

Crown grant record maps, commence and continue on Land Transfer record maps, and also, if possible, with county maps, to continue compilation of and bring up to date existing block maps, are but an indication of a few of the larger and more urgently pressing of our necessities beyond the ordinary routine work of the office. Our draughting staff is but scant in view of work on hand.

*Points of Interest evolved in Field-work.*—In Mr. Sladden's survey of the Taumata-mahoe Block, along the Tanga-rakau and Kohuratahi Streams, several picturesque spots were discovered, the two most notable being the "Falls on the Kohuratahi Stream," and a big "Snag Block" on the Tanga-rakau Stream at Patiki-tuna. Mr. Sladden took several photographs, and possibly you may deem some of these worthy of a place in the departmental annual report.

JOHN STRAUCHON, Chief Surveyor.

## WELLINGTON.

*Minor Triangulation and Topography.*—Mr. H. J. Lowe was the only officer employed on this class of work. The large areas (451,000 acres and 300,000 acres respectively) he returned were commenced in 1894. His triangulation embraced the Upper Pohangina, Oroua, and Rangitikei districts, and the Inland Patea country, and emanated from the side AD, north of Mr. Alexander Dundas's Ohingaiti verification base, which was an extension of the original provincial Rangitikei triangulation. Mr. Lowe carried his series northward to a close upon the southern limits of the triangulation executed in the year 1871, and which was extended from the Hawke's Bay base across the Ruahine Ranges to the flanks of Ruapehu. On the eastward, Mr. Lowe's stations topped the Ruahine Ranges; on the southward closures were obtained with Mr. Alex. Dundas's South Pohangina work; and on the westward, junctions were effected with triangulations executed in former years by Messrs. J. A. Thorpe, John Annabell, and A. D. Wilson. The results are shown in the following table:—

### TRIANGULATION CLOSURES.

#### *Comparison with Mr. S. Percy Smith's Inland Patea Series.*

IX. to	X., Mr. Lowe	= -20.2 in 444 chains	= 3.6 per mile and bearings	= +0 0 22
X. "	XII., "	= -19.7 " 533 "	= 3.0 "	= +0 0 16
XII. "	XIV., "	= -21.9 " 533 "	= 3.3 "	= +0 0 29
XIV. "	XVI., "	= -15.2 " 369 "	= 3.3 "	= +0 0 26
Mean links, 3.3				Mean, 0 0 23

Mr. Lowe extended twenty-four miles from Ohingaiti and fifty-six miles from Rangitikei base, and closed upon Mr. Smith's Napier work forty miles from Napier base: total distance, ninety-six miles.

#### *Comparison with Mr. Dundas's Pohangina Triangulation.*

S to CC, Mr. Lowe	= -3.4 in 335 chains	= 0.8 per mile and bearings	= +0 0 42
CC " A, "	= -5.1 " 302 "	= 1.3 "	= +0 0 38
A " Z, "	= -4.7 " 313 "	= 1.2 "	= +0 0 43
S " Z, "	= -6.0 " 457 "	= 1.0 "	= +0 0 42
Mean links, 1.075			Mean, 0 0 40

E height, Mr. Lowe,	Ft. 2,068	...	Pohangina trig.,	Ft. 2,078	...	Difference,	Ft. 10
S "	2,013	...	"	2,038	...	"	25

Mean difference, 17½

Mr. Lowe swept round from Ohingaiti base a distance of fifteen miles, and joined Mr. Dundas's work brought *via* Wharite Major trig., thirty-four miles: a total circuit of eighty miles.

#### *Comparison with Mr. J. A. Thorpe's Tiriraukawa Triangulation.*

T to F2, Mr. Lowe = -11.1 in 375 chains = 2.3 per mile and bearing = -0° 0' 04"

E2 height, Mr. Lowe,	Ft. 2,440	...	Original trig.,	Ft. 2,452	...	Difference,	Ft. 12
F2 "	2,122	...	"	2,137	...	"	15
T "	2,056	...	"	2,066	...	"	10
Q "	2,462	...	"	2,466	...	"	4

Mean difference, 10

Mr Thorpe's work extended from Messrs. Field and Annabell's, from Waipakura base, distance thirty-three miles. Mr. Lowe joined here, fifteen miles from Ohingaiti. Total distance between the main bases, eighty miles.

#### *Comparison with Messrs. Wilson and Annabell's Triangulation.*

XVI. to E2, Mr. Lowe = -1.0 in 700 chains = 0.1 per mile.

Messrs. Wilson and Annabell's work was brought from Wanganui base, forty miles. Mr. Lowe carried his triangulation a distance of nineteen miles from Ohingaiti base. Total distance between the Rangitikei and Waipakura bases, ninety-one miles.