TESTING GOLD ORE.

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It may be said in a general way that gold-bearing quartz is found in many places from the extreme east to the extreme west of the immense Province of Ontario. It is being milled in three places: in one mill in the Marmora district, in another in the Sault Ste. Marie district and in a third mill in the Lake of the Woods district. Whether enough ground had previously been opened up and tested before erecting the mills I am not in a position to state. "Dame Rumor" hath it, however, that in all these cases the mills are hampered by not having an adequate supply of ore on account of the mines not having been previously opened up. We may hope that this is not correct. There have been, I much regret to say, only too many cases in our province where mills have been put up previous to solving the important preliminary problems as to the real character and the available extent of pay ore. One difficulty which met the Ontario developer was that there was no testing plant in existence in Canada where he could have a quantity of ore treated, and he was compelled to erect a plant himself to find out what he really had, or send his ore to New York or still further. That difficulty now no longer exists, for there is a small stamp mill and concentrating plant at the Kingston School of Mining, where anyone can have a ton or more put through and the yield in free gold and concentrates determined.

Now for a few words about the determination of the value of a gold ore. I allude to the value of the contents of the ore itself outside of the considerations of size of vein, its situation, cost of mining, supplies, labor, etc., all of which have such an important bearing upon the ultimate value of the ore. The ultimate value of the ore also largely depends upon the cost of treating it, and this should be had in view from the start, especially in the case of our Ontario gold ores. As a rule most people take a piece of the ore to an assayer and get a result to the ton of ore. Let us say it is a gold ore, and suppose a return of $8 to the ton is given. They then calculate very easily that mining will cost $3, milling $1.50, management, etc, $1; total cost $5.50, which gives a profit of $2.50 per ton. Then so many thousands of tons treated give so many thousands of dollars profit as easily as one and one make two.