## HEAD OFFICE.

General Survey Office, Wellington, 30th June, 1882. Sir.

I have the honor to report that the general correspondence and accounts of the department has continued to increase during the past year.

Mr. Lakeman, Chief Clerk, notes that 8,109 letters and memoranda have been received and

despatched.

The expenditure of the Survey Department, it will be seen by the returns, amounts to £117,232 13s. 3d., and that for roads to open Crown lands for sale, is £35,223 18s. 5d.\*

The increase in the correspondence necessitated the employment of a temporary clerk; but, not-

withstanding this, the work of the record-room has been very heavy on the officers there. In the drawing office, 19 new survey district maps, 6 town maps, 9 large run maps, and a great variety of more miscellaneous drawings have been executed principally for photo-lithography.

Mr. Spreat, lithographer, besides having designed and drawn a few book covers, &c., has been

chiefly engaged on a 25-mile map of the Middle Island, now nearly completed.

In the early part of the survey year, the electoral maps and descriptions, and maps and descriptions of new licensing districts, engaged the time of many of the draughtsmen, and when it is considered that there are 91 electorates and 396 licensing districts, of each of which at least two maps had to be prepared, and also detailed descriptions of their boundaries, the work will be understood as involving some labor.

In the Photographic Gallery the number of negatives taken has not been quite so great as in previous years, but in the Lithographic Printing Office the work done has been of the average quantity. So far as the Survey Department work, the quality of the drawings and their printing have been decidedly superior. The tendency seems to be towards the desire for larger maps than the means at our disposal have been capable of producing without great cost and time. The necessity therefore for a larger machine and premises more suited to the work is very pressing. The publication of the maps of the Otago runs, for instance, could have been done in very much less time had the department possessed a steam printing press large enough to print them. As it was, all the presses capable of printing these maps were kept at work night and day for several weeks to supply the demand.

A site on the reclaimed land has been selected, and it is hoped the sum placed on the Estimates will be passed by Parliament, so that the building and machinery may be put in hand at an early

date.

Some difficulty is experienced in getting draughtsmen to understand or to remember that drawings for photo-lithography should be made in line, and in pure black and white only, with every detail distinct and firm. For the New Zealand Institute Transactions lately, a number of drawings were photographed which were not all suitable for the process, and I dare say the artists were disappointed with the results. They will be so, unless they bear in mind that a drawing on, say, buffcoloured paper, will not produce a negative which will print well; and that lines which are not sharp and continuous can never become so by being photographed. It seems to be imagined that any rough diagram or careless tracing will, by being photographed, become equal to a steel engraving, whereas what is actually produced and printed is a facsimile of the drawing, with the weak and rotten lines frequently gone altogether.

In company with the Hon. the Minister of Lands and the Chief Surveyor of Nelson, I visited the northern portion of Nelson and Marlborough, from Collingwood to Nelson, and by the Buller and Matakitaki to Reefton and Westport, returning by the Cannibal Gorge, Hanner Plains and Awatere Valley, to Blenheim. I have already reported to you the results of this journey, which was mainly to see the country, with a view to its opening up by tracks prior to sale by the Crown. I have also reported to you on the utilization of the Hanner Plains Hot Springs, which were visited on the route.

For the coming year the Head Office should endeavour to forward as much as possible the publication of the 80-chain district maps. Their use as the settlement of the country advances is becoming more necessary. At the present time the Property Tax Department is in very urgent need of them for rating and other purposes, and were they now published a great deal of cost would be saved to the Government.

A map of the northern part of the North Island will, I trust, be put in hand very soon, so as to supplement that just published by the Department on the 8-mile scale. The Middle Island should also be proceeded with so soon as the topographical work can be compiled.

A. BARRON, Office Surveyor.

## ROADS TO OPEN CROWN LANDS FOR SALE.

EXTRACTS FROM REPORTS ON WORKS UNDERTAKEN DURING THE YEAR ENDING 30TH JUNE, 1882.

Auckland.

The past season, for the last three months, has been one of the worst experienced for many years, and, as a consequence, the road works have not progressed as fast as they should have done,

whilst at the same time great damage has been done to some of the lines by floods and land slips.

Road, Head of Kaihu Valley to Kaikohe.—Vote 107, item 1. Very little has been done on this line beyond completing some piece-work begun last year. There is no immediate hurry for it until the Manganui Bluff to Kaihu Road is open, and, as the votes were taken for three years, the extension of it can well be delayed.

<sup>\*</sup> Full details of expenditure and liabilities, on roads to open Crown lands for sale, will be found on page 11 of the Public Works Statement Table, No. 6.