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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.*

*Address all correspondence, &c., to the Publishers of the CANADIAN MINING REVIEW, Ottawa.*

The death is announced of Mr. John Kelly, Deputy Commissioner of Mines for the Province of Nova Scotia. The late gentleman who was much respected has occupied this position for nearly a quarter of a century. Mr. Charles Carman, the deceased deputy's chief clerk, is highly spoken of as his probable successor.

At the annual meeting of the Iron and Steel Institute held in London on the 6th inst., President Piercy, the retiring officer, delivered an address on the iron and steel resources of Great Britain and the United States, and pointed out that British production of Bessemer Steel is rapidly decreasing.

We have observed with much satisfaction signs of improved methods being adopted for the development of our mining industry. During the past year substantial progress has been made. Our iron, copper, silver, gold, apatite, asbestos and salt deposits present a field for enterprise which has been too long neglected, and with the union of capital and skill we may confidently hope for the development of these resources, which, in the near future, will form not an unimportant part in advancing the welfare of the country.

At a great demonstration of miners held recently in the west of Scotland, a resolution was submitted regretting the continuance of low prices and consequent low wages; the evasions of the Truck Act, so common in the country, were strongly denounced and energetic measures to suppress the evil were called for. The reso-

lution also sought for the establishment by law of an eight hours day for underground workers. There was a considerable degree of earnestness and enthusiasm shown by the men, and the various speakers were warmly cheered when they referred to the hardships of the miners' lot and indicated the means by which it might be improved.

Nothing, remarks our esteemed contemporary the *Engineering and Mining Journal*, is more surprising than the tonic and strengthening effect of salt water or even a sea breeze on a gold or silver mine. A poor puny prospect-hole out west has only to cross the Atlantic once, and by the time it reaches London it is a "strong" and "healthy" lode, "mineralized throughout," full of "great strikes," and stronger and richer the deeper it is followed. From the merest shadow of a mine that would not yield "grub" to the industrious and abstemious Western miner, the sea air has invigorated it to such an extent that it not only can pay the liberal board of distinguished "guinea-pigs," but it promises a profit of from 20 to 50 per cent. on several million dollars of the worthy investors. We have not noticed that any physico-mineralogico-medical authorities have heretofore called attention to this curious and important phenomenon.

We continue to experience much difficulty in collecting correct statistics and other reliable facts in connection with mining operations in the Dominion; not that the information has been refused us in any case, but owing to the nature of it the owners and managers of mines neglect to furnish us with the particulars we desire. They appreciate the value of publishing reports of the mining industry, and wherever personal visits have been made they have been found willing to give details relating to the progress made, number and wages of employees, quantity and value of output, &c., &c. But while a personal visit to the various mines is desirable—and for gaining a proper knowledge of the industry, local observation and enquiry are occasionally essential—it is an expensive mode of ascertaining facts, and the great distances to be travelled in order to make a complete round of the mining centres of the Dominion would necessitate our employing a staff of representatives which we could not support. The progress of our mining industries is a subject in which the country at large has a deep interest, and the time has arrived when it has become necessary to organise a Bureau of Mines, in connection with the Geological Survey, with authority to make the supply of information compulsory.

Mining in Ontario is certainly growing in importance, though much more slowly than the extent and richness of her mineral deposits would warrant. Mr. A. Blue, Secretary of the Bureau of Industries, in his annual report to the Commissioner of Agriculture, declares that throughout the mining districts of the province,

as in the United States, speculation has been far more active than business enterprise, and adds: "It is easier to place a mine in the market for a million dollars than to sell it for a hundred thousand." The methods adopted for working mines have been, on a small scale, precisely the same as those pursued in the United States, on a large scale. The money required for prosecuting mining operations has been ventured in the hope of realising a speedy fortune from the discovery of a bonanza; operations are marked by rashness and extravagance, and too often end in disappointment and failure. In other words, plans are seldom laid with a view to the remote future, the desire being to produce the largest amount of bullion in the shortest time possible. The same experience is referred to by Mr. Clarence King, in the United States Census Report, recently issued. He says, after referring to the stability and steadiness of the mining industry in some foreign countries, "an engineer in this country is hardly to be blamed if he plans for the immediate present; on the one side he is pressed by the stockholders, clamorous for speedy profits, and on the other hand he realizes that the chances for a long period of bonanza are slight. His policy is forced upon him. He aims to secure given results by the most direct means, and when the object has been attained he cares little whether his drifts cave, and the structures over his hoisting works and mills fall in, if they have served their purpose." This, says Mr. Blue, is the record of Silver Islet, and East Silver Mountain, in the Province of Ontario, one of which has yielded millions of ore, and the other nothing beyond a rich surface show.

## Insoluble Phosphate.

The following letter has been recently addressed to a gentleman in the Southern States by N. B. Powter, Esq., manager in New York of the Grand Cayman's Phosphate Co., of Kingston, Jamaica, W. I.:

MY DEAR SIR,—

You ask "why does the insoluble phosphoric acid in the natural West Indian Guanos give good results when sown with potash and ammonia, when the insoluble phosphoric acid in Charlestown floats, Canadian apatite, navassa and other rocks give no results although applied in a much finer state of division than the West Indian Guanos?"

In reply, allow me to state that the solubility of the phosphoric acid depends on two great points.

First: The amount of volcanic heat to which they have been subjected. For instance, apatite is the most insoluble of all forms of phosphate rock, and the most perfectly crystallized by volcanic heat. Then, next, those rocks which have been only partially crystallized, such as Charlestown rock, Navassa, Connetable, Swan Islands, phosphate of alumina from Germany, France, and Spain, and many others. But the natural fertilizers from the low lying islands, which all show that they are water formations and have never been subjected to any heat are very few in number and of small extent, and most of them so low in grade as not to pay to mine and ship.