

by the ordinary methods of stoping out the reef and crushing the quartz. Up to the present time gold of the value of £9,800 has been taken out of the reef during the seven seasons worked, for an outlay averaging a little under four men's wages during the time worked. The gold is of high quality, being worth £3 19s. to £4 per ounce. Although the situation of the mine is such that it could be opened by a low-level adit, very little has been done in this direction to open up the mine, most of the work done being by shafts, where the lode has been followed from the surface downwards, the stone being raised by hand and afterwards sledged to the battery. A level is being driven to tap the blocks of stone known to exist at a depth of from 70 ft. to 120 ft. below old workings. This level is now within 150 ft. of the lode, and is being pushed on as circumstances will allow. Two reefs of quartz are worked, running east and west, with a southerly dip, the chutes of gold having a slight dip to the west. The two lodes vary in their distance from each other, in some parts being 50 ft. in other places 10 ft. to 12 ft. apart. Where so close as this they form one big lode. The quartz is commonly of a friable character, and the gold, although fine, is distributed generally through the stone. It takes a little more than 1 dwt. per ton to put the stone in the battery when raised to the surface, an expense which will be abolished when the level is completed. The mode of saving the gold consists of using mercury in the stamp-box and about 3 ft. of copper-plates, no blankets being used, as the plant does not include any means for the treatment of blanketings. During the twelve months ending the 31st March, 1898, which only includes nine crushing months, eight hundred pounds' worth of gold was obtained, four men and a boy being employed. Included in this was the driving of the adit level a distance of 35 ft., and the sinking of air-shaft a further 70 ft., connecting the adit with the surface; also the shifting of battery and laying down tramway, and other work of a developing nature. No explosives are required to mine the lode stuff, as it yields to pick and gad, timber, however, being a fairly heavy item of expense. The power for working the battery is obtained from a small Pelton wheel driven with a direct fall of about 100 ft. A great drawback in the working of the mine has been the want of a road from the main road to the workings. This is gradually being overcome, however, the owner spending some time on it every season, and the claim can now be reached by bullock teams halving their loads. The average number of men employed for year was four and a half.

*White's Reef Claim* (Area, 44 acres).—This mine continues to yield quartz of a payable kind. The workings are chiefly in shafts sunk to a moderate depth, with levels driven between the shafts. The runs of gold are, however, extending downwards. The battery consists of five stamps, and at the time I was in the district, on the 11th March, the owners were engaged in removing it further down the hill, in order to get advantage of the limited water-supply for power. 160 tons of quartz yielded 143 oz. 6 dwt. of gold.

*Eureka Quartz-mining Company, Ophir*.—This company was formed to undertake prospecting operations on a reef discovered in 1896 by W. Green, who had sunk to a depth of 23 ft., the reef increasing in depth as he descended. The line of reef is east and west, with little dip. Stone was taken out for a distance of 120 ft., at varying depths, and a trial crushing of 73 tons gave a return of 40 oz. 10 dwt. 11 gr. It was subsequently decided to sink a shaft on the same line of reef, and at a depth of 70 ft. it was found that the reef had widened. Sinking was carried on to a depth of 100 ft., and thence a drive of 14 ft. was put in to follow the line of reef, and a cross-cut of 28 ft. made to the north. Owing to financial difficulties, work was suspended, but the promoters entertain hopes of eventually making the property a success.

#### *Macrae's Flat District.*

*Golden Point Claim* (Area, 60 acres; owners, William and George Donaldson).—The workings are on the surface. A flat seam lying under alluvial drift and surface soil is denuded by hydraulic pressure. The loose material, being washed through sluice-boxes, yields alluvial gold. The quartz, which is of a firm friable nature, is conveyed by aerial tramway to the mill and crushed. The mill consists of one stone-breaker, one 5 ft. Huntington roller-mill, and two 3 ft. 6 in. Wheeler's pans, and is driven by a Pelton wheel. The water-race is four miles in length, costing £400. The mill machinery also cost £5,000, and the ore-bins and aerial tramway £200; total, £5,600. The quantity crushed was 130 tons, yielding 32 oz. 16 dwt. of gold; value, £127. Six wages-men are employed.

#### *Barewood District.*

Lyder and party, of the Golden Burn Company, have claims on the Taieri River. A battery of ten head of stamps is on the ground, and considerable prospecting and development work has been done. The lode averages about 5 ft. in width, but is impregnated with arsenical pyrites, for the elimination of which additional plant will be required.

*Barewood Mine*.—Prospecting operations have been energetically carried on during the past year on this property by the Anglo-Continental Gold Syndicate and the London and New Zealand Exploration Company, who are jointly interested in the venture. Three shafts have been sunk, 12 ft. by 4 ft. in the clear inside the timber, to a depth of a little over 200 ft. These shafts are on different sections of the property, along the line of reef, and are about 40 chains apart, so that the reef will be tested at different points. At Scott's Gully a level was driven on the lode from the shaft at a depth of 100 ft., and stone of a payable character for working found at that level. A cross-cut has been driven from the shaft at 200 ft., and the lode cut through, where it shows a width of 8 ft. of lode matter between the walls, but in this width there is about 5 ft. of mullock and quartz, which contains but very little gold. It is, however, satisfactory to find the width between the walls of the lode continues to be the same as it was on the 100 ft. level. A commencement is now made to drive on the line of reef on each side of the cross-cut at the 200 ft. level. One of the shafts is sunk on what is known as Ryley's Claim, and a commencement is now being made to drive a cross-cut from the shaft to cut the reef at a depth of 200 ft. The reef was said to be worked to a depth of 140 ft. by the former proprietors from an old shaft which was sunk on the underlie of the lode, but this shaft was in a very bad state of repair, and full of water, at the time the English