

of quartz on this level 42 ft. in length, on which no stoping has yet been done. In No. 2 level the reef is somewhat shorter, being 185 ft. in length. From the stopes in No. 2 level up to the floor of No. 1 level there is yet a height of 42 ft. of reef to be stoped out; and from the stopes in No. 3 level up to No. 2 there yet remains 56 ft. perpendicular to be worked, which will be ample to keep the battery going until other levels are opened up. A winze has been sunk from the floor of No. 3 level 92 ft. in solid stone all the way. At that level the reef turned off very flat, and sinking was discontinued until No. 4 level is driven, when the reef can be followed at much less expense. A contract has been entered into with Messrs. Anderson, King, and party to sink the main shaft 250 ft. The contractors have been two months at work, and have sunk 67 ft. The bottom of the shaft is now 97 ft. below the floor of No. 3 chamber, and it is the intention of the company to open out No. 4 chamber at 150 ft. below No. 3. During the twelve months 12,685 tons of quartz has been raised from the mine and sent to the battery at a cost of £6,748 5s. 8d. This amount includes all contracts and development-work in the mine, extending levels, crosscuts, and all repairs to old adits and levels. It also includes sinking of winze, but does not include sinking of main shaft. The cost per ton was 10s. 7½d. The winding-engine which was ordered last year from Messrs. Fowler and Sons, of Leeds, England, arrived here in June last. It was at once conveyed to the site and erected in position. The engine is a good one, and is doing the required work very satisfactorily. The water-wheel which was used for winding is now out of use, but will be available for working a pump, should it be found necessary in the future to place one in the mine. Immediate use will be made of the wheel in driving a dynamo to light the battery, cyanide plant, brace, and all surface-works. Battery department: The battery has been running steadily for the year, with the exception of two or three small stoppages on account of slips on the head-race. 12,685 tons has been crushed, giving a return of 2,907 oz. 12 dwt. 3 gr. of melted gold, being just a small fraction over 4 dwt. 14 gr. per ton. The battery expenses for the year, which include wear-and-tear and all renewals of plant, and also the upkeep of head-race and tail-race, amount to £1,384 5s. 11d., being just a shade over 2s. 2d. per ton. Cyanide department: The whole of the tailings as run from the battery have passed through the leaching-vats. On the whole, the extraction has been fair, though on several occasions the percolation has been bad—notably in frosty weather during the winter months. The sand, being run into the vats with water as it leaves the battery-tables, requires to be turned over in the vats to assist the percolation, and occasionally when the sand in the bottom of the vats is very wet the turning is of very doubtful benefit. It has been decided to erect settling-tanks, into which the sand will be run from the elevating-wheel; it will then, after draining, be trucked into the leaching-vats in a dry state. This method will insure a freer percolation, and will not increase the working-expenses. The overflow from the vats passes over canvas tables, and upwards of 30 tons of sulphides, the product of these tables for the year, was last month shipped to Melbourne for treatment, the assay-value being £18 per ton. There is still a loss caused by the coarser pyrites escaping in the residue, and in order, as far as possible, to prevent this loss it is intended to put down canvas tables at the tail of the battery streaks, so that all the sand will pass over them before it is lifted into the settling-tanks. The total amount of gold obtained by the cyanide process during the year is 1,627 oz. 16 dwt. 15 gr., value £5,317 19s. 11d., being an extraction value of 8s. 4½d. per ton on the gross tonnage crushed. The working-expenses for the same period, including wages, cyanide, zinc, royalty, and all alterations and additions to plant, have been £2,446 7s. 3d., being 3s. 10½d. per ton, thus leaving a profit on the year's work of £2,871 12s. 8d., or a profit of about 4s. 6½d. per ton on the gross tonnage. Owing to the low grade of the quartz operated on, and the cost of the winding-engine, the company has been unable to declare the usual monthly dividends, but trusts that the incoming year will make good the deficiency.

*New Scotia Mine.*—Mr. T. H. Lee supplies the following report: During the year 173 tons of quartz was treated at the crushing-battery for 17 oz. 10 dwt. 6 gr. gold, valued at £63; and at cyanide plant 5,350 tons of sand was cyanided for 1,011 oz. 3 dwt. 9 gr. of bullion, valued at £3,139 9s. 10d. In the Gallant section of the mine a considerable quantity of prospecting was done from the No. 1 level, and a trial crushing of 173 tons was put through the battery from a block of stone disclosed over level, but the results from battery were found to be too poor to warrant further work. The yield from the tailings produced from such crushing was, however, payable. At present No. 1 level of Drake is being extended north from main shaft to intersect the Gallant big blow, and about 150 ft. further extension should bring the face under the perpendicular of the reef showing on the surface. This drive will intersect lode about 400 ft. below its outcrop on surface. Driving has been slow owing to hard ground. In Happy Valley section the extension of the No. 2 level from main shaft has been commenced south along this line of reef. This work will test ground some 300 ft. deeper than was previously worked. The ground showing in face is very promising. The cyanide plant has been shut down, all the sands stored on the tailings-dump having been treated.

*Snowy Creek United Mine.*—Mr. T. H. Lee supplies the following report: In this mine operations have been confined to prospecting on the surface and above the level of the creek in which the first outcrop was found. Surface results did not discover anything permanent, so a drive was put in on the north side of creek at back of the old winze. This intersected the original reef-track, and it is now being extended north on line of lode with fair indications. Before cutting this line, however, a reef about 5 ft. was intersected, which carried a little gold. It is about 12 ft. to the east of old line of reef. Later on a prospecting-drive will be carried along north on this to thoroughly develop it and ascertain its value.

*Golden Lead Mine.*—Mr. Lee supplies the following report: The company's No. 2 level was being extended at the beginning of the year, and this work was continued until the following June. Some crosscutting was then done in the level, and the leader that was followed in the earlier