

we cannot afford at this time to take any step likely to frighten it away.

But we think that where an application for the incorporation of a mining company is made the promoters should be obliged to show that the capital they wish to incorporate on is warranted.

We venture to say that if speculative promoters were kept in check and the authorized capital of a number of the companies now in existence reduced to what it should be the value of their shares would advance all along the line, and individual investors be benefitted.

Mammoth Water Wheel.

THE Pelton Water Wheel Company, of San Francisco, have recently furnished the Alaska Gold Mining Company, of Douglas Island, Alaska, a wheel of such extraordinary dimensions as to make a brief description of interest.

The wheel is twenty-two feet in diameter and is direct connected to the shaft of a Riddler duplex compressor, with air cylinders twenty-four inches in diameter by thirty-eight inch stroke, having a capacity of delivering 2,800 cubic feet of free air per minute at a pressure of eighty pounds per square inch.

The wheel weighs 25,000 pounds and serves the purpose of a fly wheel as well as prime mover. It runs under a water head of 480 feet at a speed of seventy-five revolutions and develops upwards of 500 horse-power.

A hydraulic speed regulator is attached to the wheel, which controls its movement so that a uniform air pressure is maintained on the receiver.

The wheel is made of this large diameter to give proper speed to the compressor under the head in this case available.

This is probably the largest tangential wheel ever constructed, and shows the remarkable facility with which Pelton wheels can be adapted to unusual and extraordinary conditions. In a case like this the transmission machinery to carry such an amount of power would involve a heavy outlay as well as constant expense in maintenance, besides a material loss of power. A direct connection to the water wheel of machinery operated without intermediate gearing is, therefore, of great advantage wherever possible.

HAPPENINGS AT THE MINES.

ALBERNI

THE road to the Duke of York is simply excruciating. Beyond the Duke of York to the Consolidated Alberni the road is better, but that is due to private enterprise. The development work is still being vigorously carried on on many of the quartz prospects, with the result that greater confidence is felt in the ultimate success of the district as an important mining centre.

Messrs. A. J. C. Galletly and G. A. Kirk returned from Alberni lately. Work on the Duke of York mine has progressed satisfactorily, although the low stage of water retarded operations considerably. The ground sluices were cleaned up and will be moved up stream and on to bed-rock before the high water sets in, after which hydraulic mining with two monitors will be continued regularly all winter. The ground thus far washed out was old dig-

gings, which Chinamen were supposed to have worked out, and some of the quicksilver used by those miners was recovered in the sluice boxes. The yield of gold is not stated, but it is known to have been quite as large as it was expected to be. Good results may be expected from this mine during the winter and next summer.

BOUNDARY CREEK

A good strike, made by W. A. Corbett on the Lake claim this week, is evidently a rich pay streak.

Work on the Skylark is making rapid headway, the breakage of the whym notwithstanding. It is not at all improbable that a big low grade copper deposit lies almost alongside of the smaller high grade silver-gold ore on which hitherto the Skylark has based its reputation to be considered a mine.

A claim, called the Barrow, from all accounts has a big surface showing. The ore is iron-stained quartz carrying free gold and copper pyrites.

As the result of a little surface prospecting of the new iron-capped leads up Lost Creek, pyrrhotite has been uncovered.

Jack Farrell, while prospecting on the Buttercup, in Wellington camp, the other day, found a small quartz lead which has since widened out to nearly three feet. The quartz carries copper sulphurets and runs well in gold.

After a few days' work last week on the Crack-Jack, in Greenwood camp, copper ore was found beneath an iron capping. The ledge was stripped for some eleven feet; no walls were found.

All the water has been removed from the Stemwinder shafts. Sinking is in progress on one shaft and a drift is being run at the foot of another.

W. T. Shatford and A. Gosens last week located the Slamax, in Camp McKinney, with fairly good surface indications. The vein is quartz with a pay streak of clean galena.

CARIBOO

During the last few weeks a great many quartz locations have been made, and it is expected that something definite will be done to test the value of many quartz ledges that surround the district. A. D. Whittier, acting for an English syndicate, is spending a large amount of money in development work. Under the same management a camp will be built at Snowshoe Mountain, and operations carried on there during the winter. The same company is also working on Grouse Creek, and it is expected that good 'paying ore will be struck this winter on all of these locations.

The Cariboo Gold Fields Company are still working their hydraulic claim on Williams Creek. They are preparing to clean-up, and it is expected they will finish in about a couple of weeks.

The Black Jack hydraulic claim, situated next to the C. G. F. C. claim, has just completed a clean-up for the season of 200 ounces.

All the hydraulic claims in the district sent in more favourable reports this season than they have done for years. Most of the claims are just getting in good shape to work; they are reaching bed-rock, consequently they are getting more gold.

Mr. Delatier, a mining expert, living at Denver, has been sent up by a company of French capitalists to see some Cariboo properties. If favourable