

£5,123 7s. 4d., thus showing a deficit of £1,433 14s. 3d. The gold apparently occurs in chutes, which, unlike the chutes in the Glenrock Mine (which have a pitch of about 1 in 4), extend almost vertically up and down through the reef, and, so far as the present works extend, these chutes have been very patchy. The shaft is being sunk on one of these chutes, and so far the stone in it is very patchy, but now is showing signs of improvement. In the face also of the west drive there is now a splendid block of quartz 5 ft. in width, and apparently rich in gold—in fact, since taking charge of the mine in 1893 I have not seen anything better. No new works in connection with the mine have been executed since your last report. At the date of your visit you complained of the ventilation of the mine; you happened to strike it on a bad day. Mr. Hayes, on page 157 of the 'Mines Record,' for November, 1896, speaks of it as quite sweet, and it is only on a very odd occasion that there is any difficulty with the air. With a low glass and the wind south-west the air is often a little dull in the mine, but as our prevailing winds are north-west to north-east very little trouble is experienced, and all this past week the air has been excellent. However, immediately after your visit I took four men off other work, and have put them to push through to the surface for ventilation. This is, however, a very big job. We have to drive No. 6 level (which is 90 ft. above No. 7 level) a distance of about 500 ft. eastwards from its present position, and then rise 170 ft. to the surface. This will take time, but it will be pushed on as quickly as possible."

*Victor Emmanuel Mine.*—Very little work is done here, the owner, Mr. Farrell, employing two men in prospecting.

*Skipper's Creek, Bullendale.*

*Achilles Mine* (Area, 125 acres).—This mine is worked and owned by an English company. The manager, Mr. Frederick Evans, is assisted by Mr. Murray Russell, underground boss. The mine was worked from a shaft 150 ft. in depth. A cross-cut, 86 ft., at this level connects with an incline, 280 ft., leading to No. 5 level. A winze is being sunk from this level. The whole of the pumping and winding is done by compressed air. Stopping is carried on in both the north and middle lodes at No. 5 level, the reef averaging 6 ft. in width. A new underlay shaft is now nearly completed. This has been sunk to the adit level 126 ft., to No. 2 level 160 ft., to No. 3 level 86 ft., and No. 3 to No. 4 level 90 ft., and to No. 5 level 90 ft. It is impossible to use the shaft, which is only 12 ft. by 4 ft., for both pumping and winding, but it is expected that the water can be raised in trucks or tanks made for the purpose. The pump is driven by wire-rope gearing. A new Pelton has been erected, the water being supplied from a race recently constructed from Skipper's Creek, at the foot of Mount Aurum. This race is capable of carrying six sluice-heads of water, but one head and a half will be sufficient for all present requirements, the pressure being 340 ft. The quartz is delivered into a bin, holding 100 tons, constructed above the adit, and from thence is carried on a tramway to the stone-breaker, which is placed over another bin immediately behind the battery capable of holding 400 tons. The battery consists of thirty stamps, 7 cwt. each, five stamps to each of the six boxes. The ore is fed from self-feeders constructed on the manager's own plan. The tables are divided into three sections, each strake being covered with green baize, which has been found more suitable than the ordinary blankets in general use. The length of each strake is 16 ft. From 40 to 60 per cent. of the gold is found in the stamp-boxes, and no quicksilver is used either in the boxes or on the tables. The baize is washed as often as found necessary, and the concentrates are treated in an amalgamating-barrel of 1 ton capacity. Each charge requires sixteen hours' treatment, with 100 lb. of mercury in the barrel. The concentrates, after passing through the barrel, are stacked for further treatment. The tailings, after passing over the baize, are allowed to run to waste, assays made showing that only a very small percentage of gold escapes; they are of no appreciable value. The reefs in the mine are three in number, bearing east and west, and having an easterly underlay where most highly gold-producing. The electric power derived from the left-hand branch of Skipper's Creek is at present used in driving two air-compressors and as an auxiliary to the battery when water is scarce. The battery is now driven by the water used for driving the pump machinery, the fall being from that point 140 ft. A 5 ft. Pelton is used. Eighty men were employed in mine and battery, &c., at 23rd March.

*Shotover.*

*Gallant Tipperary Mine* (Area, 46 acres).—This mine has lately changed hands, the former company having gone into liquidation, and the property consequently sold. As I did not visit the place during my visit to the Shotover district, in consequence of the uncertainty of finding any one on the mine, I requested the manager to inform me what was being done, and he has written as follows:—

"In reply to your letter addressed to the mine-manager of the Gallant Tipperary Company, I beg to state that the Gallant Tipperary Company went into liquidation, the property was sold, and the purchasers floated it into a new company, called the Shotover Quartz-mining Company (No Liability). The new company commenced operations on the 1st January, 1898, and I attach herewith a report of work done, &c., to the 31st March, 1898. As I have only recently taken charge, I have not yet been able to complete the survey, and cannot, therefore, forward you a plan.

"*Shotover Quartz-mining Company (No Liability).*—This company acquired the property of the Gallant Tipperary Company, consisting of a special claim of 46 acres, situated near Skipper's Point, on the Shotover River. The machinery on the ground consists of a twelve-head battery, driven by a Pelton wheel. The water for motive-power is derived from two creeks on the opposite side of the river, carried in races two miles in length, and delivered into pipes with a head of 250 ft. The former workings were confined to the northern portion of the property, and, the levels there having fallen in, this company decided to proceed with and open up from the machine level. This level had been driven a distance of 184 ft. to connect with a pass, for the purpose of conveying stone to the battery from the upper workings. This machine level is about 50 ft. above the Shot-