

REPORT BY MR. THOMAS PETHERICK,
ON THE CANADA COPPER COMPANY'S MINE.

GENTLEMEN:—I submit to you my Report of my examination of the mineral property at Thomas Sheperd's, in Brome County, Canada East.

On this property a most satisfactory development has recently been made of copper-ore, which, looking to the shallowness of the openings on it, presents unusually good prospects. Trial-pits have been sunk a few feet on a cupriferous vein at different points on the line of it, for about 700 feet length, bearing about northeasterly and southwesterly. The vein, as are also the containing rocks, is nearly perpendicular, its size varying from five and six feet to ten feet or more in width. All the explorations are very shallow, and have yet but imperfectly proved either the size or the other circumstances of the vein; still enough has been done to show its great probable importance and very favorable composition, and that the prospects are of the most satisfactory description.

The primitive rock extending through the property is quite congenial to mineral productiveness.

The vein above noticed is composed of silicious matter, more or less indurated "flookan," quartz, carbonate of lime, a considerable proportion of rich yellow copper pyrites, vitreous copper ore (of a high percentage of metal), and green carbonate of copper. It is important to observe that the substances in which the ore is embedded in the vein are of such a nature that it can be very easily reduced, and the ore separated from it by the usual mechanical means, with great facility.

But it is not on this vein only that the favorable opinion which I have formed of this mineral property is founded. In copper-mining the plurality of veins, independent of its obvious importance *per se*, is a decidedly favorable characteristic