

Improvements in the Dressing of Gold Ores

By MR. F. HILLE, M.E., Port Arthur.

Permit me to occupy your attention for a short while with a subject which I consider at this moment to be of great importance to our mining industry. It is this: the successful dressing of gold ores, and their preparation for a subsequent metallurgical treatment; not only for us in our western districts, but perhaps also for all the different mining camps, scattered over the whole Dominion.

Since the depreciation of silver and the closing of so many mines producing this metal, and since the demand for gold by different Governments, especially that of the United States, has increased so enormously, capital and the mining world in general have lately directed their attention greatly to the search for gold. Mines, yes, whole mining camps, which were abandoned years ago on account of their then unprofitableness, are worked now vigorously, and bring in many instances handsome returns. Not less active were the prospectors and miners in our own country, and we hear and read almost daily of new finds throughout the Dominion.

The awakening of this industry has brought forth, I had almost said, another one—a very voluminous literature on the winning of gold. Indeed a number of these papers really deserve the closest attention. The dressing of gold ores is especially well considered, and the experience gained with the different machines and apparatus in vogue in the mills on this northern continent, is often very well presented. But exhaustively as the subjects are treated and the pros and cons of the improvements on these old machines propounded, I have missed almost wholly the mentioning of the practice of other nations.

We see in the dressing of ores the same old methods carried on as we have seen years ago; every other branch of our mining industry shows considerable improvements and innovations, but in our milling system we progressed not one step farther. Where some improvements in the saving of minerals are made, or attempted, it is done without the consideration of expense, saving of time, manual labor, or even complete