promoter. The result may be put in the words of a Liverpool gentleman to me recently, "Canadian mines stink to heaven"; and we have ourselves to blame, and not our imperfectly examined mineral field, for this state of things.

Secondly, the application of inappropriate treatments is another potent source of failure. Mining men know of many places where rotting timbers and rusting mills form melancholy monuments of misdirected capital. Such failures have been due to both inexperience and lack of technical knowledge. It has too often happened in mining that the man in charge has gained the wisdom of experience at the cost of his confiding employers.

But it must also be allowed that one of the main elements of successful treatment lies in the uniform composition of the ore, and many cases are known of sudden changes, such as galena to bornite, lixiviating ore to lead zinc ore, free milling to smelting ore, &c. These must be guarded against, as far as possible, by cautious preliminary exploitation. As an example of wise preliminary development before erecting a plant, the Hall mines at Nelson, B.C., may be cited. This company has quietly carried on its work of opening up for two or three years, and now with sufficient ore of known composition in sight to keep their smelter going for five years, they are in a position to operate on a most satisfactory and economical basis.

Thirdly, incompetent management has been, nay perhaps still is, the greatest cause of loss in mining investments. Influential directors have been too ready to translate some friend or relative from an office desk to the control of a mine. Untrained and out of sympathy with his surroundings, what is to be expected other than failure.

Fourthly, undue haste in erecting machinery almost before a drill has been struck, has led to much waste of money, where judicious work expended on a shaft, or careful tests with the diamond drill, would have revealed the pockety nature of the deposit, or the barren quality of the ore as depth was gained. It is well to remember that all veins do not widen, or become richer as you go down.

Neither is it necessary to build a palatial residence for the manager, nor to construct permanent houses for the miners, and schools for their children, before the mine has afforded some pretty satisfactory evidence that it will become reasonably profitable.