

CANTERBURY.

Minor Triangulation and Topographical Surveys.—As proposed in my report last year, four of the staff surveyors have been engaged on this work, to enable me to get more reliable plans made of the pastoral country proposed to be re-let next year in Canterbury. Mr. Welch has been employed on the Okuku and Noble Survey Districts, situated in the northern part of the province, adjoining the Hurunui River; Mr. Hay in the Mount Somers and Hutt Survey Districts, in the Ashburton County, embracing the head waters of the north branch of the Ashburton River; Mr. McClure has completed the Fox, Mount Peel, and Sinclair Survey Districts, in the Geraldine County, including the head waters of the Orari and the Havelock branch of the Rangitata River; and Mr. Brodrick has been engaged in completing the triangulation of the North Tekapo and Godley Survey Districts, in the Mackenzie country, embracing the northern part of Lake Tekapo and the Macaulay, Godley, and Cass Rivers. The work undertaken by these officers has been of the most arduous description. The unusually late fall of snow in the early part of October last year, the fierce and ever-recurring north-west gales which blew with such force during the past summer months, and the early fall of snow this autumn have all helped to retard the progress of the work, and necessitated the highest peaks being ascended again and again before satisfactory observations could be obtained. The average height of stations observed was over 4,500ft., a great many of them being over 6,500ft., and the highest 7,645ft. I am glad to be able to report that no loss of life has occurred, although Mr. Welch's party, whilst fording the South Hurunui River, were washed down it, barely escaping with their lives; and Mr. Brodrick had one of his men so badly frost-bitten that he had to be sent to the nearest hospital. The total area triangulated is 416,838 acres; and, besides getting the topographical features of this, the topography of 335,154 acres of the higher portions of the mountainous ranges extending far into the Southern Alps has been obtained by extending chain traverses to the sources of the various rivers and their principal tributaries, the peaks and leading ridges being fixed by cross-bearings, and the other topographical features by cross-bearings and carefully-prepared sketches taken from the various minor stations, the average cost of the triangulation and topography being 0.98d., and of the topography alone 0.35d. per acre, which includes every cost in connection with the field parties to the end of the season. The several surveyors and their parties pushed on the work with the utmost energy until they were compelled by the approach of winter to leave the high altitudes in which they had been camping. The calculations and topographical plans having been left to be completed during the winter months, I am unable yet to report definitely on the various closures which have been made with the previous work. The rough calculations, however, show satisfactory results.

Sectional Surveys.—These comprise revision surveys completed on the Peninsula by Messrs. Welch and Hay during last winter and in the early part of the spring, before commencing their trigonometrical surveys; a block of deferred-payment land in the Oxford Survey District, undertaken by Mr. Brodrick before he removed to the McKenzie country to start the triangulation there; some ordinary sectional surveys in the Geraldine County, executed by Mr. McClure in the early part of the season; and further sectional surveys, subdivision of educational reserves, mining, road, and other surveys undertaken by Mr. L. Mathias in the Ashley, Selwyn, Ashburton, Geraldine, and Waimate Counties; of this work, some 1,377 sections or allotments in all have been pegged on the ground, containing 18,799 acres, at an average cost of 1s. 1½d. per acre. This work being very similar to that reported on in previous years requires no special mention at my hands.

Land Transfer Surveys.—This work has, as in former years, been entirely supervised by Mr. Monro, the calculations and other work being done by his two assistant draughtsmen, Messrs. Cane and Leversedge, jun. Ordinary certificates for transfer and certificates in lieu of Crown grants having decreased in number, the draughtsmen have, since the 1st January last, drawn the plans on the duplicate and triplicate copies, which had been hitherto done by contract at a cost, on the average, of about £100 per annum, which sum is now saved to the department. The work in this branch of the Survey Department is approximately the same as last year; there is a decrease in the number of certificates issued in lieu of Crown grants owing to the arrears of work in the issue of titles from the Crown Lands Department being gradually overtaken; in other respects there is an increase in some of the work to be done, and a slight decrease in other items. Thirty-five new plans have been deposited, containing 480 separate allotments; 8 plans taking land for public works purposes, and 12 road-deviation plans have been checked and recorded; 157 applications to bring land under the Land Transfer Act, 353 ordinary transfers, 11 mortgages, and 25 leases were referred to Mr. Monro to check the descriptions or areas; 940 ordinary certificates, in duplicate, and 548 certificates in lieu of grants, with the usual copies, were done, necessitating 2,978 separate plans or marginal diagrams being drawn thereon; and, in addition to this, subdivision plans on a large scale were done, showing the titles issued under the Land Transfer Act in the Boroughs of Akaroa and Rangiora, in the Town District of Hampstead, and in part of the Riccarton District.

Office-work.—During the year 92 plans of sectional surveys of various kinds have been sent in by the field surveyors. Of these, and arrears remaining on hand last year, 70 have been checked and passed, 13 have been held over pending alterations being made, and 60 remain on hand; 7 new Crown-grant record-maps have been constructed, and the grants or certificates of title issued have been duly recorded thereon; 556 new certificates or grants, including 794 sections, containing 92,868 acres, have been prepared, checked, and passed on to the Land Transfer Department; 476 plans have also been put on 172 leases and licenses and their counterparts. Since the reductions made in the service last February, Mr. Shanks has taken charge of the work formerly supervised by Mr. McCardell, and most of the remaining draughtsmen can now work in the upstairs-rooms adjoining the upper safe, the others will work in a room adjoining the lower safe; and I think that a considerable saving of time will be effected by this bringing them nearer the fire-proof safes, much time having been hitherto lost by having to employ those officers, owing to want of space, at the