

Further, the ores mined at Cobalt are singularly complex. It is not to be expected, at the present stage of metallurgical knowledge, that all the constituents can be refined commercially at once. And where, in heaven's name, could they be marketed after refining! Silver and arsenic are now extracted. The residues, containing cobalt and nickel, are held for further treatment. Cobalt oxide can be turned out to meet all present demands. All the Canadian refineries seem satisfied with their processes. Their owners have secured, and paid for, the best technical assistance. A government experimental plant, such as Mr. Sifton suggests, could not secure as highly qualified men, simply because no government will pay such high salaries as do private companies. A government that will let a corporation outbid it for the services of Mr. M. J. Butler cannot be expected to compete successfully for the services of expert metallurgists, men who belong to a profession in which high salaries are demanded as a matter of course. On the other hand, a government plant, under the management of the Mines Branch as at present constituted would be an unmitigated farce.

Mr. Sifton, in his reference to mine accidents, has been again misinformed. It is not true that "Canada makes almost the worst showing in the world." As we have repeatedly pointed out, the coal mines of Nova Scotia are among the best regulated anywhere. Our Western coal mines show lower death rates per thousand men employed than do the majority of United States collieries. The death rate, due to accidents, at Cobalt in 1908 was not "24.8 per 1,000 employees working underground," but only about one-quarter of that rate. Moreover, to compare the 250 scattered mines and prospects of Ontario, with the large highly developed mines of the Transvaal, is patently unfair. It is fair, however, to institute such a comparison between these latter mines and the Copper Cliff mines. In this case we find that the fatality at Copper Cliff is, roughly, about half that obtaining in the Transvaal mines. Obviously the better record at Copper Cliff, as compared with Cobalt, is due to the concentration of attention to a few large workings.

In his statement that in electric smelting, "we have led the way in investigations," Mr. Sifton will find remarkably little support. The experiments in producing pig iron at Sault Ste Marie, were made under the direction of a French inventor, brought to Canada for the purpose. Just how far Dr. Haanel wished to advance the cause of science, and just how far the experiments were designed to exploit a private patent, we can only guess. But the actual truth (and it is high time that some one should tell it) is that economic results were not obtained at the Sault. In fact, about all that has been done in Canada is to describe the work of others. Our much heralded production of pig iron in the electric furnace has failed absolutely to materialize.

But enough of correction. We are sincerely glad that Mr. Sifton is to devote his unquestioned talents to

national economies. If we have spoken very plainly, it is entirely because we think that the time for talking official balderdash about mining has passed. Mr. Sifton can conserve our mineral resources and our patience best by reorganizing the department that he himself created. Meanwhile, we wish him all success.

#### ENGINEERS AND INSTITUTES.

Mr. A. B. Willmott contributes to our columns a profitable discussion of Mr. Kendall's paper on "Mining Engineers and Mining Institutes." It will be noticed that Mr. Willmott opposes strongly any radical restriction of the membership of the Canadian Mining Institute. Mr. Willmott points out that the Institute, as at present constituted, "is a wide-open congress . . . where all interested in mining, whether technically qualified or not, can meet and discuss matters of common interest. . . . Let us move slowly in the matter of change. . . . We want the broker and investor to attend our meetings and learn the views of our leaders on the ethics of mine finance and on the duties of directors to their shareholders."

To conserve professional standards Mr. Willmott suggests the formation of a Mining Engineers' Guild, to be composed of members of the Canadian Mining Institute, possessing certain qualifications.

The scheme outlined by Mr. Willmott will probably meet with both approval and censure. We are of the opinion that it is essentially sound and practicable. But there are many points that require the fullest discussion. And we hope that our readers will not be backward in expressing their views. We hope, also, that the whole matter will be thoroughly threshed out at the annual meeting of the Canadian Mining Institute.

#### THE PORTLAND CANAL MINING COMPANY.

Interest in the Portland Canal mining district is growing. The fact that Messrs. McKenzie and Mann, have acquired large holdings has given advertisement to the region. As usual, however, United States capitalists have been most energetic. But many British Columbia investors have sent, and are sending men north to stake properties.

One company, the Portland Canal Mining Company, Limited, with headquarters at Duncan, B.C., has issued its second annual report. From this report we learn that \$100,000, raised by the sale of a block of treasury stock, is being expended in erecting a 100-ton concentrator, an aerial tramway, and a water-power plant.

Three tunnels have been driven into the mountain side, aggregating a total footage of about 600 feet. Tunnels No. 1 and No. 2 are reported to be in rich ore. Tunnel No. 3, cuts a downward continuation of the ore body disclosed above. The ore carries from \$10 to \$30 in gold, and about \$45 in silver per ton. In thickness the vein apparently exceeds 13 feet. The ore contains galena, argentite, and native silver.