

this part of the mine contains the richest ore, other portions of the lode worked from adit levels have produced large quantities of quartz of lower grade, but still rich enough to show a good margin of profit with the cheaper motive power. Although the boilers and engine providing the power at the mill are altogether unsuitable for a place where the cost of coal is so high, they are still first-rate machines of their type. The winding and pumping machinery is good and sufficient for its purpose, while the crushing plant, a battery of ten stamps, is, for its size, probably second to none in the colony. The two vanners in use have proved a valuable addition to the gold-saving plant, and have shown the advisability of an addition to the number of these useful machines. The tailings from the mill have been regularly tested by assay, and do not show a value sufficient to warrant the erection of a cyanide plant. It is possible, however, that stone from the lower levels would, if treated separately, have shown a different result. The finances of the company did not permit of exhaustive experimenting, and further, the character of the ore from the upper and lower levels was so different, that it was found to be advantageous to treat both together. Thus the hard brittle quartz from the lower levels counteracted to some extent the clayey material unavoidably sent to the mill with the sugary quartz won from the upper levels. Although in the meantime there are difficulties in the way of finance, it is probable that these will be overcome, and the mine reopened. It is certainly to be regretted that a mine showing the returns the O.P.Q. has shown when worked under serious disabilities, should be closed down without an opportunity of proving its value by working under more favourable conditions.

Bella Reef, Lammerlaw Range.—Want of capital to open up and put on a plant to successfully treat the low-grade stone has hindered the further development of the mine. A sample of concentrates sent to Australia for treatment, and from which good results were anticipated, appears to have gone astray, consequently the mine has been idle throughout the year.

Cox's Reef, Lammerlaw Range.—This mine continues to be closed down.

MILTON.

Last Chance Quartz-mine, Canada Reef (Thomas Park, owner).—Area of claim, 59 acres. Mr. Park employed four men taking out 35 tons of quartz, which was crushed for a return of 16 dwt. per ton.

MACRAE'S.

Quartz-mining in this district has progressed steadily during the year, while some attention has been directed towards opening up at new points along the line of reef. As stated in last year's report, new machinery has been installed in the district, and more attention is being turned to the proper treatment of battery-tailings and the saving of concentrates.

Bonanza Mine, Macrae's (T. Kinvig, mine-manager).—A good deal of the timber throughout the mine has been repaired. The passes and stopes are in good order. Air good all over. Three men are employed in and about the mine. A rise is being put up from 60 ft. level on stone 3 ft. in width.

H. N. Mills and Sons, Macrae's.—(12-3-1903): The battery is idle, and very little crushing has been done during the past twelve months. Most of this has been in prospecting parcels from different points on the field. (25-10-1903): The battery has been shifted from Macrae's Flat to Horse Flat, and re-erected there. Stone is being mined from a surface-blow close to the battery, but unfortunately the results are not yet satisfactory.

Alfred G. Davies, Dunback Hill, Stoneburn.—Davies quarries out a considerable amount of quartz from various points on his freehold property. The stone is crushed in a five-head battery, power being supplied from a Ransome portable steam-boiler and engine. The stone is low-grade, but the tailings have been found to be of some value, and are being saved for future use.

Gilmour and Party, Dunback Hill, Stoneburn.—Tenders are being called for driving a tunnel 100 ft., more or less, to crosscut on to the reef.

Golden Bar Gold-mining Company (D. Peddie, mine-manager).—(12-3-1903): This mine is in good working-order, and a splendid body of stone has been opened out in readiness for stoping. Five men are employed in the mine, and the battery is kept running full time. The stopes are well timbered, and stowed except near the outcrop. The explosives are now stored in a secure surface magazine, and are carefully handled. The five-head stamper-battery is giving satisfaction; from 60 to 70 tons of quartz being treated per week. (24-10-1903): This mine is well conducted and in good order. All the stone to the rise of the top working-level has been stoped out, and a lower level has been driven 220 ft. on to the reef. From this level it will be possible to rise 70 ft. through quartz before reaching the top level, which gives the company a grip of a splendid body of stone. The level is in good order, and a good supply of stoping-timber is kept on hand. Six men are usually employed in the mine and three in the battery. The quantity of explosives kept in the mine on this date was excessive, and I advised the manager to reduce the amount considerably. The tailings are now being saved, as the concentrates are found to be valuable. (28-11-1903): I visited the mine on this date in connection with the fatal accident whereby John Harcus was killed by an explosion of gelignite.

Ounce Reef (Spiers and Ross, owners).—(12-3-1903): W. H. Lidston and party work this mine on tribute, but have not been very successful so far, chiefly owing to the smallness of reef and the distance the ore has to be conveyed to the battery, increasing the cost of winning the gold. Four men found employment here for a few months, but at this date only two men were engaged surface-prospecting on the reef. (24-10-1903): No one at the mine; very little work done since my previous visit.

Donaldson's Golden Point Mine (J. Pascoe, mine-manager).—(12-3-1903): At this date four men were engaged in an open cut, laying bare a large reef-formation carrying layers of scheelite. The erection of the new ten-head stamper-battery is being proceeded with. (24-10-1903): Operations had been pursued to the dip of the main drive, and the reef continues the same in value and permanency. This work has been discontinued, and operations are now confined to open-cut work. There is a fair percentage