

servation. Every improvement in lumbering, farming, and mining implies a definite addition to the wealth of the nation. Every method devised for the utilization of waste products, such as sawdust, mechanical fertilizers, slag, creates new wealth and postpones the final depletion of our sources of raw material. In other words, our workers, our engineers, are essentially conservers.

We must conclude, therefore, that the Commission must guard against ineffective teaching or preaching; and must recognize that its real end is to supplement the efforts of others by giving timely and proper publicity to facts, figures, and ideas that are not available to the masses. Another important function, one that the Commission is not at present qualified to perform, is the promotion of restrictive legislation. Unless the membership of the Commission be made more representative, any attempt to formulate new laws will be utterly vain.

#### THE TIMMINS SAMPLE CAR.

It is by no means an easy matter to place in its proper light the meaning of a sample, whether that sample be made up of a few pounds of ore or consists of one or more carloads. Other things being equal, we are apt to accept results obtained from large samples more readily than those obtained from small lots of ore. However, mere bulk is no guarantee of accuracy.

The Porcupine gold fields are much in the public eye at present. Among the pioneers of Porcupine were the Messrs. Timmins and Dunlop. These gentlemen, by the way, signalized their confidence in Porcupine by paying a very large cash price for certain claims. From workings on these claims there was recently taken a sample carload of ore. The entire car of ore was crushed, sampled, and assayed by competent specialists in the United States. The assay value of the ore is reported as being \$202.75. This, of course, is most gratifying. But there is distinct danger of over-emphasizing this particular assay report.

While we do not doubt in any way the "bona fides" of the men who took the sample, yet there is every likelihood that the carload was, to some extent at least, selected ore. The taking of an absolutely fair sample is neither a simple nor an easy matter. Very few men, indeed, are qualified by experience, or fitted temperamentally, to undertake the sampling of a gold-bearing vein. But, granting that the announced results are probably too high to be really representative, yet there is ample reason for encouragement. The fact that a carload of such rich ore could be secured in restricted workings and with no conscious effort on the part of the samplers to select the rich and reject the lean, is a pleasant surprise.

#### EDITORIAL NOTES.

The Yukon dredging season has had the earliest opening on record. Dredge No. 1 of the Canadian

Klondike Company was put in commission on April 27th. Water is plentiful. Everything points to a prosperous year.

#### PERSONAL AND GENERAL.

Mr. S. N. Graham is paying a professional visit to Cobalt.

Mr. R. W. Brigstocke has been elected a member of the Institution of Mining and Metallurgy.

Mr. R. G. Drinnan has been engaged to examine and report upon coal lands on Graham Island, Queen Charlotte, B.C.

Mr. Martin Nordegg has returned to Toronto. For the last four months Mr. Nordegg has been travelling through Egypt and Turkey.

The sympathy of our readers will be extended to the veteran editor of the Transactions of the Canadian Institute, Dr. George Kennedy, whose wife died on Friday, May 6th.

Mr. J. B. Tyrrell has been elected president of the Canadian Institute, the oldest scientific society in Canada. The Canadian Institute was organized in 1849. Among the former presidents were Sir William Logan, Sir Henry Lefroy, Sir John Beverly Robinson, Hon. G. W. Allan, and Sir Sandford Fleming.

A special coal dust experiment station is used by the Vienna Committee on Fire-Damp for studying mine explosions. A masonry gallery 964 feet long has an arched roof about 7 feet high, increasing slightly in height toward the outer end, and is covered with earth varying in depth from 6 1-2 feet at the outer end to 70 feet over the explosion chamber. This chamber, forming the inner end of the gallery, is of concrete, 6 feet high, 6 1-2 feet long, and 4 1-2 feet wide. Racks of shelves for coal dust are placed at intervals along the gallery, and apparatus is provided for testing measures for preventing and limiting explosions, such as wet zones, water sprays, and zones of stone dust. The flame produced by an explosion is measured by matches placed along the gallery at intervals of forty inches. Loosely corked bottles, filled with water, are suspended bottom up about 35 feet from the explosion chamber, and strings attached to the nearest shelves draw the corks when the shelves are moved by an explosion. In this way the bottles are emptied of water, samples of gas from the explosion taking its place, ready for chemical and other examination.

The market for Baku petroleum covers Central Russia and the East. Maikop, the newly-discovered oil field, will probably supply Western and Southern Russia and may export its oil for foreign consumption.

In the Maikop oilfields bluff exposures of oil-bearing strata, sometimes 150 feet vertical measurement, are covered with soft asphalt, the result of oxidation of the exuding petroleum.

There are 9,700 stamps in commission in the Transvaal. The number of gold producers is 68.