

7,500,000. Value of output say \$90,000, and amount of wages \$32,000. There are three sewer tile works, turning out 1,375,000 tiles of a value of \$270,000.

Five cement works in the province, at Queenston, Thorold, Limehouse, Deseronto and Owen Sound, manufactured 48,211 barrels cement, valued at \$44,501, costing for labor \$23,400. In this output is included 2,033 barrels of Portland cement, valued at say \$2.50 per barrel, being "the first of this kind of cement produced in Ontario in commercial quantities."

Ontario boasts thirty pottery works, and these, says the report, turned out last year wares to the total value of \$45,000. We suspect an error in the figures here, for we should be sorry to believe that such a sum represented properly the value of the output of thirty concerns. An important paragraph tells us that extensive beds of kaolin—a fine clay, suitable for making china ware—have been found on tributaries of the Moose River, the Abitibi and the Missinabi.

#### MINERALS IN ONTARIO.

Turning to minerals proper, in the *Ontario Bureau of Mines' Report*, the output of which was valued at \$1,849,473, we learn from the letter of dedication that the Inspector of Mines gives information of enterprise in a number of new directions, but especially in gold and iron-mining. Reference is doubtless made here to the Lake of the Woods district, where much gold prospecting was induced by the building of reduction works at Rat Portage and to the finding of leads at Thessalon River and Hastings; also to the recent finds of iron ore on the Mattawan and the Antik-Okan rivers, and the contract said to have been closed for the Belgian Bank by M. Van Bruyssele. The Belmont Iron Mine in Peterboro' county and the openings in Marmora township are also noted. These, however, are mostly experimental workings.

Something of more practical interest is told us about silver. No less than thirteen silver mines are reported upon; only two were idle, some were developing, others as steadily working in the Lake Superior district. These employed from 6 to 80 men each; at the Beaver mine, for example, 20 tons per day of mill rock, and an equal quantity of refuse rock, was the average handled. The Badger mine has shipped ore regularly, and the stamp mill had treated 3,500 tons ore between April and December. The output of the four principal mines is given as 14,925 tons ore, valued at \$64,475, which, nevertheless, cost \$100,278 in labor to take out.

The nickel copper mines of the Sudbury district produced, we are told, 85,790 tons nickel ore, valued at only \$3.78 per ton. This is the quantity and this the price as returned by four mining companies which work eight mines and paid out \$322,201 during the year for "labor," which does not include outlay for roasting and smelting. There was sold to the United States Government out of the above product 4,586 tons of matte, containing say 900 tons nickel. Some large and rich finds

have been made during the year, it is stated; still the mines from which such vast things have been expected, were, after all, "less active during this year (1891) than during the former one." And all the phosphates we could find market for during the year was 4,900 tons. Somehow in the matter of realizing on our mining wealth, we Canadians

Never are, but always to be blest.

However, we might as well let our hopes spring a while longer. Mr. Blue tells us that we are being treated to a succession of surprises: natural gas, kaolin, platinum (page 92), cement, artesian wells, more iron ore, more nickel ore. Let him keep on prophesying unto us in his cheery way of these things, and may be some day we shall bring our undeveloped riches to market

The gypsum mines of the province, six in number, are all in the counties of Haldimand and Brant, and most of them have been worked for ten to twenty-five years. Their output last year, however, was small compared with former years: only 5,350 tons, valued at \$2.28 per ton, a matter of \$12,200—a trivial business compared with the gypsum works on the Bay of Fundy. One of these mines was purchased in 1890 by a company in Syracuse, New York, but this same company gets its supply for use at the Syracuse mill, "chiefly from the New Brunswick and Nova Scotia gypsum beds."

The annual make of salt from Ontario wells ranges from 350,000 to 400,000 barrels. Last year it was 44,167 tons, valued at only \$157,000, and this quantity was the output of seventeen salt works. We learn by telegram of the striking of a rich salt bed at Windsor, Essex, in boring for water for a railway.

Mica is in increased request of late years, so much of it being used for electrical purposes. The United States imported \$6,000 worth and produced \$250,000 worth in 1881, whereas in 1890 their production of it had declined to \$32,000 and their imports had gone up to \$161,740. Either, therefore, their supply is becoming exhausted, or they can get Canadian more cheaply than they can produce their own. White mica, as well as the amber and brown varieties, is found near the eastern end of the province (Kingston district), whence all our supplies are derived. More than half of our out-put of 240 tons last year was sold in the raw state, and it came from four mines.

According to a computation based upon actual railway shipments and the weekly price quotations, 894,647 barrels crude petroleum was raised in Ontario last year. Only the value of the crude oil is given, namely, \$1,209,558. If this were all converted into refined oil the value would be quadrupled.

A very important material, asbestos, finds short mention in the report. More than a million dollars worth (8,000 tons, valued at \$1,039,661) was produced in the Dominion in 1890, according to the *Engineering and Mining Journal*, but that was all from the Province of Quebec near the Vermont line. It is encouraging to learn that good asbestos has been found in

Marmora township on the Central Ontario Railway in this province, and that the mine is to be actively worked.

In another issue we shall devote some attention to the theoretical part of the report and to the recommendations or suggestions made by the director. It is to be borne in mind that the Bureau of Mines was only created in March, 1891, and that its officers had less than nine months in which to cover the great area of their field and to study and report upon their observations. If therefore one does not find in this first report all he expects, the reason is not far to seek. Mr. Blue frankly says that the book falls far short of his ideal. He has got together a lot of valuable and often interesting information, expert evidence and scientific opinion, and the book bears marks of conscientious labor.

#### FURNITURE.

Canadians ought to be even more distinguished as woodworkers than they are. The wealth and variety of products of the forest to be found in the various provinces of our Dominion are enormous. Only recently have we awakened to the value of many of the woods produced in Ontario itself. Or perhaps it would be more correct to say that the public taste of both Americans and Canadians has discovered beauties in woods that were formerly neglected. Twenty years ago, for example, basswood, butternut, birch, were little thought of except for fuel; ash was more considered as a capital thing for bakers' ovens; walnut, alas! was even used in old times for fence-rails.

Now-a-days it is found that Americans as well as Canadians appreciate the beauty and value of once-despised woods in matters of interior decoration. With walnut at \$100 a thousand feet and but little of it left in the country, one must needs look for substitutes. The old-fashioned prejudice in favor of mahogany, walnut and other dark woods is overcome. Birch, once despised, is plentifully used. Ash, both white and black, is in steady request. Soft elm, rock elm, water elm, has each its value. Butternut, whitewood and chestnut find their place in school and church, bank and dwelling decoration, as well as household furniture. Cherry is now at the top of the list of Canadian woods for decorative purposes. Oak is the most largely used of all our woods to-day for furniture making, and strikingly handsome furniture it makes. Forty years ago or so, the Hiltons in Montreal, and Jacques & Hay, in Toronto, made beautiful furniture of Canadian woods, and in more recent years exported it to England and Scotland. But the industry was trivial in extent at those periods compared with to-day. In the year 1891 a list of places in Ontario alone where furniture is made at wholesale, would include Guelph, Hanover, Wingham, London, Woodstock, Dundas, Hamilton, Stratford, Bowmanville, Berlin, Belleville, Plattsville, Kincaidine, Toronto. Houses in each of these places make for the trade, we are told, and have travelling salesmen out upon the road.