

The reef outcropping on the eastern bank of the Shotover River opposite the Shotover Quartz-mining Company's mine has been taken up by Mr. Cleave of Invercargill. At the time of my visit one man was engaged exposing a block of stone on the hanging-wall, but no developments of any consequence had taken place.

The reef known as the Crystal reef was taken up by a party and some prospecting undertaken. The reef is wide, but very little work has been done upon it.

Reefton United Quartz-mining Company, Skipper's Point.—(8-12-1903): Since last visit the work of driving the crosscut to the reef had been completed and the reef was struck at 100 ft. The reef averages 2 ft. 6 in. at this point with a leader 9 in. wide running parallel to the main reef. Some driving was done along both these, and a leading stope taken out over 30 ft. on the reef. Some 10 tons of stone from reef and leader were packed out and taken to the Shotover Gold-mining Company's battery. I am informed that the stone yielded at the rate of over 1 oz. per ton of quartz. At the time of my visit, Mr. Ring, one of the Reefton shareholders in this property, was in charge and was awaiting advice from the company as to further development of the mine and erection of battery.

William Keating's Prospecting Claim, Upper Shotover.—Mr. Keating has done a considerable amount of prospecting by tunnelling for quartz-reefs at the Blue Slip, Upper Shotover. As a result of his operations he claims to have located several reefs in the locality.

MACETOWN.

Premier Sunrise (New Zealand) Gold-mining Company (Limited) (W. Patton, mine-manager, Macetown).—During the year 1903, the present company bought this property from the Indian Glenrock (Wynaad) Gold-mining Company. This mine has been worked continuously throughout the year, despite the unusual severity of the past winter. The reef continues mullocky and is by no means continuous through all the stopes, one of the drawbacks being that the backs are shallow—i.e., up to 50 ft. or 60 ft. Blank patches met with in the line of reef interfere with consistent gold-returns. The incline-face is continuously pushed ahead in advance of working stopes and is now down a distance of 1,690 ft., measured along the dip, at an inclination of 1 in 4. Two shifts of eight hours each are worked, and twenty men are engaged in the dip-face and the stopes. The reef is narrow and the stopes are kept well stowed up, minimising the requirements of stoping-timber. The main dip is very heavily timbered and kept in fair condition. The air in the mine was dull on the date of my visit and must be more so after shot-firing. The water-blast erected last year has done good work, but the manager has decided to substitute pipes of a larger diameter for conveying the air down the dip. The return airway for a considerable distance is heavy and difficult to keep open. Even at the present depth of the mine it is surprising how little water is met with. The drainage-water is collected in sumps and drawn out of the dip in large tanks. The battery runs eight hours per day, two men and one boy being capable of looking after the fifteen heads of stamps in use. Tailings are collected, and after being sufficiently oxidised, are treated successfully by the cyanide process. Mr. Patton writes as follows: "I beg to submit the following report of work accomplished in the mine for the half-year ending the 31st December, 1903. Work in the mine was carried on almost continuously during the half-year. A stoppage of one week and three days in the incline-face was caused through an accident to the armature of our generator (electric plant) in the mill, during October, which also caused a stoppage of work for a week in the stopes. During the time these works were stopped, advantage was taken to have some necessary repairs carried out in the incline and ventilation-passage, so that part of the men were employed to advantage. The new electric-generator was started on the 27th October, and has been working fairly satisfactorily up to the present time. This new dynamo is situated about a mile and a quarter from the mine motor, which latter drives the hauling-gear at the top of the incline tunnel. A telephone was erected between the new generator and the motor, which has proved of immense service to us. The damaged armature is now being repaired so that we shall have a spare machine in case of another accident. Incline: During the half-year one shift of two men were employed for twenty-four weeks, during which time a distance of 72 ft. was driven at a cost per foot of £2 7s. 9d., including all expenses. No gold-bearing stone was met with. No. 35 rise: This rise was put up to a height of 14 ft., and at this height a crosscut was started to cut the line of reef and connect with the opening tunnel, which was being driven along at the bottom of the chute of stone. The total length of this crosscut is 51 ft. in the footwall, and it has been driven through very hard country. Opening tunnel from No. 34 pass: This tunnel was driven a distance of 54 ft. from No. 34 pass, at which point it was found that the reef had taken a dip, thus necessitating sinking on the reef to a depth of 10 ft., where we found that the reef had taken its usual underlie, and still continued towards the incline tunnel. A drive was then started for the purpose of following the reef, and also to connect with No. 35 crosscut. The reef continued 23 ft. from the opening tunnel towards the pass. Stoping: During the half-year stoping has been carried on between passes Nos. 30 and 40. The reef, as usual, varied very much in size and quality. It cut out in several places completely, and at times ran up to about 3½ ft. in width. Repairing: Two men have been employed during the greater part of the half-year repairing the incline tunnel and ventilation-passage, and a large amount of timber has been used. 1,800 ft. of 6 in. galvanised-iron air-pipes were procured for installing in the incline in place of 4 in.; which latter had proved too small for carrying sufficient air to ventilate the workings. These larger air-pipes are being erected as repairing-work proceeds in the incline tunnel. Milling: During the half-year 1,265 tons of quartz was crushed for a yield of 793 oz. 19 dwt. 19 gr. smelted gold, valued at £3,184 (approximately). The mill has had a steady half-year's work, with the exception of an accident which was caused by a heavy flood in October. Cyanide: The concentrates that have accumulated during the half-year are only now being treated. Financial result: The financial result of the half-year's operations has not been so good as usual; this is owing to several poor patches of ore having been met with, and also to heavy expenses which had to be incurred for timber and machinery: However, the mine has paid its way from start to finish and has remitted £100 to the London office.