

Votes of Thanks were accorded to—(1) The Hon. G. W. Russell, for assistance rendered to the Institute during his term of office as Minister of Internal Affairs; (2) the honorary officers of the Institute, for their services during the past year; and (3) to the Standing Committee, for services rendered during the year.

Authority to confirm the minutes of the annual meeting was granted to the Standing Committee.

Resolutions of Sympathy.—That the most hearty sympathy of the Board be accorded the relatives of Professor Maclaurin, late President of the Massachusetts Institute of Technology.

That the most hearty sympathy of the Board be accorded the relatives of the late Dr. Etheridge, Director of the Australian Museum.

WELLINGTON PHILOSOPHICAL SOCIETY.

Since the 30th September, 1918, eight meetings have been held—the annual general meeting, one special and six ordinary meetings—when papers were read as follow:—

18th December, 1918 (annual general meeting): W. Donovan, "The Distillation of Waikaitia Shales"; P. G. Morgan, "New Zealand Clays."

30th April, 1919: S. H. Jenkinson, "Majority and Proportional Representation."

28th May: E. K. Lomas, "Spiders"; R. L. Andrew, "Seasonal Variations in the Wellington Milk-supply."

25th June: D. Jenness, "Canadian Arctic Expedition, 1913-1918."

23rd July: R. W. Holmes (President), "Notes on Decimal Coinage and the Metric System."

6th August (special meeting): E. Marsden, "Gun-location on the Western Front."

27th August: R. L. Andrew, "Some Analyses of Human Milk with reference to Infant Feeding"; G. B. Bradshaw, "The Bomb Calorimeter."

24th September: G. V. Hudson, "On some Examples of New Zealand Insects illustrating the Darwinian Principle of Sexual Selection"; R. W. Holmes and A. C. Gifford, "Mount Tutoko and the Darran Mountains."

The average attendance has been forty.

At the annual general meeting the annual report and audited balance-sheet were adopted.

ABSTRACT.

Council Meetings.—Eleven meetings of the Council have been held, when consideration has been given to the following matters:—

Research Grants.—A Government grant of £2,000 was made available through the New Zealand Institute in January, and applications were invited from members. The following grants have since been made: Astronomical Section, £55 for apparatus for astronomical research; Professor T. H. Easterfield, £200, "The Mineral Oils, Waxes, and Resins of New Zealand"; Dr. C. E. Adams, £150, "Testing of Observatory-sites"; Dr. J. Allan Thomson, £100, "The Chemical Characters of Igneous Rocks."

An application from Dr. C. E. Adams for a grant for assistance in computing a table of mathematical functions is under consideration.

Honorary Members of the New Zealand Institute.—Owing to the deaths of six honorary members of the New Zealand Institute, the Council was called upon to submit six names for election to the honour. At the annual general meeting of the Institute Dr. J. W. Mellor was elected, the five remaining vacancies to be filled at a later meeting.

Fellowship of the New Zealand Institute.—In conformity with the regulations of the New Zealand Institute, the Council nominated the following for election to this honour : C. E. Adams, B. C. Aston, T. Broun, C. A. Cotton, W. P. Evans, C. C. Farr, A. C. Gifford, C. Monro Hector, G. Hogben, R. W. Holmes, G. V. Hudson, H. B. Kirk, J. S. Maclaurin, P. G. Morgan, R. J. Scott, H. W. Segar, S. Percy Smith, R. Speight, E. E. Stark, A. P. W. Thomas, J. Allan Thomson, E. Phillips Turner.

Lectures in Practical Astronomy.—The Astronomical Section submitted a syllabus of lectures in practical astronomy, and after consideration the Council referred it back to the Section for preparation of a suitable scheme.

Topographical Map of New Zealand.—The Geological Section referred the need of a topographical map of New Zealand to the Council for its recommendation, and the Council found on forwarding the request to the Government that a map of this kind would shortly be put in hand.

Roll of Honour.—Now that the war is over, a complete roll of honour of members who have served overseas is being prepared.

King Telescope.—The society's telescope presented by Miss Jessie King is now in use, and a plate commemorating the gift has been approved by the Council and will shortly be attached to the mounting.

Standard Time.—The Council forwarded the report of the Committee on New Zealand Standard Time to Admiral of the Fleet Viscount Jellicoe for his consideration, asking his support to the scheme, as a measure of economic efficiency.

Longitude-determination.—The Council approved the Astronomical Section's recommendation that New Zealand should take advantage of the longitude-determination by wireless signals, to be carried out between Australia and Greenwich shortly, and forwarded the letter to the Department of Internal Affairs, the reply being that the Government could not see its way to take part in the work.

Membership.—The roll of the society stands at 181, as follows : Life members, 9 ; on active service, 13 ; ordinary members, 159. During the year one life member died ; four ordinary members died and eight resigned ; forty-two new members were elected, but ten of these did not become members.

Library.—One meeting of the Library Committee was held during the year. The periodicals hitherto ordered from booksellers are now being ordered from the publishers. Many of the volumes are in an incomplete state, and for this reason no binding has been done this year.

The sum of £59 7s. 6d. was allocated to the library, of which £36 8s. 10d. has been expended, leaving a balance of £22 18s. 8d. This amount added to last year's balance makes a total of £112 1s. 9d. to be expended.

Committee and Officers for 1920.—*President*—R. W. Holmes, I.S.O., M.Inst.C.E. *Vice-presidents*—C. E. Adams, D.Sc., F.R.A.S. ; A. C. Gifford, M.A., F.R.A.S. *Council*—Elsdon Best, F.N.Z.Inst. ; T. H. Easterfield, M.A., Ph.D., F.N.Z.Inst. ; G. V. Hudson, F.E.S., F.N.Z.Inst. ; H. B. Kirk, M.A., F.N.Z.Inst. ; W. S. La Trobe, M.A. ; E. K. Lomas, M.A., M.Sc. ; E. Marsden, D.Sc. ; P. G. Morgan, M.A., F.G.S. ; J. Allan Thomson, M.A., D.Sc., F.N.Z.Inst. ; G. H. Uttley, M.A., M.Sc., F.G.S. *Secretary and Treasurer*—C. G. G. Berry. *Auditor*—E. R. Dymock, F.I.A.N.Z. *Representatives to New Zealand Institute*—H. B. Kirk, M.A., F.N.Z.Inst. ; T. H. Easterfield, M.A. Ph.D., F.N.Z.Inst.

ASTRONOMICAL SECTION.

Four meetings were held, when papers were read as follow :—

4th June, 1919 : A. C. Gifford, "Graphical and Numerical Illustrations of Solar Attraction."

2nd July : D. M. Y. Sommerville, "Periodogram Analysis."

3rd September : C. J. Westland, "Rapid Method of calculating Occultations" ; C. E. Adams, "Reform of the Calendar."

Owing to the general interest of the paper, the meeting of the 6th August was made a special society meeting.

Committee.—Six meetings of the Committee have been held, and the following subjects have been considered: Testing of sites for observatories; Carter Bequest; Lectures in practical astronomy; Determination of longitude; Research at the Observatory.

Observatory.—During the early part of the year the Observatory was closed owing to difficulty in having repairs carried out; latterly it has been open on the second and fourth Tuesday evenings, and good average attendances have resulted. The building and instrument are in good repair; a plate to commemorate the gift of the King telescope is in preparation for attaching to the instrument. Arrangements have been made with the Kelburn Tramway Company for a combined tram and Observatory ticket; and a sign notifying that the Observatory is open is lighted up in Tramway Avenue on Observatory nights. Dr. C. Monro Hector has very generously presented to the Section a bookcase and a cupboard to contain accessories, and a 20 in. celestial globe. Professor Sommerville and the Honorary Secretary have been in charge.

Research.—A Government research grant of £55 has been made to the Section through the New Zealand Institute.

Committee and Officers for 1920.—*Honorary Member*—Miss Mary Proctor. *Chairman*—A. C. Gifford, M.A., F.R.A.S. *Vice-Chairmen*—D. M. Y. Sommerville, M.A., D.Sc.; W. S. La Trobe, M.A. *Committee*—Evan Parry, B.Sc., M.I.E.E.; C. P. Powles; H. Clark, M.Sc., Ph.D.; C. Monro Hector, M.D., B.Sc., F.R.A.S.; G. S. Hooper; R. D. Thompson, M.A. *Director and Curator of Instruments*—C. E. Adams, D.Sc., F.R.A.S. *Honorary Treasurer*—C. E. Adams, D.Sc., F.R.A.S. *Honorary Secretary*—C. G. G. Berry.

Two members of the Committee having left the Dominion—viz., Mr. Evan Parry and Professor H. Clark—their places were filled by Mr. J. Darling and Professor E. Marsden, D.Sc.

TECHNOLOGICAL SECTION.

Six meetings were held, when papers were read as follow:—

14th May, 1919: S. H. Jenkinson, inaugural address, "The Design of the Modern Locomotive."

11th June: P. G. Morgan, "The Clays of New Zealand."

9th July: A. J. Paterson, "Carburettors."

13th August: R. E. Robertson, "The Progress and Development of Railway Brakes."

17th September: A. Seifert and T. H. Easterfield, "The Past and Future of the Flax Industry."

15th October: L. Birks, "The Mathematical Basis of Hydro-electric-power Rates."

Date of Meetings.—From September the date of meetings of the Technological and Geological Sections was interchanged, the former Section now meeting on the third Wednesday in the month.

Committee and Officers for 1920.—*Chairman*—W. S. La Trobe, M.A. *Vice-Chairmen*—J. S. MacLaurin, D.Sc., F.C.S.; A. J. Paterson. *Committee*—R. W. Holmes, I.S.O., M.Inst.C.E.; F. W. Furkert, Assoc.M.Inst.C.E., A.M.I.M.E.; H. Sladden, member of Board of Surveyors; E. Marsden, D.Sc.; L. Birks, B.Sc., M.I.E.E. *Honorary Secretary*—A. C. Owen, B.E., A.M.I.E.E.

GEOLOGICAL SECTION.

Six ordinary meetings were held, when papers were read as follow:—

21st August, 1918: G. L. Adkin, "The Post-Tertiary History of the Ohau River and of the Adjacent Coastal Plain."

18th September, 1918: J. Allan Thomson, "The Geology of the Southern Wairarapa District"; G. L. Adkin, "Further Notes on the Horowhenua Coastal Plain and the Associated Physiographic Features."

16th October, 1918: G. Uttley, "Tertiary Geology of the Waitaki Valley between Duntroon and Kurow"; W. M. Davis, "The Significant Features of Reef-bordered Coasts."

21st May, 1919: P. G. Morgan, "The Tertiary Beds of Central Otago"; P. G. Morgan, "Glentunnel Coalfield, Malvern Hills, Canterbury."

18th June: S. A. R. Mair, "Roadmaking Stones of Wellington and Taranaki."

16th July: J. Allan Thomson, "Brachiopod Genera," and "Some Conglomerates of East Marlborough."

At the meeting held on the 16th July it was resolved, That, in the opinion of the Section, the preparation of a contoured topographical map of New Zealand on as large a scale as practicable (say, 1:125,000) is now an imperative necessity, as the map is required for agricultural, geological, geographical, and other purposes.

Committee and Officers for 1920.—*Chairman*—G. H. Uttley, M.A., M.Sc., F.G.S. *Vice-Chairman*—E. K. Lomas, M.A., M.Sc. *Committee*—R. W. Holmes, I.S.O., M.Inst.C.E.; J. Henderson, M.A., D.Sc., B.Sc. in Eng. (Metall.); P. G. Morgan, M.A., F.G.S.; M. Ongley, M.A.; J. A. Thomson, M.A., D.Sc., F.G.S., F.N.Z.Inst. *Hon. Secretary*—C. A. Cotton, D.Sc., F.G.S.

HISTORICAL SECTION.

The annual meeting and six general meetings were held, when papers were read as follow:—

15th October, 1918: Elsdon Best, "Native Tradition of the Death of Marion du Fresne at Bay of Islands in 1772, First Visit of Captain Cook and De Surville in 1769, &c."; Johannes C. Andersen, "Place-names in New Zealand, with Special Reference to Banks Peninsula."

17th December: Colonel Porter, C.B., "Lesser-known Maori Customs."

20th May, 1919: Elsdon Best, "Bush Settlers of the Wellington District"; Johannes C. Andersen, "The Mission of the 'Britomart' at Akaroa in 1840."

17th June: Rev. Father Gilbert, "Survey and Plan of the New Zealand Company's First Settlement"; Dr. C. Prendergast Knight, "An Episode in the Life of Sir George Grey."

15th July: Dr. J. Allan Thomson, "On the Preservation of Records and Manuscripts, and the Inauguration of an Historical-Journal"; Colonel Porter, C.B., "Camp-fire Anecdotes of Fields, Battles, and Bivouacs"; Johannes C. Andersen, "Maori String Games."

19th August: H. G. Christie, "Old Maori Middens at Paremata, Porirua"; F. P. Wilson, "The Attitude of the British Government towards New Zealand before 1841."

21st October: H. Baillie, "Our First Navy."

Donations.—A large album of views of Wellington, dated 1885, was presented to the Section by Mr. R. W. Holmes, and nine views of old Otaki and Wellington, and of early gun-boats, by Mr. H. Baillie.

Committee and Officers for 1920.—*Chairman*—Elsdon Best, F.N.Z.Inst. *Vice-Chairman*—Colonel T. W. Porter, C.B. *Committee*—Dr. C. Prendergast Knight, F. P. Wilson, H. Baillie, W. A. Edwards, E. N. Hogben.

AUCKLAND INSTITUTE.)

At the annual meeting (23rd February, 1920) the annual report of the Council was read and adopted.

ABSTRACT.

In the fifty-second annual report of the Auckland Institute and Museum, which the Council now submits to the members, an endeavour is made to give an account of the financial and general condition of the Institute, and to briefly summarize the work it has performed during the year.

Members.—The number of new members elected since the last annual meeting has been seventeen: On the other hand, twenty-four names have been removed from the roll—seven by death, twelve by resignation or removal from the provincial district, and five for non-payment of subscription for more than two consecutive years. There is thus a net loss of seven, the number on the roll at the present time being 455.

In the list of members removed by death will be found the name of Major T. Broun, the well-known authority on the New Zealand Coleoptera. Major Broun's connection with the Institute commenced in 1875, and from then to almost the day of his death the greater part of his time was devoted to his favourite study. The results of his work have been published from time to time in the separate parts of the *Manual of the New Zealand Coleoptera*, in the *Transactions* and *Bulletins* of the New Zealand Institute, and in