

for selection, is eastward of and distant some ten miles from Inglewood, in and about the Waitara Valley. As it is fine country, mixed, open, and forest, and well adapted for small farms, it will, doubtless, be rapidly taken up. The remainder surveyed this year lies inland of Hawera and Patea.

*Town Sections.*—Of town-section work but little has been done. A small township on the Waitara River has been laid off, and a few village lots at Pungarehu.

*Back Pegging of Old Work.*—This was expected to have been completed this year, but it has been impossible to assign more than one officer completely to it: notwithstanding, a considerable area has been finished; and, considering that the sections were small, with stream boundaries, which had to be traversed, the cost of 8d. is very moderate. For the preceding two years it was 8d. and 8-9d. There still remain about 8,000 acres of this to finish it down to Inglewood.

*Roads and Railways.*—Thirty-five miles of old roads in the Oakura District have been redefined, surveyed, and permanently marked throughout. This has been tedious work, owing to the very careless manner in which fences had been erected, in very many cases quite haphazard. Included also in this column are fifteen miles and a quarter of railway-land plans, completing the whole of the lines in this district.

*Other Work.*—Under this head there is £138 18s. 10d. for completing the standard survey of New Plymouth; and £109 19s., cost of surveying and levelling the Ngaire swamps in view of draining them, and levelling and preparing sections for work on roads to open up Crown lands. These are the principal items, and absorb nearly the whole amount, the balance being composed of small sums.

*Work done for Other Departments.*—The cost of work done for other departments is £246 18s. 9d. The Public Works and Land Transfer Departments were the principal ones accommodated.

*Inspection.*—I have inspected the work of each member of the field staff during the year, and have much pleasure in reporting the excellent and reliable work done in each case. The country in some instances has been intricate, but the road-lines have been admirably laid out. Inspection has also been made of authorised surveyors' work both under the Public Works and Land Transfer Acts with satisfactory results.

*Office Work.*—On Crown-grant forms 926 plans and descriptions have been placed; and in Land Transfer work thirty-six surveyors' maps have been examined and passed, besides 525 plans placed on certificates of title. The number of tracings drawn for photolithographing has been eighteen—viz., one large one of the provincial district, two mile-district maps, ten trig. and five ordinary scale. Twenty-two surveyors' maps have been checked, and seventeen block-sheets compiled.

*Proposed Operations, 1887-88.*—The principal settlement work will be the extension of the surveys of last year, both at Waitara and inland of Hawera. These are in hand at the present time, but only in the early stages. On account of the mixed character of the country I am of opinion that the small grazing-run system will be very largely adopted over the at present unsurveyed lands in this district. Forced by the nature of the country, these runs will probably interlace with the ordinary sections, the best of the land being cut up into holdings up to 640 acres, and the inferior portions made into small runs from that area upwards, according to the suitability of the country. Back pegging is now almost completed, some 8,000 acres only remaining to be done. It is anticipated that there will be considerable survey needed in subdividing Native reserves along the coast. Already the Native Land Court has treated in this manner seven blocks, containing about ten thousand acres, dividing into eighty holdings. These surveys will have to be made before certificates can issue. It is very probable that during the year a very large extent will be similarly dealt with.

THOS. HUMPHRIES, Chief Surveyor.

#### WELLINGTON.

*Major Triangulation.*—Mr. J. A. Thorpe extended a series of triangles over the Waimarino country to a junction with the Auckland staff's work; the comparisons are not sufficiently advanced yet to give results. Mr. Joseph R. Annabell observed a chain of triangles covering the upper Wanganui valley, between Tuhua and Manganui-o-te-Ao, completing the connection with Mr. Skeet's Taranaki series. Some further computations are required, and then we shall be in a position to ascertain the trigonometrical and geodesical elements along a direct triangulation between Napier and New Plymouth. Both officers above named worked under exceptional difficulties in a remote and inaccessible country. Mr. A. D. Wilson, Geodesical Surveyor, also had considerable trouble in covering the country south and west of Ruapehu with major triangles; he lost much time owing to flat-topped forest-clad hills, and the snow on the mountains.

*Minor Triangulation.*—A limited area under this heading appears on the return, and this comprises gaps which existed in the general series of the districts of Mangaone, Tararua, and Waiohine.

*Topographical and Trigonometrical Surveys.*—The three officers who executed the major triangulation availed themselves of the opportunity of covering about four survey districts with minor triangulation, and in ascertaining the general topography of the country; and Mr. District Surveyor John Annabell is credited with 78,800 acres lying to the southward of the bulk of the area returned under this heading. The district operated upon is that lying between the Ranana-Murimotu track and the Tuhua country, very remote and inaccessible from the settlements, covered with forest destitute of roads or tracks.

*Rural and Suburban Section Surveys.*—The localities of these surveys are in the Otairi (Clifton Association), Otamakapua (Pemberton Association), Alfredton, Mangaone, Kopuaranga, and Mangahao Districts; comprising, generally, hilly, forest, and dense scrub country. The staff surveyors devoted, as usual, much time to the thorough exploration of road routes, not hesitating to