

in forming a good opinion of the field. Gold has been found at different points over an area of about two miles long by a mile wide, and the sinking throughout is not deep, nor is there much water to contend with. The position of the field is all that can be desired, being situated alongside a main road and near to the Town of Hokitika. There is every reason to believe that the whole of the flat between Hokitika and Ross will eventually prove auriferous, and the Hokitika Harbour Board are offering advantageous terms to any party of miners who may prove their reserve to be capable of carrying a population of 300 miners. Water-power is at once available on the field, and there is every prospect of Woodstock proving, if not an exceedingly rich field, at least one which is capable of supporting a large population.

Ross Gold-Mining Company.—The lease of ground which is now held by this company comprises most of the leases originally held on the Ross flat, and which, during the short time they were worked, gave some very rich returns. The Prince of Wales, Scandinavian, Morning Star, Cassius's and Kohinoor leases are thus held; besides a considerable area of, as yet, unproved ground. The works which have hitherto been carried on by the company consist of a tail-race 98 chains in length which has been brought up from the sea coast, partly by open cutting and partly by tunnelling, and drains the ground to a depth of 75 feet below the surface. This tunnel is connected with the surface at two points by small shafts. The main shaft, which was to work the ground, was started on the terrace behind the town, the object being that it should be sunk through what is known as the "terrace bottom" which underlies all the known belts of auriferous wash. This bottom is generally free from water, and it was thought that by sinking here many of the expenses incidental to sinking through wet ground would be avoided, but another difficulty was met with: After sinking a short distance a belt of very fine loose running sand, known as "pug," was cut, and this so much troubled the contractor that he suspended operations while he made arrangements with the company for a special rate for sinking through it; but the delay thus incurred caused the loss of the shaft. This is the more to be regretted as workshops and a water-wheel had previously been erected at the mouth of the shaft, and thus a considerable amount of expense has been incurred. It is now proposed to sink a fresh shaft just below the terrace, so as to utilize the machinery by simply turning the water-wheel round, but it seems doubtful whether or no they will then be sinking on the terrace bottom. As, however, they would be certain to reach this at a comparatively shallow depth, and the tail-race will drain the ground to a depth of 75 feet, I think the position chosen will be a good one. The tail-race is considered to have cut the third bottom at the furthest distance to which it has been driven, and the lowest known bottom is considered to be 300 feet below the level of the tunnel. The company would seem to have every prospect of being successful. They intend to utilize the water-power which is available for the purposes of pumping, hauling, &c. They have reduced their pumping to a minimum by the construction of this long adit or tail-race, and they have a large area of ground from which 11,543 oz. 9 dwt. 21 gr. of gold are reported to have been taken during a period of thirty-two and a half weeks, the time the original companies worked before being overcome by water with which they were not prepared to cope.

I take occasion here to reproduce a map and sections of the district which were originally prepared by C. Y. O'Connor, Esq., C.E., in 1866, when the question of drainage was before the public. This map is now out of print, and is so valuable in giving information which cannot now be obtained, that I am glad of the opportunity of having it reprinted.

Humphrey's Gully Sluicing Claim.—This, which is another of the extended alluvial claims lately granted to companies prepared to incur considerable expense to work ground otherwise unremunerative, is situated on one of the Harbour Board reserves between Humphrey's and M'Donald's Gullies, which fall into the Arahura River from the south. It comprises an area of 98 acres, in which several reserves have been made for small sluicing claims which were previously in existence and which are still to be worked, the company agreeing to supply them with water at a fixed rate. From one of these parties a water-race in course of construction has been purchased, and this it is intended to enlarge and extend so as to bring in at least fifty Government heads of water, and by means of a tunnel one mile or less in length it is proposed to reduce the total length of the race by about three miles. From the engineer's report there appears no doubt that at least fifty heads of water can be readily obtained, and the race is to be made of sufficient capacity to carry double that amount. The position of the company's lease is exceedingly good, the whole of the wash being well above the flats of the Arahura River, and tail-races can be constructed wherever it may be found most convenient. The thickness of wash varies from 100 feet to 300 feet over the whole of the lease, and as a result of several trial washings in a tin dish, taken at random from different parts of the claim, I am pleased to be able to state that in no instance was a dish washed out without showing one or two colours of gold, and in several cases there was a good-looking prospect. This is one of the points on which the company chiefly rely as a test of the value of their ground, and I was curious to see if any dish of wash could be got which would not show a colour, so that we tried prospects at all points of elevation with the results which I have cited. The gold does not appear to lie on any bottom, but to be disseminated throughout the entire wash, being sometimes richer and sometimes poorer, but in all cases payable if large quantities are to be treated. The gold is coarse; pieces up to $\frac{1}{2}$ dwt. occurring, and from a trial washing which was made a short time ago when, owing to heavy rains, water was plentiful, 110 loads of dirt gave 14 oz. of gold. The day I was there, I saw some miners, who were sluicing on a small scale, clean up their top boxes after three weeks' work, with the result that about 7 oz. of gold were obtained, and probably an equal quantity would be got from their remaining boxes. There is no doubt that works of this sort require the outlay of a large amount of capital, and in this case the estimated cost of the water-race alone is £15,000; when, however, we take into consideration the quantity of auriferous ground which is there, and which only awaits the introduction of water for its treatment, we feel assured that the judicious outlay of capital, were it far greater than this, could only be attended with good results. It is, moreover, opening up a new branch of gold-mining industry on the West Coast, and I have no doubt, if similar concessions are granted to other companies, that before long we shall see many more large sluicing claims at work, and ground being turned over, which in small areas could not be worked remuneratively.

I have, &c.,

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