Mr. R. Murray, Manager Central Otago Water-races, to the Under-Secretary, Mines Department, Wellington.

SIR,-Naseby, 21st April, 1909.

I have the honour to present the following report on the Mount Ida, Blackstone Hill, and Alexandra Water-races for the year ended 31st March, 1909:-

The total sales of water from the Mount Ida Race during the year amounted to £1,078 8s. 3d., an increase over those of last year of £435 13s. 6d. The expenditure on maintenance and repairs for the same period was £1,702 14s. 10d., an increase of £597 19s. 4d. over that of last year. The total cash received was £1,078 8s. 3d. On account of payment in advance, free water to the value of £7 12s. 4d. was supplied, and free water for washing-up was also supplied to the value of £843 10s. total value of water supplied from this race during the year amounted to £1,175 4s. 5d., an increase over that of last year of £473 3s. 5d. The average number of miners supplied with water was 39·36, a decrease of 2 from the number of last year. The approximate quantity of gold obtained by parties using water from this race was 1,459 oz., valued at £5,635 7s. 9d., an increase of 484 oz. over the

quantity obtained last year.

The dry weather from last season broke up on the 10th April, and the whole of the miners were at work in their claims. The season has been the best one for water we have had for several years, giving almost full time up to the 10th March. The weather getting cold about the middle of June, most of the Chinese knocked off. During the first week in July the weather turned warm and springlike, when at 2 in the afternoon of the 7th it began to snow, and by 9 in the evening it was a foot deep on the streets, and at 7 next morning fully 4 ft. deep-the heaviest single fall that the oldest inhabitant has seen here. Nothing could be done in connection with the race, as it was impossible for man or horse to travel in this depth of snow. On the 11th I sent men on snowshoes to get the maintenance man on the Idaburn section out. As there was no communication with Blackstone Hill for ten days, it was an anxious time until the most distant maintenance men got out. The by-washes between the different creeks being built of sods are never strong, the race as it got choked with snow broke them away, thus making an escape for the water which saved the race from heavy damage, only two small breaks taking place beyond the 40-mile peg. The outlet end of the Wedderburn siphon was blocked, forcing the water down the pipe-line trench, scouring a channel, and loosening eleven of the pipes. Not till the 24th could an effort be made by the maintenance men to get to the race. I started with the cleaning of the race on the 1st September with all the strength I could get. On reaching the reservoir and finding that it was by-washing, the miners turned back and had the water from it turned on to them in their claims. After lowering the water in it 11 ft., the miners agreeing, it was closed down on the 30th, so as to get the race cleaned to Hill's Creek, as it and the Idaburn would then give while the snow lasted a full supply, thus saving that in the reservoir. Only ten miners went on. Reached Hill's Creek on the 16th October, and the miners were again at work in their claims on the 19th. High winds set in at the beginning of November which cleared the snow off the range, causing the creeks to dry -so much so that by the end of the month not more than seven sluice heads were coming into the reservoir from forty-five miles of race. The reservoir being nearly full, this, with showers during December, January, and the first week in February (although the water in the race was at times very low), gave practically a full supply until the 9th of March, when the reservoir ran empty. Owing to the extraordinary heavy snowfall, the cleaning of the race was very heavy, chiefly from heavy slips brought down when the thaw set in. Round the basin of Coalpit Gully, which is principally composed of lignite clays, the race had to be cleaned out three times. Only two small breaks occurred during the year. Repairs had to be made to several boxes crossing the race, and to two As so many persons are supplied direct from the race, to supply another elevating claim using 5½ heads, a length of race of 17 chains from a small dam in head of Home Gully had to be constructed; also, on account of the high winds breaking into the water-face of a considerable length of Coalpit Dam bank, it was faced up with snowgrass-tussock for protection. The reservoir when full was fairly tight, only a small stoppage showing along the embankment above the 50 ft. level. The cleaning of the race was completed on the 23rd December.

BLACKSTONE HILL RACE.

The total sales of water from this race during the year amounted to £14 5s. The expenditure on maintenance and repairs was £49 6s. The total cash received was £14 5s. Free water to the value of £3 10s. 3d. was supplied. The total value of water supplied from this race during the year amounted The number of men supplied with water was two—Dillon Bros. little done to it for the two previous years; on account of the Dillons starting it was given a good side-trimming and cleaning. A heavy slip into it, of about $2\frac{1}{2}$ chains in length, near the intake of the siphon across Pegleg Gully, with which nothing could be done but allow it to find its own batter, had on several occasions to be cleaned out. When this gets settled, a small annual expenditure will keep it in good order. Any spare water, or the whole of the East Marionburn, from which this race is supplied, when not wanted by the Dillons, is sent on to the Naseby miners when required.

ALEXANDRA WATER-RACE.

The total sales of water from this race during the year amounted to £151 14s. 2d. The expenditure on maintenance and repairs for the same period was £422 11s. The total cash received was £151 4s. On account of payment in advance, free water to the value of £50 6s. 8d. was supplied. The total value of water supplied from this race during the year amounted to £202 0s. 10d.

The principal demand for water from this race was by farmers for irrigation, nine of them taking

water, and two of them, mining at Blacks' No 3, using the tail-water to irrigate their farms.