

per cent. grade and from the same elevation above the river as the present cut—through the eastern rim to the pit; and an upraise made to the surface. Then down this shaft which would gradually by attrition be turned into an incline, and through the 1,200 feet of tunnel fitted with gold-saving appliances, the gravel would be washed.

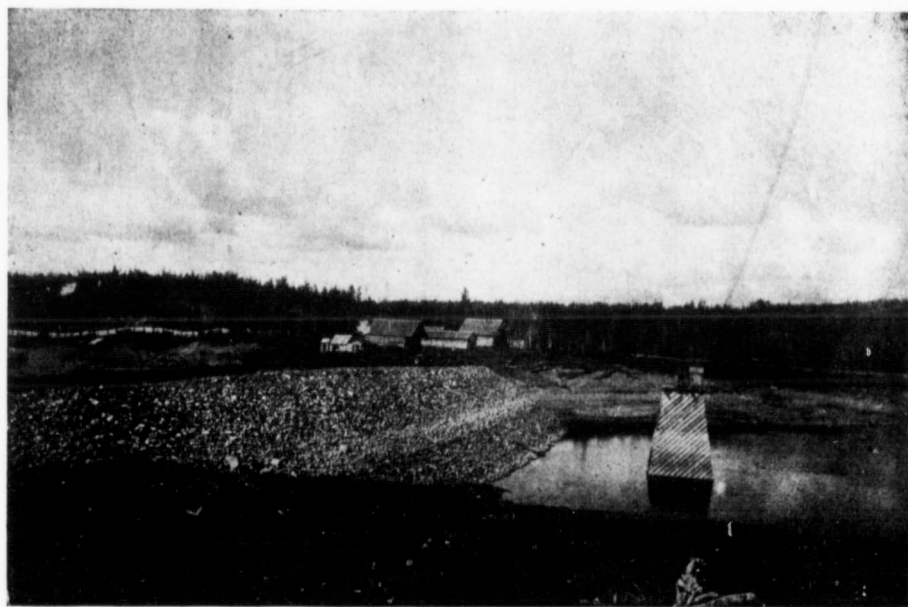
Boulders too large for the sluices are blasted, usually two by the same shot, and 150 shots at a time. Bank blasts also, are required. Of these the record-breaker shook up seven acres of ground by means of 136,000 pounds of black powder. In preparing for such a blast a shaft is sunk and drifts in which the powder is set, are run. The explosion is said to be marked by a dull thud rather than by severe detonation.

Water is conveyed by 33 miles of ditch and deliv-

by the Wellsbach Company, tested the Horsely and Bullion gravels for platinum and osmiridium, and expressed himself satisfied with the results of his experiments. In consequence, Mr. Hobson expects that a special plant will be installed next year for saving metals of the platinum group, and any fine gold that may now be lost.

Labour is brought in from the outside, usually about the middle of March, as the pits have to be cleared of ice; and piping begins any time between the 5th of April and the 10th of May. In 1903 one hundred and twenty men, whites and Japanese, were employed at an average wage of two dollars and a half.

Most discouraging to all concerned has been the past season. Owing to failure of water supply, the mine had to be closed down after a run of only fifty-



View of Morehead Lake, Dam and Camp Buildings.

ered through 1,800 feet of steel pipe grading from 48 inches at the sand-box to 22 inches at the giant. During the season just closed only one No. 8 Hydraulic Giant was in service and that with an 8-inch deflecting nozzle, which required 2,500 miner's inches of water—a 9-inch nozzle would require 3,500 inches. If washing bed-rock there is a pressure of 420 feet. The gold is rather fine in character and worth about \$17.12 per ounce. Only a few nuggets have been found of which the largest weighed 6¾ ounces, valued at \$115. Mercury is poured into the sluice boxes four times a day, sixty flasks the amount required during a season. Of this only about ten per cent. is lost, for the amalgam is retorted and the mercury distilled.

This summer Mr. Dubois, an analyst sent thither

three days. The clean-up amounted to about \$47,000. This is small in comparison with other years, as may be seen by the table that follows:—

Year.	Time Run.	Bullion Recovered.
1898	128 days 16½ hrs.	\$105,141.36
1899	144 days 8 hrs.	92,678.93
1900	171 days 13½ hrs.	350,085.77
1901	104 days 1½ hrs.	142,273.51
1902	65 days 15 hrs.	61,395.19
1903	53 days	(approx.) 47,000.00

To appreciate the water difficulty, one must know something about the water supply system, which, as it now stands, consists of thirty-three miles of canal, three main reservoirs, and two pooling reservoirs, and