

1881.  
NEW ZEALAND.

# SURVEYS OF NEW ZEALAND.

(REPORT FOR 1880-81).

*Presented to both Houses of the General Assembly by Command of His Excellency.*

The SURVEYOR-GENERAL to the Hon. the MINISTER of LANDS.

General Survey Office,  
Wellington, 26th August, 1881.

SIR,—

I have the honor to report on the progress made in the surveys of Crown and Native lands for the twelve months ended the 30th June, 1881.

The detail of operations conducted within the several land districts are referred to at length in the reports of the Chief Surveyors in the Appendix, where they are arranged geographically, as in last year's report, beginning with Auckland and going south.

The maps show the areas in the colony which have been brought under the different classes of survey, and the progress made in the publication of maps up to the 30th June last.

The out-turn of field-work is detailed in the tables, but, before beginning to deal with the subjects of report, it may be here summarized in the following general statement:—

| Nature of Work.                                | Area.            | Rate per Acre. |    |                 | Cost.  |    |    |
|------------------------------------------------|------------------|----------------|----|-----------------|--------|----|----|
|                                                |                  | £              | s. | d.              | £      | s. | d. |
| Major triangulation ... ..                     | 1,087,086 acres  | 0              | 0  | 0·38            | 1,741  | 10 | 8  |
| Minor triangulation, without topography ... .. | 822,996 „        | 0              | 0  | 1·13            | 3,877  | 13 | 11 |
| Minor triangulation, with topography ... ..    | 2,789,109 „      | 0              | 0  | 1·24            | 14,452 | 1  | 5  |
| Rural and suburban section surveys ... ..      | 474,991 „        | 0              | 1  | 7·18            | 37,949 | 5  | 5  |
| Town section surveys ... ..                    | 2,658 allotments | 0              | 15 | 10 (per allot.) | 2,104  | 9  | 1  |
| Native Land Court surveys ... ..               | 94,441 acres     | 0              | 0  | 5               | 1,973  | 12 | 9  |
| Native Land Purchase ... ..                    | 710,737 „        | 0              | 0  | 2·68            | 7,949  | 8  | 9  |
| Gold-mining surveys ... ..                     | 1,505 „          | 0              | 15 | 10              | 1,192  | 12 | 5  |
| Road surveys ... ..                            | 607½ miles       | 10             | 17 | 5 (per mile)    | 6,605  | 9  | 3  |

## TRIANGULATION.

This process of survey has for its objects the establishment of points over the face of the country, to which all settlement and Land Transfer surveys may be referred, their degree of accuracy tested, and their relative positions within narrow limits of error determined, so that, as the country gets occupied and further subdivided, all properties may be kept clear and distinct on the record plans, and, in case of obliteration or challenge of land-marks on the ground, their positions re-established. Triangulation also affords the only satisfactory ground-work for topographical maps. The delineation of the natural features of the country pro-