

In another Toronto daily the engineer is quoted as saying, "We have an immense body of ore worth many millions." This the public is invited to buy at 70 cents per share, the company being capitalized at \$1,000,000 divided into 1,000,000 shares. Buyers attracted by this astonishing liberality of the promoters will receive a shock when they read some of the other advertisements, however. In a pamphlet recently issued there is this paragraph.

"As already stated, no sinking or proving of this valuable mine has been done, for so rich is the ore that this has been deemed unnecessary, but on the surface of the property it has been very conservatively estimated that there is over \$20,000 worth of ore in sight, and the entire property has so far proven to carry ore running from 3 to 15 per cent. quicksilver."

The promoters go further and attach a report signed A. A. Lewis, M.E., in which it is stated that "there is an immense body of ore to start with and I believe that at depth the value will increase. This, however, has been proven to a certain extent by the tunnel which taps the ore body at a depth of one hundred feet, the value being considerably higher there than at the surface."

The same gentleman is responsible for the statement that "the general trend of the formation is east and west, with the vein dipping approximately forty per cent. to the north."

The company is incorporated as the King's Quicksilver Mining Company, Ontario, and you are invited to make all cheques payable to J. A. Morden & Co., Toronto.

MICROSCOPY IN ECONOMIC GEOLOGY

An address by Prof. R. Beck, delivered on the occasion of his inauguration as rector of the Royal School of Mines at Freiberg, Saxony, Oct. 3, 1911, has been translated by Joseph T. Singewald, Jr., and published in the May 31, 1913, issue of our contemporary, the Engineering and Mining Journal, N. Y. His subject is the use of the microscope in the study of rocks and ores, and he claims that such mining and geological engineers as wish to train themselves for consulting work, or such as wish to participate as pioneers in the mining development of new regions, and above all such as are striving to take an active part in the scientific part of practical geology, must familiarize themselves with the fundamental methods of microscopy. While the early protographers neglected opaque minerals and confined their studies as far as possible to fresh rather than altered rocks, their methods are now being successfully used in the study of all classes of ore deposits. Dr. Beck points out how microscopic study has given information concerning the origin of many ores, such as the platinum of the Urals, the nickel ores of Sudbury, contact metamorphic deposits of many districts

and replacement processes or metasomatism. Millmen might well make more use of the methods in solving ore dressing problems, as the microscope frequently gives valuable information concerning the physical properties of the ore. The mine examiner will sometimes find the instrument useful in detecting salting, and in making critical comparison of specimens. The application of microscopic methods to the study of opaque minerals is as yet a but slightly explored field. A few years ago Dr. Wm. Campbell and C. W. Knight showed how the methods could be applied to the study of such ores as those of Sudbury and Cobalt districts, and at a recent meeting of the American Institute of Mining Engineers, L. C. Graton and Jos. Murdoch presented valuable results of the microscopic study of sulphide ores of copper.

For purposes of reproduction and certain studies special preparation of sections is necessary; but ordinary thin sections can also be very profitably studied with a simple microscope.

RECORDING MINE ACCIDENTS

Recent publications of the U. S. Bureau of Mines show that, contrary to general opinion, the percentage of accidents in metal is greater than in coal mines. Some astonishing differences are shown between the several metal mining districts in number of non-fatal accidents reported. This, however, is largely, if not wholly, due to the various systems of recording accidents. Some companies make a record of practically every accident, however slight, while others record only the more serious accidents. Comparison is therefore, unfair to those who keep the most careful records and these are frequently the companies which take best care of their men.

MAGNETIC IRON SANDS

For various reasons the magnetic sand deposits in the County of Saguenay, Quebec, has been the subject of much investigation and discussion. In these columns have appeared from time to time articles from the pens of official and independent investigators.

Mr. G. C. Mackenzie, of the Mines Branch, Ottawa, is the last writer to deal with the matter. He is the author of a substantial pamphlet recently issued by the Branch.

The sands consist essentially of free particles of ilmenite, magnetite, garnet, quartz, feldspar, and olivine. The iron content ranges from about 15 per cent. to more than 50 per cent., with percentages of titanium running up to more than 7 per cent.

A great many tests have been made. Some of these have been crude, and some have been elaborate. Mr. Mackenzie reports recoveries of from 44 to 50 per cent. of the total iron content. By progressive concentration