

TABLE B.

Land District.				Rural Surveys.	Native-land Surveys.
				Acres.	Acres.
North Auckland	..	..	..	16,524	10,129
Auckland	..	..	..	90,627	142,333
Hawke's Bay	..	..	..	6,284	53,913
Taranaki	..	..	..	17,559	7,665
Wellington	..	..	..	5,699	27,946·37
Marlborough	..	..	..	2,711	1,362
Nelson	..	..	..	5,921	..
Westland	..	..	..	7,972	..
Canterbury	..	..	..	2,665	601
Otago	..	..	..	126,673	82
Southland	..	..	..	62,000	11·8
Totals	..	..	..	344,635	244,043·17

MINOR TRIANGULATION.

An area of 31,546 acres, at a cost of 2·6d. per acre, is shown under this heading. The whole of the work was undertaken to control the settlement surveys in Auckland, Taranaki, and Marlborough Districts.

SETTLEMENT SURVEYS.

The settlement surveys comprise Crown lands, land for settlement, and land for discharged soldiers. The bulk appears in Table A under the head of "Rural," the acreage thus shown being 344,635 acres, while the remainder includes village and suburban and town lands, totalling 1,754 acres.

NATIVE-LAND SURVEYS.

An area of 244,043 acres was completed during the year under report by staff and contract surveyors. Table A shows that areas of 29,462 acres and 214,581 acres were surveyed by staff surveyors and contract surveyors respectively. The area surveyed in each land district is shown in Table B.

GOLD- AND COAL-MINING SURVEYS.

An area of 560 acres is shown under this head. The surveys were made by private surveyors, and the fees paid by the applicant.

GEODETIC TRIANGULATION.

An examination on the ground of the triangulation scheme covering the Urewera country has been completed, and most of the signals have been erected on the stations, comprising a net of triangles extending from the Kaingaroa Plains base-line to the coast in the north and east directions.

STANDARD SURVEYS.

The extension of the standard survey of Palmerston North was completed by Mr. C. A. Mountfort, District Surveyor, with the assistance of Mr. A. C. Haase, surveyor, who was acting under his supervision in order to gain experience and receive training in work of this class. Mr. Mountfort also returns seventy-two miles of standard traverse of main roads in the vicinity of Feilding at a very moderate cost per mile. The system of measurement and the apparatus and instruments used by Mr. Mountfort is the subject of an illustrated report appended hereto.

The standard survey of Gisborne was resumed by Mr. H. M. Kensington, District Surveyor, early in the year, and the field-work is nearly completed. An examination of the traverse closures shows that the high degree of precision necessary in standard work is being maintained.

TOPOGRAPHICAL SURVEY.

Operations were commenced in Nelson District by one topographer to map an area in Motueka and Waimea Survey District, on which the Cawthron Institute is conducting a soil-survey and experimenting in afforestation. The field-work of forty-four square miles has been completed.

INSPECTIONS.

Inspections have been made during the year under review by the Chief Draughtsmen and staff surveyors of surveys under the Land Transfer Act executed by surveyors in private practice. The work inspected has generally been found satisfactory, but sufficient discrepancies have been disclosed by the Inspectors to warrant increasing the number of inspections in order to ensure that an adequate check is being maintained on the field operations of the staff and surveyors in private practice or on contract surveys.

TIDAL SURVEY.

The work for the past year comprised a fresh analysis for each of the ports of Wellington, Bluff, Dunedin, and Westport. The constants derived therefrom, combined with previous determined values of the constants of these ports and the mean constants for Auckland and Lyttelton, are shown in Table C below.