

Taking into consideration the fact that the mine above this level was not only choked by *débris* but practically worked out, there was no other alternative but to sink the shaft deeper, at the same time continuing the ends and sending up a few rises and prospecting stopes from the back of the drive, not only for the purpose of finding payable stone, but for purpose of ventilation. In this work we have been fortunate; not only have we made the necessary connections for the proper ventilation of the mine, but we have taken out some hundreds of tons of stone of a payable character which has been passed through the mill. The stuff taken from the east and west drivages was dumped into the hoppers at surface, and transported by aerial road to the battery. Much of this stuff was of very low grade, but improved in value as we proceeded; but having this cheap means of transportation, coupled with the economical advantage of water-power, the cost of sending it to the stampers was not increased a particle, it being quite as cheap to deposit it at the mill as at the shaft dumps. The work performed at the mine for a considerable period before being purchased by the English company was of a desultory character, possibly from want of working funds, but certainly for the want of a settled policy. The main object of all exploratory work for years past seems to have been the discovery of rich patches which could be worked out quickly, producing phenomenal returns, and resulting in a wild scramble to get shares in order to participate in the general dividend; then, when the faith and adventurism of the shareholders had become exhausted, at the departure of the patch, another tribute would be let, or the company would undertake to do a little dead-work prior to further explorations. This may have suited the times; it most certainly suited the average shareholders, who throughout the whole mining history of the peninsula have shown a great aversity to providing funds, or, more properly speaking, working capital, for the systematic and thorough exploration of mining ground. We are now thoroughly developing and exploring the property. The contract for the sinking of 100 ft. main shaft commencing from No. 4 level, a depth of 365 ft., was commenced on the 16th November and completed on the last day of February. This work (taking into consideration the fact that we used the shaft continually for the hoisting of dirt for the battery) has been rapidly performed. The dimensions of shaft are 10 ft. 6 in. by 4 ft., and it is securely timbered and divided for the operations of two cages. Upon first taking over the property it was not deemed wise to reopen the old portion of the mine above the bottom level, but subsequent discoveries of small leaders, carrying considerable gold, and tending upwards, led us to attempt the task of opening and securing the upper portion of the mine. This we have succeeded in doing, the advantages accruing through same being of the greatest importance, principally the opening-up of an old winze sunk 110 ft. deep upon the foot-wall of a reef at a point several hundred feet west of No. 4 level. We are now on the eve of the completion of sinking the shaft to a depth of 465 ft., and before cutting chambers, &c., are going to start a drive south to connect with the bottom of this winze and an old level. This work is intended not only for ventilation and communication, but to intersect a reef which in former days, and before the present cheap transportation was possible, was thought too poor or of too low a grade for extraction. Our plant at the present time may be classed as obsolete—that is, as far as the battery and amalgamation tables are concerned; but the Denny pans and berdans are capable of doing excellent service, their results being very satisfactory. With the plant, old as it is, we have been enabled to give the mine a thoroughly good practicable test—such a test as could not be possibly obtained under any other conditions. We hope in the near future to open up sufficient ore bodies to warrant the erection of a first-class modern plant with all the latest improvements. The low-grade ores of this mine are difficult to treat, the stone being highly mineralised, containing a large percentage of iron-pyrites, with small quantities of copper-pyrites, galena, and zinc-blende. The ores cannot be directly treated with cyanide, but from a number of experimental tests made by Mr. Allen, of the Thames School of Mines, and Mr. Henry Allom, a gentleman who has had a unique experience in the use of cyanide, we have concluded that after the ores have passed completely through the mill and before being exposed to the air the tailings can be successfully treated with potassium-cyanide. Although our ores are low grade, we possess the great advantages of cheap transportation and water-power, and are enabled to work them at an average cost of 3s. 6d. per ton. As a matter of fact, during stoping and general explorations we occasionally find small bunches of rich stone which materially assists the average value of the stone passed through the mill. The general character of the stone is also improving, as will be perceived from the monthly returns. Although our mining plant is not everything that could be desired, it is still equal to doing much more good service. The shaft since the completion of the last contract is now down to a depth of 465 ft., securely timbered throughout, contains a man-way, and is operated by two patent safety-cages, which are changed alternately, as, owing to the destructive nature of the water, it becomes necessary to look closely after all steel and iron material. As a matter of fact, since the property was taken over by the London company we have had nothing to face back upon to keep the battery employed but old ground. This has led to the reopening of the old portions of the mine, and thorough ventilation, and before long we shall have several good exits to the surface. It may therefore be said with truth that the future history of the mine will commence with the opening-up of the No. 5 or 465 ft. level. The amount of quartz worked and the yield of gold therefrom was as follows: November, 1896—235 tons ordinary quartz, 57 oz. 15 dwt. melted gold; December, 1896—285 tons ordinary quartz, 100 oz. melted gold; January, 1897—365 tons ordinary quartz, 144 oz. 2 dwt. melted gold; February, 1897—215 tons ordinary quartz, 107 oz. melted gold; March, 1897—304 tons ordinary quartz, 150 oz. 10 dwt. melted gold. The total number of tons worked to end of March was 1,404; and the total return of bullion 559 oz. 7 dwt., value £1,482 5s. 6d. It will be seen that the general character and value of the stone has gradually improved. The following are the particulars of the working on reefs: 1896—Driving, 292 ft. east, 180 ft. west; sinking, 49 ft. 1897—Driving, 226 ft.; sinking, 51 ft. This work is exclusive of stoping and all dead-work. Twenty men are employed.