

blue reef, and a drive put into the apparent deep ground to cut the wash-drift, but so far the Prospecting Association has not been successful in finding gold. The ground, however, is by no means proved yet. The deep ground where the bed of the river has originally been has not yet been touched. Gold was obtained on the northern side of the flat on the blue reef; but where this was found the reef was dipping in towards the Kapitea Hill, and the place where the gold has recently been got in this shaft on the blue reef is on the southern side of the flat, and the reef here is said to be dipping towards the river. The shaft should therefore be sunk to a greater depth, and a drive constructed from the bottom across the flat. If no lead of gold-bearing wash-drift be then found, it may fairly be presumed that it does not exist on the blue bottom.

HOKITIKA DISTRICT.

Waimea.

There are still about the same number of claims at work as there was last year, but the unworked ground is yearly getting further back into the range, and the fall for carrying on sluicing operations is gradually becoming less, and the ground is also getting poorer. The only party that is carrying on sluicing operations on a large scale are the proprietors of the Wheel of Fortune Claim. This party have erected elevators, and have commenced sluicing material into a well, and lifting it about 40ft. with elevators worked by a water-wheel. The elevated material is dumped into a hopper, and thence passed into a regular set of sluice-boxes. The sluicing-water from the well passes out through the drainage-tunnel. The quantity of material lifted by this means is about sixty loads an hour. This is a similar elevator to that used by the Ross United Company, at Ross and Donoghue's, only the elevators at the Wheel and Fortune Claim are set in a more upright position. The elevators are worked by an overshot water-wheel 25ft. in diameter, using about three sluice-heads of water, which is again used for sluicing the elevated material. A sluicing-nozzle 3in. in diameter is used in the paddock, under a head of 60ft., for breaking down the dirt, and an additional quantity of water comes over the face of the bank, to carry the material into the well. Mr. Batchelor finds his wheel not powerful enough for the quantity of material he has to lift: as the width of the breast is only 2ft. 4in., with 7in. in depth of bucket, he cannot use a larger quantity of water on the wheel to advantage. The buckets of the elevator hold about one and a half cubic feet of gravel in each, and it is lifted to a height of 30ft., when it is dumped into sluice-boxes, and washed a second time; but the most of the gold is got in the short line of boxes in the bottom of the paddock. The water used for washing in the paddock flows away in an underground tail-race. The depth of the ground they were working at the time of my visit was about 18ft., with hard cemented bands through it. Some years ago this claim was opened out and worked, but without payable results. The present proprietor is, however, very well satisfied with the amount of gold he has obtained since commencing to work it. He had spent a considerable amount on this plant, and deserves credit for the manner in which it is constructed.

The different parties of miners who are carrying on sluicing operations in the Waimea District have all dams of their own, and are therefore able to store the water which they get from the Government water-race at night, but none of them take it direct from the water-race to their claims. All the dams are at a considerably less elevation than the water-race, and even then they do not take it direct in pipes from their dams, but lead the water down in open races, having a considerable fall. Some of the parties only take a portion of their water in pipes, and let the remainder come over the face. The general method is to drive tunnels along the face, with pillars here and there, in order to break down the ground, which could easily be done if the full head of water were taken from the Government water-race. It will therefore be seen that the ground has to contain a considerable amount of gold to pay for this method of working. The parties working in this locality complain about the ground being poor, but, if worked in more approved manner, there is every likelihood of it giving good results. The general fall in the sluices is about 5in. to every 12ft. A greater gradient cannot be obtained, owing to the bed of the Waimea Creek being filled up to a great depth with tailings.

There is a considerable area of ground in the valley of the middle branch of the Waimea Creek, which is proved to be auriferous, still unworked. Some shafts have been sunk, but there is a good deal of water in the ground, which will require a tail-race or tunnel to drain it before it can be properly prospected. The ground is from 20ft. to 30ft. in depth, and if a tail-race were constructed it could all be worked by hydraulic-sluicing, as the water from the recent extension of the water-race towards Callaghan's commands the whole of this ground. The President of the Waimea Miners' Association waited on me when in this district to inquire whether the Government would subsidise the construction of an underground tail-race, which he stated would have to be about 2,000ft. in length, and which he estimated would cost about 5s. per foot to construct. If it could be done for this amount—namely, £500, it would be likely to open up a large area of ground. It is, however, very doubtful if there is sufficient fall for a tail-race to carry tailings, and, even if this proved to be the case, the cost of construction would be far more than the estimate given by the President of the Miners' Association, as it would require to be boxed and blocked throughout; but probably a drainage tail-race could be constructed for the amount named.

Arahura.

The principal gold-workings in this district are situate at Humphrey's Gulley, but there are other mining ventures in the locality which are deserving of mention. Amongst these is the tunnel constructed by Mr. Boys, of the Blue Spur, from the Arahura Valley to the valley of the Hauhau Creek. This tunnel has been in course of construction for the last seven years, and at the time of my visit to this locality, in December last, was constructed for a distance of 4,861ft. Several years ago a prospecting-shaft was sunk in a flat terrace above the valley of the Hauhau Creek, and struck gold, but could not work it owing to the large influx of water. Rich gold-bearing wash-drift was