

schistose rock finely laminated with quartz veins cut away to this depth, it is certain the time required to do this work must have been very great.

The whole of the country from the Shotover to the Arrow is highly auriferous, wherever alluvial drifts are found overlying the rock. It is nothing but the scouring action of these rivers cutting away the quartzose schist rock, causing large land-slips to take place from time to time on each side of the streams, and by the continual action of the water carrying quartz gravel down their beds wearing away and disintegrating the rocks, carrying the fine muddy material and sand out to the ocean and setting free the gold these rocks contained, that has left the concentrated wash-drift now found in the present and old water-channels, of which the Shotover, Arrow, Cardrona, and all the tributaries of the Kawarau and Clutha Rivers show abundant illustrations.

Round Hill.

This has been in past years a very rich field, and there is yet a large amount of gold in the bed of the Ourawera Valley; but the sluicing here has raised the bed several feet and made the valley now a great width. It would be a hard matter for any one now to define the place where the water in the creek used to flow. In former years this place was principally worked by Chinese, but now they number very few in comparison to what they did six years ago. The principal workings are carried on by the Round Hill Gold-mining Company, who, during the last three years, have done a great deal of work without having got any remuneration for its outlay. According to information received from the manager, Mr. Lee, the company have expended £13,000 in the purchase and construction of water-races, £3,000 in trying to bring up a tail-race channel from the ocean-beach, but which proved a failure, and £4,000 in iron pipes and plant to work the ground; and during the time the company has been carrying on sluicing operations—about three years—it has got gold to the value of about £12,000, out of which £9,200 has been paid in wages. The shareholders have not yet received a dividend, but Mr. Lee stated that it was likely that a small one would soon be declared.

Mr. Evans, the general manager of the company, at the time of my visit, had gone to England to either get the capital of the company increased or raise £15,000 to bring in water from Pourapourakino Creek, which is estimated to cost £7,000, the balance being to get larger pipes and to construct an iron-pipe channel down the bed of the Ourawera Valley to send the tailings from the workings to the ocean-beach. Considerable dissatisfaction, and not without cause, prevailed amongst the miners on this field with the manner in which this company were constructing dams across the bed of the valley and raising its level. However, on the Warden being appealed to, he ordered the dam to be cut away, and scrub and trees which the company had placed in the bed of the creek to be cleared for a width of 50ft., and the construction of a channel for a width of 20ft. in the bottom through the part of the creek-bed where this obstruction had been placed. This will tend to prevent the bed raising so fast, but the more ground that is sluiced away above the company's claim the higher the bed of the creek will be raised, as there is not sufficient fall to carry away the tailings.

The company first commenced hydraulic sluicing in November, 1891, and up to end of July, 1894, sluicing operations had been carried on for about 18,000 hours. This is equal to working continuously (exclusive of Sundays) two years, twenty weeks, four days, during which period about 1,300,000 tons of material was lifted by the elevator to a height of 45ft., and the average quantity of gold got was equal to about 1·35gr. per ton. These statistics, however, may be open to question, as the quantity of water used for lifting was said to be five sluice-heads, with three sluice-heads for breaking-down the drift, having a hydrostatic head of 208ft., which would show that the elevator was giving about 39 per cent. of the power used. This is considerably above the average done by elevating plants.

Since the company had commenced operations the manager stated that he had worked about 23 acres of ground, having an average depth of 26ft. This would be equal to 964,781 cubic yards, and, taking the value of the gold obtained at £12,000, it would show the value of the ground worked to be about 2·98d. per cubic yard. The whole of the ground worked is on a false bottom, the main bottom being some 8ft. or 10ft. below this, and it seems probable that there will be a good layer of wash-drift in places on the main bottom. The present supply of water, however, is not sufficient to elevate the material higher than at present, about 45ft., and the manager does not think there is sufficient gold in the ground to work it to a greater depth than at present, and he intends to fill up the present worked ground with tailings. Some of the men employed by the company, who had been discharged, pegged out a claim in the worked ground, and after working about three weeks took out gold to the value of about £100. The company, finding that it had left better ground than it anticipated, stopped the men from working, and brought a case against them in the Warden's Court, which was decided in the company's favour. The men considered they had a grievance, and brought their case before the Hon. the Minister of Mines when in the district, and stated that the whole of the worked-out ground which the company proposed to cover with tailings would pay men £1 a day for working, while the manager of the company denied this, and considered he had a perfect right to work and dispose of the ground as he pleased.

The conflicting statements in regard to the value of the worked-out ground which were made to the Hon. the Minister of Mines leaves a doubt on the subject; but, if the statements of the men are correct, it would seem an extraordinary proceeding for any company to leave ground that would pay £1 a day per man for working, and to cover it up again with tailings. It should be tested before again being covered up. Land leased for mining, which is the property of the Crown, is given purposely to extract the mineral or metals it contains. If it is not worked in a proper manner, and the mineral wealth wasted, the Government has a right to see this remedied, either by legislation or otherwise. A piece of Crown land may prove to contain a rich deposit of gold; but the fortunate holder of a lease, license, or right to work that ground properly, should be made to