

## MINING.

Mining in this Province was never in a more flourishing condition than at present. Gold mining especially has made great strides within the past few years and we have been fortunate in adding to the ranks of our gold miners, numbers of experts in managing gold mines and in milling ores, through whose successful labors, capitalists both at home and abroad have become acquainted with the immense value of our gold fields. As a result, any discoverer of a promising property, now finds capitalists ready and eager to help him, and unless the present prosperity is checked by swindling operations, gold mining is soon destined to attain to great proportions.

At the urgent request of many persons deeply interested in mining matters in Nova Scotia, we commenced to publish in the last issue of the Critic the judge's minutes in the case of Putnam vs. Hardman and Taylor, but in deference to the opinion of Messrs. Meagher, Drysdale and Newcombe, a member of which firm called upon us at Mr. Hardman's request, claiming that the publication of these minutes would prejudice the case of their clients, we shall for the present discontinue the publication of the same, it being our earnest desire, while furthering the mining interests of this Province, not to commit any act that would in any way prejudice the case of any individual mine owner. The letter which we print below was addressed to the publisher of the Critic. The threat of an injunction which it contains is childish, and would not for a moment be seriously considered by the Court. The appeal to our sense of British fair-play and the assertion that their clients' cause would be prejudiced in the event of the publication of these minutes, are in themselves quite sufficient to deter us from doing so; but we promise our mining friends that sooner or later they shall have the full evidence as it is adduced at the trial.

PUTNAM VS TAYLOR, ET AL.

Dear Sir,—Our attention has just been called to the publication relating to the above case appearing in the last issue of THE CRITIC.

You are doubtless aware that the trial of this action was postponed at the October sittings of the Court upon the plaintiff's application. At that time the plaintiff had rested his case upon the evidence of which your publication purports to be a copy, and the evidence of Mr. Taylor, who was the defendants' first witness, had been given in part only. The question on trial is principally one of disputed fact, and you will readily see that your report of the proceedings can result in placing before the public (from whom the jury are to be drawn) the plaintiff's side of the case only. This in our opinion, and in the opinion of counsel associated with us, will tend to prejudice a fair and impartial trial of the cause. We have to request you therefore to withhold publication of these proceedings at least until the trial has been completed.

The circumstances of the case are such as in our opinion to warrant an application to the court to restrain this publication, and unless our request be complied with, we shall be compelled in the interest of our clients to institute an action to enforce compliance.

We trust, however, that your sense of justice and British fair-play will prevent your forcing us to this alternative. Awaiting your reply, which we shall expect to-morrow morning,

Yours truly,  
MEAGHER, DRYSDALE & NEWCOMBE.

The publisher of the Critic, Halifax.

We learn that the New Albion Mine at Montague, known as the DeWolf gold mining property, has been sold to a New York Syndicate, by Charles Annand, for the handsome price of \$60,000 in cash.

We understand the "Westfield" gold mine in Queens County, has been purchased at a fair sum by Capt. Nicholls, for some of his English friends. It appears the property was bonded several months ago, and considerable prospecting done since on the "Jumbo" lode, which ranges from 20 to over 75 feet wide. A shaft has been sunk some 40 feet deep in one of its widest places, and the yield far exceeds anticipations. Free gold is prominent, but its chief value lies in the concentrates, which are abundant. No doubt this pioneer mine on such large leads, will cause much stir in the locality, and also call attention to some of the other large leads of the Province. We saw an English paper some time since wherein Capt. N. had called attention to the undeveloped mineral wealth of our Province, for which he deserved great praise.

Mr. R. H. McLeod, a mining engineer, who has had great experience in mining in the United States and Mexico, is furnishing a series of most interesting articles to the *Gold Hunter*. We publish below a recent letter on

THE MINES AND MILL OF THE MOLEGA MINING COMPANY.—The property of the company is situated on the northern shore of Ponhook Lake, and the name Molega is a confusing misnomer, for it is the name of a large lake lying one and a half miles to the eastward of these mines. Ponhook Lake is on the Port Medway River, and 15 miles from the head of the tide at Mill Village. It is a fine sheet of water 8 miles in length. The mine is reached by wagon-road from Caledonia Corner, 9 miles distant; or from the port of Liverpool, distant 19 miles, part of this distance by boat on the lake. There is also a new carriage road opened direct to the port of Bridge-water, a distance of about 20 miles.

The mining property under consideration consists of 146 mining areas, (say areas) fronting directly upon the lake. The country rock is the prevailing whin and slate of all the Nova Scotia gold fields. This so-called "whin," an old country term, is really a genuine quartzite, which at one time was a silicious sandstone, that by the action of heat and pressure has

been solidified into its present state of compactness. The slate is the ordinary clay slate, and forms not more than one quarter of all the rock.

The ore bodies are gold-bearing quartz leads, varying in their thickness from 2 inches to 2 feet. They must have been formed in the bedding planes of these ancient Cambrian rocks, while they yet lay in a horizontal position. Since then these rocks have been folded into great wrinkles, (ante-clinal,) and their crests have been scoured away by the erosive agencies of nature, water, ice and air, thus exposing the quartz leads standing at the same inclination (dip) as the rock layers, and conforming of course with their strike or compass direction, which is nearly east and west. Over all this mining property there is a stratum of gravel and sand of an average thickness of about 4 feet. This must have been derived from the granite formation, 10 miles to the northward, as it is mostly granitic gravel, sand and bowlders. Upon this layer is a thin coating of alluvium, the result of decaying vegetation. Thus it will be seen that the leads, as a rule, do not make an outcrop. Their presence is generally indicated by "float" or bowlders, being fragments of the leads lying upon or imbedded either in the gravel or the alluvium. They are encountered always to the southward of their leads, and as a rule, are within one hundred feet from them. Discovery of the leads is made by trenching across the strata, laying bare the bed rock, and thus exposing all outcrops of ore bodies. Prospecting was begun on this property a little more than two years ago; since that time several leads have been discovered, and a large amount of profitable development work has been performed upon them. The ore is the ordinary white quartz of other Queens County gold mines; not so vitreous, or glossy, as that of Whiteburn, with oftentimes a banded structure, and a blueish cast. It carries besides the free gold, a small percentage of auriferous arsenical pyrites, lead sulphide or galena, zinc sulphide, or blende, ("black jack" of the miners) and iron, and copper pyrites. The gold is almost free from any debasing element, being of course alloyed with a little silver, from which it is never quite free in the natural state. It so readily amalgamated with the quicksilver that no special devices are required beyond the ordinary arrangement of amalgamating plates.

The greatest amount of work has been done on the "Chester Lead" which passes under the mill. Upon this are six shafts, (with substantial shaft houses,) 70 feet apart, and varying in depth from 125 to 35 feet. The lead is 9 inches in width, with a general east and west direction, and a northerly dip of about 30 degrees from a perpendicular. This is a true "contact" vein, being found at the junction of the slate and whin. This has no other importance or significance, more than the greater facility of mining. In some countries a "contact" vein is more promising, not only for ore values, but for continuity and general extent. Here the presence of the slate enables the work of mining to be done for less money than it would cost were the lead included in two hard walls of whin or quartzite. From this lead has been raised about 600 tons of ore, which mills 1 oz. and 6 dwts. per ton, as nearly as can be estimated. This vein has been traced by actual uncovering of the outcrop at various places, for a distance of 1500 feet, and at that point it passes under a hill of gravel, and has not been looked for further on. It has increased a little in width, with greater depth, and presents everywhere the characteristics of a well-formed lead, that may be depended upon to yield a great deal of paying ore. The mill engine supplies the power for hoisting and pumping. By the use of well-arranged friction gear, the power is thrown on or off with the utmost ease and readiness.

About 2,000 feet to the southeast of the "Chester Lead" is situated the "Rabbit lead." It is 11 inches in width, and is worked by three shafts at depths varying from 40 to 60 feet. It has been opened along its course for 310 feet. From this lead has been milled 185 tons of ore, yielding about 2 ozs. and 12 dwts per ton.

The cost of mining is \$7 80 per ton. I think it has been very lately let out on contract at a lower figure. This lead is unluckily destitute of a slate belt, thereby increasing the cost of mining it, but the "rock" is good enough to stand the drawback. The ore is conveyed to the mill in a car worked on a wooden tramway, and drawn by a wire cable. The cost of transportation is 25 cents per ton. This lead, it will be readily seen, produces a grade of ore on which a fine profit is realized. It has been worked only during a few weeks, but in that time has risen to the first degree of importance among the many leads of the property. It bids fair to supply large quantities of rich ore. Its width, uniformity, and traced outcrop of 600 feet, which is by no means the determined limit, lead one to expect the continuation of the lead to a depth of some hundreds of feet.

Running parallel with this "Rabbit Lead," and at a distance of about 500 feet to the southeastward, is the "Nine Boulder Lead." It is two feet in thickness, and has been traced by trenching and cuts to a distance of 1000 feet. It is worked through a shaft 125 feet deep. The lead, when first encountered in the working, was thrown down to an almost horizontal position, and considerable prospecting was needed to reach the ore body "in place." The first tests of ore indicated about half an ounce; but with further development a better grade of ore is being mined; from all appearances it will yield one ounce per ton. The quartz has a very pronounced banded structure, and the gold is mostly found at the junction of the thin layers of quartz. A "working belt" of slate, and its great width, enable the owners to mine this ore for \$5 per ton. About 100 tons have already been treated, and while the margin of profit is very satisfactory, it has depreciated the general yield, which, but for it, would have run considerably over an ounce and a half. Upon the shaft is a substantial shaft-house, adjoining an engine house. A 25 horse power engine raises the ore and water, and furnishes the power to run the ore car in one direction from this and the "Rabbit Lead." It also is used to hoist the ore and water at the last named lead.

Between the Nine Boulder and Rabbit leads are ten gold-bearing veins varying in width from four to seven inches. Only one of these has been