

during the next season ; but, as the first steps have been taken towards solving the difficulties in the King country, it is not unlikely that a very large area may be dealt with. The applications received through the Native Land Court already cover several hundred thousand acres in that locality. In the Poverty Bay district a large area of both new lands and subdivisions will be prepared for the Court by the thirteen surveyors at work there under Mr. Barnard's supervision. I trust that the Geodesical Surveyor will find time to re-observe the Bay of Plenty latitude during this season : that at present recorded is very unsatisfactory, and causes considerable trouble now that the surveys from other circuits are closing in on it on all sides. The new season will probably see a complete closure between the provincial triangulations of Auckland and Taranaki, and will thus afford a double check by triangulation on the electric longitude of Auckland from Wellington. On the completion of this work there will then only remain the north part of the mountainous Urewera country, the country near the East Cape, and the narrow neck between Awanui and the North Cape to be major-triangulated to finish the whole province. As much time as possible will be devoted to the laying-out of roads before the rights expire, but I anticipate a considerable amount of trouble and delay in so doing.

During the past year four of the cadets have completed their term of service in that grade, and have passed their examinations ; three of them are engaged in the field as surveyors. Two others will finish their three years in the field and office during the ensuing season.

S. PERCY SMITH, Assistant Surveyor-General.

---

Mr. LAWRENCE CUSSEN to the ASSISTANT SURVEYOR-GENERAL.

I HAVE the honour to send you herewith a sketch showing the triangulation now in progress in the King country, and to submit for your information a short report of the work, the character of the country, and the attitude of the Natives in respect to the survey.

The triangulation was commenced in the last week of December, 1883. Forty-three stations have been erected, covering an area of 2,500,000 acres. The major work, with sides from twelve to twenty-three miles, covers the country in regular polygons ; and a secondary series of five- to eight-mile sides on Ray trace between the major stations covers nearly the whole area, but not all in polygons. There are seventeen major and twenty-five minor stations : seventeen are in the forest and twenty-five in the open country ; the bush work was very heavy and expensive. Seven stations were cleared by the Natives by contract at reasonable prices, which was a great advantage in expediting the work, and in preventing opposition from other Natives who might endeavour to stop Europeans. The angles have been observed at twenty stations, the topographical sketches being made as the work proceeds. I need scarcely mention that there is a great advantage in carrying on the minor work with the major : it takes less time, and costs less than if done separately, whilst the knowledge gained in the progress of the major work enables one to execute the minor more satisfactorily at the same time. There is an area of about two hundred square miles, lying to the southward of the Rangitoto Ranges, and between the Mokau and Waimeha Rivers, which it will be very difficult to minor triangulate, the hills being all pretty much the same height, and heavily timbered, with table-land on top. I estimate that to complete the work as we are now doing it will take about twelve months from now ; the cost of the major and minor triangulations will not, I think, exceed  $\frac{1}{2}$ d. per acre, and I expect to see it under that.

My assistant, Mr. Mace, with a party of five Europeans, and occasionally some Natives when the bush work was heavy, has been entirely engaged in the erection of stations : having selected a hill, he would leave a party to clear the bush, under an experienced chainman, and proceed to select other stations ahead. Mr. Mace and his party have worked well, and have had rough times occasionally.

Mr. W. Cussen commenced work on the west of Lake Taupo in the beginning of April. He has covered the country west of the lake, and the downs on the west of the Waikato River, comprising an area of nearly 500,000 acres, with a minor triangulation of four- to six-mile sides.

During the winter I purpose visiting the old stations east of the Waikato River, with which our present work will close. There are fourteen of these to visit. I hope also to complete the survey of the country from Kihikihi to Mokau, so as to be ready in the spring to go on with the West Coast between Raglan and the Mokau River, and work which remains unfinished to the southward. The country is generally a bad one to get about in, and it is very hard on horses, the tracks being rough and feed very scarce. It has consequently cost a great deal to get our provisions packed out to central dépôt.

*Native Opposition.*—It was not to be expected that such a work as the triangulation of the King country would be carried on without meeting some opposition from the Natives, and, although the delays from this cause were considerable, and cost £250 or more, they were not so serious as might be expected considering the magnitude of the work, and certainly not more than I have met with in triangulating Native country for years past. The obstructionists might be divided into three classes : Those who obstructed to show their claim to the land and to protest against any one else authorizing the survey over it, and who were jealous of the chiefs : these were not many and gave us but little trouble. Secondly, the remnants of Tawhiao's followers, who opposed us to show their loyalty to the cause of the King : their opposition was feeble and half-hearted, and was only by way of a protest against the work ; they would order us back and threaten to destroy the trig. stations ; they did pull down two stations, but on our replacing them they have not again been disturbed. The third class were the most numerous, the most troublesome and difficult to deal with : they are those who, from various causes, are distrustful of the objects of the trig. survey, and the ultimate intentions of the Government with regard to their land, or who desire to have their land surveyed otherwise. The chief actors are men who mix a good deal with Europeans attending Land