

which was worked largely and with great profit in the early days. Some favourable country was located, and a little driving done on the supposed track, which, although not proving the existence of the old body, is sufficiently encouraging to warrant more prospecting at this point when filling is wanted for the lower stopes. The battery crushed 13,690 tons, yielding, by amalgamation and cyanide, 6,450 oz. 5 dwt. of bullion, valued at £24,535 13s. 11d.

*Golden Fleece Mine.*—Development-work for the year consisted of driving No. 14 level to the furthest known limit of the ore-body, which has not opened up very satisfactorily, and the stopes above showed little or no improvement. Thereby the tonnage of quartz opened by No. 14 level was considerably reduced. Near the close of the year a contract was let to sink the incline shaft a distance of 170 ft., which was completed before the Christmas holidays commenced. The work proposed for 1908 consists of cutting the ore-bins on the new level (No. 15—depth below battery-level, 520 ft.), then driving with the object of intersecting the ore-body. The battery crushed 11,991 tons, yielding, by amalgamation and cyanide, 5,160 oz. 14 dwt. 4 gr., valued at £19,934 17s.

*Progress Mine.*—Development-work has been steadily maintained, and was successful in opening up profitable ore-bodies both on Nos. 9 and 11 levels (depth, 1,450 ft.). In all, 1,424 ft. of driving and crosscutting was effected, and 537 ft. of raising and sinking, while prospecting by diamond drill was also continued, and during the year 1,424 ft. was drilled. The most important discovery resulting from the year's work was the quartz body located on No. 11, approximately 140 ft. in length, but exact width is not yet determined, owing to the flatness of the vein, which is practically parallel to the ore-body opened during 1906, and from which it is located at an approximate vertical distance of 140 ft. Both these ore-bodies are lying on very flat benches, and dip towards one another. From the recent discovery, no raise or other connection has yet been started, as the relative position of this ore-body with the one overlying has not yet been defined. During development on No. 11 level a large tonnage of high-grade quartz was obtained from this block, and with regard to its general importance there can be no doubt. By extending the main drive, and crosscutting from No. 9 level, a block of stone was successfully opened, which was formerly developed from No. 2 down to No. 8 levels. This block is approximately 130 ft. in length, but the width is not known, for whilst development-work was in progress attempt was not made to carry the full width of the lode in the first driving. A raise has recently been started on this block, to connect with the upper level. Stoping has been carried on in a very general manner, and some of the large blocks in the upper portion of the mine have become exhausted. Roughly speaking, all the quartz below No. 5 level has been taken out and milled. Ventilation has been largely assisted by the application of a steam jet in the upcast shaft. To install mechanical ventilation at this mine a 40-in.-diameter double-inlet Sirocco fan is under order, and preparatory work towards the installation is being actively pushed. Power will be applied by electrical motor. During the year the sixty-five-stamp battery crushed 55,305 tons, yielding 22,825 oz. 7 dwt. bullion by amalgamation and cyanide, valued at £87,805 8s. 3d.

*Keep-it-Dark* (owners, Keep-it-Dark Quartz-mining Company, Limited); Benjamin Sutherland, mine-manager).—The general equipment relative to mining and reduction of ore is not important; while mine-development, although somewhat varied, has failed to expose values worthy of special comment. Values show a decrease of £3,091 16s. 10d., and ore milled an increase of 141 tons, as against the previous year. Workings are maintained in good order. The connections necessary to maintain ventilation, the passing of ore, and filling in the stopes have received strict attention. Ore milled was stoped from the 180 ft. block on No. 5 level (depth, 700 ft.), and from Nos. 6 and 7 levels (greatest depth, 1,000 ft.). This ore-body is strikingly erratic and disjointed in position, and assumes a decided throw in the under'ay. Values also have been affected, and cost of mining and development much increased. Fortunately, this change of underlay has been accurately determined, and stone of average width and value has been driven on for 20 ft., while the values at depth are showing greater promise. Total footage in raising and crosscutting was 549 ft., besides extension of main levels. Cost of mining, including development, upkeep of plant and winding machinery, and general costs, amounted to £8,614 19s. 1d., or a little under 12s. 10d. per ton. With the exception of minor repairs, the battery has worked full time. Ore crushed, 13,441 tons, yielding by amalgamation, 2,811 oz. 16 dwt. 5 gr. bullion, valued at £11,266 17s. The working-cost was £1,407 6s. 2d., which amount includes all renewals to milling and concentrating plant, together with general repairs to head and tail races, absorbing 2s. 1d. per ton of ore crushed. Extraction by cyanide yielded 1,332 oz. 3 dwt. bullion, valued at £4,528 6s. 1d., or an average value of 6s. 9d. per ton of ore crushed. Including salary, labour, and all goods used, working-expenses amounted to £1,842 12s. 11d., or a rate of 2s. 9d. All plant in connection with the milling, concentrating, and cyaniding is in good order and repair.

*Phoenix Syndicate.*—The ore mined is taken from a small vein located in ground much disturbed, which requires careful timbering. Ventilation is well maintained by direct rise-connection with the surface, and the works kept in good repair. A five-stamp mill, driven by an 8-horse-power Tangye oil-engine, has been recently erected. In view of cutting off the present workings, it is proposed at an early date to drive a low-level tunnel into more solid ground.

*Big River* (J. H. McMahon, mine-manager).—As noted in previous report, the main shaft was sunk and completed to No. 9 level a further depth of 150 ft., making the total depth from the battery-level 1,150 ft. and from the brace 1,350 ft. During the year the chamber has been cut, and the lode intersected at the computed distance of 450 ft. The reef was driven on 50 ft., maintaining an average width of 12 ft., with satisfactory values. In comparing the dimensions of the ore-bodies now exhausted in the upper levels, the No. 9 block is considered the strongest and most pronounced ore-body yet encountered on the property, and evidences suggest that increased dimensions of lode will be further maintained at depth. Ventilation has been well maintained by a blower, actuated by water-power from No. 7 level. The cyanide plant formerly used at the Scotia Mine has been removed and re-erected