

## Canadian Mining Review

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*The CANADIAN MINING REVIEW is devoted to the opening up of the mineral wealth of the Dominion, and its publishers will be thankful for any encouragement they may receive at the hands of those who are interested in its speedy development.*

*Visitors from the mining districts as well as others interested in Canadian Mineral Lands are cordially invited to call at our office.*

*Mining news and reports of new discoveries of mineral deposits are solicited.*

*All matter for publication in the REVIEW should be received at the office not later than the 20th of the month.*

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With the opening of the present season a marked interest is being manifested by the mining community at large in the developments that are now going on in the gold and silver regions on the north shore of Lake Superior. The mines that have for the past year been successfully operated, and other mining localities that have been taken up, and are now being prospected, are so accessible and so conveniently situated to the base of supplies, as compared with those of the far Western States and Territories, that the time has arrived when approved methods for permanent mining should be inaugurated. Until this has been done profitable development will be delayed. The manner in which mining operations are to be conducted in this new field will, in a great manner, be determined by the methods adopted by those who have been the first to engage in mining industries in the district. Not only should modern machinery be erected, but good judgment should be exercised in selecting such machinery as is most suitable to the ore on which it is to be employed. The employment of skilled and experienced workmen under proper and economical business management are cardinal features to be observed in all mining industries. Mistakes will occur, but they are to be corrected, not repeated. The Lake Superior district is among the most inviting mining centres of the Dominion, its mineral resources are varied, and its gold and silver ores are rich in these precious metals. The

value of the deposits having been assured, there should be a liberal and careful use of capital in developing them, and a prosperous future will be the result.

The Assistant Director of the Geological Survey of Canada, Dr. Robert Bell, sailed from Halifax on Wednesday, 27th May, on the *Alert*, in charge of the geological branch of the Hudson Bay Expedition. He will not return to Ottawa until late in the autumn.

Mr. William Pickford, London, England, President of the Phosphate of Lime Company, arrived in the city on 1st instant. Mr. Pickford had for some days previous been superintending the company's operations at its *High Rock* mine in Portland West.

Professor Edward J. Chapman, of the School of Natural Science, Toronto, paid us a visit a few days ago and expressed himself much gratified with the advancement in the mining industries of this district. Professor Chapman was in Ottawa attending the sessions of the Royal Society.

Mr. W. de L. Benedict, M.E., of the firm of Benedict & Cole, New York, paid us a visit last week. He was *en route* to New York, after having made a professional examination of the Fitzroy lead mine. Mr. Benedict has had much experience among the mineral deposits of Central Canada.

A special meeting of the shareholders of the Dominion Phosphate and Mining Company will be held at the office of the company, No. 8 Custom House Square, Montreal, on Tuesday, the 9th of June, proximo, at noon, for the purpose of considering, and if thought advisable, of increasing the capital stock of the company, or of authorizing the Directors to issue bonds of the company, as they may be required, for raising the means for contemplated increased operations, as authorized by the company's charter.

Many points of interest were touched upon by Professor Wm. Boyd Dawkins in the able address on the Canadian North-West which he delivered early in May before the Manchester Geographical Society. From his eminence as a geologist, most importance attaches to his remarks upon the undeveloped mineral wealth existing on the northern bank of the St. Lawrence Gold, silver and copper, he believed, were to be found in this region in valuable quantities, and in his opinion these deposits could, ere long, be fully worked, and the country peopled by large numbers of Englishmen.

MINERALOGICAL SOCIETY.—The science lecture room of the College of Ottawa was filled on the evening of May 7th, the occasion being the last regular meeting of the Mineralogical Society. The work of the year could not have been better completed than by the essay of Alf. Lussier, on the "Formation of Mineral Veins." He introduced his subject in a very lucid manner,

exposed the various facts revealed by observation, and the many theories devised to explain them. The style contributed much to make the lecture interesting even to the most indifferent in the audience. A plan was afterwards devised for a scientific excursion to Buckingham, which has since taken place, on the 19th of last month.

The Hudson Bay Expedition, under command of Lt. Gordon, R.N., sailed from Halifax, N.S., on Wednesday, 27th May, on board the *Alert*. The expedition comprises five parties to be located at the stations which were established in the Straits last season. Dr. Bell, Assistant Director of the Geological Survey, has accompanied the expedition and will explore the geological and mineralogical features of the east coast of Hudson Bay, which are already known to be of interest and importance, and will return with the ship in the autumn. The *Alert* is particularly adapted to this class of navigation and was presented some years ago to the United States Government by the British Government to assist in the search for Greeley. She has recently been transferred by the United States to the Canadian authorities for service in the expedition in which she is now engaged.

The *Canadian Gazette*, London, England, in a recent number says: "Among the minor industries of the Dominion none has had a more rapid growth than phosphate mining. It is still in its infancy, but seems certainly to have a very satisfactory future before it. The deposits in the Ottawa district are of the chief importance, and some details of their development may be of interest. It is only a few years since the first mine was opened up: now, on the Lievre River alone, seven or eight are being worked. And whilst the export of phosphate in 1878 was only 3,700 tons, this year the total will be at least 24,000 tons. The introduction of improved machinery, as English, Canadian and United States capital has been attracted to the industry, has not only increased the output, but has also diminished the cost of production. Little doubt is felt as to the demand for phosphate keeping pace with any reasonable increase in the supply."

A very interesting article by Dr. Bell, Assistant Director of the Geological Survey, "on the mode of occurrence of Apatite in the Laurentian system in Ontario and Quebec," has appeared in a recent number of *The Engineering and Mining Journal*, N.Y. The article contains a vast amount of valuable information bearing on the apatite deposits in the phosphate belt, of which Dr. Bell says: "In the county of Ottawa is the most productive phosphate belt as yet known, running northerly and following the general course of the Rivière du Lièvre. It has been traced through the townships of Templeton and Buckingham, Portland, Bowman, Bigelow and Wells, and I have been credibly informed that the mineral has been found in places in this direction to a distance of 100 miles north of the Ottawa river. In the Perth and Kingston regions the phosphate belt runs from the township of North Elmsley, south-