is needed. So long as inspection is left entirely to provincial officials it will be neither adequate nor effective. Working hand-in-hand with a well-organized Federal Bureau, the provincial departments would do infinitely better than is at present possible.

The Nanaimo disaster provides material for very serious thought. It is possible, nay, even probable, that proper inspection would have prevented the loss of 32

The civilized countries of the world not only insist upon the regular inspection of coal mines for the presence of dangerous quantities of gas, but they also regulate the use of safety lamps, prohibit certain explosions, investigate the hygienic conditions of collieries, investigate the causes of accidents, and encourage the use of rescue apparatus.

We fear that Canada has not done her duty in these respects. Apparently we are content to wait until the toll of human lives shall have become so inordinately large that indifference will no longer be possible.

DORIC RESERVE MINES, LIMITED.

In the Toronto World of October 11th, and in the Montreal Standard of October 16th, appeared advertisements of the Doric Reserve Mines, Limited. The name of Mr. A. A. Hassan, mining engineer, was used in these advertisements. We have been requested by Mr. Hassan to state that he has made no report for the Doric Company and that he could not possibly verify the statements advertised. Mr. Hassan is taking steps to force the offenders publicly to retract their misstate-

Prompt action of this kind is to be commended. Liberties taken with the good name of mining engineers deserve severe punishment.

EDITORIAL NOTES.

We are informed, on excellent authority, that, in addition to the iron and steel works projected for Vancouver Island by the Irondale Syndicate, another large steel concern contemplates the erection of a plant. This will give Vancouver a solid industrial backbone.

An editorial in the November number of The Mining Magazine concludes thus: "Vendors and promoters should not report on mines; it is as honourable to be a promoter as to be an engineer, but the combination is prejudicial to sound business." This truth cannot be repeated too frequently. At the present stage of development it applies with especial force to Canadian mining engineers.

Estimates secured by the Royal Commission on Mines give the cost of watering the workings of large collieries by the "man and hose" system. In one Ger-

man mine the cost, over a period of 14 years, averaged 1 1-2d. per ton. At another German colliery the cost in material and wages was slightly over 1d. per ton. Costs in South Wales range all the way from 1.72d up to 5d per ton. The last figure includes repairs to roadways. rendered necessary by the watering.

CORNISH TUNGSTEN ORE.

At the semi-annual meeting of South Crofty, Limited, a mining company operating at Carn Brea, Cornwall, some instructive figures were adduced bearing

upon prices current for tungsten ores.

The ore-treatment is complex. Tin, tungsten, and arsenic are recovered. During the six months ending June 30th, 335 tons of tin, 72 tons of tungsten concentrate, and 304 tons of arsenic (200 tons of the arsenic being white refined) were recovered from 29,154 tons of ore; 31.8 pounds of tin and tungsten were recovered per ton of ore crushed. The total value of the three commodities was £34,056 19s 14d.

During the six months an arsenic refinery and twenty stamps were added to the surface plant. Including development and additions, the average working costs were 19s 3d per ton. Total profits amounted

to £6,187 14s 1d; net profits, £5,187 14s 1d.

The average price for tin was £76 3s 2d; for tungsten, £78 9d. Tungsten showed a falling off of £10 per ton as compared with the previous six months. But latterly the price has improved substantially. The tungsten concentrate was kept constantly up to 64 per cent.

PLATE HOUSES.

The use of heavy stamps on the Rand has brought about one radical modification in mill design. latest mills are constructed with separate houses for the amalgamation plates, as it has been found advantageous to remove entirely the plates from the crushing section of the mill.

This innovation permits of any desired arrangement of the plates. Inasmuch as the product of any one battery may be diverted to each of several plates, the necessity of hanging up a battery before cleaning the plates is obviated. The time saved by this is supposed to add at least 10 per cent. to the efficiency of the plant.

Another hardly less important result is the facility with which samples of the crushed ore may be taken by placing automatic samplers in the launder that conveys the pulp from the stamps to the plate-house.

Incidentally it is possible to watch the tables much more closely. In large plants this makes for better practice, and has the advantage of minimizing amalgam-

Detached plate-houses have much to recommend them even for small plants.

Gelignite is the most largely used explosive in the mines of Western Australia. Last year 3,251,928 lb. of gelignite were used, as compared with 438,500 lb. of blasting gelatine and 339,852 lb. of gelatine dynamite. For the storage of explosives there are 74 magazines in the state, having a total capacity of 11,190 tons. These are placed on reserved land, and are fitted with specially devised lightning conductors.