

sixth is open, the remainder level forest land. This, together with that now being operated upon, is generally of such good quality, and some so superior, that its ready sale may be predicted, at prices ranging from £1 to £7 per acre.

Native Land Court.—Only 100 acres appear on the return, this being the only survey paid for by the Government. There is a lien lodged, but the amount has not yet been repaid. A Surveyor has been most of the summer engaged upon the Mangaotuku Block, but has lately had to desist, in consequence of the difficulty and heavy expense in prosecuting such work in the winter season; the survey will be resumed early in the spring. There has been the supervision of other blocks, the Surveyors of which have been engaged and paid by the natives themselves; arrangements having been entered into, prior to the coming into force of the Act of 1880.

Railways.—Surveys for land plans have been completed of $12\frac{1}{4}$ miles of line, the remaining 14 miles in hand is well forward. In this work great difficulty has been experienced, the lines running through districts, the surveys of which were made in some cases forty years since; and in no case have we had the good fortune to come on modern work. It is almost unnecessary for me to allude to the immense amount of detail work thereby involved, as it is so obvious. For land transfer purposes it is imperative that the piece of ground dealt with should be so defined as to enable the depicting with certainty the particular portion of the section of which it forms a part; and here is the difficulty, for not only has that section to be determined on the ground, but it often entails a traverse of four to five times the length of the piece of land to be dealt with, when the Surveyor is compelled to extend his investigation to several sections beyond, on finding overlapping, which often occurs.

West Coast Commission.—The expenditure incurred on account of this particular service (including £100 for inspection and office work,) has been £834 5s. 3d. This work has been laying out reserves and hapu divisions. By agreement, the department undertook the whole of the West Coast Commission surveys from Waingongoro to Taungatara, and Moutoti to Waiweranui. One of the main reasons for this arrangement was, that owing to a great amount of the work being so intermingled with our sectional work, we could of necessity do it very economically. The surveys of the hapu and other reserves on the Waimate and Titahi Blocks have cost only 6½d. per acre. The cutting out of 20,000 acres, reserve at Parihaka, cost £326 4s. Besides this there were some surveys seaward, of small reserves or burial grounds, which cost £28 18s. 5d., and other works in the Otauto Reserve, costing £11 10s. Summing up the whole, we have 33,420 acres, with 29 divisions, costing 5½d. per acre; which, with other charges for work done, mentioned above, amount in all to £834 5s. 3d. As the foregoing might be somewhat misleading without explanation, I would remark that the above cannot be made a basis for calculation of the cost of the remaining survey work to be done by the West Coast Commission, as the conditions have been more favorable than are to be expected in the future. These are in large blocks, good country, and half of the area mixed up in a measure with our settlement work, while the residue will be affected in a reverse manner, viz., smaller areas, rough country, and a great deal of it isolated.

Other Work.—The amount of £2,804 3s. 4d. includes work in progress, viz., 27,000 acres upon which £2,087 have been expended to date. The balance is for various kinds of work, such as inspection, west line, University Reserve, &c.

Inspection.—Three inspections have been made by Mr. Bird, thirty-three by myself; and it is a pleasing duty that I have to perform, in bringing to your notice the very excellent work done by the officers of the staff. I find that in no case has the closing error in meridian and perpendicular distance exceeded 16 links, and this special one was a traverse of 6 miles, wholly in forest, with no triangulation to lean upon, closing on to another surveyor's of 3 miles, making in all 9 miles. Another case has 13 links in $5\frac{1}{4}$ miles, and no other exceeds 8, the highest rate being 3·8 per mile, and the mean 1·9. On examining my field checks, which have from time to time been forwarded to you, I find that I have traversed 385 chains of different surveyors' work, the greatest difference has been at the rate of 2·8 links per mile, and I differ only 5·3 in the aggregate. The bearings have been equally good. I have tested them astronomically in the middle of traverses, with a maximum error of 1' 15".

Future Operations.—The work for the ensuing season will be the completion of settlement surveys now in hand, and also all the remaining area, about 20,000 acres, of available land between Waingongoro and Taungatara. When this is completed, I propose to take up settlement work to the eastward of the Mountain Road, in the Huiroa District, near the Waitara, and also in the Ngairi and Hawera, at the back of Whareroa. Surveys will also be proceeded with inland of Patea, as well as the subdivision of the University Reserve. Mr. Skeet will continue the triangulation he has now in hand through to the coast at Waitara. It is more than probable that a series will also have to be carried up into the Mokau country, as a basis for the Native Land Court surveys in that locality. During the year there appears to have been a thorough change in the attitude of the natives in regard to the survey of their lands, which was fully borne out in the Land Courts lately held at New Plymouth and Waitara, when the claims on about 200,000 acres (a large portion of it in the Mokau country) were investigated and interlocutory orders issued. Hitherto comparatively few Native Land Court surveys have been done, but, now that the ice is broken, it is probable there will be heavy calls for surveys of this nature in the future.

Office Work.—There has been the usual plotting of surveyors' work on the office block sheets, reducing and drafting them on the Crown grant record and other maps of smaller scales. A good deal of time has been occupied in the preparation of Crown grants for West Coast Commission. Of Crown grants proper, 68 have been prepared, and 467 certificates of title in lieu of Crown grants. The drawing of the maps on the latter was done by contract, but the work of drafting descriptions, checking, and recording fell upon the office staff. 60 deposited maps under Land Transfer Act have been examined and passed, and 847 plans drawn on ordinary certificates of title for the Land Transfer Office. Mounted tracings of 42 working block sheets have been prepared and forwarded to the Land Offices at Patea and Hawera, and 11 drawings made for photolithographing.

THOS. HUMPHRIES,
Chief Surveyor.