

being only about 400 yards from the shaft is made to drive a pump by means of a small wire rope on a surging-drum. The pump is double-action, and by sixty strokes per minute is capable, it is said, of throwing 1,600 gallons per hour. It is at present fixed at 92ft. down on the line of the reef, where there is a small well to store the water for a short time. The discharge-pipe is 2in. in diameter. There are ten sets of pulley-stands and pulleys for the rope to travel on between the engine and shaft. The new company intend to thoroughly prospect the lode at a much deeper level; therefore sinking is now going on, and is to be continued for some time. The lode at the bottom of the shaft is now 2½ft. wide, and considered fairly payable. The dip of the reef is very flat, and the foot-wall carries blocks of scheelite in places, which are very noticeable. The company has not yet crushed any stone, but there are 25 tons on the surface ready.

*Donald Reid's Quartz-mine, Barewood.*—I did not find any one there; the shaft had caved in, and is apparently abandoned. The surface is more or less cracked near the shaft, and at some little distance back from the line of reef outcrop. There stands close to the shaft a small vertical boiler and crab-winch in working position. This plant has been placed there since my previous visit, but it has done very little work. Mr. Walters, the manager, is now driving a prospecting tunnel in a gully to cross the line of reef some distance south of the old shaft. While writing this I learn from Mr. Reid that the shaft had followed the reef to a depth of 150ft., where it was very solid, and 2½ft. wide, of good quality.

*Surprise Reef, Nenthorn.*—The adit has been driven along the reef a distance of 800ft., where the lode still exists, but very small—too small to pay for trucking the stone that distance. A shaft was then sunk on the reef to a depth of 55ft. from the floor of the adit, and 200ft. in from its mouth, where an opening was made in the lode, and driven along on it a distance of from 60ft. to 70ft.; but as the water, which has to be lifted by hand-power, was considered rather heavy, a fresh start was made on the lode at 25ft. only, below the floor of the adit, where the work is now going on. The lowest portion of the shaft and the tunnel therefrom now act as a sump, which is capable of storing several days' drainage, and a Tangye pump, of the smallest size, is used to throw the water out. There are four men working one shift only, and the reef is very small—viz., 2ft. 4in. and 8in. The country is very hard to get out, but stands well without timber, and the side-dressing fills up the stopes as the work goes on. The air is good.

*Bonanza Quartz-mine.*—Since my last report a low-level tunnel has been put in a distance of 900ft., nearly 400ft. of which is along the line of reef following the "track," and about 200ft. on the underlay, below the old workings. At 800ft. an uprise of 75ft. has been driven on the stone all the way, and getting wider upward. The lode, so far, is small, but promises to turn out well. A considerable body of water was met with in the tunnel, near to and on the hill side of the lode. It was so heavy as to crush in some of the sets of timber, and rendered centreing others necessary. A small tunnel was then driven into the hanging-wall, which tapped the water, and immediately relieved the timber so much that the centres were removed. A considerable stream is still flowing out of the mouth of the adit. A sufficient quantity of air is conveyed to the workings through a 4in. pipe from a tank, and a 30ft. fall of water therein at the tunnel mouth. The battery plant is still at the old site, to where the stone has now to be sledged up a considerable hill. It is, however, the intention of the party to remove the plant, and place it near the creek-bed, below the mouth of the present tunnel, after the mine is properly open from this level.

*North Prospecting Reef, Nenthorn.*—This line of reef is known as the old Consolidated Lease. About eight months ago J. Holden went into an old shaft, and after a careful examination started to get out a little stone, which he has followed down about 65ft. The width of lode varies very much—from 3in. to 18in. The part of the lode worked out to date might average 7in. only, but it has paid him remarkably well. The yield from several small crushings—in all 66½ tons—was 159oz. of gold. The lode still exists below the level worked out, but there will now be water to lift. At the time of my visit there was no one working in the mine; Holden and his man were at the battery getting another small crushing of 47 tons done. Further operations depend on the returns from this crushing.

*Dunedin Dredge.*—(12/9/93): This dredge is still on good ground, and doing very well for the shareholders. From 70oz. to 100oz. per week were mentioned as the returns at the present time, but the yield varies very much, one week it may be 10oz. and the next 156oz. This last was the largest obtained for one week. About ten men are employed on the big dredge, No. 1, and six or seven on the small dredge. No. 1 consumes about 3½ tons of coal in the twenty-four hours, at a cost of 8s. 6d. per ton, and can work to a depth of 42ft., but is just now working only 25ft. deep. The width of stream now being worked is about 58ft., while the width of the river at this spot is between 400ft. and 500ft., where the water travels seven miles or more per hour.

*Roxburgh Amalgamated Gold-mining Company.*—(13/9/94): This company has two jets constantly working, unless when short of water in the head-race, which, I am sorry to hear, is the case at odd times, by which several months in the year are lost to the workmen—about thirty of them, when the mine is in full swing. Sluicing operations commenced in this claim about October, 1890, since which time, it is estimated, there have been 13 or 14 acres of ground put through the boxes. The average depth of this area is estimated at between 50ft. and 60ft., but a large proportion of this depth contains little or no gold. The total yield of gold up to the end of 1893 is 4,576oz. The bottom is an uneven hard schist-rock, showing pot-holes and trenches, which have been scoured out by the action of water and gravel for ages before the valley became filled to the level at which we now find it, by a reduction in the body of water flowing seaward.

*The Roxburgh Dredge.*—(13/9/93): This dredge is working steadily, and is said to be doing very well in the ground immediately above and close to the present workings of the Hercules No. 1. As this dredge does not appear to make rapid headway in the river the claim should last a considerable time. It is to be hoped it will do so, and that she may win a large quantity of gold for the shareholders. The yield of gold for the past year ended August is 893oz. There are three shifts in all, seven men employed.