

miles of Mr. McArthur's station, St. James', travelling with difficulty through snowdrifts, when Mr. Paske became delirious. He recovered from this, but soon after lost the use of his limbs, and although every effort was made to help him, he succumbed. Some of the party reached the station, and men went out to rescue the others. Mr. Thompson, was so exhausted that he died in the arms of one of the rescue party, on horseback. Several of the party suffered from frostbites. The weather up to the previous evening had been very fine but cold.

JOHN S. BROWNING, Chief Surveyor.

MARLBOROUGH.

Triangulation.—Of this class of work Mr. Wilson completed 467,000 acres of major, and 222,200 acres of topographical and trigonometrical survey at a cost of $\frac{1}{4}$ d. per acre for the major, and 1d. per acre for the minor. Operations in connection with the above were commenced in March, 1884, and finished in September, 1885. As reported last year, the field work was done, the computations made and checked, the mapping only being required to complete the work. This triangulation is carried over the upper part of the Wairau Valley, from the Waihopai River to the Tophouse on the boundary of the district, closing with the Motupiko triangulation in the Nelson Circuit, on lines St. Arnaud—B. and Top 1.—A¹⁸, including within its limits parts of the Onamalutu, Avon, Mount Olympus, Patriarch, Raglan and Leatham Survey Districts. The nature of the country dealt with, and the results of the closings on the Nelson Circuit have already been given in last year's report. I had purposed this season extending the triangulation up the Waihopai and the upper part of the Awatere, and arrangements were made for Mr. Wilson to resume operations; by your directions, however, Mr. Wilson had to remove to the North Island. This extension will, therefore, have to remain in abeyance for the present.

Section Survey.—Of the 3,891 acres of section survey, 3,866 are located in the back country on the Chalk Ranges at the source of the Ure River, adjoining freehold lands disposed of many years ago, the boundaries of which had never been marked on the ground. The country is open, but very rough and high, and, considering the arduous nature of the work, and the distance to pack supplies, the cost, 7d. per acre, is moderate. The remaining 25 acres in Endeavour Inlet, Queen Charlotte Sound, were surveyed for a mineral lease for the Endeavour Inlet Antimony Company.

Other Work.—Under this heading the supplementary returns shew as follows:—

Completed Works.—*Sub-Triangulation*, 7,000 acres in Whernside Survey District, open country, extension of triangulation to section work, cost $\frac{3}{4}$ d per acre. *Standard Survey* of twenty-four miles on the Wairau Plain, including mapping, &c., of sixty-six miles returned last year as finished in the field only, amounting to ninety miles, completed at a total cost of £518 19s. 1d., at the rate of £5 15s. 3d. per mile. The twenty-six closed traverses in this survey shew a mean difference of 0.76 links with the triangulation, the greatest difference being 1.4 links per mile, the difference in bearing in no case exceeding 20". These results shew the work to have been carefully done, and are creditable to Mr. Goulter, who was entrusted with the survey. In the Tua Marina and Wairau, west parts of the plain, about fifteen miles of cutting through swamp, willow, and other growth, have added considerably to the cost of this part of the work.

Uncompleted Works, consisting of Revision Survey of 4,429 acres, in 51 sections, in 27 localities, in Queen Charlotte Sound, field work completed, maps and calculations partly done. 17,600 acres of sub-triangulation in connection with the above, and about 150 acres for a village settlement near Canvas Town, in the Wakamarina Valley, in allotments of from one-half acre to ten acres now being pushed forward. Owing to the trig. stations available in Queen Charlotte Sound being mostly on high wooded peaks, difficult to "break down" from, it was found necessary to extend a ray-trace of small triangles close to the water down Tory Channel, and in several places in the main sound. These stations will be available for future work.

Office and Land Transfer Work.—In connection with the Land Transfer Branch of the Department I have to report that during the year twenty-one plans, dealing with eleven original sections, and representing ninety-eight subdivisions, have been examined, passed, and recorded. Tracings of these have been supplied to the District Land Registrar, the originals being kept in the Survey Office safe. Sixty-five certificates of title of 143 allotments, representing 130 marginal plans, have been prepared in addition to seventeen certificates in lieu of Crown grants in triplicate. Twelve applications, seventy-nine transfers, twenty-nine leases, and 113 mortgages, have been examined and passed, and two Land Transfer record maps (one town and one rural) have been constructed. Of block-sheets three have been constructed this year, and together with those previously constructed, have all been brought up to date. One Crown grant record map (rural) has also been constructed. The Office records are now in a complete and satisfactory state, excepting the record maps, which are very much in arrear, ten only having been constructed, leaving twenty-three still to be done, and it will be many years, I fear, before the majority of these can be gone on with. As I have pointed out in previous reports, all the old surveys were executed on independent magnetic meridians, at various times, and with no fixed points to control them. It will be seen, therefore, that the work of compiling these maps in the settled parts of the district can only be satisfactorily accomplished by degrees as points become established in the course of settlement and Land Transfer surveys, a process which in the more remote parts of the district will be necessarily slow. The connections made in the standard survey of the main lines of road in the Wairau Plain, and the survey of the main roads through the Kaituna and Pelorous Valleys, have given me a start in that direction by enabling me to construct the record maps of Cloudy Bay, Onamalutu, and Wakamarina districts. Three surveyor's plans, dealing with 3,891 acres, have been received and checked, and three Public Works plans of railway land, plan surveys, road exchanges, and diversions, have been examined and passed. Tracings have been made of the topographical plans, and the triangulation plans, representing Mr. A. D. Wilson's last two seasons' work, are now being traced for photolithographing. The detailed returns show the work done for other departments; it is therefore unnecessary to particularize under that head, except to mention that for nearly five months a considerable