

was then followed down to a depth of 90 ft. The shaft was sunk so far by means of a windlass. In sinking we were on quartz practically the whole way, some of it poor and some fairly rich, and as we drew near the bottom we found a marked improvement in the stone, and I had every reason to think that when the levels were opened out payable stone would be obtained. I then went into the question of power-haulage, and decided that, considering the position of the shaft, and the impossibility of obtaining a permanent water-supply, that an oil-engine would be the most suitable power for our purpose. At the same time, as there is an intermittent water-supply that could be used for power, I determined to have the engine so arranged that a Pelton wheel could be put on to drive the machine when water was plentiful. An oil-engine and hoister combined were ordered through Messrs. Murray Roberts from Messrs. Weber and Co., Kansas City, America. The engine was to be 20-horse power, and to be capable of hauling a load of 1 ton up a vertical shaft at the rate of 350 ft. a minute. The contract price was £370 in Dunedin. An engine-chamber 30 ft. long was cut out behind the shaft, with a width of 9 ft. A rise of 65 ft. was put up over the shaft to be used as poppet-heads, and to clear all the material hauled from the shaft away from our tunnel a cross-pass, at an incline of 1 in 1, was dropped into the tunnel from the poppet-heads rise. This rise and cross-cuts cost us over £700. While waiting for the engine we arranged a whip worked by a horse, and started to open out a level, to be known as 'No. 9,' at a depth of 85½ ft. below the adit. We drove 75 ft. westwards and about 60 ft. east. From the east tunnel a considerable quantity of fair-value stone was obtained, but from the west tunnel up to the time of our ceasing operations, although we were driving on quartz, nothing valuable was secured. To keep these levels hauled clear of dirt it required two horses with three men attending to each horse. The engine was ordered in May, but did not arrive until December, and was not then in working-order. Up to the 17th January no satisfaction could be got out of the machine, and even after that date its working was so unsatisfactory that it was impossible to keep the men steadily employed. Considerable liabilities had accrued while waiting for the engine, and at the end of January it was found impossible to carry on the work, and the mine was closed down, and six months' protection applied for and obtained. During the year 579 tons was crushed, for a yield of 287 oz. 13½ dwt. melted gold, or an average yield of 9 dwt. 22½ gr. per ton, valued at (including 19 oz. 1 dwt. obtained from discarded copper plates) £1,950 16s. 6d. The total gold won from the mine since the London Company took up their interest in 1893 amounts to 1,552 oz. 5 dwt. 23 gr., valued at £5,983 4s. 7d. To obtain this gold 3,617 tons was treated, but of this quantity 137 tons was concentrate tailings, which yielded gold to the value of £546 16s. 6d. There has been expended on the property since 1893 a total sum of £24,150, of which gold has supplied £5,983 and London capital £15,100. We are liable for the balance. As far as this mine is concerned the results have proved it very patchy in the lower level. The original company are said to have obtained fifty-seven thousand pounds' worth of gold from the surface with an expenditure of about £200 capital, but this patch of gold has apparently not descended to the lower level. Generally speaking the mine is worth further prospecting, and I am now proceeding to London to try and make fresh financial arrangements."

The following table gives the ore stamped and gold produced from the Tipperary Mine for the year 1898 :—

Month.			Quantity of Quartz stamped.	Bar-gold ex- tracted.	Produce per Ton of Quartz.	From Copper Plates.	Total Value.		
			Tons.	Oz. dwt.	Dwt. gr.	Oz.	£ s. d.		
January	...	...	80	19 5½	4 19·64	...	77	17	4
February	...	...	54	7 14	2 20·44	...	31	0	2
March	...	...	94	81 10	17 8·17	177 1 0	1,045	12	7
April	...	...	53	43 14½	16 12	17 0 0	246	2	7
July	...	...	90	6 0	1 8	...	24	0	0
September	...	...	88	61 14	14 0·54	...	250	17	3
November	...	...	120	67 15½	11 7·10	...	275	6	7
			579	287 13½	9 22·48	194 1 0	1,950	16	6

Farrell's Consolidated Mines, Macetown (Area, 156 acres).—Under the above heading is comprised the following well-known mines, viz. : The Victor Emmanuel, Morning Star, Black Angel, Garibaldi, Maryborough, Homeward Bound, Lady Fayre, and Golden Treasure. There are several reefs running through the ground, some of which formerly gave good returns. The configuration of the ground is such that a low-level adit would command backs of from 1,500 ft. to 1,700 ft.

Shotover District.

Shotover Quartz-mining Company, No Liability (Mine-manager, D. B. Waters).—This company's property consists of a special claim of 46 acres, being Sections 6, 7, and 8, Block XI., Skipper's Creek District. The claim was formerly held by the Gallant Tipperary Company, which company worked the reef from what is known as the "main level," driven at a height of 312 ft. above the Shotover River. When the present company took over the property the old levels had mostly collapsed, and, the ground overhead having been well worked, they decided to tap the reefs at a greater depth by driving what is called the "machine level," at a height of 35 ft. above the Shotover River. This drive is also just on a level with the roof of the battery-house, so that very little handling of ore will be required. The vertical height between the machine level and the old company's main level is 277 ft. At the point where the company decided to start the machine level they took advantage of a drive in 184 ft. connecting with a rise to the surface, through which the old