

EDITORIAL NOTES.

The Eleventh Annual General Meeting of the Canadian Mining Institute will be held in Montreal, at the Windsor Hotel on the 3rd, 4th, and 5th of March, 1909. The list of papers to be presented is already large and is being added to from day to day. Information as regards railway arrangements, etc., appears on another page in this issue. We commend it to the careful attention of our readers.

Mr. J. B. Tyrrell has been advised of his election as corresponding member of the Council of the Institution of Mining and Metallurgy, London, England. This is a signal honor. The Institution of Mining and Metallurgy is the most carefully organized body of its kind. Membership is only attainable by professional men of high standing, unblemished reputation and a long record of practical service. Election as corresponding

member of the Council is, of course, a still higher honor.

The Cobalt representative of Beer, Sondheimer & Co., 42 Broadway, New York, has drawn our attention to an inaccuracy that occurred in our issue of January 15th. In that issue the shipments of ore to Germany were reported as being about 140 tons of low-grade ore. These figures were hastily prepared and, in this case, were inadequate. Beer, Sondheimer & Co., during 1908, contracted for and shipped 200 tons of high-grade ore from the Temiscaming & Hudson Bay Co.; 150 tons high-grade ore from Kerr Lake; 60 tons high-grade ore from Crown Reserve; and 60 tons high-grade from Silver Cliff. In addition to these shipments two cars of low-grade ore were shipped from Silver Cliff.

The high-grade ore is sent to Hamburg, Germany. The low-grade goes to Norfolk, Virginia.

SOME RECOLLECTIONS OF EARLY COPPER MINING IN CANADA.

Written for the Canadian Mining Journal by Dr. James Douglas.

The early records of copper mining in Canada tell a story of mingled success and failure, the failures unfortunately decidedly preponderating. Within the provinces of Quebec and Ontario, until the building of the Canadian Pacific and the discovery of the Sudbury Copper-Nickel ores, active mining in Ontario was confined to a group of mines on the shore of Lake Ontario, and a feeble attempt to work the native copper beds of Michipocoten Island. In Quebec the area of copper mining was confined to the eastern townships, where unquestionably large deposits of low grade copper ores of very different character exist.

The Bruce mines were discovered on the land of the Montreal Mining Co. on Lake Huron in 1846. An opening was said to have been first made upon them in 1847. The Wellington mines were shortly afterwards discovered, and opened on the lands of the same organization not far from the Bruce Mine. When active operations were undertaken John Taylor & Sons, of London, at the time the most noted of mine managers, took general charge, and therefore all the work and machinery above and below ground, were designed and conducted on the Cornish type. The veins on the Bruce and Wellington properties varied from a few inches to thirty feet in width, the mineral consisting of chalcopyrite associated with small quantities of iron pyrites in a quartz gangue. The ore was therefore admirably suited to yield a high concentrate to mechanical concentration. Returns of shipments from 1847 to 1860 show about 10,000 tons of concentrates averaging about 20 per cent. from the Bruce mines, and from 1847 to 1862 some 6,000 tons from the Wellington mines. The average of the ore mined is supposed to have been about 4 per cent. The highly acid character of the ore unfitted it for smelting, but attempts to smelt the concentrates with coal imported from Ohio were financially uneconomical. At that period the success attained by Henderson in leaching the Tharsis ore from

Spain by the Longmaid method induced the Company to attempt applying it to the Bruce ores. A M.-de-Bussy was sent from Europe to erect and superintend the operation of the plant. It was found, however, that while roasting with salt such highly sulphuretted ores as those from the Spanish peninsula chlorodized very thoroughly the copper, the method was not as applicable to pure chalcopyrite in a silicious gangue. At any rate the method was speedily abandoned, and after that the mines remained idle for a long period of time. De Bussy's experiments were made about the year 1869-70.

About the same year as the Bruce mines were discovered, namely, 1846, copper was discovered in the township of Inverness, County of Megantic, in Lower Canada. Some very rich ores of erubescite were discovered at surface; considerable work was done and some shipments were made in 1849-1850 and 1851. The surface indications did not however lead in depth to either large or permanent deposits, and the Inverness mines were after 1851 abandoned. But prior to that time some ores of erubescite and bornite had been discovered on the farm of a Mr. Harvey in the 15th range of the township of Leeds. The Quebec and St. Francis Mining Company was organized in 1847 to develop this property. John Arthur Phillips, then the most noted authority in England, was sent out in 1852 to report on the property by John Taylor & Sons. He was impressed but not persuaded. Subsequently, however, English capital was enlisted, and the English and Canadian Mining Company was organized. It erected concentrating works of the Cornish type, and carried on operations for some twenty years, though during half that period the Canadian stockholders owned the whole stock of the Company. The result of their operations went to show that the rich veins which appeared at surface, though they cut across the shales of the Quebec Group, were not continuous for any long