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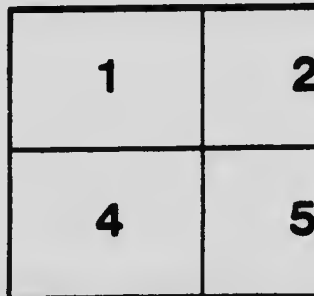
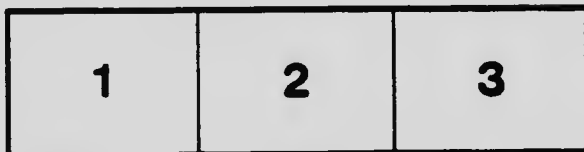
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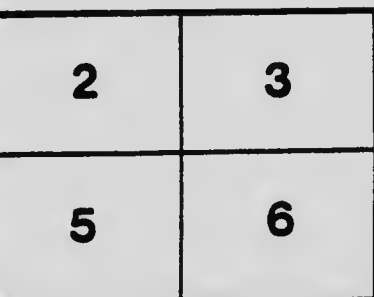
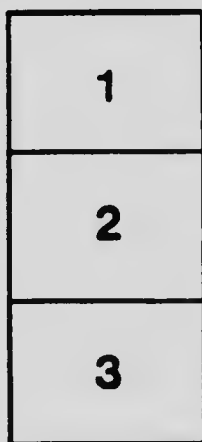
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THE  
PRODUCTION OF CEMENT

IN

CANADA

DURING THE CALENDAR YEAR

1908

BY

JOHN McLEISH, B.A.,  
Chief of the Division of Mineral Resources and Statistics

OTTAWA

GOVERNMENT PRINTING BUREAU

1909

No. 31.

## THE PRODUCTION OF CEMENT IN CANADA, 1908.

The Mines Branch of the Department of Mines has received from the producers complete statistics of the production of Portland cement in Canada, in 1908.

According to these returns the total quantity of Portland cement made in Canada in 1908 was 3,495,961 barrels of 350 pounds net, as compared with 2,491,513 barrels in 1907, or an increase of 1,004,448 barrels or 40·3 per cent.

The total quantity of Canadian Portland cement sold in 1908 was 2,665,289 barrels as compared with 2,436,093 barrels in 1907, or an increase of 229,196 barrels or 9·4 per cent.

The total consumption of Portland cement in 1908, including Canadian and imported cements was 3,134,338 barrels (of 350 lbs. net) as compared with 3,108,723 barrels in 1907, or an increase of 25,615 barrels or 0·8 per cent.

In addition to the above, other important statistical returns respecting the stocks on hand at the beginning and end of the year, the total value and average price per barrel, the number of men employed and wages paid, the quantity and value of the imports, etc., for the years 1907 and 1908, are shown in comparative form in the following table.

Comparisons of Production, Sales and Imports of Portland Cement  
in 1907 and 1908.

	1907.	1908.	INCREASE.	%	DECREAS..	%
Cement sold.....bls.	2,436,093	2,665,289	229,196	9·4		
Cement manufactured....."	2,491,513	3,495,961	1,004,448	40·3		
Stock on hand, Jan. 1....."	299,015	383,349	84,334	28·2		
Dec. 31....."	354,435	1,214,021	859,586	242·5		
Value of cement sold.....\$	3,777,328	3,709,139			68,189	1·8
Average price per bl.....\$	1·55	1·39			0·16	10·3
Wages paid.....\$	956,080	1,275,638	319,558	33·4		
Men employed.....No.	1,780	3,029	1,243	69·6		
Imports of Portland cement..bls.	672,630	469,049			203,581	30·3
Value of cement.....\$	837,520	531,045			306,475	36·6
Average price per bl.....\$	1·24	1·13			0·11	8·9
Total consumption of cement in Canada.....bls.	3,108,723	3,134,338	25,615	0·8		
No. of completed plants operated	17	23	6	35·3		
Total daily capacity of operating plants as at Dec. 31.....bls.	14,400	27,500	13,100	90·9		

The production of Portland cement in 1908 was derived from 23 operating plants, with a total daily capacity of 27,500 barrels, equivalent to about 8,250,000 barrels per year of 300 days, or 10,000,000 if all plants were run continuously for the whole year. The operating plants were distributed as follows: One in Nova Scotia using blast furnace slag; one in Manitoba making a natural Portland cement; one in British Columbia, two in Alberta and three in Quebec using limestone and clay; and fifteen in Ontario, of which 12 use marl and 3 limestone.

The total daily capacity of the plants using marl was 10,400 barrels, as compared with 17,100 barrels per day for all other plants. Of the total quantity of cement made in 1908, 1,573,090 barrels were made from marl and 1,522,871 barrels from limestone and slag.

It is not possible to give the detailed production in all of the provinces without divulging confidential returns. The following groupings, however, may be made: (1) Quebec and Nova Scotia; (2) Ontario; (3) Alberta, Manitoba and British Columbia.

The production in these groups in 1907 and 1908 was as follows:—

(1) Quebec and Nova Scotia.

	1907.	1908.	INCREASE.	%	DECREASE.	%
Cement sold.....bls.	456,579	749,021	292,442	64.1		
Cement manufactured....."	456,625	943,712	487,087	106.9		
Stock on hand Jan. 1....."	40,200	40,249	49	.1		
Stock on hand Dec. 31....."	40,216	244,937	204,721	508.6		
Value of cement sold.....\$	664,806	1,051,144	386,338	58.1		
Wages paid.....\$	104,116	203,855	100,739	102.2		
Men employed.....No.	305	705	400	130.8		
Total daily capacity of operating plants.....bls.	2,300	7,900	5,600	243.5		

(2) Ontario.

	1907.	1908.	INCREASE.	%	DECREASE.	%
Cement sold.....bls.	1,775,484	1,518,896			256,588	11.5
Cement manufactured....."	1,816,662	2,016,737	200,075	11.0		
Stock on hand Jan. 1....."	242,248	314,579	72,331	29.9		
Stock on hand Dec. 31....."	283,426	812,430	529,004	186.6		
Value of cement sold.....\$	2,705,167	1,909,815			795,352	29.4
Wages paid.....\$	684,964	636,955			48,009	7.0
Men employed.....No.	1,192	1,619	427	35.8		
Total daily capacity of operating plants.....bls.	9,400	14,900	5,500	58.5		

(3) Manitoba, Alberta and British Columbia.

	1907.	1908.	INCREASE.	%	DECREASE.	%
Cement sold.....bls.	204,030	367,382	163,352	84.8		
Cement manufactured....."	218,226	525,512	307,286	140.8		
Stock on hand Jan. 1....."	16,567	28,524	11,957	72.2		
Stock on hand Dec. 31....."	30,763	156,654	125,891	409.2		
Value of cement sold.....\$	407,205	748,180	340,975	83.7		
Wages paid.....\$	167,000	344,828	177,828	106.5		
Men employed.....No.	289	615	326	112.8		
Total daily capacity of operating plants.....bls.	2,700	4,700	2,000	74.1		

Prices:—As already stated, the average price at the works during 1908 as returned by the manufacturers was \$1.39 per barrel. Prices in car lots, ex-package, at Toronto and Montreal, according to trade quotations, ranged from \$1.90 in January to as low as \$1.55 in December. In Winnipeg prices ruled during the latter half of the year at about \$2.40.

Imports and Exports:—There is very little cement exported from Canada; only \$34,591 worth being recorded for 1908. The imports of Portland cement, which were, previous to 1904, larger than the Canadian production, have been decreasing since 1906 and were in 1908 equivalent to but 17.6 per cent of the sales of Canadian cement, or 14.9 per cent of the total consumption. A duty of



12½ cents per 100 pounds, equivalent to 43½ cents per barrel of 350 pounds net, is levied on imports. The weight of the package is, however, included for purposes of duty.

The imports of cement during 1907 and 1908 by countries were as follows:—

	1907.			1908.		
	CWT.	%	VALUE.	CWT.	%	VALUE.
Great Britain .....	1,061,414	42.6	\$313,817	691,527	36.6	\$202,139
United States .....	1,134,113	48.2	431,313	922,576	55.0	283,800
Belgium .....	182,943	7.8	50,116	128,738	7.8	40,856
Other Countries .....	33,704	1.1	11,881	8,831	0.5	4,151
Totals .....	2,354,204	100	\$837,320	1,611,022	100	\$531,045
Equivalent in barrels .....	672,63			463,040		

In the following three tables statistics of the production, imports and consumption of cement in Canada are given for the past five years:—

(1) Annual Production of Portland Cement, 1904-1908.

Calendar Year.	Cement Made.	Cement Sold.	Stock or hand Dec. 31.	Value of Cement Sold.	Average Price per bl.	Daily Capacity of Operating Plants.
	Barrels.	Barrels.	Barrels.	\$	\$	Barrels.
1904 .....	908,980	910,358	112,051	1,287,862	1.41	.....
1905 .....	1,541,588	1,346,548	306,466	1,913,740	1.42	8,000
1906 .....	2,132,582	2,119,764	302,356	3,164,807	1.49	10,500
1907 .....	2,491,513	2,436,083	354,435	3,777,328	1.55	14,400
1908 .....	3,485,961	2,665,289	1,214,021	3,706,139	1.39	27,500

(2) Imports of Cement into Canada, 1904-1908 (Fiscal Year).

Fiscal Year.	Cement in bulk or bags. Value.	HYDRAULIC CEMENT.		PORTLAND CEMENT.	
		Cwt.	Value.	Cwt.	Value.
1904 .....	\$14,305 00	—	12,088	\$ 5,391 00	2,476,388
1905 .....	18,489 00	—	16,961	10,690 00	3,228,364
1906 .....	27,858 00	—	10,794	4,084 00	2,848,582
1907 (9 months) ..	16,201 00	—	1,192	685 00	1,531,843
1908 .....	12,418 00	—	18,960	6,710 00	2,427,381
					\$ 695,017 00
					1,234,649 00
					963,839 00
					523,120 00
					852,041 00

(3) Consumption of Portland Cement in Canada, 1904-1908.

Calendar Year.	Canadian.	Imported.	Total.
	Barrels.	Barrels.	Barrels.
1904 .....	910,358	784,030	1,694,388
1905 .....	1,346,548	617,538	2,261,106
1906 .....	2,119,764	665,931	2,785,695
1907 .....	2,436,083	672,639	3,108,721
1908 .....	2,665,289	669,049	3,134,338

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