

The time will come when a great triangulation of the colony will be undertaken in the interests of science, and when this period arrives the work already done will facilitate its operations enormously, by furnishing the known position of points to form the apexes of a series of triangles of any size required.

So far as the settlement operations of the survey are concerned, no such governing triangulation is necessary, for the discrepancies on the closing lines of the work as it exists are far within the limits which could affect the boundaries of properties, or cause any displacement in the general maps of the colony.

SETTLEMENT SURVEYS.

Selection Surveys under the Act of 1887.—It has become necessary to make a distinction between the two classes of settlement surveys now carried on by the department. The first has for its object the preparation of selection-maps of lands to be thrown open before survey; the second, the complete survey of the sections as selected, in order to define individual boundaries and to furnish the data from which the titles are to issue. During the past year 261,484 acres were prepared in this manner for selection “before survey,” principally in the Wellington, Canterbury, and Hawke’s Bay Districts. The *modus operandi* is briefly this: The blocks to be dealt with have the principal road-lines run through them, with great care as to location and grades, and with a view to the areas into which the lands will subsequently be selected. Conjointly with this operation, topographical and descriptive information is obtained as to the best back and fencing lines, the character of the soil, vegetation, homestead-sites, lands for future smaller subdivision, public reserves, and other purposes incidental to the settlement of the country. The character of the surveys from which the above information is obtained is—so far as its technical value in measurements, either angular or linear is concerned—not of a first-rate class; nor is it suitable for the issue of titles, but it serves all the purposes of supplying full information to the selector, who, lithograph in hand, can easily find his way about the block, and correctly describe his selection in the subsequent application to the Land Office. A specimen plan on a reduced scale of a block thus prepared for selection “before survey” will be found in the Appendix hereto, which has been taken from one prepared by the Chief Surveyor, Wellington District, where the system has been more developed than elsewhere in the colony hitherto. So soon as the selections are made and the fees deposited for the ultimate survey, the work is put in hand, in the ordinary rigorous manner of section survey. The average cost of the former process for the past year has been slightly over 3½d. per acre. To this must be added the cost of final survey for definition of boundaries, which will average from 1s. to 1s. 6d. per acre.

The adoption of the system of preparatory survey has so far acted well, and little or no trouble has been experienced in defining the applications on the ground; whilst it has the great advantage of enabling the department to place lands in the market much more quickly than under the ordinary system of survey before sale. It seems also to have solved many of the well-known difficulties that have arisen in other countries in “selection before survey.”

Ordinary Section Survey.—Under this heading is embraced the usual survey of sections before sale, the surveys of lands alienated, in some cases, many years ago, which are necessary in order to issue titles; the surveys of areas selected under the preceding section; and all other classes of complete section survey. The total area so surveyed and mapped during the twelve months was 431,695 acres, in 2,200 sections, averaging 196 acres per section, at a cost of 1s. 3½d. per acre, being about a 1d. an acre less than the cost for the previous year—a price which cannot be considered high when it is remembered that the greater part of the country dealt with is covered with dense forest, very rough, and often difficult of access. The output for this year exceeded that of last year by over 110,000 acres; but to arrive at this result the staff was augmented by the employment of ten additional officers temporarily engaged to meet the larger demand for lands; and the aid of several authorised surveyors was also called in to assist in working off arrears, who were generally employed at contract or schedule rates.

The country the department has to deal with in the future, being of a more broken character, and more remote from roads and settlement, the costs of survey will tend rather to increase than otherwise, though at the same time this is somewhat counteracted by the larger-sized sections in which the land will necessarily be selected. The amount of land fit for settlement which is still in the hands of the Crown is becoming small, notwithstanding the frequent statements to the contrary; and the settlement of the country through the Land Department must soon show a decrease in volume unless more lands are acquired from the Native owners. In some districts this has already become a necessity, which is frequently brought under notice of the department.

SURVEYS FOR NATIVE LAND COURT PURPOSES.

During the past year an area of 805,364 acres was surveyed by surveyors in the employment of the Government, at a cost of 0·22d. per acre. This area comprised 432 divisions or blocks of various sizes; and the surveys were undertaken to carry out orders made by the Court, generally representing divisions of blocks which had previously been before the Court, and which had recently come in for division at the request of the Native owners. The largest continuous area surveyed represents divisions of the King-country, or *Rohepotae* Block, where 523,328 acres, in thirty-four blocks, were completely surveyed and mapped at a very reasonable cost, the whole of which is secured by way of lien or mortgage over the lands themselves. To the total area above mentioned must be added over 96,000 acres, in sixty-nine blocks, which were surveyed at the cost of the applicants, but under the direction of the department. It will thus be seen that over 900,000 acres of land, in 504 divisions of different sizes, were prepared for the issue of certificates by the Court; and there still remains on hand a very great deal of this class of work—so much so, that it would be a work of some years to bring it all up to date.