

gineers as a class are the salt of the earth. As public citizens they are almost negligible.

### MINING OPERATIONS IN QUEBEC DURING 1909.

We have looked forward with keen expectation to the first Quebec annual report issued under the supervision of Mr. Denis. Our first feeling on receiving an execrably printed 32-page pamphlet was one of disappointment. We had hoped that the new regime in Quebec would have been signalized by a report as ample and as dignified as are those issued by other provinces. No doubt the new Superintendent of Mines has had his hands more than full. He has occupied the office for but a few months. In many directions he has re-vivified the Department of Mines and, certainly, he has inspired the provincial government to better things. These considerations induce us to overlook the slimness of the report. But the cheapness of the paper, the wretchedness of the printing, and the unutterableness of the half-tones cause us to cry aloud and spare not. The province and the Department should be thoroughly ashamed of themselves.

It is encouraging to note that the mineral production during 1909 was the highest so far recorded. The figures for 1909 are \$5,552,062, whilst for the year before they were \$5,458,998, an increase of \$93,064. Owing to changes made in the method of gathering statistics it is probable that the increase was still larger.

The principal gains during the year were in the outputs of copper ore, cement, marble and limestone; while the chief items of loss were in bog iron ore, chrome iron ore, asbestos, mica, granite and tiles.

Since 1900 the yearly mineral production has more than doubled itself. Although the figures are still far too small, yet there appear to be healthy symptoms of growth. One strong factor in that growth is the honest endeavour of the Quebec Government to re-model the mining laws. The recent changes have been fully noticed in these columns. We need only note here the fact that Quebec has eschewed that bugbear of the prospector, "discovery."

Mr. Denis briefly reviews the status during the year of each mineral industry. An abstract of his report appears on another page. Mr. J. H. Valiquette, Assistant Inspector of Mines, contributes an analytical review of all mining accidents occurring throughout the year. To this he appends timely warnings as to the use and storage of explosives.

In the main, Quebec has every cause to look forward with confidence. Her time is coming, and coming rapidly. It will come even more rapidly when the Department is able to publish a report compatible in all respects with the dignity of the province and with the requirements of the industry.

### PORCUPINE.

Three errors against which it is constantly necessary to guard are over-estimation of a prospect, assuming

the presence of unproved ore, and dogmatizing upon a mine's future with insufficient data. All of us are prone to sin in any or all of these ways. And, on the other hand, we are equally prone to swing to the other extreme and to assume a guardedly nescient position.

We have watched Porcupine with hope, and fear, and trembling. The latter two sensations have now practically disappeared. We have abundant evidence to believe that in certain spots bonanzas, such as we have never known in quartz mining before, have been encountered. At one young mine, for instance, spectacularly and uniformly rich ore has been sunk in continuously to a depth of 120 feet. Within a short distance, and presumably in the same body of ore, two other shafts, slightly less deep, are in similarly rich ore. Fine gold is disseminated throughout the ore from shaft-collar to sump. Drifts are being run and still the ore maintains its character. In fact, considering the amount of work done we doubt if there has ever been any such showing on the continent. Mill returns, which, naturally, are neither full nor exact, indicate that much of the ore runs well over \$100 per ton. Some of it greatly exceeds this figure. The ore body ranges from six to twelve feet in width. Its horizontal extent can not be determined for some time yet.

Some other prospects are almost equally encouraging. It is inevitable that the great majority of claims staked will prove worthless. But all securable evidence points to the fact that the clouds that for so long have hung over Ontario gold mining are at last to be dispelled.

We cannot close without adding a word of congratulation. Porcupine has suffered no plague of boomsters. The "four-flusher" is there, as he is always everywhere. But he is by no means the controlling element. The men who are making Porcupine are content to mind their own business. Neither they nor we wish to see a boom in Porcupine. For once let us witness the blessed sight of a mining camp developed on its own merits.

### MINE COST DATA.

It has been well remarked that the only indication obtainable by many mine operators as to costs is the condition of their bank balance. Itemized cost statements are usually made out so late that they are of little assistance. Hence arise confusion, waste and direct loss.

The Joplin Ore Producers' Association proposes to evolve a cure for this disease. A series of daily report forms has been prepared. Forty-eight mine operators are to be requested to fill out these forms daily and send them to headquarters. Here a competent staff will transfer and systematize the data. The costs will be properly distributed and analyzed. Each company will thus have the benefit of comparison with forty-seven other operating concerns. Moreover the facts thus ascertained will prove invaluable in discussing tariff problems.

The identity of no mine will be revealed in the state-