

on reef, 446,199 cubic feet. In the Te Ao Marama section the shaft has been sunk 130 ft., making the total depth 570 ft. A further 30 ft. of sinking is necessary to reach the Komata low level, where a connection can be effected. From the shaft driving on two of the reefs in this section has been prosecuted. The Komata low-level tunnel was undertaken with the object of establishing a connection between the Komata and Te Ao Marama section and the company's mill at Waitekauri, and also with a view to the discovery of new lodes *en route*. 1,363 ft. has been driven during the year, making a total distance of 3,439 ft., and about 750 ft. of driving is yet necessary to get under Te Ao Marama shaft. In view of the probability that some more advantageous method of working the Komata section will present itself, the extension of this tunnel has been suspended. The Grace Darling low level has been extended 91 ft.; total length, 116 ft. As this work did not reveal anything of a payable nature, driving has been discontinued. In the old Waitekauri Mine an average of eight men has been continuously employed, and five heads of stampers are now constantly engaged in dealing with the ore obtained from small blocks. The following is a summary of works carried out in this section: Winzes sunk, 73 ft.; rises put up, 110 ft.; driving done, 715 ft.; stopping on reefs, 6,300 cubic feet. An average of 285 persons has been constantly employed during the year.

*New Zealand Jubilee Gold-mine (Limited).*—In this mine a considerable amount of work was done during the early part of the year in the upper levels—viz., the Moonstone and Horn levels—consisting principally of driving and crosscutting. As there were no fresh discoveries of any importance met with in those workings, it was decided (in view of the promising results obtained in the low-level tunnel) to temporarily suspend work in the upper levels and confine operations to the thorough exploiting of the deep-level portion of the mine. The result of this work will be looked forward to with some interest, as it is on these the ultimate success of the mine depends. The low-level tunnel has been extended a distance of 850 ft. in a southerly direction during the year, making the total distance from the mouth of the tunnel to the face 2,810 ft. At a point 2,380 ft. in from the mouth of the tunnel the two reefs known as the Point and Butler's were intersected, and the drive was then extended on the course of Butler's or Hanging-wall reef. Some highly encouraging results were met with; assays as high as £18 16s. per ton are said to have been obtained from general samples taken over 4 ft. to 5 ft. in width of the reef. The ore is a heavily mineralised sulphide, containing copper, lead, iron, zincblende, &c. At 110 ft. south of the point of intersection a break was met with, which had the effect of throwing the reef slightly out of its course. Since picking it up again a further distance of 315 ft. has been driven on the reef, which carries values throughout varying from 12s. to £4 4s. per ton, and in places it is 20 ft. in width. The intention is to open up an intermediate level between the low and the Horn levels (a distance of 260 ft. vertical), and the levels will be connected. This will insure good ventilation, and give facilities for working out the blocks of ground between the levels. The present low-level tunnel will also be extended indefinitely towards and under the old Waitekauri Company's ground, in order to ascertain whether the rich runs of gold formerly worked in the upper levels hold down. The results of this work should prove the capabilities of the mine. At a recent reconstruction of the company in London a further sum of £6,000 odd was raised, and it is the intention of the directors to devote this money entirely on the development-works mentioned. Should they turn out as satisfactorily as anticipated, further capital will require to be raised in order to erect machinery to treat the ore. An average of nineteen men has been employed.

*New Waitekauri Extended Mines (Limited).*—The above company was reconstructed in the early part of the year with a working capital of £30,000, the intention being to prove the reef at a depth below No. 3 or lowest level. Operations were commenced in April to cut out a large chamber in the low-level crosscut close to the reef to install boiler-power, winding and pumping plant capable of sinking to a depth of 500 ft., the smoke to be carried away by a rise already constructed to the surface. To expedite matters and to make use of the water-power at hand a single-drum water-hoist was erected, and two small plunger pumps were put in, and driven by a Pelton wheel. A commencement was made with the sinking of a main shaft, 6 ft. by 15 ft. 6 in. in the clear, 40 ft. west of the reef. This shaft had attained a depth of 76 ft. when cable instructions arrived to close down, pending an amalgamation scheme with the Waitekauri Gold-mining Company, which was subsequently carried into effect; and therefore all work for the present will be concentrated in the Waitekauri Company's mine, and the Extended property tested by means of levels from the shaft, which has already attained a depth of 700 ft. An average of forty men was employed by this company during the year.

*Waitekauri Cross Gold-mining Company.*—Work in this mine was at a standstill during the first six months of the year. On resuming operations a rise was commenced from the adit level to connect with the surface. This rise was vertical, and carried up in two compartments, one being for a ladder-way and the other a mullock-pass. The height of this rise was 80 ft. to the surface. This work was said to be a preliminary step towards the construction of a main vertical shaft. Early in December communication between the two points named was effected, and a section of 25 ft. of the main shaft completed. The shaft is 14 ft. by 6 ft. in the clear, and is divided into three compartments, and substantially constructed with 9 ft. by 9 ft. sets and 9 ft. by 2 ft. planking, all heart of kauri. The intention is to sink this shaft to a depth of 500 ft. before opening out to intersect the reef, which varies at the upper level from 6 ft. to 50 ft. in width. The company previously tried to open up and develop the mine through an underlie shaft sunk on the reef from the adit level mentioned, and on the top of the shaft an electric plant for pumping and winding was erected. This, however, did not prove a success, hence the reason of trying another mode of opening up the mine.

*Alpha Gold-mining Company.*—Operations in this mine have been principally confined to extending the No. 4 level main crosscut, which has been advanced during the year a distance of 437 ft. Several leaders have been intersected in this drive, but apparently of poor value. The