

TORONTO, JULY 12TH, 1873.

GENTLEMEN,—

I have but just returned from an examination of some coal properties in Cape Breton, and I am under engagement to leave again for England in the course of a few days. It is not in my power, therefore, at present to make the proposed examination of your mineral property on lot six of the ninth concession of Marmora. I may state, however, from personal knowledge of the locality generally, that the main band of gold-bearing mispickel and quartz, commonly known as the Dean and Williams vein, passes entirely through the property in question in a general north and south direction, and that a considerable portion of the equally rich "Gillen Vein" also occurs upon it. There can be no doubt, therefore, of the presence on the ground of a large amount of auriferous ore, and I have no hesitation in expressing my conviction that if proper works be erected for the treatment of this ore, according to the process now being carried on at the Dean and Williams mine, immediately adjacent to your property, large returns should be obtained for the amount of capital proposed to be expended.

I am, Gentlemen,

Your obedient servant,

E. J. CHAPMAN,

Professor of Mineralogy and Geology in University College, Toronto,  
and Consulting Mining Engineer.

NOTE.—The following statement may serve to convey an idea of the large amount of gold that the lode upon your property may be fairly expected to yield per 100 feet in length and depth. The width of the lode may be assumed to average at least 5 feet, and the specific gravity of the ore (a mixture of auriferous mispickel and quartz), may be regarded as being equal to at least 4. A ton of 2,000 lbs. will thus contain about  $7\frac{1}{2}$  cubic feet, and 100 feet of the lode in length and depth will hold nearly 6,700 tons. When concentrated by proper dressing, this amount would probably be reduced to about 3,350 tons, from which, as shown by actual trials on several tons of similar ore at the Dean works, from \$28 to \$30 of gold per ton should be obtained, in addition to an amount of by-products, in the shape of paint materials, sufficient to defray the cost of treatment. Upwards of eighty-seven thousand dollars' worth of gold may thus be regarded as capable of extraction from each strip of the lode 100 feet in length and depth. The gold from these Marmora lodes, I should observe, contains very little silver, and presents, on coming out of the retort, a rich yellow color. It is equal in fineness to rather more than 22 carats, and is worth about \$20 per oz. Troy.

E. J. C.

It will be seen from the foregoing letter that two valuable lodes of gold-bearing mispickel occur on the property, both of which are being worked—one by the Dean & Williams Company, and the other by the Gatling Company; the latter under a special