

# COMMERCIAL UNION.

## The Mining Interests of Canada

Over read by T. D. Ledyard—The Richness of Canadian Ore Development Pointed Out—Location of the Leading Mines in Trade Under Commercial Union Depicted.

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a whole country, and especially such a mineral country as Canada, where the ore districts extend for hundreds of miles, because objectionable ore is found in some parts. There is bad ore in almost every iron district. Titaniferous ore is found in Minnesota, on the north shore of Lake Superior, not far from the district where "The Minnesota Iron Co." produces the very best Bessemer ore, and similarly, ores too high in phosphorus and sulphur are found in the Marquette and Menominee districts, not far from the most celebrated mines of pure ore. It is most unfair, therefore, to give our ores a bad name, because in some parts of our vast mineral districts are to be found some objectionable matters. Not only owners of American mines have spread these reports, but some of our own people are much too quick to condemn the products of their own country. People who know nothing about the subject have told me that our ores are no good, but strangely enough these are generally the opponents of Commercial Union, who claim to themselves all the loyalty in the country. It is a queer loyalty which refuses to recognize whatever is good among our own productions.

Within 110 miles of Toronto, both close to the Midland branch of the Grand Trunk, and also near the Canadian Pacific Railway, are deposits of Bessemer ores of excellent quality. An analysis of ore from a large bed

### IN THE TOWNSHIP OF BELMONT

shows sulphur, only a slight trace; phosphorus, 0.002, or one-thirtieth of the permitted limit for phosphorus in Bessemer ore; metallic iron, 65.36; the chemist remarking on the exceptional purity of this ore. Another analysis of average ore taken from all over this deposit gives metallic iron, 66.29 manganese 0.42; phosphorus, 0.024; silica, 3.19; titanium, none; sulphur, practically none. These analyses were made by chemists of large blast furnaces in the States, and have fully confirmed the first analysis made by Professor Chapman, of "The Toronto School of Science," from surface samples of this ore, who remarked:—"This is an exceedingly good ore, not too close in texture, rich in metal, quite free from titanium and practically free from phosphorus and sulphur, while the rock matter would be almost self-fluxing. It is well adapted for final treatment by the Bessemer process." Dr. Chapman's opinion has been fully confirmed by practical iron men. One prominent man in Cleveland writes, "I can sell all the ore of this quality that I can get." Professor Thomas Heys, of this city, who examined this ore bed, makes a similar report regarding the quality of the ore, and estimates there are at least one million tons of ore within one hundred feet of the surface.

### THE SNOWDEN IRON DISTRICT.

in the preparation of charcoal a number of men, and would make a good local market for the farm produce of the surrounding country.

### AN ERRONEOUS IMPRESSION CORRECTED.

The Canadian market is too small to induce capitalists to put up the expensive works necessary to make iron and steel, but if the whole North American market were open to us there are many points where furnaces would be erected. And here let me correct an erroneous impression with regard to the amount of fuel necessary for smelting iron. It was stated recently in a Restrictionist paper that it required two tons of coal to smelt one ton of ore. This is not the case, the fact being almost the reverse of this. Mr. John Birkinbine, of Philadelphia, editor of the *American Journal of Charcoal Iron Workers*, a very high authority, in a letter to the *Iron Age*, computes one ton of coke only to make one ton of pig iron. A correspondent of the *Buffalo Commercial Advertiser* last fall stated that 1,900 lbs. of Pennsylvania coke smelts  $1\frac{1}{2}$  tons of Lake Superior 66 $\frac{2}{3}$  per cent. iron ore, which yields one ton of pig iron in the furnace. An account appeared recently in the *Iron Age* of a run at the Union steel works, Chicago, where only about half the weight of fuel was used in smelting a quantity of ore, the proportion being about 1,750 lbs. of fuel to 3,500 lbs. of ore.

### FURNACES SHOULD BE CONVENIENTLY SITUATED.

This makes a vast difference in considering the favorable locality for a blast furnace. If we had free trade with our continent, why should not Toronto be an excellent point for a blast furnace and a good distributing point for its products? We have the best of ores within 125 miles of us and are much nearer to the fuel than many furnaces in the States. Connellville coke is carried 600 miles to the Chicago blast furnaces, and still they do an immense and very increasing business.

### A BENEFIT TO THE WHOLE COMMUNITY.

Although the manufacture of iron and steel benefits a community more than any other, one impressive fact may be stated to show the apathy of Canadians in these matters. Take the C. P. R. east from Toronto, and when you get a little more than 100 miles down the line you will be in the mineral district and close to deposits of Bessemer ore suitable for making steel rails. This mineral district extends for hundreds of miles, the C. P. R. traversing a great portion of it. Were the steel rails over which you are travelling made from Canadian ore? Not a bit of it. These rails were bought in England, probably made from Spanish ore, and in their manufacture did not contribute one dollar's worth of benefit to any Canadian, although similar ore from which the rails are made lies almost alongside the railway track. Is

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