

Waste prevails to a very large extent. Let me illustrate,—

1. In the Cobalt camp the mine owners are largely at the mercy of foreign smelters and refiners.* Much valuable mineral is taken and not paid for or accounted for. It is lost to the owners and to this country because there is no effective method of treating these ores in Canada. Thorough investigation by experts is highly necessary. Probably the valuable mineral lost in the Cobalt camp in one year would pay for the whole investigation, and build the plant necessary to treat the ores under proper guarantees.

2. In the utilization of coal deposits, most wasteful methods are employed.† Coal difficult to mine, is not taken out and the shafts are blocked up and the deposits lost forever; so of iron. In making coke it is alleged that uneconomic methods largely prevail.

3. In British Columbia, until lately, no account was taken at all of zinc contents in the ores, and a large amount of this very valuable metal was lost. The Federal Department of Mines has investigated the subject, but further action is necessary.

4. In the Yukon, large deposits of gold-bearing gravels have been covered by tailings and rendered extremely expensive or impossible to work.

5. Upon the subject of mine accidents I speak subject to correction; but my information is that Canada makes almost the worst showing in the world. The fatality rate in coal mining in the United States and Canada appears to be steadily increasing. Increased knowledge, scientific development and modern methods are apparently not being devoted to protecting the lives of helpless employees.

In the Transvaal, with Kaffir labour, the death rate in 1906 was 5 per 1,000 employees employed underground. This was considered so great that a Royal Commission was appointed to enquire into it. In the Cobalt district in 1908, I am told the death rate was 24.8 per 1,000‡

*The present position is that, owing to recent improvements, the provision for treatment of high-grade ores in Canada is now fairly good. The low-grade ores are still sent to foreign smelters.

† This remark does not apply to coal mining in Nova Scotia.

‡ The figures respecting Mining Accidents in the Cobalt district were based upon the Eighteenth Annual Report of the Bureau of Mines of Ontario, 1909, Volume XVIII, Part I. On page thirteen appears the following statement,—

"The number of men employed in the silver mines of Cobalt, including also those engaged in the works for the reduction of ores at Copper Cliff, Deloro and Thorold, was 2414. The amount paid out in wages, \$2,159,055.00. Of these 1089 were underground workers and 1325 aboveground."

Another portion of the Report shows that there were 27 fatalities underground in the silver mines of Cobalt.

It has since transpired that the above quoted statement is not strictly accurate, and was intended to apply to "producing" mines only. The Deputy Minister of Mines of Ontario states that the correct figures would be a little less than 12 per 1000 of those employed underground.