## MARLBOROUGH.

Minor Triangulation.—There is only one entry under this heading in the return—viz., 71,192 acres, by Mr. F. Stephenson Smith, in the Acheron, Greenburn, and Mount Fyffe Survey Districts, as this is the only triangulation effected during the past season of which the maps have been completed and sent in. Mr. Carkeek has completed the fieldwork of 150,000 acres of triangulation and topography, but as the plans are not finished it cannot appear in this return. Mr. Buckeridge, also, has completed the fieldwork of about 160,000 acres of triangulation and topography, but it is not yet mapped. Mr. McFarland, also, has about 10,000 acres of triangula-

tion and topography completed in the field, with 10,000 acres more on hand: plans not ready.

Topographical Survey.—There is no entry under this heading, although a large amount of work has been done in the field. Mr. Gillies has done 100 miles of fence and river traverse in conjunction with Mr. Carkeek's triangulation. Mr. Hughes, also, has traversed 145 miles of rivers, fences, &c., including the erection of sub-trigs. and topography; but the plans of all the above are still

unfinished.

Rural and Suburban.—29,114 acres have been laid off into ninety-eight sections, which give an average of 297 acres each. The cost varies from 7d. to 1s. 6d. per acre, the average being 1s. 2d. per acre, which I think is very moderate, considering that the land, almost without exception, is rough and precipitous, and for the most part covered with bush.

Town Section Survey.—Only seven sections were laid off this season (at Kaikoura).

Native Land Court Survey.—Fifty-eight sections, comprising a total of 8,424 acres, have been laid off, at an average cost of 1s. 5d. per acre, which is a low cost, considering the nature of the ground, which is rough and mostly bush.

Gold-mining Survey.—Only ten sections, comprising an area of 205 acres, were surveyed this season. The cost per acre was 15s.; but the areas were small and isolated. Two of these were

dredging claims, each extending for a mile along the banks of the Wakamarina, through bush.

Roads, Railways, and Water-races.—In this column I have entered some works which cannot be termed either roads, railways, or water-races, but, as the cost has been reckoned as so much per mile I thought it was the most appropriate column in which to place them. The entries, in order, are as follow: E. W. Buckeridge,  $9\frac{1}{4}$  miles traverse of Clarence River, with levels and cross-sections; A. Simpson,  $2\frac{3}{4}$  miles of road survey; C. W. McFarland, 3 miles of road survey; and

R. J. Johnston, 32 miles of road survey.

Traverse Closures.—Mr. T. W. Hughes is the only surveyor who has sent in a table of closures.

He has traversed eighty miles, in which distance there were thirty-eight closures, and the average rate of error per mile was 0.97 link on meridian and 1.5 on perpendicular. Taking these numbers as the two sides of a right-angled triangle, the hypothenuse gives the general lineal error as a trifle

as the two sides of a right-angled triangle, the hypothenuse gives the general lineal error as a trifle under 1.9 links per mile, which is very creditable, considering the nature of the country.

Field Inspections.—As I have only taken charge of the Marlborough Survey District since the beginning of this year—1897—I have not had time to make many inspections. In February I accompanied my predecessor, Mr. S. Weetman, to Kaikoura; and then went with the District Surveyor, Mr. F. S. Smith, through the Mount Fyffe, Hundalee, and Greenburn districts, visiting the survey camps of Messrs. T. W. Hughes, R. J. Johnston, E. H. Farnie, and M. McNicol. On the return journey I visited Mr. E. W. Buckeridge, in the Puhipuhi district. In March I visited the Blind River Estate, chiefly to see what was required in the way of roads. I also spent four days inspecting tracks and roadworks on both sides of Tory Channel; and I also inspected proposed site for a bridge over the Omaka, near Renwicktown. site for a bridge over the Omaka, near Renwicktown.

Office Work.—The recent visit of the Land Classification Commissioners and Land Purchase Board entailed the mounting and colouring of about eighty lithographs, besides the compilation of a very complete topographical plan to 40-chains scale of a large portion of the district. The work in connection with the valuation maps was very arduous, including the preparation of seventeen subdivisional tracings of various sizes, the mounting and colouring of 162 lithographs, and rewriting

579 section-lists.

Proposed Operations, 1897-98.—The District Surveyor at Kaikoura, with certain assistant surveyors, will finish the surveys they are now engaged on, and then proceed with surveys rendered necessary by the agreements to exchange and consolidate lands on the Messrs. Symons's run at Kekerangu, and the subdivision of land for settlement in the Mount Fyffe district. Mr. M. Carkeek will complete the triangulation he is now engaged on; and Mr. D. W. Gillies, after he has finished the traverse of the Clarence River, would be available for any surveys that may be required on Mr. Thomas Carter's Stronvar Run. Mr. C. W. McFarland will be kept fully employed in subdividing land on Mr. W. Adams's Langley Dale Run and Messrs. Bell Brothers' North Bank Run. Mr. A. Simpson will probably be kept constantly at work in the Sounds C. W. Adams, Chief Surveyor. County.

## WESTLAND.

Topographical.—This comprises the features of the mountainous country adjoining the area of the triangulation mentioned below.

Minor Triangulation.—This includes a small area completed by Mr. Wilson in the Teremakau and Otira districts, and covers the bulk of the country now being explored for minerals, and in which ten special claims and three prospecting areas have been taken up. We have several trig. stations fixed in this block, and are thus able to apply checks to all future surveys in the locality.

Rural and Suburban.—Of the 4,702 acres completed during the year, 640 acres were new surveys of old selections scattered over the district, and the remainder comprised revision surveys in the Waimea and Kanieri districts.