

ANNUAL REPORT

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OF THE

NATURAL HISTORY SOCIETY

OF

MONTREAL,

FOR THE YEAR ENDING MAY, 1863:

WITH

List of the Officers, Life, Honorary, Corresponding, and Ordinary Members of the Society.

MONTREAL:

PRINTED BY JOHN LOVELL, ST. NICHOLAS STREET.

1863.

ANNUAL REPORT

NATIONAL HISTORY SOCIETY

MONTREAL

FOR THE YEAR ENDING MAY 1901

MONTREAL

PRINTED BY JOHN FORTIN, 21, RUE D'ARCADE

1901

## REPORT.

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The annual meeting of this Society was held in their rooms on the evening of May 18th, Principal Dawson, one of the Vice-Presidents, in the chair. A large number of the members were present. Mr. J. F. Whiteaves, the Scientific Curator, on behalf of the recording secretary, Mr. John Leeming, read the minutes of the last annual meeting; after which the usual annual address of the presiding officer was read, as follows:—

### THE PRESIDENT'S ADDRESS.

GENTLEMEN—I could have wished that the duty of preparing the annual address of the President had, on the present occasion, fallen on some other person, as I fear that the pressure of various official duties has scarcely left me time to do justice either to myself, or to the work of the Society—still less to enter on that wider survey of the progress of Natural Science to which we are invited on an occasion of this kind.

I find that, in the past winter, twenty-six original papers have been read at the meetings of the Society, in addition to a number of articles and reviews contributed by our members, and published in the *Naturalist*, without being formally read here. I shall not give a list of these papers, but shall endeavour to group them according to the subjects to which they relate, and to give in this way a general sketch, first of the amount of original scientific research represented by these papers; and secondly, of their bearing on the arts of life, and on the material improvement of this country.

To begin with Geology, which in our day sits justly enthroned as queen of all the natural history sciences, and with Canadian Geology which most nearly concerns us, we have had several elaborate papers on those ancient, disturbed, disputed, and until lately problematical rocks on which the oldest capital of Canada

stands, and which are consequently known to our survey as the "Quebec group." To the common eye, the ancient citadel of Quebec has been standing impregnable and secure, but in the minds of geologists it has been floating like a mirage, now here and now there, until many men have been at a loss in what terms to express their idea of its geological place. The officers of our survey have addressed themselves with much zeal and success to this formation, and deserve great credit, first for frankly giving up incorrect views previously maintained; and secondly, for establishing the true geological position of these difficult rocks on a sure basis. Mr. Billings has in the past year furnished us with an interesting view of the parallelism of these beds with the Llandeilo of England. Sir Wm. E. Logan has introduced to us a new and useful laborer on these fossils, Mr. Devine, of Quebec, and will himself publish in the next number of our proceedings an elaborate survey of the stratigraphical arrangement of the beds at Point Lévi. In the geology and mineralogy of the metalliferous deposits of this group, as they exist at the celebrated copper mine of Acton, Mr. MacFarlane's paper is a great step in advance, more especially in the large number of facts which he chronicles, and which, but for his careful collection of them in the progress of the workings, would have been forever lost.

Making a sudden leap from these ancient rocks to the most modern formations, our proceedings show several valuable contributions to the geology of the post-pliocene deposits. In this field, Mr. Billings' paper on the remains of fossil elephants found in Canada is of especial value, as for the first time giving accurate descriptions and figures of these remains, and identifying our species with that known to American naturalists as *Elephas Jacksoni*. In this paper, Mr. Billings has worthily followed up, with reference to the extinct elephantine animals of Canada, the able investigations of Dr. Falconer on the general distribution of these animals. The society has also received valuable contributions in the field of Canadian post-tertiary geology from Mr. Robb, Mr. Bell, and Mr. Whiteaves. We have not yet succeeded in Canada in tracing man back to the post-pliocene period, as is claimed to have been done in Europe; but, as I have pointed out in papers on this sub-

ject, read before the society on former occasions, the researches in the superficial geology of Canada, will have important bearings on many disputed questions as to the distribution and supposed changes of plants and animals which have survived from the post-pliocene to the modern period.

On points of the geology of the United States connected with Canadian geology, we have had important contributions from Prof. Hall and Col. Jewett. The paper of the late lamented Moses Perley on Newfoundland, presents a valuable picture of the geology and topography of that island; and the paper of Mr. Matthews on the geology of St. Johns, New Brunswick, is an excellent piece of stratigraphical geology, bearing on the solution of some most important and difficult questions. In this connection I shall take the liberty to apologise for the great length to which my own papers on the Reptiles of the coal period have extended, and to mention the ray of light which the footprints of the modern King-crab have enabled me to throw on the *Protichnites* of the Potsdam sandstone.

In chemical and economical geology, I need merely mention the profound generalisations of Dr. Hunt in his paper on the chemistry of the earth; the practical information contained in the same author's paper on the gold-fields of Canada, and in that by Mr. MacFarlane on the extraction of cobalt from Canadian ores.

In zoology and botany, our work has perhaps been less extensive and important than in geology. In these fields, however, we may mention Dr. Lawson's paper on *Aphis avenae*; Mr. Couper's on *Saperda Candida*; Mr. Scudder's on the *Orthoptera* of the northwest territory; Dr. Cobbold on a Canadian *Tœnia*; Mr. Billings on *Monohammus*; Mr. Whiteaves on the land and fresh water shells of Canada; Prof. Bailey on the *Diatoms* of the St. John River; Mr. Barnston on the Otters of America; and the completion of Dr. Hall's elaborate paper on the mammalia and birds of Montreal.

All of these papers contain important new facts in natural history. One of them, that of Mr. Whiteaves, nearly exhausts the subject to which it refers, in so far as present material is con-

cerned; others add new species to the Canadian fauna; and several are of great practical value.

In their purely scientific aspect, the pursuits of the *Naturalist* should be highly esteemed, as widening our views of nature, enlarging our minds, and elevating the reputation of our country. They are, however, also of utility to the country in their economical applications. To this I would especially advert, in connection with our proceedings, as establishing a valid claim to consideration on the part of the public, independently of our merely scientific discoveries, or of the pleasure to be derived from our collections and lectures.

In 1862, Mr. Macfarlane of Acton gave us the results of experiments on certain varieties of iron pyrites occurring near Brockville, from which he showed that cobalt and sulphuric acid could be obtained in remunerative quantities. These experiments seem to have led him to further studies of the reactions of sulphuret of iron and common salt; and the result has been another paper, detailing a new mode of obtaining chlorine and soda, which has been patented in England, and promises to effect a revolution in the manufacture of these important substances, and to cheapen and render more accessible some of the most useful agents in the promotion of comfort, cleanliness and health.

A little striped beetle, *Saperda Candida*, burrows when in its larval condition in our apple trees, and soon blasts the results of much expenditure, and of years of labour. Mr. Couper of Quebec has shown us how the entomologist, by careful study of this creature's habits, can counteract its operations, and enable us to enjoy some degree of immunity from its ravages. Mr. Billings has explained to us the habits of another insect destroyer, of the genus *Monohammus*, which it seems can devour in a single season and on a single property, pine timber to the value of £10,000. Dr. Lawson has laid before us the habits of the curious little *Aphis*, which sometimes swarms in our grain fields; and has to some extent vindicated it from the charges brought against it, and which more properly lie at the door of the wheat midge. I have myself only been prevented by lack of time from bringing

under your notice some sketches of the habits of the Army-worm, and of some other of the more common insect pests, and may commend the subject to other observers as a most promising and valuable field of labor.

A committee of our society has been engaged in promoting measures for the more effectual protection of the smaller insectivorous birds, to which has been assigned by Providence the function of protecting us against insect ravages, and which, as a part of the unpaid police of nature, as well as for their beauty and their song, should be cherished and guarded from harm in every country truly civilized.

Another Committee has been engaged in the investigation of the causes of the decay of the apple orchards, for which the island of Montreal was once celebrated. Among the principal results of this inquiry, in addition to points well known to gardeners, may be mentioned the following:—(1) That old varieties of trees necessarily become delicate and unproductive, and should be replaced by new and hardy seedling varieties. (2.) That efforts should be made to supply to the soil the mineral matters required to constitute the tissues of healthy wood, and which in the process of culture become exhausted. (3.) That the habits of injurious insects, fungi, &c., should be carefully studied, and that the birds frequenting orchards should be more effectually protected.

Other kinds of trees have also attracted our attention, and among these the vine, which, notwithstanding the great success of its culture in vineries, and the zealous efforts of M. DeCourtenay, is not yet extensively cultivated in the open air. Observation and experience have convinced me that wherever, even in Lower Canada, there are gravelly or light soils, or stony hill-sides, with good exposure, some of the varieties of our native grapes could be ripened abundantly. Independently altogether of the manufacture of wine, the introduction of the grape as an article of food of a peculiarly agreeable and healthful quality, is well deserving of effort.

At some of our meetings discussions have arisen respecting

the use of Canadian fibres in the manufacture of fabrics and of paper. It would seem that the fibres of the stem and the silky coma of the seed of our common milk-weed, might be made available in this way, and that the culture of the plant might be profitably undertaken. A more important subject, perhaps, is the culture of silk. Efforts are now being made by the Botanical Society of Kingston, to introduce into this country from China, a species of silk-worm, *Bombyx Cynthia*, said to be hardy, and which feeds on the leaves of *Ailanthus glandulosa*, a well-known ornamental plant, rather tender for this climate, but still capable of cultivation here. Dr. Lawson has kindly sent me a few of the cocoons, from which it is hoped that a small colony of the animals may be reared, as Mr. Sheppard of this city possesses a little plantation of the *Ailanthus*. Dr. Lawson has also furnished for publication a valuable paper on the subject, by Mr. Patterson of Leith. It appears to me, however, that the silk of some of our native moths might be rendered more available than that of any foreign species. The ubiquitous moths of the genus *Clisiocampa*, which devastate our forests and orchards, produce delicate silken cocoons, tons of which go to waste annually, and the amount could no doubt be greatly increased by the artificial culture of the animal. A still more abundant source of silk would be the cocoons of the great emperor moths of the genus *Attacus*, some of which, and especially the *A. cecropia*, yield cocoons superior to those of many of the species cultivated in China and India. Harris, in his "Insects of Massachusetts," states that the silk of this moth is very strong and quite available for manufacture. The writer of an excellent article on this subject in the Journal of the Board of Arts and Manufactures for Upper Canada, adduces additional facts as to the easy breeding and culture of the moth. An esteemed correspondent and good entomologist, Dr. Morris of Baltimore, has naturalized there the *Ailanthus* moth, and is now engaged in experiments on the culture of the American species. There seems no reason why these creatures, instead of reducing our forests and orchards to nakedness, might not be employed in clothing the daughters of Canada

with fabrics equal to those of China and India, and in adding silk to our articles of export. In effecting this result, the naturalists must, in the first instance at least, take the lead.

An important part of the work of this society is that of popularizing natural science, in such a way that its results may be extensively known, and that new votaries may be attracted to its study. This end we seek to attain by our popular course of Somerville lectures, free to the public, and by throwing our museum open on easy terms. I should especially mention in this connection, the engagement of our scientific Curator, Mr. Whiteaves, under whose care large portions of our collections are being arranged in such a manner as to give education in natural history to any ordinary observer, and to aid the labours of the scientific student.

We are also reminded, in glancing at the proceedings of the past year, that we do not now labour alone. On one side, the Canadian Institute of Toronto, and on the other the Literary and Historical Society of Quebec are pursuing similar paths. The young but vigorous Botanical Society of Canada, established at Kingston, has availed itself of our journal for the publication of some of its papers and proceedings. The Natural History Society of New Brunswick has in like manner contributed some important memoirs for publication. The Literary and Scientific Society of Nova Scotia has sent us its constitution and regulations. Our proceedings have been enriched by valuable contributions from Rupert's Land, and there is now a natural history society in that region. Mr. Bethune has given us a catalogue of Canadian entomologists, and this has been followed by the organization in Toronto of an Entomological society. We have also to express our thanks to many individual contributors and correspondents in various parts of British America, and to many scientific institutions and associations abroad, which have in various ways recognized our humble labors. More especially in this regard should we state our obligations to the Smithsonian Institution of Washington for its frequent kindly offices. The society has further to congratulate itself that its relations with its two nearest neighbors—the Geo-

logical Survey of Canada and the McGill University—are at once intimate and mutually advantageous. The officers of the survey are among our most valued members, while through us they are sometimes enabled more readily to bring under the public notice important facts or discoveries. The prosperity of this society is an important stimulus to the study of natural science in the university; and, on the other hand, the graduates who are constantly going forth with a knowledge of the elements of natural science, and some degree of taste for its cultivation, must materially strengthen the society.

The Council will report to the Society a regulation for the disposal annually of a silver or bronze medal to some gentleman distinguished for important services to science, and especially to science in Canada. I have further very much pleasure in stating that it is proposed that the first silver medal granted under this regulation shall be bestowed on Daniel Wilson, LL.D., of University College, Toronto. Dr. Wilson came to Canada with a high reputation, earned in the study of British archæology; and in this country he has pursued with much energy and success researches in the ethnology and antiquities of America, the results of which have appeared in many papers, published here and abroad, and more recently in his valuable work "Pre-historic Man." It is one of the most pleasant features connected with the institution of these medals, that they will thus enable us to testify our appreciation of the services of labourers in science not of our own body, nor resident here, but who are nevertheless fellow-workers with us in the objects which we have in view.

I have reached the limits to which an address of this kind should be restricted, without exhausting the topics suggested by our annual meeting, and perhaps without having noticed some important parts of our work; but I must now conclude, with the expression of the hope that the coming year may be still more prosperous than the last, and more fruitful of great results.

## REPORT OF THE COUNCIL.

The Council of the Natural History Society of Montreal, on the occasion of the 35th Annual Meeting of the Society, find it their duty to submit to the members generally a review of the proceedings and condition of the Society during the past year. And if their predecessors have had cause on former occasions to congratulate themselves on the steady progress of the Society, your Council have now the pleasure of announcing that no other year has excelled, or perhaps equalled, the one just closing in its history, either for the amount of scientific work done, or for the successful introduction of new valuable features, which it is believed will be sources of permanent benefit to the Society. Among these, two may be especially mentioned: first, the commencement of a series of annual social meetings open to the public; and secondly, the appointment of a scientific curator, a want which had grown into a reproach to the Society. It is deemed proper to exhibit the operations and progress of the Society under appropriate heads. And first of

## THE MUSEUM.

During the past year the donations to the Museum have been more than ordinarily numerous and valuable. Without desiring to be invidious, your Council cannot but acknowledge the extreme liberality of some members of the Society who have very handsomely added to departments hitherto scarcely represented in the Museum. Through the kindness of Sir William Logan, the curator has been enabled to add to our collection some seventy-two specimens of marine shells, eighty-one of land and fresh water shells, ten echinodermata (sea urchins, and star-fishes), four crustaceans, four cirripdees, six annelidæ, in all 177 species, besides a number of bryozoa and sponges, nearly all new to science. Dr. Dawson, among many other valuable gifts, presented the Society several species of marine shells, echinodermata, &c., from the gulf of St. Lawrence, Labrador, Nova Scotia, and the United States. James Ferrier, jun., Esq., has presented a most extensive and valuable series of foreign shells, in which the Society's collection

was formerly very deficient. The number of species is about 410, and contains many rare genera. R. J. Fowler, Esq., has kindly enabled the Society to complete its collection of land and fresh water shells of Lower Canada, by contributing the missing species. Your Council invite an inspection of these valuable additions to the Museum, and trust that the considerate liberality of the donors may be imitated by others. Your Council regret that the number of quadrupeds is still so very small. They have, however, issued a circular inviting contributions to their mammalia, and adding a list of the specimens wanted. Of this circular one thousand copies were printed, distributed to each member, and extensively sent to kindred societies in Europe and the United States; so that your Council are sanguine the Society will soon be enabled to see some improvement in this department. Some interesting specimens have been added to the collection of birds. Mainly through the zeal of Mr. Whiteaves, the curator of the Society, a commencement has been made for a collection of the eggs of North American birds, and several donations have already been received. Your Council having authorized Mr. Hunter the janitor of the Society, to collect specimens of the fish of this country not in the Museum, a very creditable progress has been made in the work, which it is earnestly hoped will be further promoted by the members. In the miscellaneous department various contributions have been received; and your Council have had the pleasure of welcoming among the donors a new and promising organization—the Numismatic Society of Montreal. Your Council would offer as a suggestion to their successors the consideration of the expediency of uniting the Society's collection of coins with that of the new Society.

#### THE LIBRARY.

The additions to the library have consisted of donations from members and scientific societies, or exchanges of "the Naturalist," the financial state of the Society still forbidding the purchase of scientific works much wanted.

#### APPOINTMENT OF A SCIENTIFIC CURATOR.

One of the greatest difficulties with which the student of Natural History in Montreal has had to contend, was the impossibility of finding a trustworthy classified collection, especially in zoology. It were needless to remind the members, of the chaotic state in which the collection of this Society has been permitted to remain. And although a former sub-curator and some members had bestowed much time on the task of classification, still, all must be aware that the work required to be done could not possibly be effected by a few spasmodic efforts of individuals, having but little leisure to spare. Your Council therefore esteem it matter of much congratulation that they have been enabled to secure the valuable and zealous services of one so well and so favourably known as Mr. J. F. Whiteaves. It cannot be expected that all his labours should be specified within the limits of this portion of the Report; but your Council would beg leave to refer to the statements already made public, to Mr. Whiteaves' Report delivered last month, and finally to the Museum itself, where the members can judge for themselves, as to the expediency and necessity of the appointment.

#### ORIGINAL PAPERS READ.

In the past session, twenty-six original papers in the departments of zoology, geology, botany, and ethnology have been read, the value and importance of which may be estimated by reference to "the Canadian Naturalist," in which they have nearly all been published. Many of them have been noticed in terms of the highest eulogy in the scientific periodicals of Europe and the United States.

#### THE PUBLICATION OF THE NATURALIST.

This Journal has been continued as heretofore; and the former liberality of its publishers, Messrs. Dawson Bros., has been exceeded during the past year, they having furnished its columns with an unlimited number of engravings at a considerable pecuniary loss. The volume for 1862 (the 7th) has been duly com-

pleted. Two numbers for 1863 have been issued, and the third is in progress. It is intended to commence a new series after the present volume is completed, with Scotch paper, expressly made for the Journal, and new type. Its circulation however is still much smaller than it should be, and it is hoped members will use due efforts to extend it.

#### PUBLIC LECTURES.

The annual Somerville course of public lectures was delivered, as usual, and was well attended. The following is an enumeration of the lecturers and subjects discussed :

12th February, 1863.—First lecture, Dr. Dawson, On some novelties in Natural History.

19th February.—Second lecture, Mr. Rimmer, On the Fishes of the St. Lawrence.

26th February.—Third lecture, Mr. Robb, On the Rocks, Woods, and Waters of Western Canada.

5th March.—Fourth lecture, Mr. Gilbert, On the Climate and Products of Australia, and the Customs of the Inhabitants thereof.

12th March.—Fifth lecture, Professor Small, On the Natural History of the Old World compared with that of the New.

19th March.—Last lecture, Mr. Leeming, A Glance at Science as a Recreation.

#### CONVERSAZIONE.

On the evening of the 3rd of February the first Annual Conversazione of the Society was held. The rooms had been provided with a large collection of works of art, microscopes, &c., by the friends of the Society, and addresses were delivered by Principal Dawson, the Rev. A. F. Kemp, and the Rev. Dr. De Sola. The audience was the largest that had ever assembled in the city of Montreal for such a purpose; and your Council have great pleasure in believing that the experiment proved a decided success. The tendency of such social reunions must necessarily be beneficial to the Society; opportunity being afforded for general participation in the discussion of subjects connected with natural science.

## BOTANIC GARDEN.

Your Council deemed it proper to appoint a committee\* to co-operate with the Montreal Agri-Horticultural Society for the purpose of establishing a Botanic Garden in this city, if possible in the grounds of the McGill College. Your Council are happy to state that the project has been most favourably received by the public; and the governors of McGill University having, in the same spirit of liberality which led them to present gratuitously the site of the Society's present building, offered their grounds at a nominal rent for the purposes of the garden, your Council trust that so important an auxiliary to this Society may soon be established.

## MISCELLANEOUS.

Your Council are happy to announce a continued increase in the number of members. During the month of July his Excellency the Governor General visited the Museum, when an address was presented to him requesting him to become a patron of the Society. His Excellency was pleased to assent and to express great gratification with the appearance of the Museum. The number of additional ordinary members has been forty-eight, corresponding members nine, and life members two, in all fifty-nine. Your Council believe fully one half of these resulted from the favourable impression made by the Society's Conversazione, and they know that one other result was that a member liberally offered to commence a list with the sum of \$200, to pay off the remaining indebtedness of the Society. In this connection also your Council deem it fitting to refer to the liberality of the Society's treasurer, James Ferrier, jun., Esq., who to save the payment of a high rate of interest, has advanced a considerable sum of money for the purpose of liquidating the Society's indebtedness. The usual government grant was received—an earnest, your Council trust, that the legislature will continue to appreciate the efforts of the Society and enable them to bring together the means by

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\* The committee consisted of Rev. Dr. De Sola (Convener), Rev. A. F. Kemp, Messrs. S. C. Bagg, C. Robb and hn Leeming.

which scientific attainments can be acquired. As evincing their own desire and that of the Society's to extend as widely as possible the knowledge of natural science, your Council granted the use of their rooms to Mr. Denton during the month of October for the delivery of a course of five lectures on geology, being desirous more particularly that the younger and non-scientific portion of the community should benefit by them, and devote more attention to such subjects than they have been accustomed to give. Among other proceedings of the year, your Council would further report that a committee was appointed to prepare for a field day under the direction of the Society, but that it was found necessary to postpone it for a future occasion; that the services of an assistant secretary have been dispensed with; that the building and portico have been repainted, and the sign which has been placed thereon, has had the effect of increasing the number of visitors; that the Society's amended act has been printed, and that the election of additional members of Council under its provisions has been found to promote the efficiency of its operations; that correspondence has been opened with kindred societies occupying a very high place in European estimation, among them the "Société d'Histoire Naturelle et de Physique" of Geneva; and that these societies have come to look upon the organ of the N. H. Society, "the Canadian Naturalist," as one of the most valuable exponents of the scientific progress of this continent. The sympathy of societies and individuals with the aims of the Natural History Society of Montreal, has been shown by many generous donations both of books and specimens; but your Council would offer as a suggestion that many desirable objects, the products of foreign countries, might be obtained by enlisting in behalf of the Society the assistance of the masters of the various vessels trading to this port, who have so many opportunities of procuring valuable specimens, and who have so extensively benefitted the various collections in the United States. The senior members of the Society will gratefully remember the liberal and numerous contributions of their zealous friend Captain Stoddard, whilom of the ship "Thames."

Your Council would especially record its gratification at the

very efficient manner in which Mr. Wm. Hunter has discharged the duties of his office, combined as it has been with an obliging demeanor on all occasions.

A committee, appointed by the Council of the Natural History Society, at their meeting of the 23rd inst., to consider what disposition should be made of the medals of the Society, reported that after due consideration they would recommend that at least one bronze medal should be voted annually by the Society to some resident in the British provinces distinguished for attainments in natural science, or for special discoveries or active engagement in the same; and that the *silver* medals of the Society be presented *occasionally* to the same class of persons, whether resident in the British provinces or not.

The Council would now propose to the Society that the silver medal of the Society for the present year be given to Professor Daniel Wilson, LL.D., of Toronto, in acknowledgment of his services in American ethnology.

And now your Council would divest themselves of the trust with which they have been honoured, with the fervent hope that the onward steps taken during the past year may be continued and extended in the future, and that each succeeding anniversary meeting may witness an increase of prosperity and usefulness in the Natural History Society of Montreal.

ABRAHAM DE SOLA, LL.D.,  
*Chairman of Council.*

Montreal, May 18th, 1863:

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#### REPORT OF THE SCIENTIFIC CURATOR.

It should be observed that this report refers to a period of time little exceeding six weeks, from the 1st of April, 1863, to the 18th of May in the same year. On entering upon my duties, one of the first things that struck me was the want of arrangement of the specimens in the side cases in the gallery. These contained a confused assemblage of marine shells, Echinodermata (sea urchins, star fishes, etc.), Crustaceans (crabs, lobsters, etc.),

Sponges and other marine organisms from the Gulf of the St. Lawrence, and a large series of the land and fresh water shells of Upper and Lower Canada. These were the property of the Geological Survey of Canada, and were collected principally by Messrs. J. Richardson and R. Bell. The cases containing the same, also belonged to the Geological Survey. After several interviews with Sir W. E. Logan, I was requested to go over the whole of this rather large collection and pick out as complete a series as possible, for the Natural History Society. Since that time I have carefully mounted, classified and named the collection thus formed, which will now be available for reference and study. The sponges, corallines, and other undetermined and, for the most part, minute objects have been temporarily grouped together in one case by themselves. The following is a rough estimate of this collection :

	No. of Species.
Marine Shells, (from the lower St. Lawrence) . . . . .	72
Land and Fresh Water Shells . . . . .	81
Bryozoa, (Sea mats, etc.) . . . . .	undetermined.
Echinodermata, (Sea urchins, star fishes, etc.) . . . . .	10
Crustacea . . . . .	4
Cirripedes, (barnacles, etc.) . . . . .	4
Annelida, (marine worms, inhabiting, in this case, shelly tubes.) . . . . .	6
Sponges, (mostly species new to science.) . . . . .	undetermined.

It should be stated that the tablets upon which these specimens are affixed were presented by the Geological Survey.

Among the marine shells are three species : *Crenella nigra*, Gray ; *Trochus occidentalis*, Mighels ; and *Margarita obscura*, Gould ; which had previously been omitted in the lists of shells inhabiting the Gulf of St. Lawrence as published in the "Canadian Naturalist."

Dr. Dawson has presented to the Society several species of marine shells, echinodermata, etc., from Gaspé, Labrador, Nova Scotia, and the United States. Among them is the common edible periwinkle of Europe (*Littorina littorea*), discovered by Dr. Dawson at Pictou, Nova Scotia, where it is believed to have been for the first time detected on the North American continent.

Mr. R. J. Fowler has presented a series of specimens of eighteen species of those Lower Canadian land and fresh-water shells which were wanting to complete the Society's local collection. Some of these are rare species, for the first time described as inhabiting Lower Canada, in the April Number of the "Canadian Naturalist" for 1863. The specimens of the above mentioned series have been carefully arranged and named, with the donor's name attached to each species.

Mr. James Ferrier, Jun., has presented to the Society a most extensive and valuable series of foreign shells, including several rare and interesting genera. The number of species is as follows:

From the Bay of Mazatlan, Mexico:

Bivalves, 30 species. Univalves, 57.

Exclusive of these:

Bivalves, 87 species. Univalves, 228.

These have been mounted, named, and classified. The general collection of shells belonging to the Society has also been partly classified and arranged. The following is an estimate of the Society's collection of shells, previous to the above mentioned donations:

Bivalves, 74 species.

Univalves, 340 "

As far as possible the names of the donors have been given with the name of each species, but in some cases this could not be ascertained.

To add to the interest of the Society's collection of birds, an attempt has been made to get up a collection of the eggs of North American birds. A few gentlemen have been seen, and the following donations received:

From J. Ferrier, Jun., Esq.,

15 species of eggs from Canada and the United States.

From G. Barnston, Esq.,

6 species of eggs from the Hon. Hudson Bay Company.

1 " egg from Lake Superior.

The eggs thus obtained have been named and carefully put away, until a proper cabinet be voted by the Society for their reception.

Prof. Baird, of the Smithsonian Institute at Washington, has been written to by me soliciting donations to this branch of our natural history.

As Recording Secretary to the Society, I have endeavoured to make the newspaper reports of our ordinary and annual meetings more accurate and satisfactory. In my spare time I have attempted to call some attention, through the press, to what the Society is endeavouring to effect, by reviewing its journal, and by popular articles on local natural history. It has been my duty too, assisted by other members of the Society, to prepare the annual report for the year ending May 17th, 1863. Finally, it is hoped that reasonable courtesy and attention has been paid to visitors who have wished for any special information, and to strangers.

J. WHITEAVES, F. G. S.,  
Honorary Member of the Ashmolean  
Society, Oxford, England, etc.,  
Scientific Curator and Recording Secretary.

DE. THE NATURAL HISTORY SOCIETY OF MONTREAL IN ACCOUNT WITH JAMES FERRIER, JUN., TREASURER.

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1863.  
May 1.

RECAPITULATION.

To Cash paid, Mr. Hunter's salary and note .....	\$250 00
" " Mr. McCormick's acct. commission .....	30 00
" " Interest.....	251 48
" " City Assessment.....	40 00
" " Fuel.....	107 50
" " Water Rent .....	42 75
" " Gas Rent .....	29 08
" " Insurance .....	40 00
" " Books and Binding .....	179 96
" " Advertising and Printing .....	18 70
" " Repairs and Fixtures .....	119 90
" " McNab, arranging Herbarium.....	40 00
" " Legal Expenses .....	26 40
" " The Society's note .....	1000 00
" " Post Office account.....	5 73
" " Incidental Expenses.....	40 71
Balance in Treasurer's hands.....	353 10
	<u>\$2575 31</u>

1863.  
May 1.

RECAPITULATION.

By Cash received from Government grant.....	\$1000 00
" " Life Members .....	130 00
" " Admission fees to the Museum.....	45 00
" " Proceeds of conversations.....	27 05
" " Members' subscriptions.....	1357 00
By Balance in Treasurer's hands May, 1862.....	16 26

Montreal, 1st May, 1863,

JAMES FERRIER, JUN.,  
Treasurer, N. H. S. \$2575 31

It was moved by Dr. David, seconded by Professor Cornish : That the various reports now presented be accepted, and with the annual address printed as usual.

After which a vote of thanks to the officers of the past year was proposed by Mr. Mackay, seconded by Major Latour, and unanimously carried.

The Society then proceeded to ballot for officers for the ensuing year, when the following were duly elected.

#### OFFICERS FOR 1863-64.

*President.*—Principal Dawson, LL.D., F.R.S., &c., &c.

*Vice-Presidents.*—The Lord Bishop of Montreal ; Rev. A. De Sola, LL.D. ; Sir W. E. Logan, LL.D., F.R.S., &c. ; T. Sterry Hunt, M.A., F.R.S., &c. ; Rev. A. F. Kemp, M.A. ; E. Billings, Esq., F.G.S. ; J. Leeming, Esq., and W. H. A. Davies, Esq.

*Treasurer.*—J. Ferrier, jun., Esq.

*Cor. Secretary.*—Prof. P. J. Darey, M.A.

*Rec. Secretary and Scientific Curator.*—J. F. Whiteaves, Esq., F.G.S., &c.

*Librarian.*—Mr. H. Rose.

*Council.*—Dr. Smallwood ; Stanley C. Bagg, Esq. ; A. Rimmer, Esq. ; C. Robb, Esq., C.E. ; E. Murphy, Esq. ; D. A. P. Watt, Esq. ; Dr. Hingston ; J. H. Joseph, Esq., and J. Swanston, Esq.

*Library Committee.*—Messrs. J. C. Becket ; Prof. Cornish ; Dr. Fenwick ; Dr. David, and Dr. Mackay.

*Editing Committee of the "Canadian Naturalist."*—D. A. Poe Watt, Esq., Acting Editor ; Dr. Dawson ; Dr. Hunt ; E. Billings, Esq. ; Rev. A. F. Kemp, M.A. ; Prof. Robins, B.A., and the Corresponding and Recording Secretaries.

## LIST OF DONATIONS TO THE MUSEUM.

DONORS' NAMES.	DONATIONS.
May 26th, 1862.	
— Lambe, Esq.....	English silver two-penny piece.
Dr. A. H. Hall,.....	Skin of Star nosed mole, ( <i>Condylura cristata</i> , <i>Linnaeus</i> .)
Miss Wright, .....	Hen's egg within another.
B. Hall, Esq.,.....	Two eggs joined together.
N. Macintosh, Esq.,.....	Lop eared Rabbit.
Mr. W. Hunter, .....	Little Sandpiper, female, ( <i>Tringa pusilla</i> , <i>Wilson</i> )
J. Ferrier, Jr., Esq.....	Number of small Fish and water plants for the Aquaria.
Mrs. A. Miller, .....	Specimen of Copper Ore from Lake Superior.
Mr. R. P. Isaacson,.....	Antler from the Cape of Good Hope.
Mr. W. Hunter, .....	Muscicapa—? ( <i>Flycatcher</i> , <i>species undetermined</i> .)
June 30th, 1862.	
— Ramsay, Esq., .....	4 Eggs of the spotted Sandpiper, ( <i>Tringoides</i> <i>macularius</i> , <i>Gray</i> .)
Mr. W. Hunter, .....	Geothlypis Philadelphia, Baird, male. ( <i>Mourn-</i> <i>ing warbler</i> .)
	Dendroica Striata, Baird, female. ( <i>Blackpoll</i> <i>warbler</i> .)
	Helminthophaga ruficapilla, Baird, male. ( <i>Nash-</i> <i>ville swamp warbler</i> .)
	Maniotilta varia, Viellot, male. ( <i>Black and</i> <i>white creeper</i> .)
	Vireosylvia —? species undetermined.
J. Ferrier, Jr., Esq.....	Fish and aquatic insects for the Aquaria.
August 25th, 1862.	
— Ross, Esq.....	Double hen's egg, grown together.
Mrs. McIntosh,.....	Lop-eared rabbit in spirits.
G. Barnston, Esq.,.....	Pelicanus erythrorynchus, Gmelin, ( <i>American</i> <i>Pelican</i> .)
	Accipenser carbonaria, Agassiz, ( <i>Long nosed</i> <i>Sturgeon</i> .)
	Salmo fontinalis, Linnæus, ( <i>Brook Trout</i> .)
	Coregonus Artedi, ( <i>Fresh water "Herring."</i> )
	Coregonus sapidissimus, ( <i>White fish</i> .)
	Lota maculosa, Lesuer, ( <i>Loche</i> .)
Dr. Dawson,.....	4 Limulus Polyphemus, Latreille, ( <i>King Crab</i> .)
Mrs. Hamilton,.....	An antique pair of stays, 100 years old.
Mr. Higgins, Côte S. Paul	Petrifaction, ( <i>Incrustation of carbonate of lime</i> <i>and oxide of iron around leaves and branches</i> .)

## LIST OF DONATIONS TO THE MUSEUM.

DONORS' NAMES.	DONATIONS.
	September 29th.
Mrs. Peter Redpath, . . . .	4 young <i>Limulus Polyphemus</i> , Latreille. ( <i>King Crab</i> .)
J. Ferrier, Jr., Esq., . . . .	9 Gold fish and several Eels for the Aquaria.
H. G. Vennor, Esq., . . . .	Salmo "namycush" Pennant. The Longe. Lake Magog, Georgeville.
C. F. Hill, Esq., . . . . .	Hen's egg of unusual size.
D. McKay, Esq., . . . . .	3 Flint arrow-heads from Burlington heights.
A. Rimmer, Esq., . . . . .	2 specimens of <i>Gorgonia</i> —? ( <i>Sea fan</i> .)
W. Couper, Esq., . . . . .	Specimens of <i>Saperda candida</i> .
Mr. W. Hunter, . . . . .	Perisoreus Canadensis, Bonaparte. ( <i>Canada jay</i> .)
	Eggs of <i>Emys picta</i> . ( <i>The painted turtle</i> .)
	Case containing 18 species of Fish from the St. Lawrence at Montreal, as follows :
	1 <i>Perca flavescens</i> , Mitchell. ( <i>Common yellow Perch</i> .)
	1 <i>Labrax lineatus</i> , Bloch. ( <i>Striped Bass</i> .)
	2 <i>Lucioperca Americana</i> , Cuvier and Valenciennes. ( <i>American Pike Perch</i> .)
	1 <i>Centrarchus œneus</i> , Lesuer. ( <i>Rock Bass</i> .)
	2 " <i>fasciatus</i> , Lesuer. ( <i>Black Bass</i> .)
	1 <i>Pomotis vulgaris</i> , Richardson. ( <i>Sun fish</i> .)
	2 <i>Gasterosteus gymnetes</i> ? ( <i>Stickleback</i> .)
	1 <i>Pimelodus catus</i> ? Linnæus. ( <i>Common Cat fish</i> .)
	1 <i>Catostomus</i> —? ( <i>Sucker, species uncertain</i> .)
	1 <i>Leuciscus pulchellus</i> , Storer. ( <i>The "Roach Dace"</i> .)
	1 <i>Esox estor</i> , Lesuer. ( <i>Common Pike</i> .)
	1 <i>Coregonus albus</i> , Lesuer. ( <i>White fish</i> .)
	1 <i>Hyodon clodalis</i> , Lesuer. ( <i>Winter shad</i> .)
	2 <i>Lepidosteus oxyurus</i> . ( <i>Gar pike</i> .)
	1 <i>Lota maculosa</i> , Lesuer. ( <i>Common ling</i> .)
	1 <i>Anguilla tennirostris</i> , DeKay. ( <i>Common Eel</i> .)
	1 <i>Accipenser oxyrinchus</i> , Mitchell. ( <i>Sharp nosed Sturgeon</i> .)
	1 <i>Pteromyzon nigricans</i> ? Lesuer. ( <i>Blue Lamprey</i> .)
	Also <i>Amia ocellicauda</i> , Richardson. ( <i>The Mud or Beaver fish, from Lake St. Peter</i> .)
	October 27th, 1862.

## LIST OF DONATIONS TO THE MUSEUM.

DONORS' NAMES.	DONATIONS.
J. Ferrier, Jr., Esq.,.....	Fishes for the Aquaria.
G. Barnston, Esq.,.....	2 Salmo "siscowet," Agassiz.
	1 Salmo ursinus, Barnston, nov. sp.
	1 Salmo amethystinus? Mitchell.
	1 Salmo Hoodii, or nov. sp. ( <i>S. Bairdii</i> , <i>Barnston, M. S. S.</i> )
	1 Young beaver, ( <i>Castor fiber</i> .)
	} From Lake Superior.
Dr. Van Courtlandt,....	Specimens of <i>Gasterosteus gymnetes</i> and <i>Leuciscus</i> , new species.
Mr. W. Hunter, .....	Picoides hirsutus, Gray. ( <i>Banded 3 toed Woodpecker</i> .)
	November 24th, 1862.
P. Macfarlane, Esq.,.....	Minerals from the Giants Causeway.
J. Ferrier, Jr., Esq.,.....	Pair of <i>Bucephala albeola</i> , Baird. ( <i>Buffel headed duck</i> .)
	Fishes for the Aquaria.
Mr. Gaven,.....	2 <i>Eutainia sirtalis</i> , Baird, and Girard. ( <i>Garter Snake</i> .)
Mr. Miller, .....	Specimens of Copper Ore from the Bruce mine.
J. S. Thompson, Esq., ..	1 <i>Cygnus Buccinator</i> , Richards. ( <i>Trumpeter Swan</i> .)
G. Barnston, Esq.,.....	3 <i>Percopsis</i> —? nov sp. } 3 <i>Cottus</i> —? } From Lake Superior. 2 <i>Rana</i> —? } 1 <i>Salamandra</i> —? }
E. C. David, Esq.,.....	Specimen of wild rice from the prairies.
B. Gibb, Esq., .....	Horn of African Rhinoceros.
J. O'Brien, Esq., .....	Bubo Virginianus, Bonaparte. ( <i>Great Horned Owl</i> .)
Mr. W. Hunter,.....	32 Specimens of the sternum ( <i>Breast bone</i> ) of Canadian birds.
	February 23rd.
R. Thompson, Esq.,.....	A silver, and copper coin of Napoleon III. 2 busts of Daniel O'Connell.
	Model of the Great Eastern Steamship.
— Leslie, Esq., .....	Part of the stem of an Indian pipe found near Lake Ontario.
	Receptaculites occidentalis.
Mrs. Rollo, .....	English blackbird, ( <i>Turdus merula</i> , <i>Linnaeus</i> ), female.
— Boa, Esq., .....	Columnaria alveolata.
	Scops asio, Bonaparte. <i>Mottled Owl</i> .
Mr. W. Hunter,.....	Troglodytes Parkmanni, Audubon. (female) <i>Parkman's Wren</i> .

## LIST OF DONATIONS TO THE MUSEUM.

DONORS' NAMES.	DONATIONS.
	March 20th, 1863.
N. W. Bethune, Esq.,....	A Canada bank note of the year 1792
T. Devine, Esq., Quebec.	16 specimens of electrotype casts of fossils from Point Levis.
Mr. Charlton, Laprairie,.	Fish for the Aquaria.
	April 27th, 1863.
Geological Survey of Canada,.....	A large series of marine shells, echinodermata, crustacea, sponges, &c., from the Gulf of the St. Lawrence, and a collection of the land and fresh water shells of Upper and Lower Canada, of which the following is a rough estimate :
	No. of Species.
	Marine shells..... 72
	Land and Fresh water shells..... 81
	Bryozoa, ( <i>Sea Mats, &amp;c.</i> ) not yet determined.
	Echinodermata, ( <i>Sea Urchins, Starfishes, &amp;c</i> ) 10
	Crustaceans..... 4
	Cirripedes ( <i>barnacles, &amp;c.</i> )..... 4
	Annelida..... 6
	Corallines, not yet determined.
	Sponges, ( <i>nearly all new to science</i> ) undetermined.
Dr. Dawson,.....	12 Species of marine shells and 3 of Echinodermata from Gaspé, Labrador, Nova Scotia, and the United States.
R. J. Fowler, Esq.,.....	15 Species of such Lower Canadian land and fresh water shells, as were wanting to complete the Society's local collection.
J. Ferrier, Jr., Esq.....	A valuable and extensive series of foreign shells, corals, &c., of which the following is an estimate.
	Shells from Mazatlan, Mexico, about 80 species.
	Exclusive of these :
	Bivalves 87 species.
	Univalves 228 "
	Cirripedes.
	( <i>barnacles.</i> )
	Acasta Montagu, Leach, Britain.
	Corals.
	5 species.
	Foraminifera.
	Nummulites nummularia? (Fossil from the Pyramids of Egypt.)
G. Barnston, Esq.....	6 species of birds' eggs ( <i>named</i> ) from the Hudson's Bay Territory, and 1 from Lake Superior.
J. Ferrier, Jr., Esq.....	15 species of birds' eggs from Canada and the United States.

## LIST OF DONATIONS TO THE LIBRARY.

DONORS' NAMES.	NAMES OF BOOKS.
From the Publishers, in exchange for the Naturalist .....	Canadian Journal, Toronto. Transactions of the Literary and Historical Society, Quebec. British American Journal. Silliman's American Journal. Proceedings of the Academy of Sciences of Philadelphia. Annals of the Lyceum of Natural History of New York. Boston Journal of Natural History. Proceedings of the Essex Institute. Do. do. Franklin do. Do. do. Entomological Society of Philadelphia. Transactions of the Academy of Sciences of St. Louis. Proceedings of the American Antiquarian Society. The Technologist, London. The Phytologist. The Zoologist. The Natural History Review. Proceedings of the Linnæan Society. Proceedings of the Dublin University Zoological and Botanical Association. Edinburgh New Philosophical Journal. Zeitschrift der Deutschen Geologischen Gesellschaft, 1861 and 1862, (From the Geological Society of Berlin.)
Government of Canada,	Canada Gazette.
Education Office, L.C...	Journal of Education. Statutes of Canada. Historical Magazine.
The Publishers.....	The Canadian Naturalist and Geologist.
McGill University .....	Calendar for 1862-3.
Toronto School of Medicine,.....	Annual Announcement.
Smithsonian Institute...	Smithsonian miscellaneous collections. Vols 1-4. Result of Meteorological Observations.
From the Regents of the N. York State Library,	Supplement to the Catalogue of the N. York State Library. Annual reports of the Trustees of do. 1858-1862.
From the U. S. Patent Office, .....	Patent Office Report. Agriculture, 1861.
Harvard University.....	Catalogue of Officers and Students.
J. S. Packard, Esq.,....	6th Annual report of the Maine board of Agriculture, embracing the reports on the Scientific Survey, 1861.

## LIST OF DONATIONS TO THE LIBRARY.

DONORS' NAMES.	NAMES OF BOOKS.
Royal Academy of Stockholm .....	Continuation of the voyage of the frigate Eugénie.
John Leeming, Esq. ....	Statistique générale de la France. 6 Vols.
	Bibliothèque des Mémoires. 2 "
	Algebra, M. Bourbon. 1 "
	Chimie, Thénard. 5 Vols.
	Histoire des Etats Européens. 1 "
	Histoire du Moyen Age. 1 "
	Œuvres de Mde. La Duchesse de Duras. 2 "
	Littérature et les Arts. 1 "
	Murray's Chemistry. 4 "
	Wilkinson on Galvanism. 2 "
	Outlines on Mineralogy and Geology. 2 "
	Life of James I. of England, 4to. 4 "
C. Dunkin, Esq., M.P.P. . . .	3 Vols. of the Nat. History of the State of N. York to complete the set already presented by him.
M. Shuter, Esq., . . . . .	3 Maps.
Dr. Dawson, . . . . .	Pamphlet on the Carboniferous reptiles of Nova Scotia, by Prof. Owen.
Stanley C. Bagg, Esq. . . . .	By-laws of the Numismatic Society of Montreal.
	Notes on Coins, by Stanley C. Bagg.
T. Roy, Esq. . . . .	Pictorial description of the Victoria regia.
J. Ferrier, Jr., Esq. . . . .	Japanese work on fishes, with coloured drawings.
Dr. Dawson, . . . . .	Pamphlet on the Devonian flora of E. America.
W. S. M. D'Urban, Esq. . . . .	Rhopalocera Africæ Australis.
Stanley C. Bagg, Esq. . . . .	Coins and medals as aids to the verification and study of Holy Writ.
Royal Society of Christiania, . . . . .	"Om Cirklers Berring" af C. M. Guldberg.
	"Sygehuns on Syphilizationen."
	"Om Kometbanernes Indbyrdes Beliggenhed, af H. Mohn.
	Meteorologische Beobachtungen aufgezeichnet auf Christiania's Observatorium. Vols. 1 & 2.
	"De la Syphilization, état actuel et statistique." par W. Beck.
	"Om Siphonodentalium vitreum" af Dr. Michael Sars.
	"Geologiske Undersogelser" &c., af Dr. Theodor Kjerulf.
	Synopsis of the vegetable products of Norway, by Dr. F. C. Schubeler.
W. Rennie, Esq. . . . .	Transactions of the Royal Irish Academy, V. 1-4.
W. Swanston, Esq. . . . .	Grand prix d'Architecture. Vols. 1-4.
	French translation of Dr. Dawson's papers on Indian Antiquities, by Hon. — Chauveau.
	Experiments on poisoning with vegetable alkaloids.

## THE CANADIAN NATURALIST.

The *Canadian Naturalist* is sent to the following Institutions and Societies :—

## CANADA, ETC,

University College,.....	Toronto.
Trinity College,.....	Toronto.
Canadian Institute,.....	Toronto.
Knox's College,.....	Toronto.
Victoria College,.....	Cobourg.
Queen's College,.....	Kingston.
Botanical Society,.....	Kingston.
McGill College,.....	Montreal.
Bishop's College,.....	Lennoxville.
Laval University,.....	Quebec.
Literary and Historical Society,.....	Quebec.
Natural History Society,.....	St. John, N. B.

## UNITED STATES.

Harvard College,.....	Cambridge, Mass.
Amherst College,.....	Amherst, Mass.
Yale College,.....	New Haven, Conn.
Natural History Society,.....	Boston, Mass.
State Library,.....	Albany, New York.
Albany Institute,.....	Albany, New York.
Essex Institute,,.....	Salem, Mass.
Lyceum of Natural History,,.....	New York.
Astor Library,.....	New York.
Academy of Natural Sciences,.....	Philadelphia.
Franklin Institute,.....	Philadelphia.
Smithsonian Institute,.....	Washington.
Academy of Science,.....	St. Louis, Missouri.
University of Nashville,.....	Tennessee.

## GREAT BRITAIN.

Geological Society,.....	London.
Linnæan Society,.....	London.
Royal Society,.....	London.

Royal Geographical Society,.....	London.
British Museum Library,.....	London.
University College,.....	London.
Society of Arts,.....	London.
Geological Survey of Great Britain,....	London.
Geological Society,.....	Dublin.
Royal Dublin Society,.....	Dublin.
Literary and Philosophical Society,....	Manchester.
Natural History Society,.....	Newcastle upon Tyne.
Bodleian Library,.....	Oxford.
University Library,.....	Cambridge.
University Library,.....	Edinburgh, Scotland.
University Library,.....	Glasgow, Scotland.
University Library,.....	St. Andrew's, Scotland.
College Library,.....	Maynooth, Ireland.
Queen's College,.....	Cork, Ireland.
Queen's College,.....	Belfast, Ireland.

## CONTINENT OF EUROPE.

Société Géologique de France,.....	Paris, France.
Académie des Sciences,.....	Paris, France.
Academia Car. Leop.,.....	Jena, Saxe Weimar.
Imper. Geological Institute,.....	Vienna, Austria.
Deutsches Geolog. Gesellschaft,.....	Berlin, Prussia.
Société Hollandaise des Sciences,.....	Haarlem, Holland.
Konigl. Sachs. Gesellschaft der Wissen- schaften,.....	Leipzig, Saxony.
Société Impériale des Naturalistes,.....	Moscow, Russia.
Konigl. Bayerischen Akademie der Wis- senschaften,.....	Munich, Bavaria.
Stockholm Biksbiblioleket,.....	Stockholm, Sweden.
Upsala University,.....	Upsala, Sweden.
Academy of Sciences,.....	Stockholm, Sweden.
Christiania University,.....	Christiania, Norway.
Royal Library,.....	Copenhagen, Denmark.
St. Petersburg, Bibliothèque Impériale,.	St. Petersburg, Russia.
Dorpat University,.....	Dorpat, Russia.

- Kasan University,.....Kasan, Russia.  
 Helsingfors University,.....Helsingfors, Russia.  
 Amsterdam Stadsch Bibliotheek,.....Amsterdam, Holland.  
 Leyden Batavian Academy,.....Leyden, Holland.  
 Gröningen University,.....Gröningen, Holland.  
 Bonn University.....Bonn, Prussia.  
 Breslau University,.....Breslau, Prussia,  
 Freiberg Royal Acad.,.....Freiberg, Saxony.

And to the following Periodicals:—

CANADA.

- Journal of the Board of Arts,.....Toronto.

UNITED STATES.

- Silliman's Journal,.....New Haven.

GREAT BRITAIN.

- Annals and Magazine of Natural History,..London.  
 The Geologist,.....London.  
 The Phytologist,.....London.  
 The Zoologist,.....London.  
 Journal of Botany,.....London.  
 The Technologist,.....London.  
 London, E. and D. Philosophical Magazine, London.  
 Edinburgh New Philosophical Journal,..Edinburgh.

CONTINENT OF EUROPE.

- Annales des Sciences Naturelles,.....Paris, France.  
 Allgemeine Deutsches Naturh. Zeitung,..Dresden, Saxony.  
 Archiv. fur Naturgeschichte by Weigman, Berlin, Prussia.  
 Leopoldoia,.....Jena, Saxe Weimar.  
 Leonhard und Brohn Jahrbuch,.....Stuttgart, Wurtemberg.

LIST OF  
LIFE, HONORARY, CORRESPONDING,  
AND  
ORDINARY MEMBERS  
OF THE  
NATURAL HISTORY SOCIETY  
OF MONTREAL.

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*Life Members.*

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- |                             |                         |
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| HUGH ALLAN, ESQ.            | JOHN LEEMING, ESQ.      |
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| STANLEY C. BAGG, ESQ.       | HENRY LYMAN, ESQ.       |
| HENRY CHAPMAN, ESQ.         | BENJAMIN LYMAN, ESQ.    |
| A. H. DAVID, ESQ., M.D.     | L. A. H. LATOUR, ESQ.   |
| W. H. A. DAVIES, ESQ.       | FERD. McCULLOCH, ESQ.   |
| J. W. DAWSON, LL.D., F.R.S. | HON. GEO. MOFFATT.      |
| C. DUNKIN, ESQ., M.P.P.     | THE RIGHT REV. THE LORD |
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| SIR WILLIAM E. LOGAN.       | J. H. WINN, ESQ.        |

### Honorary Members.

#### *Elected from 1849 to 1863.*

- May 29, '50. A. M. McWhinnie,..... London, England.  
 T. J. Geoghegan, M.D.,.... Dublin, Ireland.
- Nov. 29, '52. Col. J. Lefroy,..... Royal Arsenal, Woolwich, Eng.  
 Aimé Bouchard, M.D., Mem-  
 ber of the Academy of  
 Medicine,..... Paris.  
 Milne Edwards, M.D., Mem-  
 ber of the Academy of  
 Sciences,..... Paris.
- Feb. 28, '53. Prof. Joseph Henry, Secre-  
 tary of the Smithsonian  
 Institute,..... Washington.
- March 28, '53. Dr. Rae,.....
- Jan. 5, '54. O'Bryan Bellingham, M.D., Dublin.
- Oct. 29, '55. Sir Edmund W. Head, Bart.,.
- May 19, '56. Chs. Smallwood, M.D., LL.D., Montreal.
- Sept. 29, '56. Prof. James Hall,..... Albany, N.Y.  
 Prof. Dunglison,..... Philadelphia.
- May 19, '62. William Skakel,.....

### Corresponding Members.

#### *Elected from 1849 to 1863.*

- Sept. 29, '45. Major Kendall,.....
- June 26, '46. Dr. W. Newcomb,..... Troy, N. Y.
- June 25, '47. J. W. Leaycraft,.....
- Nov. 20, '47. Henry Holmes Croft, Profes-  
 sor of Chemistry, Univer-  
 sity College,..... Toronto.
- April 24, '48. Major Lachlan,..... Cincinnati.
- June 25, '49. Dr. John Hillier Blount,.... Birmingham, England.
- July 30, '49. William Notman,.....  
 Jean Charles Taché,.... Quebec.  
 Charles Payn, M.D.,.... United States.
- May 20, '50. T. McDonald,..... Jamaica.
- Aug. 26, '37. Dr. Sabourin,..... U. S., (Elected 1837).

- Jan. 27, '51. Cecil Percival Stone,.....
- April 25, '52. Samuel Kneeland, M.D.,...Boston, Mass.
- Aug. 30. '52. Rev. Dr. William Scoresby, Rochdale, England.  
Dr. Robert M. Huston,....Philadelphia, Penn.  
William Rogerson,.....Royal Observatory, Green-  
wich.  
William Andrews,.....Quebec.  
J. Adolphus Thurberg,....Louisiana.
- Sept. 8, '52. M. C. Brodie,.....Beauharnois.  
E. A. H. Allen,.....Troy, N. Y.
- Oct. 25, '52. Prof. Thos. McCulloch,....Truro, N. S.  
Wm. Goodenough Wheeler,  
M.D.,.....Chelsea, Mass.  
Rev. William Scott,.....Sherbrooke, C. E.
- Nov. 29, '52. B. P. Johnson, Secy. Agric.  
Society, .....New York.  
Samuel Walker, Pres. N. Y.  
Agricultural Society,....Albany, N. Y.  
Hon. A. N. Morin, .....Quebec.  
Sir John P. Boileau, Bart.,  
F.R.S., .....London.  
John L. LeConte, M.D.,....Philadelphia.  
J. Eliot Cabot, Cor. Secre-  
of the Boston Society of  
Nat. History,.....Boston, Mass.  
John Cassin,.....Philadelphia.  
John Gundlach, M.D.,....Cardenas, Cuba.  
Professor W. Buckland,....Toronto.
- Feb. 28, '53. Dr. Charles Huguet Latour, St. Rémi.  
Dr. J. W. Salisbury,.....Albany.  
George Webber Breton,....Paris.  
George Jephson Rumley,..Dublin.  
Archibald Cameron,.....Pointe du Chêne.
- March 28, '53. Hon. Joseph 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.  
Charles Laberge,.....St. Athanase.  
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.  
     Arthur Hill Hassall, M.D.,London.  
     Thomas Wakley, Jr.,.....London.  
     William Bell,.....London.  
     W. H. Perley,.....Fredericton, N. B.  
     Philip Claiborne Gooch, M.D., Richmond, Va.  
     Col. Campbell,.....St. Hilaire.  
     Eben Wright, M.D.,.....Boston, Mass.  
     Alexander Murray,.....Woodstock, C. W.
- July 26, '53. George G. Francis,.....Swansea, England.  
     Geo. Prev. de Boucherville, St. Hyacinthe.  
     Rev. Jean 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.  
     M. Turcot, M.D.,.....St. Hyacinthe.  
     Rev. J. B. Ferland,.....Quebec.  
     Hon. L. A. Dessaulles,.....St. Hyacinthe.  
     Rev. M. Lavallée,.....St. Vincent de Paul.
- June 30, '54. Rev. M. A. Trudeau,.....Buffalo, N. Y.  
     Edward Crisp, M.D.,.....London.  
     Edward Smith, M.D.,.....London.  
     Edward L. Ormerod, M.B., Brighton.  
     James Spence,.....Pointe Claire.
- April 24, '54. Rev. Michael Ashton,.....Adelaide, Australia.
- June 26, '54. Rev. John Jenkins,.....Philadelphia.
- Oct. 30, '54. Rev. Louis Ed. Bois,.....Maskinongé.  
     Dr. Amédée Weilbraim,....Tournay, Belgium.
- Jan. 29, '55. Sir James Ed. Alexander,..
- June 25, '55. André Cherrier,.....  
     General Rowan,.....  
     Dr. Litchfield,.....Kingston.
- Oct. 29, '55. William Couper,.....Quebec.
- March 31, '56. Hon. G. E. Cartier, M.P.P.,  
     Hon. F. Lemieux,.....Quebec.  
     A. Brunel,.....Toronto.  
     Rev. W. Brethour, M.A.,...Orms town.
- April 28, '56. Hon. L. V. Sicotte,.....St. Hyacinthe.  
     Sir E. P. Taché,.....Quebec.

- May 19, '56. Asst. Com. Gen. Ibbetson.
- Jan. 28, '56. P. L. McDonell, Advocate, Toronto  
 Rev. John Flanagan,.....Lachine  
 J. C. Lee, M.D.,.....London, C. W.  
 Prof. J. P. Heyfelder,.....Finland.
- Dec. 29, '56. H. P. Gosselin,.....Clarendon.  
 Alexander Copland,.....Hinchinbrooke.
- Feb. 25, '57. Prof. O. P. Hubbard, M.D.,  
 Dartmouth College,.....Hanover, N. H.  
 Prof. A. D. Bache, Sup. U.  
 S. Coast Survey,.....  
 Dr. Breed, .....Washington.  
 Rev. A. J. Tellier, President  
 St. John's College, N. Y.,Fordham.  
 R. L. Pell,.....New York.
- March 30, '57. W. B. Lindsay,.....Quebec.
- April 27, '57. Jules Flavien Gingras,....Quebec.
- July 27, '57. Count Motschulsky,.....St. Petersburg.
- April 27, '58. Rev. M. A. Curtis, D.D.,...Hillsborough, U. S.  
 W. S. Sullivant,.....Columbus, Ohio.  
 S. Durkee, M.D.,.....Boston, Mass.
- May '60. Rev. Louis Würtele,.....Actonvale.
- July '60. M. J. Mitcheson,.....Philadelphia.
- October '60. Henry Poole,.....Halifax, N. S.  
 Rev. D. Honeyman, F.G.S. Antigonish, N. S.  
 Ed. Bowen, M.D.,.....Brantford.
- November '60. William Ross,.....Fort Simpson, Rupert's Land.
- January '62. Thomas Macfarlane,.....Actonvale.
- June 30, '62. Prof. Baird,.....Smithson'n Inst., Washington.  
 W. Stimpson, M.D.,....." " "  
 Rev. A. Forrester, D.D.,...Superintendent of Education,  
 Truro, Nova Scotia.
- Sept. 29, '62. Dr. Lowe, F.R.S., &c.,.....
- Nov. 24, '62. S. H. Parkes,.....Birmingham, England.
- March 30, '63. Hugh E. Montgomery,....London, England.  
 Chas. Waterton, Esq.,....Wakefield, Yorkshire.  
 Prof. J. W. Bailey,.....Fredericton, N. B.  
 N. W. Bethune,.....Ottawa, C. W.

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