

1907.  
NEW ZEALAND.

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## NEW ZEALAND GEOLOGICAL SURVEY DEPARTMENT

(FIRST ANNUAL REPORT (NEW SERIES) OF THE).

*Presented to both Houses of the General Assembly by Command of His Excellency.*

SIR,—

Geological Survey Office, Wellington, 1st January, 1907.

I have the honour to present to you the first annual report (new series) of the Geological Survey Department. This report deals particularly with the operations of the Geological Survey during the year 1906; but, as it is the first report of the Department, since its reorganization in 1905, designed for general circulation, it has seemed advisable to give some account of the survey previous to that date, together with a brief description of the work accomplished during 1905.

I have, &c.,

J. M. BELL,

Director Geological Survey.

The Hon. James McGowan, Minister of Mines.

### HISTORICAL.

Previous to F. von Hochstetter's arrival in 1858, little was known about the geological features of New Zealand, though a number of naturalists, including Charles Darwin, J. D. Dana, and E. Dieffenbach, had visited our shores, and given to the world various notes concerning New Zealand geology.

Hochstetter was commissioned by the New Zealand Government to report on the geology of these Islands as far as the nine months at his disposal would allow. The results of his work, as embodied in "New Zealand" and his other publications, were of the highest value, in a great part forming the foundation of subsequent more detailed operations.

Hochstetter's visit to New Zealand was followed by an outburst of activity on the part of several of the Provincial Governments. Geological surveys, initiated in Otago, Canterbury, and Wellington, under the conduct of such men as Hector, Hutton, and von Haast, resulted in some useful work being done.

The first geological survey of all New Zealand was started in 1867, when the New Zealand Government passed an Act "to establish an Institute for the Advancement of Science and Art in New Zealand, and to make Provision for the Carrying-out of the Geological Survey of the Colony."

Sir James Hector—then Dr. Hector, in charge of the Otago Provincial Survey—was chosen as Director of the Geological Survey of New Zealand. This position, together with many others, he ably filled until his retirement in 1903. Among those associated with Sir James Hector were Mr. S. Herbert Cox (now Professor of Mining in the South Kensington Technical Institute), the late Captain F. W. Hutton, F.R.S., Mr. A. McKay, F.G.S., and Professor James Park, F.G.S. The hearty appreciation of all geological workers in New Zealand is due to the Director and staff of the early Survey. When Sir James Hector first took charge of the work the difficulties of travel were very great. The country contained few roads and practically no railways, communication being mainly by rough tracks or by small vessels along a generally dangerous coast. It is marvellous what was accomplished by so small a staff under such conditions. Now most of the country is well opened up by roads, railways, or tracks, and, in addition to these travelling facilities, we have the successful results of the labours of the former Survey on which to base our geological operations. Our work is to a great extent a detailed study of the features broadly mapped by the former Survey, and to a less degree consists of reconnaissance surveys of areas which, in a geological sense, are still *terra incognita*.

For purposes of reference there is here inserted a list of publications of the Survey previous to its reorganization in 1905.