

OTAGO.

No. 18.

HON. MR. GISBORNE to His Honor the SUPERINTENDENT of Otago.

SIR,—

Colonial Secretary's Office, Wellington, 12th November, 1870.

I have the honor to transmit to you the accompanying copy of a letter dated the 5th September last, from Mr. C. E. Haughton, enclosing a memorandum from Mr. L. Broad on the subject of water supply for the Twelve-mile District, Wakatipu Gold Fields. In order that steps may be taken by the General Government, under the "Public Works and Immigration Act, 1870," it will be necessary that your Honor and the Provincial Council should concur in a recommendation as provided in section 26 of the Act.

His Honor the Superintendent, Otago.

I have, &c.,

W. GISBORNE.

Enclosure in No. 18.

Mr. HAUGHTON to Hon. Mr. VOGEL.

SIR,—

Wellington, 5th September, 1870.

I have the honor to enclose, for your consideration, a memo. with regard to the supply of water in the Twelve-mile District, Wakatipu Gold Fields, in the Province of Otago, by Mr. Lowther Broad, the late Warden.

From my own knowledge of the country, I can fully confirm his statements; nor am I aware that any other similar work in the Lake country would be so immediately and certainly remunerative.

You are no doubt aware that action is already being taken in Otago to secure portions of the money to be expended on the water supply for the several gold fields districts. I would venture to suggest to the Government that, as a preliminary step to an engineering flying survey, some gentleman acquainted with the subject should be commissioned to travel through the country to see personally the various local bodies, and report as to the localities in which it would be most advantageous to the public interest that the works should be initiated, and under what arrangements the miners themselves might be willing to render assistance in labour or otherwise.

The Hon. Julius Vogel, M.G.A.

I have, &c.,

C. E. HAUGHTON.

Sub-enclosure to Enclosure in No. 18.

MEMORANDUM by Mr. LOWTHER BROAD.

A TRACT of country extending from the Falls, from thence to the Twelve-mile and Upper Arrow River—a distance of about 15 miles—has remained unworked in consequence of the want of water for sluicing purposes.

Prospecting tunnels have been driven at intervals into the hills, and the existence of leads of wash dirt proved. It would not pay, however, to take out such small quantities as can be done by tunnelling, and then have to convey the earth a considerable distance to wash it, but it would pay beyond all doubt if water power was available for ground sluicing.

The gold is found in regular runs or gutters, 50 to 100 yards apart, from the foot to the summit of the loftiest hills; the country is, in fact, a succession of alluvial mountains, with bands of payable wash dirt running round them.

These bands or leads have on the low levels been worked with great profit since 1863, and still continue to pay.

In 1864, when I was Warden of the Districts, I went with two miners (accustomed to the construction of water-races in California and Australia) over the whole of the neighboring country to ascertain if a constant supply of water could be brought from the head of the Shotover River at a sufficiently high level to work the topmost leads of gold. We concluded that the scheme was perfectly practicable, and that it was simply a question of expense. That the race would pay as a speculation, we believed, as water was then (and I believe still is) selling for £3 and £4 per sluice head per week of six days of 12 hours each; that is, the owner of the race got from £6 to £8 for each sluice head weekly. The discovery of quartz reefs and the construction of races nearer the Capital, absorbed most of the money in the hands of private speculators, and it was deemed hopeless to try and form a company to construct a race in a remote and comparatively unknown locality. The miners on the spot were getting some good returns from the low levels, and were too busy to care about spending three or four months in the construction of a new race; the scheme was therefore abandoned, but the high leads have continued to yield wages to the few who would go through the tedious and unsatisfactory process of tunnelling the ground.

To render the race of real service to the locality, it would be necessary to construct it at the highest attainable level, forming a large reservoir at the Twelve Mile, from which miners might construct branch