

The *Comstock*, *Silver Hill*, and *Crown Royal* mines have also ceased operations.

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

A new plant has been erected at Paeroa, capable of treating 500 tons of coarse sands per day, and is practically an improved reproduction of the Waihi plant on a much larger scale. It has been designed to work the "all slime" cyanide process, all alterations and improvements added being the outcome of practical experience gained whilst working the company's Waihi plant. Care has been taken to save labour in every department, and at the same time maintain efficiency. Parts subject to breakage or wear are made easy of renewal, and duplicates stocked where necessary, to enable the plant to work continuously. A wharf, with a jib crane capable of lifting 10 tons, is erected on the river, and all plant and material may be landed by steamer at this site. Smithy, store-buildings, &c., are erected, and a complete system of tram-lines connects from wharf to main road, where unloading-gear is also provided. From the main tram-line branch lines run in and about the works, so that everything can be conveniently and cheaply handled.

*Power.*—The power plant consists of four Babcock and Wilcox boilers, fitted with mechanical stokers, Green's economizers, feed-water heater, feed-pumps, and other necessary accessories to work at a pressure of 160 lb. per square inch. The boilers are arranged in two batteries, slack coal being used as fuel. The boilers supply steam to two compound condensing-engines, No. 1 being a cross compound, of 630 horse-power, by Hicks, Hargraves, and Co., and No. 2 a 150 horse-power tandem by Yates and Thom. No. 1 will be capable of driving the whole plant, with a small overload, and the No. 2, besides acting as a spare, will be able (when the tube-mills are not running) to operate the balance of the machinery on Sundays. The shafting and clutches are so arranged that either engine will take the load exclusive of the mills, or both engines may be worked together. In the latter case the smaller, or No. 2, engine will drive the generator (for power-lighting), and air-compressing, and fitting-shop gear. The power is transmitted by cotton rope to two main lines of shafting, and also to the intermediate shafting. From each main line of shafting ten tube mills are driven, two by belting with fast and loose pulleys on the pinion shaft, and the other eight arranged in pairs, one on each side of the shaft, each pair being driven from one steel pinion with friction-clutch on the shaft for starting and stopping. The river plant consists of an air-lift dredger capable of lifting 80 tons of sand per hour, with four 65 ton barges for sand, which when filled are unloaded by means of double-bucket belt-elevators capable of lifting 100 tons per hour, and designed to be raised or lowered to allow for variable height of river or barges.

KOMATA.

*Komata Reefs Gold-mining Company (Limited)* (J. Benny, Mine-manager).

At *No. 4 Level* (600 ft.) crosscuts east and west were projected. In the eastern crosscut, at a distance of 405 ft., Livingston's reef was intersected, and proved to be 50 ft. wide, but unfortunately the ore was low grade. The western crosscut was extended a total distance of 234 ft., and cut two lodes, only one of which was of any value. Both crosscuts have been discontinued. A little work was also done on Hartridge's leader and No. 2 and 4 lodes on this level.

*No. 5 Level* (500 ft.).—Driving south on No. 2 reef was continued for 112 ft., when the reef pinched and became poor. A winze was also sunk south of the shaft, which proved the reef to be 3½ ft. wide, worth £8 10s. per ton. Stopping at this level produced 5,452 tons of ore from a reef averaging 6½ ft. in thickness. A little stoping was also done at Nos. 6 and 7 levels.

The average value of the ore before treatment was £2 6s. 11d. per ton, and the residue averaged 1s. 9d., which is equal to an extraction of 96.2 per cent. of total value. The average number of men employed was sixty-eight.

MAROTOTO.

*Silver Stream Mine* (T. Corbett, Mine-manager).

The Silver Stream lode was cut at a distance of 700 ft. in the low level. At the point of intersection, however, the lode was small, and the level was continued for another 50 ft., without any signs of quartz. The lode referred to has been driven upon for 250 ft., connections have been made with the upper level, and a stope carried for 90 ft. and 30 ft. in height. 7½ tons of selected ore, shipped to Australia, yielded bullion worth £209 3s. 8d. A crosscut is now being put in to intersect the Silver Queen and Comolla lodes, from the face of drive on Silver Stream reef.

*Telluride Proprietary* (J. Williams, Mine-manager).

The principal work carried out in this mine during 1911 has been the extension of the low level in the Gordon section. Four lodes have been intersected, varying from 1 ft. to 6 ft. in width, but in each case the value was low. The crosscut is still being continued for the purpose of intersecting the Silver Stream lode. A small air-compressor and drilling plant have been installed, which greatly facilitates the work, as the country is very hard. An average of twenty men was employed.

*Walker's Marototo.*

This claim has been under protection during the year.

TE AROHA.

*Hardy's Mines (Limited)* (W. Greening, Mine-manager).

Work has been confined to driving 400 ft. a low level to intersect the Vulcan lode in the Premier section. The lode should be intersected in about another 150 ft., when it is intended to put up a rise, and connect with the winze from the upper level. 9 cwt. of ore from the winze treated at Thames produced gold to the value of £12 16s.