C.—4.

we have been prevented operating on; but I am hoping that the objection to it will soon be removed, when we shall connect the New Plymouth and Patea series, and have it continuous from Pukearuhe to south end of the district. Another portion is being triangulated in the interior, from the Kaharoa Block, on the Patea River, through the forest in a northerly direction to Ngatimaru, and will ultimately make a junction with the New Plymouth series, on the coast north of Waitara. The stations are selected and cleared over about 60,000 acres.

Rural and Suburban Surveys.—The area of rural and surburban completed during the year (without any arrears from last) is 58,188 acres, at a cost of 1s.  $3\frac{3}{4}$ d. per acre, with average size sections of 76 acres. This low rate for this district is greatly due to the very favourable nature of the country; 35,000 have been in open country, costing at the rate of 1s.  $3\frac{1}{2}$ d. per acre. This would have been considerably less had it not been for the greatly-increased work in the 16,000 acres near Parihaka consequent on necessary survey of all the numerous cultivations and reserves which had to be done in conjunction with the sectional work. The resurvey of the Waimate Plains, comprising 15,200 acres, cost £600 7s. 3d. This was a work of absolute necessity, and entailed a great deal of labour. Through the rapid growth of fern, flax, and toitoi none of these lines was discernible, and the pegs had been destroyed in great numbers by the Natives, who, I may say, were ably assisted by the pigs. In one block of 5,000 acres two-thirds of the section-the same proportion of those on the roads; and on a road of 2 miles in length every trace of pegs were gone, and the survey was obliterated. On account of the wide-spread destruction of marks, including all the trig. stations, with two exceptions the whole survey had to be reproduced.

West Coast Commission.—Services to the extent of £1,747 10s. have been rendered by the department. Messrs. H. M. Skeet and W. H. Skinner, staff surveyors, and Mr. H. L. Skeet, authorized surveyor, temporarily engaged, were employed on this particular work up to February, at which time the conduct of the surveys was taken over by the Commission itself; the amount expended by the department at that period being £1,536 10s. The work performed by them was principally the boundaries of the 25,000-acre continuous reserve, other reserves within and roads through it, besides numerous small reserves in the open land. A further charge of £211 is for subsequent service in the Parihaka Block. The department having performed all the required surveys in connection with the Native cultivations and reserves in that locality, which, as I have before stated, has considerably increased the rate per acre of the sectional work there.

Inspection.—During the year nineteen inspections have been made by myself, and two by Mr. Bird. The field checks forwarded to you testify to the very superior manner in which the work has been done by the field staff: the closes in no instance exceed 2 links per mile, the majority far below, nor the instrumental work more than  $1\frac{1}{2}$  minutes at the close of circuit in the forest. Common points on adjoining surveys, executed by different members of the staff, which are numerous, show equally good results, which is, no doubt, the best of tests, and show uniformity in the measurements. In attaining this accuracy the progress of the work has not been hindered, for, as will be seen by the returns, there have been executed during the year larger areas, and at lower rates, than any previous one; favourable circumstances, such as a large portion of the area being in open, and the remainder in level forest country, having had much to do with it.

Office.—With our comparatively small office staff, in the early part of the year the arrears of work were increasing rapidly, but, by the addition of Messrs. Caldwell and Rogers, we have been able to keep pace with the current work, although, as yet, we have not succeeded in reducing the arrears. Thirty-nine copies of working sheets have been made and sent to the District Office at Patea, and there is yet a large number to be done before the set is complete of the lands south of Stratford; 129 Crown grants, comprising 1,064 acres, have been prepared, including a number for the West Coast Native Commission; 66 Land Transfer maps have been examined and passed; and 529 plans placed on certificates. The work for the ensuing year will be the completion of the triangulation now being undertaken by Mr. H. M. Skeet, previously referred to, and the sectional survey of the remainder of the forest country inland of the Waimate Plains.

Thos. Humphries,

Chief Surveyor.

## HAWKE'S BAY.

Minor Triangulation.—The calls upon the staff for road- and section-surveys have not allowed of the extension of trigonometrical surveys, the operations for the year having been confined to small triangulations, to meet the immediate requirements in various districts where the surveyors were engaged. The area completed is 137,479 acres, at an average cost for triangulation, including topographical survey, of 1d. per acre; and for triangulation alone of 0.6d. per acre.

Section-surveys.—Thirty-eight applications, and two education reserves, containing 33,458 acres, have been surveyed, at a cost of 8d. per acre. The area of arrear surveys has been reduced to 9,341 acres, the surveys of which have been finished in the field but are not yet

mapped.