

## CONSTRUCTION MATERIALS.

### Demand for Brick Shows Considerable Increase — Building Trade in Ontario is Well Served.

As compared with 1908, the output of common brick in Ontario, rose from 222,361 thousand to 246,308 thousand last year, and the value from \$1,575,875 to \$1,916,147. There was a decided increase also in the value per thousand, the average being \$7.78, as compared with \$7.09 in 1908. The demand for brick was active during the year, especially in the larger cities, building operations in Toronto, for instance, which is essentially a city of brick, being decidedly brisk. A large quantity of brick is manufactured in and around Toronto, many of the brickyards being extensive and well equipped. Reference to the figures published as to the production of brick shows that the average value at the yard has risen from \$5.73 per thousand in 1901 to \$7.78 per thousand in 1909, an increase of over 35 per cent. The cost of brick constructions has been heavily affected during the same time, since the cost of labor has experienced an advance probably quite as great.

#### Quality of Brick Shows Improvement.

There has, of late years, been a marked improvement in the quality of brick made in first-class yards. Kilns of modern construction burn harder and more evenly, and there is a smaller proportion of soft brick. The present taste in brick houses, too, does not demand the same uniformity of color that was formerly insisted upon; in fact, a variety of shade, instead of being objected to, is rather desired. There is also a much greater range of products than was made years ago. From white and buff to cherry red and up to a dark, even purplish, hue, bricks of all tints and shades are freely used, and pleasing effects are sometimes obtained by employing clinker or over-burned bricks, greenish or yellowish in color. The hard-burned bricks of the present day bid fair to give us durable towns and cities, not perhaps so handsome as those built of stone, but less subject to disastrous conflagrations than those made of wood, so much employed south of the line.

Of all varieties of brick there were made last year \$2,480,418 worth, comprising common \$1,916,147, pressed \$490,571, and paving \$73,700. In the brick and tile yards there were 3,166 men employed, earning \$961,881 in wages. The brick-making season is for the most part confined to the months of late spring, summer and early fall. This, and not a low rate of wages, accounts for the comparatively small earnings of brickmakers, which last year averaged only \$303.

#### Building Trade in Ontario Well Served.

The activity in building operations last year is reflected in the increased output of lime, of which 2,633,500 bushels were made, as compared with 2,442,331 bushels in 1908. The value also went up to \$470,858, as against \$448,596.

The building trade in Ontario is well served, not only by the abundance of clay suitable for the making of brick, but also by the widespread distribution of limestone, which can be burned into lime. In composition, the rock varies from nearly pure carbonate of lime to dolomite, in structure from crystalline to fossiliferous, and in geological age from Archean to the upper members of the Devonian series, but almost all kinds will make good lime. The idea that highly magnesium limestones are unfitted for lime has been shown to have no foundation.

The value of the building and crushed stone produced last year was \$660,000, of which \$228,000 worth was limestone used as flux in blast furnaces. The output of the stone

quarries in Ontario varies from year to year, not only in accordance with the fluctuations in the building trade, but also in accordance with the demand for large public works. It is also adversely affected by the growing use of cement, which is being more and more applied to uses for which stone was formerly employed. The greater part of the product is limestone.

#### Portland Cement Output Increases.

The only kind of cement now being made in the province is Portland cement, the manufacture of the natural rock variety having come to an end in 1907. Of Portland cement however, the output has been annually increasing since 1891 when the industry began. Last year there were made 2,303,263 barrels, valued at \$2,897,348, as against 2,022,877 barrels, worth \$2,417,769 in 1908, the average price for last year being \$1.257 per barrel at the factory, as compared with \$1.195 in 1908, an increase of \$0.061 per barrel.

The chief feature of interest in the industry last year was the formation of the Canada Cement Company, Limited, with headquarters at Montreal, a "merger" which united under one management the following plants in Ontario, as well as three factories in Quebec and one in Alberta, namely: Lehigh, Belleville, Marlbank, Port Colborne, Lakefield and Shallow Lake. The following companies were absorbed by the merger: Belleville Portland Cement Company, Belleville; Lehigh Portland Cement Company, Belleville; Canadian Portland Cement Company, Marlbank and Port Colborne; Lakefield Portland Cement Company, Lakefield; Owen Sound Portland Cement Company, Shallow Lake. There now remain outside of the "merger" the following cement companies in Ontario: Maple Leaf Portland Cement Company, Atwood; Grey and Bruce Portland Cement Company, Owen Sound; National Portland Cement Company, Durham; Superior Portland Cement Company, Orangeville; Imperial Portland Cement Company, Owen Sound; Crown Portland Cement Company, Warton (formerly Colonial Portland Cement Company); Ontario Portland Cement Company, Blue Lake; Hanover Portland Cement Company, Hanover; Kirkfield Portland Cement Company, Kirkfield; Ben Allen Portland Cement Company, Owen Sound; and Sun Portland Cement Company, Owen Sound. Of these the Imperial, Crown and Ben Allen companies were idle throughout the year, and the Maple Leaf and Grey and Bruce operated for part of the year only. The output of the independent companies was small compared with that of the combine, which produced the bulk of the cement made last year. The industry gave employment to 1,354 men, whose wages amounted to \$631,137.

#### Drain Tile and Sewer Pipes.

The number of drain tile made last year was 27,418,000, having a value of \$363,550. Tile draining is being more and more practised by the farmers of Ontario, who recognize the advantage of freeing their low-lying lands of surplus moisture, which retards the growth and maturing of their crops and invites early frosts. The production in 1908 was valued at \$338,658.

Of four sewer pipe factories, three were in operation in 1909, namely, those of the Hamilton and Toronto, Dominion, and Ontario Sewer Pipe companies. The output had a value of \$311,830, as against \$344,260 in 1908. The potteries of Ontario turned out in 1909, \$43,214 worth of goods.

## COMING MEETINGS.

NEW YORK CEMENT SHOW.—December 14-20, 1910. First annual convention in Madison Square Garden, New York. Under the management of the Cement Products Exhibition Company, 115 Adams St., Chicago.