

BULLETIN XVI. FIFTH CENSUS OF CANADA.

MINERAL PRODUCTION OF CANADA FOR THE YEAR 1910 AS ENUMERATED UNDER DATE OF FIRST JUNE, 1911.

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THE CENSUS OF MINERAL PRODUCTION.

The census of the mineral production of Canada taken in June, 1911, for the calendar year 1910 is presented in Bulletin XVI and shows a gratifying expansion in this department of the country's natural resources during the last decade. Compared with the census of 1901 for the year 1900 it shows an increase in the ten years of 849 in the number of mines or works, of \$65,734,248 in the value of buildings and plant, of 31,442 in the number of persons employed, of \$24,597,877 in the earnings of salaries and wages and of \$74,048,070 in the value of production as presented in the following statement for the two census years, together with the increase in totals and the increase per cent in the decade.

Summary of mineral production.

Schedule.		1900.	1910.	Increase in	
				Totals.	per cent.
Mines or works.....	NO.	1,373	2,222	849	61.84
Value of buildings and plant.....	\$	42,771,803	\$108,506,051	65,734,248	153.68
Employees on salaries.....	NO.	1,527	2,884	1,357	89.86
Salaries.....	\$	1,512,821	3,317,030	1,804,209	119.26
Employees on wages.....	NO.	37,065	67,150	30,085	81.16
Wages.....	\$	16,336,273	39,129,941	22,793,668	139.53
Value of production.....	\$	47,956,862	122,004,932	74,048,070	154.40

Table I. shows the quantities and values of the several classes of mineral products in the census year for Canada and for each of the provinces. Coal both as to tonnage and value occupies the first place with a value of \$32,580,841, silver in ore and in combination the second with \$18,899,240, gold the third with \$10,302,973, clay products the fourth with \$9,562,302, nickel the fifth with \$8,276,313, copper the sixth with \$7,581,552, stone the seventh with \$6,372,474 and cement the eighth with \$5,851,066, being respectively 26.7, 15.5, 8.4, 7.8, 6.8, 6.2, 5.2 and 4.7 per cent of the total value of production which was \$122,004,932.

Comparing the value of products by provinces for the census years 1900 and 1910 table 1 shows (1) the value of products, (2) the percentage of the total production for Canada, and (3) the order or rank in production.

TABLE 1. Mineral production by provinces.

Provinces.	Value of production.		Per cent of total.		Rank in production.	
	1910.	1900.	1910.	1900.	1910.	1900.
Alberta.....	10,515,074	718,635	7.90	1.48	5	6
British Columbia.....	24,581,338	14,679,777	18.48	30.60	2	1
Manitoba.....	2,928,316	216,830	2.20	.45	7	8
New Brunswick.....	1,087,113	650,679	.81	1.37	8	7
Nova Scotia.....	17,059,122	9,042,003	12.82	18.85	3	4
Ontario.....	49,727,400	10,417,576	37.38	21.73	1	2
Prince Edward Island.....	12,320	15,735	.009	.04	10	10
Quebec.....	11,002,232	2,960,704	9.01	6.18	4	5
Saskatchewan.....	541,671	91,480	.47	.19	9	9
Yukon.....	4,550,346	9,163,443	3.42	19.11	6	3
Totals for Canada.....	122,004,932	47,956,862	-	-	-	-

It will thus be seen that Ontario takes the lead, British Columbia coming next, while Nova Scotia moves up into third position, displacing the Yukon, Quebec being fourth, the other provinces almost maintaining their relative places in both census years. The growth of Ontario's value of production is mainly accounted for by the opening of the Cobalt silver camp in 1904, which in the census year yielded \$17,637,256 of the total silver output for Canada of \$18,899,240.

Table 2 presents the values of buildings and plant for the census years 1900 and 1910 by classes of ores and products and shows an increased investment of \$65,734,248 in the decade, the percentage of increase being nearly 152.5. In order to make the table comparative only the values of buildings and plant have been used for 1900 as the 1910 census required only the statistics relating thereto. In table 2 is shown for the census years 1900 and 1910 according to classes of ores and products (1) the number of mines or works (2) the value of buildings and plant and (3) the average values of buildings and plant per mine or works.

The ratio of values of buildings and plant to values of products for totals for Canada was 112.12 p.c. in 1900 and 112.44 p.c. in 1910.

TABLE 2. Buildings and plant compared for 1900 and 1910 by classes of ores and products.

Classes of ores and products.	Mines or works.		Value of buildings and plant.		Average value of buildings and plant per mine or works.	
	1900.	1910.	1900.	1910.	1900.	1910.
Asbestos.....	6	17	278,000	2,585,840	46,333	152,108
Cement, Portland.....	7	24	574,092	10,482,167	82,013	436,757
Coal and coke.....	56	223	25,377,790	44,444,538	453,175	199,303
Clay products.....	573	489	4,210,244	10,752,227	7,349	21,988
Copper ore.....	20	18	795,300	5,732,251	39,765	318,458
Gold ore, lode or vein.....	71	40	2,770,862	1,996,735	39,026	49,918
Gold, placer.....	71	268	4,996,714	9,405,594	70,376	35,095
Granite.....	19	37	87,990	402,649	4,631	21,192
Gypsum.....	9	19	39,150	538,516	4,350	28,343
Iron ore.....	11	13	768,591	1,439,003	69,872	110,692
Lime.....	163	102	202,852	885,276	1,245	8,679
Limestone (dimension).....	98	124	208,195	1,034,554	2,125	8,343
Mica.....	26	26	25,075	175,454	964	6,748
Mineral water.....	8	12	131,100	251,938	16,387	20,995
Miscellaneous.....	59	460	519,832	8,718,203	8,811	18,953
Natural gas.....	13	110	368,527	1,546,569	28,348	14,059
Nickel-copper ore.....	6	5	123,188	1,494,454	20,531	298,891
Rubble and other stone.....	1	32	1	575,853	1	17,995
Salt.....	9	9	558,192	857,349	62,021	95,261
Sand and gravel.....	81	101	17,935	384,690	222	3,808
Sandstone.....	32	22	66,950	121,000	2,092	5,500
Silver-cobalt ore.....	2	44	2	2,441,477	2	55,488
Silver-lead ore.....	35	27	651,224	2,239,714	18,607	82,952

Table III. shows the number of employees on salaries and wages and the cost of salaries and wages in each class of ores or mineral products. The increase in the number of salaried employees in the decade is 1,357 and in the cost of salaries \$1,804,209 and for employees on wages it is 30,085 with an increase in wages of \$22,793,668, the average of salaries being \$991 in 1900 and \$1,150 in 1910, and of wages \$441 in 1900 and \$583 in 1910. In Table 3 is shown for the principal classes of ores and products for the census years 1900 and 1910, (1) the average number of salaried persons per mine or works of each class (columns 1 and 5); (2) the average salaries per employee in each class of mines or works (columns 2 and 6); (3) the average number of miners or workers per mine or works of each class (columns 3 and 7) and (4) the average cost of wages per mine or works of each class (columns 4 and 8.)

¹ Included with limestone and sandstone in 1900.

² Not reported in the Census of 1900.

TABLE 3. Comparative table of averages of employees, salaries and wages in 1900 and 1910.

Classes of ores and products.	1900.				1910.			
	Averages of salaried officers.		Averages of employees on wages.		Averages of salaried officers.		Averages of employees on wages.	
	No. per mine or works.	Salaries per employee.	No. per mine or works.	Wages per employee.	No. per mine or works.	Salaries per employee.	No. per mine or works.	Wages per employee.
Asbestos.....	8-30	617	129-00	250	4-50	1,307	183-00	482
Cement, Portland	5-30	1,013	74-00	373	5-40	1,288	87-00	591
Coal and coke.....	6-10	950	256-00	509	3-60	1,210	127-00	616
Clay products.....	-	-	11-70	198	1-00	923	19-00	353
Copper ore.....	3-50	1,664	57-40	817	5-00	1,817	106-00	1,208
Gold ore, lode or vein.....	3-37	1,345	51-12	608	.75	1,899	91-00	937
Gold, placer.....	1-24	826	8-44	416	.16	1,845	6-40	988
Granite.....	1-58	737	37-63	334	.65	1,098	23-00	474
Gypsum.....	2-00	680	40-80	278	1-68	901	43-90	445
Iron ore.....	4-36	773	104-00	205	3-85	977	74-00	546
Lime.....	.32	470	4-26	280	.80	838	9-16	402
Limestone (dimension).....	1-14	559	17-80	312	.94	609	14-20	425
Mica.....	1-77	504	15-15	228	.81	850	13-10	307
Mineral water.....	1-87	487	6-75	279	3-50	1,104	9-70	380
Miscellaneous.....	2-03	742	21-60	339	.98	1,068	16-07	475
Natural gas.....	.77	916	1-00	981	.24	660	1-70	441
Nickel-copper ore.	10-00	1,289	196-60	572	13-80	1,294	263-00	702
Rubble and other stone.....	1	1	1	1	.91	872	20-20	433
Salt.....	3-33	746	19-90	362	3-00	1,110	19-80	515
Sand and gravel...	.12	406	.66	219	.31	891	6-16	449
Sandstone.....	1-10	511	15-91	226	.90	836	18-70	394
Silver-cobalt ore..	²	²	²	²	4-00	1,650	6-84	893
Silver-lead ore....	3-60	1,654	36-34	1,042	1-26	1,512	30-80	1,003

It will be seen from the above table with the exceptions of natural gas and silver-lead ore that in the cost of both salaries and wages the increase in 1910 over 1900 is very considerable, which may be accounted for by the increased cost of living that has obtained since 1900.

The highest salary per employee in 1910 was in the gold, lode or vein mines and the lowest was in limestone (dimension), while in 1900 the highest salary was paid to those in the silver-lead mines and the lowest to those employed in lime works. The highest amount paid to workers on wages in 1900 was also in the silver-lead mines and the lowest to those employed in clay products, and in 1910 the highest wage paid was in copper ore mines and the lowest in mica mines.

The decrease in the averages of natural gas and miscellaneous is explained by the much greater number of returns received from natural gas and petroleum wells, the latter being included in the miscellaneous. The number of reports from natural gas wells rose from 13 in 1900 to 110 in 1910, and petroleum from which no returns were received in 1900 to no less than 219 in 1910 with a value of production of \$1,303,768. A much greater activity in the silver-lead mining district in 1900 would appear to account for the falling off in this particular industry in 1910.

¹ Included with limestone and sandstone in 1900.

² Not reported in 1900.

Table IV. shows the mineral products of Canada and the provinces for the census years 1900 and 1910 classified by 6 groups, viz., metallic ores and products, abrasive products, fuel and light materials, pigments, structural materials of stone and clay and miscellaneous products. The largest increase in value of products as shown in table (4) was in metallic ores, fuel and light materials being second and structural materials third. The largest percentage of increase was in structural materials the others following in the order named; pigments, abrasive products, miscellaneous products, fuel and light materials and metallic ores.

TABLE 4. Classified groups of mineral products compared for 1900 and 1910.

Groups of products.	Value of products		Increase 1910 over 1900.	Increase per cent 1910 over 1900.
	1900.	1910.		
Canada—				
Metallic ores and products.....	25,161,151	48,978,790	23,817,639	94.66
Abrasive products.....	125,575	431,973	306,398	244.00
Fuel and light materials.....	14,095,477	37,514,108	23,418,631	166.21
Pigments.....	18,822	80,211	61,389	326.16
Structural materials of stone and clay.....	6,483,970	27,957,600	21,473,630	331.18
Miscellaneous products.....	2,071,867	7,042,250	4,970,383	239.90

Table 5 gives the per capita production by groups of classes of ores and products for the years 1900 and 1910 and the percentage of increases in 1910 over 1900.

TABLE 5. Per capita production of mineral products compared for 1900 and 1910.

Groups of classes of ores and products.	Per capita. production.		Increase per cent 1910 over 1900.
	1900.	1910.	
	\$	\$	p.c.
Metallic ores and products.....	4.6843	6.7963	45.09
Abrasive products.....	.0233	.0599	156.37
Fuel and light materials.....	2.6242	5.2055	98.37
Mineral pigments.....	.0035	.0111	217.00
Structural materials of stone and clay.....	1.2072	3.8794	221.38
Miscellaneous products.....	.3858	.9773	153.36
Total.....	8.9283	16.9295	89.62

It will be observed that the production per capita is greater in 1910 than in 1900 in each of the groups, varying from 45.09 per cent in metallic ores and products to 221.38 per cent in structural materials of stone and clay. The greatest per capita production is in metallic ores in both census years and the lowest in mineral pigments.

Table V. shows for Canada by quantities and values in 1900 and 1910 the various minerals and other products comprised in the various groups of classes of products excluding therefrom the manufacture of cement blocks and tiles, graphite, gypsum, asbestos, mica and petroleum, leaving the total value

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of production at \$112,775,636 in 1910 and \$45,402,602 in 1900. Table 6 gives the totals of values in each of the classes of ores and products, the increase in totals and the increase per cent in 1910 over 1900.

TABLE 6. Values of groups of classes of ores and products.

Groups of classes of ores and products.	Value of classes of ores and products.		Increase 1910 over 1900.	Increase per cent 1910 over 1900.
	1900.	1910.		
	\$	\$	\$	p.c.
Metallic ores.....	25,161,151	48,978,790	23,817,639	94.66
Non-metallic ores.....	13,070,434	37,435,461	24,365,027	186.41
Mineral pigments.....	18,822	80,211	61,389	326.16
Miscellaneous products.....	704,536	3,036,629	2,332,093	331.01
Structural materials of stone and clay	6,447,659	23,244,545	16,796,886	260.51
Totals.....	45,402,602	112,775,636	67,373,034	148.38

Table VI. shows the production of Canada's mineral resources for quantities and values in the census years 1900 and 1910 including manufactures of certain ores and products which have been eliminated in Table V.

Table VII. gives for quantities and values where available, the exports and imports of mineral products for the years 1910 and 1900. The figures for exports are for the calendar year, and for imports the fiscal year, unless as otherwise stated in foot notes. In many instances quantities are not given, such information not being available, and the spaces in the columns are consequently marked blank.

EXPLANATORY NOTES.

Where ton is used throughout this bulletin, it signifies the short ton, of 2,000 lb, and year signifies calendar year, unless otherwise stated.

Statistics of exports and imports have been compiled from the Trade and Navigation returns published by the Customs Department.

The term production used throughout this bulletin refers to the quantity sold or marketed during the calendar year, except in the case of certain manufactures of mineral products, which are for the census year.

Values of ores, minerals, etc., are given at the mine or place of production, having no regard to prices in the metal markets, which if applied to lead, nickel, copper, silver and gold, the total values would be materially increased.

METALLIC ORES AND PRODUCTS.

ANTIMONY.

According to the census returns the production of antimony in 1910 was 321 tons of concentrates of the value of \$18,589. There was one mill with a 120 horse-power engine and the value of buildings and plant was \$30,000. The number of persons employed was 52 with a cost for salaries and wages of \$12,400. The aggregate weeks of working time during the year was 1,009 and the average hours per week 60. There were no returns of antimony ore in 1900 and the output in 1910 was confined to the province of Nova Scotia. The exports and imports of antimony are given in Table VII, pages 41 and 42.

COBALT.

The production of cobalt appears for the first time in the list of minerals and as refineries do not in all cases make returns of this by-product it is difficult to say what is the real quantity recovered from the ores. However, returns received indicate a production of 3,138,275 lbs. valued at \$52,467. Statistics of employees and payments on account of salaries and wages are included with the silver-cobalt production.

COPPER.

The production of copper is derived from the various sources shown in the following summary table for quantities and values in 1900 and 1910.

TABLE 7. Copper production, 1900 and 1910.

Source.	1910.		1900.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Copper ore.....	ton 1,632 lb. 429,500	5,236 54,546	ton 106,305 lb. 8,879,364	1,699,560 1,095,753
Nickel-copper ore.....	lb. 28,226,123	2,116,931	ton 12,466 lb. 6,728,000	104,304 320,001
Copper-gold ore.....	ton 700 lb. 42,504,561	10,500 5,394,339	- -	- -
Totals.....	ton 2,332 lb. 71,160,184	15,736 7,565,816	ton 118,771 lb. 15,607,364	1,803,864 1,415,754

The increase in the value of copper ore and copper in ores, etc. during the decade was \$4,361,934 or more than 135 per cent. The number of employees and their salaries and wages in copper and copper gold mines are presented in the next table for 1910 and 1900.

TABLE 8. Employees on salaries and wages in 1900 and 1910.

Classes of ores.	1910.		1900.	
	Employees.	Salaries and wages.	Employees.	Salaries and wages.
	NO.	\$	NO.	\$
Copper ore.....	90	46,787	1,218	1,053,973
Copper-gold ore.....	1,907	2,220,914	1	1
Totals.....	1,997	2,267,701	1,218	1,053,973

¹ Included with copper ore in 1900.

Capital invested in buildings and plant in copper and copper-gold mines was \$5,732,251 in 1910, and \$795,300 in 1900. The plant consisted of 2 mills, 5 blast furnaces and 2 refineries in 1910 and of 4 mills, 6 blast furnaces and 3 refineries in 1900. The aggregate time of all employees in 1910 was 99,659 weeks and 60,105 weeks in 1900. The quantity of ore raised was 1,844,588 tons in 1910 against 259,561 tons in 1900. The products of treated ore are given under their several heads. Exports and imports of copper ore, etc., are given in Table VII, pages 41 and 42.

GOLD, LODE OR VEIN.

The production of gold from ores in 1910 is presented in table 9 and shows an increase of \$844,818 in the decade, but the production of gold from all sources in 1910 falls short of that of 1900 by \$4,190,444, which has been accounted for under placer gold.

TABLE 9. Gold, lode or vein production in 1910 and 1900.

Source.	1910.		1900.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Gold ore, lode or vein.....	oz. 72,704	1,426,584	{ oz. 112,875 ton 202,957	1,994,200 2,502,481
Copper-gold ores.....	oz. 204,248	4,137,583	oz. 12,509	250,173
Silver-lead ores.....	oz. 1,473	27,505	-	-
Totals.....	oz. 278,425	5,591,672	{ oz. 125,384 ton 202,957	2,244,373 2,502,481

The number of gold mines on lode or vein in 1910 was 80 as against 71 in 1900. The plant in 1910 consisted of 92 mills, 6 refineries and 238 engines of 17,215 horse-power. In 1910 there were 53 mills with an equipment of 799 stamps, 26 rolls or crushers, 89 concentrating apparatus and 7 refineries and 190 engines of 13,720 horse-power. The value of buildings and plant was proportionately \$4,314,360 in 1910 and \$2,770,862 in 1900. The number of employees at mines and works and the cost of salaries and wages are given for each census year in Table 10.

TABLE 10. Employees on wages and salaries at lode mines.

Classes of employees.	1910.		1900.	
	No.	\$	No.	\$
Officers, clerks etc.....	114	215,531	239	321,499
Miners and workers over 16 years.....	2,514	2,709,499	3,630	2,204,236
Totals.....	2,628	2,925,030	3,869	2,525,735

The average cost of salaries and wages per employee was \$1,113 in 1910 and \$653 in 1900, being an increase of \$460 per-employee or about 70 per cent. The aggregate weeks of employment during the year were 81,438 in 1910 and 160,630 in 1900. All of the lode mines in 1900 were in British Columbia and Nova Scotia. Ontario and the Yukon each with three mines are reported for the first time in 1910 in addition to British Columbia and Nova Scotia.

GOLD, PLACER.

The mining of placer gold in 1910 was confined to the province of British Columbia and Yukon Territory and shows a falling off in production in the decade of 366,243 ounces and \$5,023,623 in value which may be accounted for by the decrease in the output of the Yukon gold fields of \$4,450,782. The production from 268 claims in 1910 was 250,624 ounces valued at \$4,711,301, being at the rate of \$18.80 per ounce, as against 527 claims reported in 1900 having an output of 616,867 ounces valued at \$9,746,563 or \$15.80 per ounce. A more advanced method of mining by the installation of steam thawing and of dredging plants has superseded the old one of thawing the frozen ground by means of the simple wood fire, and in consequence the number of individual claims has been materially reduced.

In 1910 the value of buildings and plant was \$9,405,594; the plant consisted of 4 mills, 249 sluicing plants, 95 hydraulicking works and 298 engines and motors of 7,773 horse-power; the employees on salaries and wages numbered 1,752 at a cost of \$1,767,218 and aggregated 60,802 weeks of employment during the year.

In 1900 the value of buildings and plant was \$4,996,714; the plant consisted of 4 concentrating apparatus, 61 sluicing plants, 30 hydraulicking plants and 22 engines and motors of 2,058 horse-power; employees on salaries and wages numbered 687 at a cost of \$321,794 and aggregate weeks of working time were 18,512 during the year.

The exports and imports of gold are shown in table VII, pages 41 and 42 for each of the census years.

IRON ORE.

The production of iron ore is derived from 13 deposits of ore in the provinces of New Brunswick, Nova Scotia, Ontario and Quebec and the quantities and values in the census year amounted to 350,228 tons worth \$802,197. Eleven mines in 1900 produced 283,124 tons of the value of \$436,720. There were 5 smelters in operation in each census year with 46 engines of 3,417 horse-power in 1910 and 29 engines of 1,914 horse-power in 1900. Capital invested in buildings and plant was \$1,439,003 in 1910 and \$768,591 in 1900. Employees and wages were 1,012 and \$573,646 in 1910 and 1,191 and \$271,691 in 1900. The aggregate weeks of employment during 1910 were 44,285 and 36,702 in 1900. The average hours per week were 59.8.

Manufactures of pig iron from Canadian ores in 1900 were 6,677 tons, worth \$170,280 and in 1910 they were 97,565 tons of the value of \$1,584,236. In addition to this there was a production of 7,177 tons of ferro-silicon valued at \$307,556. Imports and exports of iron ore will be found in Table VII, pages 41 and 42.

LEAD.

The production of lead is derived from various ores as shown for quantities and values, in Table 11 for the census years 1910 and 1900.

The number of employees and cost of salaries and wages in 1900 does not include those engaged in the production of gold of the value of \$5,064,966, the difference between the figures furnished by the Interior Department and that given to the enumerators for that census year.

TABLE 11. Production of lead.

Source.	1910.		1900.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Lead ore.....	ton 100	2,000	-	-
Silver-lead ore.....	(ton 2,337	56,400	-	-
	(lb. 34,477,100	606,729	lb. 4,423,680	115,712
Gold, lode or vein.....	(ton 3,761	94,025	ton 651	39,811
	(lb. 118,470	14,867		
Totals.....	(ton 6,198	152,425	ton 651	115,712
	(lb. 34,595,570	621,596	lb. 4,423,680	39,811

Statistics of capital, plant, employees and wages for lead have been given under silver-lead and gold, lode or vein. Ontario, British Columbia and the Yukon are the only provinces reporting the production of lead in 1910. The value of exports and imports of lead will be found in Table VII, pages 41 and 42.

NICKEL.

The production of nickel is confined to the Sudbury and Cobalt districts of the province of Ontario. The quantity and value of nickel produced in the census years is given in table 12.

TABLE 12. Production of nickel in 1910 and 1900.

Source.	1910.		1900.	
	Mines.		Quantity.	Value.
	1910.	1900.		
Nickel-copper ore.....	5	6	lb. 53,765,008	8,064,808
Silver-cobalt ore.....			" 1,401,244	211,505
Totals.....			" 55,166,252	8,276,313
			(tons 12,466	104,304
			(lb. 22,787,364	2,173,260
			(tons 12,466	2,277,564
			(lb. 22,787,364	

The increase in value of production over 1900 was therefore \$5,998,749 or a percentage increase of 263.4 in the decade.

The value of buildings and plant in 1910 was \$1,494,454 in nickel-copper mines; the plant consisted of two blast furnaces and 41 engines and motors of 5,155 horse-power; employees on salaries and wages numbered 384 at a cost of \$1,011,964 and the aggregate weeks of working time in the year were 71,805.

In 1900 buildings and plant were worth \$123,188; the plant consisted of 10 blast furnaces and 42 engines and motors of 2,085 horse-power; employees numbered 1,240 and the cost of wages and salaries was \$752,237, and the aggregate weeks of working time in the year were 50,121.

There were produced also from the treated ores over 954 tons of white arsenic valued at \$46,304 and 55 tons of cobalt and nickel oxides valued at \$47,036.

The quantities and values of exports of nickel contained in ore, matte, etc., will be found in Table VII, pages 41 and 42.

SILVER.

The production of silver contained in bullion or estimated as recovered from mattes, ores, etc., was, as is shown in summary Table 13 for the year 1910.

TABLE 13. Silver production in 1910.

Source.	Quantity.	Value.
		\$
Silver ore.....	{oz. 10,163	5,082
Silver-cobalt ore.....	{ton 3,993	859,429
	{oz. 32,798,845	16,777,827
Silver-lead ore.....	{ton 12	1,378
	{oz. 1,690,349	841,418
Gold, placer.....	{oz. 39,293	19,980
Gold ore, lode or vein.....	{oz. 106,767	55,165
Copper-gold ore.....	{oz. 657,226	339,060
Totals.....	{ton 4,005	18,899,240
	{oz. 35,302,643	

Similarly the production for 1900 by source was as shown in Table 14.

TABLE 14. Silver production in 1900.

Source.	Quantity.	Value.
		\$
Silver ore.....	{ton 2,293	124,451
	{oz. 130,000	75,000
Silver-lead ore.....	{ton 76,927	2,986,048
	{oz. 441,518	268,118
Copper-gold ore.....	{oz. 538,480	294,188
Gold ore, lode or vein.....	{oz. 47,809	28,637
Totals.....	{ton 79,220	3,776,442
	{oz. 1,157,807	

It will thus be observed that the production of silver ore is five times greater than ten years ago, owing to the discovery of silver-cobalt ore in the province of Ontario. All the silver-lead ore is found in British Columbia.

The plant in Canada consisted in 1910 of 27 mills, one smelter, 214 engines and motors of 9,398 horse-power and together with buildings were valued at \$4,681,691. In 1900 the plant consisted of 4 mills, 27 engines of 1,212 horse-power which with buildings were valued at \$701,724. The aggregate weeks of working time were 202,106 in 1910 and 76,920 in 1900. The number of persons employed and the cost of salaries and wages is presented in the following summary table for the census years 1910 and 1900.

TABLE 15. Employees, wages and salaries in silver and silver-lead mines.

Classes of employees.	1910.		1900.	
	Number.	Salaries and wages.	Number.	Salaries and wages.
	No.	\$	No.	\$
Officer, managers, etc.....	210	341,851	145	230,433
Miners and other workers.....	3,846	3,566,461	1,391	1,424,953
Totals.....	4,056	3,908,312	1,536	1,655,386

The value of exports of silver in ore, matte, etc., is given in Table VII, page 42.

ZINC.

The production of zinc from zinc ores and silver-lead ores was 910 tons of zinc ore valued at \$24,880 and 6,967,983 lbs. of zinc in ore and in matte valued at \$354,766. In 1910 there were 250 tons of ore produced valued at \$5,000. All of the zinc produced is from the provinces of British Columbia and Ontario. Table VII, page 41 gives the quantities and values of the exports and imports of zinc in 1910 and 1900.

NON-METALLIC PRODUCTS.

ASBESTOS.

The production of asbestos is confined to the province of Quebec and is mined in considerable quantities in the counties of Beauce, Megantic and Richmond. Comparative statistics are given in the following table for the census years 1900 and 1910 showing the number of mines in operation, the value of buildings and plant, the number of employees on salaries and wages and the quantity and value of asbestos and asbestic produced.

TABLE 16. Production of asbestos, 1900 and 1910.

Asbestos.		1900.	1910.
Mines.....	no.	6	17
Mills.....	no.	5	24
Engines and motors.....	no.	32	198
Horse-power.....	no.	1,365	15,935
Value of buildings and plant.....	\$	278,000	2,585,840
Employees on salaries.....	no.	48	79
Salaries.....	\$	29,597	103,277
Employees on wages.....	no.	684	3,114
Wages.....	\$	194,051	1,502,551
Ore treated.....	ton	23,696	1,796,337
Products of treated ore—			
Asbestos.....	\$	15,922	100,247
Asbestic.....	\$	7,000	24,751
Value of—			
Asbestos.....	\$	401,832	3,595,048
Asbetic.....	\$	15,000	18,589

The aggregate time of all employees during the year was 139,892 weeks as compared with 28,770 weeks in 1900, and the average hours of working time per week was 55.4 in 1910 and the quantity of asbestos rock raised during the year was 1,946,027 tons. Manufactures of asbestos in the census year were valued at \$514,772 as against \$68,945 in 1900. Exports and imports are given in Table VII, pages 41 and 42.

*CALCIUM CARBIDE.

The production of calcium carbide in 1910 was valued at \$515,457 according to the census of manufactures, four of the plants being in Ontario and one in Quebec. Two plants in 1900 produced 1,351 tons valued at \$69,305, both being situated in Ontario. The capital invested in buildings and plant in 1910 was \$286,682, the plant consisted of five mills with 69 engines of 6,933 horse-power; employees on salaries and wages numbered 207 at a cost of \$118,089, and the aggregate weeks of employment during the year were 9,510. Similar figures for 1900 are not available.

COAL.

The mining of coal of all classes is confined to the provinces of Alberta, British Columbia, Saskatchewan and the Yukon territory in the western and to Nova Scotia and New Brunswick in the eastern parts of the Dominion. The location of the principal coal areas by provinces is as follows:

Alberta—Calgary, Edmonton, Macleod, Medicine Hat and Red Deer districts.

British Columbia—Vancouver Island, Crowsnest Pass in East Kootenay and the Nicola valley.

New Brunswick—Grand Lake district in Queens County.

Nova Scotia—Cape Breton, Pictou, Cumberland, Inverness and Colchester counties.

Saskatchewan—Estevan and Souris in Assiniboia East.

Yukon territory—Tantalus in southern Yukon and Coal Creek in northern Yukon.

Bituminous coal forms by far the largest proportion of the total output of Canadian collieries being more than 90 per cent, and is exclusively mined in Nova Scotia and New Brunswick, and forms the greater part of the output of Alberta and British Columbia. Lignite coal is found in Alberta, British Columbia, Saskatchewan and the Yukon. There is but one anthracite mine operating in Canada and it is situated at Bankhead, Alberta. This mine operated the only briquetting plant in existence in 1910, but new plants are being installed in Nova Scotia and in British Columbia.

The tonnage raised in 1900 and 1910 may be classed as follows:

	Mines.	1900.	Mines.	1910.
Anthracite coal.....	1	17,549	1	269,787
Bituminous coal.....	41	5,253,257	94	12,045,265
Lignite coal.....	14	50,869	128	824,584

Although coal is mined so extensively in Eastern and in Western Canada it is by no means sufficient to supply our needs. The Customs Department in its published report gives the exports and imports of coal and from them the following table (No. 17) has been deduced for the eleven years beginning with 1900:

TABLE 17. Imports of coal by classes.

Year.	Bituminous Coal.		Anthracite coal and dust.		Bituminous coal dust.	
	Tons.	Value.	Tons.	Value.	Tons.	Value.
1900.....	2,439,764	4,310,964	1,654,401	6,602,912	330,174	98,349
1901.....	2,516,392	4,956,025	1,933,283	7,923,950	414,432	275,559
1902.....	3,047,392	5,712,058	1,652,451	7,021,939	489,548	264,550
1903.....	3,511,412	7,776,717	1,456,713	7,028,664	550,883	420,317
1904.....	4,053,900	9,108,208	2,275,018	10,461,223	608,041	544,128
1905.....	4,176,274	8,002,896	2,604,137	12,093,371	650,261	343,456
1906.....	4,495,550	8,360,348	2,200,863	10,304,308	747,251	489,180
1907.....	6,370,152	13,232,445	3,141,873	14,506,129	1,139,256	1,121,949
1908.....	6,025,574	12,516,748	3,160,110	14,478,536	1,111,811	1,355,677
1909.....	5,625,063	11,455,818	3,017,844	13,906,152	1,230,017	1,469,889
1910.....	5,966,466	11,919,341	3,266,235	14,735,062	1,365,281	1,795,598

NOTE. From 1900 to 1906 inclusive, the fiscal year is used and from that year on, the calendar year.

The consumption of coal computed from production, less exports added to imports is presented in the following table.

TABLE 18. Consumption of coal in Canada by 5 year periods.

Calendar Year.	Canadian.	Imported.	Total.	Percentage of Canadian.	Percentage of imported.	Consumption per capita.
	Tons.	Tons.	Tons.			Tons.
1900.....	2,433,898	4,361,563	7,795,461	44.05	55.95	1.451
1905.....	7,032,661	7,343,880	14,376,541	48.92	51.08	2.399
1910.....	10,240,076	10,438,123	20,678,199	49.52	50.48	2.869

The number of engines and motors and their horse-power employed in the coal mining industry in 1900 was 363 with 34,671 horse-power and in 1910 the number of engines rose to 880 and the indicated horse-power to 104,178.

The aggregate weeks employed during the year was 607,898 in 1900 and 1,405,664 in 1910. The average hours of working time per week in 1910 was 52.5.

Tables 19 and 20 show comparative figures for the production of coal, the number of persons employed, the salaries and wages paid them and the value of production by provinces and Canada for the census years 1900 and 1910.

TABLE 19. Coal production in Canada and the Provinces compared for 1900 and 1910.

Provinces	Coal raised in		Increase in 1910 over 1900	Increase per cent 1910 over 1900
	1900	1910		
	tons	tons	tons	p.c.
Canada.....	5,321,675	13,139,636	7,807,961	146.72
Alberta.....	296,231	3,246,242	2,950,011	995.84
British Columbia.....	1,582,859	3,020,503	1,437,644	90.82
New Brunswick.....	9,680	124,400	114,720	1,185.12
Nova Scotia.....	3,397,036	6,561,345	3,164,309	93.14
Saskatchewan.....	35,869	178,046	142,177	396.37
Yukon.....	-	9,100	9,100	-

TABLE 20. Persons employed, salaries and wages paid and value of production compared for Canada and the Provinces in 1900 and 1910.

Provinces	1900			1910		
	Em- ploy- ees	Salaries and wages	Value of production.	Em- ploy- ees	Salaries and wages	Value of production ¹
	No.	\$	\$	No.	\$	\$
Canada	14,504	7,538,452	12,995,543	29,489	18,653,357	32,580,841
Alberta	829	446,131	686,645	6,515	4,606,828	7,831,775
British Columbia	4,393	3,085,808	4,273,719	7,238	5,454,126	8,413,098
New Brunswick	48	12,024	18,580	324	119,179	317,510
Nova Scotia	9,184	3,973,488	7,966,049	14,977	8,230,660	15,468,662
Saskatchewan	50	21,001	50,550	322	173,754	267,596
Yukon	-	-	-	113	68,800	93,200
Ontario	-	-	-	-	-	189,000

¹Includes the value of coke produced.

Exports and imports of coal are shown in table VII, pages 41 and 42 and also for imports in table 17, page 14.

COKE.

Coke is made in Alberta, British Columbia, Ontario and Nova Scotia. There were 2,441 coking ovens in 1910 and 1,389,053 tons of bituminous coal were converted into 913,887 tons of coke having a value of \$3,453,424. The coal used at the Ontario ovens was all imported.

Exports and imports of coke are given in Table VII, pages 41 and 42.

CORUNDUM.

The production of corundum is confined to the province of Ontario and in 1910 the value was \$200,120 as against \$43,429 in 1900. The output in 1910 consisted of ore, 7,349 tons valued at \$22,047 and corundum in grain 3,367,650 lb. valued at \$178,073 as against 868,000 lb. in 1900 valued at \$43,429.

The plant consisted of two mills and 5 engines of 565 horse power there being no statistics available for 1900. Employees on salaries and wages numbered 188 in 1910 with payments of \$115,537 for salaries and wages. The aggregate weeks of working time in the year were 9,776 and the average hours of working time per week 58.

Exports of corundum will be found in Table VII, page 42.

FELDSPAR.

The total production of feldspar in 1910 was 17,113 tons valued at \$65,855 as compared with 1,213 tons valued at \$1,820 in 1900. In 1910 the value of buildings and plant was \$10,800 and there were 8 engines and motors of 675 horse-power. Employees numbered 84 and their salaries and wages amounted to \$41,666. The aggregate weeks of employment during the year were 3,377. Comparative figures for 1900 are not available.

The quantities and values of exports and imports are given in Table VII, pages 41 and 42.

GRAPHITE.

Ontario and Quebec are the only producers of graphite and in 1910 their total production was 20,481 tons valued at \$60,079, as against 3,000 tons of the

value of \$48,000 in 1900. Manufactures of graphite were \$7,000 in 1900 and \$112,407 in 1910. The plant consisted of 3 mills and one refinery in 1910 with an investment of \$257,000 for buildings and plant. Employees of all classes in 1910 numbered 182 with payments of \$78,839. Aggregate weeks of employment in the year were 9,108 and the average hours of working time per week were 59.5. Similar figures are not available for 1900.

For imports and exports see Table VII, pages 41 and 42.

GRINDSTONES AND PULPSTONES.

The production of grindstones, pulpstones, etc., amounted in the census year 1910 to \$80,465 as against \$41,400 in 1900. Nova Scotia, New Brunswick and Quebec were the provinces producing this kind of abrasive goods in 1910. The industry had 4 mills and 18 engines of 670 indicated horse-power, and a capital investment in buildings and plant of \$193,200. Employees numbered 248 with salaries and wages amounting to \$69,820. Comparative figures are not available for 1900. Manufactures in the census year amounted to \$64,350.

Imports and exports are shown in Table VII, pages 41 and 42.

GYPSUM.

The production of gypsum in 1910 was 515,804 tons of the value of \$598,312 as compared with 209,356 tons valued at \$194,128 in 1900. The plant consisted of 5 mills and 31 engines of 1,023 indicated horse-power which with buildings made a total of \$538,516 for investment of capital in 1910 as against 6 engines of 403 horse-power and a value of buildings together totalling \$39,150 in 1900. The number of employees on salaries and wages was 886 in 1910 and 385 in 1900; salaries and wages cost \$400,058 in 1910 and \$114,195 in 1900; aggregate weeks of working time were 36,382 in 1910 and 15,734 in 1900. Manitoba, New Brunswick, Nova Scotia, Ontario and Quebec are all producers of gypsum.

Manufactures of gypsum were reported in 1900 at \$88,706 and in 1910 the value was \$634,005.

Imports and exports of gypsum and its manufactures are presented in Table VII, pages 41 and 42.

MICA.

Returns received from 21 operators of mica mines in 1910 indicate a production in the census year of the value of \$187,544 as compared with a value of \$272,016 in 1900. The value of buildings and plant was \$168,904 in 1910 and \$25,075 in 1900. All the mica mines are situated in the provinces of Ontario and Quebec. Manufactures of mica were valued at \$482,587 in 1910 and \$406,573 in 1900.

Exports of mica are shown in Table VII, page 42.

MINERAL PIGMENTS.

The quantity of barytes shipped in 1910 was reported as 3,500 tons valued at \$7,000, and in 1900 it was 1,286 tons with a value of \$4,992. The value of buildings and plant was \$10,000 in 1910 and the number of employees was 15 with wages amounting to \$5,000. The province of Quebec furnished the whole production of barytes.

Iron ochres and iron oxides together were produced to the amount of 1,906 tons with a value of \$26,175. The number of persons employed was 28 and the cost for salaries and wages was \$11,495. The production of iron ochres and iron oxides was also furnished by the province of Quebec.

Imports and exports of mineral pigments are shown in Table VII, pages 41 and 42.

MINERAL WATER.

The quantity and value of mineral water produced in 1910 was 1,568,057 gallons worth \$203,595, and in 1900 it was 983,868 gallons worth \$97,638, an increase in the decade of 584,189 gallons and \$105,957. The number of engines and motors was 17 with indicated horse-power of 128; buildings and plant were valued at \$213,100 in 1900 and at \$251,938 in 1910; employees numbered 69 with aggregate working time of 2,868 weeks and wages amounting to \$22,391 in 1900 and 159 employees with aggregate working time of 8,160 weeks and \$90,876 in wages in 1910. The provinces reporting were Ontario and Quebec with 6 wells each. The imports of mineral waters in 1910 were valued at \$188,559 as against \$30,343 in 1900.

MISCELLANEOUS MINERALS.

The statistics for miscellaneous minerals for 1910 and 1900 are presented in table 21 and show for the following mines or works in 1910 viz: 1 aluminium, 1 dolomite, 1 fluorspar, 1 tripolite, 1 manganese, 1 mineral earth, 1 moulding sand and 1 slate. In 1900 there were 19 in this class, viz: 1 actinolite, 1 anthracite coal, 2 barytes, 1 corundum, 2 feldspar, 2 graphite, 2 ochre, 1 peat, 1 silica, 1 slate, 1 soapstone, 1 talc, 2 tripolite and 1 zinc.

TABLE 21. Miscellaneous minerals.

Statistics of miscellaneous minerals		1910	1900
No. of mines or works.....	No.	8	19
Plant, mills, etc.....	"	2	6
Engines and motors.....	"	36	27
Horse-power.....	"	460	1,110
Value of buildings and plant.....	\$	1,720,700	415,287
Employees on salaries.....	No.	12	37
Salaries.....	\$	16,980	30,578
Employees on wages.....	No.	327	417
Wages.....	\$	182,298	130,886
Aggregate weeks employed during the year.....	No.	16,367	15,778
Average hours of working time per week.....	No.	55.2	-
Value of production.....	\$	11,052,322	241,280

Table VII, pages 41 and 42 gives the statistics of exports and imports of aluminium, manganese and slate.

NATURAL GAS.

The production of natural gas in 1910 was 6,910,381,635 cubic feet valued at \$1,335,062, and in 1900 the value was \$139,703, an increase in the ten years of \$1,195,359. Quantities were not given in 1900. Returns were received from 110 wells in 1910 as against 13 in 1900, the invested capital was \$1,546,569 in 1910 and \$368,527 in 1900 and the employees numbered 218 with salaries and wages amounting to \$102,004 in 1910 as against 23 employees and \$21,908 in 1900. Ontario produced more than 98 per cent of the total output, the other provinces reporting being Alberta and Quebec. New Brunswick has recently struck gas in paying quantities but the wells had not been producers when the census was taken.

PETROLEUM, CRUDE.

The production of crude petroleum in 1910 was 10,480,238 gallons of the value of \$467,498 from 219 wells reporting. There were 167 engines of 3,211 horse-power and the value of buildings and plant was \$1,303,768. The number of persons employed was 440 with a cost in salaries and wages of \$191,598. The aggregate number of weeks employed during the year was 19,398 and the average hours of working time per week was 56.6. Ontario and New Brunswick are the sole producers, the latter having but one well that reported. No returns for crude petroleum were received in 1900. Refined oils and by-products to the value of \$2,608,830 were produced in Ontario during 1910. The imports of crude oil in 1910 were 53,604,053 gallons valued at \$1,639,358. Other oil imports included: 7,656,727 gallons of refined and illuminating oils valued at \$520,364, 16,679,691 gallons of gasoline valued at \$1,693,296, and 4,081,257 gallons of lubricating oils valued at \$718,381. Imports of crude petroleum are given in Table VII, page 41.

PHOSPHATE (APATITE).

The shipments of phosphate or apatite in 1910 were 1,396 tons of the value of \$23,999 as compared with 495 tons valued at \$3,807 in 1900. The production of phosphate is confined to the provinces of Ontario and Quebec.

PYRITES.

The production of pyrites in 1910 was 77,813 tons valued at \$328,648, of which 32,165 tons were iron pyrites and 45,648 tons, copper and sulphur pyrites. In 1910 there were five mines with 22 engines of 1,305 horse-power. The value of buildings and plant was \$201,314, the number of employees was 287, the cost of salaries and wages was \$142,806 and the aggregate weeks of working time in the year 14,183. In 1900 there was one mine producing 15 tons valued at \$105. Other statistics for 1900 are not available. Nearly all the pyrites is derived from the mines of Ontario and Quebec. The value of exports and imports are given in Table VII, page 42 for each census year.

QUARTZ (SILICA).

The production of silica quartz from three mines all situated in the province of Ontario in 1910 was 11,950 tons of the value of \$27,520 and in 1900 it was 5,000 tons valued at \$6,500. The quantities and values of exports and imports are given in Table VII, page 41.

SALT.

The total production of salt in 1910 was 80,360 tons, and inclusive of packages, were valued at \$614,496. In 1900 the production was 56,824 tons valued at \$345,148. Nine wells reported in 1910 with an investment of \$857,349 in buildings and plant, and in 1900 with the same number of wells, the value was \$558,192. The employees in 1910 numbered 205, and the cost of salaries and wages was \$121,675, and in 1900 they were 208 in number with a cost for salaries and wages of \$86,444. Ontario is the only province in which salt is produced. The values of exports and imports will be found in Table VII, pages 41 and 42.

TALC.

Three talc mines in 1910 produced 8,656 tons of talc of the value of \$23,610 as compared with 1,000 tons valued at \$4,000 in 1900. All the talc produced comes from British Columbia and Ontario.

STRUCTURAL MATERIALS AND CLAY PRODUCTS.

CEMENT, PORTLAND.

The production of Portland cement in Canada shows a remarkable increase in this growing industry during the decade. In 1900 the production from 7 operating plants was 414,055 bbls. valued at \$765,876 while in 1910 with 24 plants in operation the output was 4,385,879 bbls. of the value of \$5,851,066, being more than ten times greater in quantity but less than 8 times in value. Table 22 shows the annual production and its value for the 11 years since 1900.

TABLE 22. Production of Portland Cement in Canada in the decade 1900-1910.

Year	Barrels	Value
	No.	\$
1900 ¹	414,055	765,876
1901.....	450,394	660,030
1902.....	722,525	1,127,550
1903.....	719,993	1,225,247
1904.....	967,172	1,338,239
1905 ¹	1,600,000	2,271,002
1906.....	2,128,374	3,170,859
1907.....	2,441,868	3,781,371
1908.....	2,666,333	3,709,954
1909.....	4,067,709	5,345,802
1910 ¹	4,385,879	5,851,066

¹Census returns.

Although the production of cement has multiplied tenfold it is not yet equal to supply the demand for construction work, as in 1910 there were upwards of 349,000 barrels of 350 lb. imported during the year. When the new plants mentioned are in operation and when some of the older plants have increased their capacity, it may be expected that they will be able to meet the growing demand.

The plants in operation in 1910 were situated as follows: Alberta 3, British Columbia 1, Manitoba 2, Nova Scotia 1, Ontario 14, and Quebec 3. The following table shows for the two census years by provinces (1) the number of plants in operation, (2) the capital invested and (3) the daily capacity of plants in barrels of 350 lb. net.

TABLE 23. Plants in operation showing capital invested and daily capacity in 1900 and 1910.

	1900	1910	1900	1910	1900	1910
	No.	No.	\$	\$	bbls.	bbls.
CANADA.....	7	24	891,959	10,482,167	3,900	25,835
Alberta.....	-	3	-	2,708,000	1	3,300
British Columbia.....	-	1	-	1,500,000	1	2,050
Manitoba.....	-	2	-	137,500	1	215
Nova Scotia.....	-	1	-	37,000	1	200
Ontario.....	5	14	807,459	4,785,817	1	15,300
Quebec.....	2	3	84,500	1,313,850	1	4,770

¹Not given in 1900 census.

New plants are being constructed at Blairmore and Edmonton in Alta., Princeton and Tod Inlet in B. C., Winnipeg, Man., Owen Sound, Hamilton, Brantford, Ont., and Neuville, Que.

The salaries and wages of persons employed in cement works are compared in the following table for Canada and the provinces, and show an increase of 1,663 in the total number of persons employed in the industry and of \$1,180,570 in the total cost of salaries and wages. The total number of weeks of all employees in 1900 was 19,962 and in 1910 it was 92,389 with an average of 61.3 hours per week.

TABLE 24. Salaries and wages of persons employed in the production of Portland Cement.

Province.	1900.		1910.	
	Employees	Salaries and wages.	Employees	Salaries and wages.
CANADA.....	558	221,514	2,221	1,402,084
Alberta.....	-	-	169	175,020
British Columbia.....	-	-	261	180,644
Manitoba.....	-	-	71	23,650
Nova Scotia.....	-	-	19	8,100
Ontario.....	500	188,300	1,332	744,992
Quebec.....	58	35,214	369	269,078

Table 25 shows the quantity and value of Portland cement produced by provinces. A foot note gives the average price per barrel in the two census years indicating a fall of 51 cents per barrel in the decade.

TABLE 25. Production of Portland Cement in Canada and the provinces in 1900 and 1910.

Province.	1900.		1910.	
	Barrels.	Value.	Barrels.	Value.
	No.	\$	No.	\$
CANADA.....	414,055	765,876	4,385,879	5,851,066
Alberta.....	-	-	389,428	797,891
British Columbia.....	-	-	282,540	420,810
Manitoba.....	-	-	40,328	48,910
Nova Scotia.....	-	-	25,528	38,030
Ontario.....	342,055	619,018	2,528,463	3,145,934
Quebec.....	72,000	146,858	1,119,592	1,399,491

Average price per bbl. \$1.85 \$1.34.

Exports and imports of cement are shown in table VII, pages 41 and 42.

CEMENT BLOCKS AND TILES.

The manufactures of cement blocks and tiles in 1910 were valued at \$1,886,529. The number of works was 82, with an investment of \$513,650 in buildings and plant. The plant consisted of 108 engines of 4,130 horse-power, the number of employees was 967 and the cost of wages and salaries was \$464,387. The aggregate weeks of working time employed during the year was 29,179 and the average hours of working time per week was 58. No returns for the production of cement blocks and tiles were received in 1900.

CLAY PRODUCTS.

The production of clay products compared for the census years 1900 and 1910 is presented in the three following tables. Table 26 shows the number of plants in operation and the capital invested in buildings and plant; Table 27 the number of persons employed, their salaries and wages and the value of production, and Table 28 the quantities and values of the different classes of clay products where possible. The aggregate number of weeks of time employed by all classes of employees during the year was 170,984 in 1900 and 306,420 in 1910, while the average hours of working time per week was 56 in 1910, no data being available for 1900.

TABLE 26. Plants and capital invested in clay products compared for 1900 and 1910 by provinces.

Canada and the provinces.	Number of plants.		Capital invested in buildings and plant.		Increase of capital 1910 over 1900.	
	1900.	1910.	1900.	1910.	Increase.	Increase per cent.
CANADA.....	573	489	4,210,244	10,752,227	6,541,983	155.38
Alberta.....	5	23	26,300	1,865,826	1,839,526	6,994.40
British Columbia.....	17	19	269,800	1,112,192	842,392	312.23
Manitoba.....	19	25	164,125	649,508	485,383	295.74
New Brunswick.....	15	11	96,800	74,368	-22,432	-23.17
Nova Scotia.....	18	14	113,110	711,208	598,098	528.78
Ontario.....	389	318	2,369,627	4,619,275	2,249,648	94.93
Prince Edward Island.....	10	2	9,450	1,300	-8,150	-86.24
Quebec.....	90	62	1,125,232	1,500,450	375,218	33.34
Saskatchewan.....	10	15	35,800	218,100	182,300	509.22

NOTE.—The minus sign indicates decrease.

Table 27 shows the salaries and wages of employees engaged in the clay industry for the census years 1900 and 1910. It will be noted that the only provinces showing decrease are New Brunswick and Prince Edward Island. The percentage of increase for Canada in salaries and wages was 177.31, of persons employed 43.67, and of value of products 189.77. The production per employee, which increased by nearly 102 per cent in the decade, may be accounted for by the introduction of and improvement in brick machinery.

TABLE 27. Employees on salaries and wages.

Canada and the provinces.	Employees on salaries and wages.				Value of products	
	1900		1910		1900	1910
	Number	Salaries and wages	Number	Salaries and wages		
		\$		\$	\$	\$
CANADA.....	6,705	1,327,533	9,633	3,681,417	3,299,917	9,562,302
Alberta.....	60	10,300	802	399,627	21,500	938,368
British Columbia.....	272	65,661	573	295,536	158,520	635,508
Manitoba.....	354	53,520	1,106	411,600	122,580	1,026,079
New Brunswick.....	267	53,039	193	49,040	90,914	83,769
Nova Scotia.....	311	55,769	343	109,308	127,336	227,709
Ontario.....	3,768	765,534	4,691	1,783,495	1,933,859	4,923,283
Prince Edward Island.....	81	3,954	14	490	10,335	1,620
Quebec.....	1,462	300,062	1,522	505,088	793,953	1,451,891
Saskatchewan.....	130	19,694	389	127,233	40,920	274,075

Ontario is the first in rank as a producer of clay products with 51.5 per cent of the total, Quebec is second with 15.2 per cent, Manitoba third with 10.7 per cent, Alberta fourth with 9.8 per cent, British Columbia fifth with 6.6 per cent, Saskatchewan sixth with 2.9 per cent, Nova Scotia seventh with 2.4 per cent, New Brunswick eighth with .85 per cent and Prince Edward Island ninth with little more than one-sixth of 1 per cent.

TABLE 28. Production of clay products in 1900 and 1910.

Class.	1900.		1910.	
	Quantity.	Value.	Quantity.	Value.
	No.	\$	No.	\$
Common brick.....	371,202,668	2,196,239	689,806,815	5,570,914
Pressed brick.....	14,444,000	134,336	110,684,980	1,186,625
Glazed brick and tile.....	25,000	1,300	-	-
Silicate brick.....	-	-	33,474,261	314,589
Vitrified brick.....	5,748,000	72,275	-	-
Drain tile.....	23,145,700	251,349	49,106,392	1,005,849
Sewer pipe.....	-	369,631	-	623,458
Terra cotta.....	-	48,000	-	67,597
Pottery and earthenware.....	-	226,020	-	362,735
Roofing tile.....	49,500	767	15,000	301
Paving brick.....	-	-	106,000	3,464
Fireproofing.....	-	-	2,979,600	215,510
Firebrick and fireclays.....	-	-	-	39,985
Other clay products ¹	-	-	-	171,275
Totals.....	-	3,299,917	-	9,562,302

¹Includes bath brick, block brick, hollow brick, boiler tile, building tile, and clays not specified.

Exports and imports of clay products are given in Table VII., pages 41 and 42.

LIME.

All the provinces of Canada contributed to this industry, and in 1910 produced 5,271,897 bushels of lime valued at \$1,183,131 as against 3,201,494 bushels of the value of \$523,862 in 1900. The number of kilns reported in 1900 was 163 as against 102 in 1910; the plant consisted of 50 engines or 681 horse-power as against nil in 1900; the invested capital was \$885,276 in 1910 and \$202,852 in 1900; employees numbered 1,016 in 1910 and 747 in 1900; salaries and wages amounted to \$444,350 in 1910 and \$218,727 in 1900; aggregate weeks of employment during the year were 42,261 in 1910 and 27,231 in 1900.

Imports and exports are shown in Table VII, pages 41 and 42.

SAND AND GRAVEL.

The production of sand and gravel in 1910 amounted to 2,939,205 tons of the value of \$2,330,458, as against 272,192 tons valued at \$38,166 in 1900.

Production by provinces is given in Table 29 for the census years 1910 and 1900.

TABLE 29. Production of sand and gravel.

Provinces.	No. of pits.		1910.		1900.	
	1910.	1900.	Quantity.	Value.	Quantity.	Value.
			tons.	\$	tons.	\$
CANADA.....	101	81	2,939,205	2,330,458	272,192	38,166
Alberta.....	4	—	77,500	70,500	—	—
British Columbia.....	3	—	976,700	975,900	—	—
Manitoba.....	8	2	962,198	640,949	15,092	857
New Brunswick.....	2	1	1,900	1,930	37	240
Nova Scotia.....	1	2	16,000	7,200	1,000	4,108
Ontario.....	75	72	684,757	289,089	232,563	25,961
Quebec.....	8	4	220,150	344,890	23,500	7,000

In 1910 the value of buildings and plant was \$384,690; there were 37 engines of 1,351 horse-power; 653 employees received \$307,017 in salaries and wages and the aggregate weeks of employment in the year were 24,222. In 1900 buildings and plant were valued at \$17,935; there were 2 engines of 60 horse-power; the number of employees was 63; the cost of salaries and wages \$15,640 and the aggregate weeks of employment during the year were 1,732.

The value of exports and imports are given in Table VII, pages 41 and 42.

STONE PRODUCTION, BUILDING, MONUMENTAL, ETC., FOR
1910 AND 1900.

The production of building stone, monumental stone, paving stone, crushed stone, rubble and furnace flux is presented in Tables 30, 31 and 32 for the census years 1910 and 1900. Table 30 gives (1) the number of quarries, (2) the number of engines and motors and their indicated horse-power, and (3) the value of the buildings and plant by classes of stone.

TABLE 30. Stone production, quarries, plant and capital invested in buildings and plant in 1910 and 1900.

Classes of stone.	Quarries.		Plant.				Value of buildings and plant.	
	1910.	1900.	1910.		1900.		1910.	1900.
	No.	No.	Engines	H.P.	Engines	H.P.	\$	\$
Granite, building.....	37	19	47	1,638	19	478	402,649	87,990
Granite paving blocks.....	1	—	1	1	—	—	1	—
Limestone (dimension).....	124	98	120	4,136	69	1,259	1,034,554	203,195
Limestone for flux.....	4	5	1	1	1	1	1	1
Marble.....	5	—	10	770	—	—	116,500	—
Rubble and other stone.....	32	1	34	1,085	1	1	575,853	1
Sandstone.....	22	32	23	369	31	601	121,000	66,950
Trap rock.....	1	—	—	—	—	—	—	—
Totals.....	225	154	234	7,998	109	2,338	2,250,556	358,135

¹Included with granite in 1900.²Included with limestone and sandstone in 1900.³Included with limestone in 1900 and 1910.

Table 31 gives the number of persons employed and the cost of salaries and wages by classes of stone.

TABLE 31. Employees, salaries and wages in the production of stone.

Classes of stone.	1910.		1900.	
	Employees.	Salaries and wages.	Employees.	Salaries and wages.
	No.	\$	No.	\$
Granite, building.....	875	429,598	749	261,945
Granite paving blocks.....	1	1	—	—
Limestone (dimension).....	1,880	820,230	1,854	605,336
Limestone for flux.....	2	2	104	55,850
Marble.....	198	141,119	—	—
Rubble and other stone.....	677	305,639	1	1
Sandstone.....	429	177,512	544	132,899
Trap rock.....	40	3,183	—	—

¹Included with granite in 1910.²Included with limestone (dimension) in 1910.³Included with limestone and sandstone in 1900.

Table 32 gives the production by classes of each kind of stone by quantities and values.

TABLE 32. Production of stone; building, monumental, etc.

Classes of stone.	1910.		1900.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Granite, building..... c. yd.	59,613	405,991	89,825	604,136
Granite paving blocks..... no.	601,181	42,337	1	1
Limestone (dimension)..... c. yd.	891,264	2,043,691	325,888	816,526
Limestone for flux..... ton	200,293	151,077	78,462	68,351
Marble..... c. yd.	26,485	215,000	1	1
Rubble and other stone..... ton	1,314,053	753,148	216,508	101,244
Sandstone..... c. yd.	158,336	585,225	50,681	206,443
Trap rock..... ton	4,800	4,000	1	1
Totals.		4,200,469		1,796,700

¹Not reported in 1900.

The aggregate weeks of working time during the year were as follows:—

Granite 36,415 weeks in 1910 and 26,028 weeks in 1900; limestone (dimension) including limestone for flux, 75,918 in 1910 and 64,378 in 1900; marble, 10,060 in 1910 and nil in 1900; rubble and other stone, 26,723 in 1910 and included with limestone and sandstone in 1900; sandstone, 12,928 in 1910 and 11,594 in 1900 and trap rock, 440 in 1910 with no report for 1900. The total for all classes was 162,484 weeks in 1910 and 107,027 weeks in 1900. The manufactures include artificial stone of the value of \$94,585 in 1910, which appears in census returns for the first time, and cut stone to the value of \$2,980,653 in 1910 and \$72,700 in 1900.

The value of exports and imports of all classes of stone are given in Table VII, pages 41 and 42.

TABLE I. Summary of the Mineral statistics of Canada and the Provinces by classes of products, showing quantities and values for the census year 1910.

No.	Materials.	Quantity.	Value.
			\$
	CANADA.	—	122,004,932
1	Metallic ores and products—	—	48,978,790
2	Antimony..... tons	321	18,589
3	Copper ore..... "	14,244	59,782
4	Copper-gold ore, raised..... "	1,833,854	—
5	Copper-gold ore, marketed..... "	1,814,933	—
6	Copper-gold ore, treated at works..... "	1,527,024	—
	Products of treated ore—		
7	Copper ore..... "	700	10,500
8	Copper in ore..... lb.	3,826,061	448,870
9	Copper in matte..... "	11,306,312	1,483,651
10	Copper, fine..... "	27,372,188	3,461,818
11	Gold, lode or vein, fine..... oz.	145,263	2,945,403
12	Gold in matte, fine..... "	58,985	1,192,180
13	Silver in ore..... "	120,509	64,539
14	Silver in matte..... "	129,348	69,728
15	Silver, fine..... "	407,369	204,793
16	Gold ore, lode or vein, raised..... tons.	133,905	—
17	Gold ore, lode or vein, marketed..... "	104,861	—
18	Gold ore, lode or vein, treated at works..... "	112,584	—
	Products of treated ore—		
19	Gold, lode or vein, fine..... oz.	52,525	1,026,004
20	Gold in matte, fine..... "	20,179	400,580
21	Lead ore..... tons	3,761	94,025
22	Lead in ore..... lb.	118,470	14,867
23	Silver in ore..... oz.	102,366	52,853
24	Silver in matte..... "	4,299	2,158
25	Silver, fine..... "	102	54
26	Gold, placer, fine..... "	250,624	4,711,301
27	Iron ore, raised..... tons	271,898	—
28	Iron ore, marketed..... "	276,064	—
	Products of treated ore—		
29	Iron ore..... tons	345,432	778,427
30	Ferro-silicon..... "	7,177	307,556
31	Pig iron..... "	97,656	1,584,236
32	Iron ore (titaniferous)..... "	4,080	2,290
33	Iron ore (bog)..... "	716	21,480
34	Lead ore..... "	100	2,000
35	Nickel-copper ore, raised..... "	656,466	—
36	Nickel-copper ore, marketed..... "	629,965	—
	Products of treated ore—		
37	Copper in ore..... lb.	23,030,123	1,727,259
38	Copper in matte..... "	5,196,000	389,672
39	Nickel, in ore..... "	48,189,008	7,228,350
40	Nickel, in matte..... "	5,576,000	836,458
41	Silver ore, raised..... tons	54	—
42	Silver ore, marketed..... "	54	—

TABLE I. . Summary of the Mineral statistics of Canada and the Provinces by classes of products, showing quantities and values for the census year 1910.

No.	Materials.	Quantity.	Value.
			\$
43	Silver in ore..... oz.	10,163	5,082
44	Silver, fine..... "	39,293	19,981
45	Silver-cobalt ore, raised..... tons	211,169	-
46	Silver-cobalt ore, marketed..... "	206,371	-
	Products of treated ore—		
47	Silver ore..... tons	3,993	859,429
48	Silver in ore..... oz.	25,613,304	13,070,698
49	Silver in matte..... "	5,542,900	2,860,066
50	Silver, fine..... "	1,642,641	847,063
51	Nickel in ore..... lb.	1,401,244	211,505
52	Cobalt..... "	3,138,275	52,467
53	Silver-lead ore, raised..... tons	152,612	-
54	Silver-lead ore, marketed..... "	51,621	-
55	Silver ore..... "	12	1,378
56	Silver in ore..... oz.	1,292,747	639,206
57	Silver in matte..... "	224,676	116,493
58	Silver, fine..... "	172,926	85,719
59	Lead ore..... tons	2,337	56,400
60	Lead in ore..... lb.	31,898,272	534,722
61	Lead in matte..... "	2,578,828	72,007
62	Gold, lode or vein, fine..... oz.	1,293	23,905
63	Gold in matte, fine..... "	180	3,600
64	Zinc ore..... tons	570	13,680
65	Zinc in ore..... lb.	5,296,418	293,918
66	Zinc in matte..... "	1,162,562	48,468
67	Zinc ore, raised..... tons	633	-
68	Zinc ore, marketed..... "	633	-
69	Zinc ore..... "	350	11,200
70	Zinc in ore..... lb.	509,000	12,380
	Abrasive products—		
71	Corundum ore..... tons	7,349	431,973
72	Corundum (in grain)..... lb.	3,367,650	22,047
73	Grindstones..... tons	5,272	178,073
74	Pulpstones..... tons	20,000	64,465
75	Whetstones..... no.	21,600	12,000
76	Infusorial earth and tripolite..... tons	800	4,000
77	All other..... "	-	5,000
	Fuel and light materials—		
78	Carbide of calcium..... tons	-	146,388
79	Coal anthracite, raised..... "	-	37,514,108
80	Coal anthracite, marketed..... "	269,787	515,457
81	Coal, bituminous, raised..... "	268,059	-
82	Coal, bituminous, marketed..... "	12,045,265	790,760
83	Coal, lignite, raised..... "	10,892,211	-
84	Coal, lignite, marketed..... "	824,584	26,365,262
85	Coke..... "	807,392	-
86	*Illuminating oil..... "	913,887	1,971,395
87	Natural gas..... c. ft.	-	3,453,424
88	Peat..... "	-	2,609,130
89	Petroleum (crude)..... gal.	6,910,381,635	1,335,062
	Pigments—		
90	Barytes (crude)..... tons	-	8,120
91	Cobalt and nickel oxides..... "	3,500	467,498
92	Iron oxide..... "	55	80,211
93	Ochres..... "	1,000	7,000
	Structural materials of stone and clay—		
94	*Cement blocks and tiles..... "	745	47,036
95	Cement, Portland..... bbl.	-	11,175
96	Brick, common..... no.	-	27,957,600
97	Brick, pressed..... "	4,385,879	1,886,529
98	Brick, silicate..... "	689,806,815	5,851,066
99	Brick, paving..... "	110,684,980	5,570,914
100	Brick, hollow..... "	33,474,261	1,186,625
101	Brick, all other..... "	106,000	314,589
102	Sewer pipe..... "	3,000,000	3,464
103	Drain tile..... no.	66,700	30,000
104	Boiler tile..... "	-	11,180
105	All other tile..... "	49,106,392	623,458
106	Firebrick..... "	1,819	1,005,849
		95,000	120
		651,500	2,701
			11,624

TABLE I. Summary of the Mineral statistics of Canada and the Provinces by classes of products, showing quantities and values for the census year 1910.

No.	Materials.	Quantity.	Value.
			\$
107	Fireclay and fireclay products.....	-	58,316
108	Fireproofing..... no.	2,979,600	215,510
109	Pottery.....	-	362,735
110	Terra cotta.....	-	67,597
111	Clays.....	-	97,620
112	Granite..... c. yd.	97,794	405,991
113	Granite paving blocks..... no.	563,000	42,337
114	Lime..... bu.	5,271,897	1,183,131
115	Limestone (dimension)..... c. yd.	891,264	2,043,691
116	Marble.....	26,485	215,000
117	Rubble and other stone..... tons	1,314,053	753,148
118	Sand and gravel.....	2,939,205	2,330,458
119	Sandstone..... c. yd.	158,336	585,225
120	Slate..... sq.	3,959	18,492
121	*Stone, artificial.....	-	95,577
122	*Stone, cut.....	-	2,980,653
123	Stone, all other..... tons	4,800	4,000
	Miscellaneous products.—.....	-	7,042,250
124	Arsenic (white)..... tons	954	46,304
125	Asbestos.....	100,247	3,595,048
126	Asbestic.....	24,751	18,589
127	Dolomite.....	30,000	24,000
128	Feldspar.....	17,113	65,855
129	Fluorspar.....	175	700
130	Graphite (crude).....	5,730	48,879
131	Graphite ore.....	14,751	11,200
132	Graphite, manufactures of.....	-	40,000
133	Gypsum (crude) raised..... tons	541,767	-
134	Gypsum (crude) marketed.....	520,804	598,312
135	Limestone for flux.....	200,293	151,077
136	Manganese.....	50	1,000
137	Mica (crude).....	1,183	176,349
138	Mica, manufactures of.....	-	383,934
139	Mineral earth..... tons	16	80
140	Mineral water..... gal.	1,568,057	203,595
141	Moulding sand.....	1,200	3,050
142	Phosphate (apatite).....	1,396	23,999
143	*Plaster and other manufactures of gypsum.....	-	656,005
144	Pyrites.....	77,813	328,648
145	Salt.....	80,360	614,496
146	Silica (quartz).....	11,950	27,520
147	Talc.....	8,656	23,610

*Full statistics of products marked with a star are given in tables of manufactures.

TABLE I.- Summary of the Mineral statistics of Canada and the Provinces by classes of products, showing quantities and values for the census year 1910.

No.	Materials.	Quantity.	Value.
			\$
	ALBERTA	-	10,515,074
	Fuel and light materials—		
1	Coal, anthracite, raised..... tons	269,787	-
2	Coal, anthracite, marketed..... tons	268,059	790,760
3	Coal, bituminous, raised..... tons	2,349,785	-
4	Coal, bituminous, marketed..... tons	2,181,785	4,948,712
5	Coal, lignite, raised..... tons	626,670	-
6	Coal, lignite, marketed..... tons	624,741	1,591,162
7	Coke..... tons	122,282	501,141
8	Natural gas..... c. ft.	75,000 000	22,500
	Structural materials of stone and clay—		
9	*Cement blocks and tiles..... —	-	174,378
10	Cement, Portland..... bbl.	389,428	797,891
11	Brick, common..... no.	52,902,327	508,802
12	Brick, pressed..... no.	15,772,410	196,366
13	Brick, silicate..... no.	1,000,000	14,000
14	Fireproofing..... no.	2,000,000	192,000
15	Sewer pipe..... —	-	8,000
16	Fireclay and fireclay products..... —	-	19,200
17	Lime..... bu.	372,500	86,500
18	Rubble and other stone..... tons	140,000	135,000
19	Sand and gravel..... tons	77,500	70,500
20	Sandstone..... c. yd.	82,564	256,411
21	*Stone, cut..... —	-	201,751
	BRITISH COLUMBIA	-	24,581,338
	Metallic ores and products—		
1	Copper-gold ore, raised..... tons	1,828,854	-
2	Copper-gold ore, marketed..... " "	1,810,195	-
3	Copper-gold ore, treated at works..... " "	1,527,024	-
	Products of treated ore—		
4	Copper ore..... " "	700	10,500
5	Copper in ore..... lb.	3,453,644	419,529
6	Copper in matte..... " "	11,306,312	1,483,651
7	Copper, fine..... " "	27,372,188	3,461,818
8	Gold, lode or vein, fine..... oz.	145,263	2,945,403
9	Gold in matte, fine..... " "	58,985	1,192,180
10	Silver in ore..... " "	117,904	63,106
11	Silver in matte..... " "	129,348	69,728
12	Silver, fine..... " "	407,369	204,793
13	Gold ore, lode or vein, raised..... tons	82,988	-
14	Gold ore, lode or vein, marketed..... " "	55,404	-
15	Gold ore, lode or vein, treated at works..... " "	72,272	-
	Products of treated ore—		
16	Gold, lode or vein, fine..... oz.	41,651	812,168
17	Gold in matte, fine..... " "	20,179	400,580
18	Lead ore..... tons	3,761	94,025
19	Lead in ore..... lb.	39,470	13,814
20	Silver in ore..... oz.	49,040	25,000
21	Silver in matte..... " "	4,299	2,158
22	Silver, fine..... " "	102	54
23	Gold, placer, fine..... " "	21,239	350,162
24	Silver ore, raised..... tons	54	-
25	Silver ore, marketed..... " "	54	-
26	Silver in ore..... oz.	10,163	5,082
27	Silver-lead ore, raised..... tons	152,612	-
28	Silver-lead ore, marketed..... " "	51,621	-
29	Silver ore..... " "	12	1,378
30	Silver in ore..... oz.	1,292,747	639,206
31	Silver in matte..... " "	224,676	116,493
32	Silver, fine..... " "	172,926	85,719
33	Lead ore..... tons	2,337	56,400
34	Lead in ore..... lb.	31,898,272	534,722
35	Lead in matte..... " "	2,578,828	72,007
36	Gold, lode or vein, fine..... oz.	1,293	23,905
37	Gold in matte, fine..... " "	180	3,600

TABLE I. Summary of the Mineral statistics of Canada and the Provinces by classes of products, showing quantities and values for the census year 1910.

No.	Materials.	Quantity.	Value.
BRITISH COLUMBIA—con.			\$
38	Zinc ore..... tons	570	13,680
39	Zinc in ore..... lb.	5,296,418	293,918
40	Zinc in matte..... "	1,162,565	48,468
41	Zinc ore raised..... tons	633	—
42	Zinc ore marketed..... "	633	—
43	Zinc in ore..... lb.	509,000	12,380
Fuel and light materials—			
44	Coal, bituminous, raised..... tons	3,008,635	—
45	Coal, bituminous, marketed..... "	2,716,383	7,272,953
46	Coal, lignite, raised..... "	11,868	—
47	Coal, lignite, marketed..... "	10,146	32,637
48	Coke..... "	241,580	1,107,508
Structural materials of stone and clay—			
49	*Cement blocks and tiles.....	—	252,745
50	Cement, Portland..... bbl.	282,540	420,810
51	Brick, common..... no.	35,384,340	316,459
52	Brick, pressed..... "	5,650,000	127,400
53	Drain tile..... "	4,815,000	62,875
54	Fireproofing..... "	979,600	23,510
55	Sewer pipe.....	—	102,000
56	Paving brick..... no.	102,000	3,264
57	Granite..... c.yd.	49,999	103,369
58	Lime..... bu.	318,479	75,195
59	Rubble and other stone..... tons	33,800	35,000
60	Sand and gravel..... "	976,700	975,900
61	*Stone, cut.....	—	212,836
Miscellaneous products—			
62	Limestone for flux..... tons	800	750
63	Talc..... "	170	500
MANITOBA			2,928,316
Structural materials of stone and clay.—			
1	*Cement blocks and tiles.....	—	42,572
2	Cement, Portland..... bbl.	40,328	48,910
3	Brick, common..... no.	65,424,800	643,336
4	Brick, pressed..... "	8,834,000	107,743
5	Brick, silicate..... "	22,000,000	220,000
6	Drain tile..... "	500,000	25,000
7	Brick hollow..... "	3,000,000	30,000
8	Granite..... c. yd.	1,300	3,827
9	Lime..... bu.	345,530	66,805
10	Limestone (dimension)..... c. yd.	39,207	99,390
11	Rubble and other stone..... tons	160,607	107,248
12	Sand and gravel..... "	962,198	640,949
13	*Stone, cut.....	—	600,036
Miscellaneous products—			
14	Gypsum (crude)..... tons	40,000	30,000
15	*Plaster and other manufactures of gypsum.....	—	262,500
NEW BRUNSWICK			1,087,113
Metallic ores and products—			
1	Iron ore..... tons	24,515	49,030
Abrasive products—			
2	Grindstones..... tons	5,265	64,360
3	Whetstones..... no.	21,600	4,000
4	Infusorial earth and tripolite..... tons	800	5,000
Fuel and light materials—			
5	Coal, bituminous, raised..... "	124,400	—
6	Coal, bituminous, marketed..... "	103,750	317,510
7	Petroleum (crude)..... gall.	52,000	4,000

TABLE I. Summary of the Mineral statistics of Canada and the Provinces by classes of products, showing quantities and values for the census year 1910.

No.	Materials.	Quantity.	Value.
NEW BRUNSWICK—con.			\$
Structural materials of stone and clay—			
8	*Cement blocks and tiles.....	—	108,150
9	Brick, common..... no.	6,323,162	53,269
10	Brick, pressed..... "	100,000	1,200
11	Drain tile..... "	345,000	6,300
12	Pottery.....	—	23,000
13	Granite..... c. yd.	581	11,880
14	Lime..... bu.	375,725	96,094
15	Limestone (dimension)..... c. yd.	800	2,250
16	Marble..... "	140	4,400
17	Rubble and other stone..... tons.	2,290	3,540
18	Sand and gravel..... "	1,900	1,930
19	Sandstone..... c. yd.	25,050	83,200
Miscellaneous products—			
20	Gypsum (crude) raised..... tons	91,500	—
21	Gypsum (crude) marketed..... "	60,462	117,500
22	*Plaster and other manufactures of gypsum.....	—	127,000
23	Pyrites..... tons	2,800	3,500
NOVA SCOTIA		—	17,059,122
Metallic ores and products—			
1	Antimony..... tons	321	18,589
2	Copper ore..... "	20	400
3	Gold ore, lode or vein, raised..... "	48,312	—
4	Gold ore, lode or vein, marketed..... "	48,312	—
5	Gold ore, lode or vein, treated at works..... "	40,312	—
6	Gold, lode or vein, fine..... oz.	8,525	169,662
7	Iron ore..... tons	53,135	106,270
Abrasive products—			
8	Grindstones..... "	7	105
9	All other.....	—	31,000
Fuel and light materials—			
10	Coal bituminous, raised.....	6,561,345	—
11	Coal bituminous, marketed..... "	5,889,193	13,812,887
12	Coke..... "	508,025	1,655,775
Structural materials of stone and clay—			
13	Cement, Portland..... bbl.	25,528	38,030
14	Brick, common..... no.	17,985,000	110,445
15	Brick, pressed..... "	3,104,020	31,190
16	Drain tile..... "	300,000	5,000
17	Sewer pipe.....	—	61,000
18	Fireclay..... tons	3,075	9,330
19	Terra cotta.....	—	1,000
20	Firebrick..... no.	601,500	9,624
21	Boiler tile..... "	1,819	120
22	Granite..... c. yd.	7,773	20,700
23	Lime..... bu.	40,000	12,124
24	Limestone (dimension)..... c. yd.	157,607	410,400
25	Marble..... "	270	1,600
26	Sand and gravel..... tons	16,000	7,200
27	Sandstone..... c. yd.	13,124	61,219
28	*Stone, cut.....	—	20,000
Miscellaneous products—			
29	Dolomite..... tons	30,000	24,000
30	Gypsum (crude)..... "	350,594	360,632
31	Manganese..... "	50	1,000
32	*Plaster and other manufactures of gypsum.....	—	79,820
ONTARIO		—	49,727,400
Metallic ores and products—			
33	Copper ore, raised..... tons	9,100	—
34	Copper ore, marketed..... "	12,612	—

TABLE I. Summary of the Mineral statistics of Canada and the Provinces by classes of products, showing quantities and values for the census year 1910.

No.	Materials	Quantity	Value
ONTARIO—con.			\$
35	Copper in ore..... lb.	429,500	54,546
36	Gold ore, lode or vein, raised..... tons	1,460	—
37	Gold, lode or vein, fine..... oz.	1,388	27,828
38	Iron ore, raised..... tons	271,898	—
39	Iron ore, marketed..... "	276,064	—
-	Products of treated ore—		
40	Iron ore..... "	267,782	623,127
41	Ferro-silicon..... "	7,177	307,556
42	*Pig iron..... "	97,656	1,584,236
43	Lead ore..... "	100	2,000
44	Nickel-copper ore raised..... "	656,466	—
45	Nickel-copper ore, marketed..... "	629,965	—
-	Products of treated ore—		
46	Copper in ore..... lb.	23,030,123	1,727,259
47	Copper in matte..... lb.	5,196,000	389,672
48	Nickel in ore..... lb.	48,189,008	7,228,350
49	Nickel in matte..... lb.	5,576,000	836,458
50	Silver-cobalt ore, raised..... tons	211,199	—
51	Silver-cobalt ore, marketed..... "	206,371	—
-	Products of treated ore—		
52	Silver ore..... "	3,993	859,429
53	Silver in ore..... oz.	25,613,304	13,070,698
54	Silver in matte..... "	5,542,900	2,860,066
55	Silver, fine..... oz.	1,642,641	847,063
56	Nickel in ore..... lb.	1,401,244	211,505
57	Cobalt..... "	3,138,275	52,467
58	Zinc ore..... tons	350	11,200
-	Abrasive products—		
59	Corundum ore..... tons	7,349	22,047
60	*Corundum (in grain)..... lb.	3,367,650	178,073
61	All other..... "	—	115,388
-	Fuel and light materials—		
62	*Carbide of calcium..... "	—	215,457
63	*Coke..... tons	42,000	189,000
64	Natural gas..... c. ft.	6,834,381,635	1,312,262
65	*Illuminating oil..... "	—	2,609,130
66	*Peat..... "	—	6,120
67	Petroleum (crude)..... gal.	10,428,238	463,498
-	Pigments—		
68	Cobalt and nickel oxides..... tons	55	47,036
-	Structural materials of stone and clay—		
69	*Cement blocks and tiles..... "	—	820,310
70	Cement, Portland..... bbl.	2,528,463	3,145,934
71	Brick, common..... no.	366,044,805	2,940,895
72	Brick, pressed..... "	66,624,550	593,726
73	Brick, silicate..... "	10,424,261	79,714
74	Brick, paving..... "	4,000	200
75	Brick, all other..... "	66,700	11,180
76	Drain tile..... "	33,146,392	728,309
77	Tile, all other..... "	95,000	2,701
78	Sewer pipe..... "	—	307,341
79	Pottery..... "	—	95,000
80	Terra cotta..... "	—	66,597
81	Clays..... "	—	97,620
82	Granite..... c. yd.	6,170	45,300
83	Granite paving blocks..... no.	443,000	34,977
84	Lime..... bu.	2,597,297	519,386
85	Limestone (dimension)..... c. yd.	431,597	759,059
86	Marble..... "	1,075	59,000
87	Rubble and other stone..... tons	929,566	406,910
88	Sand and gravel..... tons	684,757	289,089
89	Sandstone..... c. yd.	37,598	184,395
90	*Stone, artificial..... "	—	95,577
91	*Stone, cut..... "	—	825,265
92	Stone, all other..... tons	4,800	4,000
-	Miscellaneous products—		
93	Arsenic (white)..... tons	954	46,304
94	Feldspar..... "	16,623	56,055
95	Fluorspar..... "	175	700

TABLE I. Summary of the Mineral statistics of Canada and the Provinces by classes of products, showing quantities and values for the census year 1910.

No.	Materials	Quantity	Value
ONTARIO—con.			\$
96	Graphite (crude).....	" 5,431	15,410
97	Graphite, manufactures of.....	" -	40,000
98	Gypsum (crude).....	tons 38,710	90,180
99	Limestone for flux.....	" 176,865	139,321
100	Mica (crude).....	" 580	76,230
101	Mica, cut or ground.....	" -	293,787
102	Mineral earth.....	tons 16	80
103	Mineral water.....	gal. 1,209,294	137,600
104	Moulding sand.....	tons 1,200	3,050
105	Phosphate (apatite).....	" 61	11,344
106	*Plaster and other manufactures of gypsum.....	" -	104,685
107	Pyrites.....	tons 29,365	83,572
108	Salt.....	" 80,360	614,496
109	Silica (quartz).....	" 11,950	27,520
110	Talc.....	" 8,486	23,110
PRINCE EDWARD ISLAND		-	12,320
Structural materials of stone and clay—			
1	Brick, common.....	no. 180,000	1,620
2	Lime.....	bu. 29,250	10,700
QUEBEC		-	11,002,232
1	Metallic ores and products—		
2	Copper ore.....	tons 1,612	4,836
3	Iron ore (titaniferous).....	" 4,080	2,290
4	Iron ore (bog).....	" 716	21,480
Abrasive products—			
5	Pulpstones.....	" 20,000	12,000
Pigments—			
6	Barytes (crude).....	" 3,500	7,000
7	Iron oxide.....	" 1,000	15,000
8	Ochres.....	" 745	11,175
Fuel and light materials—			
9	Carbide of calcium.....	" -	300,000
10	Natural gas.....	c. ft 1,000,000	300
Structural materials of stone and clay—			
11	*Cement blocks and tiles.....	" -	488,374
12	Cement, Portland.....	bbl. 1,119,592	1,399,491
13	Brick, common.....	no. 128,657,381	824,738
14	Brick, pressed.....	" 3,000,000	30,000
15	Drain tile.....	" 10,000,000	178,365
16	Sewer pipe.....	" -	145,117
17	Pottery.....	" -	244,735
18	Fireclay.....	" -	28,936
19	Granite.....	c. yd. 32,011	220,915
20	Granite paving blocks.....	no. 120,000	7,360
21	Lime.....	bu. 1,193,116	316,327
22	Limestone (dimension).....	c. yd. 262,053	772,592
23	Marble.....	c. yd. 25,000	150,000
24	Rubble and other stone.....	tons 47,790	65,450
25	Sand and gravel.....	" 220,150	344,890
26	Slate.....	sq. 3,959	18,492
27	*Stone, cut.....	" -	1,120,765
Miscellaneous products—			
28	Asbestos.....	tons 100,247	3,595,048
29	Asbestic.....	" 24,751	18,589
30	Graphite (crude).....	" 299	33,469
31	Graphite ore.....	" 14,751	11,200
32	Limestone for flux.....	" 22,628	11,006
33	Mica (crude).....	" 603	100,119
34	Mica, manufactures of.....	" -	90,147
35	Feldspar.....	tons 490	9,800
36	Mineral water.....	gal. 358,763	65,995
37	Phosphate (apatite).....	tons 1,335	12,655
38	*Plaster and other manufactures of gypsum.....	" -	82,000
39	Pyrites.....	tons 45,648	241,576

TABLE I. Summary of the Mineral statistics of Canada and the Provinces by classes of products, showing quantities and values for the census year 1910.

No.	Materials	Quantity	Value
			\$
	SASKATCHEWAN	-	541,671
*	Fuel and light materials—		
1	Coal, lignite, raised..... tons	178,046	-
2	Coal, lignite, marketed..... "	164,505	267,596
	Structural materials of stone and clay—		
3	Brick, common..... no.	16,905,000	171,350
4	Brick, pressed..... "	7,600,000	99,000
5	Brick, silicate..... "	50,000	875
6	Firebrick..... "	50,000	2,000
7	Fireclay..... "	-	850
	YUKON	-	4,550,346
	Metallic ores and products—		
1	Copper-gold ore, raised..... tons	5,000	-
2	Copper-gold ore, marketed..... "	4,738	-
	Products of treated ore—		
3	Copper in ore..... lb.	372,417	29,341
4	Silver in ore..... oz.	2,605	1,433
5	Gold ore, lode or vein, raised..... tons	1,145	-
6	Gold ore, lode or vein, marketed..... tons	1,145	-
	Products of treated ore—		
7	Gold, lode or vein, fine..... oz.	961	16,346
8	Lead in ore..... lb.	79,000	1,053
9	Silver in ore..... oz.	53,326	27,853
10	Gold, placer, fine..... oz.	229,385	4,361,139
11	Silver, fine..... "	39,293	19,981
	Fuel and light materials—		
12	Coal, bituminous, raised..... tons	1,100	-
13	Coal, bituminous, marketed..... "	1,100	13,200
14	Coal, lignite, raised..... "	8,000	-
15	Coal, lignite, marketed..... "	8,000	80,000

*Full statistics of products marked with a star are given in tables of manufactures.

TABLE II. Capital employed in buildings and plant in 1900 and 1910, by classes of minerals and mineral products, for Canada.

Kind of ore or mineral.	1910.		1900.	
	Mines or works.	Value of buildings and plant.	Mines or works.	Value of buildings and plant.
Total.....	2222	108,506,051	1373	42,771,803
Asbestos and asbestic.....	17	2,585,840	6	278,000
*Asbestos, manufactures of.....	9	483,222	4	4
*Carbide of calcium.....	5	280,682	2	2
*Cement blocks and tiles.....	82	513,650	2	2
*Cement, Portland.....	24	10,482,167	7	574,092
Clay products.....	489	10,752,227	573	4,210,244
Coal and coke, bituminous.....	94	38,625,349	41	25,360,765
Coal, lignite.....	128	4,682,189	14	17,025
Copper ore.....	4	97,000	20	795,300
Copper-gold ore.....	14	5,635,251	1	1
Feldspar.....	3	10,800	2	2
Gold ore, lode or vein.....	40	1,996,735	71	2,770,862
Gold, placer.....	268	9,405,594	71	4,996,714
Granite.....	37	402,649	19	87,990
Graphite (crude).....	6	257,000	2	2
Graphite, manufactures of.....	3	125,326	2	2
*Grindstones and pulpstones.....	8	193,200	6	18,350
Gypsum (crude).....	19	538,516	9	39,150
Iron ore.....	13	1,439,003	11	768,591
Lime.....	102	885,276	163	202,852
Limestone (dimension).....	124	1,034,554	98	208,195
Limestone for flux.....	3	3	5	8,000
Manganese.....	2	2	3	5,300
Marble.....	5	116,500	4	4
Mica and phosphate (apatite).....	26	175,454	26	25,075
Mica, manufactures of.....	13	49,012	12	12,610
Mineral water.....	12	251,938	8	131,100
Miscellaneous.....	21	2,996,343	19	415,287
Moulding sand.....	2	2	4	-
Natural gas.....	110	1,546,569	13	368,527
Nickel and copper ore.....	5	1,494,454	6	123,188
Petroleum (crude).....	219	1,303,768	4	4
*Plaster and other manufactures of gypsum.....	7	649,400	2	2
Pyrites.....	5	201,314	5	5
Rubble and other stone.....	32	575,853	6	6
Salt.....	9	857,349	9	558,192
Sand and gravel.....	101	384,690	81	17,935
Sandstone.....	22	121,000	32	66,950
Silica (quartz).....	3	8,000	2	2
Silver ore.....	2	2	7	50,500
Silver-cobalt ore.....	44	2,441,477	4	4
Silver-lead ore.....	27	2,239,714	35	651,224
*Stone artificial.....	3	3,324	4	4
Stone cut, manufactures of.....	66	2,643,662	4	9,785
Talc.....	3	14,000	2	2

¹ Included in copper ore.² Included in miscellaneous.³ Included in limestone (dimension).⁴ Not reported in 1900.⁵ Included in mica and phosphate.⁶ Included in limestone and sandstone

* Full statistics of products marked with a star are given in tables of manufactures.

TABLE III. Salaries and wages of persons employed, compared for 1900 and 1910 by classes of ores and mineral products for Canada.

Kind of ore or mineral.	1910				1900			
	Officers on salaries		Employees on wages.		Officers on salaries		Employees on wages	
	No.	Salaries	No.	Wages	No.	Salaries	No.	Wages
		\$		\$		\$		\$
Total.....	2,884	3,317,030	67,150	39,129,941	1,527	1,512,821	37,065	16,336,273
Asbestos and asbestic.....	79	103,277	3,114	1,502,551	48	29,597	775	194,014
*Asbestos, manufactures of.....	22	25,340	150	79,927	4	4	4	4
*Carbide of calcium.....	21	25,648	186	92,441	-	-	90	19,670
*Cement blocks and tiles.....	83	77,273	884	387,114	4	4	4	4
Cement, Portland.....	129	166,099	2,092	1,235,985	37	37,482	521	194,332
Clay products.....	496	457,741	9,137	3,223,676	-	-	6,705	1,327,533
Coal and coke, bituminous.....	696	850,297	25,656	16,105,833	315	307,258	13,986	7,133,096
Coal, lignite.....	96	108,145	2,445	1,156,860	19	10,085	106	42,417
Copper ore.....	6	4,830	84	41,957	70	116,505	1,148	937,468
Copper-gold ore.....	84	158,660	1,823	2,062,281	1	1	1	1
Feldspar.....	2	3,120	82	38,546	2	2	2	2
Gold ore, lode or vein.....	30	56,871	691	647,218	239	321,499	3,630	2,204,236
Gold, placer.....	43	79,320	1,709	1,687,898	88	72,727	599	249,067
Granite.....	24	26,350	851	403,248	30	22,105	719	239,840
Graphite (crude).....	11	13,420	171	(5,419	2	2	2	2
*Graphite, manufactures of.....	8	10,196	96	52,591	-	-	5	1,770
Grindstones and pulpstones.....	16	12,270	232	57,550	12	4,066	94	17,981
Gypsum (crude).....	32	28,822	834	371,236	18	12,235	367	101,960
Iron ore.....	50	48,839	962	524,807	48	37,106	1,143	234,585
Lime.....	82	68,742	934	375,608	52	24,467	695	194,260
Limestone (dimension).....	116	70,661	1,764	749,569	112	62,655	1,742	542,691
Limestone for flux.....	2	2	2	2	6	3,925	98	51,925
Manganese.....	2	2	2	2	5	4,510	29	8,893
Marble.....	13	12,440	185	128,679	4	4	4	4
Mica (crude) and phosphate (apatite).....	21	17,843	342	104,934	46	23,204	394	89,729
*Mica, manufactures of.....	28	15,809	827	116,953	24	13,200	240	42,294
Mineral water.....	42	46,379	117	44,497	15	7,300	54	15,091
Miscellaneous.....	68	86,975	1,458	856,152	37	30,578	427	131,136
Moulding sand.....	2	2	2	2	-	-	5	1,077
Natural gas.....	27	17,825	191	84,179	10	9,158	13	12,750
Nickel and copper ore.....	69	89,261	1,315	922,703	60	77,359	1,180	674,878
Petroleum (crude).....	20	13,290	420	178,308	4	4	4	4
Plaster and other manufactures of gypsum.....	31	32,638	287	139,235	9	5,752	105	32,550
Pyrites.....	6	11,136	281	131,670	5	5	5	5
Rubble and other stone.....	29	25,298	648	280,341	6	6	6	6
Salt.....	27	29,964	178	91,711	29	21,620	179	64,824
Sand and gravel.....	31	27,615	622	279,402	10	4,060	53	11,580
Sandstone.....	19	15,890	410	161,622	35	17,885	509	115,014
Silica (quartz).....	1	420	19	914	2	2	2	2
Silver ore.....	2	2	2	2	19	21,945	119	100,157
Silver-cobalt ore.....	176	290,479	3,011	2,689,671	4	4	4	4
Silver-lead ore.....	34	51,372	833	875,540	126	208,488	1,272	1,324,790
*Stone, artificial.....	5	6,680	39	25,636	4	4	4	4
*Stone cut, manufactures of.....	111	129,795	2,051	1,147,171	8	6,050	63	24,625
Talc.....	-	-	19	8,308	2	2	2	2

¹ Included in copper ore.

² Included in miscellaneous.

³ Included in limestone (dimension).

⁴ Not reported in 1910.

⁵ Included in mica and phosphate.

⁶ Included in limestone and sandstone.

* Full statistics of products marked with a star are given in tables of manufactures.

TABLE IV. Classes of mineral products compared for 1900 and 1910 for Canada and the provinces.

Classes of products.	Value of products 1900.	Value of products 1910.
	\$	\$
Canada.....	47,952,862	122,004,932
Metallic ores and products.....	25,161,151	48,978,790
Abrasive products.....	125,575	431,973
Fuel and light materials.....	14,095,477	37,514,108
Pigments.....	18,822	80,211
Structural materials of stone and clay.....	6,483,970	27,957,600
Miscellaneous products.....	2,071,867	7,042,250
British Columbia.....	14,679,777	24,581,338
Metallic ores and products.....	10,559,369	13,455,627
Fuel and light materials.....	3,902,438	8,413,098
Structural materials of stone and clay.....	187,370	2,711,363
Miscellaneous products.....	30,600	1,250
Manitoba.....	216,830	2,928,316
Structural materials of stone and clay.....	216,830	2,635,816
Miscellaneous products.....	-	292,500
New Brunswick.....	650,679	1,087,113
Metallic ores and products.....	100,000	49,030
Abrasive goods.....	38,400	73,360
Fuel and light materials.....	17,479	321,510
Structural materials of stone and clay.....	262,408	395,213
Miscellaneous products.....	232,392	248,000
Nova Scotia.....	9,042,003	17,059,122
Metallic ores and products.....	1,277,349	294,921
Abrasive goods.....	30,612	31,105
Fuel and light materials.....	7,366,165	15,468,662
Pigments.....	1,772	-
Structural materials of stone and clay.....	230,664	798,982
Miscellaneous products.....	135,441	465,452
Ontario.....	10,417,576	49,727,400
Metallic ores and products.....	3,767,054	30,693,460
Abrasive goods.....	56,563	315,508
Fuel and light materials.....	2,072,200	4,795,467
Pigments.....	-	47,036
Structural materials of stone and clay.....	3,634,148	12,112,485
Miscellaneous products.....	887,611	1,763,444
Prince Edward Island.....	15,735	12,320
Structural materials of stone and clay.....	15,735	12,320
Quebec.....	2,960,704	11,002,232
Metallic ores and products.....	293,936	28,606
Abrasive goods.....	-	12,000
Pigments.....	17,050	33,175
Fuel and light materials.....	-	300,300
Structural materials of stone and clay.....	1,863,895	6,356,547
Miscellaneous products.....	785,823	4,271,604
Alberta.....	718,645	10,515,074
Metallic ores and products.....	-	-
Fuel and light materials.....	686,645	7,854,275
Structural materials of stone and clay.....	32,000	2,660,799
Saskatchewan.....	91,470	541,671
Fuel and light materials.....	50,550	267,596
Structural materials of stone and clay.....	40,920	274,075
Yukon.....	9,163,443	4,550,346
Metallic ores and products.....	9,163,443	4,457,146
Fuel and light materials.....	-	93,200

TABLE V. Classes of ores and products, exclusive of manufactures, compared by quantities and values in 1900 and 1910 for Canada.

Classes of ores and other products.	1910.		1900.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Canada.....	-	112,775,636	-	45,402,602
Metallic—.....	-	48,978,790	-	25,161,151
Antimony..... tons	321	18,589	-	400
Cobalt..... lb.	3,138,275	52,467	-	-
Copper ore..... tons	2,332	15,736	118,771	1,803,864
Copper..... lb.	71,160,184	7,565,816	15,607,364	1,415,754
Ferro-silicon..... tons	7,177	307,556	-	-
Gold..... oz.	529,049	10,302,973	881,278	14,493,417
Pig iron from Canadian ore..... tons	97,656	1,584,236	152,029	2,316,525
Iron ore..... "	350,228	802,197	283,124	436,720
Lead ore..... "	6,198	152,425	-	-
Lead..... lb.	34,477,100	621,596	5,725,680	155,523
Nickel..... "	55,166,252	8,276,313	7,180,000	757,506
Silver ore..... tons	4,005	860,807	79,220	3,110,499
Silver..... oz.	35,302,643	18,038,433	1,157,807	665,943
Zinc ore..... tons	920	24,680	250	5,000
Zinc..... lb.	6,967,983	354,766	1	1
Non-metallic—.....	-	37,435,461	-	13,070,434
Actinolite..... tons	-	-	500	3,000
Arsenic..... tons	954	46,304	300	22,725
Asbestos..... "	100,247	3,595,048	22,922	416,832
Asbestic..... "	24,751	18,589	2	2
Coal and coke..... "	13,531,012	32,580,841	4,855,077	12,023,277
Corundum ore..... "	7,349	22,047	-	-
Corundum (in grain)..... lb.	3,367,650	178,073	868,000	43,429
Feldspar..... tons	17,113	65,855	1,213	1,820
Fluorspar..... "	175	700	1	1
Graphite..... "	5,730	48,879	3,000	48,000
Grindstones..... "	25,272	76,465	-	41,400
Whetstones..... no.	21,600	4,000	-	-
Gypsum..... tons	520,804	598,312	209,356	194,128
Mica..... "	1,183	176,349	4,481	272,016
Phosphate (apatite)..... "	1,396	23,999	495	3,807
Mineral pigments—.....	-	80,211	-	18,822
Ochres and iron oxides..... tons	1,745	26,175	1,182	13,830
Barytes..... tons	3,500	7,000	1,286	4,992
All other..... "	55	47,036	1	1
Miscellaneous—.....	-	3,036,629	-	704,536
Mineral water..... gal.	1,568,057	203,595	983,868	97,638
Natural gas..... c. ft.	6,910,381,635	1,335,062	-	139,703
Peat..... tons	1,500	6,120	150	450
Petroleum..... gal.	10,480,238	467,498	1	1
Pyrites..... tons	77,813	328,648	15	105
Salt..... "	80,360	614,496	-	345,148
Silica (quartz)..... "	11,950	27,520	5,000	6,500
Talc..... "	8,656	23,610	1,000	4,000
Tripolite and infusorial earth..... "	816	5,080	1,153	27,612
All other..... "	30,500	25,000	8,351	83,380
Structural materials of stone and clay—.....	-	23,244,545	-	6,447,659
Cement, Portland..... bbl.	4,385,879	5,851,066	414,055	765,876
Clay products.—.....	-	-	-	-
Brick, common..... no.	689,806,815	5,570,914	371,202,668	2,196,239
Brick, pressed..... "	110,684,980	1,186,625	14,444,000	134,336
Brick, silicate..... "	33,474,261	314,589	-	-
Brick, all other..... "	3,172,700	44,644	5,773,000	73,575
Fireclay and fireclay products..... "	-	167,560	-	-
Fireproofing and terra cotta..... "	-	283,107	-	48,000
Pottery..... "	-	362,735	-	226,020
Sewer pipe..... "	-	623,458	-	369,631
Tile, drain..... no.	49,203,211	1,008,670	22,195,200	252,116
Lime..... bu.	5,271,897	1,183,131	3,201,494	523,862
Limestone for flux..... tons	200,293	151,077	78,462	68,351
Moulding sand..... "	1,200	3,050	3,055	2,138
Rubble and other stone..... "	1,314,053	753,148	216,508	101,244

TABLE V. Classes of ores and products, exclusive of manufactures, compared by quantities and values in 1900 and 1910 for Canada.

Classes of ores and other products.	1910.		1900.	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Sand and gravel..... tons	2,939,205	2,330,458	272,192	38,166
Slate..... sq.	3,959	18,492	5,000	21,000
Stone—				
Granite..... c. yd.	59,613	405,991	89,825	604,136
Granite paving blocks..... no.	601,181	42,337	¹	¹
Limestone (dimension)..... c. yd.	891,264	2,043,691	325,888	816,526
Marble..... "	26,485	215,000	¹	¹
Sandstone..... "	158,336	585,225	50,681	206,443
Stone, artificial.....	—	95,577	¹	¹
Stone, all other..... tons	4,800	4,000	¹	¹

¹ Not reported in 1900.

² Included with asbestos in 1900.

TABLE VI. Classes of ores and other products, including manufactures, compared by quantities and values in 1900 and 1910 for Canada.

	1910		1900	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Canada.....	-	122,004,932	-	47,956,862
Metallic ores and products—				
Cobalt..... lb.	3,138,275	48,978,790	-	25,161,151
Copper ore..... tons	2,332	15,736	118,771	1,803,864
Copper in matte or concentrate..... lb.	16,502,312	1,873,323	15,607,364	1,415,754
Copper in ore..... lb.	27,285,684	2,230,675	-	-
Copper, fine..... lb.	27,372,188	3,461,818	-	-
Ferro-silicon.....	-	307,556	1	1
Gold ore, lode or vein, fine..... oz.	199,081	3,995,312	251,902	4,496,681
Gold in matte or concentrate..... oz.	79,344	1,596,360	12,509	250,173
Gold, placer, fine..... oz.	250,624	4,711,301	616,867	9,746,563
Iron ore..... tons	350,228	802,197	283,124	436,720
Lead ore..... tons	6,198	152,425	2	2
Lead in ore..... lb.	32,016,742	549,589	2	2
Lead in matte or concentrate..... lb.	2,578,828	72,007	5,725,680	155,253
Nickel in ore..... lb.	49,590,252	7,439,855	-	-
Nickel in matte or concentrate..... lb.	5,576,000	836,458	7,180,000	757,506
Pig iron, product of Canadian ores..... tons	97,656	1,584,236	152,029	2,316,525
Silver ore..... tons	4,005	860,807	79,220	3,110,49
Silver in ore..... oz	27,139,089	13,832,378	-	-
Silver in matte or concentrate..... oz.	5,901,223	3,048,445	1,157,807	665,943
Silver, fine..... oz.	2,262,331	1,157,610	-	-
Zinc ore..... tons	920	24,880	250	5,000
Zinc in ore..... lb.	5,805,418	306,298	-	-
Zinc in matte or concentrate..... lb.	1,162,565	48,468	-	-
Miscellaneous..... tons	4,821	11,018,589	-	400
Abrasive products—				
Corundum ore..... tons	7,349	431,973	-	125,575
Corundum in (grain)..... lb.	3,367,650	22,047	-	-
*Emery wheels.....	-	178,073	868,000	43,429
Grindstones..... tons	5,272	2146,388	-	13,134
Infusorial earth and tripolite..... tons	800	64,465	-	41,400
Pulstones..... tons	20,000	5,000	1,153	27,612
Whetstones..... no.	21,600	12,000	5	5
		4,000	5	5
Fuel and light materials—				
*Carbide of calcium..... tons	-	37,514,108	-	14,095,477
Coal..... tons	10,050	515,457	1,351	79,305
Coke..... tons	12,617,125	29,127,417	4,710,664	11,465,906
*Peat..... tons	913,887	3,453,424	144,413	557,361
Petroleum (crude)..... gal.	1,500	6,120	150	450
*Petroleum, products of.....	10,480,238	467,498	1	1
Natural gas..... c feet	-	2,609,130	-	1,862,742
	6,910,381,635	1,335,062	-	139,703
Pigments—				
Barytes..... tons	-	80,211	-	18,822
Iron oxide..... tons	3,500	7,000	1,286	6,992
Nickel-cobalt oxide..... tons	1,000	15,000	1	1
Ochres..... tons	55	47,036	1	1
	745	11,175	1,182	13,830
Structural materials of stone and clay—				
Brick, common..... no.	-	27,957,600	-	6,483,970
Brick, fire..... no.	689,806,815	5,570,914	371,202,668	2,196,239
Brick, pressed..... no.	651,500	11,624	1	1
Brick, silicate..... no.	110,684,980	1,186,625	14,444,000	134,336
Brick, paving..... no.	33,474,261	314,589	1	1
Brick, all other..... no.	106,000	3,464	1	1
Tile, drain..... no.	3,066,700	41,180	5,773,000	73,575
Tile, all other..... no.	49,106,392	1,005,849	22,145,700	251,349
Clays.....	96,819	2,821	49,500	767
Fireproofing..... no.	-	155,936	1	1
Pottery.....	2,979,600	215,510	1	1
Sewer pipe.....	-	262,735	-	226,020
Terra cotta.....	-	623,458	-	369,631
Cement, natural rock..... bbl.	-	67,597	-	48,000
Cement, Portland..... bbl.	4,385,879	5,851,066	121,000	106,800
*Cement blocks and tiles.....	-	1,886,529	414,055	765,876

TABLE VI. Classes of ores and other products, including manufactures, compared by quantities and values in 1900 and 1910 for Canada.

	1910		1900	
	Quantity.	Value.	Quantity.	Value.
		\$		\$
Granite..... c. yd.	59,613	405,991	89,825	(04,136
Granite paving blocks..... no.	601,181	42,337	1	1
Lime..... bu.	5,271,897	1,183,131	3,201,494	523,862
Limestone (dimension)..... c. yd.	891,264	2,043,691	325,888	816,526
Marble..... c. yd.	26,485	215,000	1	1
Rubble and other stone..... tons	1,314,053	753,148	216,508	101,244
Sand and gravel..... tons	2,939,205	2,330,458	272,192	38,166
Sandstone..... c. yd.	158,336	585,225	50,681	206,443
Slate..... sq.	3,959	18,492	5,000	21,000
*Stone, artificial.....	—	95,577	1	1
*Stone, cut.....	—	2,980,653	1	1
Stone, all other..... tons	4,800	4,000	1	1
Miscellaneous products—.....	—	7,042,250	—	2,071,867
Arsenic (white)..... tons	954	46,304	300	22,725
Asbestos.....	*100,247	3,595,048	22,922	416,832
Asbestic..... tons	24,751	18,589	4	4
Dolomite..... tons	30,000	24,000	1	1
Feldspar..... tons	17,113	65,855	1,213	1,820
Fluorspar..... tons	175	700	1	1
Graphite (crude)..... tons	5,730	48,879	3,000	48,000
Graphite, manufactures of.....	—	51,200	—	7,000
Gypsum (crude)..... tons	520,804	598,312	209,356	194,128
Limestone for flux..... tons	200,293	151,077	78,462	68,351
Manganese ore..... tons	50	1,000	6,013	61,080
Mica (crude)..... tons	1,183	176,349	4,481	272,016
*Mica cut or ground.....	—	383,934	—	406,573
Mineral earth..... tons	16	80	1	1
Mineral water..... gal.	1,568,057	203,595	983,868	97,638
Moulding sand..... tons	1,200	3,050	3,055	2,138
Phosphate (apatite)..... tons	1,396	23,999	495	3,807
*Plaster and other manufactures of gypsum.....	—	656,005	—	88,706
Pyrites..... tons	77,813	328,648	15	105
Salt..... tons	80,360	614,496	56,824	345,148
Silica (quartz)..... tons	11,950	27,520	5,000	6,500
Talc..... tons	8,656	23,610	1,000	4,000
Actinolite..... tons	3	3	500	3,000
Chromic iron ore..... tons	3	3	1,338	20,300
Soapstone..... tons	3	3	1,000	2,000

¹ Not reported in 1900.

² Included in silver ore.

³ Not reported in 1910.

⁴ Included in asbestos.

⁵ Included in grindstones.

* Full statistics of products marked with a star are given in tables of manufactures.

TABLE VII. Imports of minerals and mineral products by quantities and values compared for 1910 and 1900.

No.	Classes of minerals and mineral products.	1900. (Fiscal year).		1910 (Fiscal year).	
		Quantity.	Value.	Quantity.	Value.
			\$		\$
Metallic ores and products—					
1	Copper, pig, scrap, etc. lb.	1,144,000	180,990	4,690,700	617,630
2	Gold coin.....	-	-	-	4,998,236
3	Gold bullion.....	-	-	-	516,581
4	Iron ore..... tons	-	-	1,377,035	-
5	Pig iron..... tons	-	-	243,859	3,364,847
6	Ferro products..... tons	1,149	39,064	14,952	332,486
7	Lead..... tons	-	-	9,083	689,002
8	Nickel.....	-	6,988	-	23,266
9	Zinc..... lb.	2,874,800	156,167	3,504,000	201,777
10	Zinc in spelter..... lb.	583,600	29,416	13,200,100	658,285
11	Aluminium..... lb.	-	-	19,464,400	*403,283
12	Antimony..... lb.	186,997	20,001	563,662	40,681
Abrasive products—					
13	Grindstones.....	-	34,382	-	73,427
14	Burrstones.....	-	1,546	-	1,973
15	Emery, crude.....	-	19,312	-	28,482
16	Emery, manufactures of.....	-	25,615	-	73,537
17	Pumice stone.....	-	5,604	-	12,011
Fuel and light materials—					
18	Coal..... tons	4,787,479	12,510,473	10,597,982	*28,450,001
19	Coke..... tons	187,878	506,839	702,053	1,695,603
20	Petroleum..... gal.	9,633,647	864,833	60,017,066	3,442,604
21	Paraffin wax..... lb.	47,400	3,529	429,801	27,296
22	Paraffin wax candles..... lb.	27,663	3,671	164,822	20,842
Mineral pigments—					
23	Barytes..... tons	-	-	629	14,735
24	Ochres..... lb.	2,474,537	32,017	3,683,344	44,190
Structural materials of stone and clay—					
25	Brick and tile.....	-	145,914	-	1,341,310
26	Brick, paving..... M.	2,175	35,644	-	138,763
27	Brick, fire.....	-	39,535	-	519,454
28	Cement, hydraulic..... cwt.	10,418	4,711	5,880	553
29	Cement, Portland..... cwt.	1,301,361	498,607	490,809	158,487
30	Clays.....	-	122,965	-	218,232
31	Drain tile.....	-	1,383	-	2,739
32	Earthenware and pottery.....	-	959,526	-	1,859,302
33	Fireclay.....	-	59,291	-	86,151
34	Lime..... bbl.	12,865	11,211	191,537	116,964
35	Sand and gravel..... tons	35,713	41,280	151,982	155,012
36	Sewer pipe.....	-	37,766	-	196,002
37	Slate.....	-	53,707	-	136,401
38	Stone.....	-	215,652	-	703,877
Miscellaneous products—					
39	Asbestos.....	-	43,455	-	198,710
40	Arsenic..... lb.	230,730	11,035	328,629	12,895
41	Graphite.....	-	64,955	-	99,997
42	Gypsum (crude)..... tons	77	958	3,790	12,137
43	Gypsum, ground..... lb.	6,300	69	21,417,000	17,402
44	Gypsum, manufactures of..... lb.	849,100	6,492	42,095,700	123,965
45	Manganese..... lb.	126	725	810,529	13,048
46	Mineral water.....	-	30,343	-	188,559
47	Salt..... lb.	204,582,887	325,433	267,789,900	465,253
48	Silica (quartz)..... lb.	402,100	2,876	1,146,000	9,531
49	Sulphur..... lb.	21,128,656	215,433	42,943,340	430,632

* Quantities and values of products marked with a star are for the calendar year.



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TABLE VII. Exports of minerals and mineral products by quantities and values compared for 1910 and 1900.

No.	Classes of minerals and mineral products.	1900 (Calendar year)		1910 (Calendar year)	
		Quantity.	Value.	Quantity.	Value.
			\$		\$
	Metallic ores and products—				
1	Aluminium, crude..... lb.	-	-	7,722,400	1,160,242
2	Aluminium, manufactures of..... lb.	-	-	-	3,741
3	Antimony..... tons	210	3,441	239	14,095
4	Copper..... lb.	23,631,523	1,741,885	56,964,127	5,840,553
5	Gold.....	-	-	-	5,491,051
6	Iron ore..... tons.	5,527	13,511	114,499	324,186
7	Pig iron..... tons	3,513	88,052	9,763	296,310
8	Lead..... lb.	57,642,029	1,917,690	7,759,053	249,482
9	Nickel.....	-	1,031,030	36,014,782	4,030,040
10	Silver.....	-	2,341,872	-	15,649,537
	Abrasive products—				
11	Corundum..... tons	302	-	1,764	-
12	Grindstones.....	-	42,128	-	23,502
	Fuel and light materials—				
13	Coal..... tons	1,787,777	-	2,377,049	-
14	Coke..... tons	41,529	131,278	57,971	250,715
15	Petroleum..... gal.	8,559	2,396	2,818	462
	Mineral pigments—				
16	Iron oxides, etc..... tons	651	7,154	1,746	29,839
17	Barytes..... tons	-	-	5	150
	Structural materials of stone and clay—				
18	Cement.....	-	3,296	-	12,914
19	Building brick..... M.	546	4,528	390	2,762
20	Lime.....	-	80,852	-	44,762
21	Sand and gravel..... tons	197,558	101,666	624,824	407,974
22	Stone, unwrought.....	-	115,711	-	22,119
23	Stone, wrought.....	-	5,993	-	5,352
	Miscellaneous products—				
24	Arsenic..... lb.	-	-	4,512,673	173,932
25	Asbestos..... tons	16,993	693,105	71,845	2,108,632
26	Chromic iron..... tons	-	-	15	150
27	Feldspar..... tons	379	1,116	15,601	47,962
28	Graphite (crude)..... tons	1,550	40,132	788	53,008
29	Graphite, manufactures of.....	-	6,065	-	66,658
30	Gypsum (crude)..... tons	188,262	201,912	346,081	416,725
31	Gypsum, cut or ground.....	-	19,834	-	12,306
32	Manganese..... tons	34	1,720	4	160
33	Mica..... tons	-	146,750	469	330,903
34	Pyrites..... tons	17,620	41,182	30,434	110,071
35	Salt..... lb.	2,108,568	8,997	275,200	2,618