

It has been crossed in four different places\* viz., about a mile east of the St. Francis River in the township of Cleveland; along the west bank of the St. Francis, and also about three miles further west, in the township of Melbourne; and near Foster Junction on the Canadian Pacific Railway in the county of Brome. The last mentioned locality is about forty miles from the first, yet the stratigraphical relations seem to be the same, it being the most northwesterly member of the pre-Cambrian exposed along the Sutton Mountain anticline.

The economic importance of this rock is due to the copper deposits which are contained in, or are associated with, it. As far as it has been possible to ascertain, all the copper localities of any known importance that are mentioned in the Report of the Geological Survey of Canada for 1866 (pp. 310—314) in connection with the rocks of the Sutton Mountain fold, occur in association with this amygdaloidal trap. Amongst these are the St. Francis, Balrath and Coldspring mines, as well as others which have been more or less minutely described (op. cit. pp. 38-39). From the descriptions of other localities given in the Geology of Canada, 1863, (pp. 606-607) it appears that rocks of this type may have a wide distribution in the Eastern Townships, especially in the copper-bearing districts.

The occurrence of similar rocks also of cupriferous† character in the Appalachians of Pennsylvania\*\*and elsewhere is well known, and the separation of these from the sedimentary strata of the Eastern Townships would be an important step towards a scientific determination of the economic possibilities of this part of the province, as well as towards a more detailed elucidation of its complex geological structure than the progress of scientific investigation in Canada has yet permitted.

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\* The examination in Melbourne was made with the assistance of Mr. F. W. Major of Bishop's College, Lennoxville, and that at Foster by the aid of Mr. H. A. Honeyman of Knowlton.

\*\*Bulletin U. S. Geol. Survey, No. 136, pp. 25—27. "Ancient Volcanic Rocks of South Mountain, Pennsylvania." F. Bascom.

† The line of copper deposits in the State of Vermont, from Berkshire and Richford along the boundary line southward as far as Waterbury, may also indicate the extension of this rock to the south. Vide "Geology of Vermont," 1861, pp. 850 et. seq., by Edward Hitchcock, and "The Report of the State Geologist on the Mineral Resources of Vermont," 1899-1900 pp. 7 & 12, by G. H. Perkins.