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CONDUCTED BY H. T. A. BELL.

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 15th of the month.

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

To Subscribers.

Recognising the daily increasing importance of the mining district of Port Arthur, the management have secured the services of a distinguished mining engineer, who will, from this issue, furnish our readers with authentic information as to the progress and development of these mines. Thoroughly competent correspondents have also been secured for other districts hitherto but imperfectly covered. THE REVIEW having been permanently enlarged to sixteen pages, subscribers will please note that the subscription price for 1888 has been increased to \$1.50. The management would again request that any irregularity in the delivery of subscribers' copies be at once notified to the office for correction.

Gold Assays.

The Village of Buckingham has been greatly exercised by reported discoveries of gold in the neighbourhood. A California miner who has been prospecting on a lot on the west side of the Lievre River, in the township of Buckingham, has exposed a vein of quartz about seven feet wide, and a sample said to have been taken from it has given an assay showing 42 ounces to the ton, equal to \$750. A specimen has been shown yielding a flake of gold as large as a five cent piece. Accurate samples have been taken from the vein by a prominent mine manager and submitted for assay, and the result is awaited with interest.

There appears to be considerable uncertainty about gold assays. Not only are the samples often the richest specimens obtainable, but the analysts' results are variable. Samples of quartz from the Mattawa district reported to have

given a rich percentage of ore have been re-assayed and have been pronounced to contain little or no traces of gold. Others taken from the properties of the Anglo-Canadian Phosphate Company, North Burgess, have assayed \$22, \$11, and \$5 to the ton, but subsequent trials, like those from Mattawa, gave no gold whatever. Specimens taken from a mine near Kingston yielded \$67, \$18, and nothing, in three trials, while a ten ton lot of the same ore crushed and treated at reduction works gave but \$6.00 per ton. Numerous other instances might be cited. It is evident that both samplers and chemists need both caution and instruction, and that too much credence should not be given to the first reports of gold bonanzas.

The facts of this latest discovery having been reported to one of the most eminent geologists in the United States, he remarks that the rocks of this region warrant the expectation of gold finds. He would expect it to occur chiefly in the slaty rocks or schists having small veins of quartz penetrating them. He recommends the search for gold to be made first in the streams and brooks, wherever there is running water. Two men with a crowbar and pan can prosecute the search effectively. The large stones should be pried out of the water bed, and the gravel and dirt in the bottom should be carefully washed in the pan. The result will show whether the surrounding rocks contain any gold, and, if so, search can then be made for its source.

The Calabogie Disaster.

The accident at the Calabogie Iron Mine, some particulars of which are given in another portion of THE REVIEW, is another of those disasters which urge the necessity of experienced and careful management in our mines, as well as the enforcement by legislation of a thorough system of mine inspection. We have again and again advocated that there should be some law enacted which would compel owners and superintendents to take every necessary precaution for the protection of the lives of their employees. In the absence of information as to the cause of this sad affair we refrain from further comment.

The Yukon Mines.

A few days before Dr. Dawson left on his Alaskan Survey we took occasion to refer to some very unfavourable reports then prevalent as to the richness of the minerals of this far off land. These stated that the mining, which is almost entirely placer, had been grossly exaggerated, and that food and provisions of all kind were so scarce that many of the miners had been glad to get out of the country alive. This is now corroborated by a letter to the *Colonist* signed by seven Yukon miners, who state that the reports of the country have been very highly coloured, and that the results to be gained by the venturesome spirits who have braved the perils of that long and arduous

journey to and from the mines are totally inadequate. On Dr. Dawson's return, in the course of next month, we hope to be able to furnish our readers with information as to the true state of affairs. The paragraph in another place headed "Mining in Alaska," is excerpted from a long article in the *Sitka Free Press*.

The Phosphate Market in the United States.

The increasing use of mineral manures in the Northern States warrants the belief that in the near future an extensive market for Canadian phosphate will be found in that region. Orders from Chicago and Buffalo have been received this season and many requests for samples have come from other places. As freights can be had by the returning grain vessels from Kingston to Chicago for \$1 per ton and it costs \$4.50 to take the Carolina phosphates there by rail, it is clear that the Canadian article will have a virtual monopoly of the Lake Shore region, especially as it contains about 25 per cent. more of phosphate of lime than the Carolina phosphate.

One difficulty in the extension of the use of Canadian phosphate in the United States is the inability of manufacturers to treat it in all cases with satisfaction. When it was first introduced into the United Kingdom it was found that the flouric acid contained in it affected the workman's throat injuriously and occasioned a stench that was offensive to the neighborhood. For these reasons its use was discontinued, until after some years of experiments, these objections were obviated, and now it is used extensively both in the United Kingdom and on the continent without complaint. One of the largest manufacturers in the United States says he is deterred from its use from fear of the complaint of his workmen. But as these difficulties have been overcome abroad, there seems no reason to suppose that they cannot be met successfully on this continent. If any manufacturer desires to know better how to treat this article we are able to place them in communication with one of the most experienced makers of superphosphate in England who would cheerfully give them information.

An Odious Comparison.

Having in recent issues looked into the question of our Geological Surveys and their relation to the Provincial Revenue, we now come to the consideration of the benefits actually derived by the several provinces of the Dominion from this indispensable branch of Government work.

Nova Scotia and British Columbia reserve the minerals for the use of the mining section of the population, and publish annual reports of the industry, and have each a Minister of Mines as a necessary result of so wise a course; while in Ontario and Quebec, the mining laws are such that only a very small revenue is derived from this source. In Ontario, wholly from sales, while in Quebec sales and royalty on