

The battery (which was erected for dry crushing) has been remodelled and converted into an up-to-date wet-crushing plant. The process adopted consists of wet crushing, amalgamation, separation of the slimes from the sands, and concentration of the sands, which are then lifted by a "tailings-wheel" into the sand-vats, and treated by the cyanide process; the slimes are also treated in agitating-vats by the cyanide process, and the concentrates produced are treated in a small agitating plant with strong cyanide-solutions. The process is said to be economical, both as regards cost and the percentage of extraction of the ore treated. Although a considerable amount of gold has been obtained from this mine, yet it has been disappointing, the ore not yielding the results anticipated; but, as the Te Ao Marama section of the Waitekauri Gold-mining Company has been taken over by this company, which adjoins this ground, the prospects of the company appear more encouraging, as rich ore was obtained in the upper levels of the section mentioned. 9,200 tons of ore was treated at the company's mill for a bullion return of 11,216 oz. 11 dwt., valued at £11,289 6s. 6d.; and seventy-six men were employed.

Byron Bay.—Prospecting operations have been carried on in this ground intermittently with four men, and the prospects met with are said to be most encouraging.

MARATOTO.

Hikutaia Gold Syndicate.—This syndicate has resumed operations after a cessation of work for some nine months. An addition of five heads of stamps has been made to the crushing plant, which has been kept steadily working since the month of November. It is stated that six men breaking quartz in the mine can supply sufficient quartz to keep the battery running full time. Although the ore is low grade, it is easily got, and can be put into the mill at a small cost; and the supervisor is confident, even with the small plant, it can be made to pay working-expenses. Twenty men are now employed.

Maratoto Gold-mining Company.—Operations in this mine for some time past have been confined to driving a low-level crosscut for the purpose of intersecting the Maratoto and Pay Rock reefs, which are opened up to some extent in the No. 1 and No. 2 levels. The ore at those levels was rather poor to pay, as it contained a fair amount of silver, but not enough gold. As it was worked upon it was found the reef would improve in value at deeper levels, hence the reason of opening up the reefs at the level named. No returns. Six men are employed.

Khartoum Syndicate.—For the last three months prospecting operations have been carried on in this mine with four men, who have been successful in discovering two distinct reefs, one of which varies from 1 ft. to 3 ft. in thickness, and is said to carry a fair amount of bullion. So far it has not been proved to be any great depth below the surface. A crosscut is now being driven from the side of hill to intersect the largest reef at a depth of 150 ft. below the surface. Four men are employed.

WHANGAMATA.

Mananu Gold-mining Company.—The principal work carried on in this mine for the greater part of the year was confined to stoping out the Studholme reef above No. 1 level, and it was from here the bulk of the quartz was obtained to keep the stamps running. This block of ground is nearly exhausted, and the company's operations for some time past have been directed to timbering the No. 2 level and making preparations for stoping out the aforementioned reef above No. 2 level. The reef varies in size from 18 in. to 5 ft. 6 in. in width, and it is estimated there is something like 5,000 tons of payable ore in sight between those levels. At No. 3 level a crosscut has been driven a distance of 69 ft., where the Studholme reef was intersected and driven on for a short distance in a southerly direction; but as the air was very light in this drive it was stopped, pending the erection of a small furnace as a means of procuring the necessary ventilation. Two men have been employed driving on the reef at the Fulchar drive, but assays made of the stone from time to time have not given results as expected. The Nos. 2, 3, and 4 levels have been connected by rises to give better facilities for getting the ore from the mine to the battery. An additional ten heads of stampers have been erected, and auxiliary steam-power—which consists of an 80-horse-power slide-valve engine, with tubular boiler, 16 ft. long and 5 ft. in diameter—will be complete in a few weeks, when the mill will again be in full swing. 2,219 tons of ore was treated at the company's mill during the year for 3,440 oz. of bullion, valued at £7,558 13s. 11d.; and an average of forty men was employed.

Whangamata Proprietary.—As far as this property is concerned, all work was suspended in August last, when protection for six months was obtained. Previous to that date mining-work was confined to the sinking of a winze some 100 ft. in depth from the floor of the lowest or No. 3 level. The reason for suspending operations was that the future development of the mine must consist of deep sinking by the aid of a large pumping plant, which has already been ordered, and is now in Auckland. Such deep sinking, however, will necessitate heavy expenditure quite beyond the present resources of the company. A reconstruction scheme has been formulated which will provide ample fresh working capital, and this scheme now only awaits a favourable market opportunity for completion. In the early part of the year 150 tons of ore was treated for 255 oz. of bullion, valued at £224. An average of eleven men was employed.

TAIRUA.

Chelmsford Gold-mining Company.—During the period under review a large amount of work has been done on this property. The ten-stamp battery in the course of erection in the early part of the year was completed, and crushing was commenced in the month of May. The mode of treatment is wet crushing, amalgamation, and cyaniding. The quantity of water to run the plant (from where it was first lifted from the creek) was not sufficient in dry weather, and it was found necessary to extend the race a further distance of two miles to pick up the tributaries. Since this has been completed there has been ample water to keep the mill continuously running. In the