

no reason to doubt that some gold lies below the glacial drift deposited in depressions and chasms in the bed rock, even if it should not be found in the drift itself in sufficiently large quantity to pay the working.

Extensive mining operations are in progress at Renfrew, attended by the most encouraging results. Gold is so abundant, in some of the veins, that it is difficult to find a piece of quartz, a few cubic inches in size, that does not contain more or less gold; indeed, some of the quartz is so rich, that scarcely a piece, even one cubic inch in size, can be found that does not contain gold.

The yield, per ton, of such quartz, when crushed, cannot fail to prove highly satisfactory.

Mining is limited, as yet, to the south dip of the band, the strata on the north dip being covered by a considerable depth of drift from the newer group of clay slates, or upper silurian rocks, lying within a short distance of this band to the northward. That quartz veins will be found on the north side of the axis as rich as those on the south side of it, is highly probable; and efforts should therefore be made for its early exploration.

I examined a section across this metalliferous band, at a point about ten miles to the west of the Renfrew district, where the River Hebert cuts obliquely across it. This stream is a tributary of the St. Croix; it passes through a rich agricultural district, and rolls gold in its sands along the greater part of its course. In all trials made on this stream, I found from one to five pieces of gold to the panful of stuff; and other parties who were assisting me in making the search were nearly as successful.

Quartz rock is very abundant in the neighborhood. On one farm, in particular, I observed a section of over two hundred feet of a massive stone wall, all composed of good looking quartz, enclosing a large field, in which also great quantities of quartz appear cropping through the surface.

This quartz does not seem to contain much gold; for, in a search extending over two hours, I did not succeed in finding but one small spec of the metal. But in a place like this, where many thousands of tons of the rock can be got ready quarried for the crusher, and where an inexhaustible supply exists, in a district easily mined, even a small per centage to the ton should make it a valuable field for gold mining.

The inducement to try the experiment of putting an exploring shaft down to the depth of, say, four hundred feet, is greater here than in any other place I know; for the geology of the district is of such a character as to render it more than probable that the quartz will be found much richer in gold at some considerable depth *below* the surface,—for there it presents but slight traces of the metal.

Perhaps some of the associations, already organized for gold mining, would find it much to their advantage to give this locality a fair trial. Its close vicinity to good water power, on the River Hebert, adds much to its value.

Extending my researches along this range to a distance of seven or eight miles further to the westward, I observed another spot where, there is reason to believe, extensive operations might be profitably carried on in quartz crushing.

In this locality also the quartz is very abundant at and near the surface, and it appears to be of good quality. One vein, of large size, is exposed for several hundred yards along the bed of a brook, and thousands of tons from the same vein lie as loose boulders near its outcrop.

This locality is about nine miles from Windsor, and one and a half to the eastward from the post-road leading from Windsor to Halifax.

To ascertain by trial, on a large scale, the value of this quartz, and of that in the township of Rawdon, would be very desirable; for there are several localities in which it can be obtained in great quantities in rocks of the same age, viz.: the upper members of the older clay slate group, and lower members of the newer group of argillaceous schists.

On the high range of land, forming the north side of the valley of the Upper Musquodoboit River, it exists in great abundance in many places