No. 19.

Mr. J. Gow, Manager of the Waimea-Kumara Water-race and Sludge-channel, to the Under-SECRETARY for GOLD FIELDS.

Waimea-Kumara Races, Manager's Office, 12th April, 1884.

I have the honour to report steady progress in sluicing operations in connection with the Waimea-Kumara Races and Kumara Sludge-channel for the year ending the 31st March, 1884.

Waimea Race.—During the year many of the old original claims have been completely worked out, and a somewhat less number of new claims opened, consequently the sales of water do not now equal the sales of the corresponding month of last year. I am of opinion, however, that the present sales will be maintained for some time, and that the race will keep amployed from 130 to 140 miners sales will be maintained for some time, and that the race will keep employed from 130 to 140 miners for the ensuing year at average earnings on the coast. Some of the timber in the high flumes near the Kawhaka is showing decay, especially the legs and tracing, and the decay is almost wholly confined to the totara; there are only a few Kawhaka spars really bad: the silver-pine and rata spars are in excellent condition. Many of the old legs will have to be replaced with new ones at an early date, the cost of which is included in the estimated expenditure for the incoming financial year.

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Kumara Race.—This race and its branches are in excellent condition, and their carrying capacity has been much increased since my last annual report, in which I stated that the main race was being enlarged. It is now about Sft. wide by 3ft. deep, with a fall of 0.25ft. per chain; and the principal branch leading to the sludge-channel is 5ft. wide by 4ft. deep, with a fall of 0.30ft. per chain. The daily water-supply may be estimated at a little over 100 Government heads for twelve hours, equal to 4,320,000 cubic feet. I could dispose of more water if I had a better supply. The storing equal to 4,320,000 cubic feet. I could dispose of more water if I had a better supply. capacity of the dams has proved unequal to the steady requirements of this gold field; the winter rains may, however, keep up a full supply for some months to come, by which time a little work at the Loopline Dam could be done, which would increase its storing capacity considerably.

Many of the claims have lately lost much time for the want of water. There are now thirteen sluicing parties taking water from the Government race who do not use the sludge-channel, and each of them takes from six to ten heads. If an unlimited supply was always available they would take more. The thirty sluicing claims making use of the sludge-channel use from six to eight heads each, and many of them are continually asking for more; but, as a much larger quantity to each would to a certainty reduce the number of parties in the channel each shift, I have given over six heads only to those who have small fall. I hope to be able in a short time to give them all seven heads each. Amongst the forty-three claims now taking water from the Government race there are twenty-seven giant-nozzles in use, and there is every probability of many more being procured when the back-number claims are more fully opened out. Nearly all of the forty-three claims may now be considered as fairly opened and in a good style of working, most of them having plenty of room at hand to stow away stones on the ground worked out, working, most of them having plenty of room at hand to stow away stones on the ground worked out, and handy appliances for that purpose, consisting of fifteen water-balances, eight horse-whims, and five water-wheels. The shareholders generally are well pleased with the result of their washings. Some of the claims have yielded remarkably good returns, and are likely to do so for some time to come; while others, as might be expected in so large a sluicing field, have yielded very small returns indeed, and I fear that a few of these, with even a reduction of one-third in the present price for water, would never pay even small wages; and this is the opinion of many of the miners who had previously driven out parts of the ground now being sluiced. There are all over this field strips of ground running nearly east and west which are generally termed here "duffer bars," and I have no doubt that some of these poor claims have opened out in these poor strips, and when these are no doubt that some of these poor claims have opened out in these poor strips, and when these are passed through better returns may be reasonably expected.

The result of the past year's working has, financially, placed the miners in a much better

position: each party of miners shows less indebtedness for water and channel, and speak hopefully of soon being out of debt. I also learn from storekeepers and others that their outstanding accounts are being gradually reduced, and that money is more plentiful, especially within the last

six months.

Sludge-channel.—This is my great trouble, and I fear it will continue to be a trouble to the manager and others till the field is worked out. There is however some comfort to be expected if the new regulations are agreed to, and when the majority of the claims have permits under them, which is likely to be the case early in June. At the time of writing my last annual report there were only twenty parties using the sludge-channel; since then the other ten parties have opened their claims or nearly so, three only not having washed up yet. These thirty claims are represented by or employing 181 miners. Although the channel is still being used three shifts each day, I am unable to accommodate all. I can serve only twenty parties each day. As some of these have the first right to the use of the channel, but do not avail themselves of its use every day, I am enabled to give the back numbers a turn: and to help them still more I have for some time I am enabled to give the back numbers a turn; and to help them still more I have for some time back taken one day every week from each of the eight parties whose original permits have expired. This plan has enabled the outside numbers to make use of the channel from one to three shifts in

Blocking or Paving.—I have now about 33 chains of the channel paved with 14-inch stone-paving, which appears to answer the purpose very well. It is not and never will be as smooth as the wooden blocks, but I do not think the stone-paving will reduce the carrying capacity of the channel more than one party each shift. I have now less difficulty in getting suitable stone-paving: there are more men at the work, and experience is enabling them to turn out more shapely stones. In time I hope to get a stock on hand ready to replace others as they are worn out. I think the paving will last about eight months.

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The Tailing Site.—The tailing site is fast filling up of late, and, at the present rate of extension of the characteristics. of the channel, will reach the river-bed in less time than twelve months, as stated by me at the Sludge Channel inquiry. The tail end of the channel was at that time nearly 8 chains from the river-