## 1877. NEW ZEALAND.

## THE SURVEYS OF NEW ZEALAND

(REPORT BY THE SURVEYOR-GENERAL ON).

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

The Surveyor-General to the Hon. the Secretary for Crown Lands.

Sir,-

General Survey Office, Wellington, N.Z., 9th August, 1877.

In forwarding this annual report on work done by the department since the various Provincial Survey Offices were put regularly under the control of this office—which may date from the 1st January last—I have the honor to inform you that the measures proposed in my report to you of 7th December last year have been put in process, and as the Standard work, which governs all technical details, is the most important, I first allude to it.

## I.—STANDARD WORK.

As the accompanying statement by Mr. McKerrow (Appendix 1), who has charge of this branch, fully explains what has been done, I may confine my remarks to saying that the colony for standard survey operations has been divided into twenty-eight geographical areas, termed meridional circuits. True meridian at initial points had already been observed for in twelve of these, and which have been adopted; fourteen have been observed for since November last; so there now remains only two uncompleted.

Eight survey parties are now engaged in standard work, whose services, if continued, will bring all plane and section survey under the control of true bearing in twelve months' time.

Indeed, this work has so far advanced already, that in all parts of the colony surveys on magnetic or arbitrary and assumed meridians are exceptional.

## II.—Operations for 1876-7.

The work executed within the Provinces prior to the 1st January, 1877, and since the date of the last return to the respective governments, has been:—

| Nature of Work                               | Area.  | Rate<br>per Acre | Cos  | Cost. |    |           |                  |         |    |   |
|--|--------|------------------|------|-------|----|-----------|------------------|---------|----|---|
|  |        |                  |      |       | -  | Acres.    | s. d.            | £       | 8. | d |
| Major Triangulation                          | ••     |                  |      |       |    | 180,000   | 0 01             | 250     | 0  | 0 |
| Minor Triangulation without topography       |        |                  |      |       |    | 71,600    | $0 \ 1_{10}^{2}$ | 358     | 0  | 0 |
| Topographical and Trigonometrical Survey     |        |                  |      |       |    | 184,720   | 0 21             | 0 1,593 | 4  | 2 |
| Rural and Suburban Section Survey            | ••     |                  |      | ••    |    | 296,083   | 1 7,1            | 23,563  | 5  | 5 |
| Town Section Survey (3,185 allotments)       | ••     |                  |      |       |    | 2,617     | 10 10 10         | 1,731   | 0  | 8 |
| Native Land Court Survey                     |        |                  |      |       |    | 123,455   | 0 41             | 2,186   | 3  | 7 |
| Native Land Purchase Survey                  | ••     |                  |      | ••    |    | 361,833   | 0 21             | 3,392   | 3  | 8 |
| Miscellaneous work, Water-race, and Road and | d Mini | ing Sur          | veys | ••    | •• | _         |                  | 4,269   | 0  | 0 |
|  |        |                  |      |       |    | 1,220,308 |                  | 37,342  | 17 | 6 |