1898. NEW ZEALAND.

NEW ZEALAND INSTITUTE.

THIRTIETH ANNUAL REPORT, 1897-98.

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

MEETINGS of the Board were held on the 3rd September, 1897, and 11th February and 8th September, 1898.

Messrs. T. Mason, E. Tregear, and J. Young retired from the Board, in compliance with clause 6 of the Act, and were reappointed as Governors of the Institute.

The following gentlemen were elected to represent the incorporated societies—viz., Mr. S. Percy Smith, Mr. J. McKerrow, and Major-General Schaw—in accordance with clause 7 of the Act.

The members now on the roll are : Honorary members, 28; Auckland Institute, 167; Hawke's Bay Philosophical Society, 66; Wellington Philosophical Society, 146; Philosophical Institute, Canterbury, 77; Otago Institute, 103; Nelson Philosophical Society, 20; Westland Institute, 57 : making a total of 664.

The New Zealand Institute has lost two active members—Messrs. T. Kirk and W. M. Maskell —during the year, both of whom have served on the Board of Governors, and were the pre-eminent leaders for the whole colony in the special branches of science to which they devoted their talents and industry.

Thomas Kirk was everywhere recognised as our foremost botanist, and it is almost an irretrievable loss to science that his career should have been cut short when in the midst of a great work on the botany of New Zealand. The portion of the work that was in print at the time of his death covers descriptions of the flowering plants as far as the end of the natural order Compositæ. This is equal to rather more than half of the first volume of Hooker's Handbook. These sheets, containing 363 pages, have been submitted to Sir Joseph Hooker for perusal and comment, and it is hoped that satisfactory arrangements will be made for completing the work. In the meantime it is proposed that Mr. Kirk's portion should at once be published under the superintendence of his son, Mr. H. B. Kirk, who is thoroughly qualified for the task. Besides his great and standard work on the New Zealand forest flora, the late Mr. Kirk contributed 122 botanical papers to our Transactions, and supplied numerous papers for publication in the Journal of the Linnæan Society, London, The Gardeners' Chronicle, Nature, Journal of Botany, and the Journal of the Linnæan Society of New South Wales. In his official capacity as Commissioner of Forests he made botanical explorations in every part of the colony, and no other botanist has ever acquired such a complete familiarity with the New Zealand flora, and particularly with the geographical distribution of the various species of plants.

William Miles Maskell will be greatly missed by all workers in the special branch of entomology which deals with the most difficulty family of Coccididæ or scale-insects. The laborious study of these insects is of great economic importance, as they are the cause of the blights which are now spreading rapidly all over the world and tending to the destruction of the fruits of labour in the field, garden, and orchard. Mr. Maskell took up the subject twenty-five years ago, after the death of Signoret, and his name is now famous throughout the world as the best authority on it. It is a very tedious branch of study to prosecute, requiring the most delicate and precise microscopic manipulations. He did it all in his spare time, of which he could not have much, as since 1875 he has been fully occupied, and in late years, it is to be feared, overworked himself in the performance of his duties as Registrar of the New Zealand University, the official organization of which he worked up almost single-handed from its inception to the large proportions it has now attained. The enormous amount of work he did in his special studies is evidenced by his standard work on the New Zealand scale-insects and the series of elaborate and beautifully illustrated memoirs, twentyfour in number, which he has published in our Transactions during the last thirteen years. He has also left an enormous collection of specimens and microscopic preparations, the great majority of which are original types of species he described. These include cabinets containing over a H.---30.

thousand species of named Coccids; over 1,300 mounted specimens for the microscope of Coccididæ, Desmidieæ, Algæ, and Diatomaceæ; 750 named, but unmounted species of Coccids; manuscript books containing a catalogue of Mr. Maskell's collection; Signoret's Essai sur les Homopteres-Coccides, 1867 to 1875, with an analytical index by Mr. Maskell in manuscript. Specimens were transmitted to him for identification or original description from all parts of the world, and the accumulation of specimens and correspondence since he became incapacitated for work in January last is very large, and awaits the attention of an entomologist who will continue Mr. Maskell's good work in this most important branch of science.

"Maori Art": The publication of this work is progressing as rapidly as circumstances will permit. Part II. was issued in October last, and Part III., which treats of Maori weapons, implements of agriculture and handicraft, the snares and implements used in hunting rats and birds for food, list of words used in connection with the subject, and plates with descriptions, is now published. On revising the large amount of material accumulated by Mr. Hamilton on the "Habitation of the Maori," it was found necessary to make Part II., which relates to that subject, a double part, which will slightly increase the cost of the whole work to subscribers. The work has everywhere been received by most favourable reviews and cordial recognition as a contribution to anthropology of the highest merit.

to anthropology of the highest merit. The volumes of Transactions now on hand are: Vol. I. (second edition), 233; Vol. V., 8; Vol. VI., 15; Vol. VII., 98; Vol. IX., 98; Vol. X., 129; Vol. XI., 27; Vol. XII., 29; Vol. XIII., 30; Vol. XIV., 53; Vol. XV., 164; Vol. XVI., 164; Vol. XVII., 163; Vol. XVIII., 135; Vol. XIX., 154; Vol. XX., 155; Vol. XXI., 87; Vol. XXII., 89; Vol. XXIII., 163; Vol. XXIV., 167; Vol. XXV., 167; Vol. XXVI., 173; Vol. XXVII., 176; Vol. XXVIII., 180; Vol. XXIX., 450; Vol. XXX., not yet fully distributed. The volume (XXX.) just published contains sixty-eight articles, together with addresses and abstracts which appear in the Proceedings. The work consists of 638 pages and 45 plates. The following gives a comparison of the contents of the present volume and that for last year.

The following gives a comparison of the contents of the present volume and that for last year :----

						1898.	1897.	
			· · · ·			Pages.	Pages.	
Miscellaneous					 	138	178	
Zoology				•	 	245	154	
Botany					 	66	208	
Geology					 	31	32	
Chemistry					 	28	18	
Physics					 	28		
Proceedings					 	54	45	
Appendix	•••				 	48	45	
Appendix	••••	• •••						
						638	680	

The cost of printing Vol. XXIX. was £433 6s. 9d. for 680 pages, and that for the present volume (XXX.) £416 15s. 9d. for 638 pages. This includes the preparation and printing of the plates.

The treasurer's statement of accounts shows that the receipts for the year were £767 12s. 7d., the expenditure £767 12s. 7d.

The amount appropriated for the publication of memoirs and postponed papers is now £612 16s. 3d.

Reports are appended showing the work done in the Departments of Meteorology, Time-ball Observatory, and Museum.*

Approved by the Board.

JAMES HECTOR, Director.

THOMAS MASON, Chairman. 8th September, 1898.

Wellington, 3rd September, 1898.

NEW ZEALAND INSTITUTE ACCOUNTS FOR 1897-98.

Receipts.	£	s. d	d.	Expenditure.	£	8.	d.			
Balance in hand, 3rd September, 1897	3	8	11	Printing Vol. XXX	416	15	9			
Vote for 1897–98	500	0	0	Expense of publication of "Maori Art" for						
Contribution from Wellington Philosophical				year	308					
Society	17	13	6	Publication of Mangareva vocabulary		8				
Sale of volumes of Transactions, Trübner, &c.	43	10	7	Expense of library	6	6	0			
Sale of Parts I. and II., "Maori Art"	45	14	0	Foreign postage, stationery, and miscel-						
Advance against Deposit Account	157				19	3	3			
					0805					
	£767	12	7		£767	12	<u> </u>			
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WM. THOS. LOCKE TRAVERS,										

Honorary Treasurer.

8th September, 1898.

Price 3d.

* These reports will be published in a separate form.

Approximate Cost of Paper .- Preparation, not given; printing (1,425 copies), £1 6s. 6d.

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