

- 3rd.—That copper, manganese, and antimony, are generally found in lodes of quartz or greenstone, the country rock being slate.
- 4th.—That lead lodes are principally composed of barytes, quartz, calc spar, and fluor, and their country rock is limestone.
- 5th.—That the metallic lodes of the Province, as a general rule, preserve a course not varying far (10° to the N.) from east and west.
- 6th.—That their dip is generally to the north, at a high angle.

As to the probable productive capacity of these metalliferous rocks, it is impossible to speak with certainty, until mining operations, on a much more extensive scale than at present conducted, shall have fairly tested their yielding powers. Most of the operations now in progress, with the exception of those of the Albert Mines, are on the most limited scale, and generally confined to mere superficial deposits, or at most to a depth of less than fifty feet. It is to be hoped that the Mines recently opened in Charlotte and Albert Counties may be vigorously worked, until the question is fairly settled whether the useful metals, of which there are there so many indications, may really be found in sufficient quantities to make their extraction profitable. If they succeed, it will give an impetus for the further employment of capital and labor in this direction; if they fail, after a careful selection of the most promising points for trial, then others may well hesitate to invest more capital, in what is almost sure to prove an unprofitable speculation. Above all things, persons engaging in this branch of industry, should avoid a tendency, now far too common in the Province, to parcel out the same mineral district under the control of some half-dozen different companies. Until it has been satisfactorily proved that even a single one can be sustained at a given locality, it is absurd to suppose that three or more can be. Concentration of capital and effort are now more needed in the Province, than are promising fields to work upon.

In conclusion, let me express my sincere thanks to Your Excellency, for the kindness which entrusted to me the present commission, permitting me to visit a far greater portion of the Province than I should otherwise have been able to do, and allowing me to render such little assistance as lay in my power, towards developing its mineral resources. I trust that these resources may increase more and more in value, and be of lasting benefit to the Government and people of New Brunswick.

All of which is respectfully submitted.

I have the honor to be,

Your Excellency's most obedient servant,

L. W. BAILEY,

*Professor of Chemistry and Natural History,
in the University of New Brunswick.*