17 C.—1<sub>A</sub>.

better in almost every respect to extend the standard lines ourselves so as to cover the locality. This secures uniformity of standard lines and marks, and also that the subdivisional survey shall conform to the proper alignment of the streets, &c., and is really inspection before instead of after the sectional survey, and reduces the work of the final inspection to the examination of the subdivision only.

Rural and Suburban.—7,738 acres of this class of survey have been completed during the year, divided into 92 sections, at an average cost of 3.26s, per acre. This very unsatisfactory result is mainly due to the surveys being much isolated, the rough character of the country being all in high broken bush hills, and in many instances necessitating line-cutting through thick tangled scrub growing over fallen burnt logs. There is, I fear, little prospect of any material reduction in the cost of this class of work, because most of our work is composed of surveys of applications under sections 114 and 115 of "The Land Act, 1892," where small areas are applied for generally behind small freehold sections—occupying the frontages—which frequently have either only been laid off on paper or were granted on old and imperfect surveys of which no traces can now be found, and therefore necessitate difficulty, intricacy, and tedious surveys to bring the many occupation marks in accord with the old plans and titles.

Roads, Railways, Water-races, &c.—Under this heading 36'4 miles of road traverse have been completed, 28 miles of which has been done by Mr. A. P. Seymour, in the Sounds County, to legalise roads already partly formed. As this work has been chiefly the traverse of bridle-tracks through bush-covered hill county passing through small freehold sections, necessitating short lines and frequent connections, the average cost cannot be deemed very excessive. The balance under this heading has been chiefly defining old "paper" roads through small freehold and leasehold sections, necessitating extensive and intricate connections with sections which in some cases have never been marked on the ground at all. Taking into consideration these difficulties, I think that the average cost of £21 12s. per mile is not high. Three field inspections were made during the year—one of each private surveyor working in the district. I am pleased to report that they

tend to show that this class of survey is being done carefully.

Other Work.—Included under this heading are 3,900 acres of compass surveys of sawmilling areas, costing £132 12s. 8d., or about 8.2d. per acre; redefining old boundaries, £74 6s. 10d.; survey of scenic reserves (uncompleted), £60 5s. 10d.; field inspections and standard marks, £73 9s. 8d.; £61 12s. for grass-seed sowing on Crown lands recently burnt. I may remark in connection with this item that we found it impossible to obtain good reliable men with the requisite knowledge to sow the seed, because most of the settlers living in the vicinity had their hands full sowing their own lands which had the fire over them. We had therefore to employ most of the men on two survey parties to do this work. Besides the above items there were several other small services performed by field surveyors, such as inspections and reports for Land Boards, and other small services too numerous to mention here.

Proposed Survey Operations for the Coming Year. — Mr. District Surveyor Gillies will be probably fully employed on settlement surveys in the Pelorus and Rai Valleys. Mr. A. P. Seymour should be kept at the surveys of the roads already formed in the Pelorus Sound and other work adjacent to this work. The subdivision of the Crown lands in the Wakamarina district will probably keep Mr. Wicks fully employed the whole year. Besides these surveys there are about 10,000 acres of land awaiting survey in various parts of the district, and for which another surveyor should be supplied. There are also about 30 miles of road—mostly already formed—in the Gore, Arapawa, and Linkwater Survey Districts which require survey to legalise them before the titles can be adjusted. Many of these roads have been taken through freehold lands, and the delay in making the surveys is causing considerable inconvenience to the settlers.

Office-work.—During the year 66 plans and 194 traverse sheets of Land Transfer, settlement, road, and other surveys were examined and approved; 71 Crown leases were issued, of which 242 copies were made; diagrams were placed on 45 Crown titles in quadruplicate, 23 in triplicate, and 45 in duplicate, totalling 339 (this includes mining leases); 222 plans were also drawn on 113 certificates of title for the Land Transfer Department. An allotment book was compiled, giving particulars of all Crown leases. Considerable progress was made in block sheets, 14 survey districts being completed; 6 plans were drawn for photo-lithographs of lands opened for settlement. The office-work included the usual tracings for surveyors, settlers, and the general public.

F. Stephenson Smith,

Chief Surveyor.

## WESTLAND.

Topographical Survey.—During the past year 30,050 acres has been returned. This class of work is undertaken to get sufficient detail for the settlement survey that is to follow soon after. In dense bush country with numerous watercourses it is essential to have compass traverses of the leading features, to allow of the roads being located, so that sections can be set out to the best advantage for settlement in respect of soil, aspect, and the reservations of milling timber, gold-bearing and mineral areas.

Rural and Suburban.—Amounts to 23,843 acres, and comprises blocks subdivided for settlement, and the many small areas taken up under the regulations for the occupation of pastoral lands under the Mining Districts Land Occupation Act. These are mostly isolated surveys of small areas, and entail a great amount of connecting traverses that in a bush country is very costly, especially where they have to be adjusted to ancient surveys. This form of tenure is becoming very popular, and in consequence the applications are on the increase. Residence areas have