

QUARTZ-MINING.

OTAGO.

Shotover.

Mount Aurum Gold-mining Company, Bullendale (F. T. Ware, Mine-manager).—15/2/05: Operations are being continued on the line of reef known as the British-American. Rodgers's drive has been extended a total distance of 375 ft., at which point connection with an old winze on the western side of the hill affords ample ventilation in the workings. The upper level has also been extended 50 ft., and crosscuts to prove the width of the lode have been driven north and south. The crosscut to the foot-wall cut payable stone, which is being mined and sent to the battery. I instructed the mine-manager to provide safer storage for explosives at the mine. Mr. Ware, mine-manager, provides the following account of the aerial ropeway recently constructed under his supervision: To facilitate and cheapen the cost of transporting the quartz from the British-American Mine to the battery, an aerial ropeway on the single-rope system has just been erected. The distance between the two terminal stations is nearly 3,000 ft. From the upper terminal the rope rises 270 ft. to pass over an intervening ridge, from which point to the lower terminal there is a fall of 790 ft., or a mean grade throughout of 1 in 5.09. The terminals consist of two wheels 9 ft. in diameter, the upper wheel being fixed and having a brake attached for regulating the speed. The lower terminal is mounted on wheels and set on rails which have an inclination of 25°, a weighted truck being attached to the terminal to maintain proper tension on the rope. The hauling-rope is of Bullivant's patent steel 2½ in. in circumference, and is supported throughout its length on fourteen standards fixed at the most advantageous points along the line. To the crown of each standard four movable pulleys are mounted, over which the rope passes. Fixed at equal distances along the rope by means of steel clips and hung on hangers, are forty-two buckets, each capable of holding 2 cwt. of stone. The loading of the buckets at the upper terminal is performed by one man, who, when the empty bucket arrives, simply disengages it from the hanger, which latter passes round the terminal wheel to where there is waiting exactly under the rope a loaded bucket, which is on a small tram on rails for running to the shoot close by, and this is simply hooked on to the hanger as it passes without stopping the rope. The buckets are made self-tipping at the lower terminal by means of a self-acting catch. It is found that the rope will run satisfactorily 6,000 ft. or one complete circuit per hour, and at this speed will deliver 84 cwt. per hour or 33 tons 12 cwt. per day. The rope runs entirely by gravitation. The battery has been overhauled, and is now in regular work. Twelve men are employed.

Shotover Quartz-mining Company, Skipper's (T. O. Bishop, Mine-manager).—15/2/05: The rise to the upper workings for ventilation purposes is being pushed on, the ventilation in the meantime being maintained by the water-driven fan. Stopping is still being carried on in the winze section below the main drive. The stopes are worked almost entirely without timber, ample filling being obtained from the lode-material. The battery is working satisfactorily. A small cyanide plant, consisting of two 6-ton leaching-vats with all accessory plant, has been erected and worked with satisfactory results. Although all operations were at a standstill at the end of the year 1905, the future policy of the company is to raise further capital and rise from the 200 ft. level to locate the payable stone formerly worked by the Nugget Company. The main level will also be pushed forward to open up new stone. Twelve men are employed in and about the mine and battery.

Aspinall's Reef, Packer's Point, Skipper's.—Nothing has been done on this reef during the year.

Crystal Reef, Skipper's.—Operations have been at a standstill during the year.

Eureka Gold-mining Company, Skipper's Point (J. Douglas, Mine-manager).—This company was formed in Reefton to work a reef in Jennings's Gully, Skipper's. The mine has been well prospected, and trial crushings made in the Shotover Company's battery are said to have yielded satisfactory results. Operations are suspended in the meantime pending the erection of a patent two-head battery, the foundations for which are now being excavated. Latest information from the mine is to the effect that mining and crushing operations are being carried on with success.

Alpine Reef, Skipper's Point (W. L. Davies and J. Henderson, Owners).—Two men were engaged for some time prospecting on this reef, but nothing further has been done towards development of the property.

Glenorchy.

Mr. George Read is paying attention to production of scheelite at the Bucklerburn. A ten-head stamp-battery and Wilfley concentrator are being erected. Motive power will be water acting on a Pelton wheel.

Macetown.

Premier Sunrise (New Zealand) Gold-mining Company, Macetown (William Patton, Mine-manager).—1/12/05: On this date operations at the mine were confined to the adit-level area at the top of the main incline. Operations during the year were not successful in the incline tunnel and that section of work was consequently abandoned. The manager, Mr. William Patton, reports as follows on the work done for the half-year ending the 31st December, 1905: "The principal work carried on was prospecting on No. 2 line of reef. Believing from former experience that ore existed on this line of reef, we decided to carry out further prospecting. A tunnel was therefore driven on the main hanging-wall for a distance of 78 ft., 42 ft. of which was driven during the previous half-year; no payable ore was met with in the drive, although to our calculation a sufficient distance was driven to strike the reef. We then decided to drive a crosscut towards the foot-wall. A distance of 20 ft. was driven without striking ore of any kind. Crosscutting was then discontinued, and a rise started on the hanging-wall which was continued up to a height of 15 ft., when a bunch of gold-bearing ore was discovered, which, however, only continued for a few feet. At this point a drive was started from the rise to the west for the purpose of connecting with the old stopes which had been worked in the early days, where gold-bearing