

amount the Government contributed £1,150. It is now represented that it requires to be deepened and extended for a considerable distance; but, judging from the amount of available ground in the locality and the result of the workings on the flat which the last extension admitted of being worked, there is very little prospect of much auriferous ground of a payable character for working being opened out, even with further extension.

Messrs. Flannery, Morris, Sheppard, Dr. Ward and party are constructing a water-race from the Manuherikia River. They are lifting the water about five miles higher up the river from the road-crossing leading from Hill's Creek to St. Bathans, and intend to work some ground about four miles above Blackstone Hill Station, and in course of time extend the water-race down to Black's, when it is said it will be at about 200ft. higher elevation than the former survey. In constructing this race the party came on some ground which they considered payable, and have decided to give it a trial before proceeding further with the construction.

The water-race that formerly belonged to the Green Reef Company has been purchased by Mr. Pitches for £70, and he is using it for irrigation purposes on his farm.

Tinker's.

This place still continues to be the greatest gold-producing field for the number of men employed there is in the colony, not that the ground is particularly rich, but more owing to the character of the wash-drift, and the appliances used for working it. A great portion of the wash-drift is of old quartz-grit, or, as it is termed, granite-wash. This drift lies within two well-defined walls, and about 150ft., in width, and the depth of this deposit has in no instance yet been ascertained. The same character of wash-drift follows round the foot of the Dunstan Range to near Clyde, and again follows the foot of the range to St. Bathans in a north-easterly direction, and thence following a general easterly direction to Mount Burster. The dip, however, of this quartz-drift varies considerably at St. Bathans, where it is dipping to the south-east, while at Tinker's it is dipping to the north-west, being covered on that side by slips from the mountains known as the Dunstan Range. These slips make it difficult to work, as a large quantity of material has to be shifted in which there is little or no gold, on the north-western side, before the quartz-drift can be taken out; and the deeper the workings the more this will affect them. On the south-eastern side of the quartz-drift deposit rich auriferous ground has been worked by several parties holding claims; but the quantity of stones through the wash-drift make the ground far more costly to work, and consequently the same quantity of gold per cubic yard would not meet the expense of working ground where there are stones to contend with as it does to work the quartz-drift deposit.

Sims and Morgan's Claim.—This is situate at the southern end of Tinker's, on the quartz-drift lead; it is held by two men, who have altogether about 40 acres of ground, and employ two men besides themselves. The ground is from 40ft. to 80ft. in depth, which is worked by sluicing in the ordinary way. The quantity of water available for working being from two to six sluice-heads, which is brought in from Blackbush and Devonshire Creeks; the supply from these creeks vary according to the state of the weather. This is a claim that the present owners will never see worked out, except a much larger quantity of water can be got on the field. During this season about 300oz. of gold was obtained.

Ewen and McConnechie's Claim.—This claim adjoins the northern boundary of Sims and Morgan's claim. It was only commenced to be opened out last season, but, it being extremely dry, there was only water for about ten weeks to work the ground, but during this season there has been a plentiful supply, and a very large quantity of material have been sluiced away. The present workings is in the quartz-drift lead, the ground being on an average about 100ft. in depth, composed of quartz-drift, clay, and cemented bands, with but very few stones. Mr. Ewen estimates that there is from 1,400 cubic yards to 1,500 cubic yards of material washed away every twenty-four hours with about ten sluice-heads of water; this is equal to a sluice-head of water washing away 6 cubic yards per hour, which is a very high average, and certainly could not be calculated on were it not that the whole of the material is of a fine character. When the workings get further back into the foot of the range there will be a large quantity of loose rocks, stones, and boulders to contend with, which lies on the western side of the quartz-drift deposit; and as this deposit is dipping into the range, and of a great depth, it will in time become a question as to what extent of the deposit can be profitably worked, seeing that a large quantity of the loose material which has from time to time come away in slips, &c., from the main range, is partially overlying the western side of the auriferous lead.

The hydraulic-plant for working this claim is one of the best on the field, the head or pressure being 470ft. All the ground that can be sluiced off in the ordinary manner will be done before commencing to use a hydraulic-elevator. The material is washed into a tail-race, which is 5ft. in width, paved with stone on bottom; at about 5 or 6 chains down this tail-race there is a drop of about 5ft.; at this point a wooden box is placed in the tail-race, having a perforated plate in the bottom at the lower end with holes $\frac{3}{4}$ in. in diameter. The water and fine material coming through the holes goes into a distributing-chute, which is placed at right angles to the line of tail-race, and from this chute the water and material is distributed on to tables covered with cocoanut-matting. These tables have a total width of 24ft. and are divided into eight compartments, each 3ft. wide and 5ft. 8in. long, where there is a well or drop of about 5in., and then another similar set of tables—in all, there are three sets of tables of the width and length as previously stated. During the four months' operations previous to my visit, 80oz. of gold was collected off these tables; the proportion being for every 1oz. of gold got from the two bottom set of tables, 11oz. was obtained from the upper set, thus showing the width of the tables is of far greater consequence than the length with respect to gold-saving. This really means that, in order to save the fine gold, the water and material must pass over the matting in a very thin film, which requires a great width of tables to do so. There are eight men employed in the claim, and if their wages are reckoned at 9s. per day for four months