

tion of incombustible dust) is dwelt upon as being often advantageous. But stress is laid upon the fact that local watering and schistification are powerless to arrest an explosion that has been well started.

The question of arresting an explosion that has already become serious was, therefore, looked into. It was found that an explosion that had developed over a length of 75 metres could be stopped by establishing an arresting zone 100 metres in length. But a high degree of watering or schistification was required in that zone. Four times more water (by weight) than there is dust was found necessary to establish the zone; and at least 75 per cent. of slate dust when schistification was resorted to. Both methods have their drawbacks.

Far more efficacious were the experiments with two new methods—concentrated schistification and concentrated watering. Briefly, in these methods the flame arrives at the moment when the water or combustible dust has just been overturned. The arresting barriers are thus extinguishers rather than gradual suppressing agents. Whilst these results are tentative, they are extremely encouraging.

Other conclusions reached are that no explosion can be produced by the ordinary initial causes in a dust deposit where the content of volatile matter does not exceed 18 per cent.; though it may be propagated there as the result of a violent initial explosion occurring over a portion of dust deposit richer in volatile matter, or started by firedamp or by explosives. It is also stated that, other conditions being equal, coal dust rich in volatile matter is more dangerous than if the content of the latter were smaller.

The practicability of applying these experimental results to working mines has not been fully demonstrated. But that, we believe, is only a matter of time.

#### MR. W. H. ALDRIDGE.

The announcement of the retirement of Mr. W. H. Aldridge from the active management of the Consolidated Mining and Smelting Company of Canada came as a surprise to his large circle of friends. Since 1897, Mr. Aldridge has been the controlling spirit in the C. P.R. mining interests in British Columbia. In that year he arranged the purchase of the Trail smelter from F. Augustus Heinze. The history of the enterprise has been a record of expansion. Operated until 1906, under the name of the Canadian Smelting Works, the plant was then taken over by the present company, which had also acquired large mining areas near Rossland.

Mr. Aldridge still retains his place on the board of directors, and will continue to act in an advisory capacity for the Consolidated. His position as general manager is to be filled by Mr. R. H. Stewart, a thoroughly competent and experienced official, who has long been connected with the company. Mr. S. G. Blaylock becomes assistant general manager. Both of these gentlemen have excellent records.

#### IMMUTABLE MAN.

Human nature in all ages remains startlingly unchanged. Here is a quotation from an old volume, printed first in German and translated into English in 1730. The reference is to mining in the Hartz Forest:—

“This Mountain is hollow'd out underground into such large Caverns, that they in some places are too high to be propp'd; wherefore 'tis very dangerous to workfl in some of the Mines; upon which account the Miners at Goslar are two Mornings in the Week exhorted by a Sermon to live in the Fear of God, to be prepar'd in case of any Accident; but they are such a fool-hardy audacious Crew, that when the Parson preaches a little longer than ordinary, and the City-Gates are open, they run out of the Church, leaving him to preach to him-self.”

Our sympathy goes out to that poor preacher. His life-insurance policy was not popular.

#### THE TUNGSTEN MARKET IN 1910.

Canada is not yet a producer of tungsten ores, although within a few months shipments will be made from the rich deposits at Moose River, Nova Scotia. The condition of the tungsten mining industry in the United States is, therefore, of interest.

Ten years ago the production of concentrated tungsten ores in the United States was only 46 tons, valued at \$11,040. Last year's output was 1,824 tons, valued at \$832,992. This is probably the largest annual output on record in any country.

Prices during 1910 were fairly high, ranging from \$6.50 to \$9 per unit, for concentrates carrying at least 60 per cent. tungsten trioxide. California and Colorado are the principal producing States.

The Nova Scotian ores are more easily concentratable than those mentioned above and it is probable that higher prices will be obtained for them.

#### THE SILVER MARKET DURING 1910.

A happy augury for one of Canada's greatest mining camps is the continued strength of the silver market. After maintaining an average price throughout 1909, of 51.502 cents, the metal more than held its own during 1910, the average price for the past year being 53.486 cents. For the latter half of 1910 the average was 54.318 cents, a decided improvement over the preceding six months. The highest monthly average in 1909 was that for May, 52.905 cents. The highest during 1910 was November's average, 55.635 cents. The corresponding low figures were 50.468 cents for March, 1909, and 51.454 for the same month in 1910.

Arguing from analogy, we may expect a drop in price through one or two winter months. But there are plain indications that the Chinese and Indian demands will be large during 1911, and that, therefore, there will be no significant falling off in prices. Much will depend upon the success of the Chinese Government's