

MARLBOROUGH.

Triangulation.—It will be observed that under the several headings in the general return of triangulation no work of this character has been undertaken during the past season. The triangulations completed by Mr. Wilson cover for the most part those portions of the district in which section, road, Land Transfer, and other like surveys will probably be required; no material extension, therefore, it may be expected will be wanted for some time. There is, however, a small triangulation in the Orieri and Gore Survey Districts which I contemplate doing this season, from Cape Jackson to Forsyth Island, to connect the Pelorus and Queen Charlotte Sound triangulations, embracing an area of from twenty to twenty-five thousand acres, and covering Port Gore and Waitui, Titirangi, and Auakoa Bays.

Rural Section Surveys.—These call for no special remark beyond stating that three sections were surveyed under application for deferred payment, one for perpetual lease, and one for cash.

Revision Section Survey.—These are a part of the legacy of old defective surveys the department is from time to time called upon to correct. They are situated in forty-three different localities in the Gore, Arapawa, and Linkwater Districts, and they include the revision and connection to trig. stations of nearly all the freehold sections in Queen Charlotte Sound. 4,429 acres were reported last year as field-work completed. The resurvey shows that most of the original surveys were very loosely done, and are quite unreliable. In several cases the sections were found to be about half a mile out of the positions shown on the maps, and the coast-line on which the sections abut was found in many cases to be from 5 chains to 20 chains in error. With few exceptions no indication of the ground-marking existed, and it was found necessary in nearly every case to retrace the coast, and fix the position of the section by the natural features and configuration of the coast. Front and direction pegs were put into every section excepting where two or more sections adjoined belonging to the same owner, in which case the lines dividing the sections were not marked on the ground. There were twenty-one closed traverses in connection with these surveys, the mean closing error being 1·3 link per mile. Many of the traverses of isolated sections are checked by bearing, the difference between observed and calculated bearings seldom exceeding 1'.

Town Section Survey.—Two sections were resurveyed for issue of Crown grant, and one for Land Transfer purposes. The cost appears great, but this is owing to most of the surveyors' time being occupied in determining the frontage street-lines.

Village Homestead Special Settlement.—This block is divided into fifteen allotments of about half an acre each, the remaining eighteen allotments ranging from three to ten acres.

Gold-mining Survey.—This was a licensed holding for gold-mining purposes in the Queen Charlotte Sound Mining District. It is situated at Jackson's Head, is difficult of access except in fine weather, and most of the time was taken up in travelling.

Office and Land Transfer Work.—During the year thirty-four surveyors' plans have been received and checked, and plotted on to their respective block-sheets and record-maps. Thirteen new block-maps have been prepared, and more or less work placed on each. Six certificates in lieu of Crown grants in triplicate were prepared.

In the Land Transfer branch twelve plans were passed, and tracings of them supplied to the District Land Registrar, and 7 applications, 104 mortgages, 5 leases, and 73 transfers were examined. Diagrams in duplicate were placed on sixty certificates of title, representing dealings with nine original sections in 176 allotments. One new record-map (rural) was constructed and brought up to date. During the year the Chief Draughtsman was absent on leave one month, and the Assistant Draughtsman was away for two months on sick leave.

Proposed Operations.—The principal operations in this direction will be—25,000 acres of trigonometrical survey with topography, from Jackson's Head to Forsyth Island; connection of Pelorus and Queen Charlotte Sounds; completion of revision surveys in Queen Charlotte Sound, 1,540 acres, 13 sections, in two groups—sub-trig.-stations ready, and work just commenced; survey of fourteen small grazing-runs, with adjoining forest reserves (13,000 acres), in the Pelorus Sound; and section surveys as requisitions are sent in by the Land Office.

HENRY G. CLARK, Chief Surveyor.

NELSON.

Minor Triangulation without Topography.—Mr. W. D. Murray has completed 100,000 acres over the Croixelles, French Pass, south end of D'Urville Island, and Pelorus Sound; and the unconnected old surveys and new applications can now be located in that part.

Topographical and Trigonometrical Surveys.—Messrs. Smith and Thompson have completed 125,030 acres at a cost of 1½d. per acre, part of which was completed in the field during the previous season at the head of the Stanley River and Lake Guyon, skirting the eastern side of the Spencer Ranges and down the Wairau to Tarndale. This triangulation was brought up from the Hanmer Plain base-line, and closed on Tarndale 19,469·1 with a difference of ·6 link. The number of polygons is 10, the mean close being 3", the greatest and least differences being 9" and 0" respectively. In twenty-six triangles the mean error in summation is 3"·6, the greatest 9" and least 0" also. It will be seen that these officers keep up the high standard of their work. Sixty thousand acres of topographical work has been done, taking in the main range which forms the boundary of circuits, counties, electoral districts, &c., hitherto altogether undefined, but which is now located in true position.

Sectional Surveys.—There have been surveyed 67,314 acres, at an average cost of 1s. 6½d. per acre. Of this, 32,018 consist of ten leases in the Amuri District and 10,660 in the Maruia Block surveyed for sale; the remainder consists of scattered applications in heavy-bush valleys. The current applications during the year have been chiefly made in the Nelson and Collingwood Districts, in which arrears have accumulated. The unsurveyed arrears at the end of last year were 56,336 acres, in 223