

made by the Ontario Canoe Company, and samples of the wood from which they are made are also on view. Standing on a pedestal are large specimens of Ontario marble, limestone, and granite, and above these are other examples of black and mottled marbles. Above these, again, are nearly fifty smaller specimens of dolomite, limestone, and granite, while, surmounting the whole, is a shaped block of the splendid pink marble of Quebec, which rests on a block of Red Syenite from the same Province. Next to the marbles is a long glass case containing mica from Lanark and other districts, terra-cotta from the Toronto Pressed Brick and Terra Cotta Company, with other products, manufactured and unmanufactured.

Towering above this case, to a height of quite 12 feet, is the feature of the section—a magnificent collection of fruits, which both Sir Henry Tyler and Mr. Paton declared to be the finest in the country. All the fruits are in bottles, but the diverse colours prevent the tameness so usual in bottled exhibits. Sir Henry Tyler called particular attention to this fruit trophy, which was one of the attractions in the Ontario section at the Chicago World's Fair. Everyone knows that Ontario produces splendid apples, but everyone does not know that in the Niagara peninsula grapes and peaches are cultivated successfully, while apricots, nectarines, almonds, and figs grow out-of-doors. The 600 specimens of fruit are indeed a remarkable proof of the fruit-growing powers of Ontario, and of the splendid sunshine of the Canadian climate.

Ranged round the walls of the section are numberless specimens of Ontario minerals. Gold, silver, lead, iron, copper, nickel, and zinc are to be seen; while interspersed between the cases containing these examples of the mineral wealth of the Province are small bottles of seeds and fruits. Also against the wall stands a collection of prepared woods, having at its head the arms of the Province—a red cross on white ground, with the maple-leaf below. On the walls themselves are numerous large photographs, presented by the Grand Trunk Railway Company, depicting lovely scenes in the woods, on the lakes, and busy scenes in the shipping centres and in the towns. Not the least noticeable among the photographs are representations of most of the trees of the Province.

THE CANADIAN BEET SUGAR INDUSTRY.

This journal has had frequent occasion to allude to the sugar beet factory at Berthierville, Que., under the management of Messrs. Michel Lefebvre & Co. Our contention always being that the sugar beet could be grown to as good advantage in Canada as any where else in the world, and that it was the duty of the Dominion Government to encourage the home production of beet sugar in manner somewhat as it was encouraged in the United States under the McKinley tariff. This question is constantly forcing itself before the public, and therefore we have pleasure in reproducing a letter on the subject written by Mr. R. H. Lauder, who has given it much study and investigation. Mr. Lauder's letter is as follows:

It is pretty generally known that some 10 or 12 years ago, three large, well equipped beet-sugar factories were erected at Farham, Conticook and Berthierville, in the Province of Quebec. The history of the operation of

these factories was until recently a continuous record of failures and discouragement. The causes of this result were, injudicious location of the works, insufficient capital, unskillful management, and, above all, an insufficient supply and poor quality of the beets furnished.

The only factory now in operation is the one at Berthierville. Undeterred by previous disasters, and confident that many of the causes which produced them could be avoided or overcome, Messrs. Michel Lefebvre & Co., of Montreal, about three years ago, became proprietors of the Berthierville factory, and made considerable additions and improvements to the buildings and machinery. By invitation of the proprietors, I recently visited the works, with a view of informing myself as to the methods of operation and particularly as to the views of the farmers in that section with respect to the value of the advantages conferred by such factories on the agricultural interests of the surrounding country.

Berthierville is a village 55 miles east of Montreal on the north shore of a branch of the St. Lawrence river, and is connected with the C. P. R. by a spur of about two miles to Berthier Junction. The grounds of the factory consist of 17 acres of land, lying about one-quarter of a mile north of the river, which necessitates the pumping of about 700,000 gallons of water per day from the river to the factory. This distance from the river was necessary, because for a few days at the breaking up of every winter, ice jams cause an overflow of the river which rendered it compulsory that the factory should be erected at a sufficient distance to escape the overflow. The buildings of the factory proper are almost entirely of substantial, thick, stone walls, and have a total frontage of about 540 feet; they are considerably larger than is necessary for a sugar factory of the present capacity for manufacturing 200 German, or 220 Canadian tons of sugar beets daily. In connection with the main building there are several outbuildings, the principal one of which is the lime kiln, being a large, brick tower about 40 feet high. The buildings, exclusive of machinery, are said to have cost \$196,000, and, with the machinery, the total cost of the factory was \$396,000. There must have been some serious mismanagement, or worse, in making the cost amount to any such sum. In conversation with Mr. Alfred Musy, the superintendent of the works, I found from a tender which the company has received from one of the best sugar works manufacturing firms in France that a beet sugar factory with a daily capacity for manufacturing 500 gross tons of beets, and equipped with the very best modern machinery, can now be erected for less than the cost of this 200-ton factory. Without a visit to the factory one could scarcely believe that such massive machinery and so many different kinds of apparatus are required in the manufacture of beet-sugar. For the motive power, three large boilers of 150 horse power each and one boiler of 30 horse power are employed. The consumption of coal per day of 24 hours is fully 40 tons, and of lime from 12 to 15 tons. Further details as to the machinery, or description of the process of manufacturing would occupy too much space. The main object of this letter is to describe the methods of dealing between the factory and the farmer.