For the first time, then, since the foundation of the Colony, the Government is now in a position to define the geography of this part of its territory with precision. The doing this has been recognized as one of its first duties by every civilized Government in the world: and a special necessity for it here arises from the Acts of the Legislature giving every Native the right to claim a grant from the Crown, which must for its own safety and credit ascertain the position and boundary of the land granted.

Were all the surveys now to begin afresh, with present necessities and present facilities, no one can doubt but that it would be the duty of the Government to institute them on a sound trigonometrical system; and it can hardly be maintained that this moral obligation is lessened by the fact that, partly owing to the force of circumstances, but certainly in part by the neglect of preceding Governments, the surveys hitherto executed are so erroneous that new ones cannot be made to abut

upon them without the perpetuation and multiplication of the grossest errors.

In the first operation of the Native Lands Act, its full effect in converting a wilderness, studded with a few spots only over which civilization was free to extend, into a uniform territory available for colonization in all its parts, was not readily perceived. It was assumed that the plan which had been pursued for twenty-five years might still be persevered in.

Surveys were made by compass meridian, and without any external connection. When the plans had been cursorily examined, to see that they had no self-contradiction on the face of them, and that no trespass or overlap appeared to have been committed on lands already held in ownership by the

Province or the Colonists, they were passed, and Crown Grants for the land issued.

In this way several hundreds of detached maps speedily accumulated; no record maps existed, on which they could be delineated; the position of very many of them was quite unknown; and a state of extreme confusion was evidently likely to ensue, unless prompt means were taken to reduce the surveying and recording to order and system.

Happily, a lull in the activity of the Court afforded time to adopt a temporary remedy before the

arrears had become unmanageable.

The palliative adopted was to make recompilations of all existing maps into districts; all passed surveys were entered on these, many of them, it is true, provisionally only, their position not being yet accurately defined; and the rule is now established, that no map is passed for certificate, until it has been properly delineated on the district map.

This plan, carefully followed up, is sufficient to prevent any immediate mischief. In mapping the land, it is at once seen what estate it abuts upon or approaches, and this enables the office to send defective maps back to the surveyor, with proper instructions, if he has failed to make the

closures which are necessary

Still it is but a makeshift, and can only serve temporarily. It continually happens that pieces of land abut on opposite sides on two or more old surveys, and that the interstice is either far too large or too small; and as we are wholly unaware of the real direction of the error, it is impossible to rectify it. Any attempt to place the district maps together would be hopeless, since all the discrepancies arising from the "building up" from detached points accumulates at the outskirts.

In the central portion of the Province of Auckland, near Lake Taupo, the country is chiefly formed of open and undulating plains, and is being taken up on leases in large blocks. such a country the system of periphery traverse, would be merely to subject the Native owners to a very heavy tax, from which no advantage whatever could be derived, either to the Government or to the individuals. Such surveys being wholly unconnected, and with uncertain meridians, would be useless, and the expense of effecting them would be several times greater than to carry a thoroughly good triangulation over the country.

I think, then, that it will be admitted, from all these considerations, that within the Province of Auckland an extreme necessity has arisen for a complete system of triangulation, at the same time that the reasons or excuses for its not having been hitherto attempted have to a great extent

disappeared.

The same necessity and opportunity are also arising between the Provinces.

Those Provinces which at the time of their institution were quite isolated, have now become truly conterminal; extensive tracts of land have been bought or leased, overstepping the boundaries, and no detached or Provincial triangulation can now be satisfactory, except in so far as it is suited to

form part of a general system.

 ${f I}$  do not propose now to go into any technical description of the mode of triangulation which  ${f I}$ conceive to be applicable to this country. I shall very shortly have to report to you on the commencement I have just made between the Bay of Islands and Hokianga; when I propose to enter into the subject in detail. It is sufficient for me to show that a triangulation is of the first necessity, that it is quite practicable over a great part of the Island, especially in those parts in which it is most immediately required; and to urge that such a work to be trustworthy, and therefore really economical, and to be creditable to the Colony, and likely to meet the ends which will hereafter be required from it, must be based on sound geodetic principles, and be carried out in minute accordance with plans previously laid down for its execution; and above all that it must be general, or at least be suited, ultimately, though probably after some lapse of time, to embrace the whole Island.

Should the views I have suggested be adopted, it will be desirable as early as possible to look into the state and progress of the triangulations which have been and are now being carried on in the other Provinces of the North Island, and to endeavour, if necessary, to induce the adoption of any modifica-

tion which would increase their fitness to be ultimately closed into a general system.

For the present, however, I apprehend that it will be sufficient for me to consider the carrying on the work in the ensuing summer over the country north of Auckland, and south of it, as far as the condition of the Native question may permit. To push this work with due vigour, will require two complete parties, which should consist each of a Geodetic Surveyor, with two junior assistants, each capable of acting separately, and conducting the subordinate part of the work with his own party of Native labourers.