

ERICK.

tal survey be
Canada East.
ts of the min-
of ore can be
ery moderate
and econom-
be speedily
te the great
ently antici-

and opened
absence of
aggregate
are other
ms, which,
to be six
height of
of having
on of the
actory es-
e, as well
fore free

K,
ineer

REPORT OF DR. C. T. JACKSON,

ON THE SUTTON MINE.

GENTLEMEN:—Having visited and examined the Copper Mine belonging to Solomon Sweet & Co., in the township of Sutton, Canada East, I have to submit the following Report:—

SITUATION OF THE MINE.

The mine is situated in North Sutton, Lot 8, Range 10, and is sixteen miles from the station at West Farnham, on the Stanstead, Shefford, and Chambly Railroad; twenty-three miles from the Lake Memphramagog, and nineteen miles from Pike River, the head of navigation on Lake Champlain.

It is near the summit of a hill, and from the immediate plain or meadow below the mine, I found the height by the pocket-level to the mine, to be 106 feet, the distance being about 1000 feet. This is the extent of natural drainage of the mine.

The land in the immediate neighborhood is cleared and cultivated, and the soil appears to be fertile, and is considered valuable for grazing. The population is sparse, and the people are mostly occupied with agriculture.

GEOLOGY OF THE REGION.

The rocks in which the copper ore is found are of the Lower Silurian or Taconic series, and consist of a pearly argillaceous slate, associated with magnesian limestone, or compact dolomite, like that of Acton. The slate strata at the mine run N. 32 degrees E., S. 32 degrees W., and dip to the northwestward 8 degrees; on another part of the hill further down the slope, the strata run N. 40 degrees E., S. 40 degrees W., and dip S. 50 degrees, W. 8 degrees.

The slates split out in large, smooth sheets, and in some places are sound enough for roofing purposes; but at the mine