

machinery is procured. This mine has lately been disposed of to a Home company, named the Silverton-Waihi Extended Gold-mining Company, and Mr. H. H. Adams, the newly-appointed manager, has furnished the directors with a report with recommendation as to future working, &c. The scheme has been adopted and the work commenced. In the report, Mr. Adams says: "The main shaft is now down a distance of 108ft. from the surface. This is 88ft. below your smithy level. I would recommend starting a cross-cut 100ft. from the surface of the shaft; this would give you a well of 8ft. and a block of 80ft. below your smithy level. This cross-cut will require to be driven a distance of 180ft. to cut the lode. This work can be started at once if a small pump is got to keep the water out of the shaft, and a horse-whip erected to haul the stuff. This work would necessitate an extra expenditure of £200. The work can be in progress, and will not interfere with the erection of the permanent pumping and winding plant. Your main shaft will require making larger, so that you can sink 2,000ft. if required, and to do this you will require a shaft 14ft. by 6ft., in the clear, and timbered with 8 by 8 frame-sets, 2 ft. apart, slabbed with 9 by 2 slabs. This work can also be in progress during the erection of the permanent winding and pumping plant. The cost of this work will not exceed £225. Poppet-heads will require to be erected over your shaft, 60ft. high, with all necessary bearings for winding-sheaves and guides; the cost of this work will not exceed £200. You will require a winding plant capable of winding 2,000ft. I would recommend your getting a double-cylinder engine for this work, and of the very latest type; if this plant is got new it will not exceed £1,250. You will also require a pumping plant capable of carrying you down a distance of 2,000ft. I would suggest the Cornish system of plungers and drawing-lifts; these pumps to be worked by a horizontal engine connected with the pumps with crank and crank-shaft, the crank having different lengths of stroke, say, 7ft. to 3ft. This will put you in a position to cope with small or large quantities of water. The cost of these pumps and engine will not exceed £2,150. You will require also two multitubular boilers to supply steam for your winding plant and pumping-engines. These boilers will require to be built on the very latest economising type, and sufficiently large so that either of them will have sufficient capacity to find the steam for the engines. These boilers, placed in position, will not exceed a cost of £750. Two kilns will require to be built to dry your ore to make it fit for dry-crushing. I would recommend these kilns being put at the mine. This will be a great saving, as you will only require to convey to the mill the dried ore. It will also save elevating the ore, which, if done at the battery, would require elevating twice. The cost of these kilns will not exceed £300. A tramway will be required from the mine to the mill, the distance being about one mile and a quarter. I would recommend 26lb. rails being used, with sleepers 6 by 4, 3 ft. apart. The cost of this line will not exceed £750. The battery will require to be made a dry-crushing mill. This alteration will necessitate new stampers and a complete new cyanide plant erected on the most modern principle. The cost of this work will not exceed £2,500. If you adopt the foregoing recommendations, I have not the least hesitation in saying you will have a complete plant, and, from information I have received from men whose opinion is of value, you have a mine which warrants this expenditure. There will be required, extra to the above amounts, £1,850 for driving cross-cut, opening up reef, supply of 2,000 tons of firewood, office, blacksmith's shop, and sundries."

The Gladstone Mine was abandoned, but the ground is again taken up.

Grand Junction Mine.—This is situated on the eastern boundary of the Waihi Mine. Mr. J. W. Walker, the manager, says: "The company's operations to date (31st March, 1895) have been confined to erecting diamond-drill plant, sinking with same to 206ft., and in building housing for manager and his men on the mine. The first 21ft. sunk in alluvial deposit, which rested on 91ft. of rhyolitic rock, under which is a layer of 75ft. of soft whitish clay, resting on about 10ft. of very coarse sandy material. I may add that we are now (6th April) for the last 19ft. into a fine healthy sandstone class of country, precisely similar to that which enclosed the Martha Reef.

A great deal of attention has been directed to this district, and a large area of ground occupied under licensed holdings and special claims, but some time will yet elapse before permanent works are commenced in the new areas. The heavy deposits of rhyolite overlaying the bed-rock in this district renders the work of prospecting difficult and expensive.

The *Cassel's Gold-extracting Company (Limited)* have kept their plant for the treatment of Waihi tailings continuously employed. During the year 18,732 tons of tailings were treated for a return of gold bullion valued at £17,225 10s. 7d. It is expected that the stock of tailings will last another six months.

PIAKO COUNTY.

WAIORONGOMAI DISTRICT.

New Find Mine.—Very little work has been done in this mine during the year; 23 tons crushed for the owners, 16oz. 17dwt., and 250 tons of tailings treated for 55oz. 8dwt. of gold, and for tributers 15 tons for 9oz. 17dwt. of gold.

Loyalty Mine.—Four men have been employed during the year. Upwards of 200ft. of driving has been done, and 80 fathoms of the reef stoped out. 321 tons of quartz yielded 342oz. 8dwt. of gold.

Palace Mine.—This mine includes portion of the old May Queen ground. Nine tons were crushed for 29oz. of gold. Two men were employed for about six months.

New Premier Mine (late Newsham's).—A portion of the large reef about 16ft. in width was taken out, and 460 tons yielded 156oz. 11dwt. of gold. Two men were employed.

Several prospecting parties have been working in this district, but no new discovery has been made.

TUI CREEK DISTRICT.

Champion Mine.—Very little work has been done, and there are no returns for the year.

Galena Mine.—Three men have been employed during the greater part of the year, but no returns of gold or exported galena have been made.