

shows the bottom to be dipping towards the terrace, thereby indicating that the river had at one time been flowing close to the terrace. It is not, however, to be expected that gold will be found continuous even amongst the gravel of the former channels: in some places it will be found in rich patches, while in other places in the river-bed gravel, scarcely any gold will be found. The same thing takes place in the present river-beds; in places the gold has been completely scoured out, but it is generally found on bars and rough bottoms.

This company is elevating the material to a height of nearly 70ft. The hydraulic head on their pipes is 800ft.; but, according to the pressure-gauge at the bottom, it only registers 270lb. to the square inch when the water is going through the nozzle, which is equal to a hydrostatic head of 622ft., which shows the nozzle used to be too large for the supply of water with this pressure, or else it means a loss of 178ft. head by friction.

Roxburgh.

The claims on the opposite side of the river from Roxburgh are doing fairly well. The ground is getting washed away alongside the banks of the river, and the workings are now getting well back into the flat. The ground, however, is not so rich as it was close alongside the river; nevertheless, there is another deep run of ground going through the flat, in which good prospects can be got.

Roxburgh Amalgamated Company.—This company stripped a large area of ground by sluicing off the top material down to such a depth as the fall for the tail-races and sluices into the river would admit, and during the last year they have been working the bottom portion of the ground by hydraulic elevating. The whole of the stripped ground is not yet all worked, but the returns from the operations, although payable for working, have not come up to expectations. The workings are now back about 20 chains from the river, and payable gold got from the whole of the distance: two distinct runs of gold have been crossed, and the manager expects to get a deep run of ground still further back, where, probably, the river had flowed at one time, skirting round the foot of the range, and coming into the gorge at the junction of the Teviot River. The water-supply is taken from the Teviot River, where a concrete weir is constructed in the mouth of the gorge, leading out of the Dismal Swamp. This weir has been raised another 6ft. 6in. last year, with stone and cement, the Roxburgh Amalgamated Company paying two-thirds of the cost, and Ewing and McConochie, who purchased the plant and claim belonging to the Hercules No. 2 Company, is to pay the other third of the cost. This could be made, with very little expenditure, one of the best water-supplies in Otago, as the Dismal Swamp is a large area of flat land, where water could be dammed back at the mouth of the gorge, and thus insure a never-failing supply. There are thirty men employed by this company. Taking the balance-sheet of this company for the year ended the 30th of April last, the value of the gold obtained for the year amounted to £5,420 1s. 7d., while the whole expenditure for the same period was £3,649 18s. 1d., thus leaving a net profit on the workings of £1,770 3s. 6d. for the year.

Some of the private claims higher up the flat than the Roxburgh Amalgamated Company have been doing very well. It is said that the shareholders in one of them has averaged about £10 a week when at work.

Hercules No. 1 and No. 2 Companies.—These companies' workings are on a flat about one and a-half miles lower down the valley than the Roxburgh Amalgamated Company's ground. The Hercules No. 1 Company took up the whole of this flat, and, after working a portion of it for some months, sold the one-half of it to another company, which was termed the Hercules No. 2. Both of these companies' ground was payable for working alongside the edge of the river; but on getting back into the flat, the ground got poorer, and did not return a profit on the company's operations. There is a large number of boulders and big stones in the drift, which entails a good deal of extra expense in removing and stacking. The Hercules No. 1 Company paid extremely well the first two years after it commenced operations, the shareholders getting back the most of the capital invested, if not the whole of it; but of late years it has had a struggle to make ends meet. There is always the chance of another deep run of ground close to the foot of the range; but the workings in the No. 1 Company's ground are now getting a good distance back from the river, and no sign of this has yet been met with. According to the last balance-sheet presented to the annual meeting of shareholders, the value of the gold obtained for the year was £2,970 4s. 3d., and the expenditure in connection with the working was £2,000 18s. 10d., but the net profit for the past year was only £69 5s. 5d., as there were other expenses in connection with the office, &c.

The Hercules No. 2 Company could not make the ground pay for working, and it went into liquidation some eighteen months ago, and the property and plant was purchased by Messrs. Ewing and McConochie, who intended to remove the plant to their claim at Tinker's; but before doing so they agreed to give the ground a trial, with the result that sluicing operations have been carried on ever since. For some time the yield of gold did not pay the expense of working; but as they got nearer the foot of the range which projects to the edge of the river at the lower end of their ground, better prospects were obtained, and recently the workings are being carried on at a profit.

Spear-grass Flat.

There are three sluicing claims working in the small gully and flat at the back of Mr. Kemp's store and hotel; this gully was all worked by paddocking in the early days, and some portions of it were ground-sluiced with a small supply of water, but the natural fall is not sufficient to carry away the tailings. About three years ago Hesson and Simmonds took up some ground in this locality, and erected a hydraulic elevating plant, and since then they purchased the water rights belonging to the Commissioner's Flat Company, which went into liquidation, and have constructed a water-race from Coal Creek to the ground. The claim is said to be paying very well. The material is lifted for about 20ft.