

As the result of our labours, carefully prepared geological maps of the areas examined, especially arranged with a view to aid prospectors, will be obtainable. On these maps we do not pretend to locate every feature of economic interest, though many of these may be discovered in the course of our examinations; but we do hope to delineate the horizon within which prospecting for deposits of commercial value may be conducted with a reasonable hope of success.

The nature of the country and the detailed examination undertaken prevent more than a very limited area being examined in a single year with the staff at present available, but the work that is completed from time to time may be regarded as practically final. Of course, the classification of the rocks according to age cannot be finally worked out until considerable areas have been examined, and hence the grouping adopted in the earlier bulletins is subject to alteration. Similarly other general features may require revision.

Much of the mountainous country of New Zealand is unsuitable for agriculture or pasturage, and its chief value would seem to be in its mining and water-power potentialities. As yet we have no comprehensive idea as to what our mineral resources actually comprise, since much of the country, especially the mountainous part, is still not thoroughly explored. To gain the required knowledge a careful and detailed geological survey is certainly necessary, and it is highly desirable that the class of work now in progress should be pushed on as much as possible, so that results of economic value may be available without delay.

SUMMARY OF OPERATIONS DURING THE YEAR 1905.

During the year 1905 detailed field-work was begun in the North Westland division, in the Hauraki division, and in the Central Otago division. The first work undertaken was in the Hokitika subdivision of the North Westland area, which was started in April, 1905, with Mr. Colin Fraser, M.Sc., as Assistant Geologist, Mr. C. E. Adams, B.Sc., as Topographer, and myself in charge of the survey. At the end of May, leaving the Westland work in Mr. Fraser's hands, I departed on a general tour throughout the North Island and parts of the South Island, in order to familiarise myself with the various mining localities of the colony. Various departmental matters had also to be attended to, but by the beginning of August I was back at work in the Hokitika subdivision with Mr. Fraser, who had before my arrival been joined by Mr. P. G. Morgan, General Geologist. The topographical work was now undertaken by Mr. R. P. Greville, who succeeded to the position of Topographer, some weeks after Mr. Adams had retired in July. At the end of October I left for Coromandel, in order to initiate detailed work in the Hauraki division. Here, in a few weeks, I was joined by Mr. Fraser, while Mr. Morgan commenced operations in the southern portion of the North Westland division—the Miconui subdivision. Mr. Greville remained in North Westland in order to carry out the topographical mapping of the hitherto unsurveyed parts of the Hokitika and Miconui subdivisions.

Professor James Park, of Otago University, was engaged under special agreement for the summer season of 1905–6, and in November, 1905, started field operations in the Alexandra subdivision of Central Otago.

By the end of the year 1905 the work of the newly organized Geological Survey was well started. I come now to a detailed account of our operations during the year 1906.

DETAILED REPORT FOR THE YEAR 1906.

OFFICE WORK.

Reports.—During the year 1906, in addition to my report to you for the year 1905, published in Parliamentary paper C.—3, 1906, two separate bulletins were brought out by the Geological Survey. No. 1, written by myself with the assistance of Mr. Colin Fraser, bears the title "The Geology of the Hokitika Sheet, North Westland Quadrangle, with which has been included a small portion of the Upper Wilberforce Valley in the Waimakariri Quadrangle." Although the actual field-work was not completed until the end of May, the bulletin was ready for presentation to Parliament on the 30th August.

Bulletin No. 2, written by Professor James Park, and based on the results of his geological examinations during the summer months of 1905–6, is entitled "The Geology of the Area covered by the Alexandra Sheet, Central Otago Division." Both bulletins contain maps which exhibit the geology and topography of the areas which each report covers.

During the year 1,425 bulletins were issued, largely in exchange for the publications of other surveys, scientific societies, &c.

Correspondence.—One of the most gratifying features of the work throughout the year has been the great interest apparently taken by the public of New Zealand, and even of the outside world, in the operations of the Geological Survey. We are constantly receiving inquiries from various parts of the colony, from Great Britain, and elsewhere, as to the occurrence, or the contrary, of various mineral deposits and their location if occurring. Requests are also frequently coming to hand for the identification of mineral and rock specimens, and for information on various technical subjects relating to the mining industry of the country. Moreover, applications for geological inspections to be conducted in a detailed manner have been received from quite a number of places.

The correspondence received and answered may be tabulated under the following headings:—

	Received.	Answered.	Total.
Letters requesting the identification of minerals	41	58	99
Applications for employment	40	45	85
Letters requesting the services of Geological Survey officers			
in the field	29	15	44
Letters on technical subjects relating to mining	116	123	239
Departmental letters and memorandums	293	340	633
Letters on general subjects	301	348	649
	<u>820</u>	<u>929</u>	<u>1,749</u>