

Development of the corundum deposits.—The great extent and comparative richness of the Ontario corundum deposits prompted the Government of that province to take such action as seemed best calculated to develop the deposits and also to establish a home industry. Regulations were accordingly drafted under which the mineral rights in lands lying within the known areas of corundum-bearing rocks were withdrawn from sale, so that their acquisition for mining purposes could only be obtained under the leasehold system. An order-in-Council was adopted on July 4, 1898, embodying a series of provisions having such a purpose in view, it being stated that the Commissioner of Crown Lands may receive tenders for mining lands and mining rights in the explored belt to the 15th day of September, 1898.

Only one substantial tender was received under the terms of the proposed regulations, but an agreement upon all details was not reached until September 15, 1899. The contract was entered into with the Commissioner of Crown Lands by Messrs. Joseph H. Shennstone and B. A. C. Craig, of Toronto, on behalf of the Canada Corundum Company. A partial agreement, however, was made on September 15, 1898, with these same gentlemen, together with Mr. Lloyd Harris, of Brantford, that they should explore the corundum belt and select corundum-bearing lands from it, not to exceed 2,000 acres. Mr. Thomas Hodgson, who had been Professor Miller's assistant in the two previous years, and Mr. M. B. Baker, of Kingston, were engaged to do the necessary prospecting for the location of workable deposits of corundum. By September, 1899, a total area of 1,400 acres had been chosen and these lands were leased on September 15 to the Canada Corundum Company, who were organized to carry on mining and milling operations.

The Canada Corundum Company was, therefore, the first in the field, and in addition to the mining areas leased from the Government, purchased other lands from private owners. These included certain lots having deposits of corundum situated in Raglan, Radcliffe, Brudenell, Carlow, Montegale and Dungannon townships. Briefly stated, the agreement between the Ontario Government and the Canada Corundum Company, granted to the latter the exclusive right to make the first selection of corundum deposits throughout the Ontario corundum-bearing area, on lands whose mineral rights were still vested in the Crown. The company, as their part of the covenant, agreed to the expenditure of \$100,000 on certain specified conditions in the development of these mining lands and the establishment of a corundum industry. The agreement also entailed an obligation on the company's part to conduct certain experiments affecting the use of corundum especially as an ore of aluminum.

Active mining development work was inaugurated in April, 1900, under the supervision of Mr. Thomas Hodgson. The village and post-office were called "Craigmont" in appreciation of the services of Mr. B. A. C. Craig, the first vice-president and general manager of the company, to whose optimism and insistence the world is indebted for the establishment of its greatest natural corundum industry. An old saw-mill, with a small water power, on a creek flowing near the base of Robillard mountain, on which the corundum deposits are situated, was almost entirely remodeled, and concentrating machinery, with a crushing capacity of about 20 tons of corundum bearing rock daily, was installed. This mill is about 7 miles

from the village of Combermere on the Madawaska river. At first water power alone was used, but in a very short time this was supplemented by a 25 horse-power steam engine. Mining or quarrying operations (for the corundum rock was obtained by means of a series of large open-cuts or excavations), were undertaken on lots 3 and 4, concession 18, of Raglan, and later were extended into the same lots with addition of lot 2 in concession 19, of the same township. The equipment of the mill, which is located close to the line between lots 1 and 2, concession 18, was mainly designed for experimental purposes, following Prof. De Kalb's experimentation at the Kingston School of Mining, but on a much larger scale. It anticipated the construction of a much larger mill when the various problems attending the concentration of the corundum would be more thoroughly understood. Before the end of the year (1900) about 60 tons of cleaned, graded corundum were produced, but of this amount only 3 tons were sold.

Other companies organized.—In 1901, the Imperial Corundum Company, as also the Crown Corundum and Mica Company, both of Toronto, Ontario, were organized, and the same year did a considerable amount of development work, the former on lot 14 and part of lot 15, concession 8, and the latter on lot 14, concession 9, of the township of Methuen, in Peterborough county.

It was the irony of fate that despite the somewhat unusual imposed conditions affecting the lease by the Ontario Government of lands in the belt of corundum bearing rocks, all mining activity, even that contemplated, was on lots which were deeded to the original settlers, inclusive of the mineral rights, many years before.

In the spring of 1901, Mr. John Donnelly, of Kingston, convinced that other deposits of corundum might be found which had not been selected by the Canada Corundum Company, who had been accorded special permission by the Ontario Government to make the first selection of corundum-bearing lands, engaged Messrs. M. B. Baker and A. Longwell to prospect for occurrences of corundum, which gave promise of development as mines. These gentlemen, after a search of about six weeks, selected the corundum deposits situated on lots 27 and 28, concession 19, of Raglan township, in the county of Renfrew. Besides the advantageous situation of these occurrences on the side of a big hill, the location is within a short distance (2.5 miles) of Palmer rapids on the Madawaska river, a water power which with a head of 17 feet has a minimum capacity of 980 horse-power. A company known as the "Corundum Refiners, Limited," was organized under the management of Mr. P. Kirkegaard, formerly of the Deloro Gold Mines, to develop this property. Plans were also made for the erection of a large mill at Palmer rapids, but up to the present time, with the exception of some stripping and other preliminary mining development work, little or nothing has been done.

Ontario Corundum Company.—In July, 1902, the Ontario Corundum Company, with offices at Ottawa and Boston, commenced corundum mining operations at the locality where corundum was originally discovered by Ferrier (lot 14, concession 14, of Carlow township) now known as Burgess Mines. A Blake crusher, 7 x 10 in., was installed to crush the corundum-bearing rock, but it was afterwards found better to cob the ore into large lumps, this hand sorting resulted in a pro-