THE CANADIAN MINING INSTITUTE.

The annual meeting of the Canadian Mining Institute was held at the King Edward Hotel, Toronto, March 2nd, 3rd and 4th, under the presidency of Eugene Coste, with a good attendance. Unfortunately, the meeting was clouded by the news of the death, on February 29th, of B. T. A. Bell, secretary of the Institute.

At the first session the reports of the officers and council were presented, showing a membership of 435 and cash balance in hand of \$2,912.73.

Resolutions of sympathy with Mrs. Bell were passed, and Messrs. Coste, Brown and Major Leckie were appointed a special committee to represent the Institute at Mr. Bell's funeral. It was also decided that the annual dinner be cancelled. Messrs. Obalski, Hobart and Mills were appointed scrutineers of the ballot for officers.

Nine papers were submitted by student members. The Committee of Award in the Geological Section recommended that the cash prize of \$25 be given to S. H. Boright for his paper "On the Geology of the Northern Portion of the Boisdale Hills, Anticline." In the Mining Division the committee recommended that Norman W. Parlee be given a similar cash prize for his paper on "Rock Drilling and Blasting." None of the papers being deemed to have sufficient merit to warrant its award, the president's gold medal was not given.

The afternoon session opened with the president's address, in which he expressed his pleasure that the Institute was meeting in his native Province. The membership tended more and more toward the West, 108 Ontario members, 68 from British Columbia, and 11 in the Yukon having to be set against 69 from Quebec and 30 from Nova Scotia. He outlined the historical development of the Institute from the various provincial mining societies. The Government had recognized the value of their publications by an annual grant of \$3,000. They were the only body in the Dominion upon whom it devolved in the terms of the charter to take "concerted action in such matters as affect mining and metallurgical interests in Canada." Their recommendations to the Government had invariably been accepted. Three notable instances were adduced. Export duties on nickel ores and matte were not imposed, though approved by the Ontario Government in 1899. Taxes on nickel and copper ores and matte had been recognized as an interference with the industrial independence of these interests, which was essential to their development. The reduction to 2.5 per cent. of the export gold duty in the Yukon was a third point in which they had used their influence. They had helped to defeat the alien labor and eight-hour laws in British Columbia. Good roads and mining legislation in the Yukon and the free listing of gold, dredging and mining machinery were other matters in which they had acted. The president then discussed at some length the possible aid to mining which could be rendered by the Government. He called attention to the fact that, notwithstanding the great growth of the mining industry, the Geological Survey appropriations had not been increased, and its operations had been restricted by limited means. He advocated a great extension of the work now done; whether such extension could best be made by the establishment of a new bureau, or by extending the organization of the Geological Survey, would be a matter of detail. In either case the proposed bureau ought to contain several branches, as the general administration; the geological survey proper; the topographical and geographical survey; the preparation of reports and monographs on mining districts and mineral deposits; the collection of statistics; economic results and commercial facts bearing on the mining interests-which would be closely connected with the statistical bureau; and a department interested in metallurgical and chemical work. The work of such a department would not interfere with the mining rights and the making and administering of mining laws in the several Provinces. To them would be reserved the selling and leasing of mineral lands, the inspection of mines, the keeping of maps, plans and records; the collection of dues, license fees, taxes or royalties; the collection of statistics; the fostering of technical education, public assay offices, roads and transportation in mining districts; custom concentration and reduction works; deep sinking and

testing deposits; issuance of papers on newly dicovered mineral districts, etc.

A paper was read by Frederick Keffer on "Mining in the Boundary District, B.C." It supplemented his paper presented at the 1902 meeting, describing the improvements in mining and handling ore recently made. This was followed by a paper on "The Rossland Ore Deposits," by E. B. Kirby. W. Thompson followed with an account of the work now being done on the low-grade ores of the Rossland district, including the application of the Elmore oil concentration process.

At the evening session Mr. Thompson gave an account of the method adopted by him in building bulkheads in the Nickel Plate mine at Rossland to hold back water in an adjoining mine, having a head of 450 feet. They were built of brick and cement, and proved equal to the work. R. W. Brock read a paper on the "Lardeau District, B.C.", which was illustrated by maps and photographs. The district extends from the head of Kootenay lake to Arrow lake, and contains three zones of mineralization. Between Poplar lake and Silver Cap mountain had not been prospected, but the rich strikes of free gold at Poplar Creek were very remarkable. The Lucky Jack claim had been staked three years ago and thrown up by Buckle, the original prospector. The railway ran past it for a year before the rich discovery of free gold was made.

B. A. C. Craig described the new concentration mill of the Canadian Corundum Co. Dr. W. A. Parks spoke on the value of stratigraphical geology, which, he claimed was being neglected for petrography. The importance of this branch of study was shown. Mr. Coste, the greatest economic stratigraphist in the country, had discovered the two oil fields on which the Canadian manufacture of oil depended. Stratigraphical research might develop other native resources. S. Dillon Mills read a paper on "Recent Rock Movements in the Laurentian."

Thursday morning was devoted to the reading of students' papers. The following were read and discussed: "Relative Attraction of Different Minerals for Residuum Oil," J. F. Hamilton, School of Practical Science, Toronto; "Limitations of the Cyanide Process," T. H. Plunkett, School of Practical Science, Toronto; "The Treatment of the Dry Ores of the Slocan District," T. W. Cavers, School of Mining, Kingston, Ont.; "Notes on Some Deposits in the Eastern Ontario Gold Belt," C. W. Knight, School of Mining, Kingston, Ont. These papers generally showed careful work.

The afternoon session was adjourned as a mark of respect to the memory of B. T. A. Bell.

In the evening J. Obalski read a paper on "Minerals Containing Radium Found in Quebec. These included a specimen obtained from a pegmatite dike at the mica mine near Lake Pied des Monts, about eighteen miles from Murray Bay, in the county of Charlevoix, Quebec, part of which showed 70.7 per cent. uranium oxide, and exercised a strong radioactive influence. Photographs taken by means of the radioactivity were shown. Another specimen was a substance resembling coal, also found in a pegmatic dike, the ashes of which contained a large percentage of uranium oxide, and showed a high degree of radioactivity. Dr. McLennan, Toronto University, said that it was interesting to learn that such ores had been discovered in Canada, and suggested that exploring parties be provided with testing apparatus. In reply to Prof. Miller, he said that so far the only economic use of radium was in medicine. Prof. Curie, being unable to obtain the ore from Austria, the great value of radium having caused an embargo to be put on the ore, was now looking elsewhere, and would be glad to buy such ores from Ontario or Quebec. Dr. Mc-Lennan suggested that the Government give a bounty for the discovery of specimens.

E. L. Fraleck, Belleville, referred to the white mica discoveries in Ontario, and Prof. Miller said that these deposits would be explored this summer by an electric company, which hitherto has been obliged to import from India.

E. J. Davis, Commissioner of Ontario Crown Lands, in an address, said that he had met the suggestions of the mining engineers by abolishing royalties and leaving the mining laws unchanged. He regarded the presence of so many young men as a hopeful sign for the development of the country's mining interests, and referred appreciatively to the valuable services of Prof. Miller, Prof. Coleman and Thomas Gibson. Mr.