

PROCEEDINGS

OF THE

Nova Scotian Institute of Natural Science.

VOL. V. PART I.

Provincial Museum, Oct. 9, 1878.

ANNIVERSARY MEETING.

WILLIAM GOSSIP, ESQ., *Vice-President, in the Chair.*

Inter alia.

The following Gentlemen were elected Office-bearers and Council for the ensuing year:—

President—WILLIAM GOSSIP.

Vice-Presidents—FREDERICK ALLISON, A. M., PROF. G. LAWSON, Ph. D. LL. D.

Treasurer—W. C. SILVER.

Secretaries—PROF. D. HONEYMAN, D. C. L., JOHN T. MELLISH, A. M.

Council—J. B. GILPIN, B. A., M. D., M. R. C. S., PROF. A. P. REID, M. D., PROF. J. SOMMERS, M. D., HON. L. G. POWER, JOHN MATTHEW JONES, M. L. S., ROBERT MORROW, AUGUSTUS ALLISON, ANDREW DEWAR.

Resolved, That the thanks of the Institute be expressed to the late President, Dr. J. B. GILPIN, for his able and efficient discharge of the duties of President, during his long tenure of office.

ORDINARY MEETING, Dalhousie College, Nov. 11, 1878.

WM. GOSSIP, ESQ., *President, in the Chair.*

The SECRETARY announced that the Council had elected as members of the Institute, COLONEL DRAYSON, R. A., LIEUT. COL. COCKBURN, R. A., LIEUT. MURRAY DUNLOP, R. A., LT. COCKERILL, R. A., and JOHN R. MCLEOD, Merchants' Bank, Halifax.

Resolved, That the thanks of the Institute be given to the Governors of Dalhousie College for the excellent accommodation afforded for the Meetings of the Institute for the present session.

Resolved, That the Institute record its expression of deep regret at the great loss that the Institute and science have sustained by the death of THOMAS BELT.

F. G. S., M. E., "The Naturalist of Nicaragua," who was one of the Founders of the Institute, an active member, and a contributor to its Transactions.

The following notice of Mr. BELT's death, appears in the Sept. 26, 1873, No. of "Nature," an illustrated Journal of Science, published in London:—

"The Scientific world will hear with regret the recent death of the well-known naturalist and geologist, Mr. Thomas Belt, F. G. S., which has just been telegraphed from Colorado. It is believed to have been caused by mountain fever. Elected a Fellow of the Geological Society in 1866, the geological world owes to him the division of the Lingula flags into Maentwrog, Pfestiniog, and Dolgelly flags, proposed in 1867. In 1874 appeared his well-known and deservedly popular "Naturalist in Nicaragua," in which he showed how his professional avocations as an engineer, had lent keenness to his observing faculties, and how an acute reasoner can utilize his observations. The work conveyed much information on protective mimicry, plant fertilisation, sexual selection, and the other collateral issues of the theory of evolution."

DR. SOMMERS gave an interesting account of Observations "On Nova Scotian Mosses." Illustrative specimens were exhibited.

DR. LAWSON directed attention to a Communication from the Rev. E. BALL, Corresponding Member of the Institute, "On Certain Nova Scotian Ferns." The Communication was illustrated by specimens of Ferns from Dr. Lawson's Herbarium.

MR. J. M. JONES gave an account of important additions made to the list of Nova Scotian Fishes, by the United States Fishery Commissioners. Mr. J. also intimated his intention to prepare a catalogue of the Fishes of Nova Scotia, as far as known, for publication in the Transactions of the present Session.

ORDINARY MEETING, DEC. 9, 1873.

The PRESIDENT *in the Chair*.

The SECRETARY announced that the Council had elected V. G. HARRIS a member, and WONG KIEN SHOON, of the Chinese Imperial Navy, on board of H. M. S. Bellerophon, an Associate Member of the Institute.

DR. HONEYMAN described and figured a new gigantic Trilobite from the Iron Mines of Clements, Annapolis County.

DR. SOMMERS read a letter from the REV. E. BALL, in reference to his observations on the varieties of *Aspidium Spinulosum*, Gray, which was communicated at a preceding meeting by DR. LAWSON.

"The Analysis of a new Mineral from Blomidon," by H. LOUIS, Assoc. R. S. M., was read by the SECRETARY.

An interesting specimen of fossiliferous sandstone was exhibited and described by the SECRETARY. The specimen was from Mira Ridge, Cape Breton. A letter was read from the Rev. Donald Sutherland, of Gabarus, describing the locality where he found the specimen.

ORDINARY MEETING, January 13, 1879.

The PRESIDENT *in the Chair*.

MR. J. M. JONES gave an interesting account of certain exotic fishes sometimes found on the Coast of Nova Scotia.

A paper "On the Geology of King's County," was read by DR. HONEYMAN.

ORDINARY MEETING, February 10, 1879.

The PRESIDENT *in the Chair*.

The SECRETARY announced that CHARLES R. F. TWINING, C. E., had been elected by the Council as a member of the Institute.

MR. EDWIN GILPIN, M. E., read a paper "On the Limonites and Limestones of Pictou County."

DR. J. B. GILPIN also read a paper "On the *Salmonidæ* of Nova Scotia." The paper was illustrated by numerous drawings and sketches.

The PRESIDENT announced the death of J. J. MACKENZIE, M. A., Ph. D., Professor of Physics in Dalhousie College, and a Member of the Institute. Dr. Mackenzie was a native of Pictou County, and studied at Dalhousie College, where he graduated as Bachelor of Arts in 1869, subsequently taking the higher degree of M. A. He afterwards proceeded to Europe, where he spent several years in studying at the Universities of Berlin, Liepzig and Paris. In Prof. Helmholtz's Physical Laboratory in Berlin, he conducted an elaborate series of investigations on the Absorption of Gases by Liquids, the results of which were published as a graduation thesis when he took the Degree of Doctor of Philosophy. His removal at an early age, when entering apparently upon a career of great public usefulness, is deplored as a great loss to Science.

ORDINARY MEETING, March 10, 1879.

The PRESIDENT *in the Chair*.

MR. HENRY LOUIS, Assoc. R. S. M., read a paper "On the Ankerite of Londonderry Mines."

The PRESIDENT communicated a paper by PRINCIPAL DAWSON, McGill College, Montreal, "On Nova Scotian Geology."

The *Communication* was the proof sheet of a reply to Dr. Honeyman's article in last year's Transactions, and intended for publication in the *Canadian Naturalist*.

ORDINARY MEETING, April 14, 1879.

The PRESIDENT *in the Chair*.

A paper "On Magnetism" was read by ANDREW DEWAR.

A paper was also read by DR. HONEYMAN, "Notes to Geological Retrospect of 1878-9."

ORDINARY MEETING, May 12, 1879.

The PRESIDENT *in the Chair*.

Before the Minutes were read the PRESIDENT referred to the loss the Institute had recently sustained by the decease of FREDERICK ALLISON, Esq., after a lingering illness,—as follows:—

"Mr. ALLISON had been a Member of the Institute for a number of years. At the time of his death he was one of its Vice-Presidents. He was a man of high character and attainments, M. A. of the University of King's, Windsor, and one of its Governors, and held the important position of Provincial Meteorolo-

gist, which he filled with honour to himself, and with entire satisfaction to the Government which appointed him to the office.

"In the Meteorological Section of the Institute he was conspicuous. He was an able successor of the late lamented Col. MYERS, to whom we were formerly much indebted for valuable services in that department of Natural Science. Our published Transactions attest the ability of both these gentlemen, and especially to that of Mr. ALLISON, who was an enthusiast in the study of the Science. The service he has rendered to Nova Scotia, and to the Dominion, by his Papers, which exhibit a continuous record for a series of years, of carefully observed atmospheric phenomena, and their influences upon the climate and vegetation of the country, cannot be too highly appreciated.

"Taken from us in the prime of life, an honorable gentleman, of unassuming demeanour, of whose friendship any one might be proud, an able advocate of science in general, and of high proficiency in a department which he had made his own, we sympathize in the sorrow of his relatives and friends in their bereavement; and lament the dispensation which has deprived us of an associate in every way worthy of our respect and esteem."

The Minutes of last Meeting were read.

The PRESIDENT directed attention to the following Communication received from the Royal Microscopical Society of London, in which it was proposed to constitute the President of the Institute, for the time being, a Fellow of the Society, and an exchange of publications was requested.

The Secretary Nova Scotian Institute.

6 Old Jewry, London, E. C.,
2nd April, 1879.

Dear Sir,

The Royal Microscopical Society have recently determined, as you will see from the enclosed report, to elect the Presidents of kindred Societies ex officio Fellows of this Society.

Your Society has been nominated under this regulation, and I shall be much obliged if you will inform me whether it will be agreeable to it to accept the nomination.

We shall be very pleased to receive your publications in exchange.

FRANK CRISP,
Secretary
Royal Microscopical Society.

The kindly intentions of the R. M. S. were acknowledged by the PRESIDENT, in a subsequent communication to the R. M. S., and the exchange of publications cordially acceded to.

A paper was read by J. T. MELLISH, A. M., "On Pisciculture."

The paper was illustrated by specimens of young salmon, hatched in the establishment at Bedford, superintended by Mr. Wilmot.

DR. SOMMERS read an interesting paper "On Microscopy."

Two excellent microscopes were used to illustrate his observations, with a good selection of objects—technical, geological and petrological.

DR. HONEYMAN exhibited geological specimens under the microscope, and DR. SOMMERS illustrated the circulation of the blood in the frog.