

years standing not yet surveyed, which he will locate. Mr. J. Snodgrass to bring up arrears of isolated applications in the Buller Valley, and to extend triangulation northerly from Westport to the quartz-reefing localities of the Mokihinui and Tumble-down Creek, connecting with the Karamea Circuit. Mr. C. Galwey to survey the isolated applications in the Ahaura Valley, revising and connecting old sectional work at the Haupiri with Mr. F. Smith's triangulation, recently carried over that part. Mr. J. Montgomerie to complete standard surveys and extension of Towns of Reefton and Black's Point. The remainder of the staff on arrears and current sectional and mining work, as may be required.

JOHN S. BROWNING, Chief Surveyor.

WESTLAND.

Major Triangulation.—Area completed, 169,270 acres, at a cost of 0.45d. per acre. It covers the Okuru and Arawata and portions of the Matakītaki, Governor's Pass, Turnbull, and Cascade Survey Districts. The work was executed by Mr. G. J. Roberts in his usual careful and thorough style, and his closures are again very satisfactory. This major triangulation extends to the Open Bay Islands abreast the Okuru River and halfway between Jackson's Head and Arnett Point, thus including an area of 55,500 acres covered by water, and not comprised in the above 169,270 acres. If allowance for it is made, the cost of his survey will be reduced to 0.3d. per acre.

Topographical and Trigonometrical Survey.—Area completed, 185,750 acres, at a cost of 1.84d. per acre. Of these, 140,950 acres (within the Jackson's Bay Circuit) of minor triangulation, with topography, were the work of Mr. Roberts; while the rest, about 45,000 acres, comprise circuit traverse work by Messrs. Murray, Smyth, and Wither. The closures in the latter work are satisfactory: the average error is three links per mile, as against 3.4 links per mile returned last year. The details of traverse closures are as under:—

TABLE OF CLOSURES, 1883 TO 1884.

SURVEYOR.	Length of Traverse in Miles.	Total Error in Links.	Error per Mile in Links.	Total Number of Trav. Lines.	Number of Trav. Lines per Mile.	Length of Traverse in Miles.	Total Error in Links.	Error per Mile in Links.	Total Number of Trav. Lines.	Number of Trav. Lines per Mile.
W. G. Murray	1.3	7.1	5.4	5	3.9	11.9	22.1	1.8	67	5.8
	2.0	3.8	1.9	6	3.0					
	2.0	1.4	0.7	9	4.5					
	2.6	3.7	1.4	17	6.5					
	1.7	3.0	1.8	12	7.1					
E. I. Lord	2.1	7.6	3.6	77	36.7	15.1	55.4	3.6	226	15.0
	6.4	24.3	3.8	36	5.6					
	3.0	10.8	3.6	66	22.0					
	3.0	10.8	3.6	36	12.0					
	0.6	1.9	3.2	11	18.3					
J. N. Smyth	6.6	36.3	5.5	84	12.7	26.8	87.2	3.2	253	9.4
	1.0	2.9	2.9	13	13.0					
	2.0	7.5	3.7	14	7.0					
	3.2	8.0	2.5	30	9.4					
	2.5	8.0	3.2	30	12.0					
	2.5	3.5	1.4	22	8.8					
	3.3	5.0	1.5	27	8.2					
	5.7	16.0	2.8	33	5.8					
R. Wither	1.7	7.0	4.1	23	13.5	17.0	48.3	2.8	165	9.7
	2.7	12.4	4.6	37	13.7					
	1.9	5.0	2.6	46	24.2					
	3.0	8.7	2.9	26	8.7					
	2.2	1.5	0.7	12	5.5					
	2.4	10.6	4.4	18	7.5					
	3.1	3.1	1.0	3	1.0					
Totals for district	70.8	213.0	3.01	711	10.0

Rural and Suburban.—9,300 acres, at a cost of 2s. 8.6d. per acre. The land surveyed consists to a great extent of small and isolated sections, and in many cases the labour involved in connecting with trig. stations has been very great, and thus the cost of survey is higher this year than at any of the previous years.

Town Section Surveys.—In the Borough of Ross, 126 allotments, at a cost of 11s. 8d. per allotment. Simultaneously with this survey twenty-eight permanent reference marks were fixed twenty-five links off the frontage lines at the intersection of all the streets. The Towns of Hokitika and Kumara remain still to be supplied with these standard reference marks. I hope to be able to attend to this during the current year.

Gold-mining Surveys.—510 acres, at 14s. 9d. per acre. Work in this department had fallen off considerably until about two months ago, when the discovery of a gold-bearing quartz-reef in Cedar