

experienced in getting rid of the tailings through Muddy Creek, which has risen quite 4 ft. since January, and a considerable amount of work has had to be done at the upper end to prevent the tail-races from getting choked altogether. A start will be made shortly with the driving of the piles to extend the walling towards the river. This is a subsidised work.

Garty and Gallagher's Claim.—This is a somewhat similar deposit to that which the Scandinavian Company are working, except that, instead of being a solid face of quartz-drift, about 50 ft. of hard clay overlies the quartz-wash, and has to be removed first. The wash varies in thickness from a few inches to over 20 ft. Notwithstanding the height of barren material to be removed with a plant that is quite inadequate, the claim pays handsomely. About 200 oz. of gold were obtained during the last twelve months.

Hunt's Claim.—Mr. Hunt owns the claim adjoining Garty and Gallagher's. He has a water-right of his own from Clear Creek, but it is too low to be of any use for elevating with, and is only used by Mr. Hunt to strip off the surface material and prepare the ground for elevating, which must be done from one of the higher races.

During the spring months there have been about twenty miners working along the banks of Muddy Creek from Mr. Hunt's claim downwards. They all seemed satisfied with the results obtained, and one old miner (Mr. P. Hanahan) has gone to considerable trouble and expense in erecting an elevating plant to test the old bed of the gully about a mile below Mr. Hunt's claim. Indications at present point to his being well repaid for his trouble and expense.

Ewing's Claims.—Work at the several claims of Mr. Ewing—viz., Kildare Hill, Vinegar Hill, Shepherd's Flat, and Cambrian's—has been prosecuted throughout the year much on the same lines as given in previous reports. Mr. Ewing does not appear to spare anything for the efficient working of the several properties.

The claims of the United M. and E. Company and Mr. J. Eagle at St. Bathans, and that of Messrs. Morgan and Hughes at Shepherd's Flat, have been worked with a reasonable amount of success.

Sludge-channels.—The construction of a subsidised channel from St. Bathans Township to near the mouth of Dunstan Creek has been continued under the supervision of Mr. J. Eagle, and a start made to open out the Muddy Creek Channel. This latter is under the direction of Mr. Neil Nicholson.

Bannockburn.

About forty men, working in small parties, find employment in the sluicing claims here. Representation having been made to the Government to the effect that the outlet for tailings *via* the Bannockburn Creek bed is rapidly filling up, and that, in order to prevent some hundreds of acres of known auriferous ground being locked up, a tailings-tunnel having a discharge into the Kawarau River is necessary, I was instructed to visit Bannockburn and report on the scheme. A survey had previously been made and an estimate of cost obtained. The latter is considered too high, and the diggers interested are of opinion that it could be materially reduced. After careful inspection, and making due allowance for contingencies, my estimate for a tunnel of the required length, 6 ft. high by 5 ft. wide at the bottom, including the necessary works connected therewith, is £11,000. The local people are not prepared to spend this amount, nor any portion of it, but ask that the tunnel should be constructed as a Government work, and a rate levied upon claimholders and owners of water-races who would benefit by its construction. Other details of arrangement (set out in my report on the subject) would have to be made. There is very little question as to the utility of such a tunnel, and on its being driven, and the head-races being put into proper repair (the latter are private property), there appears no reason to limit the working-life of Bannockburn Diggings to less than half a century. Probably not more than fifty diggers could be employed at one time. The amount of head-water available determines the number.

The several parties of alluvial miners working at and around Bannockburn are reported to have done fairly well, taking the year throughout. Three small parties are tunnelling in the wash; the others work by sluicing.

About thirty Chinese miners manage to make a living in the locality. They occasionally get on a good patch, but for the most part are fossicking about old ground.

The Bannockburn Creek, Smith's Creek, and Shepard's Creek are about to be worked by dredges. Material for these are on the ground.

Cromwell and Lowburn.

There have not been any developments in alluvial mining during the year to call for special mention. Several small parties of miners in the locality, including a number of Chinese, appear to be making comfortable livings. Work is carried on by ground-sluicing and driving. There are no large hydraulic plants in the neighbourhood.

Lake Wanaka.

Alluvial mining goes on in a more or less desultory fashion throughout the district. Small hydraulic plants are worked at Matatapu and by White Brothers at Luggate, but the bulk of the work is by driving and ground-sluicing. The approximate number of men engaged in various parts of the district is as under: Matatapu, 12; Luggate, 8; Criffel, 4; Cardrona (including Criffel Face and Branch Creek), 54, including some half-dozen Chinamen: total, 78.

Owing to frost and snow in winter the work is not constant in many instances, and the earnings in the locality of Cardrona is given as not exceeding £1 10s. per man per week on an average for the year.

Arrowtown.

Arrow Falls Gold-mining Company (Legal manager, Mr. R. F. Cuthbertson, Invercargill; claim-manager, Mr. J. Miller).—A detailed description of the method adopted for working the