

APPENDIX No. 1

corundum for the production of aluminium. It is the richest of all minerals in aluminium. Pure corundum contains about 53 per cent of this metal. Inquiry was directed to ascertain if it was possible to use it for the production of aluminium. We were satisfied that if an economical process could be found for treating the ore to produce the metal, it might become the basis of a very important industry for the province, especially as at that time the uses of aluminium were well known throughout the world.

By the Chairman:

Q. Did you find much corundum?—A. Yes, there are very large quantities. It occurs over an area of about 70 miles long by from half a mile to three miles wide—that is the corundum bearing rock has that extent, but it is only here and there that the mineral itself occurs in paying quantities. A number of valuable deposits have been discovered there, and at the present time operations are carried on upon two locations, both of them near the York branch of the Madawaska river. I may say that almost immediately upon the discovery of the mineral the local government withdrew the lands from sale. Nearly the whole tract of country there was free grant land. There were settlers scattered over it, but the minerals were withheld from sale. They did not go with the patent, and we withheld the land from sale pending a study of the best means of dealing with corundum so as to develop an industry.

Q. The government did this at the instance of the Bureau of Mines?—A. On my recommendation. Our experience had been that when any important discovery of that kind was made, the prospectors rushed in and took up all the good properties, and held them for a big price. We wanted, if possible, to get the capitalists and the practical man in on the ground floor and give him the best chance, and that policy we worked out. We invited tenders for the purchase of land subject to working conditions. The companies were required to have a minimum capital, and to expend a certain amount every year in mining operations, to put up works, and especially to direct their attention to a possible method of treating the corundum for the production of aluminium, and to whatever company gave us the best proposition, we gave the first chance to select the lands up to a certain limit.

Q. You have a couple of companies working there now, have you not?—A. Yes, but only the tender of one company was accepted.

By the Hon. Mr. Sullivan:

Q. Americans were allowed to compete as well as Canadians?—A. Yes, and we had a number of Americans there. There are some Americans interested in this company.

Q. Pretty much altogether Americans now, are they not?—A. No, that is not the case. Three Canadians were interested in the first venture. One of them is a large stockholder in the Massey-Harris Company, Mr. Shenstone; another is Mr. B. A. C. Craig, of Toronto. They organized the company and proceeded to business.

Q. Did you make any investigation as to the nature of the substance that was combined, in the reduction of the metal?—A. No.

Q. Had you a laboratory there?—A. No, but we employed a professor at the School of Mining, in Kingston, Professor Miller. It was Professor Miller we employed to explore the country and to make a report upon it, and to state in his report the locations of all discoveries he might make in the process of his exploration. We also had Professor Coleman doing some work. Professor Coleman was at that time the geologist of the Bureau of Mines. He is the professor of Mineralogy in the School of Practical Science in Toronto. He has been identified with the work of the Bureau of Mines since its organization in 1891. Professor Miller was employed temporarily during the summer vacations from 1896 onward, until the time I left the bureau in 1900. Since then he has been appointed an officer of the bureau and he has continued to devote his attention to this among other minerals. I may say that under the contract made with the Canadian Corundum Company they were required to spend a certain amount every year—my recollection is \$3,000—in experiments to discover a method for producing aluminum from the ore.