

branches of Humphrey's Gully to be of a payable character. Work is in progress on the gravel deposits to the east, and, should a repetition of the results obtained in Humphrey's Gully be found, there need be no hesitation in starting the new equipment. Surveys are under way with the object of bringing in a race which it is expected will be less expensive in construction than the one already estimated. The tributers' desultory work resulted in obtaining 156 oz. gold, sufficient to pay all labour of prospecting outside of engineer's fee. Surveys and estimates are now being made with the idea of putting the present supply of water on better-grade gravel, so that the time occupied in surveying the large race and prospecting gravel will not be lost.

Kumara.

This is the most important hydraulic-slucing district in the colony, and for many years past has produced quantities of gold, and has furnished employment to a very large number of miners, not only in the locality adjacent to the ample water-supply provided by the Government in the Waimea-Kumara Water-races, with their recently-established branch races, but also to a very large number of men in the Greenstone and other parts of the district, who, though working on a smaller scale, are yet profitably employed, and will, in all probability, for many years to come be enabled to earn a living, if not a competency. In the vicinity of Kapitea Hill, although the smaller areas of rich ground have been to a certain extent worked out, there still remains a very wide extent of country containing auriferous drifts. The later explorations in the low-level tunnels driven from the Teremakau River terrace show that profitable employment may be given to a number of miners for future years.

Although the yield of gold on the Kumara field has fallen off, there is still a large quantity being obtained, and the field will yield good returns for many years to come. The area of ground on the field that will be sluiced away in the course of years is very extensive, and, although it is comparatively poor, it will, with improved and more economical methods of sluicing, employ a large number of miners. There are three main tail-races (sludge-channels) at present in work. What was originally known as No. 1 main tail-race has been abandoned for the last seven years, as it was found to be too low for the economical discharge of tailings on the tailing-site. No. 2 main tail-race has still four claims making use of it, and there is still an area of known auriferous ground that will take some years to sluice away commanded by the main tail-race. No. 3 main tail-race is used at present by ten claims, and the area of ground untouched commanded by this main tail-race will not all be sluiced away in ten years. Another party has obtained a right to sluice into No. 3, and their branch tail-race will soon be driven from the main tail-race to their claim. No. 4 main tail-race is used by three parties at present, but all of the parties are using large quantities of water—fourteen, fourteen, and twenty-four sluice-heads respectively, and they are in consequence sluicing away about twice the quantity of auriferous wash that the same number of claims washed away six years ago. Another party has driven a branch tail-race connecting No. 4 with their claim, and they will shortly begin sluicing into it. No. 5 main tail-race is not yet completed, as bad and difficult pug ground was met with in No. 1 section of the work, and the loose ground and large inflow of water was met with in No. 2 section. These difficulties have greatly retarded the progress of the work. The total length of No. 5 main tail-race will be $62\frac{3}{4}$ chains, and of this $40\frac{1}{4}$ chains has been completed, and $22\frac{3}{4}$ chains has yet to be driven. No. 5 main tail-race will open up a very large area of auriferous ground, and, although the ground is not by any means rich, it will give employment to a number of miners, and enable them to earn wages for the next twenty years.

The number of claims engaged in hydraulic sluicing on the Kumara field are: No. 2 main tail-race, four parties, thirteen men; No. 3 main tail-race, ten parties, thirty-nine men; No. 4 main tail-race, three parties, seventeen men; private tail-races, nine parties, forty men; parties preparing to sluice, three parties, seventeen men. Of the above-mentioned parties, twenty-one are using water from the Government race and five from private races; and of the three parties preparing to work, two will use water from the Government race and one from a private race.

The Kumara Long Tunnel Gold-mining Company have an alluvial claim of 60 acres at Kumara, worked by hydraulic sluicing, the length of the tunnel and tail-race being 2,742 ft. The materials treated consists of an alluvial drift of glacier wash, averaging about 40 ft. in depth. The water used averages twenty Government heads, giving a pressure of 80 ft. The quantity put through during the year was 153,360 yards, yielding 625 oz. 5 dwt. 12 gr.; value, £2,438 11s.—£975 8s. 6d. for owners and £1,436 2s. 6d. for tributers. The quantity washed per hour is 120 yards, averaging 2 gr. of gold per yard.

Waimea.

The Waimea district still continues to give employment to a large number of miners, and there is a fair hope of a considerable revival when the Waimea main tail-race and the Kelly's Terrace drainage-tunnel are completed and working, and the yield of gold will compare favourably with recent years.

The driving of the Waimea main tail-race has been completed throughout its whole length—about 2,100 ft.—and the trustees are about to sink a shaft at the upper end of work to connect it with the surface in the large flat in the middle branch of the Waimea Creek, where highly-payable sluicing-ground is known to exist. When this communication is made the tail-race will be paved with wood blocks, the material for which is now ready. Several parties are ready to drive branch tail-races to connect their claims with the main tail-race, when sluicing operations will be proceeded with. The large area of ground proposed to be sluiced through the main tail-race has nearly all been taken up in claims. The completion of this work and the starting of extensive sluicing operations in connection therewith should give a great impetus to mining in the district, as all the old residents have no doubt as to the payable character of the extensive flat commanded by this main tail-race.