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THE OFFICIAL ORGAN

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Badly Amuck.

The *Halifax Colliery Guardian and Critic*, in its issue for May 18th, contains a remarkable article on the "deposition and treatment of gold-bearing ores"; remarkable for the intense ignorance of the writer thus displayed to public view and comment.

It is of course well known that the phenomenal genius who edits that paper knows absolutely nothing about the precious metal; but he should know (and if he does not it is herewith pointed out to him) that the gentlemen representing the gold industry in Nova Scotia, cannot possibly be expected to swallow such mental pabulum as the article referred to without intense intellectual nausea.

The amount of chemical, geological and metallurgical knowledge stored in the brain of the writer of this contribution to the *Critic* is almost equal to that shown by Mr. Mark Anthony in some of his most valuable geological contributions to the same paper, and we propose to treat our readers to some of the choicest morsels.

This encyclopaedic writer tells us in the first place what the "bottom fact now known about gold" is, and it is this: that all "original iron pyrites of small grain texture" contains more or less gold. We can with difficulty appreciate the immense satisfaction and relief of all metal lurgists and gold mine operators at learning at last the real "bottom fact" about this metal of "lordly appearance." As to the value of this "bottom fact we prefer to leave them to judge. Then, after a dozen lines of searching analysis of the disputed point as to whether gold in pyrites is in chemical or mechanical combination, the author discomposes the quietude following the announcement of his "bottom fact" by telling us that gold is not only in pyrites, but is "also in the crystalline or quartz and composite veins formed during the dislocation and upheaval of rocks.

We have before this called the *Critic's* attention to its bad punctuation, and it may be due to defective punctuation that we here have pre-

sented to us the alternative of "crystalline" veins and "quartz and composite" veins. We frankly have to admit that now we need a glossary—we are in water too deep for wading and we can't swim. The authoritative way in which the whole phenomena and causes of vein formation are grouped into the delightfully simple and intelligent clause "the dislocation and upheaval of rocks" leaves us speechless.

The following paragraph deserves to be reproduced entire:—

"Quartz that looks like coarse-grained white sugar is a good sign, but clear rock crystal quartz, or quartz with a glassy vitreous lustre, with no grains in its texture, never holds gold. The granular quartz in veins, badly stained with iron rust, and full of little sharp-cornered cells with iron dust in them, is the best prospect, and when this quartz is in streaks or sheets standing on edge, and intercalated between sheets of all sorts of yellow and brown minerals, and some sulphides of iron and copper, all filling up a vein which has masses of brown spongy iron ore or 'gossan' scattered over the surface at its outcrop, then the prospect requires immediate attention."

"Sheets of all sorts of yellow and brown minerals" like millerite, sulphur orpiment, mimetite and willemitite to say nothing of gold, topaz and yellow diamonds would, we are very ready to admit, require the most "immediate attention" possible to give it.

The writer then proceeds to tell us of the "original home of the gold," and points out how "comfortably things go on" until the zone of unoxidised ore is encountered, and that when the sulphides are "hard, and light, and sharp cornered, it is more than time for the mining engineer to cease."

This great truth about the "sharp corners" had hitherto escaped our attention; we strongly urge our gold mining readers to look sharply after "sharp corners," to be unremitting in their attention to these corners, and at the first symptom of "sharpness" call in a mining engineer immediately.

We must admit too that our knowledge of lithology, hitherto complacently believed to be rather good, is really trivial and elementary. For we are told that sometimes "slate beds are filled with small grains of quartz * * * this slate being simply an old bed of sand, mud, etc."

Shades of Bischoff and Sterry Hunt! How ignorant we mortals be. Listen ye ignoramuses and learn of "another obscure point in the history of gold"—

Another obscure point in the history of gold is that in the quartz veins, free from sulphur, the gold is sometimes found in grains, nuggets, sheets or strings, looking as though it had been melted, leading to the conclusion that these quartz veins have been reformed by heat from very silicious sulphide veins, or that the quartz has come up from below in a melted state, and after passing through sulphides and driving off the sulphur has brought the gold up with it. Something of this kind is indicated by the fact that auriferous quartz contains no water of crystallisation, differing in this respect from the crystalline varieties with shining surfaces or transparent bodies. Free gold quartz veins, when washed down, yield gravel diggings containing coarser wash gold than gravels derived from sulphide veins.

It would have been very pleasant if the author of this remarkable contribution had signed his name to it, for then the suspicion engendered by the closing paragraph might never have arisen. The fact is, that the concluding para-

graph, advocating the use of dry crushing and amalgamating, looks suspiciously like the veiled advertisement of some of the new patent dry processes, like the Walker-Carter, which are now trying to force their claims upon public notice.

The Heavy Metal Trade under the New Tariff.

Since the last issue of the REVIEW the tariff has undergone some changes in committee, but without altering in any material degree the principle of the new rates of duty which were first announced.

The rate on pig iron, etc., has been confirmed, and in connection with this manufacture in Canada, it is satisfactory to note that the opinion of members on both sides of the House was favorable to its continued encouragement. The action of the Ontario Government also in its bid for the production of pig iron in that Province appears to have met with general approval, and shows that, apart from politics, Canadians are now realizing that the manufacture of iron is one of the natural industries of this country.

As was to be expected, the increase of the duty on wrought scrap created a good deal of discussion, but it was shown that the rolling of foreign scrap into a quality of bar iron, which was certainly inferior to imported material, was clearly an anomaly in the iron trade. The price of iron has not changed since the duty on bar iron was lowered, showing that internal competition had been sufficient to keep figures a good deal below the cost of imported iron. Indeed it is difficult to see very much money in the manufacture of bar iron at present prices, but the mills are now getting some excellent scrap from the United States at very low figures, and this, with increased economy in manufacture, and the prospect of using at an early date puddled bars made from Canadian iron will certainly enable them to compete more satisfactorily with imported iron, and there is no doubt they will come out all right.

The items of wire and wire nails have been adjusted to the satisfaction of the manufacturers. In the case of wire, gauges 11 to 14 inclusive, had been reduced to 15%, as these are the gauges used in the manufacture of wire nails, the duty on which had been reduced considerably. On the other hand, it was evident that this was an injustice to the wire drawers, as the great bulk of their product is used in the manufacture of wire nails, and they have certainly not taken advantage of the difference in duty over imported wire. It has been settled by these gauges of wire being rated at 25%, as on the other sizes, and the duty on wire nails increased to one cent per pound, which is a reduction of one-half cent per pound on the rate under the old tariff. A good deal has been said on the subject of the low prices for wire nails in the United States, and there is no doubt that these have been selling at a basis price of under \$1 per keg, but the American basis is a 6" nail, with an extra of 50 cents per keg on 5", which