

they will undoubtedly be big dividend payers in due time.

The Wagaer and Empire groups resemble each other, the surface showings being exceedingly good, and although the ore at present is too low grade to handle profitably, the Duncan railway will alter the situation. The assay values run from \$60 to \$100. The Wagaer having slightly better grade of the two. Work on the Empire for the last season consisted of a 210 foot tunnel and 30 feet drifting. The tunnel crosscuts two veins, each from 3 to 4 feet wide, and carrying concentrating ore; proving the ore body at 150 feet depth. Another promising Duncan river prospect is the Black Warrior, which is situated in the Lime Dyke belt. The surface showings are very fine, consisting of galena and copper ores in carbonates. The surface showings can be traced for over sixty feet and from one to two feet in width of galena ore averaging 140 ozs. silver, and 50 per cent lead, have been developed. The carbonates are richer and assays of 300 ozs. have been obtained.

Development work on the Old Gold, also in the same belt, has disclosed a chute of clean ore two feet in width and consisting of galena, grey copper and zinc blende. This has been



PACKING WOOD TO THE MINES, TROUT LAKE DISTRICT.

driven along for about 30 feet and is still holding out, and is probably the best strike that has so far been made in the Duncan slope.

I could if space permitted, mention many more claims which from the surface showings, and assays which can be obtained by anyone who wishes to inspect them, offer attractions of a very favourable character to mining men and capitalists, who care to visit the district.

I ought not to close without mentioning the two Banner mines of the camp, namely, the Silver Cup and the Nettie L. Both of these properties (more especially the former) are now proved mines, and with adequate transportation could be large shippers. The ores in both mines are high grade, the former averaging \$10 in gold, 200 ozs. silver, 50 per cent. lead and 7 ozs. zinc. Nettie L. ore runs even higher than this, they have several hundred tons ready for raw-hiding, and expect before the winter is over to ship somewhere round a thousand tons.

The accompanying photographs were taken in the vicinity of Ferguson and the Duncan river.

Prof. J. A. Fleming, the well-known electrician of London University, is understood to be engaged in important experiments in connection with a novel form for the transmission of electrical energy. There is reason to believe that the professor has discovered the means by which such power can be distributed without wires by utilizing the ether as Marconi does for ordinary signaling.

The average value of silver was 67.1c per oz. in 1896; 59.79c. in 1897; 58.26c. in 1898; and 59.58c. in 1899. For the first ten months of 1900 the average price has been 60.76c.

## CONSOLIDATED CARIBOO HYDRAULIC MINING COMPANY.

MANAGER'S REPORT FOR 1900.

**T**HE canals opened earlier than usual under the influence of the warm Chinook winds that prevailed during the last two weeks of March, and washing commenced on the 4th of April, about two weeks earlier than usual.

The Mine was operated 171 days and 13½ hours, with a quantity of water varying from 2,500 to 2,750 miner's inches.

The season's mining operations were divided into three runs, as follows:—

Washing was commenced in Pit No. 1 on the 4th day of April, and was continued for a period of 66 days 1½ hours, ending on the 1st day of July. During the run 170,753 miner's inches of water was used to wash out 791,899 cubic yards of gravel and top clay, from which was recovered 7,867 ounces of gold, valued at \$134,728.45, an average yield of about 17 cents per cubic yard, and a daily product of \$2,039.48. The duty of the water attained was 4.63 cubic yards of gravel per miner's inch.

Washing operations were confined mainly to the ground thrown down by the blank blasts exploded in August, 1899, and March, 1900. Both blank blasts included a large percentage of the clay and low grade gravel lying on the southwest rim, east of "Dancing Bill" Gulch. The inclusion of so large a percentage of low grade material explains the cause of the low average yield of 17 cents per cubic yard.

The second run commenced on July 2nd, continued for a period of 68 days and 12 hours, and ended on September 30th. During the progress of the run 188,375 miner's inches of water were used to wash out 751,000 cubic yards of gravel and top clay, from which was recovered 9,058 ounces of gold, valued at \$154,848.41, an average yield of 20.61 cents per cubic yard and a daily product of \$2,260.56. The duty of the water attained during the run was 3.98 cubic yards of gravel per miner's inch.

After the whole of the gravel and clay disintegrated by the blank blasts was washed out, the run was continued to completion by undercutting and caving the main bank by force of the hydraulic streams.

The breaking up of the large masses of indurated clay by hand and the delay in the delivery of explosives required for the second blank blast, and to keep the pit clear of boulders, caused a serious loss of washing time and explains the cause of the falling off of the duty of the water below that attained during the first run.

The Third, and closing run of the season, commenced on the 1st of October, continued for a period of 37 days, and ended on the 9th of November, when the low temperatures closed the canals and ended the season's washing operations. During the progress of the run 101,750 miner's inches of water were used to cave and wash out 301,039 cubic yards of top clay and gravel, from which was recovered 3,544.5 ounces of gold valued at \$60,508.91, an average yield of 20.1 cents per cubic yard, and a daily product of \$1,635.37. The duty of the water attained was 2.90 cubic yards per miner's inch. The hard freezing of the gravel and lumps of indurated clay during several periods of low temperature retarded the progress of the tip work, and explains the cause of a further falling off of the duty of the water.

During the progress of the second and third runs about 5,940 cubic yards of gravel were washed from the lower bench through the bedrock cuts and sluice sect on No. 1. The product thereof was 320 ounces of coarse gold and nuggets valued at \$5,470.00, an average yield of about 92 cents per cubic yard. This product is included in that of the second and third runs.

Washing operations were confined entirely to Pit No. 1, so there is no washing to report for Pit No. 2, which is practically in the same condition as it was at the close of the season of 1899.

### SUMMARY OF THE SEASON'S MINING OPERATIONS.

Total time occupied in washing in Pit No. 1. 171 days, 13½ hrs  
Total quantity of water used . . . . . 460,878 miner's inches