

The following is a synopsis of work done and in hand :—

	Acres.	
Meridional circuit ...	13,240,000	On true meridian mathematically reduced.
Major triangulation ...	680,000	Ditto.
Minor " ...	5,800,000	Ditto.
Block section survey ...	2,103,000	Ditto, except early surveys.
Spotting " ...	800,000	Ruled by triangulation, and mathematically reduced.

Surveys in Hand.

Sectional and spotting ...	130,000	In ten separate localities.
Minor triangulation ...	140,000	Work in all parts of the province.

SURVEYS AS AFFECTING THE ABORIGINES.

Before leaving this branch of the subject, it is necessary to make a few remarks on the system of Native surveys, so as to show how they affect the Aborigines and the Government. In these remarks we are first led to the system of survey in large blocks, which are principally for the purpose of purchase and extinguishment of Native title.

In looking at a survey consisting of 28,000 acres, near the source of the Rangitikei, which is a fair specimen, it is found to have been covered by major triangulation. The boundaries, which are for the most part marked by rivers and other natural features, are traversed by theodolite and chain. Of this portion of the work it is difficult to judge without ground inspection; the gross errors, however, amount to 50 and 70 links, and in one case to 119 links. It is, however, carefully checked by minor triangulation. The country is open, and the cost of the survey was £208, the time taken being nearly two months.

The cost of other blocks is as follows :—

	Acres.	£	s.	d.
Maungaporau ...	16,000	610	2	1
Tokomaru ...	17,000	327	0	0
Maunganui-o-tahu ...	8,500	629	8	1
Mangaohira (unfinished) ...	15,000	287	0	0
Ohauko ...	28,413	208	5	0
&c.,	&c.,	&c.		

These appear to be very heavy items of expenditure for interior blocks that may not be utilized immediately. I would therefore suggest the propriety of altering the system of such surveys from actual to reconnaissance, which latter, where the blocks are always bounded by natural features, are quite as intelligible, nearly as accurate, and sometimes more accurate, than the long intricate chain traverses, and whose cost is very much smaller, not averaging more than a tenth or twentieth in large areas. I am of opinion on this point that the whole of the interior of North Island could be quickly mapped by reconnaissance in an accurate and effective manner, by which means could not only present purchases be recorded, but future negotiated with perfect intelligence and satisfaction to all parties; and I may further suggest that, were the work taken in hand with mutual understanding by one or two active officers, they would give a far more lucid idea of the topography than a dozen working incongruously and independently. Again, as reconnaissance does not require large marks to be built, the prejudices of the Natives against the operations are less apt to be excited. In the remote positions, to go to the cost of actual survey, in its numerous and slow details, appears to me to be waste of force.

On scrutinizing the plans of village and tribal areas, this fact strikes the surveyor, that it is difficult to apply the modes and methods pertaining to civilized and highly artificial social states to people in a primitive condition. The efforts of the statesman, the judge, and the philanthropist seem to miscarry however benignly conceived. Thus, scanning several village plans, and selecting as a specimen that of Otaki, we find 150 claims (that have been surveyed from time to time and by different licensed surveyors) generally overlapping, promising to yield in after years a crop of litigation that will ruin the holders and bring down the value of the holdings to zero. This survey, executed for the purposes of the Native Lands Court, is not on any basis, such as triangulation, nor on any determined meridian. The compilation is constructed by "building" the claims together, but which cannot be made to coincide with each other.

A continuance of this mode of attempting to localize Native claims appears to me to be fraught with injury rather than benefit. They would be better in fact without such mis-records, for a property by occupation and prescriptive right is less dangerous than one which may have a paper title hanging over it, ready to dispossess with prior and forgotten survey and processes of law.

The Maoris, in their wants, imitate the Asiatic rather than the European. To survey their minute, complex, and irregular land tenures accurately, would be to eat up the value. It is better left alone unless their general consent can be had to a simple and regular re-arrangement such as we have in European districts and towns. Again, the partition of claims into immensely long narrow strips must make such holdings valueless when Crown-granted and brought under the fencing ordinances. Thus, as a specimen, I cite one of twenty-seven claims at Ngakaroro, No. 2A, 1933 acres, whose width is 26 chains, and length 780 chains—that is, length thirty times the breadth. Of course I notice these subjects from the peculiar aspect in which a surveyor scans them, so that, if thought sufficiently important, they may be considered by the proper authorities.

SUMMARY.

The survey work done in the entire Colony of New Zealand may be summarized as follows, and to which I have appended explanatory remarks :—