

The following lease-deeds were prepared and plans placed thereon: Seventy-five leases in perpetuity drafted in quadruplicate, seven small grazing-runs, nine miscellaneous occupation leases in triplicate, ten pastoral-run licenses, seventy-three temporary licenses in duplicate, and 198 single copies of back leases in perpetuity for the Head Office; making a total of 712 copies prepared, and representing 174 leases issued. The present arrears are about 192 leases in perpetuity, which is inclusive of 128 recently balloted for on the Waikakahi Estate; twenty-five small grazing-runs, including fourteen on the Waikakahi Estate; and about thirty-three pastoral and miscellaneous: making a total of 250 in arrear, forty-two of which are written and are now having the plans placed thereon. Probably the whole of the arrears will be worked off during the current year. Since the 1st January there have been prepared for the Valuer-General tracings of twenty-two deposit-plans and fifty-four other tracings, being copies of sixty-five certificates of title, illustrating transfer dealings that have taken place during the three months of the year, at an estimated cost of £7 18s. There were also prepared for the Valuation Department duplicate copies of the Kaiapoi, Rangiora, and Sydenham Borough tracings; schedule of lands defining the area of sections within and without the Eyre River Conservation District, and illustrating on their plans the boundaries of the Waimakariri Water-supply District; and subdivisions at a cost of £17 16s. One record-map of the Noble district was constructed, and all the back titles, eight certificates, and one Crown grant recorded thereon. Several of the other record-maps were amended, and additional work compiled thereon, besides fifty-five certificates recorded, six of which were closed roads. The Akaroa and Okains district maps were posted up to date for the purpose of publication, work in which we are very backward, there being a few of the districts in the Ashley, Ashburton, and Selwyn Counties still unpublished, and all the districts in the Geraldine, Levels, Waimate, and Mackenzie Counties, the whole of which will require more or less attention before publication. The Geraldine County districts, being the most urgently required, are proposed to be taken first. Miscellaneous draughting and other work have comprised the preparation of photo-lithographic plans of the Oxford Bush runs and reserves on the Peninsula. A number of tracings have been made for the Land Purchase Commissioners relating to estates offered to be sold to the Crown for settlement. All the surveyors' current plans, and a large amount of extra surveys plotted upon other maps, have been reduced and recorded on the compiled maps of the office; the survey data renewed on a few of the early plans whereon the figures were rapidly fading away. The values of the initial trig. station of each survey district were calculated from the initial station of the circuit, to enable surveyors to tabulate their work accordingly, and a great deal of other miscellaneous work was performed. In conclusion, I may remark that the office-work is in a fairly satisfactory state, the year's current work of examination and compilation of plans being up to date, leaving us with a few of the back plots that have had extra information placed on them to sort out, and record the additional work, and thus bring up the district maps for publication. The work which is seriously in arrear is the recording of leases in perpetuity issued, for comparatively few have been recorded, owing to pressure of other work which must, if possible, be kept up to date."

I was absent from the office seventy-two days on various duties, such as attending at Wellington meetings of the Land Purchase Board and Surveyors' Examination Board; inspecting with other members of the Land Purchase Board several properties offered for sale; inspecting with Mr. McLachlan and Mr. Williams (Crown Lands Ranger) the Highbank and Marawiti Settlements after the severe gale which occurred on the 23rd September; also, with Messrs. McMillan, McLachlan, and Williams, reclassifying runs in South Canterbury, &c.

SIDNEY WEETMAN, Chief Surveyor.

EXTRACTS FROM A REPORT BY MR. G. H. M. MCCLURE ON WORK CONNECTED WITH STANDARD SURVEY NEAR CHRISTCHURCH, ETC.

Mr. McClure's nine plans of standard survey contain work done in the Borough of New Brighton and Blocks XII. and XVI., Christchurch District. He reports as follows:—

"The angles were observed with a 5 in. theodolite, taking from eight to twelve readings at every station, and the chainages done with the standard chain with thermometers attached, with the exception of work shown on plan 24 and lines 34A to SS 38 and SS 36 to SS 37; which, owing to the nature of the country, I had to chain with a 5-chain wire. The standard band was stretched with a uniform tension of 14 lb. as shown by a spring-balance attached to one end of the chain. Three steel plates, 10 in. square and $\frac{1}{8}$ in. in thickness, spiked to the ground by four steel spikes, were used to mark the chaining on. All lines were chained twice, and, if there was any difference, three times. The coefficient applied for temperature was .00000625. The standard lines are parallel to the sides of the streets and roads, except in a few cases where it was not possible to have them so. The offsets, which are shown in black on plans, vary from 19 to 50 links. This was occasioned by the nature of the ground—drift sand, lupins, and gorse—making a uniform offset impossible. The datum for heights is the Cathedral floor, 15.72 ft. above spring tide, taken at Sumner bar. This information was obtained from Mr. Cuthbert, Drainage Board Engineer. If 34.28 be added to my heights, it will give the reduced levels used by the Drainage Board. Plans 21, 22, 23, showing the built-on part of New Brighton, are plotted 1 chain to the inch, the rest of the plans being 2 chains to the inch. The work is tabulated from Mount Pleasant, taking Mr. C. W. Adams's position of SS 79 as origin. The closures show the following average error per mile: On meridian, 0.25; on perpendicular, 0.12. The origin of my bearings was Mr. Adams's bearing $310^{\circ} 26' 13''$ between SS 78 and SS 79, and bearing $108^{\circ} 04' 53''$ between Trigs. W and C. Owing to the nature of much of the country—drifting sand, covered with lupins and gorse—much time was occupied in finding old pegs and in clearing and levelling standard lines, which has necessarily increased the cost of this work. The total length of standard work done is $13\frac{1}{4}$ miles, and number of stones put in sixty-eight, which gives an average length of $15\frac{1}{2}$ chains to each line."