp. gal.	19,933,578	889,874	23,231,604	1,307,918
115	Oil, diesel (all oil sold under this name)	11	Imp. gal.	62,974,083	3,262,261	79,123,640	4,193,368
116	Paste, Soderberg, for electrodes	17					
117	Petroleum spirits, including engine distillate and V.M. & P. or solvent naphtha	11	Imp. gal.	36,484,400	3,306,163	52,902,219	4,979,157

Table 10.—Alphabetical List of Products made in All Industries classified under the Manufactures of Non-Metallic Minerals in Canada, 1940 and 1941—Concluded

Item No.	Product	Industry number (See key below)	Unit of measure	1940		1941	
				Quantity	Gross selling value at works	Quantity	Gross selling value at works
118	Pipe, drain (sewer, water and culvert), of cement.....	4			\$ 791,371		\$ 781,661
119	Pipe, sewer, of clay, including flue linings, copings, etc.....	12-13			1,354,260		1,700,704
120	Pottery, glazed or unglazed.....	12-13			1,122,937		1,284,356
121	Pulpsstones, artificial.....	1			..		..
122	Refractories, (silicon carbide firesand, etc.) (also see firebrick)	1-13-17	ton	5,841	352,210	7,706	467,382
123	Salt.....	14	ton	464,714	3,322,250	560,845	3,852,499
124	Sanitary earthenware, enamelled.....	13			..		..
125	Silicon carbide, crude.....	1	ton	24,562	3,053,047	32,258	3,661,868
126	Soap, soft and soap chips (1).....	10	lb.		48,107	583,123	52,629
127	Sockets and plugs, porcelain (1).....	13	no.		225,390		44,957
128	Sphagnum and other peat mosses.....	17			331,882	(see mining)	
129	Stone, artificial.....	4			155,500		148,413
130	Stones, sharpening, and files.....	1			116,411		191,757
131	Tar, coal.....	5	Imp. gal.	32,817,895	1,762,324	33,375,297	1,902,394
132	Textolite and cold moulded goods (1).....	13			..		..
133	Tile, drain, from domestic clay.....	12	M	10,550	277,551	12,319	333,364
134	Tile, floor, from imported clay.....	13	sq. ft.	308,312	91,246	378,675	116,404
135	Tile, wall, from imported clay.....	13	sq. ft.	769,525	220,436	882,241	281,697
136	Tile, structural (from domestic clay)— Hollow blocks, including fireproofing and loadbearing tile.....	12	ton	105,073	788,478	117,530	1,063,120
137	Roofing tile.....	12			1,839		750
138	Floor tile (quarries).....	12			13,631		21,349
139	Tiles made in abrasive industry.....	1			..		..
140	Toluol and xylol.....	5	Imp. gal.	1,583,451	555,523	1,869,696	655,746
141	Wax, petroleum, and candles.....	11-17	lb.	6,449,816	346,799	5,356,240	282,282
142	Wool, mineral.....	16			918,317		1,185,324
143	Products reported by only 1 or 2 firms, as indicated by **.....				3,913,658		6,766,133
144	All other products.....	1-2-4-6-8- 10-11-12- 13-15-16- 17			2,665,984		6,393,266
145	Repairs and custom work.....	4-6-16-17			539,184		211,832
	Total				255,624,328		324,289,898

KEY TO NUMBERED INDUSTRIES

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

CHAPTER TWO

THE ARTIFICIAL ABRASIVES AND ABRASIVE PRODUCTS
INDUSTRY

The factory selling value of all products made during 1941 by the manufacturers in Canada of artificial abrasives and artificial abrasive products amounted to \$25,556,330. This value represented a gain of 40 per cent over the total of \$15,324,693 for 1940.

There were 15 firms engaged in manufacturing artificial abrasives and their products during the year, or one less than in 1940, and of these, 13 were located in Ontario and 2 in Quebec.

The average number of employees in the industry was 2,075 and payments in salaries and wages totalled \$3,530,751. Expenditures for manufacturing materials amounted to \$7,650,413 and \$1,821,337 was paid out for fuel and electricity. Capital investment in the industry totalled \$9,833,950 of which \$3,815,821 was the value placed on land, buildings and equipment.

Artificial abrasives were made by 4 plants in Ontario and 2 in Quebec. The output of these 6 works was valued at \$20,663,533 and included 130,881 tons of crude fused alumina at \$13,665,811 32,258 tons of crude silicon carbide at \$3,661,868 and other products and by-products, such as ferrosilicon, firesand, refractory brick and cements, calcium boride, crude boron carbide and boron carbide shapes. One of these works also made abrasive wheels and sharpening stones. An average of 1,548 people were employed and salaries and wages totalled \$2,565,464.

Nine other plants were occupied chiefly in making abrasive products, such as wheels, paper, pulpstones and sharpening stones; 7 made abrasive wheels and segments, 4 made sharpening stones and files, and 2 made abrasive cloth and paper. The value of all products made in these establishments was \$4,892,797. The number of employees was 527 and payments for salaries and wages amounted to \$965,287.

Table 11.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930	13	6,281,425	799	1,156,641	815,901	2,213,310	6,450,351
1931	14	6,070,652	691	982,820	640,815	1,709,983	4,857,914
1932	14	5,805,031	386	519,013	480,601	449,624	1,489,555
1933	14	5,170,927	572	705,729	481,152	1,338,879	3,550,456
1934	14	5,109,861	861	1,091,992	697,028	2,317,552	7,414,853
1935	15	5,281,916	976	1,314,272	782,553	2,684,406	8,643,930
1936	15	6,241,502	1,149	1,528,194	967,236	3,164,252	10,631,533
1937	16	7,151,369	1,289	1,995,589	1,222,529	4,351,854	14,174,351
1938	16	6,754,670	1,141	1,602,771	830,813	2,557,393	9,579,705
1939	16	7,179,801	1,099	1,630,889	777,654	2,971,056	9,275,143
1940	16	8,120,898	1,439	2,261,495	1,208,439	4,093,981	15,324,693
1941	15	9,833,950	2,075	3,530,751	1,821,337	7,650,413	25,556,330

Table 12.—Capital Employed, 1940 and 1941

	1940	1941
	\$	\$
Present value of land, buildings, fixtures, machinery, tools and other equipment	3,451,260	3,815,821
Inventory value of raw materials, stocks in process, fuel and miscellaneous supplies on hand	2,743,510	2,709,553
Inventory value of finished products on hand	1,926,128	971,582
Cash, bills and accounts receivable, prepaid expenses, etc.		2,336,994
Total	8,120,898	9,833,950

Table 13.—Employees, Salaries and Wages, 1940 and 1941

	1940	1941
Salaried employees—Male	no. 205	230
Female	no. 81	107
Total	no. 286	337
Wage-earners—Male	no. 1,148	1,705
Female	no. 5	33
Total	1,153	1,738
Total employees	no. 1,439	2,075
Salaries	\$ 600,791	842,368
Wages	\$ 1,570,704	2,688,383
Total salaries and wages	\$ 2,261,495	3,530,751

Table 14.—Wage-Earners, by Months, 1940 and 1941 (Number on pay-roll on the last work day of each month)

Month	1940		1941	
	1940	1941	1940	1941
January	1,067	1,330	1,185	1,855
February	1,048	1,375	1,239	1,928
March	1,020	1,460	1,242	1,950
April	1,022	1,599	1,253	1,966
May	1,062	1,664	1,289	1,994
June	1,101	1,727	1,315	2,008
July			1,185	1,855
August			1,239	1,928
September			1,242	1,950
October			1,253	1,966
November			1,289	1,994
December			1,315	2,008
Average			1,153	1,738

Table 15.—Hours Worked per Week by Wage-Earners, 1940 and 1941 (In one week of month of highest employment; overtime included)

Hours worked per week	1940		1941		Hours worked per week	1940		1941	
	Male	Female	Male	Female		Male	Female	Male	Female
30 hours or less.....	22	1	36	1	51-54 hours.....	65	2	84	
31-43 hours.....	81	1	327	7	55 hours.....	9		119	9
44 hours.....	12	2	9		56-64 hours.....	189		361	
45-47 hours.....	71		47		65 hours or over.....	19		61	
48 hours.....	743	4	849		Total.....	1,283	10	2,006	48
49-50 hours.....	72		213	31	Total wages paid during selected week.....	\$ 33,090	159	65,817	753

Table 16.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	ton	200	1,434	291	2,408
Imported.....	ton	6,208	43,367	7,030	50,126
Anthracite coal (for fuel only).....	ton	288	2,953	298	3,498
Coke (for fuel only).....	ton	189	1,835	258	2,908
Gasoline.....	Imp. gal.	1,005	277	2,025	562
Kerosene.....	Imp. gal.	255	45	268	42
Fuel oil.....	Imp. gal.	310,567	20,634	390,703	29,221
Gas—Manufactured.....	M cu. ft.	321	286	609	528
Natural.....	M cu. ft.	4,356	3,208	2,857	2,147
Other fuel.....	\$		10		2
Electricity purchased.....	K.W.H.	420,835,422	1,134,390	587,006,441	1,729,895
Total.....	\$		1,208,439		1,821,337

Table 17.—Power Equipment, 1940 and 1941

	1940		1941	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Gasoline engines—ordinarily in use.....	1	27	1	26
Electric motors run by purchased power—Ordinarily in use.....	938	7,997	1,181	9,169
In reserve or idle.....	89	841	69	618
Electric motors run by re-generated power—Ordinarily in use.....	79	273		
Stationary boilers—Ordinarily in use.....	13	741	11	670
In reserve or idle.....	1	100	1	100

Table 18.—Materials Used in Manufacturing, 1940 and 1941

Material	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bauxite and pure alumina.....	ton	100,163	2,369,165	151,815	4,010,127
Coal (not for fuel)—					
For fused alumina.....	ton	326	1,992	345	2,182
For silicon carbide.....	ton	4,749	30,961	8,345	60,258
For graphite.....	ton	54	388		
Coke (not for fuel)—					
For fused alumina.....	ton	5,830	34,466	8,859	55,065
For silicon carbide.....	ton	27,202	337,011	32,759	413,275
For graphite.....	ton	407	4,734		
Electrodes.....	ton	1,607	193,715	2,335	286,685
Feldspar.....	ton	68	2,056	84	3,127
Iron borings.....	ton	9,427	108,351	13,550	172,713
Salt.....	ton	393	4,002	413	4,280
Sawdust.....	ton	7,687	21,717	9,129	28,113
Silica sand.....	ton	45,982	221,925	57,362	269,605

Table 18.—Materials Used in Manufacturing, 1940 and 1941—Concluded

Material	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Artificial abrasive grains—					
Fused alumina.....	ton	3,085	377,544	5,524	736,569
Silicon carbide.....	ton	1,191	185,135	1,429	263,571
Natural abrasive grains—					
Garnet.....	lb.	254,455	21,780	392,846	38,074
Emery.....	lb.	146,405	10,383	233,765	20,325
Quartz or flint.....	lb.	277,110	5,577	348,167	6,624
Other.....	lb.	79,918	6,639	93,568	9,378
Bonding and bushing materials—					
Clay bonds.....	lb.	1,001,491	29,960	907,697	40,479
Silicate (quantity in equivalent solid form).....	lb.	10,130	362	14,374	623
Elastic mixture.....	lb.	29,887	11,022	30,928	6,489
Bakelite and synthetic resins.....	lb.	112,944	46,013	215,784	76,936
Lead for bushings.....	lb.	53,869	3,035	113,203	6,307
Cotton cloth.....			121,226		172,727
Kraft and rope paper.....			93,338		82,767
Containers and packing material.....			49,551		71,364
All other material.....			401,923		812,750
Total			4,693,981		7,650,413

Table 19.—Products Manufactured, 1940 and 1941

Product	1940		1941	
	Short tons	Selling value at works	Short tons	Selling value at works
		\$		\$
Crude silicon carbide.....	24,562	3,053,047	32,258	3,661,868
Crude fused alumina.....	85,336	8,249,815	130,881	13,665,811
Silicon carbide finesand, etc.....	868	34,649	1,096	30,889
Abrasive wheels and segments.....		1,838,558		3,713,303
Sharpening stones and files.....		116,411		191,757
Ferrosilicon.....	8,354	100,910	10,489	124,383
Other products*.....		1,931,303		4,168,319
Total		15,324,693		25,556,330

* Includes abrasive cloth, abrasive paper, tiles, artificial pulpstones, artificial graphite, boron carbide, boron carbide shapes, calcium boride, fused magnesia, refractory cements, firebrick, etc., each of which was reported by one or two companies.

Table 20.—Production of Crude Artificial Abrasives in Canada, 1930-1941

Year	Crude silicon carbide		Crude fused alumina		Total	
	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works
	Tons	\$	Tons	\$	Tons	\$
1930.....	22,778	2,111,476	42,804	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.....	3,104	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.....	16,308	1,858,746	44,596	3,955,837	60,994	5,814,583
1935.....	18,475	1,788,657	51,194	4,735,019	69,669	6,523,676
1936.....	23,805	2,299,602	59,533	5,762,217	83,338	8,061,819
1937.....	25,644	2,808,016	86,604	8,435,371	112,248	11,243,387
1938.....	19,094	2,002,041	50,515	5,165,920	69,609	7,167,961
1939.....	17,225	1,865,604	51,118	4,565,569	68,343	6,431,173
1940.....	24,562	3,053,047	85,336	8,249,815	109,898	11,302,862
1941.....	32,258	3,661,868	130,881	13,665,811	163,139	17,327,679

Table 21.—Production of Artificial Abrasive Wheels and Segments* in Canada

Year	Selling value at works		Year	Selling value at works
	\$	\$		
1930.....	546,276	1936.....	862,283	
1931.....	347,345	1937.....	1,165,406	
1932.....	293,528	1938.....	916,695	
1933.....	336,647	1939.....	1,117,689	
1934.....	509,764	1940.....	1,838,558	
1935.....	785,777	1941.....	3,713,303	

* Sharpening stones and artificial pulpstones not included.

CHAPTER THREE

THE ASBESTOS PRODUCTS INDUSTRY

Production by the manufacturers of asbestos goods in Canada in 1941 was valued at \$4,359,217, an increase of 70.5 per cent over the 1940 total of \$2,556,278. Products included brake linings valued at \$1,371,791, boiler and pipe covering at \$611,431, clutch facings at \$199,846, asbestos packings at \$224,870 and such other lines as asbestos gaskets, cloth, yarn, dryer felts, cement, etc.

Eleven factories were engaged in this business, of which 5 were located in Quebec, 5 in Ontario and 1 in Nova Scotia. Fixed and working capital as represented by these works totalled \$3,459,185; the number of employees averaged 772 for each month of the year and payments in salaries and wages for the year amounted to \$959,268. Expenditures for fuel and electricity totalled \$169,358 and materials for manufacturing cost \$1,866,795.

Table 22.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930	11	2,316,645	306	401,490	77,082	1,327,025	2,301,924
1931	13	1,112,143	240	302,638	57,339	729,771	1,308,183
1932	13	2,682,882	279	280,953	67,732	559,673	1,067,801
1933	11	1,777,975	222	208,580	55,031	331,062	757,626
1934	11	1,391,873	228	233,379	46,488	387,074	910,983
1935	13	1,703,301	327	323,854	66,793	518,994	1,130,282
1936	13	1,955,676	372	376,574	70,290	622,530	1,293,909
1937	13	2,003,659	451	464,882	91,252	812,639	1,896,677
1938	13	1,701,202	403	433,964	107,436	614,207	1,531,118
1939	14	2,003,516	415	497,324	90,711	724,424	1,783,993
1940	13	2,317,225	476	591,982	126,352	1,150,499	2,556,278
1941	11	3,459,185	772	959,268	169,358	1,866,795	4,359,217

Table 23.—Principal Statistics, by Provinces, 1940 and 1941

Province	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
		\$		\$	\$	\$	\$
1940							
Quebec	6	1,477,043	327	376,361	99,783	680,730	1,378,977
Nova Scotia	1)	840,182	149	215,621	26,569	469,769	1,177,301
Ontario	6)						
Canada	13	2,317,225	476	591,982	126,352	1,150,499	2,556,278
1941							
Quebec	6	1,926,950	567	649,582	138,355	1,112,078	2,558,186
Nova Scotia	1)	1,532,235	205	309,676	31,003	754,717	1,801,051
Ontario	5)						
Canada	12	3,459,185	772	959,268	169,358	1,866,795	4,359,217

MANUFACTURES OF NON-METALLIC MINERALS

Table 24.—Capital Employed, by Provinces, 1940 and 1941

Province	Present value of land, buildings, fixtures machinery and tools	Value of inventories		Cash, bills and accounts receivable, prepaid expenses, etc.	Total Capital Employed
		Raw materials, fuel and other supplies on hand, and stock in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
Quebec.....	627,550	440,553		408,940	1,477,043
Other provinces.....	328,617	244,230		267,335	840,182
Canada.....	956,167	684,783		676,275	2,317,225
1941					
Quebec.....	713,909	313,082	306,917	593,042	1,926,950
Other provinces.....	610,717	201,888	127,456	592,174	1,532,235
Canada.....	1,324,626	514,970	434,373	1,185,216	3,459,185

Table 25.—Employees, Salaries and Wages, by Provinces, 1940 and 1941

Province	Average number of employees					Salaries	Wages	Total Salaries and Wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
No.	No.	No.	No.	\$	\$	\$	\$	
1940								
Quebec.....	50	8	225	44	327	103,079	273,282	376,361
Other provinces.....	22	11	116		149	85,105	130,516	215,621
Canada.....	72	19	341	44	476	188,184	403,798	591,982
1941								
Quebec.....	79	16	400	72	567	136,775	512,817	649,592
Other provinces.....	24	13	167	1	205	94,555	215,121	309,676
Canada.....	103	29	567	73	772	231,330	727,938	959,268

Table 26.—Wage-Earners, by Months, 1940 and 1941 (Number on pay-roll on the last work day of each month)

Month	1940			1941		
	Male	Female	Total	Male	Female	Total
	No.	No.	No.	No.	No.	No.
January.....	297	32	329	483	60	543
February.....	296	31	327	507	69	576
March.....	292	30	322	502	63	565
April.....	299	34	333	525	68	593
May.....	311	37	348	535	74	609
June.....	308	37	345	561	72	633
July.....	335	46	381	596	76	672
August.....	362	51	413	600	74	674
September.....	374	55	429	615	72	687
October.....	395	57	452	652	73	725
November.....	433	56	489	642	85	727
December.....	399	54	453	595	87	682
Average.....	341	44	385	567	73	640

Table 27.—Hours Worked per Week by Wage-Earners, 1940 and 1941 (In one week of month of highest employment, overtime included)

Hours worked per week	Number of wage-earners		Hours worked per week	Number of wage-earners	
	1940	1941		1940	1941
30 hours or less.....	17	16	55 hours.....	6	9
31-43 hours.....	81	7	56-64 hours.....	101	236
44 hours.....	12	15	65 hours and over.....	85	100
45-47 hours.....	6	4	Total.....	474	738
48 hours.....	74	103	Total wages paid in selected week \$	9.797	18.519
49-50 hours.....	53	54			
51-54 hours.....	39	194			

Table 28.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Anthracite coal.....	ton	70	783	880	7,639
Bituminous coal—Canadian.....	ton	5,239	35,654	4,176	35,349
Imported.....	ton	44	312	201	1,635
Coke.....	ton	1	12	1	12
Gasoline.....	Imp. gal.	5,946	1,280	8,496	3,015
Fuel oil.....	Imp. gal.	531,549	36,322	761,051	57,099
Kerosene.....	Imp. gal.	4,365	787	3,899	721
Gas—manufactured.....	M cu. ft.	42	38	65	67
Other fuel.....			198		
Electricity purchased.....	K.W.H.	3,699,429	50,960	4,613,869	63,821
Total.....			126,352		169,358

Table 29.—Power Equipment, 1940 and 1941

	1940		1941	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Electric motors—Ordinarily in use.....	392	3,972	451	4,449
In reserve or idle.....				
Total.....	392	3,972	451	4,449
Stationary boilers—Ordinarily in use.....	6	556	6	203

Table 30.—Materials Used, 1940 and 1941

	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Asbestos fibre.....	lb.	12,454,956	229,824	25,098,964	446,301
Asbestos cloth.....	lb.	82,878	32,402	123,403	46,782
Asbestos paper, corrugated and plain.....	lb.	532,115	19,316	779,548	22,037
Asbestos sheets and strips.....	lb.	24,640	13,136	36,428	19,686
Asbestos yarn.....	lb.	401,313	133,006	449,523	170,136
Cotton cloth and yarn.....			113,761		139,256
Rubber and rubber sheets.....	lb.	123,263	27,001	186,034	46,026
Containers and packing material.....			44,740		95,476
All other materials.....			537,313		881,095
Total.....			1,150,499		1,866,795

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Table 31.—Products Manufactured, 1940 and 1941

Product	Unit of measure	1940		1941	
		Quantity	Selling value at works	Quantity	Selling value at works
			\$		\$
Asbestos brake linings—Moulded.....	ft.	3,383,085	735,305	4,690,883	1,172,076
Other.....	ft.	1,190,153	148,606	1,179,926	199,715
Asbestos boiler and pipe covering.....	ft.	2,671,445	250,701	4,122,646	611,431
Asbestos clutch facings.....	no.	611,529	166,406	716,978	199,846
Asbestos gaskets.....	lb.	43,087	23,904	55,638	31,618
Asbestos packings of all kinds.....	lb.	422,118	160,484	519,533	224,870
All other products (*).....			1,070,872		1,919,661
Total			2,556,278		4,359,217

(*) Includes products made by 1 or 2 firms, such as asbestos dryer felt, hydraulic brake hose, asbestos shingles, asbestos yarn, packings of rubber, duck and flax, asbestos paper, asbestos cloth, etc.

Table 32.—Production of Asbestos Brake Linings, 1936-1941

	Moulded		Other		Total value
	Quantity	Value	Quantity	Value	
	Ft.	\$	Ft.	\$	\$
1936.....	1,603,835	252,417	954,357	139,892	392,309
1937.....	2,263,300	391,919	1,449,744	188,568	580,487
1938.....	1,859,377	330,726	1,197,453	148,108	478,834
1939.....	2,245,559	489,305	1,096,577	150,579	639,884
1940.....	3,383,085	735,305	1,190,155	148,606	883,911
1941.....	4,690,883	1,172,076	1,179,926	199,715	1,371,791

Table 33.—Production of Asbestos Boiler and Pipe Coverings, 1936-1941

	Quantity	Selling value at works
	Ft.	\$
1936.....	1,757,708	162,216
1937.....	2,028,782	212,341
1938.....	1,619,599	145,621
1939.....	1,769,485	156,878
1940.....	2,671,445	250,701
1941.....	4,122,646	611,431

Table 34.—Production of Asbestos Packings, 1936-1941

	Quantity	Selling value at works
	Lb.	\$
1936.....	257,780	113,821
1937.....	433,083	131,213
1938.....	253,475	93,689
1939.....	283,358	112,049
1940.....	422,118	160,484
1941.....	519,533	224,870

CHAPTER FOUR

THE CEMENT INDUSTRY

Producers' sales of cement in 1941 as reported by the Canadian cement industry totalled 8,368,711 barrels valued at \$13,063,588, compared with 7,559,648 barrels worth \$11,775,345 in 1940. The output in 1941 was the largest attained since 1931 when production totalled 10,161,658 barrels valued at \$15,826,243. Of the 1941 sales, 4,048,749 barrels were produced in Quebec plants; 2,748,854 barrels in Ontario; 576,648 barrels in Manitoba; 492,515 barrels in Alberta and 501,945 barrels in British Columbia. The high and low prices per barrel in 1941 were \$2.70 and \$1.25.

The number of firms reporting commercial production of Portland cement in Canada during 1941 was 3 and the plants in operation numbered 8. Capital employed totalled \$51,108,294 and the industry distributed \$1,860,931 in salaries and wages to 1,235 employees. The total value of fuel and electricity used during the year under review amounted to \$2,897,383, of which \$2,104,277 were expended for coal and \$748,631 for electricity. Process supplies consumed, including chemicals, explosives, etc., were valued at \$887,041 and in addition the following tonnages of primary materials of mineral origin were used in the manufacture of the final product: limestone, 2,086,781; clay, 185,954; gypsum, 49,031; shale, 26,837; sand, 16,110 and iron pyrites cinder, 614. Data relating to imports and exports of cement are being withheld from publication until the termination of the war.

Erection of new plants and office buildings for war-time service, together with the construction of air training centres and other military projects, has greatly stimulated the production of Portland cement in Canada.

Portland cement, the principal raw materials for which are limestone and clay, is manufactured in five provinces of Canada. In addition to the standard or ordinary variety of Portland cement, several other varieties, including high-early-strength, alkali-resistant, and white cement are now made in this country, the last named variety, however, being made from imported clinker.

The Canada Cement Company, Limited, operates plants at Hull and Montreal East in Quebec; at Port Colborne and Belleville in Ontario; at Fort Whyte, Manitoba; and at Exshaw, Alberta. The St. Mary's Cement Company, Limited, operates a plant at St. Mary's, Ontario, and the British Columbia Cement Company operates at Bamberton, British Columbia. The total rated daily-capacity of all plants at present is about 35,000 barrels, (a barrel of cement weighs 350 pounds net), but this will be increased in 1942 when equipment now being installed is in operation. The Medusa Products Company of Canada, Limited, has a plant at Paris, Ontario, making white cement, cement paints, etc., from imported clinker.

When the change over from the "dry" to the "wet" process, now under way at the Exshaw plant of Canada Cement Company, is completed, all Canadian plants making cement from domestic raw materials will be using the wet process. Remarkable uniformity in the chemical and physical properties of the standard variety of cement is achieved throughout the country as the result of close technical control and improvements in plant equipment.

MANUFACTURES OF NON-METALLIC MINERALS

Table 35.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930	11	59,210,737	2,317	3,172,198	4,120,367		17,713,067
1931	12	57,378,436	1,820	2,432,950	3,280,870		15,826,243
1932	12	55,294,814	1,216	1,344,772	1,701,125		6,930,721
1933	12	54,403,379	740	781,746	982,087		4,536,935
1934	11	53,413,000	860	1,009,686	1,206,550		5,667,948
1935	9	52,454,004	924	1,027,416	1,227,410	394,264	5,580,043
1936	9	53,343,991	1,052	1,196,664	1,576,142	592,929	6,908,192
1937	9	54,150,672	1,083	1,373,444	1,904,418	540,915	9,095,867
1938	8	52,299,046	1,034	1,306,331	1,764,427	529,157	8,241,350
1939	8	51,251,358	1,001	1,297,542	1,705,981	532,058	8,511,211
1940	8	50,370,276	1,052	1,515,766	2,347,730	1,943,491	13,006,643
1941	8	51,108,294	1,235	1,860,931	2,897,383	2,146,825	14,323,372

Table 36.—Capital Employed, 1940 and 1941

	1940	1941
	\$	\$
Present cash value of land	10,620,056	10,250,350
Present value of buildings, machinery, tools and other equipment	33,453,392	32,735,590
Inventory value of raw materials, fuel and other supplies on hand and stocks in process	745,520	1,018,623
Inventory value of finished products on hand	961,819	1,350,021
Cash, bills and accounts receivable, prepaid expenses, etc.	4,556,489	5,753,710
Total	50,370,276	51,108,294

Table 37.—Employees, Salaries and Wages, 1940 and 1941

	1940	1941
Employees—On salaries—Male	No. 76	79
Female	No. 4	8
On wages—Male	No. 969	1,148
Female	No.	
Total employees	No. 1,052	1,235
Salaries	\$ 161,548	190,771
Wages	\$ 1,324,218	1,670,160
Total salaries and wages	\$ 1,515,766	1,860,931

Table 38.—Wage-Earners by Months, 1940 and 1941

(On the last work-day of each month)

Month	1940	1941		
		Quarry	Mill	Total
January	736	133	918	1,651
February	711	140	918	1,658
March	795	131	959	1,684
April	874	153	1,010	1,169
May	1,021	158	1,019	1,177
June	1,041	155	1,064	1,219
July	1,046	162	1,059	1,221
August	1,052	153	1,024	1,177
September	1,111	153	1,044	1,197
October	1,146	151	1,007	1,148
November	1,100	141	1,004	1,145
December	923	143	981	1,124
Average	969	148	1,060	1,148

Table 39.—Hours Worked per Week by Wage-Earners, 1940 and 1941
(In one week of month of highest employment; overtime included)

Hours worked per week	1940	1941	Hours worked per week	1940	1941
	No.	No.		No.	No.
30 hours or less.....	1	5	51-54 hours.....	71	104
31-43 hours.....	104	54	55 hours.....	7	13
44 hours.....	70	68	56-64 hours.....	337	411
45-47 hours.....	20	28	65 hours and over.....	133	78
48 hours.....	411	457	Total	1,206	1,251
49-50 hours.....	52	62	Total wages paid in selected week.. \$	34,670	34,775

Table 40.—Power Equipment, 1940 and 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
1940				
Steam engines and steam turbines.....	1	7	1	50
Diesel engines.....	2	525	1	300
Gasoline, gas and oil engines (except diesel).....	47	2,134	4	222
Total primary	50	2,666	6	572
Electric motors run by purchased power.....	1,340	71,552	331	12,502
Total	1,390	74,218	337	13,074
Electric motors run by power generated by above primary units.....	11	763		
Stationary boilers.....	11	412	3	140
1941				
Steam engines and steam turbines.....	2	107	1	50
Diesel engines.....	3	825		
Gasoline, gas and oil engines (except diesel).....	48	2,139	4	222
Total primary	53	3,071	5	272
Electric motors run by purchased power.....	1,435	76,264	297	13,629
Total	1,488	79,335	302	13,901
Electric motors run by power generated by above primary units.....	18	1,086	3	212
Stationary boilers.....	9	515	2	90

Table 41.—Fuel and Electricity Used, 1940 and 1941

	Unit of measure	1940		1941	
		Quantity	Value	Quantity	Value
			\$		\$
Bituminous coal—Canadian.....	ton	185,325	1,108,287	125,740	772,829
Imported.....	ton	85,885	513,224	203,905	1,331,448
Gasoline.....	Imp. gal.	134,033	30,959	157,133	38,277
Kerosene.....	Imp. gal.	4,238	750	5,831	1,102
Fuel oil and diesel oil.....	Imp. gal.	35,116	4,108	41,911	4,969
Wood.....	cord	31	127	35	127
Electricity purchased, including service charges.....	K.W.H.	126,737,622	690,266	151,845,080	748,631
Total			2,347,730		2,897,383

MANUFACTURES OF NON-METALLIC MINERALS

Table 42.—Kilns in Cement Plants, 1931-1941

Year	Number	Total daily capacity
		Barrels of 350 pounds
1932	47	43,822
1933	41	43,622
1934	41	43,922
1935	20	32,650
1936	19	33,000
1937	18	33,900
1938	21 (a)	35,200
1939	21 (b)	35,000
1940	21 (c)	35,000
1941	20 (d)	33,050

(a) 10 in use with a daily capacity of 23,100 barrels.

(b) 11 in use, capacity 23,700 barrels per day.

(c) 13 in use, capacity 27,950 barrels per day.

(d) 16 in use, capacity 30,350 barrels per day.

Table 43.—Output of Cement, Disposition by Producers, and Producers' Stocks, 1940 and 1941

	1940		1941	
	Barrels	Value	Barrels	Value
		\$		\$
Output	6,947,577		8,480,987	
Sold or used by producers	7,559,648	11,775,345	8,368,711	13,063,588
Stocks on December 31st	1,253,400		1,365,676	

Table 44.—Production of Cement in Canada, Disposition by Producers and Apparent Consumption, 1929-1941

Year	Output	Sold or used by producers	Apparent consumption*
		(Barrels)	
1929	1,021,016	12,252,203	12,284,081
1930		11,790,406	11,032,538
1931		10,197,964	10,161,858
1932		4,643,675	4,498,721
1933	209,877	2,410,518	3,007,432
1934		3,484,233	3,783,226
1935		3,487,602	3,648,080
1936		4,939,030	4,508,718
1937		6,142,934	6,168,971
1938		5,588,047	5,519,102
1939	476,787	5,721,447	5,731,264
1940	578,965	6,947,577	7,559,648
1941	706,749	8,480,987	8,368,711

* Sold or used by producers plus imports less exports.

CHAPTER FIVE

THE CEMENT PRODUCTS INDUSTRY

Production of manufactured cement products in Canada during 1941 was valued at \$6,070,677 compared with \$5,303,560 during 1940.

A total of 122 plants operated in this industry during 1941—there being 68 in Ontario, 30 in Quebec, 9 in British Columbia, 6 in Alberta, 1 in Nova Scotia, 2 in New Brunswick, 2 in Manitoba and 4 in Saskatchewan. The Ontario plants accounted for 58 per cent of the total production; establishments in Quebec contributed 31 per cent, and works in British Columbia accounted for 4 per cent, the remaining 6 per cent being distributed among New Brunswick, Nova Scotia, Manitoba, Saskatchewan and Alberta.

Products included ready-mixed concrete worth \$1,834,129, cement pipe of all kinds at \$781,661, hollow building blocks of cement at \$857,440, cinder blocks at \$367,511, artificial stone at \$148,413, cement bricks at \$187,874, and other items, such as haydite blocks and slabs, laundry tubs, burial vaults, 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.

Statistics for the manufacture of Portland cement are given in chapter four of this report.

Table 45.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930	146	5,157,051	1,252	1,414,043	86,188	1,261,910	3,718,704
1931	157	5,081,227	1,166	1,296,250	83,032	1,245,483	3,807,188
1932	118	4,461,574	710	684,371	57,072	697,483	1,771,287
1933	83	3,545,805	460	392,941	42,482	625,525	1,596,998
1934	88	3,285,150	489	405,028	42,107	444,274	1,042,258
1935	94	3,024,286	519	451,625	37,176	459,296	1,154,138
1936	97	3,053,745	602	569,209	50,036	763,021	1,713,347
1937	109	3,695,565	840	804,024	57,511	1,596,870	3,299,331
1938	119	3,476,390	634	796,902	97,023	1,452,169	3,200,419
1939	122	3,731,652	951	961,143	115,038	1,698,179	3,716,692
1940	128	4,362,184	1,145	1,300,985	170,084	2,407,552	5,303,560
1941	122	4,148,169	1,222	1,497,120	198,471	2,511,415	6,070,677

Table 46.—Principal Statistics, by Provinces, 1940 and 1941

Province	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
		\$		\$	\$	\$	\$
1940							
New Brunswick	4	29,773	6	1,277	295	2,164	0,780
Quebec	32	1,490,666	379	413,559	88,300	871,307	2,004,550
Ontario	73	2,423,445	632	724,686	73,092	1,247,077	2,770,109
British Columbia	9	183,252	54	66,166	2,988	156,937	269,165
Nova Scotia	1						
Manitoba	1	92,054	15	15,158		7,323	31,646
Saskatchewan	2						
Alberta	6	142,994	59	80,139	4,003	122,744	221,300
Canada	128	4,362,184	1,145	1,300,985	170,084	2,407,552	5,303,560
1941							
Quebec	30	1,510,455	386	469,619	92,970	859,031	1,904,298
Ontario	68	2,207,897	671	825,949	92,345	1,363,732	3,543,584
British Columbia	9	187,568	52	72,620	4,528	153,211	269,396
Saskatchewan	4	109,251	22	23,788	2,239	16,044	61,463
Nova Scotia	1						
New Brunswick	2	30,316	24	20,168	657	8,407	60,934
Manitoba	2						
Alberta	6	122,682	67	84,976	5,732	110,990	231,002
Canada	122	4,148,169	1,222	1,497,120	198,471	2,511,415	6,070,677

MANUFACTURES OF NON-METALLIC MINERALS

Table 47.—Capital Employed, by Provinces, 1940 and 1941

Province	Present value of land, buildings, fixtures, machinery and tools	Value of inventories		Cash, bills, and accounts receivable, prepaid expenses, etc.	Total capital employed
		Raw materials, fuel and other supplies on hand and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
New Brunswick	25,148	3,125		1,500	29,773
Quebec	940,035	232,690		317,941	1,490,666
Ontario	1,090,495	500,837		832,113	2,423,445
British Columbia	140,655	13,791		28,806	183,252
Alberta	68,713	23,438		50,843	142,994
Other provinces	82,793	5,481		3,780	92,054
Canada	2,347,839	779,362		1,234,983	4,362,184
1941					
Quebec	901,867	57,004	239,085	312,499	1,510,455
Ontario	1,158,629	167,957	143,450	737,861	2,207,897
British Columbia	120,692	6,102	9,925	30,849	167,568
Saskatchewan	90,102	2,140	2,082	14,927	109,251
Alberta	57,385	22,247	10,384	32,666	122,682
Other provinces	18,527	1,036	3,904	6,849	30,316
Canada	2,347,202	256,496	408,836	1,135,651	4,148,169

Table 48.—Employees, Salaries and Wages, by Provinces, 1940 and 1941

Province	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
					\$	\$	\$	
1940								
New Brunswick			6		6		1,277	1,277
Quebec	66	8	304	1	379	108,647	304,912	413,559
Ontario	108	13	506	5	632	219,869	504,817	724,686
British Columbia	18	2	34		54	27,139	39,027	66,166
Alberta	9	1	45	1	59	30,720	49,419	80,139
Other provinces	4	1	10		15	7,937	7,221	15,158
Canada	205	25	905	7	1,145	394,312	906,673	1,300,985
1941								
Quebec	71	13	301	1	386	141,518	328,101	469,619
Ontario	103	15	547	6	671	231,888	594,061	825,949
British Columbia	16	3	33		52	28,625	43,995	72,620
Saskatchewan	3	1	18		22	9,820	13,968	23,788
Alberta	14	1	51	1	67	34,899	50,077	84,976
Other provinces	6	1	15	2	24	9,877	10,291	20,164
Canada	213	34	965	10	1,222	456,627	1,010,493	1,497,120

Table 49.—Wage-Earners, by Months, 1940 and 1941

(Number on payroll on the last work-day of each month)

Month	1940			1941		
	Male	Female	Total	Male	Female	Total
January	550	6	556	898	6	904
February	583	6	589	750	5	755
March	550	6	556	795	6	801
April	735	7	742	961	7	968
May	911	7	918	1,041	8	1,049
June	1,042	7	1,049	1,054	9	1,063
July	1,093	7	1,100	1,084	7	1,091
August	1,073	7	1,080	1,032	11	1,043
September	1,126	6	1,132	1,071	10	1,081
October	1,111	6	1,117	1,096	11	1,107
November	1,111	6	1,117	989	11	1,000
December	965	5	970	811	10	821
Average	908	7	915	965	10	975

Table 50.—Hours Worked per Week by Wage-Earners, 1940 and 1941
(In one week in month of highest employment; overtime included)

Hours worked per week	Number of wage-earners		Hours worked per week	Number of wage-earners	
	1940	1941		1940	1941
30 hours or less.....	119	101	55 hours.....	39	156
31-43 hours.....	148	102	56-64 hours.....	458	410
44 hours.....	78	51	65 hours and over.....	183	115
45-47 hours.....	48	55	Total.....	1,576	1,562
48 hours.....	146	151	Total wages paid in selected week	\$ 35,231	\$ 34,663
49-50 hours.....	138	85			
51-54 hours.....	219	276			

Table 51.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	ton	4,006	27,631	4,829	38,008
Imported.....	ton	2,672	19,088	3,432	26,096
Anthracite coal.....	ton	92	1,175	98	1,651
Lignite coal.....	ton	8	40	21	131
Coke.....	ton	2,525	14,467	142	1,680
Gasoline.....	Imp. gal.	260,712	58,929	314,258	81,563
Kerosene or coal oil.....	Imp. gal.	1,796	505	1,352	387
Fuel oil.....	Imp. gal.	42,953	2,503	28,732	1,647
Wood.....	cord	428	1,160	171	736
Gas—Manufactured.....	M cu. ft.	893	773	800	742
Natural.....	M cu. ft.	1,804	542	2,080	658
Other fuel.....			472		707
Electricity purchased.....	K.W.H.	1,589,959	42,799	1,704,147	44,465
Total.....			170,084		198,471

Table 52.—Power Equipment, 1940 and 1941

Kind	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
1940				
Steam engines and steam turbines.....	4	94		
Gasoline engines.....	44	454		
Total primary equipment.....	48	548		
Electric motors run by purchased power.....	348	3,658	20	93
Total.....	396	4,206	20	93
Stationary boilers.....	28	1,641	8	414
1941				
Steam engines and steam turbines.....	3	36		
Gasoline engines.....	44	439	1	3
Total primary equipment.....	47	475	1	3
Electric motors run by purchased power.....	363	3,489	22	113
Total.....	410	3,964	23	116
Stationary boilers.....	27	1,560	7	354

Table 53.—Materials Used in Manufacturing, 1940 and 1941

Material	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Portland cement	brl.	618,465	1,247,247	685,914	1,291,805
Quicklime	ton	254	3,308	145	1,933
Sand	cu. yd.	246,590	304,908	273,863	289,130
Gravel	cu. yd.	134,356	147,706	112,008	134,031
Crushed stone	cu. yd.	212,209	212,729	219,055	231,714
Cinders	cu. yd.	53,618	40,991		42,173
Reinforcing steel	ton		151,186		145,580
Other materials			274,372		302,576
Boxes, crates, lumber, etc.			25,105		72,473
Total			2,407,552		2,511,415

Table 54.—Materials Used in Manufacturing, by Provinces, 1941

Material	Quebec	Ontario	British Columbia	Other provinces	Canada
	\$	\$	\$	\$	\$
Portland cement	454,166	665,226	91,393	81,020	1,291,805
Quicklime	685	1,248			1,933
Sand	123,762	130,373	18,762	16,233	289,130
Gravel	5,814	77,893	19,727	30,597	134,031
Crushed stone	148,522	80,178	1,875	1,139	231,714
Cinders	9,082	32,243	278	570	42,173
Reinforcing steel	67,598	69,722	4,323	3,937	145,580
Other materials	48,888	238,810	13,295	1,583	302,576
Boxes, crates, lumber, etc.	514	68,039	3,558	362	72,473
Total	859,631	1,363,732	153,211	135,411	2,511,415

Table 55.—Products Manufactured, 1940 and 1941

Product	1940		1941	
	Quantity	Selling value at works	Quantity	Selling value at works
		\$		\$
Cement bricks		52,616		187,874
Cement hollow building blocks, etc.		934,702		857,440
Cement drain pipe, sewer pipe, water pipe and culvert tile		791,371		781,661
Artificial stone		155,500		148,413
Cement laundry tubs	No.	9,931	10,977	106,778
Cinder blocks		275,169		367,511
Cement stucco		8,029		9,628
Ready mixed concrete		1,757,675		1,834,129
Cement posts, poles, etc.		546		1,389
Repair work		9,801		8,972
All other products		1,242,887		1,766,885
Total		5,303,560		6,070,677

Table 56.—Products Manufactured, by Provinces, 1941

Product	Quebec	Ontario	British Columbia	Other provinces	Canada
	\$	\$	\$	\$	\$
Cement bricks	12,877	168,719	5,678	600	187,874
Cement hollow building blocks, etc.	211,619	625,700	8,800	11,231	857,440
Cement drain pipe, sewer pipe, water pipe and culvert tile	259,462	345,618	49,161	127,420	781,661
Artificial stone	24,523	119,309	301	4,280	148,413
Cement laundry tubs		87,798	19,960		106,778
Cinder blocks	40,394	316,572		10,545	367,511
Cement stucco			9,628		9,628
Ready mixed concrete	635,925	621,868	136,693	139,643	1,834,129
All other products	419,498	1,249,328	40,065	59,380	1,768,271
Amount received for repair work		8,672		300	8,972
Total	1,904,298	3,543,584	269,396	353,399	6,070,677

Table 57.—Output of Principal Cement Products, 1921-1941

Year	Cement hollow building blocks	Cement sewer pipe, water pipe, drain pipe and culvert tile	Cement bricks	Artificial stone	Cinder blocks
	\$	\$	\$	\$	\$
1921.....	511,283	463,091	11,375	71,741	Not
1922.....	596,063	378,818	75,742	27,725	
1923.....	652,420	432,602	70,502	53,326	specified
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	69,145
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	877,659	273,097
1931.....	709,876	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	8,685	101,548	39,617
1934.....	231,901	202,345	13,949	86,511	76,684
1935.....	277,923	305,203	17,178	148,480	102,615
1936.....	315,141	432,424	63,032	133,629	107,350
1937.....	380,008	377,806	146,522	188,021	208,149
1938.....	431,547	464,916	86,383	155,660	238,092
1939.....	653,185	481,095	76,186	149,644	240,012
1940.....	934,702	791,371	52,616	155,500	275,169
1941.....	857,440	781,661	187,874	148,413	367,511

CHAPTER SIX

THE COKE AND GAS INDUSTRY

Production from coke plants and from illuminating and fuel gas plants in Canada during 1941 was valued at \$50,818,720. This output was 8.8 per cent above the \$46,673,660 of the previous year and set a new record for the industry. Output for the year under review included 3,145,715 tons of coke valued at \$24,888,023 at the works, 57,728,803 M cubic feet of gas, of which 57,477,104 M cubic feet valued at \$21,557,128 were sold or used, and by-products valued at \$4,373,569.

Twenty-eight coke and gas works operated in 1941, including 10 by-products and bee-hive plants and 18 retort coal and water gas plants. Fourteen of these works were located in Ontario, 4 in British Columbia, 4 in Quebec, 2 in Manitoba, 2 in Nova Scotia, and 1 in each of New Brunswick and Alberta. In addition to these producers, 1 company in Quebec and 2 in Ontario purchased coke-oven gas and distributed it for domestic or commercial use and data covering their operations have been included to round out the figures for the industry.

Output of coke from gas retorts, by-products and bee-hive ovens totalled 3,145,715 tons in 1941 compared with 3,015,394 tons in 1940 and 2,410,095 tons in 1939. By-product and bee-hive ovens produced 2,847,624 tons of coke in 1941 and gas retorts made 289,091 tons. In addition, 70,840 tons of petroleum coke were recovered in petroleum refineries.

Data on the distribution of coke (except petroleum coke) by the producers show that 195,880 tons were sold direct to domestic consumers, 1,382,051 tons were used in metallurgical works operated by the producing companies, 231,464 tons were used by coke plants as fuel or to make water gas, 645,529 tons were sold direct to consumers for foundry and other uses (other than domestic), 730,908 tons were sold to dealers for resale, and 44,574 tons were sold for export. The total distribution was 3,230,406 tons, including about 75,000 tons withdrawn from producers' stocks during the year. Total stocks of coke in the hands of producers amounted to 215,481 tons at the end of 1941.

Imports of coke made from coal declined to 614,417 tons in 1941 from 719,338 tons in 1940, but exports increased to 40,167 tons from 37,523 tons. Imports of petroleum coke during this period rose to 235,852 tons from 185,334 tons and exports (including re-exports of imported coke) advanced to 67,738 tons from 40,433 tons.

Manufactured gas, sold and used, amounted to 57,477,104 M cubic feet in 1941, including 46,818,325 M cubic feet from by-product ovens and 10,658,779 M cubic feet from gas plants. Sales of gas by the producers totalled 16,931,434 M cubic feet, of which 9,896,061 M cubic feet were from by-product ovens and 7,035,373 M cubic feet were from gas works. Most of the remaining gas was used as fuel in the producing plants or in their associated metallurgical works. These figures do not include 45,208 M cubic feet of (Pintsch) oil gas for lighting railway cars, 9,971,268 M cubic feet of still gas recovered at petroleum refineries, nor iron blast furnace gas and some producer gas which was recovered and used by the producers but for which no records are available.

The number of customers served with manufactured illuminating and fuel gas in 1941 was 493,933, the number of active meters was 513,489, the length of distributing mains was 3,906 miles, and the average calorific value of the gas sold ranged from 450 to 570 B.T.U. per cubic foot.

Table 58.—Distribution of Coke and Gas Manufacturing Plants, by Provinces, 1941

Province	Coke plants *	Gas plants			Total
	By-product and 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		4
Ontario	4	2	5	3	14
Manitoba	1	1			2
Alberta	1				1
British Columbia	2	1		1	4
Canada	10	7	6	5	28

* 1 Bee-hive only in Alberta and 1 both by-product and bee-hive in British Columbia; others all by-product.

Table 59.—Size of Establishments, according to Quantity of Coal and Coke Used for Gas-Making, 1941

Coal and coke used	Number of plants	Total coal or coke for gas-making
Less than 1,000 tons	3	2,174
1,001—5,000	8	17,215
5,001—15,000	5	56,901
15,001—100,000	3	161,014
100,001—500,000	5	1,097,817
Over 500,000	4	3,078,501
Total	28	4,413,622

Table 59 (a).—Principal Statistics of the Coke and Gas Industry, 1930-1941

Year	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
Coke (By-product and Bee-hive)							
		\$		\$	\$	\$	\$
1937	13	56,416,667	2,314	3,325,958	2,243,977	14,614,177	31,913,459
1938	13	56,952,033	2,227	3,351,614	2,181,609	14,058,917	29,583,633
1939	13	58,691,213	2,327	3,392,800	2,364,798	14,102,330	29,158,686
1940	13	58,066,525	2,471	3,829,937	2,974,347	18,143,915	36,310,384
1941	13	59,445,269	2,488	4,073,482	3,611,421	20,505,807	39,999,164
Gas (Retort and Water Gas)							
1937	20	35,404,583	1,713	2,383,611	662,115	2,603,780	9,789,470
1938	20	36,385,539	1,703	2,447,888	660,711	2,534,728	10,137,897
1939	20	36,234,551	1,716	2,458,814	1,065,625	2,624,115	9,870,884
1940	18	38,081,758	1,674	2,546,528	994,587	2,863,414	10,363,276
1941	18	38,449,081	1,802	2,458,621	950,169	3,402,071	10,819,556
Total—Coke and Gas							
1930	41	89,987,235	3,970	5,864,802	2,384,306	17,082,864	36,597,859
1931	41	95,872,858	4,005	5,816,763	1,962,266	13,891,061	31,349,460
1932	42	93,531,495	3,639	4,897,746	2,223,414	12,241,698	29,812,659
1933	42	91,235,476	3,526	4,606,308	2,606,590	12,729,075	29,936,975
1934	41	99,297,395	4,278	5,648,969	2,883,019	15,237,031	38,272,020
1935	41	98,839,160	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	39,851,898
1937	33	91,911,250	4,027	5,709,569	2,906,092	17,217,952	41,702,929
1938	33	93,347,522	3,930	5,799,592	2,842,320	16,603,643	39,721,530
1939	33	91,925,764	4,043	5,851,614	3,430,393	16,726,445	39,629,576
1940	31	96,748,283	4,035	6,376,465	3,968,934	21,037,329	46,673,666
1941	31	97,891,349	4,299	6,332,403	4,561,590	23,907,878	50,818,726

* The number shown for by-product and bee-hive ovens includes 3 companies which did not produce coke or gas but which purchased coke-oven gas from the manufacturers and distributed it to customers. Data for employees, capital, etc., for these distributing companies are included in the industry totals but duplication in gas purchases and sales as between producers and distributors has been eliminated.

Table 60.—Principal Statistics, by Provinces, 1940 and 1941

Province	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
		\$		\$	\$	\$	\$
1940							
Nova Scotia and New Brunswick	3	11,017,097	428	659,836	512,560	3,609,526	6,341,424
Quebec	5	11,527,351	680	1,144,212	986,912	3,740,689	10,805,200
Ontario	16	54,065,968	2,422	3,748,502	2,235,544	12,132,878	25,516,288
Manitoba and Alberta	3	6,790,306	208	298,557	71,648	797,453	1,454,286
British Columbia	4	13,347,561	357	525,358	162,270	756,783	2,556,453
Canada	31	96,748,283	4,095	6,376,465	3,968,934	21,037,329	46,673,660
1941							
Nova Scotia and New Brunswick	3	10,577,490	435	641,628	515,383	3,504,586	6,251,344
Quebec	5	11,446,587	697	1,175,043	1,081,390	4,275,338	11,300,468
Ontario	16	55,418,370	2,552	3,790,781	2,679,379	14,353,519	28,712,757
Manitoba and Alberta	3	6,665,041	213	313,444	105,509	894,616	1,668,176
British Columbia	4	13,786,861	393	611,267	179,939	879,819	2,885,975
Canada	31	97,894,319	4,290	6,532,103	4,561,590	23,907,878	50,818,720

Table 61.—Capital Employed, by Classes and by Provinces, 1940 and 1941

Province	Present value of land, buildings, fixtures and machinery	Value of inventories		Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
		Raw materials, fuel and other supplies on hand, and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
Nova Scotia and New Brunswick	6,805,029	3,049,459	1,162,690		11,017,097
Quebec	8,871,931	1,923,138	732,282		11,527,351
Ontario	43,039,209	7,141,137	3,895,532		54,065,968
Manitoba and Alberta	6,397,094	219,484	363,818		6,790,306
British Columbia	12,856,541	299,689	191,321		13,347,561
Canada	77,769,804	12,632,907	6,243,572		96,748,283
1941					
Nova Scotia and New Brunswick	6,855,017	2,075,685	500,424	1,146,164	10,577,490
Quebec	8,719,073	1,719,858	152,585	854,171	11,446,587
Ontario	43,269,845	7,196,729	597,262	4,454,533	55,418,370
Manitoba and Alberta	6,396,530	79,138	17,451	361,861	6,665,041
British Columbia	13,136,698	210,478	125,419	314,266	13,786,861
Canada	78,178,093	11,281,888	1,303,343	7,131,025	97,894,319

Table 62.—Employees, Salaries and Wages, by Provinces, 1940 and 1941

Province	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
					\$	\$	\$	
1940								
Nova Scotia and New Brunswick	36	11	391	.....	428	64,148	595,688	659,836
Quebec	192	43	445	.....	640	478,340	665,873	1,144,212
Ontario	524	216	1,689	.....	2,422	1,039,887	2,708,115	3,748,502
Manitoba and Alberta	44	29	138	.....	208	100,249	198,317	298,557
British Columbia	59	3	295	.....	357	429,741	395,617	525,358
Canada	855	289	2,939	2	4,095	1,812,356	1,561,109	6,376,465
1941								
Nova Scotia and New Brunswick	39	10	386	.....	435	69,595	572,032	641,628
Quebec	223	59	474	.....	697	546,865	628,178	1,175,043
Ontario	524	202	1,826	.....	2,552	1,015,627	2,775,144	3,790,781
Manitoba and Alberta	46	25	142	.....	213	100,275	213,169	313,444
British Columbia	65	4	324	.....	393	140,807	470,400	611,267
Canada	897	291	3,102	2	4,290	1,873,179	4,658,924	6,532,103

Table 63—Wage-Earners, by Months, 1940 and 1941 (Number on pay-roll on the last day of each month)

Month	1940			1941		
	Male	Female	Total	Male	Female	Total
January	2,909	2	2,911	3,022		3,022
February	2,891	2	2,893	2,995		2,995
March	2,838	2	2,840	2,996		2,996
April	2,891	2	2,893	3,041		3,041
May	3,020	2	3,022	3,095		3,095
June	2,995	2	2,997	3,092		3,092
July	2,964	2	2,966	3,211		3,211
August	2,999	2	3,001	3,238		3,238
September	2,978	2	2,980	3,225		3,225
October	2,942	2	2,944	3,191		3,191
November	2,924	2	2,926	3,103		3,103
December	2,931	2	2,933	3,087		3,087
Average	2,933	2	2,941	3,192		3,192

Table 64.—Hours Worked per Week by Wage-Earners, 1940 and 1941 (In one week of highest employment; overtime included)

Hours worked per week	No. of wage-earners		Hours worked per week	No. of wage-earners	
	1940	1941		1940	1941
30 hours or less	79	54	51-54 hours	212	273
31-43 hours	157	172	55 hours	26	51
44 hours	377	315	56-64 hours	563	591
45-47 hours	183	57	65 hours and over	39	193
48 hours	1,324	1,218	Total	3,168	3,121
49-50 hours	208	197	Total wages paid during selected week	\$ 84,534	92,457

Table 65.—Fuel and Electricity Used, 1940 and 1941

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

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian	Ton	4,675	24,684	7,939	35,102
Imported	Ton	12,044	67,618	15,500	92,429
Lignite coal—Canadian	Ton	42	126	102	306
Coke (all made in users' works)	Ton	148,898	1,092,973	152,811	1,013,442
Gasoline	Imp. gal.	23,372	3,434	23,188	4,678
Fuel oil	Imp. gal.	89,899	2,891	200,655	10,949
Wood	Cord	245	1,203	121	802
Gas—Manufactured (all made in users' works)	M cu. ft.	22,098,597	2,538,352	22,935,971	3,121,480
Natural	M cu. ft.			3,118	1,007
Other fuel			22,660		28,821
Electricity purchased	K.W.H.	39,862,662	214,903	38,305,898	252,474
Total			3,964,934		4,561,590

Table 66.—Power Equipment, 1940 and 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1940				
Steam engines and turbines	185	9,132	103	5,945
Diesel engines			1	40
Gasoline, gas and oil engines (except diesel)	7	119	7	224
Hydraulic turbines or water wheels			1	6
Total primary	192	9,251	112	6,215
Electric motors run by purchased power	736	15,531	149	2,845
Total	928	24,782	261	9,060
Electric motors run by primary units shown above	229	6,265		
Stationary boilers	76	16,745	41	15,106
1941				
Steam engines and turbines	184	9,703	101	5,919
Diesel engines	10	50	7	90
Gasoline, gas and oil engines (except diesel)	11	185	7	228
Hydraulic turbines or water wheels			1	6
Total primary	205	9,938	116	6,243
Electric motors run by purchased power	727	15,494	149	2,873
Total	932	25,432	265	9,116
Electric motors run by power from primary units shown above	235	6,207		
Stationary boilers	78	16,973	42	15,161

Table 67.—Materials Used in Coke and Gas Plants, 1940 and 1941

Material	Unit of Measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal carbonized in ovens or retorts—					
(a) Canadian	Ton	1,418,671	6,048,615	1,434,215	6,237,832
(b) Imported	Ton	2,699,570	13,295,700	2,884,107	15,805,353
Bituminous coal for making water gas—					
Imported	Ton	2,699	20,691	3,522	34,463
Coke for gas-making—					
(a) Purchased	Ton	7,334	71,921	7,447	75,197
(b) Companies' own make	Ton	77,984	532,257	84,331	630,178
Oil used for enriching water gas	Imp. gal.	4,229,239	282,041	5,204,117	329,986
Absorbing and wash oil	Imp. gal.	220,038	27,743	255,563	30,926
Caustic soda	Pound	1,500,655	31,184	1,592,879	33,462
Lime	Ton	2,608	27,339	2,613	27,935
Water			20,917		18,836
Iron oxide	Ton	5,417	42,401	8,574	36,480
Sulphuric acid, 66° B _e	Pound	61,483,735	432,618	47,693,474	473,238
All other materials			203,812		173,994
Total cost			21,037,329		23,907,878

Table 68.—Materials Used in Coke and Gas Plants, by Areas, 1941

Material	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	ton	1,020,956	4,696,526			413,259	1,541,300
(b) Imported	ton	397,579	2,386,026	2,486,397	13,418,206	131	1,121
Bituminous coal for making water gas—							
Imported—	ton	235	2,115	3,287	32,348		
Coke for gas-making—							
(a) Purchased	ton	876	8,847	6,571	66,350		
(b) Companies' own make	ton	28,703	262,581	25,325	195,549	30,303	172,046
Oil used for enriching water gas	Imp. gal.	350,307	27,610	4,538,951	279,364	314,859	23,012
Absorbing and wash oil	Imp. gal.	141,044	17,482	101,492	12,531	13,027	913
Caustic soda	pound	783,277	20,261	809,602	13,201		
Lime	ton	2,250	24,588	363	3,347		
Water			8,285		3,979		6,572
Iron oxide	ton	2,302	13,092	5,958	18,818	314	4,470
Sulphuric acid, 66° B _e	pound	27,742,656	202,514	19,950,818	270,724		
All other materials			109,997		39,002		24,095
Total cost			7,779,924		14,353,519		1,774,435

Table 69.—Products Made in Coke and Gas Plants, 1940 and 1941

Product	Unit of measure	1940		1941	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
Gas made—			\$		\$
Retort coal gas	M cu. ft.	5,453,621		5,002,989	
Coke oven gas	M cu. ft.	38,490,043		40,143,240	
Producer gas	M cu. ft.	9,292,731		9,415,880	
Water gas	M cu. ft.	1,870,126		2,498,003	
Propane gas	M cu. ft.			8,691	
Total gas made	M cu. ft.	55,112,521		57,728,803	
Gas sold or used—					
Gas sold	M cu. ft.	15,392,723	14,803,049	16,931,434	15,888,723
Gas used in own plants	M cu. ft.	22,877,703	2,865,974	23,489,119	3,052,823
Gas used in associated metallurgical works	M cu. ft.	13,185,237	1,629,944	13,352,389	1,636,603
Gas otherwise accounted for but not sold	M cu. ft.	2,128,931	101,301	2,335,672	122,761
Gas not accounted for	M cu. ft.	1,520,578	1,250,201	1,368,490	856,218
Total gas sold or used	M cu. ft.	55,105,172	20,650,469	57,477,104	21,557,128
Coke made—					
Coke from by-product or bee-hive ovens	ton	2,559,332	18,974,117	2,680,771	21,808,129
Coke from gas retorts	ton	268,509	2,323,609	280,728	2,362,880
Coke breeze from by-product ovens	ton	166,541	600,534	166,853	670,466
Coke breeze from gas retorts	ton	21,012	39,601	17,363	40,548
Total coke	ton	3,015,394	21,937,861	3,145,715	24,888,023
Other products—					
Tar	Imp. gal.	32,817,895	1,762,324	33,375,297	1,902,394
Ammonia liquor			20,380	1,922,682	19,210
Ammonium sulphate	pound	70,986,981	952,014	70,786,432	1,030,095
Benzol	Imp. gal.	5,614,458	715,981	6,031,137	723,608
Other light oils, including toluol, xylol, naphthalene, etc.	Imp. gal.	2,301,370	631,535	1,990,910	680,649
All other products			3,006		5,613
Grand total			46,673,660		50,818,726

Table 70.—Products Made in Coke and Gas Plants, by Areas, 1941

Product	Unit of measure	Eastern provinces		Ontario		Western provinces	
		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.	542,222		4,890,020		230,747	
Coke oven gas	M cu. ft.	15,254,544		22,505,385		2,383,311	
Producer gas	M cu. ft.	6,850,138				2,565,742	
Water gas	M cu. ft.	175,563		2,278,286		44,154	
Propane gas	M cu. ft.			8,691			
Total gas made	M cu. ft.	22,822,467		29,682,382		5,223,954	
Gas sold or used—							
Gas sold	M cu. ft.	5,278,970	5,737,406	9,472,855	7,951,774	2,179,609	2,199,543
Gas used in own plants	M cu. ft.	10,197,650	1,374,002	10,423,340	1,469,140	2,868,129	209,681
Gas used in associated metallurgical works	M cu. ft.	4,763,587	488,820	8,588,802	1,147,783		
Gas otherwise accounted for but not sold	M cu. ft.	2,004,249	44,046	331,351	78,650	72	65
Gas not accounted for	M cu. ft.	557,623	205,923	621,946	470,314	188,921	179,981
Total Gas Sold or Used	M cu. ft.	22,802,079	7,850,197	29,438,294	11,117,661	5,236,731	2,589,270
Coke made—							
Coke from by-product or bee-hive ovens	ton	881,735	7,162,307	1,528,248	12,856,85t	270,788	1,788,971
Coke from gas retorts	ton	54,659	445,341	217,276	1,862,136	8,793	55,403
Coke breeze from by-product ovens	ton	89,084	416,788	73,555	244,508	4,214	15,170
Coke breeze from gas retorts	ton	3,550	14,070	13,030	21,701	783	4,777
Total coke made	ton	1,029,028	8,038,500	1,832,109	14,985,196	284,578	1,864,321
Other products—							
Tar	Imp. gal.	12,042,534	558,058	19,732,520	1,245,492	1,600,243	98,844
Other products	\$		1,105,051		1,364,408		1,716
Grand total	\$		17,551,812		28,712,757		4,554,151

MANUFACTURES OF NON-METALLIC MINERALS

Table 71.—Production of Bee-Hive, By-Product and Gas Retort Coke, 1930-1941

Year	By-product and bee-hive coke		Gas retort coke		Total	
	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works
	tons	\$	tons	\$	tons	\$
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	12,419,741
1932	1,331,170	9,085,716	306,531	3,008,789	1,637,701	12,091,505
1933	1,509,448	9,817,600	271,716	2,618,995	1,772,161	12,466,195
1934	1,948,294	13,481,930	295,126	2,379,827	2,243,420	15,861,757
1935	1,962,844	13,121,614	294,760	2,739,545	2,257,601	15,861,159
1936	2,147,810	14,343,959	256,983	2,366,049	2,401,793	16,710,008
1937	2,334,556	16,283,370	235,829	2,182,698	2,570,385	18,466,068
1938	2,120,588	14,599,384	231,415	2,295,683	2,352,003	16,895,067
1939	2,147,210	14,517,186	262,885	2,246,331	2,410,095	16,763,517
1940	2,725,873	19,574,651	289,523	2,363,210	3,015,394	21,937,861
1941	2,847,624	22,484,595	298,091	2,403,428	3,145,715	24,888,033

Table 72.—Production of Bee-Hive, By-Product and Gas Retort Coke, by Provinces, 1930-1941

Year	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Alberta, and British Columbia		Canada	
	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works	Quantity	Selling value at works
	tons	\$	tons	\$	tons	\$	tons	\$
1930	680,911	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	12,419,741
1932	403,330	3,115,737	1,087,122	7,876,941	147,249	1,101,827	1,637,701	12,091,505
1933	445,755	2,840,433	1,153,509	8,429,660	172,900	1,196,102	1,772,161	12,466,195
1934	654,305	4,369,150	1,388,709	10,290,363	200,406	1,292,244	2,243,420	15,861,757
1935	730,469	4,738,191	1,334,081	9,868,953	193,054	1,254,015	2,257,601	15,861,159
1936	775,270	4,655,468	1,441,813	10,807,611	187,690	1,240,929	2,401,793	16,710,008
1937	853,122	5,548,042	1,504,334	11,522,965	212,929	1,395,061	2,570,385	18,466,068
1938	754,975	5,040,400	1,365,571	10,339,065	231,457	1,515,602	2,352,003	16,895,067
1939	809,072	5,583,317	1,379,042	9,712,164	228,081	1,468,036	2,410,095	16,763,517
1940	1,040,999	7,582,337	1,732,303	12,842,138	242,092	1,513,386	3,015,394	21,937,861
1941	1,029,028	8,068,506	1,832,109	14,985,190	284,578	1,804,321	3,145,715	24,888,033

Table 73.—Production of Bee-Hive, By-Product and Gas Retort Coke, by Months, 1933-1941

(In 000's of short tons)

Month	1933	1934	1935	1936	1937	1938	1939	1940	1941
January	150	195	200	212	218	224	203	257	268
February	128	169	181	198	198	199	177	225	240
March	139	192	198	202	221	218	191	239	266
April	122	185	180	190	214	208	184	237	253
May	134	185	185	200	218	208	196	252	260
June	136	179	180	199	210	192	189	249	248
July	145	183	176	193	212	183	190	259	259
August	150	189	175	191	214	182	193	257	266
September	156	188	180	180	208	184	188	252	263
October	173	204	205	212	218	184	226	263	276
November	174	199	206	208	217	180	229	258	270
December	165	175	192	211	222	190	244	267	277
Total	1,772	2,243	2,258	2,405	2,570	2,352	2,410	3,015	3,146
Monthly Average	148	187	188	200	214	196	201	251	262

Table 74.—Bituminous Coal Charged to Coke Ovens and Gas Retorts, 1930-1941

Year	Bee-hive and by-product ovens		Gas retorts		Total
	Canadian	Imported	Canadian	Imported	
			(tons)		
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	45,258	(*349,884)	3,358,499
1937	1,106,706	2,106,960	48,109	(*318,175)	3,579,950
1938	960,492	1,917,995	48,403	(*301,124)	3,228,014
1939	1,020,585	1,871,975	56,303	(*325,255)	3,274,299
1940	1,336,172	2,357,492	82,499	(*344,786)	4,120,919
1941	1,352,112	2,506,770	82,103	(*380,859)	4,321,944

(* Includes 3,261 tons used in making water gas in 1935, 3,159 tons in 1936, 2,392 tons in 1937, 3,650 tons in 1938, 2,882 tons in 1939, 2,699 tons in 1940, and 3,522 tons in 1941.

Table 75.—Bituminous Coal Charged to Coke Ovens and Gas Retorts, by Provinces, 1930-1941

Year	Nova Scotia, New Brunswick and Quebec		Ontario		Manitoba, Alberta and British Columbia		Total
	Canadian	Imported	Canadian	Imported	Canadian	Imported	
				(tons)			
1930	515,793	433,414		1,063,195	220,673	57,968	3,191,043
1931	338,072	414,179		1,510,819	226,810	36,656	2,532,536
1932	271,496	295,114	105	1,435,964	177,663	38,670	2,217,012
1933	384,175	256,086	5,700	1,584,652	214,142	21,806	2,465,961
1934	556,628	359,210	700	1,911,920	286,975	671	3,116,104
1935	708,872	326,342	600	1,820,847	279,681		3,136,343
1936	765,743	328,216	15,684	1,973,183	275,672		3,358,499
1937	853,949	338,851	6,028	2,060,077	294,838	26,197	3,579,950
1938	673,925	345,319	3,200	1,858,798	335,270	11,802	3,228,014
1939	733,972	352,236	9,260	1,843,570	333,740	1,424	3,274,299
1940	1,071,156	355,024		2,344,726	347,515	2,528	4,120,919
1941	1,020,956	397,814		2,489,684	413,239	131	4,321,944

Table 76.—Bee-Hive, By-Product and Gas Retort Coke Sold and Used by Producers during 1940 and 1941, and Stocks on Hand at End of Year

	Coke	Breeze	Total
		(tons)	
1940			
Coke actually used by reporting companies—			
In coke or gas plant	183,752	39,125	222,877
In associated works	1,173,230	65,480	1,238,710
Coke sold—			
(a) Direct to consumers—			
For domestic use	220,925	25,891	246,816
For other uses	471,351	36,276	507,627
(b) To dealers for resale	781,544	19,272	800,816
(c) For export	36,556		36,556
Total sold or used	2,867,358	186,044	3,053,402
Stocks on hand at end of year	237,632	51,784	289,416
1941			
Coke actually used by reporting companies—			
In coke or gas plant	199,587	31,877	231,464
In associated works	1,295,712	86,339	1,382,051
Coke sold—			
(a) Direct to consumers—			
For domestic use	177,430	18,450	195,880
For other uses	562,768	82,761	645,529
(b) To dealers for resale	724,098	5,910	730,908
(c) For export	44,574		44,574
Total sold or used	3,005,069	225,337	3,230,406
Stocks on hand at end of year	194,114	21,367	215,481

Table 77.—Coal Carbonized, Coke Produced, and Distribution of Coke by Manufacturers, 1941

	Bee-hive and by-product plants	Gas retort plants	Total for coke producing plants
		(tons)	
Coal carbonized—			
Canadian.....	1,352,112	82,103	1,434,215
Imported.....	2,506,770	377,337	2,884,107
Total.....	3,858,882	459,440	4,318,322
Coke made—			
Coke.....	2,680,771	280,728	2,961,499
Breeze.....	166,853	17,303	184,216
Total.....	2,847,624	298,091	3,145,715
Coke yield.....%	73.8	64.9	72.8
Coke used in coke or gas plants—			
Coke.....	65,597	133,990	199,587
Breeze.....	29,634	2,243	31,877
Total.....	95,231	136,233	231,464
Coke used in associated metallurgical works—			
Coke.....	1,295,657	55	1,295,712
Breeze.....	86,339		86,339
Total.....	1,381,996	55	1,382,051
Coke sold direct to consumers for domestic use—			
Coke.....	116,120	61,310	177,430
Breeze.....	4,195	14,255	18,450
Total.....	120,315	75,565	195,880
Coke sold direct to consumers for other uses—			
Coke.....	527,663	35,105	562,768
Breeze.....	82,761		82,761
Total.....	610,424	35,105	645,529
Coke sold to dealers for resale—			
Coke.....	640,613	84,385	724,998
Breeze.....	4,900	1,010	5,910
Total.....	645,513	85,395	730,908
Coke sold for export.....	44,574		44,574
Total coke sold and used—			
Coke.....	2,696,224	314,845	3,065,069
Breeze.....	267,829	17,508	225,337
Total.....	2,898,053	332,353	3,230,406
Stocks on December 31, 1941—			
Coke.....	152,806	41,218	194,114
Breeze.....	20,191	1,176	21,367
Total.....	173,087	42,394	215,481

Table 78.—Production of Petroleum Coke, 1930-1941

Year	Made for own use		Made for sale		Total	
	Tons	Selling value at works	Tons	Selling value at works	Tons	Selling value at works
1930.....	23,528	\$ 124,363	68,549	\$ 292,915	92,087	\$ 517,308
1931.....	20,029	96,676	52,310	240,660	72,339	377,336
1932.....	19,278	104,181	53,787	293,750	73,065	397,836
1933.....	20,079	115,400	54,646	322,376	74,725	437,779
1934.....	9,208	57,961	52,467	200,512	61,760	258,473
1935.....	8,748	21,250	63,843	372,723	72,191	393,979
1936.....	2,629	11,087	62,077	381,473	64,706	393,160
1937.....	2,281	8,942	59,654	371,198	62,935	380,140
1938.....	634	1,547	63,375	388,753	64,009	390,300
1939.....	4,238	18,259	62,091	370,936	66,329	389,189
1940.....	4,876	25,328	63,458	416,262	68,334	441,590
1941.....	3,138	21,774	67,702	471,564	70,840	493,338

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

Table 79.—Sales⁽¹⁾ of Petroleum Coke in Canada for Fuel Purposes, 1938-1941

From "Petroleum Fuels in Canada" issued by the Bureau of Mines, Ottawa.

Area and Year	Fuel for domestic and industrial heating (2)	Inventory on December 31, including stocks at refineries
	tons	tons
1938	52,351	94,040
1939	36,949	147,836
1940	44,392	183,579
1941—Maritimes	467	
Quebec	500	56
Ontario	36,704	3,498
Western provinces	1,479	431
Canadian	37,846	
Imported	1,304	
Total for 1941	39,150	3,985

(1) As reported by coal dealers, distributors and importers.
 (2) Consisting mostly of amounts used as fuel by refineries.

Table 80.—Total Production of Coke (including Petroleum Coke) in Canada, 1938-1941

	Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba, Saskatchewan, Alberta and British Columbia	Canada
1938					
Coke and gas industry	Tons 350,234	404,741	1,365,571	231,457	2,352,003
	\$ 2,126,335	2,914,065	10,339,065	1,515,602	16,895,067
Petroleum refining industry	Tons 377	3,530	59,010	1,092	64,009
	\$ 1,225	16,535	399,184	3,356	390,300
Total	Tons 350,611	408,271	1,424,581	232,549	2,416,012
	\$ 2,127,560	2,930,600	10,708,249	1,518,958	17,285,367
1939					
Coke and gas industry	Tons 390,692	411,380	1,379,942	228,081	2,410,095
	\$ 2,607,367	2,975,950	9,712,164	1,468,036	16,763,517
Petroleum refining industry	Tons 783	3,660	58,762	3,127	66,332
	\$ 2,162	15,592	362,965	8,470	389,189
Total	Tons 391,475	415,040	1,438,704	231,208	2,476,427
	\$ 2,609,529	2,991,542	10,075,129	1,476,506	17,152,706
1940					
Coke and gas industry	Tons 605,917	435,082	1,732,303	242,092	3,015,391
	\$ 4,106,917	3,475,420	12,842,138	1,513,386	21,947,861
Petroleum refining industry	Tons 541	2,758	61,936	3,099	68,334
	\$ 1,498	12,688	414,671	12,733	411,590
Total	Tons 606,458	437,840	1,794,239	245,191	3,083,725
	\$ 4,108,415	3,488,108	13,256,809	1,526,119	22,379,451
1941					
Coke and gas industry	Tons 567,535	461,493	1,832,109	284,578	3,145,715
	\$ 3,970,872	4,067,634	14,985,196	1,864,321	24,888,023
Petroleum refining industry	Tons 467	3,673	65,208	1,492	70,840
	\$ 1,283	17,385	464,682	9,988	493,338
Total	Tons 568,002	465,166	1,897,317	286,070	3,216,555
	\$ 3,972,155	4,085,019	15,449,878	1,874,309	25,381,361

Table 81.—Apparent Consumption of Coke (including Petroleum Coke) in Canada, by Provinces, 1938-1941

	Prince Edward Island, Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba, Saskatchewan, Alberta and British Columbia	Canada
			(tons)		
Apparent consumption—1937	458,119	477,829	2,044,592	192,352	3,172,892
1938	260,157	448,704	1,691,839	199,476	2,700,176
1939	398,790	500,502	2,011,859	207,231	3,118,382
1940					
Production	606,458	437,840	1,704,239	245,191	3,083,728
Add—Decline in producers' stocks		32,406	7,048	8,163	47,617
Deduct—Increase in producers' stocks	606,458	470,240	1,801,287	253,354	3,131,345
	23,919				23,919
Add—Imports entered for consumption	582,539	470,246	1,801,287	253,354	3,107,426
	3,482	140,348	701,705	9,551	855,086
Deduct—Exports and re-exports	586,021	610,594	2,502,992	262,905	3,962,512
	1,055	2,314	47,880	26,719	77,968
Apparent consumption	584,966	608,280	2,455,112	236,186	3,884,544
1941					
Production	568,002	465,166	1,897,317	286,070	3,216,555
Add—Decline in producers' stocks	19,828	14,785	28,433	12,006	75,052
Add—Imports entered for consumption	587,830	470,951	1,925,750	298,076	3,291,607
	2,304	138,893	743,005	11,340	895,542
Deduct—Exports and re-exports	590,134	618,844	2,608,755	309,416	4,187,149
	1,146	2,479	47,207	37,320	88,152
Apparent consumption	588,988	616,365	2,621,548	372,906	4,098,997

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

Table 82.—Analysis of Coke Consumption in Canada, by Principal Areas, 1938-1940

	Prince Edward Island, Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba, Saskatchewan, Alberta and British Columbia	Canada
			(tons)		
1938					
Furnace charges	273,671	25,190	719,207	74,842	1,093,010
Manufacturing material	377	112,642	135,774	46,293	295,086
Industrial fuel	23,501	43,215	218,158	10,010	294,884
Available for domestic use (by difference)	62,608	267,657	618,600	68,334	1,017,196
Apparent consumption	360,157	448,704	1,691,839	199,476	2,700,176
1939					
Furnace charges	313,050	25,270	769,688	73,958	1,181,966
Manufacturing material	368	123,420	133,579	54,470	311,837
Industrial fuel	31,829	47,451	218,303	11,584	309,167
Available for domestic use (by difference)	53,643	304,361	890,280	67,219	1,315,412
Apparent consumption	398,790	500,502	2,011,859	207,231	3,118,382
1940					
Furnace charges	471,938	32,710	1,151,805	89,852	1,746,305
Manufacturing material	120	156,101	157,087	58,810	372,118
Industrial fuel	34,302	52,108	249,941	21,899	358,250
Available for domestic use (by difference)	78,606	367,361	890,279	65,625	1,401,871
Apparent consumption	584,966	608,280	2,455,112	236,186	3,884,544

NOTES.—

- 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.
- No allowance has been made for changes during the year in stocks of coke held by dealers or users.
- No allowance has been made for interprovincial shipment of coke.
- Consumption figures for 1941 are not yet available.

Table 83.—Production and Sales of Manufactured Gas, 1930-1941

Year	From by-product and gas plants			Production of still gas from petroleum refineries M cu. ft.
	Production**	Sales		
		Quantity	Income from sales	
M cu. ft.	M cu. ft.	\$	M cu. ft.	
1930	35,027,532	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	12,895,039	3,836,413
1933	29,125,295	15,895,248	11,839,345	3,505,405
1934	40,125,201	15,409,927	15,766,750	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
1938	42,932,721	15,198,068	15,001,142	6,486,618
1939	41,662,773	14,936,102	14,562,246	7,802,666
1940	55,112,521	15,302,723	14,803,049	8,706,834
1941	57,728,803	16,931,434	15,888,723	9,971,208

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

Table 84.—Sales of Manufactured Gas, Number of Customers and Mileage of Pipe Lines, 1941

Area	Number of customers	Number of active meters	Gas sales		Mileage of pipe lines	Approximate population served by mains
			M cu. ft.	\$		
Eastern provinces	205,141	232,269	5,278,970	5,737,406	1,000	1,633,000
Ontario	220,432	308,610	9,472,855	7,051,774	2,041	1,309,219
Western provinces	68,360	72,010	2,179,609	2,199,543	865	571,050
Total	493,933	512,889	16,931,434	15,888,723	3,906	3,513,269

Table 85.—Production of Crude Coal Tar, by Provinces, 1939-1941

Province	1939	1940	1941
(Imperial gallons)			
Nova Scotia and New Brunswick	5,781,870	8,447,592	8,022,504
Quebec	3,581,790	3,746,100	4,019,940
Ontario	16,370,250	19,241,763	19,732,520
Manitoba	483,315	400,764	473,305
British Columbia	859,836	981,676	1,126,938
Canada	27,027,076	32,817,895	33,375,297

Table 86.—Production, Imports and Exports of Ammonium Sulphate, 1930-1941

Year	Production		Imports		Exports	
	Tons	\$	Tons	\$	Tons	\$
1930	23,893	936,417	3,425	137,607	12,019	386,710
1931	28,354	706,197	12,830	369,254	5,927	167,477
1932	57,770	983,077	13,511	280,026	38,741	701,707
1933	82,534	1,437,749	4,156	100,415	92,383	1,081,392
1934	76,292	1,398,251	11,048	245,372	57,704	1,114,104
1935	67,362	1,473,675	4,280	94,222	45,655	977,552
1936	98,483	1,883,088	5,729	148,056	83,835	1,802,818
1937	87,621	1,782,364	3,230	82,440	56,485	1,212,258
1938	119,520	2,590,994	5,911	156,540	77,191	1,697,204
1939	129,865	3,107,977	5,217	94,854	109,260	2,508,364
1940	115,670	3,217,268	355	13,506	72,485	2,172,049
1941	98,662	3,156,880	57	4,951	59,480	2,147,013

*Includes output of synthetic ammonium sulphate in the Fertilizer Industry.

Primary Production—Natural Gas

Output of natural gas in Canada in 1941 totalled 43,495,353 thousand cubic feet as compared with 41,232,125 thousand cubic feet in the previous year. This production includes only the natural gas consumed for industrial and domestic purposes and does not take into account the waste gas burned in the Turner Valley field.

Table 87.—Principal Statistics of the Natural Gas Industry, 1940 and 1941

	1940	1941
Number of firms.....	236	231
Capital employed.....	\$ 80,487,766	81,280,541
Number of employees—On salary.....	811	1,059
On wages.....	1,378	1,102
Total employees.....	2,189	2,161
Salaries and wages—Salaries.....	\$ 1,218,836	1,659,559
Wages.....	1,529,904	1,182,236
Total salaries and wages.....	2,748,740	2,841,795
Cost of fuel, electricity and process supplies.....	85,561	103,229
Gross selling value of products.....	11,203,103	11,223,103

Table 88.—Production of Natural Gas in Canada, by Provinces, 1940 and 1941

Province	1940		1941	
	M cu. ft.	Value	M cu. ft.	Value
		\$		\$
New Brunswick.....	616,041	300,543	653,542	317,437
Ontario.....	13,053,403	7,745,834	11,828,703	7,140,130
Manitoba.....	600	180		
Saskatchewan.....	100,773	30,232	106,168	31,850
Alberta.....	27,450,808	4,923,469	30,905,440	5,175,364
Northwest Territories.....	1,500	335	1,500	335
Canada	41,232,125	13,006,593	43,495,353	12,665,116

CHAPTER SEVEN

THE GLASS INDUSTRY

Production from the glass industry in Canada amounted in value to \$21,100,323 during 1941, an increase of 46 per cent over the \$14,417,663 reported for 1940, which in turn was 15 per cent over the 1939 total of \$12,529,050.

Eighty factories were occupied in the production of glass and glass products during 1941. These establishments had fixed and working capital amounting to \$19,719,438 and gave employment to an average of 4,649 persons who were paid \$6,062,919 in salaries and wages. Fuel and electricity cost \$1,356,749 and expenditures for materials to be used in manufacturing processes amounted to \$7,687,353.

Pressed, blown and drawn glass was produced in 6 plants, including 3 in Quebec, 2 in Ontario and 1 in Alberta. This branch of the industry had an output worth \$14,577,033 against \$9,734,651 in 1940. Production consisted of bottles and jars, sheet and window glass; no plate glass being made in Canada in 1941.

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, prismatic glassware, etc. The number of plants operating in this group was 74 distributed across Canada as follows: 47 in Ontario, 16 in Quebec, 5 in British Columbia, 4 in Manitoba, 1 in Alberta and 1 in New Brunswick. Production from these works was valued at \$6,523,290 in 1941, a gain of 39 per cent from the 1940 production of \$4,683,012.

Table 89.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930.....	62	15,962,392	3,388	4,205,566	990,891	4,213,885	12,191,752
1931.....	66	14,873,963	2,956	3,564,192	822,094	3,586,570	9,937,411
1932.....	63	14,281,044	2,606	2,989,887	765,685	3,155,579	8,469,895
1933.....	66	13,207,596	2,579	2,586,370	717,701	2,950,309	7,830,795
1934.....	67	13,808,243	3,001	3,176,204	803,488	3,549,677	9,790,871
1935.....	68	14,168,575	3,135	3,291,074	837,025	3,618,175	9,933,348
1936.....	68	14,687,098	3,323	3,522,157	851,774	4,208,706	11,094,762
1937.....	77	16,750,801	3,799	4,289,031	1,030,993	5,768,738	14,437,250
1938.....	77	16,333,941	3,429	3,987,826	898,006	4,648,477	12,649,957
1939.....	73	16,534,161	3,372	3,948,603	888,316	4,559,732	12,529,050
1940.....	78	17,388,129	3,685	4,454,815	991,409	5,217,347	14,417,663
1941.....	80	19,719,438	4,649	6,062,919	1,356,749	7,687,353	21,100,323

Table 90.—Principal Statistics, by Provinces, 1940 and 1941

Year	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
		\$		\$	\$	\$	\$
1940							
Quebec	17	6,914,137	1,148	1,467,383	396,718	1,349,159	4,377,962
Ontario	49	8,609,890	2,257	2,642,649	525,454	3,238,526	8,715,527
British Columbia	5	123,470	32	38,489	1,050	55,768	97,405
Manitoba	4	99,151	26	24,190	866	28,669	86,695
New Brunswick	1						
Alberta	2	1,641,481	222	282,104	67,315	545,225	1,140,074
Canada	78	17,388,129	3,685	4,454,815	991,409	5,217,317	14,417,663
1941							
Quebec	19	8,235,891	1,648	2,150,045	693,607	2,451,979	7,502,297
Ontario	49	9,542,780	2,622	3,439,555	579,356	4,436,825	11,703,198
British Columbia	5	186,050	52	61,593	2,812	98,423	179,463
Manitoba	4	123,882	27	25,775	2,524	34,313	77,750
New Brunswick	1						
Alberta	2	1,630,909	300	375,951	78,450	665,813	1,577,615
Canada	80	19,719,438	4,619	6,062,919	1,356,719	7,687,353	21,100,323

Table 91.—Capital Employed, by Provinces, 1940 and 1941

Province	Present value of land, buildings, machinery, tools and other equipment	Value of inventories		Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
		Raw materials, fuel and other supplies, on hand, and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
Quebec	3,615,051	1,196,363		2,102,123	6,914,137
Ontario	4,803,113	1,827,906		1,918,871	8,609,890
British Columbia	29,290	55,721		38,459	123,470
Manitoba	60,025	31,750		17,376	99,151
Other provinces	1,002,740	302,658		336,077	1,641,481
Canada	9,560,825	3,414,398		4,412,906	17,388,129
1941					
Quebec	4,000,534	590,170	796,749	2,848,408	8,235,861
Ontario	5,201,296	1,415,170	753,482	2,082,788	9,542,736
British Columbia	61,977	64,896	4,255	54,922	186,050
Manitoba	36,412	57,702	3,275	26,493	123,882
Other provinces	942,981	136,118	234,712	317,098	1,630,909
Canada	10,333,200	2,264,056	1,792,473	5,329,709	19,719,438

Table 92.—Employees, Salaries and Wages, by Provinces, 1940 and 1941

Province	Average number of employees				Total	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
					\$	\$	\$	
1940								
Quebec	129	44	843	132	1,148	389,152	1,078,231	1,467,383
Ontario	216	82	1,643	316	2,257	518,849	2,123,800	2,642,649
Manitoba	10	5	9	2	26	12,328	11,862	24,190
British Columbia	7	2	23		32	12,258	26,231	38,489
Other provinces	12	4	167	39	222	41,391	240,713	282,104
Canada	374	137	2,685	489	3,685	973,978	3,480,637	4,454,815
1941								
Quebec	161	65	1,217	205	1,618	524,320	1,635,725	2,160,045
Ontario	216	98	1,793	515	2,622	645,850	2,793,705	3,439,555
Manitoba	6	5	9	7	27	11,322	14,453	25,775
British Columbia	14	2	30		52	19,407	42,186	61,593
Other provinces	9	6	209	76	390	36,579	339,372	375,951
Canada	406	176	3,264	803	4,619	1,237,478	4,825,441	6,062,919

Table 93.—Wage-Earners, by Months, 1940 and 1941 (On the last work day of each month)

Month	1940			1941		
	Male	Female	Total	Male	Female	Total
January.....	2,606	419	3,025	2,934	584	3,518
February.....	2,511	382	2,893	3,084	667	3,751
March.....	2,450	385	2,835	3,207	741	3,948
April.....	2,568	421	2,989	3,325	805	4,130
May.....	2,703	459	3,162	3,405	898	4,303
June.....	2,818	523	3,341	3,370	910	4,280
July.....	2,859	548	3,407	3,578	957	4,535
August.....	2,816	583	3,399	3,363	927	4,290
September.....	2,798	578	3,376	3,432	879	4,311
October.....	2,734	549	3,283	3,171	721	3,892
November.....	2,736	521	3,257	3,185	772	3,957
December.....	2,741	489	3,230	3,186	785	3,971
Average.....	2,685	489	3,174	3,264	803	4,067

Table 94.—Hours Worked per Week by Wage-Earners, 1941 (In one week in month of highest employment: overtime included)

Hours worked per week	Number of wage-earners				Hours worked per week	Number of wage-earners			
	1940		1941			1940		1941	
	Male	Female	Male	Female		Male	Female	Male	Female
30 hours or less.....	165	40	162	53	51-54 hours.....	240	22	301	78
31-43 hours.....	228	124	376	107	55 hours.....	31	16	146	50
44 hours.....	249	55	198	109	56-64 hours.....	607	45	984	53
45-47 hours.....	92	31	258	182	65 hours and over.....	241	25	244	3
48 hours.....	960	257	783	296	Total	3,032	673	3,702	1,057
49-50 hours.....	219	75	310	66	Total wages paid in selected week.....	\$ 69,688	8,434	95,946	15,188

Table 95.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of Measure	1940		1941	
		Quantity	Cost of works	Quantity	Cost of works
Bituminous coal—Canadian.....	ton	1,668	10,927	2,400	17,181
Imported.....	ton	4,104	26,225	8,496	45,499
Anthracite coal.....	ton	207	3,148	263	3,172
Coke.....	ton	263	2,702	258	3,341
Gasoline.....	imp. gal.	48,947	12,442	66,573	17,067
Fuel oil.....	imp. gal.	6,406,671	323,287	12,195,920	713,388
Kerosene.....	imp. gal.	1,055	175	1,827	336
Wood.....	cord	36	236	34	246
Gas—Manufactured.....	M cu. ft.	22,619	18,435	31,161	20,366
Natural.....	M cu. ft.	1,159,779	367,443	871,232	259,514
Electricity purchased.....	k.w.h.	33,820,870	226,389	42,175,707	270,039
Total.....			991,409		1,356,749

Table 96.—Power Equipment, 1940 and 1941

	Ordinary in use		In reserve or idle	
	No. of Units	Total rated horse power	No. of Units	Total rated horse power
1940				
Steam engines and steam turbines.....	4	144		
Gasoline, gas and oil engines.....			2	225
Total primary equipment.....	4	144	2	225
Electric motors run by purchased power.....	1,368	12,740	89	1,503
Total	1,372	12,884	91	1,728
Stationary boilers.....	21	1,005	5	485
1941				
Steam engines and steam turbines.....	3	129		
Gasoline, gas and oil engines.....	1	150	2	200
Total primary equipment.....	4	289	2	260
Electric motors run by purchased power.....	1,475	13,830	84	1,320
Total	1,479	14,119	86	1,520
Stationary boilers.....	24	1,144	3	265

Table 97.—Materials Used in Manufacturing, 1940 and 1941

Material	1940		1941	
	Quantity	Cost of works	Quantity	Cost of works
		\$		\$
CUT AND BEVELLED GLASS DIVISION—				
Bevelled or polished edge plates.....		34,502		33,185
Bevelled or polished edge sheets.....		21,841		16,900
Figured and cathedral glass, leaded glass, etc.....		21,879		17,838
Glass blanks for making cut glass.....		166,708		310,743
Glass tubing.....		91,097		54,313
Plate glass used for bevelling, silvering, laminating, etc.....		726,563		1,066,629
Sheet glass used for bevelling, silvering, laminating, etc.....		369,989		573,462
Rough blanks for lenses.....		167,548		279,438
Grinding and polishing materials.....		50,550		86,043
Celluloid and other plastics.....		108,477		103,023
Lead, zinc and copper.....		9,736		15,842
Solder.....		3,606		3,606
Silver nitrate.....		28,106		33,906
Containers, boxes, packages, etc.....		16,661		25,484
All other materials.....		174,615		329,558
Total		1,991,848		2,967,887
PRESSED, BLOWN AND DRAWN GLASS DIVISION—				
Arsenic..... lb.	250,223	8,447	359,008	14,133
Barytes..... lb.	608,584	8,208	734,776	10,948
Borax..... ton	1,164	77,666	1,480	112,794
Cobalt oxide..... lb.	3,710	5,804	4,316	7,912
Cullet..... ton	8,922	84,885	20,167	159,662
Chromite..... ton	4	193	2	204
Feldspar..... ton	350	5,744	909	16,656
Fluorspar..... ton	140	6,353	185	7,984
Lime..... ton	10,462	93,437	14,554	135,208
Nepheline-syenite..... ton	4,233	69,619	5,834	94,091
Salt cake..... lb.	287,036	2,966	1,111,335	11,379
Selenium..... lb.	3,102	5,287	4,211	7,047
Silica sand..... ton	78,955	439,540	114,761	713,677
Shipping containers and packing materials.....		666,142		1,087,979
All other materials.....		1,751,208		2,349,792
Total		3,225,499		4,729,466
Grand Total		5,217,347		7,697,353

Table 98.—Products Manufactured, 1940 and 1941

Products	Selling value at works	
	1940	1941
	\$	\$
CUT AND BEVELLED GLASS DIVISION—		
Bent plate glass.....	14,146	30,270
Bevelled or polished edge plate.....	204,649	181,393
Chipped or etched plate glass.....	7,886	13,358
Plate glass signs.....	3,402	51,584
Plate glass mirrors.....	790,708	1,153,979
Bent sheet glass.....	77,209	65,596
Bevelled or polished edge sheet glass.....	7,310	40,612
Chipped or etched sheet glass.....	9,170	22,078
Sheet glass signs.....	620	833
Sheet glass mirrors.....	243,926	468,508
Leaded glass, including memorial windows.....	100,683	101,400
Cut glass (tumblers, bowls, etc.).....	316,907	613,534
Optical lenses.....	712,183	932,057
Druggists' and chemical glassware.....	135,694	187,918
Receipts for repair work.....	30,928	62,007
All other products, including laminated and safety glass.....	2,027,591	2,598,163
Total.....	4,683,012	6,523,290
PRESSED, BLOWN AND DRAWN GLASS DIVISION—		
Pressed, blown and drawn glass (including bottles, sealers, window glass, etc.).....	9,734,651	14,577,033
Grand total.....	14,417,663	21,100,323

CHAPTER EIGHT

THE GYPSUM PRODUCTS INDUSTRY

Nine Canadian factories, operated by four companies, manufactured gypsum products having a factory selling value of \$4,601,093 during 1941. This output was 11.9 per cent over the 1940 total of \$4,110,795 and 44.9 per cent over the 1939 value of \$3,174,137. The main products were gypsum wallboard, gypsum hardwall plaster, gypsum tile and gypsum blocks.

Capital employed in these nine manufacturing plants amounted to \$3,431,883 in 1941, including \$1,668,647 as the value of buildings and equipment, \$526,925 as the value of inventories at the year-end and \$1,236,311 as cash, bills receivable, etc. The average number of employees in 1941 was 374 to whom \$464,776 was paid in salaries and wages. Expenditures for fuel and electricity amounted to \$191,685, while materials used in manufacturing processes cost \$1,941,052.

Table 99.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930	6	5,315,137	337	422,083	107,454	846,118	2,007,710
1931	7	2,122,648	231	256,178	74,262	437,748	1,621,382
1932	8	2,246,738	232	173,995	61,884	433,969	1,222,004
1933	8	2,296,863	152	109,172	54,998	481,873	980,589
1934	8	2,549,037	173	144,923	60,826	668,222	1,417,646
1935	8	2,685,222	173	136,297	60,968	581,945	1,418,793
1936	9	2,766,619	217	219,495	77,415	798,799	1,970,882
1937	9	2,756,165	243	232,244	109,770	1,002,568	2,525,507
1938	9	2,823,184	245	289,593	118,936	1,123,950	2,715,894
1939	9	3,660,233	307	321,596	129,889	1,240,763	3,174,137
1940	9	3,151,533	382	425,023	157,299	1,630,819	4,110,795
1941	9	3,431,883	374	464,776	191,685	1,941,052	4,601,093

Table 100.—Capital Employed, 1940 and 1941

	1940	1941
	\$	\$
Present value of land, buildings, machinery, tools, and other equipment	1,729,301	1,668,647
Inventory value of raw materials, fuel and other supplies on hand, and stocks in process	484,390	280,714
Inventory value of finished products on hand	937,833	240,211
Cash, bills and accounts receivable, prepaid expenses, etc.	937,833	1,236,311
Total	3,151,533	3,431,883

Table 101.—Employees, Salaries and Wages, 1940 and 1941

	1940	1941
Salaried employees—Male	27	25
Female	3	4
Wage-earners—Male	332	345
Female		
Total employees	362	374
Salaries	\$ 60,129	\$ 66,430
Wages	\$ 364,894	\$ 398,346
Total salaries and wages	\$ 425,023	\$ 464,776

Table 102.—Wage-Earners, by Months, 1940 and 1941
(Number on payroll on last work-day in each month)

Month	Number of wage-earners		Month	Number of wage-earners	
	1940	1941		1940	1941
January.....	237	314	July.....	346	382
February.....	227	306	August.....	392	365
March.....	285	293	September.....	403	354
April.....	265	328	October.....	420	362
May.....	312	371	November.....	383	358
June.....	348	381	December.....	354	337
			Average.....	332	345

Table 103.—Hours Worked per Week by Wage-Earners, 1940 and 1941
(In one week of month of highest employment; overtime included)

	Number of wage-earners			Number of wage-earners	
	1940	1941		1940	1941
30 hours or less.....	16	14	49-50 hours.....	22	21
31-43 hours.....	10	9	51-54 hours.....	63	46
44 hours.....	26	36	55 hours.....	8	8
45-47 hours.....	15	14	56-64 hours.....	153	105
48 hours.....	24	22	65 hours or over.....	88	124
			Total.....	425	400
			Total wages paid in selected week.. \$	9,630	9,670

Table 104.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Coal—Bituminous—Canadian.....	ton	375	2,895	405	2,818
Imported.....	ton	5,353	33,399	6,087	38,983
Lignite.....	ton	4,178	16,010	4,556	17,537
Coke.....	ton	200	1,966	244	2,521
Gasoline.....	imp. gal.	13,640	3,312	11,160	3,031
Kerosene.....	imp. gal.	20	5		
Fuel oil.....	imp. gal.	1,121,479	56,262	1,571,597	82,495
Wood.....	cord	115	468	200	842
Gas—Natural.....	M cu. ft.	5,516	1,464	5,589	1,502
Electricity purchased.....	K.W.H.	4,000,652	41,512	6,511,550	41,954
Total.....			157,299		191,683
Electricity generated for own use.....	K.W.H.	333,839		333,839	

Table 105.—Power Equipment, 1940 and 1941

	1940		1941	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines.....	6	190	5	170
Gasoline, gas and oil engines.....	1	40	1	40
Total primary equipment.....	7	230	6	210
Electric motors run by purchased power.....	293	4,107	303	4,856
Total.....	300	4,327	309	5,066
Electric motors run by power generated by above primary units.....	31	272	28	240
Stationary boilers.....	8	1,362	10	1,482

Table 106.—Materials Used in Manufacturing, 1940 and 1941

Material	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Gypsum, crude	ton	21,611	75,046	30,978	112,158
Gypsum, calcined (plaster of Paris)	ton	125,917	660,502	157,488	638,325
Paper	ton	9,056	491,035	13,106	718,014
Starch or paste	ton	262	18,803	487	42,310
Hair	ton	111	17,933	125	23,253
Retarder	ton	267	20,329	286	23,330
Sawdust or shavings	ton	1,176	5,577	751	5,481
Containers, etc.			126,794		124,660
All other materials			213,900		262,581
Total			1,630,819		1,941,052

Table 107.—Products Manufactured, 1940 and 1941

Product	Unit of measure	1940		1941	
		Quantity	Selling value at works	Quantity	Selling value at works
			\$		\$
Gypsum wallboard	sq. ft.	114,523,870	2,712,355	154,760,145	3,255,618
Gypsum hard wall plasters	ton	69,889	897,932	80,210	1,043,864
All other products (*)			500,508		301,611
Total			4,110,795		4,601,093

(*) Includes gypsum tile, gypsum blocks, etc.

Primary Production—The Gypsum Mining and Quarrying Industry

Production (producers' sales and consumption) of gypsum in Canada during 1941 totalled 1,593,406 short tons valued at \$2,248,428 compared with 1,448,788 short tons at \$2,065,933 in 1940. The tonnage in both years represents various grades of crude gypsum and anhydrite shipped from quarries or mines together with the tonnage of calcined gypsum used in or shipped from quarry or "primary" plants. The quantity of the mineral produced in 1941 established an all-time high record in the history of the Canadian gypsum mining industry; the value, however, was exceeded annually during the years 1925-1930 inclusive.

Of the 1941 output, Nova Scotia properties contributed 1,395,172 tons valued at \$1,517,297; Ontario, 90,599 tons at \$276,459; New Brunswick, 56,172 tons at \$150,530; Manitoba, 27,601 tons at \$162,822, and British Columbia, 23,862 tons worth \$141,320.

The quantity of crude gypsum mined in 1941 amounted to 1,532,228 short tons while the tonnage of anhydrite mined (all in Nova Scotia) totalled 28,212 short tons. Crude gypsum calcined in primary or quarry plants totalled 197,413 short tons.

The following are the average prices per short ton recorded in 1941 by the industry for total sales of various grades, including anhydrite: crude lump, \$1.31; crushed crude, \$1.10 and ground crude, \$7.44.

In 1941 the number of firms reporting production was 8 and the gypsum quarries and mines in operation totalled 15. Some of the Canadian gypsum mining companies confine their operations in the Dominion to the production and sale 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. Gypsum is exported from Canada almost entirely in the crude form.

Capital employed by Canadian gypsum mining companies totalled \$5,175,821 in 1941; employees aggregated 648; salaries and wages paid amounted to \$745,008 and the total value of fuel, purchased electricity and process supplies used was computed at \$452,008.

Table 108.—Principal Statistics of the Gypsum Mining Industry, 1940 and 1941

	1940	1941
Number of firms.....	9	8
Capital employed.....	\$ 4,048,662	5,175,821
Number of employees—on salaries.....	57	48
on wages.....	637	600
Total employees.....	694	648
Salaries and wages—salaries.....	\$ 111,422	90,935
wages.....	\$ 606,244	654,073
Total salaries and wages.....	\$ 717,666	745,008
Cost of fuel and electricity.....	\$ 194,964	222,564
Cost of process supplies.....	\$ 223,375	229,444
Gross selling value of products.....	\$ 2,065,933	2,248,428

Table 109.—Production of Gypsum in Canada, 1940 and 1941

	1940		1941	
	Quantity	Value	Quantity	Value
	Tons	\$	Tons	\$
Shipments by grades—				
Crude (1)—Lump or mine run.....	21,101	23,201	30,776	52,156
Crushed.....	1,296,769	1,331,843	1,396,364	1,541,431
Fine ground.....	521	2,961	277	2,061
Calcined gypsum, sold and used (2).....	130,397	707,928	156,989	652,780
Total.....	1,448,788	2,065,933	1,593,406	2,248,428
Shipments by provinces—				
Nova Scotia.....	1,278,204	1,302,347	1,395,172	1,517,297
New Brunswick.....	52,218	192,980	56,172	150,530
Ontario.....	75,271	313,512	90,599	276,459
Manitoba.....	23,108	137,051	27,601	162,832
British Columbia.....	19,987	120,043	23,862	141,320
Total.....	1,448,788	2,065,933	1,593,406	2,248,428
Total gypsum mined and quarried (1).....	1,540,795		1,560,440	
Total gypsum calcined (2).....	156,372		197,413	

(1) Includes some anhydrite quarried in Nova Scotia.

(2) Does not include gypsum calcined in manufacturing plants located in Montreal and Calgary, but includes calcine used in manufacturing plants operated in direct conjunction with the mines—the value of calcine used is its value as a process material.

CHAPTER NINE

THE LIME INDUSTRY

Production of quick and hydrated lime in Canada during 1941 totalled 860,885 short tons valued at \$6,357,941 compared with 716,730 short tons worth \$5,194,555 in 1940. The output in 1941 comprised 723,864 short tons of quick lime valued at \$5,287,711 and 137,021 short tons of hydrated lime at \$1,070,230. During the year under review, 665,319 short tons of quick lime and 86,202 short tons of hydrated lime were sold or used by lime producers for chemical manufacture, while the balance of Canadian lime production, totalling 109,361 tons and comprising both the quick and hydrated varieties was sold or used for building, agricultural and other purposes.

Stone used in the production of lime in Canada includes calcium, high calcium and dolomitic varieties of limestone. It is estimated that about 1,530,200 tons of limestone were consumed in the production of lime in 1941. Lime was produced in all Canadian provinces with the exception of Prince Edward Island and Saskatchewan; no commercial production of lime in the Territories has ever been officially reported. Of the total Canadian output of lime in 1941, Ontario plants produced 431,125 tons or about 50 per cent, and Quebec 306,515 tons or nearly 36 per cent.

During 1941 the industry reported 50 plants as active; capital employed totalled \$4,633,946 and \$1,321,571 in salaries and wages were distributed to 1,105 employees. The cost of fuels and purchased electricity used amounted to \$2,008,142 and the value of explosives, chemicals and other process supplies consumed aggregated \$188,387.

Table 110.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930.....	50	8,816,879	1,086	1,087,778	886,354	.....	4,038,688
1931.....	60	7,289,000	799	785,868	612,278	.....	2,794,415
1932.....	60	6,823,949	677	575,072	535,433	.....	2,394,547
1933.....	60	8,920,042	696	480,833	473,125	.....	2,432,306
1934.....	58	8,497,895	737	535,492	606,335	.....	2,745,797
1935.....	54	5,707,391	756	556,049	686,186	124,251	2,925,791
1936.....	57	6,106,901	799	640,322	743,663	96,316	3,335,970
1937.....	57	4,931,831	872	781,274	871,131	167,827	3,824,917
1938.....	53	4,881,214	867	795,068	826,230	113,759	3,542,652
1939.....	59	4,802,983	937	849,468	944,502	107,510	4,003,514
1940.....	55	5,107,739	982	1,003,671	1,424,947	177,499	5,194,555
1941.....	50	4,633,946	1,105	1,321,571	2,008,142	188,387	6,357,941

Table 111.—Principal Statistics, by Provinces, 1940 and 1941

Province	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
		\$		\$	\$	\$	\$
1940							
Nova Scotia.....	2	209,300	125	138,955	68,013	13,018	359,501
New Brunswick.....	4						
Quebec.....	19	1,284,334	374	331,726	647,910	45,906	1,480,466
Ontario.....	20	2,422,536	250	324,229	623,505	60,496	2,752,787
Manitoba.....	4	543,046	89	74,229	37,257	37,942	217,547
Alberta.....	3	214,472	32	38,508	20,810	17,272	149,720
British Columbia.....	3	434,051	83	96,024	20,552	2,865	234,534
Canada.....	55	5,107,739	962	1,003,671	1,424,047	177,499	5,194,555
1941							
Nova Scotia.....	2	203,900	130	155,376	73,824	14,492	379,710
New Brunswick.....	4						
Quebec.....	16	957,410	419	437,801	1,026,095	72,911	2,062,744
Ontario.....	17	2,228,865	309	450,576	777,901	39,852	3,246,048
Manitoba.....	4	527,916	98	95,266	55,137	43,405	273,492
Alberta.....	4	235,538	41	52,232	29,038	13,368	151,296
British Columbia.....	3	480,317	108	130,320	46,147	4,359	244,051
Canada.....	50	4,633,946	1,105	1,321,571	2,008,142	188,387	6,357,941

Table 112.—Capital Employed, by Provinces, 1940 and 1941

Province	Present value of land, buildings, machinery, and other equipment	Value of inventories		Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
		Raw materials, fuel and other supplies, on hand, and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
Nova Scotia and New Brunswick.....	146,600	14,800	5,500	42,400	209,300
Quebec.....	712,963	269,044	8,290	294,037	1,284,334
Ontario.....	2,123,179	252,775	9,524	37,058	2,422,536
Manitoba.....	500,756	34,902	7,388	.....	543,046
Alberta.....	165,542	9,864	5,930	33,136	214,472
British Columbia.....	226,191	43,283	32,096	132,481	434,051
Canada.....	3,875,231	624,668	65,728	539,112	5,107,739
1941					
Nova Scotia and New Brunswick.....	132,500	13,900	3,900	53,600	203,900
Quebec.....	535,117	178,903	14,966	228,424	957,410
Ontario.....	1,824,383	352,942	15,428	36,112	2,228,865
Manitoba.....	497,442	25,655	4,819	.....	527,916
Alberta.....	183,568	6,301	4,765	37,004	235,538
British Columbia.....	258,017	69,275	26,916	126,109	480,317
Canada.....	3,434,027	616,976	70,794	482,149	4,633,946

MANUFACTURES OF NON-METALLIC MINERALS

Table 113.—Employees, Salaries and Wages, 1940 and 1941

Province	Number of employees				Total employees	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
1940						\$	\$	\$
Nova Scotia and New Brunswick	5	2	118		125	17,031	121,024	138,955
Quebec	23	2	349		374	40,527	291,199	331,726
Ontario	20	3	236		259	35,671	288,558	324,229
Manitoba	5		84		89	9,427	64,802	74,229
Alberta	4	1	27		32	7,935	30,573	38,508
British Columbia	10	2	71		83	17,352	78,672	96,024
Total	67	10	885		962	127,943	875,728	1,003,671
1941								
Nova Scotia and New Brunswick	5	2	123		130	17,288	138,088	155,376
Quebec	24	3	392		419	43,772	394,029	437,801
Ontario	25	6	278		309	45,514	405,062	450,576
Manitoba	6		92		98	11,290	83,976	95,266
Alberta	4	1	36		41	9,595	42,637	52,232
British Columbia	12	4	92		108	23,236	107,084	130,320
Total	76	16	1,013		1,165	150,695	1,170,876	1,321,571

Table 114.—Wage-Earners, by Months, 1940 and 1941

(Number on pay roll on the last day of each month)

Month	1940			1941		
	Quarry	Kiln	Total	Quarry	Kiln	Total
January	275	440	715	300	605	905
February	271	463	734	319	630	949
March	274	497	771	343	656	999
April	310	530	846	350	665	1,015
May	366	562	929	375	668	1,043
June	370	554	924	368	674	1,042
July	390	590	980	379	705	1,084
August	372	596	968	372	666	1,038
September	365	582	947	375	660	1,035
October	378	594	972	373	674	1,047
November	328	667	995	365	659	1,024
December	326	536	862	333	631	964
Average	340	545	885	356	657	1,013

Table 115.—Hours Worked per Week, by Wage-Earners, 1940 and 1941

(In one week of month of highest employment; overtime included)

Hours	1940	1941	Hours	1940	1941
	No.	No.		No.	No.
30 hours or less	10	7	51-54 hours	204	200
31-43 hours	11	23	55 hours	86	84
44 hours	76	65	56-64 hours	308	308
45-47 hours	8	6	65 hours and over	115	145
48 hours	261	304	Total	1,083	1,148
49-50 hours	4	6	Total wages paid in selected week, \$	22,970	28,451

Table 116.—Fuel and Electricity Used in the Lime Industry in Canada, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian	ton	81,390	567,930	116,102	886,538
Imported	"	60,095	298,189	96,491	535,335
Anthracite coal	"	1,868	10,058	2,527	23,046
Lignite coal	"	81	305	101	381
Coke	"	10,813	123,562	18,798	167,018
Gasoline	imp. gal.	86,212	21,250	113,066	29,514
Kerosene	"	1,244	291	105	24
Fuel oil and diesel oil	"	612,920	23,101	644,704	27,537
Wood	cord	54,822	193,026	66,368	241,556
Gas, natural	M cu. ft.	350,597	117,887	49,994	16,530
Other fuel			1,298		1,236
Electricity purchased	k.w.h.	10,398,113	61,150	13,325,379	79,427
Total			1,421,047		2,008,142

NOTE.—Electricity generated for own use in 1940 totalled 1,307,252 k.w.h.; and 1,478,083 k.w.h. in 1941.

Table 117.—Power Equipment, 1940 and 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse-power	Number of units	Total rated horse-power
1940				
Steam engines and steam turbines	7	235		
Diesel engines	5	409		
Gasoline, gas and oil engines (except Diesel)	21	687	2	40
Total primary	33	1,331	2	40
Electric motors run by purchased power	336	6,328	5	253
Total	369	7,659	7	293
Electric motors run by power generated by above primary units	52	758		
Stationary boilers	13	1,023	6	367
1941				
Steam engines and steam turbines	10	266	1	25
Diesel engines	6	600		
Gasoline, gas and oil engines (except Diesel)	23	882	1	10
Total primary	39	1,728	2	35
Electric motors run by purchased power	406	7,089	4	213
Total	445	8,817	6	248
Electric motors run by power generated by above primary units	54	843		
Stationary boilers	14	1,683	3	117

Table 118.—Production of Lime in Canada, by Provinces, 1941, showing Purposes for which Used* or Sold

	Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba and Alberta	British Columbia	Total Canada
(Tons of 2,000 pounds)						
Quicklime						
Building trades—						
Finishing lime..... ton		1,192	3,583	3,415	118	8,308
\$		11,072	23,253	27,077	2,990	64,392
Masons' lime..... ton	2,323	5,477	12,365	1,313		21,478
\$	21,124	63,992	107,722	13,677		206,515
Sand-lime brick..... ton		1,786	6,448	40		8,274
\$		8,478	44,260	1,032		53,770
Agriculture..... ton	195	2	293		79	569
\$	2,000	34	1,376		454	3,864
Chemical—						
Smelters (non-ferrous)..... ton		1,724	5,751	3,007	29	10,511
\$		11,068	34,941	30,070	175	76,254
Iron and steel furnaces (a)..... ton	23,179	3,876	34,469	181	35	61,740
\$	210,567	30,730	248,326	1,429	211	500,263
Cyanide mills (gold mines)..... ton		4,163	15,567	7,847	930	28,507
\$		31,801	97,135	67,219	5,599	201,754
Pulp and paper mills..... ton	9,311	105,740	8,289	10,959	19,233	153,522
\$	75,003	653,226	56,905	79,237	139,181	1,003,517
Glass works..... ton			11,909	175		12,084
\$			79,773	1,382		81,155
Sugar refineries..... ton	200	20	7,642	8,217	45	16,124
\$	1,800	240	78,466	65,736	271	146,513
Tanneries..... ton		1,080	3,402	2		4,484
\$		9,030	22,849	20		31,899
Fertilizer plants..... ton			3,350			350
\$			2,725			2,725
Insecticide plants..... ton	40		1,430		244	1,714
\$	560		9,681		1,400	11,710
Other chemical works..... ton	80	112,736	261,463	2,004		376,283
\$	800	891,273	1,832,853	16,332		2,741,258
Uses unspecified..... ton		8,018	966	1,580	9,372	19,916
\$		80,660	9,039	15,974	56,410	162,092
Total quicklime..... ton	35,328	245,814	373,927	38,720	30,073	723,864
\$	320,854	1,791,604	2,649,394	319,180	206,769	5,287,711
Hydrated Lime						
Building trades—						
Finishing lime..... ton	54		20,346	5,863		26,263
\$	560		250,524	99,693		350,767
Masons' lime..... ton	832	1,664	9,317			11,813
\$	7,156	24,146	82,237			113,539
Sand-lime brick..... ton						
\$						
Agriculture..... ton	1,070	588	2,962		3,787	8,407
\$	8,870	4,891	29,917		26,016	69,694
Chemical—						
Smelters (non-ferrous)..... ton		37,739	19,689	20	650	58,098
\$		94,348	184,151	200	4,405	283,164
Iron and steel furnaces..... ton			104			104
\$			1,115			1,115
Cyanide mills..... ton		4,788	580	255		5,623
\$		24,850	6,181	2,550		33,581
Pulp and paper mills..... ton	5,175	6,514	149			11,831
\$	40,000	53,230	1,474			94,704
Sugar refineries..... ton	82	180	93			355
\$	750	1,620	978			3,348
Tanneries..... ton		356	574			930
\$		2,833	6,151			8,984
Fertilizer plants..... ton		5,546	272			5,818
\$		33,276	2,346			35,622
Insecticide plants..... ton	152				36	188
\$	1,520				247	1,767
Other chemical works..... ton		213	2,850	192		3,255
\$		1,763	29,308	3,175		34,246
Uses unspecified..... ton		3,113	269		954	4,336
\$		30,183	2,962		6,554	39,699
Total hydrated lime..... ton	7,365	60,701	57,198	6,330	5,427	137,021
\$	58,856	271,110	597,344	105,608	37,282	1,070,230
Grand total..... ton	42,693	306,515	431,125	45,050	35,502	860,885
\$	379,710	2,062,744	3,246,648	424,788	244,051	6,357,941

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

(x) Not necessarily consumed in provinces where produced.

NOTE.—Of the total quantity of 860,885 tons of lime produced, 409,524 tons were consumed by the producers themselves.

Table 119.—Production of Lime in Canada, by Provinces, 1940, showing Purposes for which Used* or Sold

	Nova Scotia and New Brunswick	Quebec	Ontario	Manitoba and Alberta	British Columbia	Total Canada
Quicklime (Tons of 2,000 pounds)						
Building trades—						
Finishing lime..... ton		615	3,077	3,548	173	8,013
\$		5,450	24,302	33,656	4,070	67,478
Masons' lime..... ton	1,925	7,651	11,868	1,270		22,714
\$	16,700	75,784	100,340	12,562		263,386
Sand-lime brick..... ton		1,993	8,126			8,119
\$		8,895	39,424			48,319
Agriculture..... ton	196	21	42		97	356
\$	1,818	175	247		502	2,742
Chemical—						
Smelters (non-ferrous)..... ton			777	2,652	45	3,474
\$			4,276	26,520	417	31,213
Iron and steel furnaces (a)..... ton	23,885	1,075	34,218		336	60,114
\$	200,933	13,067	239,089		3,115	456,801
Cyanide mills (gold mines)..... ton		4,963	19,000	6,144		30,107
\$		34,408	113,489	49,618		201,029
Pulp and paper mills..... ton	8,558	98,494	6,580	8,356	13,082	135,070
\$	69,908	565,772	43,462	57,407	104,256	840,805
Glass works..... ton			8,496			8,496
\$			56,101			56,101
Sugar refineries..... ton	200	22	9,534	10,146	410	20,312
\$	1,800	230	81,090	84,134	3,802	171,056
Tanneries..... ton		924	3,131			4,055
\$		6,168	20,485	20		26,673
Fertilizer plants..... ton			242			242
\$			1,767			1,767
Insecticide plants..... ton			694		231	1,225
\$			6,975		2,142	9,117
Other chemical works..... ton	155	75,561	229,017	270		365,003
\$	1,450	542,604	1,602,889	3,240		2,150,183
Uses unspecified..... ton		5,612	769	1,294	8,447	16,122
\$		55,314	6,070	13,379	78,320	153,085
Total quicklime..... ton	34,919	197,531	334,471	33,692	23,200	623,803
\$	292,609	1,307,869	2,340,606	250,536	200,138	4,421,758
Hydrated lime						
Building trades—						
Finishing lime..... ton	56		19,301	5,005		24,362
\$	560		239,235	82,009		321,804
Masons' lime..... ton	815	1,050	7,780			9,651
\$	6,842	10,316	67,007			84,165
Agriculture..... ton	1,246	731	3,045		3,236	8,281
\$	11,014	6,328	30,937		21,475	69,751
Chemical—						
Smelters (non-ferrous)..... ton		65	3,942	20	873	4,900
\$		682	37,665	200	5,787	44,334
Iron and steel furnaces..... ton		20,821	91			20,912
\$		62,463	886			63,349
Cyanide mills..... ton		1,956	377	145	74	2,552
\$		9,704	4,251	1,450	491	15,986
Pulp and paper mills..... ton	5,875	5,530	70			11,475
\$	45,422	44,448	753			90,646
Sugar refineries..... ton	22	152	110			284
\$	108	1,292	1,148			2,638
Tanneries..... ton		405	854			1,259
\$		3,150	5,193			8,343
Fertilizer plants..... ton		25				25
\$		150				150
Insecticide plants..... ton			10	6	45	375
\$			95	60	278	3,286
Other chemical works..... ton		370	2,085	181		2,636
\$		3,167	21,659	3,012		27,838
Uses unspecified..... ton		4,760	492		960	6,212
\$		30,787	3,352		6,365	40,594
Total hydrated lime..... ton	8,331	35,888	38,163	5,357	5,188	92,927
\$	66,892	172,397	412,181	86,731	34,396	772,797
Grand total..... ton	43,250	233,419	372,634	39,039	28,388	716,730
\$	359,501	1,480,466	2,752,787	367,267	234,534	5,194,555

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

(x) Not necessarily consumed in provinces where produced.

NOTE.—Of the total quantity of 716,730 tons of lime produced, 357,550 tons were consumed by the producers themselves.

Table 120.—Production of Lime in Canada, 1930-1941

Year	Short tons	Value	Year	Short tons	Value
1930	400,802	4,038,698	1936	468,401	3,335,970
1931	344,785	2,764,415	1937	549,353	3,824,917
1932	320,650	2,394,537	1938	486,922	3,542,652
1933	323,540	2,432,306	1939	(a) 552,205	4,003,514
1934	368,113	2,745,797	1940	(b) 716,730	5,194,555
1935	405,419	2,925,791	1941	(c) 860,885	6,357,941

(a) Includes 263,957 tons used by producers.

(b) Includes 357,550 tons used by producers.

(c) Includes 409,524 tons used by producers.

Table 121.—Lime Sold or Used for Chemical and other Purposes, 1930-1941

Year	Lime sold or used for chemical purposes		Lime sold or used for building or other non-chemical purposes	
	short tons	\$	short tons	\$
	1930	351,443	2,596,112	139,359
1931	231,837	1,637,319	112,948	1,127,098
1932	255,472	1,758,898	65,178	635,639
1933	235,810	1,664,946	87,730	767,260
1934	229,005	1,598,006	138,207	1,146,891
1935	290,885	1,775,657	144,534	1,150,134
1936	(b) 389,324	2,670,266	79,077	665,704
1937	(c) 466,796	3,112,147	82,557	712,770
1938	(d) 403,825	2,746,927	83,097	705,725
1939	(e) 455,148	3,059,306	97,061	944,208
1940	(f) 612,900	4,201,318	103,830	993,237
1941	(g) 751,521	5,293,009	109,304	1,064,332

(b) 349,940 short tons quicklime; 39,384 short tons hydrated lime.

(c) 421,867 tons quicklime and 44,929 short tons hydrated lime.

(d) 373,278 tons quicklime and 30,547 short tons hydrated lime.

(e) 424,287 tons quicklime and 30,861 tons hydrated lime.

(f) 568,479 tons quicklime and 44,421 tons hydrated lime.

(g) 665,319 tons quicklime and 86,202 tons hydrated lime.

CHAPTER TEN
 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.

Thirty-five refineries and 14 blending plants, or a total of 49 works, reported under this category in 1941 and the aggregate value of production was \$156,635,495, an increase of 28.2 per cent over the 1940 total of \$122,212,800.

Output figures for 1941 included \$155,389,872 for petroleum refineries and \$1,245,623 for concerns engaged in blending oils and greases, against corresponding totals in 1940 of \$121,012,497 and \$1,200,303, respectively. 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 chapter.

Table 122.—Principal Statistics of the Petroleum Products Industry, 1937-1941

Year	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
Petroleum Refining							
1937.....	44	\$ 63,759,579	5,047	\$ 8,126,583	\$ 4,444,878	\$ 79,993,972	\$ 97,701,954
1938.....	47	62,097,038	4,586	7,750,746	4,678,933	75,993,557	96,121,611
1939.....	42	65,784,933	4,675	7,736,330	4,573,570	73,922,206	103,494,238
1940.....	38	75,983,928	5,060	8,616,296	5,746,186	94,302,889	121,012,497
1941.....	35	81,910,037	5,317	10,186,382	7,263,685	125,258,314	155,389,872
Compounding Oils and Greases							
1937.....	13	520,687	90	120,260	5,127	407,908	752,060
1938.....	12	523,870	89	122,294	4,284	425,959	881,736
1939.....	11	596,256	91	153,917	5,129	543,394	1,084,279
1940.....	11	597,815	96	192,241	5,309	557,632	1,200,303
1941.....	14	565,471	89	140,464	5,005	723,923	1,245,623
Total							
1937.....	57	\$ 64,280,266	5,137	\$ 8,246,843	\$ 4,450,005	\$ 80,401,880	\$ 98,451,014
1938.....	59	62,620,908	4,675	7,873,040	4,683,217	76,419,516	97,003,347
1939.....	53	66,381,189	4,766	7,890,247	4,578,699	74,465,600	104,578,517
1940.....	49	76,581,743	5,156	8,808,537	5,751,485	94,860,521	122,212,800
1941.....	49	82,475,508	5,406	10,326,846	7,268,690	125,982,237	156,635,495

NOTE.—Profits or losses cannot be calculated from above figures as data are not available for general expense items, such as interest, rent, depreciation, taxes, insurance, etc.

Table 123.—Principal Statistics of the Petroleum Products Industry, by Provinces, 1940 and 1941

Province	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
		\$		\$	\$	\$	\$
1940							
Quebec.....	7	27,244,738	1,055	1,799,917	1,666,606	27,351,569	32,268,186
Ontario.....	12	25,275,249	2,260	3,926,007	2,079,843	31,746,825	41,583,057
Manitoba.....	4	1,849,832	140	149,392	61,003	1,627,882	2,317,954
Saskatchewan.....	10	5,015,539	488	738,770	572,050	8,027,185	11,710,812
Alberta.....	9	6,764,414	482	817,467	556,422	6,890,155	11,897,374
British Columbia.....	4	4,556,084	296	576,100	287,069	9,583,052	11,627,175
Nova Scotia.....	1						
New Brunswick.....	1	5,875,887	435	800,884	528,502	9,633,853	10,808,244
Northwest Territories.....	1						
Canada.....	49	76,581,743	5,156	8,808,537	5,751,495	94,860,521	122,212,500
1941							
Quebec.....	7	26,656,036	1,142	2,192,092	2,153,343	37,820,739	44,455,163
Ontario.....	15	29,262,451	2,344	4,520,431	2,863,854	43,269,989	54,453,303
Manitoba.....	4	2,195,727	165	213,923	88,406	2,025,373	2,810,573
Saskatchewan.....	9	5,446,340	474	863,797	598,763	9,427,910	14,162,758
Alberta.....	7	6,574,472	455	849,600	557,166	8,902,106	14,329,999
British Columbia.....	4	4,247,973	338	687,299	321,210	10,107,981	12,333,758
Nova Scotia.....	1						
New Brunswick.....	1	8,092,509	488	999,674	685,948	14,428,139	14,089,941
Northwest Territories.....	1						
Canada.....	49	82,475,508	5,406	10,326,846	7,268,690	125,982,237	156,635,495

(a) The Petroleum Refining Industry, 1941

Thirty-five petroleum refineries operating in Canada during 1941 were distributed by provinces as follows: 9 in Saskatchewan, 7 in Alberta, 5 in Ontario, 4 in Quebec, 4 in Manitoba, 3 in British Columbia and 1 in each of Nova Scotia, New Brunswick and Northwest Territories. Compared with 1940, there was a loss of 2 refineries in Alberta and 1 in Saskatchewan. The operating refineries had a capacity of 232,290 barrels of crude oil per day, of which Ontario had 68,000 barrels or 29.3 per cent; Quebec, 67,000 barrels or 2.8 per cent; Nova Scotia, 34,000 barrels or 14.6 per cent; British Columbia, 24,500 barrels or 10.6 per cent; Saskatchewan, 17,300 barrels or 7.4 per cent; Alberta, 16,250 barrels or 7.0 per cent; Manitoba, 4,150 barrels or 1.8 per cent; the Northwest Territories, 840 barrels or .4 per cent, and New Brunswick, 250 barrels.

During the year, 1,681,058,493 gallons of imported crude oil and 352,839,574 gallons of crude oil and absorption gasoline from Canadian wells, or a total of 2,033,898,067 gallons was put through Canadian refineries, this amounting to about 67 per cent of the rated capacity. Of the total crude input, about 47 per cent was imported from the United States and nearly 35 per cent from other countries, while about 17 per cent came from Canadian wells. The total cost at the refineries of all crude oil and naphtha charged to stills during the year was \$113,574,954. Stocks of crude oil held at the refineries on December 31 amounted to 144,786,917 gallons.

Refinery production of gasoline in 1941 amounted to 857,924,454 gallons, and in addition the refineries used for blending about 47,301,143 gallons of imported casinghead gasoline which is not included in the Canadian production figures. The gallonage of gasoline made in 1941 was the highest on record, being 10 per cent over 1940, which in turn was 5 per cent over 1939. The refinery selling value of the gasoline made during the year was \$90,130,773. Stocks of gasoline held by the reporting firms on December 31 included 117,170,696 gallons of straight run or cracked gasoline and 4,249,650 gallons of imported casinghead gasoline. In 1941 there was an output of 10,262,175 gallons of natural gasoline from absorption plants in Alberta. This was practically all sold to refineries and is included with the gallonage charged to stills and the refined gasoline made therefrom is included in the refinery output figures.

Imports of gasoline, including casinghead, amounted to 88,522,531 gallons during 1941, which, added to the production of 857,924,454 gallons plus the decline in stocks of 7,712,347 gallons and less the exports of 15,843,229 gallons, made an apparent Canadian consumption of 938,316,103 gallons. Actual sales reported to the Provincial Governments under the Gasoline Tax Acts amounted to 980,426,039 gallons.

Production of fuel and gas oils (excluding any made and used for cracking processes) totalled 834,848,910 gallons, of which 771,897,171 gallons were made for sale and 62,951,739 gallons for use as fuel in the producing plant. Imports amounted to 63,385,706 gallons and exports to 18,469,619 gallons. Refinery stocks at the end of the year stood at 93,703,708 gallons, or about 993,000 gallons more than in 1940. The apparent consumption of fuel and gas oils in Canada, as calculated from the above figures, amounted to 868,595,460 gallons.

Output of tractor and engine distillates was 40,810,126 gallons in 1941, imports amounted to 965,827 gallons, and producers' stocks increased 1,239,674 gallons. The apparent Canadian consumption was 40,536,279 gallons.

Capital employed in the petroleum refining industry in 1941 was reported at \$81,910,037, of which \$37,781,937 was the value placed on land, buildings, machinery and equipment; \$39,862,266 represented inventories of finished products and processing materials, and \$4,265,834 were for operating capital, such as cash, bills and accounts receivable. The monthly employment averaged 5,317 persons who received \$10,186,382 in salaries and wages. Expenditures for fuel and electricity amounted to \$7,263,685 and \$125,258,314 were paid out for crude oil and other processing materials.

Table 124.—Number and Total Capacity of Petroleum Refineries in Operation in Canada, 1938-1941

Province	1938		1939		1940		1941	
	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	20,000	1	32,500	1	32,500	1	34,000
New Brunswick.....	1	250	1	250	1	250	1	250
Quebec.....	5	65,500	4	64,500	4	64,500	4	67,000
Ontario.....	5	41,500	5	44,500	5	57,500	5	68,000
Manitoba.....	5	3,360	5	2,550	4	4,150	4	4,150
Saskatchewan.....	12	14,475	11	14,620	10	16,220	9	17,300
Alberta.....	14	13,600	11	18,250	9	16,850	7	16,250
British Columbia.....	3	22,500	3	22,700	3	24,500	3	24,500
Northwest Territories.....	1	150	1	150	1	800	1	840
Canada.....	47	181,335	42	200,020	38	217,270	35	232,290

NOTE.—1 barrel=35 Imperial gallons.

Table 125.—Principal Statistics of the Petroleum Refining Industry, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930.....	15	60,077,982	5,030	8,003,357	3,859,683	71,307,879	90,809,711
1931.....	20	67,288,556	4,058	6,110,068	3,371,118	50,353,423	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	48,913,966	69,803,721
1934.....	42	66,450,496	4,876	6,274,799	3,117,697	50,659,492	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	70,993,972	97,701,964
1938.....	47	62,097,038	4,589	7,750,746	4,678,933	75,993,557	96,121,611
1939.....	42	65,784,933	4,675	7,736,330	4,573,570	73,922,207	103,494,238
1940.....	38	75,983,928	5,060	8,616,296	5,746,189	94,502,889	121,012,497
1941.....	35	81,910,037	5,317	10,189,382	7,263,685	125,258,314	155,369,872

Table 126.—Principal Statistics of the Petroleum Refining Industry, by Provinces, 1940 and 1941

Province	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
		\$		\$	\$	\$	\$
1940							
Quebec.....	4	27,143,581	1,027	1,753,805	1,663,634	27,279,461	32,124,559
Ontario.....	5	24,781,081	2,193	3,781,440	2,077,639	31,263,902	40,531,431
Manitoba.....	4	1,849,832	140	149,392	61,003	1,627,882	2,317,954
Saskatchewan.....	10	5,015,539	488	738,770	572,050	8,027,185	11,710,812
Alberta.....	9	6,764,414	482	817,467	556,422	6,890,155	11,897,374
British Columbia.....	3	4,553,594	295	574,448	286,936	9,580,451	11,622,123
Other provinces*.....	3	5,875,887	435	800,884	528,502	9,633,853	10,808,244
Canada	38	75,983,928	5,060	8,616,296	5,746,186	94,302,889	121,012,497
1941							
Quebec.....	4	26,542,918	1,112	2,142,629	2,150,408	37,746,149	44,293,624
Ontario.....	5	28,814,379	2,287	4,432,949	2,862,084	42,627,542	53,380,114
Manitoba.....	4	2,195,727	165	213,923	88,406	2,025,373	2,810,573
Saskatchewan.....	9	5,446,340	474	863,797	598,763	9,427,910	14,162,758
Alberta.....	7	6,574,472	455	849,600	557,166	8,902,106	14,329,989
British Columbia.....	3	4,243,692	336	683,810	320,910	10,101,095	12,322,863
Other provinces*.....	3	8,092,509	488	999,674	685,948	14,428,139	14,089,941
Canada	35	81,910,037	5,317	10,186,382	7,263,685	125,258,314	155,399,872

*Includes 1 refinery in each of Nova Scotia, New Brunswick and the Northwest Territories.

Table 127.—Capital Employed in the Petroleum Refining Industry, 1940 and 1941

Province	Present value of land, buildings, machinery and equipment	Value of inventories		Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
		Raw materials, fuel and other supplies on hand, and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
Quebec.....	12,341,900	14,733,134		68,547	27,143,581
Ontario.....	11,658,919	12,033,639		1,088,523	24,781,081
Manitoba.....	1,235,494	367,740		246,598	1,849,832
Saskatchewan.....	2,612,231	2,105,901		297,407	5,015,539
Alberta.....	4,225,656	2,180,080		358,678	6,764,414
British Columbia.....	1,863,652	2,686,188		3,754	4,553,594
Other provinces.....	2,566,010	3,103,047		206,830	5,875,887
Canada	36,503,862	37,209,729		2,270,337	75,983,928
1941					
Quebec.....	11,845,836	6,122,499	8,327,267	247,316	26,542,918
Ontario.....	13,644,617	6,747,000	7,179,269	1,243,433	28,814,379
Manitoba.....	1,330,588	268,478	289,880	306,781	2,195,727
Saskatchewan.....	3,047,253	725,642	1,162,532	510,913	5,446,340
Alberta.....	3,942,861	919,772	1,363,323	348,516	6,574,472
British Columbia.....	1,521,362	787,765	1,879,900	54,665	4,243,692
Other provinces.....	2,449,420	1,511,086	2,577,793	1,554,210	8,092,509
Canada	37,781,937	17,082,302	22,779,964	4,265,834	81,910,037

Table 128.—Employees in Petroleum Refineries, Salaries and Wages, 1940 and 1941

Province	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
						\$	\$	\$
1940								
Quebec.....	174	20	832	1	1,027	517,191	1,236,704	1,753,895
Ontario.....	316	46	1,824	7	2,193	1,007,056	2,774,384	3,781,440
Manitoba.....	34	8	98		140	68,513	80,879	149,392
Saskatchewan.....	102	28	357	1	488	228,691	510,079	738,770
Alberta.....	96	16	369	1	482	256,690	560,777	817,467
British Columbia.....	52	11	231	1	295	172,394	402,054	574,448
Other provinces.....	48	19	367	1	435	202,490	598,394	800,884
Canada.....	822	148	4,078	12	5,060	2,453,025	6,163,271	8,616,296
1941								
Quebec.....	181	21	908	2	1,112	568,223	1,574,406	2,142,629
Ontario.....	333	75	1,873	6	2,287	1,123,508	3,309,441	4,432,949
Manitoba.....	41	10	114		165	87,800	126,123	213,923
Saskatchewan.....	90	23	359	2	474	265,866	597,931	863,797
Alberta.....	80	18	357		455	264,534	585,060	849,600
British Columbia.....	54	10	269	3	336	184,445	499,365	683,810
Other provinces.....	52	22	413	1	488	225,789	773,885	999,674
Canada.....	831	179	4,293	14	5,317	2,720,165	7,466,217	10,186,382

Table 129.—Number of Wage-Earners in Petroleum Refineries, by Months, 1941

(Number on payroll on the last work day of each month)

Month	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Other provinces	Canada
January.....	870	1,756	97	323	332	257	376	4,011
February.....	854	1,748	99	330	330	258	361	3,980
March.....	894	1,768	111	344	329	260	350	4,056
April.....	908	1,816	105	378	343	257	360	4,167
May.....	896	1,913	125	391	365	266	393	4,349
June.....	967	1,931	128	393	379	272	439	4,564
July.....	957	2,012	123	394	376	291	468	4,631
August.....	968	1,981	122	377	367	293	466	4,574
September.....	937	1,927	122	372	374	280	462	4,474
October.....	905	1,912	117	370	372	276	427	4,379
November.....	880	1,895	114	354	369	277	432	4,321
December.....	895	1,896	114	319	362	269	437	4,292
Average.....	910	1,879	114	361	357	272	414	4,307

Table 130.—Hours Worked per Week by Wage-Earners, 1940 and 1941

(In one week of month of highest employment; overtime included)

Hours worked per week	Number of wage-earners				Hours worked per week	Number of wage-earners			
	1940		1941			1940		1941	
	Male	Female	Male	Female		Male	Female	Male	Female
30 hours or less.....	22		87		55 hours.....	27		70	
31-43 hours.....	3,039	12	2,025	9	56-64 hours.....	337	2	197	
44 hours.....	95	1	1,232	2	65 hours and over.....	190		57	2
45-47 hours.....	72		47		Total	4,466	18	4,715	16
48 hours.....	364	3	706	2	Total wages paid during selected week..... \$	143,474	334	162,013	324
49-50 hours.....	80		90	1					
51-54 hours.....	240		204						

Table 131.—Fuel* and Electricity Used in Petroleum Refineries, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
		\$		\$	
Bituminous coal—Canadian	ton	4	28	5	35
Imported	ton	15,828	78,266	35,151	196,414
Coke, including petroleum coke	ton	4,871	24,264	3,133	20,157
Gasoline	imp. gal.	246,516	26,589	418,134	67,444
Kerosene	imp. gal.	17	5	32,712	2,892
Fuel oil	imp. gal.	61,116,065	2,433,433	62,869,774	2,739,119
Wood	cord	450	1,454	518	1,648
Gas—Manufactured, including still gas	M cu. ft.	8,566,402	2,132,112	9,970,599	3,119,323
Natural	M cu. ft.	4,206,670	317,285	3,992,284	301,784
Other fuel			207,588		226,609
Electricity purchased	k.w.h.	72,633,717	525,162	82,780,311	588,210
Total			5,746,186		7,263,685
Electricity generated for own use	k.w.h.	640,720		219,415	

*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 132.—Power Equipment in Petroleum Refineries, 1940 and 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse-power	Number of units	Total rated horse-power
1940				
Steam engines and steam turbines	491	19,663	33	775
Diesel engines	10	1,094		
Gasoline, gas and oil engines (except diesel)	61	3,469	2	76
Total primary equipment	562	24,226	35	851
Electric motors run by purchased power	1,549	28,136	49	694
Total	2,111	52,362	84	1,545
Electric motors run by power generated by primary equipment above	25	75		
Stationary boilers	136	32,849	3	260
1941				
Steam engines and steam turbines	480	21,971	28	705
Diesel engines	11	1,144		
Gasoline, gas and oil engines (except diesel)	65	2,854	2	76
Total primary equipment	556	25,969	30	781
Electric motors run by purchased power	1,662	30,342	69	848
Total	2,218	56,311	99	1,629
Electric motors run by power generated by primary equipment above	32	105		
Stationary boilers	133	31,756	3	260

Table 133.—Materials Used in Petroleum Refineries, 1940 and 1941

Material	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
		\$		\$	
Crude oil (under 60° A.P.I.) in its natural state, from Canadian wells	Imp. gal.	293,601,299	13,651,059	342,774,192	17,627,799
Crude naphtha (60° A.P.I. and over) in its natural state, from Canadian wells	Imp. gal.				
Absorption gasoline, etc., from Canadian wells (run to stills)	Imp. gal.	8,634,531	531,410	10,065,382	643,968
Crude oil, in its natural state, imported, (run to stills)—					
(a) From United States	Imp. gal.	996,917,614	50,083,035	948,975,940	55,377,605
(b) From Other Countries	Imp. gal.	445,437,156	21,434,013	731,145,673	39,877,817
Crude oil, not in its natural state (run to stills)	Imp. gal.	903,681	41,108	936,880	47,765
Benzol for blending	Imp. gal.	1,762,372	284,410	4,753,868	568,575
Phenol	pound	203,150	31,270	470,309	69,308
Sulphuric acid, 66° Bé	pound	27,995,157	301,446	29,316,857	315,083
Sulphur	pound	122,131	3,110	102,634	2,649
Caustic soda	pound	6,122,558	177,477	7,170,755	205,336
Soda ash	pound	664,820	13,662	4,10,738	8,920
Litharge	pound	323,510	26,121	257,296	22,430
Fuller's earth and clay	pound	23,828,660	400,185	30,155,750	571,010
Compounding materials			945,628		1,386,825
Tetramethyl fluid			4,309,173		3,944,940
Aviation blending materials					1,458,307
Other materials			1,017,069		2,013,991
Shipping containers			1,046,713		1,115,986
Total			94,302,889		125,258,314

Table 134.—Materials Used in Petroleum Refineries, by Provinces, 1941

Material	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.		5,409,555	18,498,968	152,149,980	164,799,079		1,910,612
	\$		345,008	1,322,932	8,878,543	6,990,522		90,794
Absorption gasoline, etc., from Canadian wells (run to stills).....	Imp. gal.				65,108	10,000,274		
	\$				9,773	634,195		
Crude oil, in its natural state, imported (run to stills)—								
(a) From United States.....	Imp. gal.	208,053,404	573,473,961	6,647,536		56,245	160,744,794	
	\$	13,397,923	33,764,476	620,780		2,812	7,591,634	
(b) From Other Countries.....	Imp. gal.	368,674,041	51,665,718				36,981,852	273,824,062
	\$	21,917,519	2,519,450				2,099,456	13,341,381
Crude oil, not in its natural state, imported from United States.....	Imp. gal.				101,450		745,430	
	\$				8,708		39,057	
Benzol for blending.....	Imp. gal.	2,003,983	2,015,209	69,820	2,040	248		662,568
	\$	245,017	228,740	13,489	807	80		80,436
Sulphuric acid, 66° Bé.....	Pound	695,905	22,078,437	51,015	2,237,547	1,838,732	1,515,221	
	\$	6,532	234,032	2,087	36,709	20,926	14,707	
Sulphur.....	Pound	14,920	52,414	100	1,900	33,300		
	\$	456	1,438	4	85	666		
Caustic soda.....	Pound	2,073,217	1,672,220	104,174	1,038,859	1,098,537	303,327	880,421
	\$	49,685	41,988	4,448	34,539	38,823	10,102	25,751
Soda ash.....	Pound	48,033	17,100	6,700	212,506	39,600	27,500	59,399
	\$	1,018	265	175	4,566	1,120	652	1,124
Litharge.....	Pound	48,680	146,458	328	2,304	58,914	134	480
	\$	3,533	13,528	39	241	5,025	11	53
Fullers' earth and clay.....	Pound	2,326,588	22,616,453		1,166,426	2,087,000		1,959,244
	\$	35,642	461,751		15,931	25,147		32,539
Compounding materials.....	\$		1,379,249				7,576	
Tetraethyl fluid.....	\$	1,117,035	1,360,786	50,697	346,814	493,232	243,373	333,003
Other materials.....	\$	971,789	1,167,805	7,882	89,899	689,552	94,435	520,244
Shipping containers.....	\$		1,109,017	2,860	1,295			2,814
Total.....	\$	37,746,149	42,627,542	2,025,373	9,427,910	8,902,106	10,101,085	14,428,129

(\$=Cost at works).

Table 135.—Consumption of Crude Oil in Petroleum Refineries in Canada, 1919-1941

Year	Crude oil used		Year	Crude oil used
	Imp. gal.	Imp. gal.		
1919.....	301,006,533	1931.....	1,074,788,038	
1920.....	295,576,527	1932.....	930,114,055	
1921.....	373,469,418	1933.....	1,044,210,850	
1922.....	394,139,055	1934.....	1,109,510,343	
1923.....	408,810,739	1935.....	1,196,411,443	
1924.....	467,144,634	1936.....	1,286,462,895	
1925.....	445,115,694	1937.....	1,433,581,694	
1926.....	585,466,320	1938.....	1,418,659,164	
1927.....	716,369,890	1939.....	1,569,903,295	
1928.....	849,033,770	1940.....	1,745,494,281	
1929.....	1,072,838,496	1941.....	2,033,898,067	
1930.....	1,064,434,974			

Table 136.—Consumption of Crude Oil in Petroleum Refineries showing Canadian and Imported, Separately, 1931-1941

Year	Canadian (a)	Imported (b)	Total
	Imp. gal.	Imp. gal.	Imp. gal.
1931.....	49,868,529	1,025,119,509	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
1938.....	236,492,200	1,182,166,964	1,418,659,164
1939.....	262,198,884	1,307,704,411	1,569,903,295
1940.....	302,235,830	1,443,258,451	1,745,494,281
1941.....	352,839,574	1,681,058,493	2,033,898,067

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

Table 137.—Casinghead Gasoline Imported and Used for Blending at the Refineries, 1941

(These items not included in previous tables)

Imported natural casinghead gasoline received at the refinery during the year.....	Imp. gal.	47,899,002
	\$	4,454,513
Imported natural casinghead gasoline used for blending during the year.....	Imp. gal.	47,301,143
Total stocks of imported natural casinghead gasoline at the end of year.....	Imp. gal.	4,249,650

Table 138.—Products Made in Petroleum Refineries, 1940 and 1941

Product	Unit of measure	1940		1941	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
			\$		\$
Made for sale—					
Gasoline—Straight run (1).....	Imp. gal.	409,289,135	37,868,711	407,405,924	44,722,348
—By cracking process (2).....	Imp. gal.	370,455,070	33,333,794	450,312,427	45,535,487
Stove oil (40°-42° A.P.I.).....	Imp. gal.	19,933,578	889,874	23,231,604	1,307,618
Gas and light fuel oil (20°-40° A.P.I., except diesel).....	Imp. gal.	114,798,038	5,753,019	135,322,293	7,512,639
Diesel fuel oil (all fuel oil sold under this name).....	Imp. gal.	62,968,656	3,261,731	79,104,809	4,192,138
Residual fuel oil (10°-20° A.P.I.).....	Imp. gal.	439,928,344	17,050,341	534,238,465	23,197,496
Tractor and engine distillate.....	Imp. gal.	23,795,943	2,138,333	40,807,811	3,748,290
V.M. and P. or solvent naphtha.....	Imp. gal.	12,686,637	1,167,633	12,092,093	1,230,697
Kerosene.....	Imp. gal.	25,946,909	2,387,294	26,758,097	2,741,984
Lubricating oil.....	Imp. gal.	28,380,256	6,530,531	36,433,253	7,089,121
Lubricating grease.....	pound	9,441,500	549,456	15,562,856	861,604
Asphalt.....	Imp. gal.	60,312,753	5,226,995	72,752,742	6,168,440
Petroleum coke.....	ton	63,458	416,262	67,702	471,564
Other products.....			554,763		479,572
Total—made for sale.....			116,128,737		149,258,998
Made for own use—					
Gasoline—Straight run.....	Imp. gal.	223,028	22,537	192,848	21,650
—By cracking process.....	Imp. gal.	15,873	1,902	13,255	1,684
Gas and light fuel oil (20°-40° A.P.I.).....	Imp. gal.	113,769	4,868	100,309	4,545
Diesel fuel oil.....	Imp. gal.	5,427	530	18,831	1,230
Residual fuel oil (10°-20° A.P.I.).....	Imp. gal.	61,165,490	2,431,454	62,632,512	2,727,422
Tractor and engine distillate.....	Imp. gal.	1,820	197	2,315	170
Kerosene.....	Imp. gal.	26,550	2,326	41,741	3,775
Lubricating oil.....	Imp. gal.	63,582	15,324	93,918	17,453
Asphalt.....	Imp. gal.	68,266	5,411	62,003	5,485
Petroleum coke.....	ton	4,876	25,328	3,138	21,774
Still gas.....	M cu. ft.	8,706,834	2,164,514	9,971,268	3,109,920
Other products.....			209,369		215,766
Total—Made for own use.....			4,883,766		6,130,874
Grand total.....			121,012,497		155,389,872
Fuel and gas oils and topped crude, for use in cracking process.....	Imp. gal.	656,962,708		765,115,376	

(1) Includes recoveries from 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.

(2) Includes polymer gasoline.

Table 139.—Products Made in Petroleum Refineries, by Provinces, 1941

Product	Unit of measure	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Other provinces
Made for sale—								
Gasoline.....	imp. gal.	235,065,896	291,407,541	11,800,667	86,504,741	112,950,105	51,780,020	68,209,381
	\$	27,472,573	28,639,218	1,736,202	9,503,395	11,304,621	6,348,091	5,253,735
Fuel oil and gas oil.....	imp. gal.	209,262,409	199,048,453	6,486,608	18,607,968	27,498,562	130,199,424	180,793,747
	\$	10,655,322	10,135,015	496,832	975,041	1,177,252	5,133,159	7,637,270
Tractor and engine distillate.....	imp. gal.	2,729,405	1,970,619	3,573,939	21,285,119	11,247,820	909	
	\$	194,607	165,567	441,864	2,127,890	818,215	147	
V.M. & P. or solvent naphtha.....	imp. gal.	3,342,815	6,673,599	74,501	571,219	334,616	793,098	302,245
	\$	371,852	632,305	15,410	65,025	33,349	91,206	21,550
Kerosene.....	imp. gal.	4,101,545	15,758,856	271,309	4,457,668	2,168,719		
	\$	432,965	1,427,860	45,752	600,134	235,273		
Lubricating oil.....	imp. gal.	852,045	35,020,290				560,618	
	\$	155,157	6,831,709				102,255	
Grease.....	Pound		15,592,856					
	\$		861,094					
Asphalt.....	imp. gal.	34,806,721	15,916,905		4,165,996	7,023,565	3,932,394	7,007,181
	\$	2,889,071	1,464,645		349,834	561,069	363,549	540,252
Petroleum coke.....	ton	3,673	63,234		261	76		458
	\$	17,385	450,976		1,819	125		1,259
Other products.....	\$	112,027	325,692		41,853			
Total—made for sale.....	\$	42,300,959	50,934,591	2,736,080	13,665,011	14,129,904	12,038,407	13,454,066

Table 139.—Products Made in Petroleum Refineries, by Provinces, 1941—Concluded

Product	Unit of measure	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Other provinces
Made for own use—								
Gasoline	imp. gal.	27,190	103,514	11,965	22,486	6,117	6,356	28,475
	\$	3,123	9,485	2,215	4,749	528	731	2,503
Fuel oil and gas oil	imp. gal.	20,084,444	18,820,587	1,627,582	6,468,409	836,398	6,786,660	8,308,828
	\$	913,404	853,834	72,208	265,262	18,186	255,071	353,912
Kerosene	imp. gal.		38,794		2,947			
	\$		3,418		357			
Lubricating oil	imp. gal.		91,039				2,879	
	\$		16,928				525	
Petroleum coke	ton		1,974		1,155			0
	\$		13,706		8,044			24
Still gas	M cu.ft.	2,954,970	4,223,521		759,844	1,086,460	120,002	827,471
	\$	1,075,223	1,355,995		195,243	176,436	27,767	279,256
Other products	\$	915	192,157		24,092	4,945	362	180
Total—made for own use.	\$	1,992,665	2,445,523	74,513	497,747	200,095	284,456	635,875
Grand total	\$	44,293,624	53,380,114	2,810,573	14,162,758	14,329,999	12,322,863	14,089,941
Fuel and gas oils made for use in cracking process	imp. gal.	160,532,670	345,762,932	3,950,000	43,372,059	59,230,635	20,762,350	131,504,730

(\$=Gross selling value at works).

Table 140.—Stocks on Hand at the Refineries at the End of 1941

	Stocks on hand at refineries on December 31, 1941	Increase or decrease over December 31, 1940
	imp. gal.	imp. gal.
Crude oil and naphtha, in its natural state, from Canadian wells	14,349,997	-3,779,802
Absorption gasoline, etc., from Canadian wells	746,690	-20,801
Crude oil, imported—in its natural state	129,395,057	-52,018,176
—not in its natural state	295,172	+25,637
Total Crude	144,786,916	-55,793,142
Gasoline (excluding imported casinghead or Canadian absorption gasoline)	117,170,696	+6,588,320
Stove oil (40°—42.5° A.P.I.)	5,237,419	+377,852
Gas and light fuel oil (20°—40° A.P.I., excepting diesel)	32,292,792	+12,885,998
Diesel fuel oil	4,499,624	-1,139,027
Residual fuel oil (10°—20° A.P.I.)	51,673,873	-11,132,984
Fuel oil for use in cracking process	11,819,038	-17,678,872
Tractor and engine distillate	5,150,615	+1,239,874
V.M. & P. or solvent naphtha	3,207,744	+3,207,744
Kerosene	6,205,442	-1,528,007
Lubricating oils	4,478,449	-74,423
Total Refined	241,735,692	-7,254,725

Table 141.—Refinery Production of Gasoline, 1930-1941

Year	Straight run	By cracking	Total	Per cent of total made by cracking
	imp. gal.	imp. gal.	imp. gal.	
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	37
1934	294,980,092	166,773,271	461,753,363	36
1935	292,520,425	221,195,579	513,716,004	43
1936	318,207,576	251,451,700	569,659,276	44
1937	361,900,397	278,399,479	640,299,876	43
1938	362,583,649	291,445,476	654,029,125	45
1939	405,738,237	334,825,342	740,563,619	45
1940	409,512,153	370,470,943	779,983,106	47
1941	407,598,772	450,325,692	857,924,464	52

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Table 142.—Apparent Supply in Canada of Gasoline, Fuel Oil, Engine Distillate, Kerosene and Lubricating Oil, 1940-1941

	Fuel and gas oils (a)	Gasoline	Lubricating oils	Kerosene	Tractor and engine distillate
	imp. gal.	imp. gal.	imp. gal.	imp. gal.	imp. gal.
1940					
Production.....	(b)698,913,302	779,983,106	30,006,720	25,973,459	23,797,763
Plus imports entered for consumption.....	101,806,725	105,586,068	18,506,716	5,783,003	713,482
	800,720,027	885,569,174	48,513,436	31,756,462	24,511,245
Less exports and re-exports.....	2,699,135	4,320,701		636,800	
	798,020,892	881,248,473	48,513,436	31,119,662	24,511,245
Plus decline in refinery stocks.....		15,280,355			3,428,565
	798,020,892	896,528,828	48,513,436	31,119,662	27,939,810
Less increase in refinery stocks.....	21,434,566		252,344	1,980,093	
Apparent consumption.....	776,586,326	896,528,828	48,261,092	29,139,569	27,939,810
1941					
Production.....	834,848,910	857,924,454	38,008,499	26,799,838	40,810,126
Plus imports entered for consumption.....	63,385,706	88,522,531	14,898,783	1,065,445	965,827
	898,234,616	946,446,985	52,907,282	27,865,283	41,775,953
Less exports and re-exports.....	18,469,619	15,843,229		1,013,324	
	879,764,997	930,603,756	52,907,282	26,851,959	41,775,953
Plus decline in stocks (c).....		7,712,347	74,423	2,612,668	
	879,764,997	938,316,103	52,981,705	29,464,627	41,775,953
Less increase in stocks (c).....	11,169,537				1,239,674
Apparent consumption.....	868,595,460	938,316,103	52,981,705	29,464,627	40,536,279

(a) Import figures for fuel oil include amounts brought in "on-warehoused for ships' stores". This item covers fuel oil imported in bond for use in fuelling 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 1940 the amount under this item was 54,453,217 gallons, and in 1941 it was 32,242,767 gallons.

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

(c) Allows for changes in stocks at points other than refineries.

Table 143.—Apparent Supply of Fuel Oil, Gasoline, Kerosene, Engine Distillate, and Lubricating Oils, 1931-1941

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

Year	Fuel and gas oils	Gasoline	Engine distillate	Kerosene	Lubricating oils
Imperial gallons					
1931.....	488,371,080	565,260,046	Not available	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	31,198,763	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
1938.....	592,659,806	769,926,869	32,029,333	27,466,756	38,749,528
1939.....	647,298,402	814,188,217	38,924,386	35,757,905	43,279,063
1940.....	776,586,326	896,528,828	27,939,810	29,139,569	48,261,092
1941.....	868,595,460	938,316,103	40,536,279	29,464,627	52,981,705

Table 144—Gross Sales of Gasoline in Canada, by Provinces, 1938-1941

(Gross sales—sold for all purposes; Net sales—sold for use in automobiles)—Computed from gasoline tax returns.

Province	1938	1939	1940	1941
Imperial gallons				
Prince Edward Island.....	3,631,360	4,128,907	4,094,203	5,174,759
Nova Scotia.....	29,632,787	31,621,971	34,961,212	41,354,887
New Brunswick.....	21,998,728	23,192,413	24,829,924	26,288,682
Quebec.....	135,026,866	138,925,246	148,499,644	165,839,507
Ontario.....	337,880,996	345,105,726	371,903,633	410,711,924
Manitoba.....	38,596,582	41,455,558	48,893,738	54,212,671
Saskatchewan.....	65,090,674	87,877,403	101,101,143	112,779,554
Alberta*.....	73,724,520	75,535,323	83,808,689	93,068,504
British Columbia.....	57,157,813	59,823,751	65,198,108	70,995,551
Total gross sales.....	762,740,326	807,666,298	883,296,294	980,426,039
Refunds.....	130,722,877	144,504,737	181,175,411	233,869,757
Total net sales.....	632,017,449	663,161,561	702,114,883	746,556,282

*Includes diesel oil to March 31, 1938.

Table 145.—Gross Sales of Gasoline in Canada, by Months, 1938-1941

	1938	1939	1940	1941
	Imperial gallons			
January	35,407,164	40,077,850	44,772,623	48,959,776
February	33,146,647	33,452,296	41,690,460	46,312,513
March	41,373,278	43,065,980	43,822,862	53,796,887
April	54,401,471	48,866,349	56,039,829	83,077,098
May	74,511,526	78,809,692	91,110,599	97,697,796
June	77,799,950	77,668,907	88,003,837	98,313,249
July	80,660,413	87,258,978	93,334,938	110,014,064
August	90,584,831	97,200,212	103,444,717	105,148,805
September	85,737,63	95,290,364	97,901,488	94,391,984
October	77,036,848	82,708,454	94,116,475	95,363,290
November	63,500,199	67,842,577	71,711,105	77,817,972
December	48,520,376	55,424,039	57,341,361	69,532,805
Total	762,740,326	807,666,238	883,290,294	966,426,039

Table 146.—Gross Sales of Gasoline in Canada, by Months and by Provinces, 1941, and Totals for 1940

Month	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario
	(Thousands of Imperial gallons)				
January	97,020	2,048,141	1,245,582	7,808,238	24,257,336
February	107,203	1,658,901	1,213,399	7,252,690	23,522,312
March	207,934	2,046,416	1,329,804	8,067,967	26,718,873
April	296,521	6,252,610	1,621,042	12,170,539	36,348,337
May	533,327	3,564,592	2,419,223	15,180,721	36,781,655
June	626,949	3,884,744	2,990,915	16,864,971	38,606,009
July	712,113	4,358,721	3,221,559	19,847,091	43,993,464
August	696,195	4,062,575	3,026,960	18,574,248	41,527,953
September	533,247	3,617,698	2,736,131	17,055,331	37,958,248
October	666,983	3,748,034	2,615,553	16,866,982	36,847,483
November	362,028	3,267,903	2,173,675	14,373,217	33,085,054
December	334,339	2,844,582	1,694,839	11,778,412	31,065,200
Totals for 1941	5,174,759	41,354,897	26,288,682	165,839,507	410,711,924
Totals for 1940	4,094,203	34,961,212	24,829,924	148,499,644	371,903,633
	Manitoba	Saskatchewan	Alberta	British Columbia	Total
January	2,073,301	2,440,284	4,384,118	4,604,956	48,959,776
February	1,994,498	2,453,672	3,535,695	4,574,143	46,312,513
March	2,415,407	3,549,208	4,411,541	5,050,637	53,796,887
April	3,981,547	7,451,025	8,900,463	6,050,014	83,077,098
May	5,455,286	17,313,143	10,419,074	6,030,775	97,697,796
June	5,380,748	14,254,753	9,344,608	6,359,552	98,313,249
July	6,502,449	14,787,610	8,906,836	7,654,221	110,014,064
August	6,354,816	12,728,082	11,017,750	7,160,026	105,148,805
September	5,656,192	13,286,256	7,079,484	6,469,427	94,391,984
October	5,979,028	11,629,731	11,029,814	5,979,082	95,363,290
November	4,142,923	7,215,068	7,528,493	5,669,611	77,817,972
December	4,216,476	5,695,722	6,510,628	5,392,607	69,532,805
Totals for 1941	54,212,671	112,779,554	94,068,504	70,995,551	966,426,039
Totals for 1940	48,893,738	101,101,143	83,868,689	65,198,104	883,290,294

Table 147.—Net Sales of Gasoline in Canada, by Provinces, 1938-1941

(Net Sales—Gallons sold on which no refunds have been granted, chiefly for motor vehicles)

Province	1938	1939	1940	1941
(Imperial gallons)				
Prince Edward Island	2,891,204	3,205,532	3,030,054	2,889,089
Nova Scotia	25,575,322	26,836,029	29,367,015	31,954,514
New Brunswick	18,905,155	19,474,851	21,328,394	20,479,114
Quebec	128,768,743	131,113,441	139,430,661	150,948,949
Ontario	310,461,674	316,505,920	328,484,418	346,515,906
Manitoba	36,388,003	38,858,888	40,175,901	39,763,907
Saskatchewan	27,347,080	41,692,634	47,976,575	48,777,508
Alberta	37,179,884	38,900,385	41,337,799	59,587,241
British Columbia	44,530,384	46,568,881	50,984,066	54,610,056
Canada	632,017,419	663,161,561	702,114,883	746,526,282

MANUFACTURES OF NON-METALLIC MINERALS

Table 148.—Revenues from Gasoline Taxes, by Provinces, 1938-1941

Province	1938	1939	1940	1941
	\$	\$	\$	\$
Prince Edward Island.....	285,505	316,087	300,842	284,722
Nova Scotia.....	2,424,355	2,608,180	2,475,400	3,031,449
New Brunswick.....	1,807,493	1,893,169	2,104,686	2,052,234
Quebec.....	7,037,151	9,069,226	11,154,540	12,260,427
Ontario.....	18,593,789	25,105,359	26,608,201	27,641,457
Manitoba.....	2,529,088	2,750,638	2,805,074	2,736,158
Saskatchewan.....	1,822,680	2,760,196	3,348,936	3,340,357
Alberta.....	2,953,128	3,096,644	3,221,775	4,212,305
British Columbia.....	3,284,490	3,454,852	3,759,629	4,005,947
Yukon.....				14,300*
Canada.....	41,247,688	51,954,360	56,179,173	59,579,356

*Levied for first time in 1941.

Table 149.—Revenues from Motor Vehicle Registrations and Gasoline Taxes, 1926-1941

Year	From motor vehicle registrations	From gasoline taxes	Year	From motor vehicle registrations	From gasoline taxes
	\$	\$		\$	\$
1926.....	15,434,494	6,360,800	1934.....	21,567,830	29,054,853
1927.....	16,572,361	7,963,345	1935.....	23,090,978	31,532,645
1928.....	19,004,276	12,547,073	1936.....	25,632,843	34,532,436
1929.....	22,514,030	18,760,543	1937.....	25,903,905	38,373,947
1930.....	20,166,283	22,655,225	1938.....	26,230,196	41,247,688
1931.....	19,684,908	22,546,119	1939.....	27,961,132	51,954,360
1932.....	21,126,271	27,083,316	1940.....	29,300,720	56,179,173
1933.....	20,576,392	26,467,765	1941.....	31,559,944	59,579,356

Table 150.—Registrations of Motor Vehicles in Canada, by Provinces, 1938-1941

Province	1938	1939	1940	1941
	(Number)			
Prince Edward Island.....	7,992	8,040	8,070	8,013
Nova Scotia.....	51,214	53,008	57,873	62,805
New Brunswick.....	37,110	38,116	39,090	41,441
Quebec.....	205,463	213,148	225,152	232,149
Ontario.....	669,088	682,891	703,872	739,194
Manitoba.....	88,219	88,864	90,932	96,573
Saskatchewan.....	109,014	119,018	126,970	131,403
Alberta.....	107,191	113,702	120,514	124,244
British Columbia.....	119,230	122,087	128,044	132,509
Yukon.....	342	371	402	427
Canada.....	1,394,853	1,439,245	1,500,829	1,568,758

Table 151.—Registrations of Motor Vehicles in Canada, by Types, 1941

Province	Passenger cars	Motor trucks	Motor buses	Motor cycles	Other motor vehicles	Total
	(Number)					
Prince Edward Island.....	6,773	1,214	10	16	(x)	8,913
Nova Scotia.....	47,273	13,375	169	669	1,319	62,805
New Brunswick.....	31,945	8,166	109	361		41,441
Quebec.....	184,167	42,983	1,051	2,875	1,073	232,149
Ontario.....	636,624	95,408	1,268	5,894	(x)	739,194
Manitoba.....	75,962	19,696	111	726	78	96,573
Saskatchewan.....	94,896	35,484	100	742	181	131,403
Alberta.....	105,561	27,748	202	733	(x)	124,244
British Columbia.....	104,241	24,793	413	2,392	670	132,509
Yukon.....	171	193	(xx)	30	33	427
Canada.....	1,277,613	269,060	3,433	14,438	4,214	1,568,758

(x) Included with trucks.

(xx) Included with passenger automobiles.

Table 152.—Fuel Oil and Distillate Deliveries: Deliveries for Consumption, by Provinces, 1939-1941

(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 including distributors tankers	Total Deliveries	Inventory on Dec. 31, at refinery, warehouses and consumers' storage
	Number domestic customers	Quantity						
1941								
N.B. and P.E.I.	5,473	4,226,581	5,344,321	72,705	277,323	4,628,526	14,549,456	1,877,805
Nova Scotia	10,037	7,913,703	7,029,494	99,987	50,852	157,799,762	172,893,798	18,323,080
Quebec	44,495	55,231,385	92,020,636	2,059,674	2,826,836	44,024,241	196,162,772	69,726,903
Ontario	24,997	45,702,919	124,538,803	9,668,845	2,916,238	10,651,484	193,478,289	89,090,031
Manitoba	778	1,413,719	3,238,524	16,908,552	1,425,105	8,850	22,994,750	2,986,161
Saskatchewan	1,256	2,214,477	12,478,907	17,655,191	226,596	.....	32,575,171	8,771,927
Alta. and N.W.T.	156	438,870	3,602,848	10,900,374	21,803,209	83,184	36,928,485	7,572,346
B.C. and Yukon	21,253	29,609,092	53,565,141	1,408,093	43,647,013	58,037,731	186,267,070	28,308,965
Total 1941	108,445	146,750,746	301,818,674	58,773,421	73,173,172	275,233,778	855,749,291	726,657,218
Total 1940	62,815	150,673,413	241,293,960	30,604,540	55,268,523	248,567,157	725,807,593	215,487,681
Total 1939	58,654	136,161,167	181,239,889	34,773,691	53,795,067	204,944,464	610,854,218	263,628,275

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. Fuel oil used as a material in manufacturing is omitted.

Table 153.—Kerosene Deliveries: Deliveries for Consumption, by Provinces, 1939-1941

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

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

Province	For domestic heating, cooking and lighting purposes	For fuel in tractors	For other general usage	Less kerosene used as material—major users of	Total deliveries	Inventory December 31
1941						
N.B. and P.E.I.	1,780,818	.....	157,919	— 3,213	1,935,524	335,009
Nova Scotia	2,988,359	.....	160,450	— 13,558	3,135,251	432,067
Quebec	4,581,729	3,367	177,413	— 99,406	4,663,103	3,312,716
Ontario	5,519,978	522,445	443,629	— 273,306	6,212,749	4,528,518
Manitoba	1,906,139	117,642	53,890	— 15,170	2,062,401	549,700
Saskatchewan	2,981,204	40,740	.....	— 629	3,021,381	999,091
Alberta and N.W.T.	1,942,853	146,737	200,425	— 1,327	2,288,688	863,598
British Columbia and Yukon	1,188,940	200	39,327	— 4,633	1,223,634	1,455,633
Total—1941	22,890,686	831,037	1,233,033	— 411,239	24,542,531	12,476,332
Total—1940	22,652,011	1,772,271	458,667	.....	24,812,949	15,089,649
Total—1939	25,664,269	2,643,168	699,704	.....	28,947,141	14,368,933

Table 154.—Petroleum Coke: Deliveries for Consumption, 1940 and 1941

(Used as fuel only—not as manufacturing materials)

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

Fuel for domestic and industrial heating	1940	1941
New Brunswick and Prince Edward Island	.....	.....
Nova Scotia	541	467
Quebec	330	500
Ontario	40,269	36,704
Manitoba	.....	.....
Saskatchewan	3,107	1,402
Alberta and Northwest Territories	134	77
British Columbia and Yukon	11	.....
Total	44,382	39,150

(b) Manufacture by Lubricating Oils and Greases (Other than in Refineries)

Fourteen Canadian factories were occupied chiefly in compounding lubricating oils and greases in Canada during 1941. Ten of these plants were located in Ontario, 3 in Quebec and 1 in British Columbia.

They employed a fixed and working capital of \$565,471 and gave work to a monthly average of 89 people who were paid \$140,464 as salaries or wages. Purchases of processing materials and containers cost \$723,923 and the selling value of products totalled \$1,245,623. Included in the year's output were lubricating oils at \$976,182, lubricating greases at \$185,523 and soaps or soap powders at \$52,629.

Total Canadian output of lubricating oils, including production from the refineries, amounted to 38,008,499 gallons in 1941 against 30,006,720 gallons in 1940. Corresponding figures for lubricating greases totalled 16,668,438 pounds in 1941 and 10,521,173 pounds in 1940. By taking account of changes in producers' stocks and adding the imports to the Canadian production, the consumption of lubricating oils in Canada during 1941 amounted to 52,981,705 gallons.

Table 155.—Principal Statistics of the Lubricating Oils and Greases Industry, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930	13	1,256,399	104	186,773	8,861	492,550	977,494
1931	12	847,725	64	104,677	7,481	264,316	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	551,835
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	5,127	407,908	752,060
1938	12	523,870	89	122,294	4,284	425,959	881,736
1939	11	506,256	91	153,017	5,129	543,394	1,084,279
1940	11	597,815	96	192,241	5,309	557,632	1,200,303
1941	14	565,471	89	140,464	5,005	723,923	1,245,623

Table 156.—Principal Statistics of the Lubricating Oils and Greases Industry, by Provinces, 1940 and 1941

Year	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
		\$		\$	\$	\$	\$
1940							
Ontario	7	404,168	67	144,567	2,204	482,923	1,051,620
Quebec	3	103,647	29	47,674	3,105	74,709	148,677
British Columbia	1						
Canada	11	597,815	96	192,241	5,309	557,632	1,200,303
1941							
Ontario	10	448,072	67	87,512	1,770	642,447	1,073,189
Quebec	3	117,399	32	52,952	3,235	81,476	172,434
British Columbia	1						
Canada	14	565,471	89	140,464	5,005	723,923	1,245,623

Table 157.—Capital Employed in the Lubricating Oils and Greases Industry, 1940 and 1941

Province	Value of land, buildings, machinery and equipment	Value of inventories		Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
		Raw materials, fuel and other supplies on hand and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
Ontario.....	107,597		196,075	190,496	494,168
Other provinces.....	68,122		12,493	23,032	103,647
Canada.....	175,719		208,568	213,528	597,815
1941					
Ontario.....	105,568	43,188	111,398	187,918	447,072
Other provinces.....	69,505	13,632	2,076	32,186	117,399
Canada.....	175,073	56,820	113,474	220,104	565,471

Table 158.—Employees, Salaries and Wages in the Lubricating Oils and Greases Industry, 1940 and 1941

Province	Average number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total			
	Male	Female	Male	Female				
					\$	\$	\$	
1940								
Ontario.....	31	10	25	1	67	111,891	32,676	144,567
Other provinces.....	12	3	14		29	34,226	13,448	47,674
Canada.....	43	13	39	1	96	146,117	46,124	192,241
1941								
Ontario.....	30	8	17	2	57	69,494	18,018	87,512
Other provinces.....	13	3	16		32	34,740	18,212	52,952
Canada.....	43	11	33	2	89	104,234	36,230	140,464

Table 159.—Number of Wage-Earners in the Lubricating Oils and Greases Industry, by Months, 1940 and 1941

Month	Ontario		Other provinces		Canada	
	1940	1941	1940	1941	1940	1941
January.....	24	13	13	15	37	28
February.....	25	14	15	14	40	28
March.....	25	13	14	15	39	28
April.....	25	16	14	15	39	31
May.....	25	16	13	18	38	34
June.....	27	17	13	10	40	33
July.....	26	17	13	15	39	32
August.....	26	20	14	16	40	36
September.....	27	20	12	18	39	38
October.....	25	17	12	14	37	31
November.....	25	16	13	15	38	31
December.....	25	15	18	14	43	29
Average.....	26	19	14	16	40	35

MANUFACTURES OF NON-METALLIC MINERALS

Table 160.—Hours Worked per week, by Wage-Earners, 1940 and 1941

(In month of highest employment; overtime included)

	1940		1941	
	Quantity	Cost at works	Quantity	Cost at works
30 hours or less.....	1	2	7	2
31-43 hours.....	18	7	1	1
44 hours.....	4	6		1
45-47 hours.....	1	6		
48 hours.....	8	8		
49-50 hours.....				
Total			46	34
Total wages paid in selected week.....		\$	954	725

Table 161.—Fuel and Electricity Used in the Lubricating Oils and Greases Industry, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
Coal, anthracite.....	ton	32	403	22	300
Coal, bituminous—Canadian.....	ton	2	18		
Coal, bituminous—Imported.....	ton	143	1,201	153	1,303
Coke.....	ton	2	16	2	22
Gasoline (includes gasoline used in cars and trucks).....	Imp. gal.			650	210
Kerosene or coal oil.....	Imp. gal.			100	20
Wood.....	cord	93	824	63	677
Manufactured gas.....	M cu. ft.	222	243	330	370
Electricity purchased.....	K.W.H.	108,310	2,604	91,433	2,193
Total			5,309		5,005

Table 162.—Power Equipment in the Lubricating Oils and Greases Industry, 1940 and 1941

	1940		1941	
	Number of units	Total rated horse power	Number of units	Total rated horse power
Steam engines and turbines.....	2	8	2	8
Total primary (all in use).....	2	8	2	8
Electric motors run by purchased power.....	26	144	25	83
Total	28	152	27	91
Stationary boilers.....	2	18	2	18

Table 163.—Materials Used in the Lubricating Oils and Greases Industry, 1940 and 1941

Material	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
Compounding stocks (oils, etc.).....	imp. gal.	1,128,087	374,281	1,938,337	509,001
Tallow and grease.....	lb.	279,422	22,499	266,470	22,356
All other materials.....			54,559		36,393
Shipping containers.....			106,293		156,173
Total			557,632		723,923

Table 164.—Products Made in the Lubricating Oils and Greases Industry, 1940 and 1941

Product	Unit of measure	1940		1941	
		Quantity	Gross selling value at works	Quantity	Gross selling value at works
			\$		\$
Greases, lubricating.....	pound	1,069,891	175,177	1,105,582	185,523
Oils, lubricating.....	gallon	1,542,882	876,679	1,481,328	976,182
Soaps and soap powders.....			48,107		52,629
All other products.....			100,340		31,289
Total			1,290,303		1,245,623

Primary Production—Crude Petroleum.—The Canadian production of crude petroleum and natural gasoline totalled 10,133,838 barrels worth \$14,415,096 as compared with 8,590,978 barrels valued at \$11,160,213 in 1940.

Production from New Brunswick wells in 1941 amounted to 31,359 barrels compared with 22,167 barrels in the preceding year. As in former years, production was obtained from the Stony Creek field near Moncton.

Ontario's production decreased to 160,238 barrels worth \$337,760 from 187,644 barrels worth \$397,078 in 1940. Although the demand for petroleum increased steadily during the year, and the average price paid per barrel at the refineries improved, the quantity of petroleum from Ontario wells declined 15.2 per cent from the preceding year. It may be said that the failure of the oil producers to maintain or increase the output of petroleum was due to the steady decline of the oil wells of the Dawn and Warwick fields, and the disappointing results obtained in exploratory drilling, rather than a falling off of the productive capacity of the older oil fields.

Production of crude oil and natural gasoline in Alberta totalled 9,918,577 barrels in 1941 against 8,362,203 barrels in the preceding year. Four natural gasoline absorption plants were active in Alberta during 1941. The Royalite Oil Co. Limited operated two of these plants; the other two were operated by the Gas and Oil Products Limited and the British American Oil Company.

Table 165.—Principal Statistics of the Crude Petroleum Industry, 1940 and 1941

	1940	1941
Number of firms.....	300	272
Capital employed..... \$	52,216,853	58,206,984
Number of employees—on salary..... No.	348	416
on wages..... No.	1,393	1,428
Total employees	1,741	1,844
Salaries and wages—salaries..... \$	754,229	867,638
wages..... \$	2,081,181	2,387,179
Total salaries and wages \$	2,835,410	3,254,817
Cost of fuel, electricity..... \$	934,834	609,616
Gross selling value of products..... \$	11,160,213	14,415,096

Table 166.—Production of Crude Petroleum in Canada, 1940 and 1941

	1940		1941	
	Barrels	Total value	Barrels	Total value
		\$		\$
New Brunswick.....	22,167	31,220	31,359	44,102
Ontario—				
Petrolia and Enniskillen.....	55,589	116,658	55,383	115,473
Oil Springs.....	31,392	69,016	29,783	65,761
Moore Township.....	1,307	2,743	1,333	2,779
Sarnia Township.....	370	776	213	444
Plympton Township.....	89	187	93	194
Bothwell Township and Thamesville.....	36,684	76,982	33,053	68,916
West Dover.....	11,856	24,880	9,574	19,962
Onondaga.....	957	2,169	300	625
Mosa Township.....	17,288	36,279	19,075	39,771
Brooke.....	51	107	113	236
Dunwich.....	337	707	420	876
Raleigh and Tilbury East.....	76	160	245	511
Dawn and Euphemia.....	2,294	4,814	834	1,739
Warwick.....	29,354	61,600	9,748	20,325
Chatham.....			27	56
Manitoulin Island.....			44	92
Total for Ontario.....	187,644	397,078	160,238	337,760
Saskatchewan.....	331	256		
Alberta—				
Turner Valley.....	8,326,141	10,668,155	9,870,550	13,947,320
Red Coulee (light crude).....	12,080	10,872	11,065	10,902
Wainwright-Ribstone (heavy crude).....				
Tuber-Moose Dome.....	23,982	15,307	36,902	27,684
Total for Alberta.....	8,362,203	10,694,334	9,918,577	13,985,906
Northwest Territories.....	18,633	37,265	23,664	47,328
Canada.....	8,590,978	11,160,213	10,133,835	14,415,096

CHAPTER ELEVEN

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 Twelve, covering the manufacture of products from imported clays.

A total of 164 plants, representing in the aggregate, a capital investment of \$22,846,741, operated in the domestic and imported clay products industries in Canada during 1941. These two industries provided employment for 4,521 persons during the year; their earnings totalled \$5,245,317. The combined production in 1941 was valued at \$12,947,189 compared with \$10,848,338 in 1940.

The gross value of Canadian producers' sales of domestic clays and products made from same totalled \$7,575,336 in 1941 compared with \$6,344,547 in 1940 and \$13,904,643, the all-time high record established in 1929. Commercial production of domestic clay products in 1941 was reported from every province except Prince Edward Island; no output of these materials has as yet been recorded for the Yukon and Northwest Territories. Of the total value of sales in 1941, Ontario and Quebec firms contributed \$3,087,616 and \$1,944,358 respectively.

Sales of building brick in 1941 totalled 208,871 thousand, valued at \$3,765,493. Sewer pipe shipments aggregated \$1,422,389; hollow blocks, roofing and floor tile, \$1,085,219; drain tile, \$333,364, and pottery, including earthenware, \$502,212.

Fireclay was mined during 1941 in Nova Scotia, Saskatchewan and British Columbia with sales of this material totalling 5,431 short tons valued at \$35,475. Firebrick and other fireclay products made from Canadian clays were evaluated at \$374,394. Bentonite shipments during the year under review amounted to 2,172 short tons valued at \$7,830. Shipments of Kaolin were also reported from the province of Quebec in 1941; these totalled 2 short tons appraised at \$30 and represented the first commercial production of the mineral in Canada since 1935.

The number of firms reported as active in the Canadian domestic clay products industry totalled 137 in 1941, of which 71 were located in Ontario, 24 in Quebec, 12 in Alberta, 9 in British Columbia, and the balance in Nova Scotia, New Brunswick, Saskatchewan and Manitoba. Capital employed by the industry was reported at \$17,377,553, employees numbered 2,881, and salaries and wages paid amounted to \$3,227,785. Fuel and electricity used during 1941 totalled \$1,561,326, and chemicals and various other process supplies consumed were valued at \$207,247.

Table 167.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930.....	203	33,430,777	5,026	4,961,130	1,922,606		10,593,578
1931.....	189	33,819,164	3,259	3,541,250	1,486,438		7,841,288
1932.....	164	25,347,582	1,740	1,576,586	579,803		3,650,218
1933.....	157	24,211,890	1,312	1,101,893	377,321		2,262,835
1934.....	149	23,046,807	1,572	1,262,977	558,732		2,680,410
1935.....	139	20,502,006	1,728	1,387,924	618,995	60,583	3,012,563
1936.....	140	19,863,431	1,775	1,498,148	695,001	71,353	3,471,027
1937.....	143	20,437,232	2,287	2,004,792	1,032,755	103,566	4,516,859
1938.....	152	18,068,542	2,242	2,110,233	939,190	114,650	4,536,084
1939.....	146	17,649,742	2,165	2,161,688	998,683	108,815	5,151,236
1940.....	143	17,146,443	2,557	2,675,251	1,282,593	139,635	6,344,547
1941.....	142	17,377,553	2,881	3,227,785	1,561,326	207,247	7,575,336

Table 168.—Principal Statistics, by Provinces, 1940 and 1941

Province	Number of plants	Capital employed	Average number of employees	Salaries and wages	Cost of fuel and electricity	Cost of materials at works	Gross selling value of products at works
		\$		\$	\$	\$	\$
1940							
Nova Scotia.....	5	904,821	139	141,513	84,658	6,256	490,543
New Brunswick.....	5	253,917	70	58,245	38,360	2,846	171,745
Quebec.....	21	3,864,494	570	600,028	378,710	49,409	1,546,246
Ontario.....	77	7,618,378	1,038	1,130,262	620,659	67,340	2,508,540
Manitoba.....	5	257,954	68	56,382	19,634	407	102,906
Saskatchewan.....	6	787,034	48	59,864	18,219	1,138	164,829
Alberta.....	12	2,509,514	411	396,777	44,922	4,435	838,856
British Columbia.....	12	950,331	213	232,180	71,431	7,804	520,883
Canada.....	143	17,146,443	2,557	2,675,251	1,282,593	139,635	6,344,547
1941							
Nova Scotia.....	6	893,152	200	189,732	114,149	5,755	529,435
New Brunswick.....	6	256,226	71	67,885	52,279	3,107	193,643
Quebec.....	26	4,131,649	680	741,266	445,689	67,276	1,944,358
Ontario.....	74	7,639,665	1,160	1,422,132	791,912	112,112	3,087,616
Manitoba.....	4	214,994	61	51,894	16,693	350	84,817
Saskatchewan.....	5	820,893	47	75,382	22,465	1,335	224,897
Alberta.....	12	2,570,548	441	405,983	31,419	6,430	952,144
British Columbia.....	9	850,426	221	273,511	86,720	16,882	558,426
Canada.....	143	17,377,553	2,881	3,227,785	1,561,326	207,247	7,575,336

Table 169.—Capital Employed, by Provinces, 1940 and 1941

Province	Present cash value of land	Present value of buildings, machinery and other equipment	Value of inventories		Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
			Raw materials, fuel and other supplies on hand, and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$	\$
1940						
Nova Scotia.....	115,904	590,442	42,430	48,814	107,231	901,821
New Brunswick.....	19,567	169,090	3,165	29,446	32,639	253,917
Quebec.....	381,557	2,509,967	56,119	396,689	520,162	3,864,494
Ontario.....	1,302,303	4,010,117	149,083	700,255	1,456,620	7,618,378
Manitoba.....	17,850	134,293	7,629	24,120	74,062	257,954
Saskatchewan.....	250,080	422,449	17,389	35,514	61,602	787,034
Alberta.....	215,282	1,769,848	103,996	152,684	267,704	2,509,514
British Columbia.....	126,179	474,235	22,979	127,463	200,484	950,331
Canada.....	2,427,713	10,080,431	402,799	1,514,985	2,720,524	17,146,443
1941						
Nova Scotia.....	114,463	584,896	38,526	47,469	107,798	893,152
New Brunswick.....	27,759	166,671	6,395	29,995	25,406	256,226
Quebec.....	384,547	2,603,486	82,289	414,047	647,280	4,131,649
Ontario.....	1,256,070	3,694,350	132,384	751,472	1,805,389	7,639,665
Manitoba.....	14,000	96,921	3,000	21,780	79,293	214,994
Saskatchewan.....	262,794	307,121	120,508	45,467	85,006	820,893
Alberta.....	144,756	1,861,470	109,164	153,469	301,689	2,570,548
British Columbia.....	139,361	409,034	13,367	110,403	178,261	850,426
Canada.....	2,343,747	9,723,949	505,633	1,574,102	3,236,122	17,377,553

Table 170.—Employees, Salaries and Wages, by Provinces, 1940 and 1941

Province	Number of employees					Salaries	Wages	Total salaries and wages
	On salaries		On wages		Total employees			
	Male	Female	Male	Female				
						\$	\$	\$
1940								
Nova Scotia	9	2	128		139	35,529	105,984	141,513
New Brunswick	4	1	65		70	7,915	50,330	58,245
Quebec	57	2	511		570	139,610	460,418	600,028
Ontario	113	25	900		1,038	254,697	875,565	1,130,262
Manitoba	7		61		68	16,395	39,987	56,382
Saskatchewan	10		38		48	20,537	39,327	59,864
Alberta	40	3	368		411	86,960	309,817	396,777
British Columbia	21	2	190		213	44,270	187,910	232,180
Canada	261	35	2,261		2,557	605,913	2,069,338	2,675,251
1941								
Nova Scotia	8	3	189		200	34,603	155,129	189,732
New Brunswick	5	2	64		71	9,074	58,811	67,885
Quebec	58	2	620		680	137,702	603,594	741,296
Ontario	107	25	1,028		1,160	265,410	1,156,722	1,422,132
Manitoba	5		56		61	14,500	37,394	51,894
Saskatchewan	9		38		47	22,157	53,225	75,382
Alberta	30	4	407		441	72,351	333,632	405,983
British Columbia	19	5	197		221	46,752	226,759	273,511
Canada	241	41	2,599		2,881	602,549	2,625,236	3,227,785

Table 171.—Wage-Earners, by Months, 1940 and 1941

(On last work day of each month)

Month	1940			1941		
	Pit	Plant	Total	Pit	Plant	Total
	No.	No.	No.	No.	No.	No.
January	93	1,097	1,190	147	1,760	1,907
February	89	962	1,051	121	1,671	1,792
March	97	1,190	1,287	122	1,749	1,871
April	121	1,618	1,739	196	2,231	2,427
May	312	2,335	2,647	393	2,857	3,250
June	437	2,706	3,143	427	2,942	3,369
July	423	2,768	3,191	399	2,882	3,281
August	417	2,610	3,027	362	2,708	3,070
September	359	2,453	2,812	288	2,581	2,869
October	284	2,246	2,530	255	2,373	2,628
November	199	2,101	2,300	204	2,220	2,424
December	138	2,013	2,151	163	1,990	2,153
Average	258	2,003	2,261	267	2,332	2,599

Table 172.—Hours Worked per Week by Wage-Earners, 1940 and 1941

(In one week in month of highest employment; overtime included)

Hours worked per week	Number of wage-earners		Hours worked per week	Number of wage-earners	
	1940	1941		1940	1941
30 hours or less	65	63	51-54 hours	725	601
31-43 hours	87	137	55 hours	110	180
44 hours	184	268	56-64 hours	940	889
45-47 hours	152	152	65 hours and over	158	150
48 hours	451	494	Total	3,385	3,374
49-50 hours	513	450	Wages paid in selected week	\$ 67,621	72,702

MANUFACTURES OF NON-METALLIC MINERALS

Table 173.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works \$	Quantity	Cost at works \$
Bituminous coal—Canadian.....	ton	28,008	175,126	30,016	203,607
Imported.....	ton	105,550	696,862	112,301	866,947
Anthracite coal—From United States.....	ton	563	4,299	1,128	10,616
Other.....	ton	455	3,052	250	1,915
Lignite coal.....	ton	2,007	6,098	4,575	13,055
Coke.....	ton	406	3,926	1,176	10,525
Gasoline.....	Imp. gal.	127,985	32,023	179,497	48,982
Kerosene or coal oil.....	Imp. gal.	7,217	1,587	2,053	492
Fuel oil.....	Imp. gal.	178,720	11,397	444,006	32,898
Wood.....	cord	39,266	144,962	42,887	170,411
Gas—Natural.....	M cu. ft.	824,878	29,396	668,965	19,639
Manufactured.....	M cu. ft.	18,760	4,003	827	335
Electricity purchased.....	K.W.H.	11,055,009	169,528	13,581,151	181,904
Other fuel.....			334		
Total			1,282,593		1,561,328
Electricity generated for own use.....	K.W.H.	285,707		269,000	

Table 174.—Power Equipment, 1940 and 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1940				
Steam engines and steam turbines.....	48	4,629	4	180
Diesel engines.....	11	480		
Gasoline, gas and oil engines (except diesel).....	45	1,202	11	274
Hydraulic turbines.....	5	300		
Total primary.....	109	6,611	15	454
Electric motors run by purchased power.....	539	13,667	44	2,000
Total	648	20,278	59	2,454
Electric motors run by above primary units.....	21	207		
Stationary boilers.....	51	5,377	12	1,030
1941				
Steam engines and steam turbines.....	49	4,576	4	230
Diesel engines.....	12	570		
Gasoline, gas and oil engines (except diesel).....	52	1,489	8	424
Total primary.....	113	6,635	12	654
Electric motors run by purchased power.....	543	13,786	50	2,016
Total	656	20,421	62	2,670
Electric motors run by above primary units.....	19	134		
Stationary boilers.....	49	4,864	13	1,055

Table 175.—Factory Sales of Domestic Clay and Clay Products in Canada, 1940-1941

Product	Unit of measure	Sales or shipments			
		1940		1941	
		Quantity	\$	Quantity	\$
Clay—Bentonite	ton	1,469	4,488	2,172	7,830
Fireclay	ton	4,881	30,564	5,431	35,475
Koalin	ton			2	30
Other clay	ton	16,543	27,310	21,620	34,807
Fireclay blocks and shapes			85,127		190,497
Firebrick	M	3,167	165,525	3,643	183,897
Brick—Soft mud process—Face	M	15,946	323,634	14,288	285,260
Common	M	40,395	611,750	30,664	455,385
Stiff mud process Face (wire cut)	M	41,552	903,636	52,419	1,218,832
Common	M	52,777	738,416	69,750	1,043,832
Brick—Dry press—Face	M	14,932	333,717	15,621	363,908
Common	M	24,870	351,335	25,449	386,097
Fancy or ornamental brick (including special shapes, embossed and enamelled brick)	M	47	2,477	36	2,100
Sewer brick	M	694	12,222	644	10,279
Paving brick	M	19	819	120	7,312
Structural tile—					
Hollow blocks (including fireproofing and load-bearing tile)	ton	105,073	788,478	117,530	1,063,120
Roofing tile			1,839		750
Floor tile (quarries)			13,631		21,349
Drain tile	M	10,550	277,551	12,319	333,364
Sewer pipe (including copings, flue linings, conduits, etc.)			1,152,603		1,422,389
Pottery, glazed or unglazed (including coarse earthenware, sanitary ware, stoneware, flower pots, and all other pottery)			474,452		502,212
Other products			44,973		6,811
Total			6,344,547		7,575,338

Note.—In addition to the clays recorded in the above table, there were 185,954 tons of ordinary clay consumed in Canada during 1941 in the production of Portland cement; the corresponding consumption in 1940 was 144,152 tons. Also consumed by the Canadian cement industry in 1941 were 26,837 tons of shale.

Table 176.—Factory Sales of Fireclay Blocks and Shapes and Firebrick from Domestic Clays, by Provinces, 1941

Province	Fireclay*		Fireclay blocks and shapes	Firebrick	
	Short tons	\$	\$	M	\$
Nova Scotia	3,315	11,155	1,461	11	495
New Brunswick			4,410		
Saskatchewan	1,321	13,592	153,890		
Alberta				60	3,227
British Columbia	795	10,728	30,736	3,572	180,175
Canada	5,431	35,475	196,497	3,643	183,897

* Does not include the entire quantity of clay shipped from Saskatchewan to Alberta for the manufacture of clay products.

Table 177.—Factory Sales of Fireclay, Fireclay Blocks and Shapes, and Firebrick from Domestic Clays, 1932-1941

Year	Fireclay		Fireclay blocks and shapes	Firebrick	
	Tons	\$	\$	M	\$
1932	990	11,826	75,209	1,580	71,757
1933	1,421	11,273	80,625	1,547	73,226
1934	1,043	12,598	62,388	2,169	101,218
1935	2,272	15,574	71,344	1,817	90,149
1936	2,437	17,639	65,171	2,548	118,923
1937	4,123	26,081	75,431	2,950	142,827
1938	2,344	17,243	73,512	2,213	113,581
1939	3,785	22,504	95,256	2,331	119,346
1940	4,881	30,564	85,127	3,167	165,525
1941	5,431	35,475	190,497	3,643	183,897

Note.—Firebrick and fireclay blocks and shapes are made also from imported clays; see Table 197.

Table 178.—Factory Sales of Pottery made from Domestic Clays, 1932-1941

Year	Selling value at works	Year	Selling value at works
	\$		\$
1932.....	244,861	1937.....	232,209
1933.....	202,500	1938.....	235,890
1934.....	223,733	1939.....	282,712
1935.....	220,711	1940.....	474,452
1936.....	218,402	1941.....	502,212

Table 179.—Factory Sales of Pottery made from Domestic Clays, by Provinces, 1940 and 1941

Province	1940	1941
New Brunswick.....	31,628	37,277
Quebec.....	13,921	13,921
Ontario.....	49,853	46,070
Alberta.....	381,650	401,114
British Columbia.....	11,321	3,230
Canada.....	474,452	502,212

Table 180.—Factory Sales of Building Brick in Canada, 1932-1941

	Soft mud process		Stiff mud process (wire cut)		Dry press		Fancy or ornamental brick	Sewer brick	Total
	Face	Common	Face	Common	Face	Common			
1932.....	M 6,188	12,801	30,197	40,753	5,522	4,248	125	643	100,477
	\$ 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	23,894	4,544	3,916	830	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	60,616	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	5,236	1,555,167
1936.....	M 6,097	24,180	30,218	35,592	8,961	10,241	25	418	115,732
	\$ 111,378	302,690	575,765	484,078	165,024	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	735,615	755,630	233,542	152,662	2,972	2,777	2,375,276
1938.....	M 10,835	24,104	34,179	50,734	13,125	15,536	63	228	148,807
	\$ 208,810	313,082	671,471	681,744	266,039	192,741	4,175	3,581	2,341,443
1939.....	M 10,927	26,652	45,993	51,114	12,283	17,790	68	217	165,624
	\$ 182,376	372,116	941,606	692,224	242,518	236,597	4,001	4,506	2,676,634
1940.....	M 15,946	40,395	41,552	52,777	14,932	24,870	47	694	191,213
	\$ 323,634	611,750	903,636	738,416	333,717	351,335	2,477	12,222	3,277,187
1941.....	M 14,288	30,664	52,410	69,750	15,621	25,449	36	644	208,871
	\$ 285,260	455,385	1,218,632	1,043,832	363,908	386,097	2,100	10,279	3,765,493

Table 181.—Factory Sales of Building Brick made from Domestic Clays, by Provinces, 1939-1941

Province	1939		1940		1941	
	M	\$	M	\$	M	\$
Nova Scotia.....	4,975	74,489	6,183	108,477	5,402	84,394
New Brunswick.....	5,371	78,074	6,605	114,832	7,216	110,370
Quebec.....	59,452	935,051	71,482	1,161,709	78,700	1,384,875
Ontario.....	71,691	1,279,978	77,106	1,482,273	58,484	1,786,717
Manitoba.....	4,099	60,353	5,581	86,423	4,680	79,260
Saskatchewan.....	982	16,633	1,230	16,632	921	10,864
Alberta.....	11,907	124,358	13,618	137,839	15,441	152,827
British Columbia.....	6,547	107,698	9,408	169,002	8,018	147,180
Canada.....	165,624	2,676,634	191,213	3,277,187	208,871	3,765,493

Table 182.—Factory Sales of Sewer Pipe, Copings, Flue Linings, etc., in Canada, 1932-1941

Year	Value	Year	Value
	\$		\$
1932.....	813,224	1937.....	790,210
1933.....	354,458	1938.....	778,107
1934.....	436,453	1939.....	813,208
1935.....	481,559	1940.....	1,152,603
1936.....	588,485	1941.....	1,422,389

Table 183.—Factory Sales of Drain Tile in Canada, 1932-1941

Year	Quantity	Value	Year	Quantity	Value
	M	\$		M	\$
1932.....	7,385	186,670	1937.....	11,391	298,970
1933.....	10,057	222,820	1938.....	12,882	322,774
1934.....	7,325	180,553	1939.....	14,361	353,973
1935.....	7,124	205,336	1940.....	10,550	277,551
1936.....	8,148	214,590	1941.....	12,319	333,364

Table 184.—Factory Sales of Drain Tile and Sewer Pipe, in Canada, by Provinces, 1940 and 1941

Province	1940			1941		
	Drain tile		Sewer pipe*	Drain tile		Sewer pipe*
	M	\$	\$	M	\$	\$
Nova Scotia.....	192	5,771	285,740	157	5,408	331,042
New Brunswick.....	56	2,364	3,931	65	1,946	3,783
Quebec.....	852	30,045	111,453	917	37,860	172,530
Ontario.....	7,912	183,079	399,212	9,827	226,334	480,036
Manitoba.....	69	4,025	.....	.....	.....	.....
Saskatchewan.....	.....	.....	.....	15	400	.....
Alberta.....	269	10,217	283,475	242	8,545	325,773
British Columbia.....	1,200	42,050	88,792	1,096	53,871	109,225
Canada.....	10,550	277,551	1,152,603	12,319	333,364	1,422,389

* Includes copings, flue linings, etc.

Table 185.—Factory Sales of Structural Tile in Canada, by Provinces, 1941

Province	Hollow blocks (x)		Roofing tile	Floor tile (quarries)
	Short tons	\$	\$	\$
Nova Scotia.....	10,240	95,400	.....	.....
New Brunswick.....	3,366	26,857	.....	.....
Quebec.....	37,765	335,142	.....	.....
Ontario.....	55,771	512,430	552	21,135
Manitoba.....	400	4,227	.....	.....
Saskatchewan.....	1,625	13,700	.....	.....
Alberta.....	6,656	54,776	.....	.....
British Columbia.....	1,707	20,588	198	214
Canada.....	117,530	1,063,120	750	21,349

(x) Including fireproofing and load-bearing tile.

Table 186.—Factory Sales of Structural Tile in Canada, 1932-1941

Year	Hollow blocks (x)		Roofing tile		Floor tile (quarries)	
	Short tons	\$	No.	\$	Sq. ft.	\$
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	3,669	51,765	7,629
1936.....	58,501	467,860	52,739	2,139	97,738	13,798
1937.....	64,526	533,843	60,542	3,302	73,191	12,169
1938.....	70,648	591,416	150,504	5,196	100,958	15,330
1939.....	86,120	714,291	148,291	4,964	90,812	15,233
1940.....	105,073	788,478	41,772	1,839	.....	13,631
1941.....	117,530	1,063,120	.....	750	.....	21,349

(x) Including fireproofing and load-bearing tile.

(a) In addition, there was produced \$615 worth of ceramic tile.

Table 187.—Production (Sales) of Bentonite and Kaolin in Canada, by Provinces, 1932-1941

Year	Bentonite								Kaolin (a)	
	Manitoba		Alberta		Br. Columbia		Canada		Tons	\$
	Tons	\$	Tons	\$	Tons	\$	Tons	\$		
1932.....					7	176	7	176		
1933.....					55	1,363	55	1,363		
1934.....					63	1,578	63	1,578		
1935.....					41	781	41	781	170	1,520
1936.....					(b) 120	180	(b) 120	180		
1937.....	132	1,154			31	817	163	1,971		
1938.....			1,136	3,444	43	215	1,179	3,659		
1939.....	99	591	889	2,850			988	3,441		
1940.....	710	2,023	714	2,240	45	225	1,469	4,488		
1941.....	760	1,330	1,317	5,882	95	618	2,172	7,830	2	30

(a) All from Quebec.

(b) Partly for experimental purposes.

CHAPTER TWELVE

PRODUCTS FROM IMPORTED CLAYS

This industry covers the operations of Canadian plants which were occupied chiefly in making ceramic products from imported clays. Products made in these plants during 1941 included high tension insulators, vitreous china sanitary ware, china dinnerware, firebrick, sewer pipe, floor and wall tile, refractory cements, electrical porcelains, etc.

Twenty-two plants reported in this group for 1941 and their output was valued at \$5,371,853, against last year's total of \$4,503,791 and the 1939 figure of \$2,971,979. Capital employed amounted to \$5,469,188. The average number of workers was 1,640 and payments for salaries and wages totalled \$2,017,532. Fuel and electricity cost \$388,106 and materials for use in manufacturing processes cost \$1,331,608.

Table 188.—Principal Statistics, 1930-1941

Year	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 workn
		\$		\$	\$	\$	\$
1930	15	4,099,965	841	1,052,286	106,135	834,181	2,978,143
1931	14	4,320,382	832	958,900	176,902	695,706	2,455,738
1932	16	4,207,767	715	707,269	143,779	406,441	1,580,411
1933	18	4,220,768	536	471,742	111,144	288,379	1,305,052
1934	19	4,161,435	713	672,754	184,735	515,465	1,623,218
1935	20	4,449,314	895	864,212	187,180	530,735	2,174,977
1936	20	4,216,334	1,079	1,001,047	214,762	708,576	2,006,432
1937	19	4,457,109	1,218	1,265,913	286,499	971,497	3,599,181
1938	21	4,690,306	1,163	1,194,509	229,517	795,956	3,048,888
1939	20	4,661,821	1,097	1,150,712	237,718	792,767	2,971,979
1940	21	5,359,190	1,381	1,573,610	302,773	1,084,669	4,503,791
1941	22	5,469,188	1,640	2,017,532	388,106	1,331,608	5,371,853

Table 189.—Capital Employed, by Provinces, 1940 and 1941

Province	Present value of land, buildings, machinery and tools	Value of inventories		Cash, bills and accounts receivable, prepaid expenses, etc.	Total capital employed
		Raw materials, fuel and other supplies on hand, and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
Ontario	1,864,670	769,083		954,180	3,587,933
Quebec	1,128,358	228,196		414,697	1,771,251
Saskatchewan					
Canada	2,993,034	997,279		1,368,877	5,359,190
1941					
Ontario	1,863,576	440,390	528,287	1,129,940	3,962,193
Quebec	936,659	146,676	102,912	320,748	1,506,995
Saskatchewan					
Canada	2,800,235	587,066	631,199	1,450,688	5,469,188

MANUFACTURES OF NON-METALLIC MINERALS

Table 190.—Employees, Salaries and Wages, by Provinces, 1940 and 1941

Province	Average number of employees				Total	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
1940						\$	\$	\$
Ontario.....	94	45	752	255	1,146	287,302	954,403	1,241,705
Quebec.....	33	8	186	8	235	74,668	257,237	331,905
Saskatchewan.....								
Canada	127	53	938	263	1,381	361,970	1,211,640	1,573,610
1941								
Ontario.....	100	52	912	278	1,342	324,632	1,307,797	1,632,429
Quebec.....	60	10	220	8	298	83,989	301,114	385,103
Saskatchewan.....								
Canada	160	62	1,132	286	1,640	408,621	1,608,911	2,017,532

Table 191.—Wage-Earners, by Months, 1940 and 1941

(Number on payroll on the last work day of each month)

Month	1940			1941		
	Male	Female	Total	Male	Female	Total
January.....	802	248	1,050	1,070	283	1,353
February.....	832	247	1,079	1,080	289	1,369
March.....	843	251	1,094	1,088	287	1,375
April.....	868	236	1,104	1,115	271	1,386
May.....	883	256	1,139	1,154	276	1,430
June.....	902	234	1,136	1,131	274	1,405
July.....	930	233	1,163	1,144	261	1,405
August.....	989	271	1,260	1,127	272	1,399
September.....	1,047	280	1,327	1,192	296	1,488
October.....	1,062	299	1,361	1,166	310	1,476
November.....	1,037	301	1,338	1,164	310	1,474
December.....	1,041	301	1,342	1,139	303	1,442
Average	938	263	1,201	1,131	286	1,417

Table 192.—Hours Worked per Week, by Wage-Earners, 1940 and 1941

(In one week in month of highest employment; overtime included)

Hours worked per week	Number of wage-earners				Hours worked per week	Number of wage-earners			
	1940		1941			1940		1941	
	Male	Female	Male	Female		Male	Female	Male	Female
30 hours or less.....	66	6	68	4	51-54 hours.....	159	30	172	47
31-43 hours.....	84	13	110	14	55 hours.....	30	2	20	1
44 hours.....	44	18	29	9	56-64 hours.....	200	2	212	18
45-47 hours.....	247	179	235	172	65 hours and over.....	69		84	6
48 hours.....	63	10	59	18					
49-50 hours.....	161	45	193	47	Total	1,123	305	1,182	336
					Total wages paid in selected week..... \$	25,043	4,105	30,633	4,995

Table 193.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Coal, anthracite.....	ton	14	194	14	189
Coal, bituminous—Canadian.....	ton	724	4,352	18	177
Imported.....	ton	23,092	167,339	30,604	233,035
Coke.....	ton	1,248	9,984	1,507	15,283
Gasoline.....	imp. gal.	12,604	3,286	11,263	3,259
Kerosene.....	imp. gal.	2,162	273	2,124	357
Fuel oil.....	imp. gal.	617,960	45,713	662,917	52,687
Wood.....	cord	45	166	21	117
Gas—Manufactured.....	M cu. ft.	728	638	26,321	20,304
Natural.....	M cu. ft.	52,671	41,394	38,883	27,343
Electricity purchased.....	K. W. H.	2,648,524	29,444	3,444,580	35,355
Total			302,773		388,106
Electricity generated for own use.....	K. W. H.	770,933		925,120	

Table 194.—Power Equipment, 1940 and 1941

	1940		1941	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Steam engines.....	3	465	3	415
Gasoline, gas and oil engines.....			1	40
Total primary equipment	3	465	4	455
Electric motors run by purchased power.....	555	2,253	593	2,290
Total	558	2,718	597	2,745
Electric motors run by above primary units.....	34	366	38	378
Stationary boilers.....	6	438	24	1,228

Table 195.—Materials Used in Manufacturing, 1940 and 1941

Material	1940		1941	
	Short tons	Total cost at works	Short tons	Total cost at works
		\$		\$
Imported clays—Ball clay.....	3,348	58,300	3,746	71,966
China clay.....	3,382	72,182	3,504	76,768
Fireclay.....	34,153	203,744	39,423	277,448
Saggar clay.....	904	12,776	976	15,008
Other imported clays.....	4,782	16,151	1,161	20,820
Canadian clays—Fireclay.....	2	20	2	20
Other clays.....	100	1,900	215	1,669
Feldspar.....	3,305	70,788	3,333	74,247
Silica and ground quartz.....	3,426	53,690	4,055	63,116
Talc.....	511	7,635	762	11,542
Other glazing materials.....		35,773		37,742
Insulator hardware.....		238,076		230,375
Shipping containers and packing materials.....		105,349		149,739
All other materials.....		208,285		301,148
Total		1,084,669		1,331,608

Table 196.—Products Manufactured, 1940 and 1941

Product	1940	1941
	Gross selling value at works	Gross selling value at works
	\$	\$
Firebrick and stove linings—Rigid.....	534,943	661,633
Plastic.....	146,904	193,093
High temperature cements.....	87,418	105,467
High tension porcelain insulators, china sanitary ware, 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).	3,734,526	4,411,660
Total	4,503,791	5,371,853

Note.—Clay firebrick, floor tile, sewer pipe and pottery are also made in Canada from domestic clays (See tables 175 and 197.) High temperature cements and refractory bricks are made also by concerns in other industries (See tables 197 and 198).

Table 197.—Total Production in Canada of Refractory Shapes, 1930-1941

Year	From domestic clays			Silica brick		Other*	Total
	Fireclay blocks and shapes	Firebrick						Rigid firebrick and stove linings
		\$	M	\$	M	\$	\$
1930.....	147,309	3,789	177,608	2,418	97,379	298,045	721,211
1931.....	83,039	2,248	107,597	900	35,746	280,588	506,970
1932.....	75,209	1,580	71,757	93	4,304	212,438	364,108
1933.....	80,625	1,547	73,226	636	23,185	220,484	397,520
1934.....	62,388	2,100	101,219	2,528	85,945	275,472	325,024
1935.....	71,344	1,817	90,149	2,461	96,194	314,825	572,512
1936.....	65,171	2,548	118,923	2,393	97,285	330,602	611,981
1937.....	75,431	2,950	142,827	3,744	181,126	441,341	840,725
1938.....	73,512	2,213	113,581	1,788	100,403	448,494	735,990
1939.....	95,256	2,331	119,346	2,493	124,807	640,376	979,785
1940.....	85,127	3,167	165,525	3,438	182,786	892,072	1,325,510
1941.....	190,497	3,643	183,897	4,111	238,433	1,198,096	1,810,923

*Includes shapes made from imported clays, from magnesite, etc., amounting to 32,600 tons in 1941.

Table 198.—Total Production in Canada of Refractory Cements and Plastics, 1932-1941

Year	Short tons	Selling value at works
		\$
1932.....		118,402
1933.....	1,405	101,488
1934.....	2,119	142,290
1935.....	3,506	179,161
1936.....	3,784	212,607
1937.....	5,303	260,883
1938.....	7,155	377,687
1939.....	5,094	271,106
1940.....	10,915	630,450
1941.....	15,789	893,099

CHAPTER THIRTEEN

THE SALT INDUSTRY

Commercial production of common salt or sodium chloride in Canada during 1941 totalled 560,845 tons valued at \$3,196,165 compared with 464,714 tons at \$2,823,269 in 1940. In 1941 salt was produced in Nova Scotia, Ontario, Manitoba and Alberta and of the total Canadian output in 1941 Ontario contributed 477,170 tons or 92 per cent. Statistics of production represent the recovery of the mineral from brine wells with the exception of Nova Scotia where the output comes entirely from the underground mining of rock salt deposits. The quantity and value of output in 1941 were the greatest ever recorded.

Of the total salt sold or used by producers in 1941, about 46 per cent, or 258,711 tons, was consumed directly by the producers themselves in the manufacture of caustic soda and other chemicals. Sales of salt during 1941 included 78,901 tons of table and dairy grades; 131,001 tons of common fine and 35,838 tons of common coarse. The balance of shipments in 1941 consisted of various other grades, including salt for agriculture and for highway maintenance.

Nine firms produced salt during 1941. Capital employed by these concerns amounted to \$5,559,307, of which \$3,538,827 represented the value of buildings, machinery, etc., and \$261,237 the value of land. Employees numbered 668, including 72 females. Salaries and wages totalled \$1,018,652; \$450,291 were expended for fuel and electricity and \$69,341 for chemicals and other process supplies.

The "apparent" consumption of salt in Canada in 1941 was estimated at 629,754 tons valued at \$3,524,285 compared with 570,876 tons worth \$3,319,115 in 1940.

Statistics relating to salt production in Canada are available only since 1886 and salt production in the Dominion since that year to the end of 1941 totalled 9,439,546 tons valued at \$54,070,274. Statistics relating to world production of salt have not been available since 1938.

Table 199.—Principal Statistics, 1930-1941

Province	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
		\$		\$	\$	\$	\$
1930.....	8	4,685,549	381	455,539	197,313		1,694,631
1931.....	7	4,196,927	363	446,984	184,001		1,904,149
1932.....	8	3,805,008	345	455,049	176,836		1,947,551
1933.....	9	3,708,358	400	473,420	191,373		1,939,874
1934.....	9	3,711,598	409	551,998	236,257		1,954,953
1935.....	10	3,776,333	473	597,785	175,240	39,700	1,880,978
1936.....	9	3,856,187	506	640,644	181,502	31,195	1,773,144
1937.....	9	4,001,568	543	653,136	183,117	75,947	1,799,465
1938.....	9	4,270,799	562	786,720	278,711	30,369	1,912,913
1939.....	9	4,447,204	547	741,736	276,267	508,511	2,957,982
1940.....	9	4,993,914	586	836,506	321,589	539,179	3,322,250
1941.....	9	5,559,307	668	1,018,652	450,291	725,675	3,852,499

NOTE.—Cost of containers included in materials and in products from 1939 only.

MANUFACTURES OF NON-METALLIC MINERALS

Table 200.—Capital Employed, 1940 and 1941

	1940	1941
	\$	\$
Present cash value of land.....	260,598	261,237
Present value of buildings, fixtures, machinery and other equipment.....	3,377,413	3,538,827
Inventory value of raw materials, fuel and other supplies on hand.....	331,157	438,218
Inventory value of finished products on hand.....	78,478	88,882
Cash, bills, and accounts receivable, prepaid expenses, etc.....	946,268	1,232,143
Total.....	4,993,914	5,559,307

Table 201.—Employees, Salaries and Wages, 1940 and 1941

	1940	1941
Employees—On salaries—Male.....no.	80	108
Female.....no.	40	42
On wages—Male.....no.	436	490
Female.....no.	30	30
Total employees.....no.	586	668
Salaries.....\$	299,521	361,661
Wages.....\$	536,985	656,991
Total salaries and wages.....\$	836,506	1,018,652

Table 202.—Wage-Earners, by Months, 1940 and 1941

(Number on payroll on the last work day of each month)

Month	1940				1941			
	Surface		Under-ground	Total	Surface		Under-ground	Total
	Male	Female			Male	Female		
January.....	353	28	50	431	372	28	30	428
February.....	361	26	52	439	368	26	41	435
March.....	365	26	51	442	379	28	42	449
April.....	387	27	49	463	404	30	50	484
May.....	402	33	55	490	440	28	48	516
June.....	394	30	53	477	465	28	50	543
July.....	415	27	51	493	480	29	49	558
August.....	427	27	49	503	480	31	53	564
September.....	407	30	53	490	476	32	57	565
October.....	395	35	53	483	485	34	55	574
November.....	407	33	52	492	476	31	58	563
December.....	367	28	1	396	470	31	55	556
Average.....	380	30	47	466	441	30	49	520

Table 203.—Hours Worked per Week by Wage-Earners, 1940 and 1941

(In one week of month of highest employment, overtime included)

Hours worked per week	Number of wage-earners				Hours worked per week	Number of wage-earners			
	1940		1941			1940		1941	
	Male	Female	Male	Female		Male	Female	Male	Female
30 hours or less.....	33	5	18	5	51-54 hours.....	25	3	32	3
31-43 hours.....	18	11	45	3	55 hours.....	10		25	
44 hours.....	33	2	32	1	56-64 hours.....	71	6	171	13
45-47 hours.....	24		25	2	65 hours and over.....	59	4	60	
48 hours.....	207	3	130	4	Total.....	485	34	555	33
49-50 hours.....	5		17	2	Total wages paid in selected work.....\$	11,858		15,526	606

Table 204.—Power Equipment, 1940 and 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
1940				
Steam engines and steam turbines.....	25	2,828	6	190
Diesel engines.....	4	735		
Gasoline, gas and oil engines (except diesel).....	2	24		
Electric motors run by purchased power.....	132	940	1	1
Total.....	163	4,527	7	191
Electric motors run by power generated by above primary units.....	160	1,681		
Stationary boilers.....	8	3,600	7	1,135
1941				
Steam engines and steam turbines.....	27	3,328	7	190
Diesel engines.....	1	180		
Gasoline, gas and oil engines (except diesel).....	5	246	1	120
Electric motors run by purchased power.....	137	980	3	11
Total.....	170	4,734	11	321
Electric motors run by power generated by above primary units.....	197	2,097	3	15
Stationary boilers.....	7	3,836	7	1,135

Table 205.—Fuel and Electricity Used, 1940-1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost of works	Quantity	Cost at works
			\$		\$
Bituminous coal—Canadian.....	ton	15,469	71,904	14,773	91,298
Imported.....	ton	35,882	159,985	49,331	268,492
Anthracite coal.....	ton	7,081	38,516		
Lignite coal.....	ton	6,616	22,812	14,091	48,744
Gasoline.....	imp. gal.	25,844	5,926	90,225	21,429
Kerosene.....	imp. gal.	57	16	33	9
Fuel oil.....	imp. gal.	90,197	9,904	48,930	5,422
Gas, natural.....	M cu. ft.	45	24	39	21
Electricity purchased.....	k. w. h.	2,318,990	12,502	2,755,287	14,876
Total.....			321,589		450,291
Electricity generated for own use.....	k. w. h.	1,496,290		5,198,019	

Table 206.—Production of Salt in Canada, by Grades, 1940 and 1941

Grade	1940			1941		
	Manufactured	Sold	Value of salt sold (not including containers)	Manufactured	Sold	Value of salt sold (not including containers)
	Tons	Tons	\$	Tons	Tons	\$
Table, dairy and pressed blocks.....	73,907	75,166	1,421,832	79,683	78,901	1,372,409
Common, fine.....	93,831	94,817	549,410	133,103	131,001	733,072
Common, coarse.....	24,143	24,259	263,754	36,807	35,838	360,772
Highway salt.....	6,689	6,689	34,264	7,069	7,069	36,986
Land salt.....	673	708	4,528	626	641	4,254
Other grades.....	40,795	39,056	190,509	47,208	45,684	258,010
Brine for chemical works (salt equivalent sold or used).....	224,006	224,009	358,972	258,711	258,711	430,653
Total.....	461,647	461,714	2,823,269	563,297	560,845	3,196,165
Value of containers.....			498,981			656,334
Grand Total.....	461,647	461,714	3,322,250	563,297	560,845	3,852,499

Table 207.—Production of Salt by Provinces(*), 1932-1941

Year	Nova Scotia		Ontario		Manitoba		Alberta	
	Tons	\$	Tons	\$	Tons	\$	Tons	\$
1932	31,897	150,708	231,138	1,789,751	508	7,092		
1933	34,278	161,889	244,107	1,755,087	1,490	18,388		
1934	42,886	191,917	276,751	1,734,196	1,664	20,137		
1935	38,701	181,659	320,003	1,698,508	1,538	18,765		
1936	38,774	183,915	350,044	1,557,078	2,498	32,151		
1937	47,865	216,401	407,701	1,539,599	3,391	43,465		
1938	44,950	194,759	388,130	1,657,140	2,920	34,976	4,045	446,035
1939	47,885	213,029	370,843	2,200,189	2,453	35,888	3,319	37,526
1940	42,495	220,328	412,401	2,371,780	3,076	45,731	6,742	185,430
1941	54,097	307,637	477,170	2,512,169	13,051	115,367	16,617	269,595

*In addition, Saskatchewan produced 231 tons valued at \$4,510 in 1933, 452 tons at \$4,703 in 1934 and 101 tons at \$2,046 in 1935.

Table 207 (A).—Production of Salt in Canada, 1929-1941

Year	Tons	\$	Year	Tons	\$
1929	330,264	1,578,086	1936	391,316	1,773,144
1930	271,695	1,694,631	1937	458,957	1,799,415
1931	259,047	1,904,149	1938	440,045	1,912,913
1932	263,543	1,947,551	1939	424,500	2,486,632
1933	280,115	1,939,874	1940	464,714	2,823,269
1934	321,753	1,954,953	1941	560,845	3,196,165
1935	360,343	1,880,978			

Table 208.—Salt Produced for Chemical Purposes(†), 1929-1941

Year	Tons	Per cent of total salt output	Year	Tons	Per cent of total salt output
1929	168,327	51	1936	165,882	42
1930	114,737	42	1937	205,149	45
1931	97,958	38	1938	170,938	39
1932	96,242	37	1939	187,958	44
1933	104,740	37	1940	224,009	48
1934	124,132	39	1941	258,711	46
1935	145,433	40			

†Used in the manufacture of chemicals by producers of salt.

Table 209.—Available Statistics on Consumption of Salt, by Industries, 1940 and 1941

Industry	1940		1941	
	Quantity used	Cost at works	Quantity used	Cost at works
	Pounds	\$	Pounds	\$
Fish canning and curing (factories only)	47,546,400	273,818	44,229,400	363,201
Slaughtering and meat packing	94,220,916	588,536	102,888,038	702,348
Acids, alkalis and salts—Brine (salt content) and dry salt	415,425,301	541,914	495,346,445	708,321
Soaps and cleaning preparations	4,926,412	18,661	5,823,762	24,311
Dyeing, cleaning and laundry work	5,070,363	42,354	5,018,198	49,389
Dyeing and finishing of textiles	3,162,844	14,181	3,379,482	19,898
Artificial ice	457,096	3,245	428,411	3,550
Abrasives—artificial	786,009	4,002	828,000	4,280
Waterworks	1,000,000	(a)	1,000,000	(a)
Leather tanneries	14,301,972	67,025	16,212,371	84,365
Pulp and paper mills	25,258,000	96,351	28,780,000	118,144
Stock and poultry foods	5,278,000	44,247	6,258,000	46,353
Bread and other bakery products	12,744,255	153,204	14,443,819	170,847
Fruit and vegetable preparations	9,377,683	70,918	14,476,063	102,009
Biscuits, confectionery, etc.	1,648,845	10,487	1,609,456	17,085
Foods, breakfast	1,165,733	8,630	1,200,819	10,211
Sausage and sausage casings	635,106	6,524	766,466	7,996
Ice cream industry	1,508,345	8,682	414,880	2,749
Breweries	548,811	5,304	721,984	7,530
Malt and malt products	228,100	1,257	221,159	1,236
Macaroni, vermicelli, etc.	100,506	943	74,259	817
Ice cream cones	3,959	125	6,006	195
Foods, miscellaneous, including coffee, tea, etc.	1,868,705	19,774	2,603,422	26,614
Butter and cheese		190,729		214,659
Starch and glucose	482,783	2,102	492,467	2,302
Animal oils and fats	314,000	1,400	270,000	1,200

(a) Value not available.

CHAPTER FOURTEEN

THE SAND-LIME BRICK INDUSTRY

Six plants in Canada were engaged chiefly in making sand-lime building brick during 1941. Four of these were located in Ontario, 1 in Quebec, and 1 in Manitoba. Production, including some cement blocks and bricks, was valued at \$431,359, an increase of 34.8 per cent over the 1940 total of \$319,909.

Capital invested in these works amounted to \$454,035. An average of 139 people were employed and they were paid \$164,802 in salaries and wages. Expenditures for fuel and electricity amounted to \$39,919, and for processing materials to \$142,942.

Production of sand-lime brick amounted to 19,223 M valued at \$230,030, an increase in both quantity and value over the output of 17,405 M brick at \$196,423 in the previous year. Production value of sand-lime building blocks dropped to \$46,665 from \$47,565.

Table 210.—Principal Statistics, 1930-1941

Province	Number of plants	Capital employed	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
		\$		\$	\$	\$	\$
1930.....	11	2,165,362	225	265,094	51,478	215,921	671,301
1931.....	11	1,490,453	183	207,570	43,461	191,572	540,390
1932.....	6	759,211	75	74,521	14,872	49,106	153,716
1933.....	6	789,962	67	62,584	13,814	37,934	116,367
1934.....	6	781,444	78	65,996	20,172	51,316	174,069
1935.....	6	608,899	71	58,700	17,048	43,083	154,950
1936.....	5	598,510	75	71,021	17,838	55,998	189,668
1937.....	5	547,691	81	72,219	20,095	63,285	197,921
1938.....	6	542,648	68	62,425	16,004	52,875	153,763
1939.....	5	382,745	74	73,885	19,587	66,187	212,223
1940.....	5	385,930	103	116,442	28,939	116,983	319,909
1941.....	6	454,035	139	164,802	39,919	142,942	431,359

Table 211.—Capital Employed, 1940 and 1941

	1940	1941
	\$	\$
Present value of land, buildings, fixtures, machinery and tools.....	209,458	348,421
Inventory value of raw materials, fuel and other supplies on hand and stocks in process.....	39,758	30,113
Inventory value of finished products on hand.....		14,479
Cash, bills and accounts receivable, prepaid expenses, etc.....	46,714	61,022
Total.....	385,930	454,035

MANUFACTURES OF NON-METALLIC MINERALS

Table 212.—Employees, Salaries and Wages, 1940 and 1941

	1940	1941
Salaried employees—Male	15	16
Female.....	1	1
Total	16	17
Wage-earners—Male	87	122
Female.....		
Total	87	122
Total employees.....	103	139
Salaries	\$ 28,677	32,321
Wages	\$ 87,765	132,481
Total salaries and wages.....	\$ 116,442	164,802

Table 213.—Wage-Earners, by Months, 1940 and 1941

(Number on payroll on the last day of each month or nearest work day)

Month	1940	1941	Month	1940	1941
January	48	116	August	84	131
February	46	101	September	94	120
March	61	120	October	96	108
April	87	135	November	93	106
May	128	136	December	94	111
June	117	136	Average	87	122
July	103	138			

Table 214.—Hours Worked per Week by Wage-Earners, 1940 and 1941

(In one week of month of highest employment; overtime included)

Hours worked per week	Number of wage-earners		Hours worked per week	Number of wage-earners	
	1940	1941		1940	1941
30 hours or less.....	1		51-54 hours.....	13	1
31-43 hours.....	1	2	55 hours.....	29	32
44 hours.....		1	56-64 hours.....	59	61
45-47 hours.....		1	65 hours and over.....	21	12
48 hours.....		1	Total	124	153
49-50 hours.....		42	Wages paid in selected week.....	\$ 2,746	3,343

Table 215.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Coal, anthracite	ton	614	3,682		
Coal, bituminous—Canadian	ton	455	2,502	773	5,184
Imported.....	ton	2,210	13,917	22,929	19,915
Gasoline	imp. gal.			13,859	4,150
Electricity purchased.....	K.W.H.	370,065	8,838	471,355	10,670
Total			28,939		39,919

Table 216.—Power Equipment, 1940 and 1941

Kind	1940		1941	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
Primary equipment.....				
Electric motors run by purchased power.....	38	830	40	955
Total	38	830	40	955
Stationary boilers.....	8	1,085	8	835

Table 217.—Materials used in Manufacturing, 1940 and 1941

Material	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Cement, Portland.....	bbl.	6,773	14,941	13,175	26,550
Quicklime.....	ton	5,237	42,325	5,157	41,674
Sand and gravel.....	cu. yd.	53,823	44,340	60,973	47,647
Cinders.....	cu. yd.	6,216	5,019	8,614	7,466
Other materials.....			10,355		19,605
Total			116,983		142,842

Table 218.—Products Manufactured, 1940 and 1941

Product	1940		1941	
	Quantity	Selling value at works	Quantity	Selling value at works
	M	\$	M	\$
Sand-lime brick.....	17,405	196,423	19,223	230,030
Sand-lime building blocks.....		47,565		46,665
Other products (x).....		75,921		154,664
Total		319,909		431,359

(x) Includes cement blocks, cinder blocks and insulating brick.

Table 219.—Production of Sand-Lime Brick in Canada, 1921-1941

Year	Quantity	Selling value at works	Years	Quantity	Selling value at works
	M	\$		M	\$
1921.....	43,457	662,744	1932.....	10,819	131,440
1922.....	52,749	851,007	1933.....	8,541	91,468
1923.....	60,080	897,060	1934.....	12,744	135,588
1924.....	55,873	618,946	1935.....	10,522	120,307
1925.....	68,869	854,055	1936.....	11,456	119,707
1926.....	50,282	606,409	1937.....	11,363	125,880
1927.....	72,864	864,911	1938.....	8,774	99,573
1928.....	82,271	1,038,510	1939.....	11,805	133,168
1929.....	78,301	953,726	1940.....	17,405	196,423
1930.....	52,770	567,022	1941.....	19,223	230,030
1931.....	46,004	469,783			

CHAPTER FIFTEEN

THE STONE PRODUCTS INDUSTRY

The Stone Industry in Canada comprises two main divisions:—1. *The Stone Quarrying Industry*, including quarries and dressing works operated in conjunction with quarries, and 2. *The Stone Products Industry*, comprising the operations of firms having no quarries but which 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 1941 there were 174 stone dressing works whose operations were reported separately from the quarries. These plants were engaged chiefly in cutting or polishing Canadian or imported stone to produce finished monuments or cut and dressed stone for construction purposes. Retail establishments engaged only in selling and lettering monuments have not been included. Five producers of rock wool were also included in this industry.

Output from this industry was valued at \$3,883,496 in 1941, an increase of 8.1 per cent over the total of \$3,592,623 reported for the previous year. The 78 works in Ontario accounted for 63.8 per cent of the total output and the 40 plants in Quebec for 19.6 per cent. The average number of employees was 987 and \$1,296,534 were paid in salaries and wages. Materials used in the cutting and dressing processes, including stone, cost \$1,244,013 and expenditures for fuel and electricity amounted to \$137,842.

These two major divisions, constituting the Canadian stone industry, represented a capital investment of \$15,459,244 in 1941. Production during the year totalled \$10,640,167, which figure includes the value of the quarry output and the value added by manufacturing in the secondary stone industry. Salaried employees and wage-earners employed in 1941 numbered 3,745 and their combined earnings amounted to \$4,192,634.

Table 220.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930.....	226	7,468,687	1,919	3,044,877	147,450	2,759,870	8,355,605
1931.....	223	6,880,835	1,436	2,145,023	136,135	1,770,559	5,989,372
1932.....	206	5,828,109	1,003	1,200,214	108,052	928,572	2,961,914
1933.....	212	5,461,171	821	841,425	87,562	691,525	2,162,650
1934.....	218	5,194,703	881	886,809	90,874	834,320	2,407,474
1935.....	222	5,180,887	1,066	1,174,229	107,836	1,010,999	3,079,118
1936.....	227	5,766,308	1,245	1,257,808	127,151	1,070,902	3,309,911
1937.....	229	5,213,431	1,159	1,352,506	122,209	1,142,885	3,371,242
1938.....	234	5,172,014	1,261	1,560,931	138,259	1,271,650	3,902,774
1939.....	190	4,991,636	1,257	1,458,780	139,438	1,259,547	3,805,989
1940.....	182	4,097,903	1,061	1,230,825	133,417	1,183,112	3,592,623
1941.....	174	4,297,208	987	1,296,534	137,842	1,244,013	3,883,496

Table 221.—Principal Statistics, by Provinces, 1940 and 1941

Province	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
		\$		\$	\$	\$	\$
1940							
Prince Edward Island.....	2	103,345	35	33,914	3,282	20,301	86,801
New Brunswick.....	5						
Nova Scotia.....	8	132,683	36	36,160	2,787	27,354	105,189
Quebec.....	46	1,132,560	259	287,212	25,937	395,028	877,875
Ontario.....	81	2,592,319	563	689,923	86,762	635,495	2,101,147
Manitoba.....	13	185,740	55	49,794	4,638	35,964	111,282
Saskatchewan.....	9	144,745	38	47,280	3,468	30,545	100,821
Alberta.....	7	252,041	38	46,899	3,391	25,382	123,891
British Columbia.....	11	154,470	37	45,643	3,152	13,042	85,617
Canada.....	182	4,697,903	1,061	1,236,825	133,417	1,183,112	3,592,623
1941							
Prince Edward Island.....	1						
New Brunswick.....	5	97,713	30	31,634	3,205	18,752	95,322
Nova Scotia.....	9	105,955	31	33,713	3,938	31,227	102,886
Quebec.....	40	1,093,733	214	252,604	22,292	309,060	761,881
Ontario.....	78	2,352,811	550	794,841	93,099	774,692	2,477,466
Manitoba.....	14	144,562	52	50,774	5,454	37,636	116,965
Saskatchewan.....	9	130,763	31	42,509	3,143	30,167	114,460
Alberta.....	6	228,374	39	42,131	3,415	26,051	110,405
British Columbia.....	12	137,297	40	48,328	3,296	16,428	104,111
Canada.....	174	4,297,298	987	1,296,534	137,842	1,244,013	3,883,496

Table 222.—Capital Employed, 1940 and 1941

Province	Present value of land, buildings, fixtures, machinery and tools	Value of inventories		Cash bills and accounts receivable, prepaid expenses, etc.	Total capital employed
		Raw materials, fuel and other supplies on hand, and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
Prince Edward Island.....	45,593	38,484	19,208	103,345	
New Brunswick.....	56,055	46,015	30,613	132,683	
Nova Scotia.....	752,981	240,403	139,176	1,132,560	
Quebec.....	1,649,723	471,772	470,824	2,592,319	
Ontario.....	57,463	85,032	43,245	185,740	
Manitoba.....	67,639	32,302	44,804	144,745	
Saskatchewan.....	142,951	31,225	77,865	228,041	
Alberta.....	88,941	27,409	38,120	154,470	
Canada.....	2,861,346	972,642	863,915	4,697,903	
1941					
Prince Edward Island.....	42,791	14,764	17,413	97,713	
New Brunswick.....	56,087	11,153	7,495	105,955	
Nova Scotia.....	733,849	138,467	92,087	1,093,733	
Quebec.....	1,473,550	287,543	206,515	2,352,811	
Ontario.....	80,112	9,966	17,389	144,562	
Manitoba.....	60,925	30,674	5,517	136,763	
Saskatchewan.....	135,217	27,317	7,365	228,374	
Alberta.....	89,021	13,283	16,875	137,297	
Canada.....	2,671,552	533,167	370,656	4,297,298	

MANUFACTURES OF NON-METALLIC MINERALS

Table 223.—Employees, Salaries and Wages, by Provinces, 1940 and 1941

Province	Average number of employees				Total	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
1940								
Prince Edward Island.....	5	3	27		35	9,250	24,664	33,914
New Brunswick.....	7	1	28		36	7,814	28,346	36,160
Nova Scotia.....	71	3	185		259	99,304	187,818	287,212
Quebec.....	144	16	400	3	563	232,164	457,759	689,923
Ontario.....	20	3	31	1	55	22,588	27,206	49,794
Manitoba.....	19	2	16	1	38	28,098	19,182	47,280
Saskatchewan.....	10	4	23	1	38	17,272	29,627	46,899
Alberta.....	17	1	19		37	23,280	22,363	45,643
British Columbia.....								
Canada.....	293	33	729	6	1,061	439,860	796,965	1,236,825
1941								
Prince Edward Island.....	5	3	22		30	8,610	23,024	31,634
New Brunswick.....	7	1	23		31	7,088	26,625	33,713
Nova Scotia.....	57	2	155		214	80,020	172,584	252,604
Quebec.....	138	17	394	3	550	230,608	564,333	794,941
Ontario.....	23	2	26	1	52	25,795	24,979	50,774
Manitoba.....	16	2	13		31	25,181	17,328	42,509
Saskatchewan.....	7	5	27		39	14,661	27,470	42,131
Alberta.....	18	1	21		40	22,967	25,361	48,328
British Columbia.....								
Canada.....	269	33	681	4	987	414,830	881,704	1,296,534

Table 224.—Wage-Earners, by Months, 1940 and 1941

(Number on payroll on the last work day of each month)

Month	1940			1941		
	Male	Female	Total	Male	Female	Total
January.....	563	3	566	508	1	509
February.....	573	2	575	505	1	506
March.....	591	2	593	562	1	563
April.....	728	3	731	671	1	672
May.....	773	4	777	740	1	741
June.....	802	6	808	758		758
July.....	834	6	840	756	3	759
August.....	838	6	844	760	2	762
September.....	840	5	845	753	3	756
October.....	733	5	738	762	2	764
November.....	716	4	720	716	2	718
December.....	621	4	625	627	3	630
Average.....	720	6	735	681	4	685

Table 225.—Hours Worked per Week, by Wage-Earners, 1940 and 1941

(In one week of highest employment; overtime included)

Hours worked per week	Number of wage-earners		Hours worked per week		Number of wage-earners	
	1940	1941	1941	1941	1941	1941
30 hours or less.....	87	35	51-54 hours.....	50	111	
31-43 hours.....	156	105	55 hours.....	28	22	
44 hours.....	284	237	56-64 hours.....	110	103	
45-47 hours.....	73	72	65 hours and over.....	121	79	
48 hours.....	113	156	Total.....	1,096	960	
49-50 hours.....	74	40	Total wages paid in selected week... \$	26,504	33,002	

Table 226.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
Bituminous coal—Canadian	ton	165	\$ 1,497	189	\$ 1,694
Imported	ton	2,300	14,760	2,689	17,556
Anthracite coal	ton	298	3,298	332	3,917
Lignite coal	ton	13	72	22	131
Coke	ton	146	1,600	190	2,083
Gasoline	imp. gal.	30,268	8,933	60,563	20,249
Kerosene or coal oil	imp. gal.	119	15	346	40
Fuel oil	imp. gal.	94,721	7,539	71,050	5,538
Wood	cord	26	1,288	312	1,733
Gas—Manufactured	M cu. ft.	64	65	68	67
Natural	M cu. ft.	843	389	545	265
Other fuel			805		825
Electricity purchased	K.W.H.	6,727,888	93,150	6,315,783	83,744
Total			133,417		137,842

Table 227.—Power Equipment, 1940 and 1941

	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horsepower	Number of units	Total rated horsepower
1940				
Steam engines and steam turbines	1	150		
Diesel engines	3	106		
Gasoline, gas and oil engines (other than diesel)	10	234		
Total primary equipment	14	490		
Electric motors run by purchased power	607	8,445	63	1,042
Total	621	8,935	63	1,042
Electric motors run by power generated by above primary units	1	10		
Stationary boilers	5	302		
1941				
Steam engines and steam turbines	2	157		
Diesel engines	3	157		
Gasoline, gas and oil engines (other than diesel)	11	274	1	2
Hydraulic turbines or water wheels	1	15		
Total primary equipment	17	553	1	2
Electric motors run by purchased power	695	8,347	71	1,133
Total	712	8,900	72	1,135
Electric motors run by power generated by above primary units				
Stationary boilers	7	320	1	90

Table 228.—Materials used in the Stone Products Industry, 1940 and 1941

	Cost at works	
	1940	1941
Stone—(a) From Canadian quarries	\$ 380,650	\$ 373,780
(b) Imported	235,871	185,162
Monuments, cut and polished, for lettering only	99,114	73,799
All other materials	487,476	611,272
Total	1,183,112	1,244,013

Table 229.—Output of the Stone Products Industry, 1940 and 1941

Product	Total selling value at works	
	1940	1941
	\$	\$
Granite, cut and polished—		
(a) Monuments	1,416,298	1,582,016
(b) For building purposes	159,427	92,899
Marble, cut and polished—		
(a) Monuments	167,805	186,269
(b) For building purposes	218,271	148,294
Marble chips and dust	14,005	22,326
Limestone—		
(a) Monuments and bases	29,861	31,820
(b) For building purposes	446,441	384,265
Finished monuments, lettered only	132,775	120,681
Other products (x)	964,112	1,249,065
Repairs and custom work (re-lettering, etc.)	43,628	65,861
Total	3,592,623	3,883,496

(x) Includes rock wool, etc.

Table 230.—Production from the Stone Products Industry, by Provinces, 1940 and 1941

	Granite		Marble		Marble chips and dust	Limestone		Finished monuments, lettered only	Other products	Total
	Monu-ments	For build-ing purposes	Monu-ments	For build-ing purposes		Monu-ments and bases	For build-ing purposes			
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Prince Edward Island and New Brunswick—										
1940	61,634	3,575	13,081			1,430		6,381	700	86,801
1941	73,588	770	14,411			1,500		2,280	2,793	85,322
Nova Scotia—										
1940	63,013	2,846	11,334			75		26,201	1,630	105,189
1941	44,870	930	10,344			1,065		38,172	7,505	102,886
Quebec—										
1940	332,685	109,680	9,892	116,835	4,442	7,240	45,047	9,710	242,344	877,875
1941	335,936	35,332	5,639	57,565	7,862	4,389	22,972	9,133	283,653	761,881
Ontario—										
1940	738,932	8,159	75,740	79,305	324	7,480	391,835	50,407	748,965	2,101,147
1941	881,220	25,150	85,337	73,164	2,170	15,795	359,359	36,616	998,655	2,477,466
Manitoba—										
1940	60,514	4,088	8,490	8,673	300	2,288		25,568	1,361	111,282
1941	66,460		18,306		360	4,220		26,644	925	116,965
Saskatchewan—										
1940	42,357		29,463	275	875	6,398	295	13,228	7,930	100,821
1941	50,134		37,568		1,707	4,301	1,694	5,215	13,841	114,460
Alberta—										
1940	49,373	27,750	17,650	6,000	8,000	4,950	9,084		1,084	123,891
1941	59,283	25,000	12,328	8,000	10,112	550		641	3,541	110,405
British Columbia—										
1940	67,760	3,322	2,155	7,183	64		180	1,190	3,722	85,617
1941	79,575	5,717	2,276	9,568	125		240	2,000	4,613	104,111
Canada—										
1940	1,416,298	159,427	167,805	218,271	14,005	29,861	446,441	132,775	1,007,740	3,592,623
1941	1,582,016	92,899	186,269	148,294	22,326	31,820	384,265	120,681	1,314,926	3,883,496

Table 231.—Total Production in Canada of Dressed Building Stone, 1927-1941

Year	Granite		Marble		Limestone		Sandstone from quarries	Total
	From quarries	From dressing works	From quarries	From dressing works	From quarries	From dressing works		
	\$	\$	\$	\$	\$	\$		
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	465,185	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	339,627	348,187	636,294	20,580	1,949,199
1933	114,318	40,224	27,377	73,445	111,235	281,074	19,300	666,973
1934	216,574	35,057		137,902	173,536	280,279	5,600	819,748
1935	403,951	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	1,651,031
1937	252,346	179,557	18,297	347,405	248,659	438,450	51,893	1,536,607
1938	244,501	216,485	1,440	369,698	227,324	832,123	83,692	1,975,263
1939	561,253	438,619	145,618	174,275	349,547	684,270	101,448	2,435,630
1940	255,527	159,427	19,680	218,271	192,183	446,441	55,139	1,316,668
1941	284,803	92,899	51,535	148,294	241,298	384,265	15,016	1,218,110

Table 232.—Sales of Rock Wool by Canadian Producers, by Months, 1940 and 1941

	Full thick batts	Semi-thick batts	Granulated wool	Bulk or loose wool	Industrial wool
	sq. ft.	sq. ft.	cu. ft.	cu. ft.	cu. ft.
	1940				
January	331,517	380,178	119,568	73,055	37,288
February	226,740	258,073	105,443	35,988	28,559
March	179,727	289,391	89,642	16,901	33,766
April	281,992	355,404	76,995	34,594	42,031
May	625,862	696,403	125,023	33,190	39,556
June	556,432	673,718	103,257	30,373	25,263
July	632,656	1,859,735	94,355	39,306	32,839
August	531,399	1,618,573	92,297	35,237	34,852
September	627,456	2,080,998	108,733	53,451	27,155
October	843,340	2,212,875	121,545	56,531	49,655
November	729,198	2,187,894	192,130	54,161	47,508
December	668,037	1,481,434	129,928	28,431	40,183
Total	6,234,356	11,091,674	1,358,916	491,218	429,655

	Three-inch batts	Two-inch batts	One-inch batts	Granulated wool	Bulk or loose wool	Industrial wool
	sq. ft.	sq. ft.	sq. ft.	cu. ft.	cu. ft.	cu. ft.
	1941					
January	385,610	1,082,115		91,926	26,821	22,960
February	410,422	904,651		79,110	28,416	40,531
March	323,169	660,377		87,438	15,238	43,972
April	430,459	751,183		61,128	23,389	40,964
May	670,589	1,349,373	20,700	102,539	23,785	35,394
June	521,334	1,295,423	84,427	137,030	37,175	33,379
July	941,247	1,778,731	392,276	126,428	20,587	37,288
August	1,335,141	1,781,498	579,675	149,558	38,496	36,879
September	800,585	1,678,827	644,262	182,157	63,320	32,356
October	1,021,775	1,122,082	661,573	199,697	71,009	39,641
November	1,106,597	3,259,235	780,962	167,487	54,164	28,107
December	728,548	2,701,034	584,795	200,440	35,154	57,327
Total	8,675,476	20,364,529	3,748,670	1,584,938	447,454	448,798

Primary Production—The Stone Quarrying Industry.—The kinds of stone quarried in Canada include granite (trap rock, syenite and other igneous rock), limestone, marble, sandstone, and slate. Stone of almost every known variety occurs in Canada; rocks of the igneous areas of British Columbia, Manitoba, Ontario, Quebec and the Maritime Provinces exhibit a wide range of physical characteristics, some varieties being especially noted for their richness of colour and beauty of crystallization. The sedimentary rocks, including limestones, sandstones

and marbles are quarried at various points in Canada. The products from quarries operating in these different formations yield not only high class structural and decorative materials but provide the chemical and other allied industries with many of their increasing requirements.

The gross value of all varieties of stone produced in Canada during 1941 totalled \$8,000,684 compared with \$7,398,959 in 1940. Comprising the tonnage shipped in 1941 were 600,922 tons of granite valued at \$1,498,786; 7,151,049 tons of limestone at \$6,057,727; 17,649 tons of marble at \$126,081; 169,885 tons of sandstone at \$305,528 and 1,296 tons of slate worth \$12,562. Of the total value of domestic stone sold in 1941, that of Quebec shipments amounted to 45.1 per cent; Ontario, 41.0 per cent, and British Columbia, 5.1 per cent.

The number of firms in the stone quarrying industry reported as active in 1941 totalled 457; capital employed amounted to \$11,162,036; employees numbered 2,758; salaries and wages paid aggregated \$2,896,100 and the cost of fuel, electricity and process supplies used was reported at \$1,283,183.

Table 233.—Principal Statistics of the Stone Quarrying Industry in Canada, 1940 and 1941

	1940	1941
Number of firms	482	457
Capital employed.....	\$ 12,127,271	11,162,036
Number of employees—On salary	283	293
On wages.....	2,603	2,465
Total employees	2,886	2,758
Salaries and wages—Salaries.....	\$ 438,559	445,139
Wages.....	\$ 2,341,144	2,450,961
Total salaries and wages	\$ 2,779,703	2,896,100
Selling value of products (Gross).....	\$ 7,398,959	8,000,684
Cost of fuel and electricity.....	\$ 528,319	642,085
Process supplies used.....	\$ 676,056	641,098
Selling value of products (Net).....	\$ 6,194,584	6,717,501

Table 234.—Production (Sales) of Stone from Canadian Quarries, by Kinds, Showing Purposes for which Used, 1940

For use as follows:	Granite (a)	Limestone (b)	Marble	Sandstone	Slate	Total
1940						
Building stone—Rough..... tons	54,214	15,095	58	1,514		70,881
..... \$	120,372	70,885	3,070	5,658		199,985
Dressed..... tons	10,908	13,281	131	2,135		26,455
..... \$	255,527	192,183	19,680	55,139		522,529
Monumental and ornamental stone—						
Rough..... tons	5,230	4	52			5,286
..... \$	55,176	80	1,704			56,960
Dressed..... tons	2,623	47				2,670
..... \$	223,203	2,218				225,421
Flagstone..... tons	137	585		401		1,123
..... \$	310	1,943		2,886		5,139
Curbstone..... tons	844			539		1,383
..... \$	4,142			1,617		5,759
Paving blocks..... tons	8,383					8,383
..... \$	17,165					17,165
Lining open-hearth furnaces..... tons		34,565				34,565
..... \$		24,518				24,518
Chemical—						
Flux in iron and steel furnaces..... tons		167,476	166			167,642
..... \$		136,598	358			136,956
Flux in non-ferrous smelters..... tons		163,512				163,512
..... \$		103,446				103,446
Glass factories..... tons		1,613	121			1,734
..... \$		2,016	682			2,708
Pulp and paper mills..... tons		248,755				248,755
..... \$		315,080				315,080
Sugar refineries..... tons		10,164				10,164
..... \$		12,331				12,331
Other chemical uses..... tons		133,878				133,878
..... \$		111,275				111,275
Pulverized Stone—						
Whiting (substitute)..... tons		900				900
..... \$		9,600				9,600
Asphalt filler..... tons		13,311				13,311
..... \$		45,284				45,284
Dusting coal mines..... tons		610				610
..... \$		2,449				2,449
Agricultural purposes and fertilizer plants..... tons		174,114	1,440			175,554
..... \$		272,161	3,070			275,231
Other uses..... tons		27,464	378			27,842
..... \$		55,228	2,112			57,340
Crushed stone for manufacture of artificial stone..... tons			600			600
..... \$			3,520			3,525
Roofing granules..... tons	12,406	524			1,113	14,043
..... \$	105,709	1,274			7,522	114,505
Poultry grit..... tons	2	1,877	1,499			3,378
..... \$	57	8,211	7,120			15,388
Stucco dash..... tons	2	55	1,327			1,384
..... \$	55	266	9,129			9,450
Terrazzo chips..... tons		1,290	3,484			4,774
..... \$		5,650	17,184			22,834
Rock wool..... tons		5,825				5,825
..... \$		6,451				6,451
Rubble and riprap..... tons	168,274	267,934	3,980	12,526		452,714
..... \$	126,302	156,962	7,562	7,909		298,635
Crushed stone—						
Concrete aggregate..... tons	288,703	2,352,153		32,222		2,673,078
..... \$	341,581	1,784,808		45,098		2,171,487
Road metal..... tons	160,819	2,018,453	303	121,138		2,300,613
..... \$	186,714	1,517,592	202	181,236		1,885,744
Railroad ballast..... tons	435,202	455,206		6,000		896,408
..... \$	448,097	287,675		6,000		741,772
Total (b)..... tons	1,147,747	6,198,591	13,739	176,473	1,113	7,447,663
..... \$	1,884,410	3,126,075	75,409	305,543	7,522	7,398,939

(a) Includes all igneous rock.

(b) Does not include limestone used in Canadian lime and cement industries but includes marl used for agricultural purposes.

Table 235.—Production (Sales) of Stone from Canadian Quarries, by Kinds, Showing Purposes for which Used, 1941

For use as follows:	Granite (a)	Limestone (b)	Marble	Sand-stone	Slate	Total
1941						
Building stone—Rough.....	tons 2,589	15,687	61	1,902		20,239
	\$ 11,248	36,557	3,036	9,584		60,425
Dressed.....	tons 13,772	19,455	422	374		31,023
	\$ 284,803	241,298	51,535	15,016		592,652
Monumental and ornamental stone—						
Rough.....	tons 7,260	148	24			7,432
	\$ 81,073	434	798			82,305
Dressed.....	tons 4,925	52		20		1,997
	\$ 291,643	2,339		400		294,382
Flagstone.....	tons 150	1,459		927		2,536
	\$ 336	2,625		5,474		8,435
Curbstone.....	tons 3,379	70		31		3,480
	\$ 14,483	42		207		14,732
Paving blocks.....	tons 2,106					2,106
	\$ 16,931					16,931
Lining open-hearth furnaces.....	tons	29,124				29,124
	\$	20,893				20,893
Chemical—						
Flux in iron and steel furnaces.....	tons	254,998				254,998
	\$	222,916				222,916
Flux in non-ferrous smelters.....	tons	275,918				275,918
	\$	178,543				178,543
Glass factories.....	tons	2,605	899			3,504
	\$	3,256	3,428			6,684
Pulp and paper mills.....	tons	240,031	334			240,365
	\$	305,023	668			305,691
Sugar refineries.....	tons	6,219				6,219
	\$	8,024				8,201
Other chemical uses.....	tons	184,686				184,686
	\$	167,716				167,716
Pulverized stone—						
Whiting (substitute).....	tons	5,481				5,481
	\$	31,907				31,907
Asphalt filler.....	tons	425	18,403	5,240	63	24,131
	\$ 1,635	62,089	9,956		504	74,184
Dusting coal mines.....	tons	1,894				1,894
	\$	8,472				8,472
Agricultural purposes and fertilizer plants.....	tons	216,657	480			217,137
	\$	453,548	840			454,388
Other uses.....	tons	12,873	837			13,708
	\$	37,278	4,207			41,545
Crushed stone for manufacture of artificial stone.....	tons		862			862
	\$		3,711			3,711
Roofing granules.....	tons	14,274	887		887	16,048
	\$ 143,328	2,405			11,712	157,445
Poultry grit.....	tons	2	3,912	2,195		6,109
	\$ 90	16,397	10,908			27,396
Stucco dash.....	tons	5	2,697	1,412		4,114
	\$ 115	14,958	9,018			24,091
Terrazzo chips.....	tons		896	4,131		5,027
	\$		2,688	26,019		28,707
Rock wool.....	tons		8,313			8,313
	\$		8,339			8,339
Rubble and riprap.....	tons	118,328	414,827	410	346	533,811
	\$ 85,212	232,741	1,638	47,230	346	367,193
Crushed stone—						
Concrete aggregate.....	tons	178,611	2,350,850	52,122		2,581,583
	\$ 214,956	1,548,057		123,213		1,986,226
Road metal.....	tons	254,171	2,647,797	342		2,902,310
	\$ 352,378	2,038,208	228	98,579		2,481,195
Railroad ballast.....	tons	925	435,052	10,528		446,405
	\$ 555	310,974		30,810		322,348
Total (b)	tons	609,922	7,151,019	17,649	169,885	7,940,461
	\$	1,198,786	6,657,727	126,081	365,528	8,000,684

(a) Includes all igneous rock.

(b) Does not include limestone used in Canadian lime and cement industries, but includes marl used for agricultural purposes.

Table 236.—Production (Sales) of Canadian Stone from Quarries, by Kinds and by Provinces, 1940 and 1941

Province	Granite (a)	Limestone (b)	Marble	Sandstone	Slate	Total
1940						
Nova Scotia.....	tons 87,975	24,160		69,316		181,451
	\$ 155,458	46,717		111,409		313,614
New Brunswick.....	tons 1,326	159,812		5,015		166,153
	\$ 69,833	206,916		33,550		310,299
Quebec.....	tons 366,662	2,287,384	8,767	92,378	639	2,755,830
	\$ 792,708	1,851,423	50,652	129,179	639	2,827,601
Ontario.....	tons 529,440	3,302,596	4,792	3,446		3,840,274
	\$ 704,421	2,649,809	22,157	11,008		3,387,395
Manitoba.....	tons 218	48,488				48,706
	\$ 4,324	74,116				78,440
Alberta.....	tons	3,981				3,981
	\$	11,999				11,999
British Columbia.....	tons 162,126	282,170	180	6,320	474	451,270
	\$ 157,666	282,095	2,600	20,337	6,883	469,581
Canada.....	tons 1,117,747	6,108,591	13,739	176,475	1,113	7,447,665
	\$ 1,884,410	5,126,075	75,409	305,543	7,522	7,398,959
1941						
Nova Scotia.....	tons 410	46,973		66,219		113,602
	\$ 30,537	69,501		169,307		269,345
New Brunswick.....	tons 1,529	131,941		4,678		138,148
	\$ 63,184	274,000		10,680		347,864
Quebec.....	tons 316,372	3,370,875	10,809	76,928	346	3,775,330
	\$ 866,182	2,567,422	62,916	82,701	346	3,609,567
Ontario.....	tons 152,426	3,353,856	6,540	13,420		3,526,242
	\$ 388,325	2,832,056	30,365	27,190		3,277,936
Manitoba.....	tons 244	38,103				38,347
	\$ 4,155	60,742				64,898
Alberta.....	tons	7,942				7,942
	\$	24,303				24,303
British Columbia.....	tons 129,941	201,359	300	8,640	950	341,190
	\$ 146,403	229,702	2,800	15,650	12,216	406,771
Canada.....	tons 600,829	7,151,049	17,649	169,885	1,296	7,940,801
	\$ 1,498,786	6,057,727	126,081	305,528	12,562	8,000,684

(a) All igneous rocks included.

(b) Includes dolomite, also marl for agricultural purposes.

NOTE.—Not included in the above limestone statistics are 1,765,944 tons of limestone consumed in the cement industry in 1940 and 2,086,781 tons in 1941. Limestone used in the Canadian lime industry is also not included; it is estimated that approximately 1,280,949 tons of limestone were burned in the manufacture of lime in 1940 and 1,530,200 tons in 1941.

CHAPTER SIXTEEN

THE MISCELLANEOUS NON-METALLIC MINERAL PRODUCTS INDUSTRY

Statistics for this industry cover the operations of 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 other main industries in this group as reviewed in separate chapters.

In 1941 there were 44 operating plants in this miscellaneous industry; 8 made Pintsch oil gas for lighting railway cars; 6 made foundry facings and supplies; 3 made refractories; 4 made asphalt emulsions; 2 made graphite and carbon electrodes; 2 ground non-metallic minerals, while each of the following was reported by only one establishment: enamel frit, lime from imported stone, mica plate, imitation brick siding, wax crayons, tailors' wax chalk, composition toilet seats and battery boxes, roofing cements, abrasive pads, carbon brushes, core oil, diamond saw teeth, onyx and marble novelties, fuel briquettes, cement and wood wallboard, asphalt paving material, and mud for rotary drilling.

Production from these works during 1941 was valued at \$13,352,187, an increase of 52.7 per cent over the 1940 total of \$8,740,561. The 13 works in Quebec accounted for 60 per cent of the total for Canada and 18 plants in Ontario accounted for 34 per cent.

The number of employees in this industry in 1941 was 1,386 to whom \$2,094,624 was paid in salaries and wages. In 1940, the 1,355 workers were paid \$1,719,862.

Materials for processing cost \$5,607,150 in 1941 and fuel and electricity cost \$672,132.

Table 237.—Distribution of Plants, by Provinces and Principal Groups, 1941

Province	Carbon electrodes	Foundry facings and supplies	Mica products	Asphalt emulsions	Pintsch Gas	Miscellaneous	Total
Nova Scotia.....						1	1
New Brunswick.....					1		1
Quebec.....	1	1	1	2	1	6	12
Ontario.....	1	5		1	2	10	19
Manitoba.....					1	1	2
Saskatchewan.....					1	1	2
Alberta.....					1	1	2
British Columbia.....				1	1	3	5
Canada.....	2	6	1	4	8	23	44

Table 238.—Principal Statistics, 1930-1941

Year	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
		\$		\$	\$	\$	\$
1930.....	18	5,881,902	447	503,057	119,376	884,459	2,172,892
1931.....	24	6,304,454	351	459,290	143,819	795,795	2,105,776
1932.....	23	5,314,907	299	357,449	99,523	438,179	1,537,705
1933.....	25	4,999,487	264	317,714	98,828	415,385	1,747,983
1934.....	25	4,485,658	308	340,563	118,895	534,598	2,396,701
1935.....	27	4,771,581	460	554,131	123,961	903,490	2,818,797
1936.....	29	5,167,585	645	756,689	234,114	1,208,185	3,498,559
1937.....	38	6,164,333	808	1,054,432	310,969	1,750,148	5,399,637
1938.....	48	7,296,824	945	1,175,122	300,257	2,144,288	5,880,096
1939.....	49	7,970,400	976	1,232,707	333,182	2,217,698	6,445,545
1940.....	57	12,360,765	1,355	1,719,862	403,779	3,129,764	8,740,561
1941.....	44	15,170,029	1,386	2,094,624	672,132	5,607,150	13,352,187

Table 239.—Principal Statistics, by Provinces, 1940 and 1941

Year and province	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
		\$		\$	\$	\$	\$
1940							
Quebec	17	7,816,587	567	620,555	171,813	1,830,485	4,286,374
Ontario	22	3,511,538	562	836,821	181,645	1,009,992	3,580,801
Alberta	3	48,835	18	18,504	1,712	10,546	50,266
British Columbia	7	289,008	119	143,699	10,658	50,089	241,103
Nova Scotia	1						
New Brunswick	1						
Manitoba	3	694,797	89	100,283	37,951	228,652	582,017
Saskatchewan	3						
Canada	57	12,360,765	1,355	1,719,862	463,779	3,129,764	8,740,561
1941							
Quebec	13	10,950,252	577	825,582	319,734	3,772,194	7,912,486
Ontario	18	3,332,325	720	1,115,624	298,795	1,413,595	4,502,662
Alberta	2	38,571	12	16,122	1,564	12,421	45,830
British Columbia	5	123,916	14	18,230	3,626	45,831	110,009
Nova Scotia	1						
New Brunswick	1						
Manitoba	2	720,961	63	119,066	48,413	363,119	781,191
Saskatchewan	2						
Canada	44	15,176,025	1,386	2,094,624	672,132	5,607,150	13,352,187

Table 240.—Capital Employed, by Classes and by Provinces, 1940 and 1941

Province	Present value of land, buildings, fixtures and machinery	Value of inventories		Cash, bills and accounts receivable, prepaid expense, etc.	Total
		Raw materials, fuel and other supplies on hand, and stocks in process	Finished products on hand		
	\$	\$	\$	\$	\$
1940					
Quebec	3,958,852	1,996,826		1,860,909	7,816,587
Ontario	1,132,331	1,116,109		1,263,098	3,511,538
Alberta	40,526	535		7,774	48,835
British Columbia	211,314	51,771		25,923	289,008
Other provinces	603,039	33,004		58,754	694,797
Canada	5,946,062	3,198,245		3,216,458	12,360,765
1941					
Quebec	4,084,279	2,122,037	78,642	4,674,294	10,950,252
Ontario	1,066,311	447,783	507,300	1,310,931	3,332,325
Alberta	31,726		380	1,465	38,571
British Columbia	53,410	5,222	888	64,396	123,916
Other provinces	639,872	13,980	10,961	56,148	720,961
Canada	5,875,598	2,589,022	598,171	6,107,234	15,176,025

Table 241.—Employees, Salaries and Wages, by Provinces, 1940 and 1941

Province	Average number of employees				Total	Salaries	Wages	Total salaries and wages
	On salaries		On wages					
	Male	Female	Male	Female				
					\$	\$	\$	
1940								
Quebec	69	12	466	20	567	170,149	450,406	620,555
Ontario	82	21	446	13	562	222,617	614,204	836,821
Alberta	5		13		18	11,006	7,498	18,504
British Columbia	11		105	1	119	24,512	119,187	143,699
Other provinces	15	1	73		89	23,993	76,290	100,283
Canada	182	36	1,103	31	1,355	452,277	1,267,585	1,719,862
1941								
Quebec	63	14	475	25	577	158,752	666,830	825,582
Ontario	85	26	591	18	720	238,417	877,207	1,115,624
Alberta	4		8		12	9,418	6,704	16,122
British Columbia	5		9		14	8,380	9,850	18,230
Other provinces	11	2	50		63	52,108	66,958	119,066
Canada	168	42	1,133	43	1,386	467,075	1,627,549	2,094,624

Table 242.—Wage-Earners, by Months, 1940 and 1941

(On the last work day of each month)

Month	1940			1941		
	Male	Female	Total	Male	Female	Total
January.....	888	33	921	898	42	940
February.....	869	32	901	925	43	968
March.....	872	33	905	923	37	960
April.....	960	29	989	1,011	45	1,056
May.....	952	32	984	1,121	42	1,163
June.....	1,174	33	1,207	1,171	43	1,214
July.....	1,249	35	1,284	1,201	43	1,244
August.....	1,326	27	1,353	1,243	43	1,286
September.....	1,335	34	1,369	1,255	47	1,302
October.....	1,198	39	1,237	1,284	46	1,330
November.....	1,183	40	1,223	1,294	45	1,339
December.....	1,235	45	1,280	1,285	42	1,327
Average.....	1,163	34	1,137	1,133	43	1,176

Table 243.—Hours Worked per Week by Wage-Earners, 1940 and 1941

(In one week of month of highest employment; overtime included)

Regular Hours worked per week	Number of wage-earners				Regular Hours worked per week	Number of wage-earners			
	1940		1941			1940		1941	
	Male	Female	Male	Female		Male	Female	Male	Female
30 hours or less.....	138	2	36	1	55 hours.....	19		41	
31-43 hours.....	180	6	86	8	56-64 hours.....	347		291	
44 hours.....	109	6	31	23	65 hours and over.....	87		60	
45-47 hours.....	14	2	16	5	Total.....	1,531	41	1,363	48
48 hours.....	46	20	668	2	Total wages paid in selected week..... \$	32,085	511	37,709	548
49-50 hours.....	128	5	89	9					
51-54 hours.....	43		45						

Table 244.—Fuel and Electricity Used, 1940 and 1941

Kind	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Coal—anthracite.....	ton	685	5,322	735	5,755
Coal—bituminous—Canadian.....	ton	2,571	16,705	3,296	22,699
Coal—bituminous—Imported.....	ton	4,755	25,787	4,945	36,044
Coke.....	ton				
Gasoline.....	imp. gal.	31,694	8,045	22,636	6,502
Fuel oil.....	imp. gal.	857,911	59,529	1,080,749	84,907
Wood.....	cord	415	887	56	428
Gas—manufactured.....	M cu. ft.	168,560	18,271	157,727	19,903
Gas—natural.....	M cu. ft.	1,282	477	1,751	587
Other fuel.....			88		4,056
Electricity.....	K. W. H.	111,051,593	268,668	181,185,026	491,251
Total.....			403,779		672,132

Table 245.—Power Equipment, 1940 and 1941

Description	Ordinarily in use		In reserve or idle	
	Number of units	Total rated horse power	Number of units	Total rated horse power
1940				
Steam engines and steam turbines.....	1	20		
Gasoline, gas and oil engines.....	10	352		
Total primary power.....	11	372		
Electric motors run by purchased power.....	731	9,257	18	437
Total	742	9,629	18	437
Stationary boilers.....	19	1,590	2	165
1941				
Steam engines and turbines.....				
Gasoline, gas and oil engines.....	4	160		
Total primary power.....	4	160		
Electric motors run by purchased power.....	795	9,266	16	586
Total	799	9,426	16	586
Stationary boilers.....	17	1,432	1	15

Table 246.—Materials Used in Manufacturing, 1940 and 1941

Material	Unit of measure	1940		1941	
		Quantity	Cost at works	Quantity	Cost at works
			\$		\$
Asphalt.....	ton	12,821	227,442	14,423	305,564
Coal—anthracite.....	ton	11,883	122,709	15,041	168,435
bituminous.....	ton	26,966	159,843	51,981	342,903
lignite.....	ton	86,822	89,427	119,545	123,131
Coke—petroleum.....	ton	52,805	908,552	146,535	2,168,342
Carbon, scrap and electrode butts.....	ton	10,327	226,321	23,069	356,992
Carbon blanks.....			19,000		26,000
Clays.....			22,363		27,316
Limestone, imported.....	ton	44,672	58,889	9,086	15,586
Mica.....	lb.	58,116	24,240	54,330	26,697
Oil, linseed.....	imp. gal.	43,059	33,726	48,885	31,343
Oil for oil gas.....	imp. gal.	624,711	51,462	674,000	58,993
Pitch.....	ton	18,864	343,679	37,179	706,681
Resin.....	lb.	252,347	7,519	274,501	9,639
Tar.....	imp. gal.	172,107	13,414	217,688	18,532
Tripoli.....	ton	83	2,220	95	2,620
Wax.....	lb.		18,774		22,746
Other materials.....			800,184		1,195,630
Total			3,129,761		5,607,150

Table 247.—Products Manufactured, 1940 and 1941

Product	Unit of measure	1940		1941	
		Quantity	Selling value at works	Quantity	Selling value at works
			\$		\$
Asphalt emulsions.....	Imp. gal.	3,224,659	418,430	3,644,304	493,920
Foundry facings and partings.....			110,358		177,419
Core oil and core compounds.....			90,185		120,960
Oil gas (pintsch).....	M cu. ft.	41,064	474,068	45,208	522,014
Refractories.....		3,586	200,484	6,319	359,079
All other products*.....			7,438,036		11,678,774
Total			8,740,561		13,352,187

* Includes products, such as carbon electrodes, graphite electrodes, enamel frit, chalk and wax crayons, etc., made by less than 3 firms.

Primary Production—The Mica Mining Industry.—Canadian production (mine shipments) of mica in 1941 totalled 3,487,891 pounds valued at \$335,288 compared with 1,950,219 pounds worth \$237,145 in 1940. Shipments during 1941 were made only from properties located in the provinces of Quebec, Ontario and British Columbia. Of the total output in 1941, mines in the province of Quebec contributed 1,603,575 pounds valued at \$284,563; Ontario mines, 1,587,316 pounds worth \$47,047; and British Columbia, 297,000 pounds at \$3,678. In these statistics of mica production are shipments of all grades of the mineral produced, including hand cobbled, thumb-trimmed, splittings, knife trimmed, scrap, ground and mica schist.

The number of Canadian mica operators reporting commercial shipments in 1941 totalled 75; capital employed by the industry amounted to \$1,180,097, and \$181,800 were distributed in salaries and wages to 246 employees. The total net value of shipments was estimated at \$295,759.

Table 248.—Principal Statistics of the Mica Mining Industry in Canada, 1940 and 1941

	1940	1941		
	Canada*	Quebec	Ontario	Canada*
Number of firms or operators.....	65	63	16	81
Capital employed..... \$	259,168	1,081,313	98,784	1,180,197
Number of employees—On salary.....	8	11	5	16
On wages.....	210	190	40	230
Total employees.....	218	201	45	246
Salaries and wages—Salaries..... \$	8,567	15,562	7,631	23,193
Wages..... \$	126,138	139,393	19,214	158,607
Total salaries and wages..... \$	131,705	154,955	26,845	181,800
Selling value of products (gross)..... \$	237,145	284,563	47,047	335,288
Cost of fuel and electricity..... \$	9,371	15,117	2,588	17,765
Cost of process supplies used..... \$	18,258	16,790	5,124	21,824
Selling value of products (net)..... \$	209,316	252,746	39,335	295,759

* Does not include general statistics for one operating plant in British Columbia in 1940 for which data are not available, also 2 in British Columbia in 1941.

Table 249.—Production of Mica in Canada, by Grades, 1940 and 1941

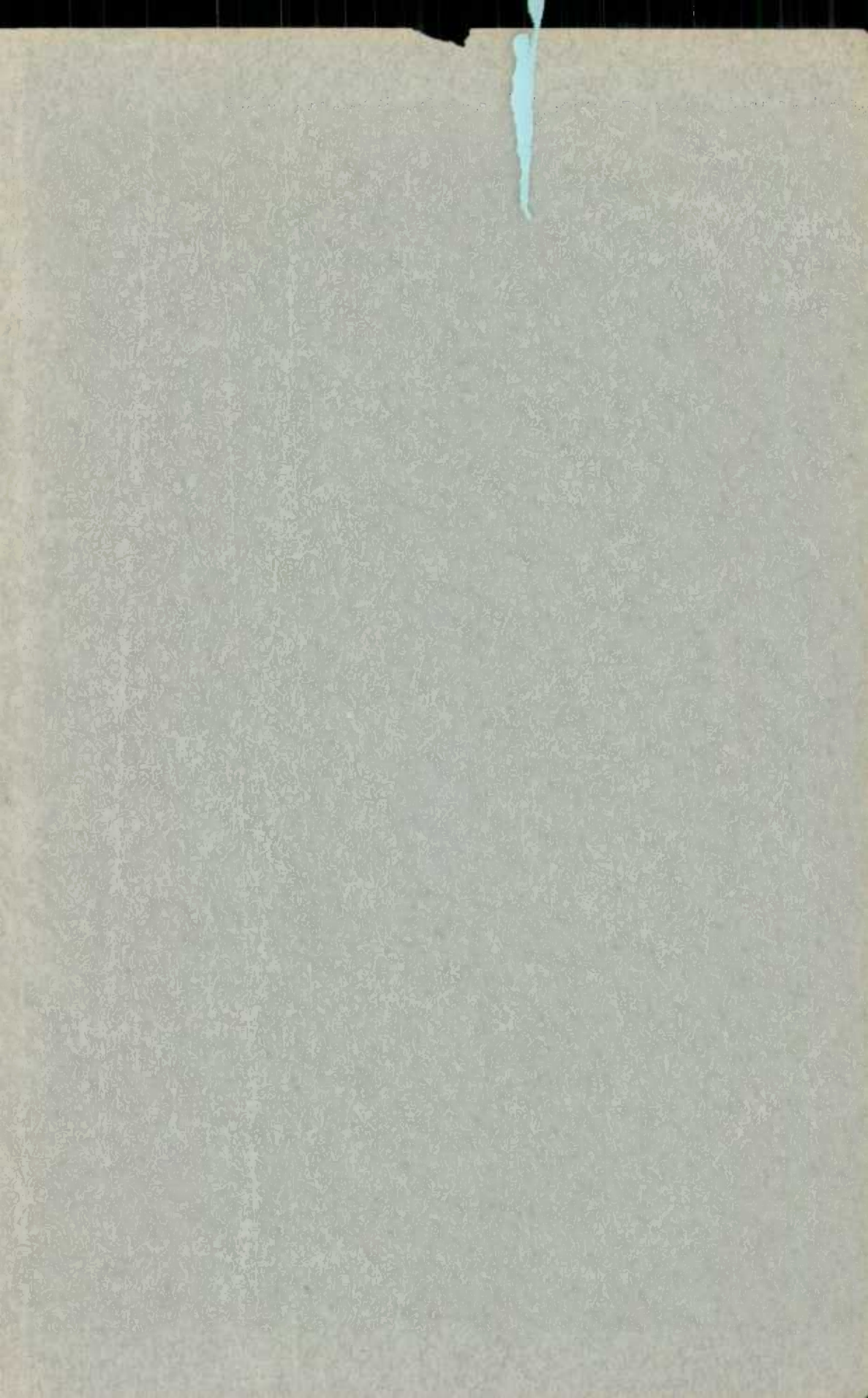
	1940			1941		
	Quantity	Value, f.o.b. shipping point	Price per pound	Quantity	Value, f.o.b. shipping point	Price per pound
	Pounds	\$	\$	Pounds	\$	\$
Rough cobbled.....	142,911	22,801	0.16	160,315	25,977	0.15
Knife-trimmed.....	158,200	80,836	0.51	264,409	144,356	0.55
Thumb-trimmed.....	144,232	17,383	0.12	139,577	19,738	0.14
Splittings.....	170,375	103,624	0.61	184,830	121,879	0.66
Scrap*.....	1,334,496	12,501	0.009	2,729,760	23,338	0.009
Total.....	1,950,219	237,145		3,487,891	335,288	

* Includes ground mica.

Table 250.—Production (Sales) of Mica in Canada, by Provinces, 1940 and 1941

	1940		1941	
	Pounds	Value	Pounds	Value
		\$		\$
Quebec.....	873,802	202,583	1,603,575	284,563
Ontario.....	916,417	31,982	1,587,316	47,047
British Columbia*.....	160,000	2,600	297,000	3,678
Total.....	1,950,219	237,145	3,487,891	335,288

Crude and ground mica schist.



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