

run to their new pump, thereby greatly decreasing the cost of the old pump without materially increasing the cost to the new.

Thames-Hauraki Goldfields (Limited).—This property consists of two sections—Queen of Beauty section and Deep-sinker section. The property is owned by the Thames-Hauraki Goldfields (Limited), but will shortly be taken over by the Standard Exploration Company.

Queen of Beauty section: Area, 47 acres. During the past twelve months the sinking of the shaft, which is 20 ft. by 11 ft. over all, has been continued, and is now down a depth of 750 ft., at which point the bottom of the old shaft was reached, so that further sinking will be in solid country. In addition to sinking the shaft, the crosscut leading from the No. 8 chamber at the 540 ft. level has been cleaned out, and retimbered where necessary. This has been done with a view of commencing operations on a large ore-body known as the Vanguard reef. The crosscut from the chamber to the reef is 950 ft., and 620 ft. of this has been already cleaned and repaired. A large amount of CO₂ gas in this drive gave considerable trouble. To procure ventilation a suction-pipe has been connected with the chimney-stack, which is answering admirably. A jet of compressed air, as well as a water-jet, are being utilised so that the work can be proceeded with. At a depth of 595 ft. the shaft was enlarged for a distance of 40 ft. to 25 ft. by 20 ft. over all to provide a chamber for the second set of plunger gear, which is already in position. A coupled horizontal steam-engine, with high-pressure cylinder 18 in., low-pressure cylinder 29½ in., and 32 in. stroke, and supplied with Paxman's automatic expansion gear, has been erected to work the air-compressor to replace the Corliss engine, which proved unsuitable. The whole of the plant—pumping, winding, capstan, and electric—continues to give every satisfaction.

Deep-sinker section: The work in this section was temporarily suspended in December, 1899. For the nine months prior to this the principal work carried on was the extension of the northern crosscut at the 450 ft. level. This crosscut is now in a total distance of 1,299 ft., at which point the drive entered a hard bar, and it was deemed advisable to discontinue the drive further in this direction. The men thus employed were consequently removed to open up the No. 8 level from the Queen of Beauty shaft towards the Deep-sinker property for the purpose of locating and proving the Vanguard reef in this direction. In prosecuting the above work, numerous small leaders and quartz veins were intersected, but no large ore-bodies were met with.

Karaka (Limited).—The work carried on during the year has been the extension of the crosscut at the Collarbone Creek level, which is now in a distance of 1,064 ft. There are two reefs in this property, the No. 1 and No. 2. The No. 1 reef, which is 3 ft. wide, has been driven on for a distance of 200 ft., while the No. 2, which is 4 ft. wide, has been driven on a distance of 450 ft. Both reefs, however, are low grade. The total driving on the No. 1 reef is therefore 900 ft., and on the No. 2 reef 750 ft.

Adelaide Mine.—The only work done by the company has been the repairing of old drives, two men being employed, and three men working blocks of ground on tribute. The leaders operated on were from 4 in. to 10 in. in thickness. 24 tons of quartz was treated for a return of 7 oz. 7 dwt. of gold, valued at £20 6s.

May Queen Extended.—This company had protection to work with two men, who were employed for several months in the early part of the year, the greater part of their time being devoted to driving a series of prospecting-drives, from which no encouraging results were obtained. The principal work now being proceeded with is the sinking of a shaft, which has obtained a depth of 100 ft., the size being 10 ft. by 4 ft., and the management has decided to sink it another 70 ft. before opening out, when crosscut drives will be driven to intersect several reefs which are known to traverse the property. Two in particular are large, and good returns were obtained from quartz broken out at the upper levels. The shaft is being sunk close to the Karaka Creek, and a small plunger pump worked by an overshot wheel is erected. This is continuously worked to keep the shaft dry. The company has a twenty-two-stamp battery and thirteen berdans, which have been employed for the greater part of the year in crushing quartz from various mines in the district, the mode of treatment being the ordinary wet-crushing and amalgamating process.

Occidental.—This mine has been partially under protection, the Warden having granted the company permission to work with a limited number of men. The North Star low level has been extended a distance of 350 ft. on the course of the Hague Smith reef, and has now been driven a total distance of 1,500 ft. The drive is now penetrating a good channel of country for gold. There are four gold-bearing lodes traversing the length of the property, varying from 1 ft. to 35 ft. thick, in which rich deposits of gold were obtained in the upper levels, and the developments in progress are for the purpose of ascertaining their thickness and value at the lower levels. An average of four men have been employed. 52 tons of ore was treated for 27 oz. 5 dwt. of gold, valued at £74 6s. 5d.

Fortuna Mine.—This mine was worked vigorously in the first part of the year, twenty-five men being employed. The work was chiefly confined to working the reef at No. 2 and No. 3 levels, which varied from 1 ft. to 4 ft. in thickness; but, as the yield of gold obtained from the quartz treated that was won from the No. 3 level did not prove payable, operations here were stopped, and the water allowed to rise to the No. 2 level. Trial crushings were also taken from the reefs at No. 2 level, and, as payable results were not obtained, another attempt was made on the reef at No. 3 level, but with no better success, and the mine was shut down. 514 tons of ore was treated at the company's mill for 116 oz. 8 dwt. of gold, valued at £251 2s. 3d.

Ethel Reef Gold-mining Company (Limited).—This company holds the following mining areas at Hape Creek, Thames: Anchor Special Quartz Claim, 96½ acres; Lord Nelson Special Quartz Claim, 36 acres. Also an option over the Mascotte Special Quartz Claim, 57 acres. Up to the present the chief work has been done on the Anchor Claim; the only work in connection with the Lord Nelson Claim is a crosscut adit, being driven to intersect the Lord Nelson reef. This