

not being able to replace them in the colony, work was stopped, and the water allowed to rise, but they have since arrived, and work has been resumed. The principal development-work carried out in the mine during the year has been the driving of a level on course of the main reef a distance of 300 ft. Several crosscut drives have been put in through the reef to ascertain the width of lode, which proves to be fully 40 ft. wide. This level has been opened out from an underlie shaft, sunk on the reef a distance of 160 ft. below chamber, which is opened out from the lowest adit-level. It is intended to sink this shaft a further distance to 300 ft., where another level will be opened up. Motive-power is derived from two powerful dynamos, which are driven by water, and are situated about two miles from the mine. About sixteen men are employed.

Grace Darling Mine.—Operations in this mine were suspended during the greater part of the year, pending the erection of a ten-stamp battery, with cyanide plant and water-race, which was completed in February, when crushing operations were started and work resumed in the mine. The present work in the mine is confined to stoping on the main reef in the Grace Darling section over the back of the No. 2 level, where it has been opened up to a fair extent, and varies from 2 ft. to 5 ft. in thickness. In the No. 3 level, 100 ft. below the No. 2 level, the reef has been intersected, and it is intended to connect this level with two winzes which have been sunk on the reef from the No. 2 level, a depth of 50 ft. and 70 ft. In the Portsea section of the property driving and rising operations are proceeding on the reef. The battery which has been erected by the company at present consists of ten head of stamps, but in the erection of the plant provision was made in the building and foundations for another ten head if required. The mode of treatment adopted is wet crushing, amalgamation, and cyaniding. An auxiliary steam-power has also been erected for running the mill in dry weather, when water is not obtainable as a motive-power. Steam will be supplied by a Babcock and Wilcox boiler of 85-horse power, and a Tangye single engine of 65-horse power. These will be capable of running the full plant, including the extra ten head of stamps, &c., should they be erected. The reduction and cyanide plant consists of ten head of stamps of 1,050 lb. each; one 4 in. Gates ore-crusher, with automatic feeders for the stamper-boxes and amalgamating-tables; two spitzlütens for separating the slimes; three percolating-vats, 20 ft. in diameter by 8 ft. deep; three settlers, 17 ft. in diameter by 8 ft. deep; two sumps, two storage-vats, and two precipitating-boxes. The only return for the year was 295 tons of ore crushed at the new battery for a yield of 96 oz. 15 dwt. of gold, valued at £120 18s. 9d., which is rather disappointing, as better returns were anticipated. An average of thirty men were employed during the year.

Alpha Mine.—Operations in this mine have been continuously carried on during the year. The erection of the battery was completed in the early part of the year, and crushing operations were commenced in June. After putting through 965 tons of ore (which was cleaned up in the month of August for a return of 652 oz. 8 dwt. of bullion, valued at £710 17s. 11d., which was very disappointing, not being sufficient to cover expenses), the plant was closed down, and further prospecting operations carried on in the property; but so far nothing new of a payable nature has been opened up. The work is chiefly confined to the No. 4 level Alpha section, and Rainbow section on the western side of the hill. Eight men have been employed during the year.

Young New Zealand Mine.—Prospecting operations have been steadily carried on in this ground during the year, with from two to five men employed. At present their attention is directed to extending the low level to intersect the reef at a depth below the higher workings, where the reef has been operated on to a fair extent, and from which good returns were obtained in the early days. It is expected the reef will be met with in about another 60 ft. of driving, when it is anticipated payable ore will be opened up.

Huanui Mine.—Work in this mine is at present confined to driving on the reef from the main low-level crosscut, which is in a distance of about 700 ft. The reef varies from a few inches to 2 ft. in thickness, and occasionally a little gold is seen in the stone, but no returns of gold have been made during the year. At present only two men are employed.

Waitekauri King Mine.—A fair amount of work had been done in this mine during the early part of the year by the owners in prospecting the ground and opening up some of the reefs discovered on the property, but, not finding anything that was considered payable, the mine was let on tribute to A. Campbell and party, who broke out and treated 8 tons of quartz at the Thames for a return of 12 oz. 3 dwt. of gold, valued at £24 4s. 7d.; but as the expenditure in getting the quartz to a battery for treatment was so great it was considered not payable. An average of four men were employed.

Prospecting operations are also carried out in the Diamond Gully and Eclipse Claims, with from one to two men on each.

WAIHI DISTRICT.

Waihi Gold-mining Company.—Work in this company's mine has proceeded very satisfactorily during the year, and has consisted in driving, rising, stoping, &c., on the principal lodes in the mine—viz., the Martha, Welcome, Victoria, Magazine, Regina, Surprise, Empire, Prince, Princess, and Albert reefs, which vary from 1 ft. to 57 ft. in thickness. The No. 4 level on the Martha lode east has been driven on the reef a distance of 530 ft. At 521 ft. the lode was cut through and found to be 18 ft. thick. The western end of No. 4 level on the Welcome lode has been extended a total distance of 1,047 ft. from the No. 2 shaft. The lode split in two places about 50 ft. back from the face, and the level is at present being driven on the south portion, and it is to be extended to No. 3 shaft a further distance of 220 ft. The No. 4 level on the Empire lode, west of the new crosscut, has been driven on the lode a distance of 176 ft.; the lode is 2 ft. 6 in. wide, and is of first-class quality. East of the new crosscut the reef is very large and of good quality. East of the old crosscut the level is in 100 ft., and another 115 ft. will bring the drive to a point near where