

The stopes have continued to maintain their previous characteristics, thus proving the irregularities in the reef-formation, which tends to largely increase the cost of stoping. It is proposed to sink the main shaft from No. 13 to No. 14 a vertical distance of 125 ft., at an early date. During the year 12,930 tons of quartz was crushed, yielding bullion by amalgamation to the value of £21,040 17s. 6d., while the concentrates and slimes shipped to the smelter realised £1,940 3s. 7d. Cyanide: 8,610 tons of sands, representing 66·589 per cent. of the tonnage milled was cyanided, yielding bullion to the value of £3,011 7s. 5d., equal to a return of 6s. 11·941d. per ton treated. Compared with values of previous year the bullion shows a decrease of £798 9s. 2d. Temperature at noon in the shade, 65°, at No. 11, 53°, at No. 12, 65°, return airway, 70°.

*Progress Mine.*—The various works in connection with this property have been continuously carried on, and the developments so efficiently and energetically effected at levels Nos. 3, 4, 6, 8, 9, and 10 have resulted in opening out a large tonnage of quartz, of which a considerable percentage is of very low grade. The total footages driven, &c., comprise driving and crosscutting 3,442 ft., and rising and sinking 1,311 ft., at a cost of £7,030 10s. Stoping has been carried out on Nos. 4, 5, 8, 9, and 10 levels, the stopes calling for no special comment except the east stopes on Nos. 4 and 5, where, owing to an increased percentage of antimony, a larger portion of the quartz has had to be used for filling. During the latter half of the year the developments were watched with a great amount of interest on No. 10 level, as an ore-body was developed which at first sight appeared to be of considerable magnitude. This body of stone was driven on in all directions, and the stone on the level mined out, leaving an area 120 ft. long by an average of 20 ft. wide standing on timber. The quartz in this block contained only a small portion of ore having a good value; but taking the values throughout the average was very moderate. In rising from No. 10, stone was carried for about 70 ft., and evidently connection was completed to No. 9 on good reef-formation. Diamond drill: During eight months and a half the drill was steadily worked and valuable information was obtained, the combined borings amounting to 2,125·5 ft., but owing to the soft character of the ground in the vicinity of the reefs, difficulty was experienced in procuring reliable cores. The surface equipment at the mine has undergone no material alteration, and the machinery connected therewith continues to maintain its former standard of efficiency. At the battery the only alteration of importance was the erection of an additional 25-ft.-diameter treatment-tank, the plant now comprising fourteen tanks of equal diameter. During the year the sixty-five-stamp mill ran 303·73 days, leaving only 8·27 days lost time for the whole year, which includes all incidental stoppages, such as monthly clean-ups, daily scrapes, &c. The tonnage crushed exceeds that of any previous year by 2,794 tons. The 59,908 tons crushed yielded bullion by amalgamation to the value of £88,641 15s. 3d., equal to 7 dwt. 3·93 gr. per ton. 1,093 tons of concentrates was treated in the chlorination-works, yielding 2,750 oz. 14 dwt. 5 gr. of gold, valued at £11,020 7s. 7d. At the cyanide-works 31,735 tons of coarser sands was treated, yielding bullion to the value of £8,674 18s. 5d. The treatment-cost amounted to 2s. 1·77d. per ton, and the profit to 3s. 3·82d. per ton, making the yield equal to 5s. 5·6d. The pyritic slimes shipped to the smelter realised £2,034 1s. 7d. A general summary of the aggregate working-cost, yield, and resulting profit in milling 59,908 tons, and cyaniding 31,735 tons, for 1904, is as follows: Total working-cost (exclusive of capital and development expenditure) incurred in mining, transporting, milling and concentrating (including bullion charges and office and general expenses) £48,671 19s. 3d., or 16s. 2·987d. per ton milled; cyaniding, £3,408 10s., or 1s. 1·655d. per ton milled: totals £52,080 9s. 3d., or 17s. 4·642d. per ton milled. Profit on mining, transporting, milling and concentrating, and chlorinating (including bullion charges and office and general expenses) £53,024 5s. 2d., or 17s. 8·423d. per ton milled; cyaniding, £5,266 8s. 5d., or 1s. 9·098d. per ton milled: totals, £58,290 13s. 7d., or 19s. 5·521d. per ton milled. Summary: total working-cost, £52,080 9s. 3d., or 17s. 4·642d. per ton milled; profit, £58,290 13s. 7d., or 19s. 5·521d. per ton milled: yield, £110,371 2s. 10d., or £1 16s. 10·163d. per ton milled. A slightly lower-grade quartz has been milled during 1904 than previously, and this will probably again be the case in 1905, otherwise the management look forward to another successful year. With regard to the underground work, mine-development will be energetically pushed, also the main shaft will be sunk to another level.

*Keep-it-Dark* (owners: Keep-it-Dark Gold-mining Company (Limited); Edwin Bray, Manager).—The various works in connection with mining, milling, and cyanide extraction at the mine and battery have been steadily maintained at their usual standard of efficiency. Development-work is kept well ahead, the safety of men and property well attended to, and the plant generally is kept in good order. In addition to the ordinary work done the winding-shaft was sunk to a further depth of 300 ft., the cost (including the cutting and timbering of two suitable chambers) being £1,428 14s. 4d., which sum, when rated on the depth sunk, gives an average cost of £4 10s. per foot. Stone for milling was chiefly stoped from levels Nos. 4 and 5. The lode on the former level continued to maintain uniformity in width and quality, but more adverse conditions exist on No. 5, where the formation is somewhat irregular, the underlay being found to take a strong veer to the east when stoping had proceeded to 40 ft. in height. This disappointing change of formation is attributed to the irregular position of the lode intersected on No. 5 crosscut at 252 ft. from the main shaft. To effect connection for ventilation and the future development of No. 6 block, sinking was commenced and continued on the 252 ft. stone to a depth of 116 ft., when holing was successfully effected by rising from No. 6 crosscut at 382 ft. from the shaft. Shortly afterwards, the main lode was cut at 9 ft. in width, showing fair prospects of gold. The stone mined and milled—12,300 tons—yielded 3,641 oz. 15 dwt. 5 gr. from amalgamation: value, £14,756 16s. 2d., giving an average rate per ton of 5 dwt. 22 gr. The working-costs for mining and raising the tonnage milled, were £7,904 11s. 10d., or an average of 12s. 10d. per ton, while the cost of milling and other incidental expenses were £1,501 5s., or a fraction over 2s. 4d. per ton. The extraction by cyanide continues to show improved results as compared with those of the previous year, the yield of bullion being 1,873 oz. and 13 gr., valued at £5,911 13s. 7d. This gave an extraction value of a