

TORONTO MEETING OF THE AMERICAN INSTITUTE OF MINING ENGINEERS

The proceedings of the Institute were formally opened on Tuesday afternoon, July 23rd, in the banquet hall of the King Edward Hotel. The delegates were met at the station by a reception committee consisting of Dr. W. G. Miller, Mr. J. B. Tyrrell, Mr. O. N. Scott and Mr. J. C. Murray.

At the afternoon session Mr. John Hays Hammond, the president, occupied the chair. In the absence of His Worship, Mayor Coatsworth, Alderman J. J. Graham read a brief address of welcome.

The secretary of the Institute, Dr. R. W. Raymond, was presented with a portrait of himself. This mark of appreciation was contributed to by members of the Institute from all quarters of the globe. Dr. James Douglas made the presentation. His speech was singularly happy. Dr. Raymond replied in a brief but most characteristically felicitous speech.

It was then announced by the secretary that Dr. Charles D. Wolcott, late Director of the United States Geological Survey, and now secretary of the Smithsonian Institute, had been unanimously elected an honorary member of the American Institute of Mining Engineers.

Papers were read by Professor W. P. Blake, on "The Destruction of the Salt Industry at Salton Lake, California," and by Dr. James Douglas, on "Some Reflections on Secrecy in the Arts."

In the evening a reception was held at the Parliament Buildings. The Hon. Mr. Cochrane occupied the chair, and Chief Justice Moss, Acting Lieutenant-Governor, welcomed the visitors on behalf of the Province of Ontario. The Hon. Mr. Foy, Acting Premier, also spoke briefly. Mr. John Hays Hammond, in an incisive and brilliant reply to the welcome, spoke appreciatively of Canadian mining engineers. Dr. R. W. Raymond and Dr. James also spoke. Refreshments were then served in the west wing of the building.

Wednesday's proceedings consisted in the reading of several papers. The ladies of the Institute were taken for a tour of inspection by the civic authorities. In the evening the whole party left for Cobalt.

As these meetings are being held just as THE CANADIAN MINING JOURNAL is going to press, it is impossible to give a full account of the proceedings. In our issue of August 15th we shall, however, publish a full and accurate account of all the meetings, both in Toronto and elsewhere.

It is noteworthy that never before has Toronto been visited by such a body of distinguished mining men. The Provincial authorities and the City Council, fully realizing the importance of the occasion, have spared no effort to make the visit of the American Institute of Mining Engineers a memorable one. The tone of all the meetings has been high, as is to be expected from a society whose officers are men of such lofty attainments and

ideals. The series of meetings, entirely apart from the commercial aspect of their advertising value, will do much to educate the mining men of this Province.

ELECTRO METALLURGY

At the recent meeting of the Engineering Conference of the Institution of Civil Engineers, in Great Britain, the subject of the progress of electro-metallurgy was very ably discussed in a paper presented by Mr. Bertram Blount, A.I.C.E. After referring to the recent improvement in methods, it is pointed out that the subject of electro-metallurgy was not so long ago so special that few were able to judge whether a process was likely to be successful or not. Now, however, it is being studied like any other branch of chemical engineering, its principles are well understood, and the result is that processes which may be of considerable laboratory interest, but are plainly unworkable commercially, are disregarded, and the energy and money formerly wasted on these are directed to those which may be made a commercial success. The principal electro-metallurgical industries at present are, the author states, the refining of copper, the greater part of the world's output being refined electrolytically, and the manufacture of aluminum, of sodium and of steel. The latter, it is opined, will eventually become the largest of all electro-metallurgical industries; but, at present, only a beginning has been made in the development of suitable methods. We quote the following paragraph from the paper itself: "Much delay in arriving at the present status has occurred because for years inventors tried to smelt iron instead of manufacturing steel from iron already smelted in the blast furnace. Now, however, attention is turned to steel-making as a more easily attainable end, with the results that already steels of high grade can be successfully prepared in electric furnaces of various type—the Heroult and the Kjellin representing two of the most distinctive and promising. Probably, in the first instance, the electrical method will have its greatest measure of success in preparing steels of such high grade that any extra cost will be quite outweighed by the certainty that the metal will absorb no impurity in the course of manufacture. But as methods are cheapened it may well be that every grade of steel now prepared in open hearth furnaces will be prepared in corresponding furnaces electrically heated. The power necessary should be obtainable from blast furnace gases, for after a liberal allowance for heating the blast and for the blowing engines, hoists and subsidiary gear, there is certainly an ample surplus, provided modern power plant is installed."

Another author of a paper read at the meeting refers to the electro-metallurgical experiments carried out in Canada under Government auspices, and states that three important points have been decided thereby: (1) that charcoal, even of inferior quality, can be satisfactorily used in the electric furnace without briquetting; (2) that ores containing a considerable percentage of sulphur and practically no manganese can be used to produce low sulphur pig iron; and (3) that magnetite offers no special difficulties for treatment by this method.