

small fall in the return airway is being cleaned up, otherwise the return is in good condition. Mr. Patton informs me that the main system (reef-formation) is 70 ft. in width between the walls, and carries three distinct reefs within, each having its own hanging- and foot-wall. The following report from the manager (Mr. Patton) gives particulars of the work, &c., for the last year:—

The incline-work has been carried on almost continuously during the year, one shift of two men being employed. During the twelve months 120 ft. has been driven. The tunnel measured 1,465 ft. on the 31st December. The cost of driving this 120 ft., including all expenses, came to £384 1s. 11d., or an average of £3 4s. per foot to drive and timber. The country driven through has been very hard up till the last two months, when an improvement set in, but no gold-bearing stone has as yet been discovered, the line of gold-bearing stone still being on a higher level. The tunnel has been continued at the same grade as usual (1 in 4), which so far has proved to be well under the stone. In addition to this 120 ft. drivage, a sump has been sunk 12 ft. and timbered throughout. Work in the incline face was unavoidably stopped during its construction. There has been a very great increase in the quantity of water, which has hindered the work considerably. Stopping-work has been carried on continuously during the year between passes Nos. 21 and 28. The stopes are almost worked out down to No. 26 pass. The reef has been of a very broken nature all through, and at times very difficult to trace, as it has a peculiarity of cutting out on one wall and making on another, which generally causes a very great delay in breaking stone. The reef in stopes between passes Nos. 26 and 28 is not well defined. The block of stone which we have been following during the year ran out between passes Nos. 27 and 28, but, after a considerable amount of crosscutting and prospecting, has been discovered in a crosscut between the incline and what was the bottom of the old reef, so that now, to all appearance, the top of the reef is almost where the bottom of the old block was. This disturbance in the reef has caused a delay of three months in opening stopping-ground. The new make of stone was first discovered in a crosscut from No. 28 pass, and, finding that we had not got the bottom of the stone, it was necessary to cut down the floor of the crosscut so as to follow the stone down. This work is being pushed ahead, and it will be necessary to find the bottom of the reef before we can start our opening tunnels. The delay will be considerable owing to the hard nature of the country. The new make of stone, from what we have seen of it, looks promising, and I have good hopes that when opened up it will prove profitable. This, however, will cause a further delay of three months before a fair quantity of stopping-ground is opened up. The number of blocks of stone discovered in stopping between passes Nos. 20 and 28 are as follows: No. 1 block, between passes Nos. 20 and 23; No. 2 block, between passes Nos. 23 and 26; No. 3 block, between passes Nos. 26 and 28; and No. 4 (the new make lately discovered in No. 28 pass). The ventilation tunnel, which last year was started from No. 20 pass, has this year been connected with the top of the old lower stopes at No. 16 pass, thus causing a circulation of air all through the mine, except on calm hot days, when the air is a little lighter. Another cause for inferior ventilation on hot days is the great distance the air has to travel. It requires constant care and attention to keep this air-passage open, and a large amount of timber is sometimes required in repairing, in the old high level especially, and also the incline tunnel, so that at present the mine is much more expensive to work than it was a few years ago. During the year the mill ran ninety-two days (twenty-four-hour day) twelve hours and a half. The greater part of the time fifteen heads of stamps were kept running. The supply of stone being limited, only one shift of eight hours daily could be kept going. The mill returns show a falling-off as compared with those of 1900. This is accounted for by the irregular nature of the reef and the frequent breaks. The gold from the concentrates treated by cyanide shows a decrease on that obtained last year (1900). From 38 tons treated bullion valued at £461 3s. 10d. was obtained. The financial result of the year's operations has not been as satisfactory as I could have wished. The mine has paid its way from start to finish, and remitted £450 to the London office. In addition to this, we have spent £384 1s. 11d. on Mine-development Account, or the driving of the incline, and £49 11s. on New Plant Account, both of which works are chargeable to capital. On Mining Account—that is, rising, crosscutting, and stopping—the sum of £2,131 2s. has been spent to obtain 2,099 tons, or an average of £1 0s. 3d. per ton. 2,110 tons of quartz was milled at a cost of £486 10s. 5d., or an average of 4s. 7d. per ton. 38 tons of concentrates was treated by cyanide at a total cost of £72 4s. 11d., or an average of £1 18s. per ton. This average is in excess of last year's, and is accounted for by extra expense having been incurred in erecting a new precipitating-vat, and building to cover same. It has cost £323 1s. for mine-maintenance—that is, driving for ventilation, keeping the air-passage and high-level adit (part of which is kept open for ventilation) and the main low-level adit and incline in repair. The total expenditure on revenue account for the year, all charges, amounts to £4,432 11s. 6d., an average of £2 2s. 2d. per ton mined. The total expenditure on the mine for the twelve months amounts to £4,866 4s. 5d., or an average of £2 6s. 2d. per ton mined and milled; on Insurance Account, £59 10s. 9d.; and on Rents, Rates, and Licenses Account, £78 1s. 4d.: or a total of £137 12s. 1d. was expended during the year.

The Westralian and Tipperary Mines at Macetown are still closed down.

CROMWELL.

Cromwell Proprietary Gold-mining Company, Bendigo.—(5/12/1901): The mine has been standing during the year, but it is understood that negotiations are pending for working the property on an extended tribute, and the mine may be expected to soon again be placed on the list of gold-producing mines.

Bendigo Tailings Syndicate, Cromwell (S. E. Brent, secretary; G. E. Thomson, A.O.S.M., manager).—(5/12/1901): The company has been formed for the purpose of treating the tailings from the Cromwell Proprietary Gold-mining Company's battery. Experimental plant has been erected which is capable of treating 25 tons of tailings per week by the cyanide process, and with