

Under-Secretary for Public Works wrote to the Chairman of the county informing him that the Government agreed to comply with his request to construct the water-race and that the vote would be renewed for this purpose on condition that the County Council paid one half the interest on the cost of construction. A survey of the race was made from the Four-mile Creek to Haines's Dam (at that time the property of a private company), a distance of 7 miles 30 chains. This race was estimated to cost about £7,500, and the quantity of water it would supply would be about ten heads. Instead of constructing this new water-race, the Government purchased the Argyle Water-race and Haines's Dam in the early part of 1879, then the property of a private company, for £3,000, and since that period the Government has expended a further sum of £11,701 15s. 3d., making the total cost of this water-supply up to the present time £14,701 15s. 3d.

In August last the County Chairman waited on the Hon. the Minister of Mines to urge the Government to construct an extension of the water-race from Haines's Dam to the Four-mile Creek, representing at the same time that a far larger supply of water was required for the field. The manager of the Argyle Water-race reported that twelve sluice-heads would be the maximum quantity that could ever be taken from the water-race. This being the case, it did not justify the Government in incurring a further expenditure of £7,500, and it resulted in the water-race being offered to the County Council, with a sum of £250 to execute some urgent repairs to the existing water-race. The County Council agreed to accept the offer, and the water-race was handed over accordingly on the 1st November last.

The following table shows the receipts and expenditure in connection with this water-race for seven months ending the 31st October, 1890 :—

Month.	Sales of Water.	Expenditure.	Number of Men employed.	Approximate Amount of Gold obtained.	Value of Gold.
1890.	£ s. d.	£ s. d.		Oz.	£ s. d.
April .. .. .	42 8 10	47 16 3	21	56	215 12 0
May .. .. .	40 6 2	51 7 0	21	48	184 16 0
June .. .. .	54 6 6	90 1 3	23	60	231 0 0
July .. .. .	23 9 7	42 19 9	20	30	115 10 0
August .. .. .	28 15 3	29 18 0	21	32	123 4 0
September .. .. .	20 11 5	31 5 0	13	22	84 14 0
October .. .. .	32 3 1	92 11 3	17	35	134 15 0
Handed to County Council to effect necessary repairs .. .. .	..	250 0 0	..	..	..
Totals .. .. .	242 0 10	635 18 6	136*	283	1,089 11 0

\* Average number of men employed, 18; average weekly wages, after deducting sales of water, £1 10s. 8d.

During the period the Government has had this water-race, about twelve years and seven months, the receipts for sales of water amounted to £5,530 16s. 10d., and the expenditure on maintenance, including the £250 handed recently to the County Council to effect the necessary repairs, has been £5,401 12s. 11d., showing only a profit on the working, during the whole period, of £129 3s. 11d. The collateral advantages have been—an average of about seventeen men employed in working ground with water from this supply, and the approximate quantity of gold obtained amounting to about 8,040oz., representing a value of £30,738 12s. The County Council has recently made a new survey of an extension to Four-mile, with the view of having the race constructed.

#### MIKONUI WATER-RACE.

The portion of this water-race that is constructed, about three miles at the lower end, is leased to the Mont D'Or Company at Ross for £50 per annum. The Borough Council of Ross is now laying air-pipes into the lower end of the long tunnel (which is constructed for about 45 chains), in order to ascertain its condition, and whether it would be advisable to continue its construction.

#### MOUNT IDA WATER-RACE.

The revenue from this water-race has never been sufficient to cover the cost of maintenance. It has been handed over to a Trust to manage on behalf of the Government. The race commands a large extent of auriferous country, and is likely some day to become a valuable property; but the present supply of water is not adequate to the requirements of the district, neither is it sufficient to pay the working-expenses. The district being at a high altitude there are at least two or three months in the winter that mining operations cannot be carried on owing to frost. At the time when this work was constructed it was part of the scheme to construct a reservoir in the valley of the Eweburn, so as to conserve the water during wet weather and have a reserve to draw on in dry weather; but this reservoir was never constructed, and the Trust maintains that it is impossible to make the water-race a paying concern without it.

There is a good site for a reservoir in the valley of the Eweburn, and there will be no difficulty in getting good foundations for an embankment across the narrow gorge where it is proposed to be made; but on the side of the valley next to Naseby there is some doubt whether a good foundation can be easily obtained. This requires to be looked into and tested before any design for an embankment is made. The increased revenue that would accrue from having an extra supply of water would be likely to make this race a profitable investment instead of its being a direct loss; but it is not understood by this that the increased revenue from sales of water would pay interest on the whole of the original cost, which is £65,766, but it would be likely to pay good interest on the extra expenditure required to construct the reservoir, estimated at between £8,000 and £10,000.

The following table will show the results of working the water-race for the year ending the 31st December, 1890 :—