

taken further up before the claim can be advantageously worked. This sludge-channel has been in course of construction for the last five years, and it will take a considerable time yet before it is taken up to the intended level, which is from 60ft. to 70ft. below the level of the present workings; it will, however, shortly benefit a few claims to some extent. The whole of the material from the excavation of the channel is passed over wide gold-saving tables, similar to those used at Ewing's claim at Tinker's, and for about seven months' work gold was obtained to the value of about £500, which covers all the expense of construction. The whole of the material is shifted with water.

Vinegar Hill.—Mr. Ewing has also a claim here, but the ground being deep and all of a mullocky character, requiring a good supply of water, he has not been able to send away the quantity of material he did in former years, owing to the scarcity of water last season. The tail-race is too high to be able to sluice the material in the ordinary manner; it has to be lifted by a hydraulic elevator for about 25ft. This, together with the character of the ground to be worked, requires a large supply of water. The yield of gold for last year—about 550oz.—is, however, sufficient to pay all expenses in connection with working the claim and leave a good margin of profit.

Watson and party's claim has been paying very well, giving, it is said, about £8 per man per week. Messrs Morgan and Hughes also have a very good claim, but they did not work it last year on account of having to construct a tail-race to enable them to work it at deeper levels. The quantity of gold obtained last year from Watson and party's claim was about 300oz., three men being employed. Another claim, worked by P. Tiernan and another, yielded 250oz. of gold for the year.

NASEBY.

This is a field where there is a large area of auriferous ground, but in many places the wash-drift is shallow and the claims are quickly worked out. This, together with the ground containing very little gold, prevents many of the miners placing a good hydraulic plant on their claims, they being content to follow the methods of sluicing used in the early days—namely, a canvas hose with very little head, the ground being broken with picks before turning on the water. This method of working poor ground cannot be advantageous to the claimholder. To any one visiting this district and observing the manner in which a great many of the claims are worked, the question would present itself to them: How can these claimholders make a livelihood? There is no doubt that there is a large area of drift-wash containing a little gold, but it requires a constant supply of water and all the improved hydraulic appliances to make this character of ground pay for working.

The present supply of water on this field is not sufficient for the number of men employed, and the ground being at a high elevation, subject to severe frosts in winter, there are at least about two months in the year that sluicing cannot be carried on, and, again, during the summer months, in dry weather, there is a scarcity of water. The principal supply of water is obtained from the Government water-race, which is managed by a Trust. This water-race takes its supply from the Maunherikia River and some of its tributaries. It is sixty miles in length, principally an open conduit, and this open cutting is carried across numerous wide shingle-beds of small creeks, coming out of the high mountains close to the race. Every flood brings down a quantity of gravel and shingle from the side of the steep range, filling up the open cutting; which has to be reconstructed before any water can flow down the conduit, and no doubt these breaks interfere considerably with the constant supply. Indeed, many of these shingle-gully beds should have been crossed with iron pipes. The expense in connection with the repairs to the open ditching in these gullies would have covered the cost of pipes long ago.

There is another thing which interferes with the supply of water for working the ground, and that is the quantity of flush-water required to work the sludge-channel in the bed of the Hogburn Creek. This sludge-channel is ten miles long, constructed partly on a gradient of 1 in 60, and partly 1 in 100. This channel requires a considerable quantity of flushing water, which could be used to work the ground in the vicinity of Spec Gully, where most of the sluicing will in future be carried on, the greater portion of the ground in the vicinity of the Hogburn Creek being worked out. The tailings from several parties having private head-races run into this sludge-channel. The water for flushing is given from the Government race free, irrespective of who is using it. The great complaint in this locality is the want of water, and the necessity for the Government constructing a large reservoir in the valley of the Eweburn Creek is constantly being brought up. The question of the construction of this reservoir is referred to in my report on the working of the Mount Ida Water race, but, even if a larger supply of water were brought in, the day is not far distant when the water-race will have to be extended across Spec Gully and on towards Kyeburn.

There is a large extent of country between St. Bathans and Naseby, and the run of the old quartz-drift, which is successfully worked at Mount Burster, apparently traverses the country towards St. Bathans, and follows on round the foot of the high range to near Clyde. Some portions of this quartz-drift give high returns of gold for sluicing, and most probably a fresh discovery will yet be made between the Maunherikia River and Naseby. A prospecting shaft at the upper end of the Hogburn Valley was put down several years ago to a depth of about 120ft., which got into the quartz drift-wash containing a little gold, but this shaft was never bottomed. The same run of ground is found at Mount Burster, where some of the claims last year turned out very well, but these claims can only be worked for about six months in the year, owing to their high altitude.

Guffie and Inder's Claim.—This is one of the claims on Mount Burster which is about 4,500ft. above sea-level. This claim turned out very well last year, yielding about 400oz. of gold. Owing to the remarkably fine season, the workings were carried on for eight months, but part of that time the men working in the snow, having to tunnel through the snow in places along the line of the head-race in order to get the water through to the claim. The quartz-drift wash is about 90ft. deep here, the richest patches of gold-bearing drift being generally found near the bottom; and, wherever there are large blocks of the bed-rock projecting above the general level of the bottom, rich wash-drift is always obtained. The existence of this run of quartz-drift, and the manner in which the layers occur, containing in many places, as, for instance, at St. Bathans and Muddy Creek,