

has been put in where used. Air good. The mine makes very little water, which is easily kept under by a barrel. Winding plant: Drum, 3 ft. diameter; geared; reversing by fast and loose pulleys; belt-driven; winding-ropes, 2½ in. galvanised-steel wire; Pelton wheel, 5 ft. 6 in. diameter; pipe column, 600 ft. in length; pipes reduced from 13 in. to 11 in. to 9 in.; pressure, 200 ft. vertical head. Battery: Ten-head stamps, each 600 lb., driven by Pelton wheel, similar to winding-power; tables, copper plates 6 ft. in length by 11 ft. in width; blanket-strakes, 9 ft. in length; blanketings passed through two berdans driven from intermediate shaft.

Cuttle Cove Gold-mining Company, Cuttle Cove.—(24/5/1902): An adit level was driven 100 ft. about the year 1900, the leader cut being only 6 in. in thickness, laminated in the country-rock—slate. Dip, 1 in 2½ from horizontal; stone highly pyritiferous. In June, 1901, the mine was let on tribute to two miners, who laid a tramway from the beach and took out a trial crushing (15½ tons) of stone, which on being crushed at the Morning Star battery returned 11 oz. 13 dwt. of retorted gold. The mine has been recently taken up, and the proprietors propose to do some further prospecting.

Tarawera Mining Company, Isthmus Sound.—(31/5/1902): The reef is seen outcropping on the beach; strike, east and west; underlay, south, 1 in 7; reef, all quartz, 2 ft. 6 in. in width in hard country (granite). No work has been done here recently. A shaft 8 ft. by 4 ft. had been sunk 80 ft. and a level driven to the reef. The quartz carries several minerals, galena, &c. (see Geological Report, 1896; McKay), but the returns are said to have been non-payable.

Golden Site Extended Gold-mining Company, Wilson's River.—(27/5/1902): Underground work was suspended on the 30th April, 1901. The water was kept under for a time, but pumping subsequently discontinued. Extensive prospecting had been conducted, but stone was all too poor to pay expenses. It was hoped that the Hesperides reef would turn out to be payable, and the reef was opened up, but here again the results were practically nil. The mine stands full of water to the river level; rails have been left in; ten-head battery and plant recently sold. The bush tramway from Cromarty is in a state of disrepair, being overgrown with scrub, and the wooden rails are rotting away.

Fifteen men are employed in the locality at quartz-mining. Some few years ago prospecting-work was regularly carried on, but is now intermittent. The country, generally speaking, is highly mineralised, and the work, though arduous in the extreme, is said to have been very fascinating, the principal drawbacks having been roughness of the country and the difficulty of obtaining necessary supplies and maintaining communication with the inhabited world. Old miners, having spent years on the south-west coast, are quite satisfied that "something good will be found there yet," and are only now constrained to reluctantly abandon their search owing to advancing years and diminished purses.

HYDRAULIC AND ALLUVIAL MINING.

DEEP STREAM.

Deep Stream Amalgamated Hydraulic Sluicing Company, Deep Stream (A. C. Buckland, manager).—The ground is shallow, and consists of a material of a fine nature, and sluicing operations are advancing rapidly up the flat, being now two miles above the point where work was begun. Two elevators are at work lifting dirt to a height of 35 ft. under a pressure of 300 ft. vertical. The windings of the stream hamper proceedings, as the work cannot be carried forward in a proper face. Intake races being frozen up, work is usually suspended in winter for a period of about six weeks. Gold-saving appliances consist of angle-iron ripples in the boxes with perforated plates and cocoanut-matting. Eleven men employed.

SUTTON.

Hibernia Sluicing Company, Matarae.—Water being in plentiful supply all season, work has been steady. The face is 45 ft. in depth, and there is 3 ft. of wash resting on a very soft bottom of fine sand. This bottom being easily cut, great care is required in handling the nozzle when cleaning up bottom. Edges of face kept nicely trimmed to prevent falls occurring. The tail-race tailings-tunnel continues working satisfactorily and has never given any trouble. No work has yet been done to test the false bottom.

MANUKA CREEK.

Stewart's Sluicing Claim, Manuka Creek.—There is very little work now done in this ground-slauicing claim. The friction between the farmers and the claimholder on account of dirty water continues to hamper sluicing operations very much. The tailings are discharged into a gully, and held there by a series of dams, allowing only comparatively clear water to flow away.

WAITAHUNA.

German Flat Hydraulic Sluicing and Elevating Company, Waitahuna.—This private party have not been so successful as was expected. The average depth of the ground is 10 ft., the top layer of clay being hard and troublesome, but there are a few large stones in the wash. With a water-pressure of 120 ft. the material is elevated 20 ft. As the work is being pushed on up the flat pressure is being lost, and if a more payable class of ground is met with the pipe-line will be shifted to bring the pressure more directly on to the claim. Four men employed.

Upper German Flat Hydraulic Sluicing Claim, Waitahuna (S. Johnston and M. Girvan, owners).—The flat operated on is very even on the bottom, the average depth of the face being 8 ft. The top layer consists of a hard clay, which is somewhat troublesome to work. Pressure, 160 ft.; height of lift, 15 ft. The ground is little better than payable. Three men employed.

Ferris and Traye's Sluicing Claim, Waitahuna Gully.—This is the only party in this district working into the cement deposit. The method is to sluice off the top layers of recent deposits and