

small electrically-driven fans to ventilate dead ends. A new magazine for explosives, in compliance with the Explosives Act, was erected in brick and concrete. A capstan steam and air winch, capable of hauling 20 tons, was installed at main shaft to handle pump gear. A second electric locomotive was put into commission for handling filling for mine. Two new tube mills and tailings-wheels, with necessary gear, &c., were added to the milling plant, thus increasing its capacity to a probable 400 tons per day. Two modern tilting furnaces, for melting bullion, were added to the smelt-house equipment. Two coal-bunkers, capable of storing 500 tons of coal under water, have just been completed. During the year 1,160-horse power (electricity) and 150-horse power (steam) has been in constant use.

Comparison of costs for mining and milling for 1909 and 1910 : Tons crushed (2,000 lb. dry weight) —1909, 59,147 ; 1910, 84,313. Value, per ton—1909, £1 19s. 5d. ; 1910, £1 15s. 10d. Extraction—Gold, 1909, 88.9 per cent. : 1910, 89.0 per cent. ; silver, 1909, 70.1 per cent. : 1910, 73.9 per cent. ; value, 1909, 85.2 per cent. : 1910, 87.5 per cent. Final tails, per ton—1909, 5s. 9d. ; 1910, 4s. 8d. Cost of mining, per ton—1909, 12s. 6d. ; 1910, 7s. 7d. Cost of milling, per ton—1909, 8s. 3d. ; 1910, 6s. 3d. General expenses, per ton—1909, 2s. 1d. ; 1910, 1s. 5d.

*Waihi Extended Gold-mining Company (Limited)* (F. Stewart, Mine-manager).

The development-work in this mine for the past year has been confined to opening up the No. 5 level at 960 ft. from the surface and sinking the shaft to open out at the No. 6 level.

*No. 5 Level.*—No. 1 lode : This has been driven on east and west of main crosscut for 250 ft., exposing a strong body of low-grade ore. The main crosscut has been extended a further 350 ft. beyond No. 1 lode, or a total distance from the shaft of 750 ft., but no further ore-bodies were met with.

No. 2 drive has been advanced to the boundary and a connection made with the Grand Junction workings, thus improving the ventilation.

Shaft-sinking is being carried out, and a further 45 ft. must be sunk before opening out at No. 6 level at 1,100 ft. from the surface, when development of the lodes will be pushed on with.

*Waihi Reefs Consolidated (Limited)* (W. Morrison, Mine-manager).

The 200-horse-power Tandem pumping-engine and the Rand Ingersoll air-compressor were erected in the early part of the year ; also a ferro-concrete tank of 18,000 gallons capacity, to supply the condenser. The engine is in position for driving other pumping machinery if necessary. The shaft was bailed by tanks ; and a new Evans sinking-pump, capable of pumping 9,900 gallons of water per hour from 600 ft., was installed at 400 ft. down the shaft. The surface drainage is arrested here by a cistern, and pumped direct to the surface. This water was about 8,000 gallons per hour at first, and is now reduced to 4,000 gallons per hour. The surface swamps were drained, which reduced the water. Sinking was started on the 17th September, and 160 ft. was sunk, making a total of 700 ft. from the surface. The shaft, which was 11 ft. by 6 ft., has been lengthened from where sinking was resumed to 13 ft. 8 in. by 6 ft., and 12 in. by 12 in. timbers used.

*Pride of Waihi Gold-mining Company* (F. Stewart, mine-manager).

Two men were employed by this company working in the Waihi Extended Mine from the 2nd to the 17th May. For the balance of the year the mine has been under protection.

*Waihi-Paeroa Gold-extraction Company* (R. W. Aitken, Manager).

The average number of men employed during the year by this company was thirty, and 7,100 tons of tailings have been treated. On the 31st March the Ohinemuri River, owing to exceptionally heavy rainfall, rose 20 ft., and washed the tailings from the bed of the river. The company therefore decided to remove their plant to a site near Paeroa. Extensive alterations have been made, so that the new plant will be double the capacity of the old plant, it being equipped with every modern convenience necessary for the operations.

*Waihi Beach Gold-mining Company* (J. Caisley, Mine-manager).

The 355 ft. level was extended 32 ft. north during January, making the total length of this drive 861 ft. A reef striking east and west was intersected near the face of the drive, but owing to the water encountered from this reef, operations from the main shaft were discontinued at the end of January. An adit level on the same reef above sea-level was commenced on the shore, and continued 187 ft. westward.

*Romulus Syndicate* (G. M. Stocking, Attorney).

This syndicate have hired a Government diamond drill, and are now testing the country east of the Consolidated property by means of a series of inclined boreholes ; but the rocks hitherto penetrated are not favourable for inclined diamond drilling.

*Waitekohe Syndicate* (S. Middlebrook, Manager).

Since 1906 prospecting-work with two men has been continuously carried out on this property. The main drive has been driven a distance of 630 ft. through hard country. A small vein containing pockets which give high assay values has been proved, but it is very irregular and difficult to follow.