



41 PROCEEDINGS

AT THE

ANNUAL MEETING

OF THE

NATURAL HISTORY SOCIETY

OF

MONTREAL,

FOR THE YEAR ENDING MAY, 1869:

WITH

A LIST OF THE OFFICERS, LIFE, ORDINARY, HONORARY AND  
CORRESPONDING MEMBERS AND ASSOCIATES  
OF THE SOCIETY.

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## PROCEEDINGS.

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The annual meeting of this Society was held at its rooms on the evening of May 18th, the President, Principal Dawson, LL.D., F.R.S., &c., in the chair. Mr. J. F. Whiteaves, the Recording Secretary, read the minutes of the last annual meeting; after which the usual annual address of the President was delivered. An abstract only is given here, the entire address will be found in Vol. 4, pages 121 to 138 of the New Series of the Canadian Naturalist.

The President commenced by saying:—

The sphere of this Society, as a modest preserver and collector of local facts in Natural History, does not preclude its glancing at the more difficult and abstruse questions which agitate Naturalists elsewhere; and perhaps no place is more fitting for this than the annual address of the President. I propose, therefore, on the present occasion, to direct your attention to the present state of those exciting questions agitated in our day by Geologists, Zoologists and Botanists, as to the origin of Species and Genera, and the law of their creation.

He then proceeded to an elaborate discussion of the various theories of Derivation, more especially those promulgated by Lamarck, Darwin, Owen and Cope; and concluded as follows:

What that law will ultimately prove to be, and to what extent it may include processes of derivation, it is impossible now to say. At present we must recognize in the prevailing theories on the subject merely the natural tendency of the human mind to grasp the whole mass of the unknown under some grand general hypothesis, which, though perhaps little else than a figure of speech, satisfies for the moment. We are dealing with the origin of species precisely as the Alchemists did with Chemistry, and as the Diluvialists and Neptunists did with Geology; but the

hypotheses of to-day may be the parents of investigations which will become real science to-morrow. In the meantime it is safe to affirm that whatever amount of truth there may be in the several hypotheses which have engaged our attention, there is a creative force above and beyond them, and to the threshold of which we shall inevitably be brought after all their capabilities have been exhausted by rigid investigation of facts. It is also consolatory to know that species, in so far as the Modern period, or any one past Geological period may be concerned, are so fixed that for all practical purposes they may be regarded as unchanging. They are to us what the planets in their orbits are to the Astronomer, and speculations as to origin of species are merely our nebular hypotheses as to the possible origin of worlds and systems.

One word, in conclusion, with reference to our own work here as a Society, and as individual collectors of facts. We may not be in a position to take any leading place in the agitation of the questions to which I have referred; but we are well situated for the useful task of accumulating the necessary data for their settlement. The broad area of the American continent, the wide space occupied by its geological formations, the completeness of the series of its palæozoic rocks, the unbroken connection of its post-pliocene and modern fauna and flora, the meeting on this continent within recent times of multitudes of indigenous and exotic species of plants and animals, the existence up to our own time of feral and aboriginal conditions which are pre-historic in the Eastern continent,—these are all points of vantage on which we can seize in dealing with these questions; and if we properly inform ourselves as to what is being done elsewhere, and diligently improve our own opportunities, I see nothing to prevent us from taking the lead of those who in the Old World are pursuing such enquiries in a comparatively narrow field, and under conditions in many respects less favourable. I must insist, however, that this is not to be done by vieing with them in crude speculations and hypotheses, or in building up specious fabrics of conjecture to dazzle the popular eye, but in patient, honest, and careful accumulation of facts.

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We should also bear in mind that in the greater centres of literary and scientific life there is a strong temptation, especially on the part of ambitious men who have their own fortunes to build up, to deal in that sensation science with which the popular literature of the day is deluged. In our own comparatively obscure field there is little inducement to this or opportunity for its display, and this is so far in favour of a healthy scientific tone, which we should endeavour to preserve and cultivate. Our danger arises from being too ready to follow the extreme views put forth elsewhere, and from impatience with the slow returns for honest and careful work.

The Chairman of the Council (Dr. J. Baker Edwards, F.C.S.,) then submitted the following :—

#### REPORT OF THE COUNCIL.

Your Council, in reviewing the work of the past year, believe they may congratulate the members on the amount of progress attained.

The ordinary meetings have been fairly attended, and much interest has been evinced in the subjects brought forward; some of which have been of a highly practical and interesting social character, viz. :—

1. Oct. 26, 1868.—On some Specimens of Palæontological interest. By Principal Dawson.
  2. “ “ On the remains of Mastodon found at Dunville, Ont. By E. Billings, F.G.S.
  3. Nov. 30, 1868.—Notes on Beetles collected in the neighbourhood of Montreal. By A. S. Ritchie.
  4. Dec. 28, 1868.—On some Recent Additions to the Society's Collection of Birds. By J. F. Whiteaves.
  5. Jan. 25, 1869.—On the Prevention of Cruelty to Animals. By F. Mackenzie.
- “ “ “ (On the) Vital Statistics of 1868. By Dr. P. P. Carpenter.

6. Feb. 22, 1869.—Notes on a Cruise in the Gulf of St. Lawrence. By John Bell, M.D.
7. " " Notes on the Introduced Plants of Ontario and Quebec. By A. T. Drummond, B.A., LL.B.
8. March 29, 1869.—On the Geology and Silver Ore of Wood's Location, Thunder Bay, Lake Superior. By Thomas Macfarlane.
9. " " On the Application of Manures to Agriculture. By Dr. G. P. Girdwood.
10. " " On Easy Methods for Securing Ventilation and Drainage in Dwellings. By Dr. P. P. Carpenter.
11. April 26, 1869.—On some Rare Exotic Birds recently added to the Collection. By J. F. Whiteaves.
12. " " On Disinfectants. By Dr. J. Baker Edwards.

During the summer recess, the Society held a second field meeting at St. Ann's. Owing to unsettled weather, the party was a comparatively small one, but those who ventured were well repaid.

The excursionists were, by courtesy of the Grand Trunk authorities, conveyed by special train, which stopped first at Pointe Claire, allowing an interval, during which the party walked to the Quarries, and listened to an interesting address from Principal Dawson on the Geological features there exposed. Many fossils were obtained and the rocks closely examined.

The train then proceeded to St. Ann's, where the company separated into groups; the first, to collect fossils, under the guidance of Dr. Dawson; the second, to Fort La Berre, on the property of the Hon. J. Abbott, who gave a brief history of the old fort, and kindly entertained the party, which was conducted by Dr. Girdwood and Mr. Ritchie; and lastly, a botanical and microscopical party, in charge of Messrs. Whiteaves, McCord, and Edwards, who crossed over the river to Isle Perrot, where a large number of specimens in flower were obtained. After the return to the station, the prizes were announced as follows:

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Largest number of named species of Flowering Plants, Mrs. Dr. Girdwood.

“ “ unnamed, Miss Dawson.

Juvenile Prize for Bouquet, Miss Edwards.

The Course of Somerville Lectures was of considerable and general interest, it embraced the following subjects :

1. On Palæozoic Land Animals. By Principal Dawson, F.R.S., &c.
2. On the Chemistry of Soap-making. By J. Baker Edwards, Ph. D., F.C.S.
3. On the Zoology of the Bible. By Rev. A. DeSola, LL.D.
4. On Primæval Chemistry. By Prof. T. Sterry Hunt, LL.D., F.R.S.
5. On the Recession of Niagara Falls. By Charles Robb.
6. On the Adulteration of Food. By G. P. Girdwood, M.D., &c.

The thanks of the Council and members are due to the gentlemen who have thus volunteered their exertions on the behalf of public instruction in Science.

The *Conversazione*, held on the 18th of February, was lively and interesting, and the Council believe was very acceptable to the members generally. The President gave an interesting address on the value of Scientific Education and Schools of Science for Adults. Prof. Johnson and Dr. Smallwood exhibited and explained a variety of philosophical apparatus, kindly lent by McGill College. Dr. J. B. Edwards exhibited and floated in the Museum, Plateau's Soap Bubbles charged with gas, which Mr. Charles Baillie illuminated with the Electric Light and maintained it steadily throughout the evening. A programme of excellent music was provided by Herr Mayerhoffer and his friends, the German Choral Society. A good display of Microscopes under the charge of members of the Montreal Microscopic Club, attracted great attention in the Library, which was also adorned with some valuable works of art, arranged by Mr. J. P. Clark

On the 2nd February, an address was presented at the Court House, to the Governor General, Sir J. Young, who accepted the same with cordiality, and expressed his willingness to lend his aid to the Society, by becoming its Patron. The following day His Excellency visited the Museum, and was received by the Officers of the Society. He carefully examined the collections, and expressed his pleasure and interest therein.

We are indebted to the exertions of our esteemed Scientific Curator, Mr. Whiteaves, for very valuable additions to our Museum, partly presented and partly purchased, which will be enumerated in his report. These add greatly to the attractive character of the collection.

The membership of the Society during the year has somewhat diminished. The additions have been 14—losses 17; other sources of income are below the average; and in consideration of the loss of income by the presentation of Life membership to subscribers towards the debt, it becomes the duty of the friends of the Society to seek further additions to its ranks, and your Council would recommend an active canvass for new members and for subscribers to the *Quarterly Journal*, during the coming year. To the active officers of the Society, especially our industrious Curator, Mr. Whiteaves, our skilful bird-stuffer, Mr. Hunter, and our indefatigable Treasurer, James Ferrier, jun., Esq., the Society owes its best thanks for steady and hearty co-operation.

The Council have much pleasure in recommending to the Society that the silver Medal be presented to Dr. T. Sterry Hunt, F.R.S., for his valuable contributions to Science, in connection with the Geological Survey, and in the advancement of Chemical Geology in Canada.

The ventilation and lighting of the Lecture Room received the attention of your Council in the early part of the session, and some improvements in the admission of air were effected; it was found, however, absolutely necessary to provide means for carrying off the products of combustion, and by the kind assistance of Mr. M. H. Sanborn, the necessary amount was raised by voluntary

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contribution to complete the plan, by exchanging the open light for a Liverpool sunburner, which, being connected with a chimney, carries off all foul air, and will in future provide for the comfort and health of the audiences. One or two more improvements only require the necessary funds for their adoption, and your Council would appeal to some of the members to assist the future Council in carrying out these arrangements, viz., to provide a vestibule in the hall, and close in the lobby for a Curator's room, to fit double windows in the Lecture Room and Museum, and to colour and paint the premises.

In the Library a reading desk has been provided and the periodicals may there be found by members. The Library, however, requires urgently some clearances and additions, which duty we commend to the early attention of our successors.

During the year, the *Canadian Naturalist* has been put on a new and more popular basis, which your Council hope will make it more generally subscribed for among the members, and more acceptable to the public than heretofore. The Editing Committee has been re-organised, with a view to issue the Journal with greater regularity, and it will now appear Quarterly instead of Bi-monthly. It will contain a greater variety of matter, and be of a more popular scientific character. The Committee regret the delay in the appearance of the first number, which was partly due to the backward state of the two numbers of the last series, and partly to the printers' strike. The first number is now laid on the table and will be immediately in the hands of subscribers. Mr. Whiteaves, the Acting Editor and Recording Secretary, will be glad to receive the names of members who have not already subscribed for this Journal, and to receive communications or papers for publication therein, on subjects of natural or general science. The Society is responsible for 100 copies of the Journal which will be supplied to members at \$2 per annum.

J. B. EDWARDS, Ph. D., F.C.S.,  
Chairman of Council.

After which Mr. Whiteaves read the following

REPORT OF THE SCIENTIFIC CURATOR AND  
RECORDING SECRETARY.

During the past session, a large portion of the time has been spent in the active collection of new specimens. The additions to the Museum have been as follows:—

MAMMALIA.

Thirteen fine specimens of exotic mammals, new to the collection, have been added. These have been mounted, named, and placed temporarily in one of the large cases in the Museum. Two species have been added to our American series, a fine example each of the Water Mole (*Scalops aquaticus*), and of the Missouri pouched Rat (*Geomys bursarius*). Want of the necessary cases compels a temporary arrangement of many of the exotic mammals.

Several of the Canadian mammals are represented by very old and badly-preserved specimens, and these, as opportunity offers should be renewed.

BIRDS.

Efforts have been persistently made for some years past to make the series of Canadian birds as perfect as possible. Old specimens have been weeded out, and their places filled with fresh examples. During the past twelve months, twenty-two specimens have been added to our local collection. In the department of Foreign birds, great progress has been made. About 164 specimens have been added, all species of much interest, and some of considerable rarity. Among these latter may be noticed, three species of birds of Paradise, two species of the beautifully-coloured fruit pigeons (*Ptilinopus*), of the Indian Archipelago, Sonnerats' jungle fowl, three species of albatross, &c. The whole of the new birds have been skilfully mounted by Mr. Hunter, and are all named.

## REPTILES AND FISHES.

Thirteen species of reptiles and three of fishes have been added during the past session. The space allotted to this part of the collection is altogether insufficient to exhibit even the whole of our present series. It is for this reason that we have not done anything towards completing our series of Canadian fishes, as at present we have nowhere to put them.

There are quite a number of reptiles and fishes in alcohol, which we are unable to exhibit from want of the proper bottles, and of suitable cases. The same reason has prevented the forming of a collection of the smaller and more critical Canadian fishes.

## INVERTEBRATA.

In the kingdom mollusca rather over 100 species have been added. Large series of Canadian insects have been received from Sir W. E. Logan, Mr. Billings, Mr. Ritchie, and Mr. Barnston. Over 500 species have been added, but many of these are duplicate specimens. Finally, five species of echinodermata, two of crustaceans, three cirrhipedes, two corals, and several sponges have been received.

## GEOLOGY.

About 260 species of fossils, mostly from European formations, have been obtained. This has necessitated the re-grouping of the whole collection, which has been done, and the additions mounted, named, and incorporated with the general series. A few new minerals have also been received.

## MISCELLANEA.

Several donations have been made to the ethnological and miscellaneous collections, but none of very special interest.

## LIBRARY.

During the past year no new books have been purchased, and we still have to regret the absence of works of reference of recent date in every department of American natural history. Still, some improvements have been made in the library. By special

application to the authorities we have succeeded in getting 35 volumes of the British Museum descriptive catalogues. During my stay in England efforts were made, with much success, to complete our series of English periodicals. Several of the numbers wanting to complete our American serials have also been procured, upon application to the editors; 20 volumes of serials have been bound since the last annual meeting; a reading-desk has been placed in the library, and the table re-covered.

Since the first of January considerable time has been spent in connection with the first number of the new volume of the Society's Journal, copies of which are now laid upon the table.

The most prominent wants in the Museum are additional cases for the series of mammalia, for fishes and reptiles, and for the formation of a collection to illustrate comparative anatomy and osteology. Further, special cases, with proper bottles, are urgently required to contain the collection of specimens preserved in alcohol, only a small portion of which can now be exhibited.

The additions to the collection during the session are the most important and numerous that have been received for years; and in conclusion, it is hoped that the work done has been in a satisfactory degree conducive towards the efficient carrying out of those objects, which it is the aim of this Society to foster and cherish.

J. F. WHITEAVES, F.G.S., &c.,  
*Curator and Rec. Secretary.*

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The following financial statement was submitted by the Treasurer, James Ferrier, jr.:

DR. THE NATURAL HISTORY SOCIETY OF MONTREAL, IN ACCOUNT WITH JAMES FERRIER, JR., TREASURER. CR.

| 1868.  |           | RECAPITULATION.                           |           |
|--|-----------|---|-----------|
| To Cash paid, J. F. Whiteaves, salary.....       | \$400 00  | By Cash received, Government Grant.....   | \$750 00  |
| " " Wm. Hunter, " .....                          | 250 00    | " " Donations towards liquidation of debt | 50 00     |
| " " J. E. Pell, commission on collection.....    | 26 35     | " " " Glass Cases .....                   | 50 00     |
| " " Interest.....                                | 120 00    | " " Members' yearly subscriptions .....   | 552 00    |
| " " for Wood and Coal.....                       | 163 25    | " " Museum entrance fees.....             | 38 00     |
| " " Gas bills.....                               | 71 40     | " " Rent of Lecture Room, &c.....         | 55 00     |
| " " Water " .....                                | 40 60     | " " Sale of Old Cases .....               | 8 00      |
| " " City Assessments.....                        | 45 40     | " " Excursion tickets sold.....           | 56 50     |
| " " Insurance .....                              | 39 00     | " " Proceeds of Conversazione.....        | 9 57      |
| " " Repairs, and petty expenses.....             | 119 85    |   |           |
| " " Books, Printing, and Advertising .....       | 124 54    |   |           |
| " " Fixtures.....                                | 171 76    |   |           |
| " " Specimens .....                              | 90 53     |   |           |
| 1869.  |           |   |           |
| " " Excursion .....                              | 64 99     |   |           |
| May 1st, 1869.—Balance in Treasurer's hands..... | 60 99     |   |           |
| Montreal, May 1st, 1869.                         | \$1788 66 |   | \$1788 66 |

(Signed,) J. FERRIER, Jun., Treasurer.

(Signed,) E. & O. E.

STATEMENT OF LIABILITIES, MAY 1st, 1869.  
 Mortgage on Society's Building, favour Royal Insurance Co..... \$2000 00  
 Dawson Bros.' account..... 128 75  
 Total..... \$2128 75 18 May, 1869.

We, the undersigned, have examined the vouchers and compared them with the entries, and find them correct.  
 (Signed,) G. L. MARLER.  
 (Signed,) ALEX. S. RITCHIE.

It was moved by W. Muir, seconded by L. A. H. Latour, and carried unanimously,

That the reports just submitted be accepted, printed, and distributed to the members.

On motion of Dr. Edwards, seconded by Dr. Smallwood, it was resolved:

"That the silver medal of the Society be voted to Dr. T. Sterry Hunt, F. R. S., to mark its appreciation of the value of his scientific labours, more especially in the department of Chemical Geology."

A vote of thanks to the President for his able and interesting address, having been moved by John Leeming, and seconded by Dr. Smallwood, was carried with acclamation.

The following resolution was also carried, having been moved by John Leeming, seconded by J. H. Joseph:

"That the thanks of the Society be voted to the officers for the past session, particularly to the Scientific Curator."

The following officers were then elected, Messrs. A. T. Drummond and Dr. John Bell acting as scrutineers:—

#### OFFICERS FOR 1869-70.

*President.*—Sir W. E. Logan, LL.D., F.R.S., &c.

*Vice-Presidents.*—Rev. Dr. De Sola: C. Smallwood, M.D., LL.D., D.C.L.; Principal Dawson, LL.D., F.R.S.; Dr. T. Sterry Hunt, F.R.S.; Dr. P. P. Carpenter; E. Billings, F.G.S.; John Leeming; G. Barnston; C. Robb.

*Treasurer.*—James Ferrier, Jun.

*Corresponding Secretary.*—Prof. P. J. Darey, M.A., B.C.L.

*Curator and Recording Secretary.*—J. F. Whiteaves, F.G.S., &c.

*Librarian.*—A. T. Drummond, B.A., LL.B.

*Council.*—Dr. J. Baker Edwards, F.C.S.; A. S. Ritchie; D. A. P. Watt; D. R. McCord, M.A., B.C.L.; C. Baillie; G. L. Marler; J. H. Joseph; M. H. Sanborn; Dr. E. H. Trenholme.

*Editing Committee of the "Canadian Naturalist."*—General Editor, J. F. Whiteaves; Dr. J. B. Edwards (Chairman);

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Principal Dawson; Dr. T. Sterry Hunt; Dr. Smallwood; E. Billings; Dr. Carpenter; D. A. P. Watt; A. S. Ritchie.

*Library and Membership Committee.*—E. E. Shelton; R. McLachlan; R. J. Fowler; Dr. John Bell; D. A. P. Watt; and M. H. Sanborn.

DONATIONS TO THE MUSEUM.

Session 1868-69.

| DONORS' NAMES.   | DONATIONS.  |
|--|---|
| Captain Bulger .....   | 11 specimens of S. American Birds.  |
| Thos. Morland, Esq. ....   | Fine specimen of the Canadian Salmon.   |
| Dr. G. P. Girdwood.....  | Head of a large Maskinonge. ( <i>Esox Estor.</i> )                                    |
| Rev. R. Ferrier.....   | A lamprey. ( <i>Petromyzon Americanus.</i> )  |
| Mr. W. Hunter.....   | Marsh harrier. ( <i>Circus Hudsonicus.</i> )  |
|  | Red headed Woodpecker. ( <i>Melanerpes erythrocephalus.</i> )                         |
|  | Cat-bird. ( <i>Mimus Carolinensis.</i> )  |
|  | Pair of the American redstart. ( <i>Setophaga ruticilla.</i> )                        |
|  | Chipping Sparrow. ( <i>Spizella socialis.</i> )                                       |
|  | Pair of the Purple Grackle. ( <i>Quiscalus versicolor.</i> )                          |
|  | Red Crossbill. ( <i>Curvirostra Americana.</i> )                                      |
|  | Golden Plover. ( <i>Charadrius Virginicus.</i> )                                      |
|  | Sanderling. ( <i>Calidris arenaria.</i> )   |
|  | Kittiwake Gull. ( <i>Rissa tridactyla.</i> )  |
|  | Bonaparte's Gull. ( <i>Chroicocephalus Philadelphia.</i> )                            |
|  | Short-tailed Tern. ( <i>Hydrochelidon plumbea.</i> )                                  |
|  | Wilson's Tern. ( <i>Sterna Wilsoni.</i> )   |
|  | Pair of English Sparrows. ( <i>Passer domesticus.</i> )                               |
|  | Specimen of the Missouri Pouched Rat. ( <i>Geomys bursarius.</i> )                    |
| G. Barnston, Esq.....  | Specimen of the "resurrection plant" ( <i>Lycopodium lepidophyllum</i> ) from Mexico. |
| Y. J. Gambly, Esq., (California).....                            | Sprig of the tamarind tree planted by Capt. Cooke in Tahiti.                          |
|  | Silver ore from the "Yellow Jacket" Mine, Nevada.                                     |
|  | Do. from the "Morning Star" Mine, Alpine County, California.                          |
|  | Native Silver from the "Gould & Curry" Mine, Virginia city, Nevada.                   |
|  | Gold Ore from Montana, U.S.   |
|  | 2 Poisoned Arrows used by the Shoshone Indians.                                       |
| From the Proprietors of the Capel Mine. Lennoxville, Quebec..... | "Undressed" specimen of Copper ore, containing 10-15 per cent of the metal.           |
|  | A sample rather above the average.  |
|  | One "dressed" specimen of the ore, containing 8-9 per cent of copper.                 |

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Jas. Hu

Mrs. G.  
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## DONATIONS TO THE MUSEUM.

| DONORS' NAMES.   | DONATIONS.  |
|--|---|
| From the Proprietors of }<br>the Capel Mine, Len- }<br>noxville, Quebec..... } | Specimens of roasted ore.<br>"Regulus" or matter containing 40 per cent<br>of ore, as it comes from the furnace,<br>Slag, which contains less than 5-10 per cent<br>of copper, and about 28 per cent of<br>metallic iron. |
| Jas. Hutchison, Esq.....   | Specimen of the Black Hawk. ( <i>Archibuteo<br/>Sancti Johannis.</i> )  |
| Mrs. G. P. Girdwood.....   | Male long-tailed Duck. ( <i>Harelda glacialis.</i> )  |
| Jno. Swanston, Esq.....  | Indian bag from the North-West Territory.   |
| G. Barnston, Esq.....  | 28 specimens of Coleoptera (beetles) from<br>the Mackenzie River.   |
| A. S. Ritchie, Esq.....  | A named series of Canadian coleoptera,<br>comprising 73 specimens of 54 species.  |
| E. Billings, Esq., F.G.S....   | Fine named collection of Canadian coleop-<br>tera, containing 733 specimens of 475<br>species.  |
| Natural History Society }<br>(St. John, N.B.)..... }                           | A collection of Devonian plants (35 speci-<br>mens of 22 species) from the "Fern<br>ledges" near St. John, N.B.; collected by<br>Prof. C. F. Hartt.   |
| Jas. Ferrier, Esq., jr.....  | Specimen of the siliceous sponge, known as<br>"Venus' flower basket" ( <i>Euplectella as-<br/>pergillum</i> ), from the Philippine Islands.   |
| Principal Dawson, LL.D.,<br>F.R.S., &c.....                                    | Plaster models of 5 Indian pipes from the<br>supposed site of the ancient Indian village<br>of Hochelaga.   |
| Sir W. E. Logan, LL.D.,<br>F.R.S., &c.....                                     | 1238 specimens of 378 species of Canadian<br>insects, and a small series of fresh water<br>shells.  |
| Jas. Ferrier, Esq., jr.....  | Pair of Barrow's Golden Eye. ( <i>Bucephala<br/>Islandica.</i> )  |
|  | Female of the Common Golden Eye. ( <i>Bucc-<br/>phala Americana.</i> )  |
| W. Carruthers, Esq. (of }<br>the British Museum).. }                           | A series of 25 named specimens of Grapto-<br>lites from the Moffat shales.  |
| A. Bell, Esq. (London, }<br>England)..... }                                    | Two molars of <i>Elephas primigenius</i> , 59<br>species of European fossils, and 70 species<br>of exotic shells.   |
| Bryce M. Wright, Esq. }<br>(London, England)... }                              | 150 species of European fossils.<br>4 rare minerals.<br>5 species of Echinodermata.<br>4 " " Crustacea.<br>2 " " Corals.  |
| F. A. B. Vinen, Esq. }<br>(London, England)... }                               | 7 skins of Jamaican birds.<br>Specimen of the inner bark of the "Silk<br>Cotton" tree ( <i>Eriodendron anfractuosum</i> )<br>and four species of seeds, all from Jamaica.   |
| J. F. Whiteaves, Esq....   | 35 specimens of rare exotic birds.  |

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| Liverpool Free Museum, }<br>per T. J. Moore, Esq.... } | Wandering Albatross.<br>Black eyebrowed Albatross.<br>Sooty " "<br>Great Grey Petrel. ( <i>Procellaria hæsitata</i> .)<br>Two horned Chameleons from Fernando Po.<br>2 Tapayaxins or horned Frogs, from Mexico.<br>1 Loggerhead Turtle.<br>4 species of exotic lizards and 4 of East Indian Snakes.   |
| Jno. Turk Lacey, Esq.....                              | A Russian soldier's sword, from Sebastopol.   |
| Miss Thompson.....                                     | 4 Humming birds.  |
| The St. George's Society, }                            | Japanese handkerchief case.   |
| per Mrs. Simpson..... }                                | Jackal. ( <i>Canis aureus</i> .)  |
| By purchase.....                                       | Tasmanian bush Kangaroo. ( <i>Halmaturus Bennettii</i> .)   |
|  | Watermole. ( <i>Scalops aquaticus</i> .)  |
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|  | 4 species of Parrots.   |
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June 2

July 30

May 20

Jan. 27

April 25

Aug. 30

Sept. 8,

*Honorary Members.*

| DATE OF ELECTION. |   |                                      |
|-------------------|---|--------------------------------------|
| May 29, '50       | A. M. McWhinnie.....  | London, England.                     |
| Nov. 29, '52      | General G. Lefroy, F.R.S.....                                       | Royal Arsenal, Woolwich,<br>England. |
|                   | Aimé Bouchard, M.C.....   | Academie des Sciences,<br>Paris.     |
|                   | Milne Edwards, M.D.....   | " " " "                              |
| Feb. 28, '53      | Professor Joseph Henry, Secretary of the Smithsonian Institute..... | Washington.                          |
| March 28, '53     | Dr. Rae.....  |                                      |
| Jan. 5, '54       | O'Bryan Bellingham, M.D.....  | Dublin.                              |
| May 19, '56       | C. Smallwood, M.D., L.L.D., D.C.L.....                              | Montreal.                            |
| Sept. 29, '56     | Professor James Hall.....   | Albany, N. Y.                        |
|                   | Professor Dunglison.....  | Philadelphia.                        |
| Oct. 26, '56      | Professor Agassiz.....  | Cambridge, Mass.                     |

*Corresponding Members.*

| DATE OF ELECTION. |   |                               |
|-------------------|---|-------------------------------|
| Aug. 26, '37      | Dr. Sabourin.....   | United States.                |
| Sept. 29, '45     | Major Kendall.....  |                               |
| June 26, '46      | Dr. W. Newcomb.....   | Troy, N. Y.                   |
| June 25, '47      | J. W. Leaycraft.....  | Quebec.                       |
| Nov. 20, '47      | Henry Holmes Croft, Professor of Chemistry, University College..... | Toronto.                      |
| April 24, '48     | Major Lachlan.....  | Cincinnati.                   |
| June 25, '49      | Dr. John Hillier Blount.....  | Birmingham, England.          |
| July 30, '49      | Jean Charles Taché.....   | Quebec.                       |
|                   | Charles Payn, M.D.....  | United States.                |
| May 20, '50       | T. McDonald.....  | Jamaica.                      |
| Jan. 27, '51      | Cecil Percival Stone.....   |                               |
| April 25, '52     | Samuel Kneeland, M.D.....   | Boston, Mass.                 |
| Aug. 30, '52      | Dr. Robert M. Huston.....   | Philadelphia, Penn.           |
|                   | William Rogerson.....   | Royal Observatory, Greenwich. |
|                   | William Andrews.....  | Quebec.                       |
|                   | J. Adolphus Thurberg.....   | Louisiana.                    |
| Sept. 8, '52      | M. C. Brodie.....   | Béauharnois.                  |
|                   | E. A. H. Allen.....   | Troy, N. Y.                   |

## DATE OF ELECTION.

|                   |                                  |                            |
|-------------------|----------------------------------|----------------------------|
| Oct. 25, '52....  | Wm. Goodenough Wheeler, M.D....  | Chelsea, Mass.             |
|                   | Rev. William Scott.....          | Sherbrooke, C. E.          |
| Nov. 29, '52....  | B. P. Johnson, Secretary, Agri-  |                            |
|                   | cultural Society.....            | New York.                  |
|                   | Samuel Walker.....               | Roxbury, Mass.             |
|                   | Sir John P. Boileau, Bart.,      |                            |
|                   | F.R.S.....                       | London.                    |
|                   | John L. LeConte, M.D. ....       | Philadelphia.              |
|                   | J. Eliot Cabot, Cor. Sec. of the |                            |
|                   | Boston Society of Natural His-   |                            |
|                   | tory.....                        | Boston, Mass.              |
|                   | John Gundlach, M.D.....          | Cardenas, Cuba.            |
|                   | Prof. W. Buckland.....           | Toronto.                   |
| Feb. 28, '53....  | Dr. Charles Huguet Latour.....   | St. Rémi.                  |
|                   | Dr. J. W. Salisbury.....         | Albany.                    |
|                   | George Webber Breton.....        | Paris.                     |
|                   | George Gephson Rumley.....       | Dublin.                    |
|                   | Archibald Cameron.....           | Pointe du Chêne.           |
| March 28, '53.... | Hon. Jos. Cauchon, M.P.P.....    | Quebec.                    |
|                   | Benjamin Franklin Niles.....     | Washington, D. C.          |
|                   | Francis Markoe, jr.....          | Washington, D. C.          |
|                   | Samuel Dutton.....               | Guernsey.                  |
|                   | H. Thieleke.....                 | Quebec.                    |
|                   | François Xavier Garneau.....     | Quebec.                    |
|                   | Chas. Laberge, Esq.....          | St. Johns, P. Q.           |
|                   | Rev. F. Pilote, College of Ste.  |                            |
|                   | Anne de la Pocatière.....        |                            |
|                   | Dr. Théop. Huguet Latour.....    | Boucherville.              |
| April 27, '53.... | Vertue Edwards.....              | London, England.           |
|                   | Pierre Martial Bardy, M.D.....   | Quebec.                    |
|                   | Thomas Wakley, jr.....           | London.                    |
|                   | William Bell.....                | London.                    |
|                   | Philip Claiborne Gooch, M.D..... | Richmond, Va.              |
|                   | Col. Campbell, C.B.....          | St. Hilaire.               |
|                   | Eben. Wight, M.D.....            | Boston, Mass.              |
|                   | Alexander Murray.....            | Woodstock, C. W.           |
| July 26, '53....  | George G. Francis.....           | Swansea, England.          |
|                   | Geo. Prev. de Boucherville.....  | St. Hyacinthe.             |
|                   | Rev. G. Langevin.....            | Quebec.                    |
|                   | Albert Baker, M.D.....           | Stancross, Devon, England. |
|                   | John Gilson.....                 | Rome, Italy.               |
| Nov. 28, '53....  | Casimir Dessaulles.....          | St. Hyacinthe.             |
|                   | Hamilton D. Jessup, M.D.....     | Prescott.                  |
| Nov. 29, '53....  | M. Turcot, M.D.....              | St. Hyacinthe.             |

## DATE OF ELECTION.

|                   |                                    |   |
|-------------------|------------------------------------|---|
| Nov. 29, '53...   | Rev. M. Lavallée.....              | St. Vincent de Paul.                                |
| April 24, '54.... | Rev. Michael Ashton.....           | Adelaide, Australia.                                |
| June 30, '54....  | Rev. M. A. Trudeau.....            | Buffalo, N. Y.                                      |
|                   | Edward Crisp, M.D.....             | London.   |
|                   | Edward L. Ormerod, M.B.....        | Brighton.   |
|                   | James Spence.....                  | Pointe Claire.                                      |
| Oct. 30, '54....  | Rev. Louis Ed. Bois.....           | Maskinongé.   |
|                   | Dr. Amédée Weilbraim.....          | Tournay, Belgium.                                   |
| Jan. 29, '55....  | Sir James Ed. Alexander.....       |   |
| June 25, '55....  | General Rowan.....                 |   |
|                   | Dr. Litchfield.....                | Kingston.   |
| Oct. 29, '55....  | William Couper.....                | Ottawa.   |
| March 31, '56.... | Sir G. E. Cartier, M.P., Bart..... |   |
|                   | A. Brunel.....                     | Toronto.  |
|                   | Rev. W. Brethour, M.A.....         | Ormsdown.   |
| April 28, '56.... | Hon. Judge Sicotte.....            | St. Hyacinthe.                                      |
| May 19, '56....   | Asst. Com. Gen. Ibbotson.....      |   |
| Jan. 28, '56....  | P. L. McDougall, Advocate.....     | Toronto.  |
|                   | J. C. Lee, M.D.....                | London, C. W.                                       |
|                   | Prof. P. J. Heyfelder.....         | Finland.  |
| Dec. 29, '56....  | H. P. Gosselin.....                | Clarendon.  |
|                   | Alex. Copeland.....                | Hinchinbrooke.                                      |
| Feb. 25, '57....  | Prof. O. P. Hubbard, M.D., Dart-   |   |
|                   | mouth College.....                 | Hanover, N. H.                                      |
|                   | Rev. A. J. Tellier, President St.  |   |
|                   | John's College, N. Y.....          | Fordham.  |
|                   | R. L. Pell.....                    | New York.   |
| April 27, '57.... | Jules Flavien Gingras.....         | Quebec.   |
| July 27, '57....  | Count Motschulsky.....             | St. Petersburg.                                     |
| April 27, '57.... | Rev. M. Curtis, D.D.....           | Hillsborough, U. S.                                 |
|                   | W. S. Sullivan.....                | Columbus, Ohio.                                     |
|                   | S. Durkee, M.D.....                | Boston, Mass.                                       |
| May —, '60....    | Rev. Louis Wurtele.....            | Actonvale.  |
| July —, '60....   | M. J. Mitcheson.....               | Philadelphia.                                       |
| Oct. —, '60....   | Henry Poole.....                   | Halifax, N. S.                                      |
|                   | Rev. D. Honeyman, F.G.S.....       | Antigonish, N. S.                                   |
|                   | Ed. Bowen, M.D.....                | Brantford.  |
| Nov. —, '60....   | Barnard R. Ross.....               | Ft. Simpson, Rupert's Land.                         |
| Jan. —, '62....   | Thos. Macfarlane.....              | Actonvale.  |
| June 30, '62....  | Professor Baird.....               | Smithson'n Inst., Wash'gton                         |
|                   | W. Stimpson, M.D.....              | “ “ “   |
|                   | Rev. A. Forrester, D.D.....        | Principal of Normal Schools,<br>Truro, Nova Scotia. |
| Sept. 29, '62.... | Dr. Lowe, F.R.S., &c.....          | Brighton, England.                                  |

## DATE OF ELECTION.

|               |                                    |                      |
|---------------|------------------------------------|----------------------|
| Nov. 24, '62  | S. H. Parkes                       | Birmingham, England. |
| March 30, '63 | Hugh E. Montgomerie                | London, England.     |
|               | Prof. J. W. Bailey                 | Fredericton, N.B.    |
|               | N. W. Bethune                      | Ottawa, C. W.        |
| Oct. 26, '63  | W. Saunders                        | London, C. W.        |
|               | A. S. Packard                      | Brunswick, Me.       |
|               | H. Rose                            | Granby, C. E.        |
|               | G. F. Matthew                      | St. John, N. B.      |
| Oct. 26, '63  | Professor How                      | Nova Scotia.         |
| Nov. 30, '63  | John Brown                         | Hamilton, C. W.      |
| Sept. 26, '64 | Prof. R. Bell, F.G.S.              | Kingston, C. W.      |
| Oct. 24, '63  | Rev. R. McDonald                   |                      |
|               | Professor H. Y. Hind               | Windsor, N. S.       |
| Nov. 28, '64  | Captain Rooke, S.F.                |                      |
| March 27, '65 | Captain P. G. Fortin               | Laprairie.           |
| Nov. 29, '65  | Professor Westwood                 | Oxford, England.     |
|               | Professor Daniel Wilson            | Toronto.             |
|               | G. F. Angas, Esq., F.Z.S., &c.     | London, England.     |
| Jan. 29, '66  | Alexander Agassiz                  | Cambridge, Mass.     |
| March 26, '66 | Rev. T. Robinson                   | Abbotsford.          |
| Feb. 25, '67  | H. Woodward, Esq.                  | British Museum.      |
|               | Bryce M. Wright, Esq.              | London, England.     |
|               | Thos. J. Moore, Esq.               | Liverpool, England.  |
| Nov. 25, '67  | Sanford Fleming, Esq.              | Halifax, Ont.        |
| Feb. 24, '68  | John Macoun, Esq.                  | Belleville, Ont.     |
| Oct. 26, '68  | Bt. Maj. G. E. Bulger, F.L.S., &c. | India.               |
| March 29, '69 | Cyril Graham, Esq.                 | London, England.     |



