

APPENDIX B—*continued.*STATEMENT showing Reductions made by the School Commissioners of Otago in Rents of Education Reserves, &c.—*continued.*

Section.	Block.	District.	Name of Lessee.	Original Rent.	Reduced to	Date of Reduction.
				£ s. d.	£ s. d.	
4	V	Invercargill	A. Fahey	5 0 0	3 15 0	31/9/90.
1	V	Glenomaru	J McLean	8 14 0	5 16 0	23/7/90.
9	VIII.	East Winton	J Welsh	6 0 0	3 18 0	30/12/90.
1	XV	Maungatua	S. Shaw	16 6 0	10 4 8	1/4/89.
1	IX.	} Clarendon	W J Douglas	11 16 0	8 5 6	31/10/89.
12	X.					
2	VI.	Lumsden	W J Moffatt.	5 0 0	2 0 0	30/6/89.
12	XVII.	Invercargill H'd.	J Weavers	17 18 6	12 10 0	28/12/88.
10	III.	Oteramika	C. Robertson	4 0 0	3 6 0	1/5/91.
4	VIII.	Waikaka	D. Fraser	12 13 0	10 10 0	18/3/91.
39	V	Papakaio	S. E. V Maguire	15 19 0	9 7 6	18/5/91.
2	VI.	Lumsden	G. Fletcher	5 0 0	3 0 0	30/6/89.
3	III.	South Lumsden.	J A. Watson	3 10 0	1 0 8	2/1/89.
3	VI.	"	"	2 5 0	1 11 6	2/1/89.
4	"	"	"	2 10 0	1 16 8	21/10/88.
1, 2, 3	XV	Dipton	J Morrison	11 0 0	3 2 0	22/3/88.
2, 3	XXII.	"	C. Williamson	6 0 0	2 5 0	22/9/88.
3, 4	XVIII.	"	G. Hempton	6 10 0	5 10 0	22/3/88.
3	XVI.	Gore	W Hume	6 15 0	3 10 0	27/3/88.
1	X.	Wyndham	B. Ross	46 5 4	23 3 8	20/12/87
9	XX.	Winton	A. McCormack	1 10 0	1 0 0	22/3/88.
36	VII.	Mataura	G. Crow	9 5 0	4 10 0	10/6/87
9	VI.	South Lumsden	Watson, Johnston, and	13 0 0	7 2 0	20/3/88.
1, 2, 3	IX.	} Menzies Ferry	} Crosbie	11 18 6	9 10 10	21/4/88.
15	IV					
14	IX.	Waikaia	Templeton and Bain	2 10 0	1 5 0	1/5/89.
54, 67	I.	} "	John Rowley	12 12 6	11 8 6	24/2/90.
32	IX.					
43	VI.	Invercargill H'd	W C. Galloway	10 8 0	9 5 6	1/1/91.
18	XLI.	"	G. Manson	4 10 0	3 0 0	30/6/91.
1	VI.	Toitois	G. Wells	28 19 6	22 6 0	1/5/91.
2 of 12	VI.	Hawksbury	G. A. and P Mein	3 18 0	2 8 0	2/12/91.
2 of 30	XII.	Oamaru	J Aitcheson	15 0 0	10 0 0	21/12/91.
			W Meek			
				1 744 2 8	1,063 0 1	

APPENDIX C.

REPORT BY MR. E. DOBSON, M.I.C.E., ON A PROPOSAL TO IRRIGATE LAND ON RUN 194.

SIR,—

The problem placed before me by you at the request of the School Commissioners for the Otago Provincial District appears to be briefly as follows, viz. To ascertain the possibility cost, and advisability of bringing water on to the Waikaia Plains, especially to that portion of Mr Gillanders's run which is now about to be subdivided and offered on lease in blocks of from 200 acres to 500 acres—whether for a general system of irrigation, or for the supply of water for stock and domestic use, with perhaps a limited amount of irrigation applied to gardens and orchards.

It may be well at the outset to consider what is implied by each of these systems for the clearer understanding of what follows, merely remarking in addition that I use the term "successful irrigation" in a financial sense only as regards the returns to be derived from the investment of capital, quite apart from any other results, however desirable, which may follow the inauguration of schemes of water-supply in new or sparsely-settled districts. Successful irrigation (suitability of climate being of course implied) requires the fulfilment to a greater or less degree of the following conditions: (1) An ample supply of water at a cheap rate, (2) such a configuration of the surface of the soil as will allow of its being terraced to form ponds for the reception of the irrigation water, with facilities for draining off the surplus water as it passes from the land, (3) such a depth of good soil as will repay the cost of irrigation cultivation 4) facilities for obtaining the manure necessary for replacing what is taken from the soil by the extra stimulus given to vegetation. The conditions of a successful water-race system are far more simple. The great point to be aimed at is to lead the water from the source of supply to the highest part of the district to be watered, whence it can be taken in small races either through, or along the boundaries of, the several properties, each proprietor having the free use of the water as it flows, and being bound to send it on to the land below his own, and allowed, subject to certain conditions, to fill his tanks or to irrigate small patches of land for special crops, paying a special charge for the water so used. The essential condition of the supply is that it should be constant, and not fail in the driest seasons, when the water is most wanted, especially in dairying districts. Where the supply is not sufficient to allow the whole of the races to be kept always flowing, the establishment of private tanks will, however, go far to remedy this inconvenience, as it will be remembered that the greater portion of water-race water ultimately reaches the natural outfalls, a very small portion being used by stock, absorbed by filtration into the soil, or taken up by evaporation, as is the case with irrigation water, the races, even in porous gravels, generally silting up so as to become watertight in a very few weeks after they have been opened. With regard to the artificial storage of water at the source of supply it may as well be here mentioned that for irrigation or water-race purposes this will seldom be successful,