

terrace facing the Hokitika River, and are working the ground from these, instead of hauling the wash-drift up shafts. The ground here is not rich. None of the miners are making more than small wages. The sluicing-claims at the front of the terrace are good property, but even the returns from these could be greatly increased if a large supply of water was available.

There is little doubt but there is a large extent of ground in this neighbourhood that would give remunerative employment to a considerable population if there was a large supply of water brought on to the field, but the expense of bringing in a sufficient supply to work the ground would be a very big undertaking. When in this district, a deputation of the Miners' Association at Rimu met me, and wished me to represent to the Government the advisability of having a survey made to see if water could not be brought on to this field, and at what cost. Several sources are mentioned from which it can be got—namely, the Hokitika River or some of its tributaries, the Kanieri Lake, and the Arahura River. The distance it would have to be taken from either of those sources would be very great, and the quantity of water required to maintain a large population on this field, taking into consideration the great depth of the gravel deposits, would have to be at least eighty sluice-heads; and no matter what source the water was taken from, it would have to be conveyed at least three miles in iron piping.

The elevation of the terrace at Belcher and party's shaft on the top of the terrace at Back Creek is 346ft. above high-water mark, and some of the claims are at an elevation of 390ft.; the water therefore would have to be at least 450ft. above sea-level at the terminating point of the supply. The elevation where the water was lifted would need to be at least 700 feet above sea-level, to provide for fall for the ditching, fluming, and iron pipes. The cost of three miles of iron pipes alone, to convey eighty sluice-heads of water, allowing 15ft. to the mile of fall, would be over £35,000.

The Miners' Association at Rimu have been doing good work last year in trying to find fresh discoveries with the small amount of money they had at their disposal. The following is an extract from a report forwarded me by A. Clifton, the President, on the subject: "We have not been able to do as much work as in the previous year owing to the scarcity of funds, and also as some of our work was more expensive than usual. We have sunk four shafts of an aggregate depth of 233ft., at a cost of £51 6s. 8d., and have constructed 370ft. of prospecting drives at a cost of £27 15s. We have also put down a line of bore-holes from Mahinapua Creek to the ocean beach, a distance of about 60 chains, at about half a chain apart. The total number of bores put down was one hundred and fifteen, having depths varying from 15ft. to 25ft., making the aggregate distance bored 2,300ft., the cost of this work being £51. Owing to the peculiar nature of the boring we had to pay men 30s. each per week instead of the schedule rates, which made a considerable difference in our funds. The ground along the line of bore-holes is all of a sandy beach formation and black sand, and a little gold was found in five or six of the bore-holes; but nothing was found to be anything like payable for working. Out of all the work done last year we only obtained gold payable for working out of our shaft, which was the means of six parties of miners setting in and getting gold. This was to the south-west of Rimu. We have made another effort to raise subscriptions, with the result that we have between £70 and £80 promised for the next six months. This, with the Government subsidy, will enable us to do a considerable amount of work the next spring."

This shows that there is a considerable interest taken amongst the miners of this portion of the Westland district in prospecting for new ground, and shows that the miner of to-day has not lost the vitality and determination of seeking to open up fresh fields and pastures new. The bore-holes referred to in Mr. Clifton's report were put down to try and find the continuation of the Black Sand Lead along the old ocean beach line, and the shaft they discovered gold in is the one mentioned by me previously as being on the rise of the terrace above Rimu Flat.

Craig's Freehold.—This is between Rimu and the Mahinapua Creek, from which a considerable quantity of gold has been obtained. This land has been worked now for several years on tribute, the tributers paying 33½ per cent. of the gross yield of gold. Recently fresh arrangements have been entered into with reference to the working of this land, and there are now three parties of tributers at work.

ROSS DISTRICT.

This field still continues to support a fair mining population, but the quantity of gold obtained comes far short of the returns of the earlier days of the field. There is no goldfield in the colony where the alluvial drifts are at so great a depth as they are on Ross Flat, neither is there a field where there are so many gold-bearing layers directly above one another. The character of the formation of these layers on the upper levels are entirely different to those below, and these lower auriferous gravels are now 200ft. below sea-level, and no bed-rock has ever yet been reached in Ross Flat. This portion of the colony has been elevated and depressed at different periods, as marine shells can be seen at high elevations above the level of the sea, while the auriferous gravels referred to—now 200ft. below sea-level, and it is not known how much more—have been brought there by the action of flowing water. This was referred to in my last year's report, and a theory set up that the older gravels found in the lower auriferous layers came from a different direction to that of the present mountain chain, while the upper or newer gravel deposits came from the present mountains or high land.

Mr. A. McKay, F.G.S., the Mining Geologist, has devoted a good deal of consideration to this subject, and, after exploring this part of Westland, between the Grey and Miconui Rivers, arrives at the conclusion that at one time there was high land to the westward of Hokitika, and the auriferous gravels referred to at the lower levels are likely to have come from the westward, and not from the present chain of mountains. This would account for the great richness of the sea-beaches all along the West Coast, but, whether this theory is correct or not, one thing is certain, that there is none of the same character of material to be found on the present mountain chain.