A total of four men are required to run the briquetting plant. The briquettes find a ready sale at lump coal prices, whilst the demand is in excess of the output. They are giving every satisfaction both for furnace and range use.

The capacity of the plant is 45 tons per 10-hour run.



Head of Distributing Spout Showing Coal Feeding Into Same.

The coaling and briquetting plant here described is owned by the McDowell-Mowat Coal Co., Ltd., of Vancouver. Mr. Kerr, of the Canadian P. G. Mitchell Co., Montreal, superintended its construction. Mr. S. A. Lake, of Wilson and Lake, 422 Pacific Building, Vancouver, was the consulting engineer in charge of design and construction.

## BRICKS FOR BUILDING AND FIREPROOFING

The total production of clay building brick, including the common and pressed varieties, and ornamental, paving fire-brick, and fireproofing brick, is shown in the following statistics.

In 1911 the total sales were 732,901,056, valued at \$6,515,472, made up of 645,550,517 common, valued at \$5,420,890, or an average value per thousand of \$8.37; and 87,350,539 pressed brick, valued at \$1,094,582, or an average value per thousand of \$12.53. In addition to the common and pressed brick there was a production of ornamental brick of 605,643, valued at \$11,281, and a production of fireproofing brick and architectural terra-cotta valued at \$400,585.

In 1910 the production was 627,715,319 common brick, valued at \$5,105,354, or an average value per thousand of \$8.13; and 67,895,034 pressed brick, valued at \$807,294, or an average value per thousand of \$11.89; the total of the two classes being 695,610,353, valued at \$5,912,648. The production of ornamental brick in 1910 was 703,345, valued at \$16,092; and of fireproofing and architectural terra-cotta, \$176,979.

The increase in production of fireproofing has been particularly marked, and is due to the establishment of new plants, including the National Fire Proofing Company of Canada at Hamilton, Ont., and the Alberta Clay Products Company, Limited, of Medicine Hat, Alta.

The demand for brick has been very strong, particularly throughout the west, where numbers of plants are being increased in capacity and many new plants either contemplated or in course of construction.

The exports have never been large, averaging for a number of years past about \$6,000 in value per annum, but falling in 1910 and 1911 to \$2,762 and \$3,977, respectively, according to the latest report of Mr. J. McLeish, B.A., chief of the division of mineral resources and statistics. The annual imports

for a number of years previous to 1903 averaged only about \$20,000 in value. During the past eight years, however, the imports have rapidly increased from \$100,000 to nearly \$500,000 per annum. During the calendar year 1911 the imports were 51,102,000 brick, valued at \$475,865; of which 6,404,000, valued at \$72,675, or an average of \$11,35 per thousand, were imported from Great Britain; and 44,698,000, valued at \$403,190, or an average of \$9.02 per thousand, from the United States. The imports during the calendar year 1910 were 29,049,000 brick, valued at \$274,482; of which 1,993,000, valued at \$26,447, or an average of \$13.27 per thousand, were imported from Great Britain; and 27,056,000, valued at \$248,035, or an average of \$9.45 per thousand, from the United States.

The total production of paving brick and paving blocks in Canada in 1911 was reported as 5,220,400, valued at \$79,444, as compared with a production of 4,215,000, valued at \$78,980 in 1910.

This paving brick is made at West Toronto, Ont., from shale obtained from the banks of the Humber River. The annual production has for a number of years varied from 3,000,000 to over 5,000,000 per season, and the output finds a market chiefly in Toronto. The average price per thousand has varied from \$8 to \$20.

The imports of paving brick have during the past three years exceeded the domestic production. During the calendar year 1911 the imports were 11,450 thousand, valued at \$164,292, or \$14.34 per thousand, and included 4,988 thousand, valued at \$78,201, or \$15.68 per thousand, from the United States, and 6,462 thousand, valued at \$86,091, or \$13.32 per thousand, from Great Britain. The imports during the calendar year 1910 were 10,503 thousand, valued at \$124,994.

The manufacture of sand-lime or silica brick, although of comparatively recent origin in Canada, has developed with considerable rapidity during the past five years, for which statistics have been collected.

Returns received from sixteen producing firms showed total sales in 1911 of 51,535,243 brick, valued at \$442,427, or an average of \$8.58 per thousand, as compared with a production of 44,593,541 brick, valued at \$371,857, or an average of \$8.34 per thousand, by thirteen firms in 1910.

The total sales by nine firms in 1909 were 27,052,864 brick, valued at \$201,650, or an average of \$7.45 per thousand.

The number of men employed in 1911 was 337, and wages paid, \$166,902.

## RAILWAYS IN SASKATCHEWAN.

At the end of the season the Canadian Pacific Railway had 414.80 miles of main line and 1,659.45 miles of branch lines, or a total of 2,074.25 miles in Saskatchewan; the Canadian Northern Railway had 400.67 miles of main line and 1,653.93 miles of branch lines, or a total of 1,854.60 miles; and the Grand Trunk Pacific Railway had 415 miles of main line and 267.67 miles of branch lines, or a total of 682.67.

This gives a grand total for the province of 4,611.52 miles, made up of 1,230.47 miles of main lines and 3,381.05 miles of branch lines.

Throughout the whole season there was a shortage of labor, and much time was lost on account of the unsettled weather. When harvest time arrived the high wages offered by the farmers rendered it impossible to keep the construction gangs at full strength. The steel rail mills were slow in making deliveries, on account of the heavy demand for this material. These and other causes all contributed to delay construction, with the result that the number of miles of railway added during 1912 was much less than in other recent years.