

side being 80 ft. in, showing the reef to be 3 ft. 6 in. wide, and carrying the best gold near the hanging wall. The west level is upwards of 60 ft. in, the reef being 3 ft. wide at the face. The stone from the level in the winze-shaft has yielded 15 dwt. to the ton. At the top of this winze a chamber has been cut for the reception of hoisting-gear, to be worked by an oil-engine, and an excavation made vertically above the winze to allow of height for winding pulley-frame and shoot. In the main level the stone has pinched out, so that the only milling-quartz at present in sight is that in the winze-workings. At my inspection in February last I objected to the system of ventilation adopted, and suggested that prompt measures should be taken to provide a second outlet to the surface, which would act both as an airway and as a means of escape for the men in the event of accident. My wishes are now being given effect to, a shaft having been sunk up Tipperary Gully down to the lode, and a level is being driven in the formation to meet another level being cut from a rise from the main level alongside old workings, and it is expected that communication will be established in the course of a few weeks. Twenty-three persons are employed, fifteen of whom are engaged in connection with the new air-drive. At this date the air was fairly good. Similar circumstances in respect to storage of explosives affect this mine in common with Premier Mine, and have been similarly dealt with. Under date of the 21st November Mr. Stanford wrote to say that the air-connection was made on the 5th instant, and gave excellent ventilation.

*Premier Mine, Macetown (Glenrock Consolidated, Limited)* (W. J. Stanford, general manager; W. Patton, mine-manager).—(14/10/98): Since my last visit arrangements have been made with the Mines Department for the storage of a limited amount of explosive material in a specially-constructed chamber connected with the mine, but at a long distance from any workings. This chamber is very satisfactorily arranged, is kept under lock and key, and only entered with a safety-lamp, and at my visit the amount of gelignite in stock was below the allowed quantity. Excellent ventilation is maintained throughout the mine, but pressure from the working stopes is causing a crush on the timbers in the main incline. This is only to be expected in the meantime until the stoped-out ground has become settled. The main incline is being continued, and is now 950 ft. down. There are also four stopes in work, and prospecting is being continued in the top level. The reefs at Macetown appear somewhat patchy. At Premier Mine, the stone dips at an angle of, say, 1 in 4 on the bottom, the walls are somewhat irregular and have a pitch of probably 50° to 60° from the horizontal. Near the top of the incline the stone has a depth of some 25 ft. by an average width of 3 ft., and gradually increases to 70 ft. deep by 3 ft. wide; it then thins out and decreases in depth to 45 ft. at No. 12 stope, and at this date is only 10 in. wide at the bottom of the incline, and is not carrying so much gold as formerly, the last crushing only averaging 8½ dwt. to the ton. Boring operations have been commenced near the battery, with the object of proving a lead of alluvial wash.

*Shotover Quartz-mining Company's Claim, Skippers*.—(9/3/99): This was formerly known as the "Gallant Tipperary," and was shut down for some time. Since the present company was formed, what is known as "the machine-level" tunnel has been repaired, and continued with the object of cutting the reef at a lower level than that at which it was formerly worked, the vertical distance between the two tunnels being 270 ft. This low level tunnel is 6 ft. 6 in. high, 4 ft. 6 in. wide at bottom, 3 ft. at top inside of timbers, and approximately 600 ft. long at date. It is thought another 500 ft. may have to be driven before the reef is cut. The tunnel is being well constructed. The ground in which the tunnel is being driven is lode-formation, but this is of no value (foliated schist, with thin, leafy, white quartz). I understand the reef exists as a block of quartz, and that at the higher level it was (when cut) found to be going down almost perpendicularly. It is from the evidences there obtained that the estimate as to the probable distance to drive in the lower level has been arrived at.

*Phoenix Mine, Bullendale (Achilles Gold-mines, Limited)*, (James S. Cherry, provisional manager).—(18/10/98): Shortly after my last visit, the company (Achilles Goldfields, Limited) went into voluntary liquidation, and has now been reconstructed under the title of the Achilles Gold-mines (Limited). In consequence of the circumstances which rendered a reconstruction of the company necessary, the working of the mine was, to a great extent, suspended for some time. The new company having engaged Messrs. John Taylor and Sons, of London, as their consulting engineers, this firm sent out two of its officers, Mr. N. C. Morcom and Mr. J. S. Cherry, as superintendent and mining manager respectively, and these gentlemen arrived at the mine on the 5th September. Since then operations have consisted principally of taking the accumulated water out of the mine, and putting the roadways and plant in order, so as to make a fresh start. It is expected that in a comparatively short time the mine and battery will be again in full swing; but before the mine can be worked to advantage, the sinking of the incline shaft will have to be continued to No. 6 level at least, and afterwards kept in advance of the working levels. Some re-arrangement of the plant is contemplated, and in all probability some renewals at the battery will have to be undertaken.

*Longwood Prospecting Tunnel*.—(22/6/98): This tunnel was driven 950 ft. at my visit on the 31st August, 1897. Since then work has been standing for some time, but was resumed recently. At that date I estimated a reef might be cut at, say, 1,000 ft. At this visit I find a reef 2 ft. wide has been passed through at 994 ft., and it is intended to drive the tunnel a little further. The tunnel is kept in very fair order. (31/3/99): I understand that since my visit nothing payable has been found, and that operations have again been suspended.

*Preservation Inlet (Morning Star Mine)*.—(18/6/98): This mine is situated at Long Beach, and is entered by four levels from the side of a mountain range. The lowest level is known as No. 2, and connects to the outside by a crosscut tunnel, from which it has been driven on the line of reef for 499 ft. No. 1 level is 86 ft. above No. 2, and is driven 591 ft. No. 1A level is 138 ft. above No. 1, and 718 ft. in. No. 1B level is 156 ft. above No. 1A, and 192 ft. in. Below No. 2 level a winze has been sunk to a depth of 170 ft., so that the ground has been proved to a vertical depth of 550 ft. below No. 1B level. At the lowest point where the reef has been cut—namely, at the bottom of the winze—it is 6 ft. wide, and assays 4 dwt. to the ton. No. 2 level is said to have never