

grants showed great discrepancies; but its further advance has been delayed for want of an available officer to carry it out. I trust that this will soon be remedied, and that the rest of the city and suburbs will, during the next season, be submitted to this process, without which I feel that the Government are running a very great risk in issuing certificates. A portion of Tauranga has also had standard traverses run along a few of the streets, and applications have been received from the Borough of Onehunga and Town Board of Whangarei to have the system extended to those towns.

During the year standard chain-lengths have been laid down at Tauranga by District-Surveyor Goldsmith and myself, and also at Gisborne and Grahamstown by Messrs. Barnard and Hickson. This was especially necessary at the latter place, for it was found that the old standard there was $1\frac{1}{2}$ inches too long, or 15 links in the mile—a quantity nearly double the limit of error allowed in chain surveys.

OFFICE WORK.

The amount of office work during the past season has been exceptionally heavy, and shows no sign of diminution. The fact of this branch of the department being in more immediate connection with the Native Land Court alone throws on us more work (and that of a peculiar nature) than any other office in the colony; and it is due to the energy and industry of the chief draughtsman, Mr. W. C. Kensington, that we are able to accomplish it. During the last year forty-four sittings of the Native Land Court have been advertised, the large number of maps for which, with few exceptions, have had to be sorted out and compared with the advertised claims by him alone. Up to the present time 577 block sheets have been got out, on which all work as received is plotted; whilst Crown-grant record maps of 404 districts have also been prepared, showing all grants which it is possible to define on them. Many of these, of course, as well as the block sheets, show only a few surveys here and there; for, as I have more than once reported, the attempt to replot the old work in connection with the new has proved impossible in every case. The surveys and plans under "The Public Works Act, 1876," of roads taken and closed by counties and Highway Boards, are now so numerous that their record and check takes up the time of one draughtsman entirely. This work is likely to be greatly increased, for I am of opinion that two miles out of every four of the sectional roads shown on our plans will have to be closed, and others taken in their places; whilst the innumerable roads necessary under the military settlements scheme for dividing the country into 50-acre sections, now that the land is occupied in large farms, have no use, and will also be closed. The correspondence arising out of this is by no means small.

During the year the whole of the surveyed part of the district has been lithographed on a scale of one mile to the inch, besides other maps of towns and rural sections, numbering altogether eighty-six maps, of which 9,250 copies were struck off. The 80 chains to 1 inch maps were specially prepared for the Property-Tax Department; and therefore had to be published in a period so short that it was impossible, with the incomplete records that we have, to avoid a good many errors. Their form also is not generally suitable, otherwise than for the collectors. The cost of lithographing, however, will be recouped to the Government within twelve months by the mere saving in making tracings. The number of Crown grants and memorials prepared during the season will be seen in the returns attached. This branch is under the charge of Mr. A. Morrow, to whose care, and that of his assistants, is due the fact that not one has been returned for correction out of the large number prepared. There are considerable arrears of both grants and memorials, amounting, indeed, to 1,377 plans, to be placed on the forms.

With respect to the work on hand in the field, the principal item, and the one which causes me some anxiety, is the number of applications for surveys of Crown lands for sale. They amount to 135 applications, of 39,000 acres, scattered all over the district in as many localities. The difficulty of getting through with these surveys is contained in the fact that a very large proportion of them are situated within the limits of old surveys, which necessitates more than double the amount of work to complete them. Though the average does not look large, I feel confident that, what with the work for which the surveyors have already received instructions, we shall not get through them under twelve months, without allowing for others that will be received from time to time.

In conclusion, sir, I wish to state my opinion, based on a $3\frac{1}{2}$ -years trial, that the system of survey so ably introduced by the late Surveyor-General, Mr. J. T. Thomson, has been found to work as well in our forest-clad, broken country of the North as in the open plains of the South. Under its guidance a staff of surveyors has grown up whose work will bear favourable comparison with any other of a like nature in the colonizing world, and to whom my best thanks are due for the intelligent and able manner in which they have seconded my efforts to carry out the duties intrusted to me.

S. PERCY SMITH,
Chief Surveyor.

TARANAKI.

MINOR TRIANGULATION.

During the year 127,000 acres have been triangulated, 69,000 acres of which, executed by Mr. W. H. Skinner at a cost of a little over 1 $\frac{1}{2}$ d. per acre, extend from New Plymouth to Hangatahau. This completes the triangulation of the surveyed and settled districts from Pukearuhe to Okato, and embraces nearly the whole of the old magnetic and unreliable work; so that no further operations of this nature will be required north of Mount Egmont for some time. The remaining 58,000 acres, executed by Mr. H. W. Climie, cover the country lying between Whakamara and the Kaitangiwhenua Block, when it joins a Ray-trace taking an inland course from Waitotara, executed by Mr. Sicely, of the Wellington staff. The closure of the two series of 1.2 links per mile must be considered highly satisfactory, and very creditable to the surveyors employed, considering the bases being 45 miles apart, and the difficulties attending work carried through rough forest-country, where force of circumstances often compels small and ill-conditioned triangles.