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first Annual Report

OF THE

AMERICAN MUSEUM

NATURAL HISTORY.

JANUARY, 1870.

New Mork:

PRINTED FOR THE MUSEUM

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PRINTED FOR THE MUSEUM,
BY THE MAJOR & KNAPP ENGRAPHY, MYR. & LITHOGRAPHY, C.O., 21 BROADWAY, N. Y.

# American Museum of Natural History.

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#### Finance Committee:

HOWARD POTTER, HENRY G. STEBBINS, BENJAMIN B. SHERMAN.

#### Auditing Committee:

MORRIS K. JESUP.

HENRY PARISH,

A. G. PHELPS DODGE.

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# REPORT.

The Trustees of the American Museum of Natural History have the pleasure of presenting to the subscribers to the funds of the museum, this, their First Annual Report, accompanied by copies of their Charter, Constitution, Correspondence, and Reports of the Committees and Treasurer.

On the thirtieth of December, 1868, a number of gentlemen addressed a letter to the Commissioners of the Central Park, expressing their desire that a great Museum of Natural History should be established in the Park, and enquiring if the Commissioners were disposed to provide for its reception and development, to which a favorable reply was received.

On the nineteenth of January, 1869, the following preamble and resolutions were unanimously adopted:

Whereas, Nearly all the capitals in Europe, and more important cities in our own land, including Boston, Philadelphia, Washington and Chicago, possess instructive and valuable museums of Natural History, while New York, notwithstanding its metropolitan position, is still destitute of such an institution:

Resolved, That recognizing the necessity of such a museum as a means of education and recreation, and desiring its establishment upon a scale commensurate with the wealth and importance of our great city, we have heard with much satisfaction, that the opportunity is now presented of securing by purchase, in Europe, the largest and most valuable collection of objects of Natural History, which has been offered for sale in many years.

Resolved, That in our judgment immediate action should be taken to secure this, or some other collection, as a nucleus of a great Museum.

Resolved, That, therefore, a Committee be, and is hereby appointed to raise the necessary funds, and to act as trustees for, and dispose of the same, and of the collections when acquired, and with full powers to do whatever may be requisite or needful in connection with the business, said committee to consist of such of the signers to the recent letter of inquiry, dated December 30th, 1868, and addressed to the Commissioners of the Central Park, as may consent to serve, with power to increase their number to twenty-five.

A permanent organization under a special charter from the State Legislature was effected, and in a few weeks the sum of \$44,550 was secured. A valuable collection of North American birds, containing over three thousand specimens, was purchased from Mr. D. G. Elliot, and arrangements made with Mr. J. G. Bell to mount them. This was followed by the purchase in Europe, by Messrs. Blodgett and Elliot, of the collection of the late Prince Maximilian of Neu-

wied, in Germany, and of a selection from the Verreaux and Vedray collections in Paris, a full and interesting report of which is hereto annexed.

These valuable collections having been acquired, a letter was addressed to the Commissioners of the Central Park, expressing a desire to know if they would receive them on deposit within the Park, and suggesting the conditions on which the Trustees would like to deposit them. A reply was received accepting them on the terms proposed, and accommodations for their exhibition are being rapidly completed in the two upper stories of the Arsenal Building.

In addition to these purchases, valuable donations have been received. The State of New York, by an act of Legislature, has offered a series of all duplicates it may acquire; Baron R. Osten Sacken has presented to the Museum more than four thousand specimens of beetles, and insects of other orders; Mr. Coleman T. Robinson more than ten thousand specimens of Lepidoptera, representing three thousand species; and Mr. A. L. Rawson has presented a collection illustrating the geology of Palestine and Sinai. Charles W. le Gendre, the American Consul at Amov, China, has forwarded an invoice of seven boxes of minerals, woods, etc., the first response to a circular kindly issued and forwarded by the State Department of the United States to all our ministers and consuls in foreign countries. Also, Mr. Lyell T. Adams, U. S. Consul at Malta, has offered to send a complete collection of specimens from that interesting locality. A similar circular was forwarded by the Navy Department to all its officers on foreign stations, and correspondence has been opened with some of the societies having similar purposes with our own. Efforts are being made to enlist the services of owners and captains of vessels going from our ports, and we hope in this way to add largely to our collections. We are favored with the sympathy of many scientific men in our city, who already take a deep interest in our work, and some of whom have promised at no distant day to add their valuable collections to our Museum.

(In beginning this enterprise everything has been done to make it worthy of our great Metropolis. Commissioner Green, in his letter herewith annexed, says: "Permit me to express on behalf of the Park Commissioners their high appreciation of the enlightened sentiment that has provided so generously for all interested in this department of science, and, at the same time, the hope that this auspicious beginning may, by the continued augmentation of similar liberality, become an unequalled treasury of science, alike honorable to the public spirit of the citizens by whom it has been inaugurated, and an indispensable aid to those engaged in efforts to increase the knowledge of the science that it is intended to illustrate."

In closing their Report for the first year, the Trustees feel justified in congratulating the subscribers on the marked success that has attended their efforts to meet a great want so long felt by our city. With a continuance of your deep interest, with the cordial aid of scientific men in our midst, and allied as we are in this effort with the Park Commissioners, we have, if properly supported and aided with funds

by our fellow citizens, a guarantee of a prosperous future in the formation of a Museum of Natural History that will be second to none, and which, while affording amusement and instruction to the public, will be the means of teaching our youth to appreciate the wonderful works of the Creator. Many large and very valuable collections are offered for sale to us by persons anxious to place them in a permanent public institution, and very frequently the results of the labor and care of years may be obtained for a fraction of their real value; to secure these and commence a fund that shall place the museum in an independent position, the present subscription list of \$52,000 should be increased to at least \$100,000, and the Trustees appeal to the public to aid them in soon securing this amount.

All of which is respectfully submitted.

## JOHN DAVID WOLFE,

President.

A. G. PHELPS DODGE,

Secretary.

## INCORPORATION.



#### AN ACT TO INCORPORATE THE AMERICAN MUSEUM OF NATURAL HISTORY.

Passed April 6, 1869.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. John David Wolfe, Robert Colgate, Benjamin H. Field, Robert L. Stuart, Adrian Iselin, Benjamin B. Sherman, William A. Haines, Theodore Roosevelt, Howard Potter, William T. Blodgett, Morris K. Jesup, D. Jackson Steward, J. Pierpont Morgan, A. G. P. Dodge, Charles A. Dana, Joseph H. Choate, and Henry Parish, and such persons as may hereafter become members of the corporation hereby created, are hereby created a body corporate, by the name of "The American Museum of Natural History," to be located in the city of New York, for the purpose of establishing and maintaining in said city a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation.

Sec. 2. Said Corporation shall have power to make and adopt a Constitution and By-Laws, and to make rules and regulations for the admission, suspension, and expulsion of its members, and their government, the number and election of its officers, and to define their duties, and for the safe keeping of its property, and, from time to time, to alter and modify such Constitution, By-

Laws, Rules and Regulations. Until an election shall be held pursuant to such Constitution and By-Laws, the persons named in the first section of this act, shall be, and are hereby declared to be the Trustees and Managers of said Corporation and its property.

Sec. 3. Said Corporation may purchase and hold, or lease any real and personal estate necessary and proper for the purposes of its incorporation, provided they shall not hold real estate which shall exceed one hundred thousand dollars in value.

Sec. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes.

SEC. 5. This act shall take effect immediately.

STATE OF NEW YORK,
OFFICE OF THE SECRETARY OF STATE, Ss.:

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office at the city of Albany, this fourteenth day of April, in the year one thousand eight hundred and sixty-nine.

D. WILLERS, JR., Deputy Secretary of State.

At a meeting of the Trustees, held at the residence of Theodore Roosevelt, Esq., April 8, 1869, the above charter was unanimously accepted by a majority of the Trustees.

# AN ACT

TO DONATE TO THE AMERICAN MUSEUM OF NATURAL HISTORY A COLLECTION FROM THE DUPLICATE SPECIMENS OF NATURAL HISTORY BELONGING TO THE STATE.

PASSED MAY 8, 1869, BY A TWO-THIRDS VOTE.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. The curator of the State Cabinet, under direction of the regents of the university, is hereby authorized to select from the duplicate specimens of natural history belonging to the State, and those which the State may acquire, and from all other specimens of natural history which may be disposed of by the regents or the State, the first and best series of specimens, subject, however, to the rights of other institutions under existing laws, and label the same with their proper scientific names, and present them in the name of the State to the American Museum of Natural History, in the city of New York, all of which is to be done at the expense of said Museum.

SEC. 2. This act shall take effect immediately.

STATE OF NEW YORK, OFFICE OF THE SECRETARY OF STATE, Ss.:

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office, at the city of Albany, this seventeenth day of August, in the year one thousand eight hundred and sixty nine.

D. WILLERS, JR.,

Deputy Secretary of State.

## CONSTITUTION

OF THE

# AMERICAN MUSEUM OF NATURAL HISTORY,

IN THE CITY OF NEW YORK.

#### ARTICLE I.

This Corporation shall be styled the American Museum of Natural History.

#### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

#### ARTICLE III.

The Trustees shall meet quarterly on the second Monday of

every February, May, August and November, at an hour and place to be designated on at least one week's written notice from the Secretary, and shall, annually, at the quarterly meeting in November, elect the officers and committees for the ensuing year. They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

#### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, an Executive Committee, an Auditing Committee, and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

#### ÁRTICLE V.

The President, and, in his absence, the First or Second Vice-President shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee, and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report, at the annual meeting, of the receipts and disbursements of the past year, with such suggestions as to the financial management of the Museum as he may deem proper.

#### ARTICLE VI

The Executive Committee shall consist of five, who shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meetings of the Trustees, without the express sanction of the Trustees.

#### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

#### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

#### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

#### ARTICLE X.

By-Laws may, from time to time, be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-laws, when once adopted, may be amended at any meeting of the Trustees by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

#### ARTICLE XI.

The contribution of two thousand five hundred dollars to the funds of the Museum, at one time, shall entitle the person giving the same to be a Patron of the Museum.

The contribution of one thousand dollars, at one time, shall entitle the person giving the same to be a Fellow in Perpetuity.

The contribution of five hundred dollars, at one time, shall entitle the person giving the same to be a Fellow for Life.

Any person may be elected by the Trustees to either of the above degrees, who shall have donated to the Museum Books or Specimens to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly, under the seal of the Museum. The Trustees may also elect Honorary Fellows of the Museum in their discretion.

All persons receiving such degrees and diplomas shall be entitled at all times, to free admission to the Museum and its Exhibitions, but shall not, by virtue of such degrees or diplomas, become members of the Corporation.

#### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly Meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

#### Commissioners of the Central Park :

DEAR SIRS—A number of gentlemen having long desired that a great Museum of Natural History should be established in the Central Park, and having now the opportunity of securing a rare and very valuable collection as a nucleus of such Museum, the undersigned wish to enquire if you are disposed to provide for its reception and development.

James Brown,
Alex, T. Stewart,
Benj. H. Field,
Addian Iselin,
Robert L. Stuart,
Marshall O. Roberts,
Theodore Roosevelt,
George Bliss,
Morris K. Jesup,
William T. Blodgett,

JOHN DAVID WOLFE,
ROBERT COLGATE,
I. N. PHELFS,
LEVI P. MORTON,
W. A. HAINES,
J. PIERFONT MORGAN,
A. G. PHELFS DODGE,
D. JACKSON STEWARD.
HOWARD POTTER.

OFFICE OF THE BOARD OF COMMISSIONERS
OF THE CENTRAL PARK, NEW YORK, January 13, 1869.

GENTLEMEN—The Commissioners of the Central Park have received your communication, in which inquiry is made if they are disposed to provide the reception and development of a large and valuable collection, as a nucleus of a Museum of Natural History.

The Commissioners appreciating the views you so kindly express, entirely concur in the desirability of the establishment of a Museum in the Park, that shall become an aid in the Great Educational System of the city, concentrate and develop Scientific efforts in all departments of Natural History, and at the same time be an instructive and acceptable resort for the people of the city, and for the throng of strangers that visit it.

The Commissioners of the Park will very gladly receive the collection to which you allude, and will use their best exertions toward the establishment of a Museum of Natural History, of an extent and excellence in all its departments that will be creditable to the city, and in their efforts towards the devel-

opment of such an institution the Commissioners of the Park will highly esteem your valuable co-operation.

I am, gentlemen, with great respect,

(Signed)

Andrew H. Green, Comptroller of the Central Park.

To James Brown, Alex. T. Stewart, John David Wolfe, and others.

On the 19th of January, 1869, a meeting of the gentlemen who signed the above note of inquiry, was held at the residence of Benjamin H. Field, Esq., and the following resolutions were unanimously passed:

Whereas, Nearly all the Capitals in Europe and more important cities in our own land, including Boston, Philadelphia, Washington, and Chicago, possess instructive and valuable Museums of Natural History, while New York—notwithstanding its metropolitan position—is still destitute of such an institution:

Resolved, That, recognizing the necessity of such a Museum as a means of recreation and education, and desiring its establishment upon a scale commensurate with the wealth and importance of our great city, we have heard, with much satisfaction, that the opportunity is now presented of securing by purchase in Europe, the largest and most valuable collection of objects in Natural History which has been offered for sale in many years.

Resolved, That in our judgment immediate action should be taken to secure this or some other collection as a nucleus of a great Museum.

Resolved, That, therefore, a Committee be and is hereby appointed to raise the necessary funds, and to act as Trustees for and dispose of the same, and of the collection when acquired, and with full powers to do whatever may be requisite or needful in connection with the business; said Committee to consist of such of the signers of the recent letter of inquiry, dated December 30th, 1868, and addressed to the Commissioners of the Central Park, as may consent to serve, with power to increase their number to twenty.

The following gentlemen have already consented to serve as a Committee and Trustees in accordance with the above Resolution.

JOHN DAVID WOLFE,
ROBERT COLGATE,
BENJAMIN H. FIELD,
ROBERT L. STUART,
ADRIAN ISELIN,
BENJAMIN B. SHERMAN,
WILLIAM A. HAINES,
THEODORE ROOSEVELT,
HOWARD POTTER.

MILLIAM T. BLODGETT,
MORRIS K. JESUP,
D. JACKSON STEWARD,
J. PIERPONT MORGAN,
A. G. P. DODGE,
CHARLES A. DANA.
JOSEPH H. CHOATE,
HENRY PARISH.

New York, December 23, 1869.

Andrew H. Green, Esq., Comptroller of the Central Park:

DEAR SIR-The Trustees of the American Museum of Natural History

having purchased the extensive collection of Mammals, Birds, Fishes, &c., belonging to the late Prince of Neuwied, the Elliot collection of Birds, besides a part of the Verraux and other collections of specimens of Natural History, desire to know if the Commissioners of the Central Park will receive them on deposit within the Central Park, and they would suggest the following as the conditions upon which they would like to deposit them, viz.:

First—The Commissioners of the Park to provide accommodations in the two upper stories of the building known as the Arsenal and such other rooms as shall from time to time be necessary for the exhibition of the collections deposited by the American Museum, and shall cause them to be furnished with glass cases suitable for the preservation and exhibition of such collections.

Second—The Trustees of the American Museum to employ their own Curators for the care and arrangement of their collection, and to pay them their salaries, all such persons to be subject to the regulations of the Park Commissioners

Third—The Police force for the protection of the property and the employees for the cleansing and general care of the rooms to be employed and paid by the Park Commissioners.

Fourth—The Trustees and Curators of the American Museum to have free access at all reasonable times to the rooms occupied by their collections.

Fifth—The collections so deposited to be exhibited to the public at least three days in the week in the name of the American Museum of Natural History, the Trustees to have the right to close the collections at such times as shall be necessary for the arrangement and rearranging of the specimens subject to the regulations of the Park Commissioners.

Sixth—The collections already acquired, and those which may from to time be acquired and so deposited, to remain the property of the American Museum of Natural History to be removed by them immediately after the expiration of six months' previous notice in writing to the Commissioners of the Park, or within six months after receiving a written notice from the Commissioners, asking them to withdraw their property from the Park.

Awaiting the favor of an early reply, I am,

Very truly, yours,

W. A. Haines, Chairman, Executive Committee.

OFFICE OF THE BOARD OF COMMISSIONERS OF THE CENTRAL PARK, BANK OF COMMERCE BUILDING, 31 NASSAU St., New York, Jun. 21, 1870.

DEAR SIR—I have the pleasure to acknowledge the receipt of your letter of the 23d ultimo, relating to the deposits of certain collections with the Park Commissioners by the American Museum of Natural History. The terms upon which it is proposed to make these deposits are such, as will, I think, secure the object that the Museum and the Park Commissioners equally desire; to wit, an establishment that shall afford opportunity for popular instruction and amusement, and for the advancement of the Natural Sciences. If the plan which insures and combines in this enterprise the interests and means of the

private citizen, with those of the public, is productive of all the good results that may reasonably be expected, it will probably be made at once an example and incentive for uniting the energies of those interested in other branches of science and art, in similar undertakings.

In accepting these extensive and valuable collections on the conditions specified, permit me to express, on behalf of the Park Commissioners, their high appreciation of the enlightened sentiment that has provided so generously for all interested in this department of science, and, at the same time, the hope that this auspicious beginning may, by the continued augmentation of similar liberalities, become an unequalled treasury of science alike honorable to the public spirit of the citizens by whom it has been inaugurated, and an indispensable aid to those engaged in efforts to increase the knowledge of the science that it is intended to illustrate.

Very respectfully and truly,

Andrew H. Green, Comptroller of the Park.

W. A. HAINES, Esq.,

Chairman of the Executive Committee of the American Museum.

#### REPORT

ON

#### PURCHASES MADE IN EUROPE

FOR THE

# American Museum of Natural Kistory.

NEW YORK, Jan. 24, 1870.

To the Executive Committee of the American Museum of Natural History:

Gentlemen,—A few days after my arrival at Hanover, Germany, on the first of September last, I received from your chairman a letter requesting me to act, with the assistance of Mr. D. G. Elliot, for the Museum, in negotiating for the purchase of certain collections of specimens in Natural History, which were offered for sale on remarkably favorable terms.

On the 25th of the same month, I arrived in Paris and had a consultation with Mr. Elliot, and ascertained that negotiations were nearly completed for the purchase of the collection of the late Prince Maximilian of Wied. Baron Bibra, the representative of the present Prince of Wied, was informed by Mr. Elliot that I had arrived in Paris, and, as a Trustee and member of the Executive Committee, was prepared to conclude the terms of purchasing the collection, and he at once made an appointment to meet us there.

The Committee having placed the proper credit at my disposal, everything was satisfactorily adjusted and the contract forwarded to your chairman. The price paid for the entire collection was £1,500 Sterling, and instructions were given to ship the collection

from time to time, when ready, by the North German Lloyd's Line of Steamships from Bremen. A full and complete catalogue of the collection was furnished, and deposited with Mr. Elliot, and when copied he will forward the original.

The collection consists of 4,000 mounted birds, 600 mounted mammals, and about 2,000 fishes and reptiles mounted and in alcohol. It is regarded as one of the most important private collections in Europe, and has long been consulted by the scientific world, and contains a large number of types, the results of the Prince's explorations in South America, and many rare specimens which have been secured at intervals during the period of a long lifetime. We were informed by competent experts that the cost of mounting this collection exceeds the price we paid for it.

The fact that we had secured the important collection of Prince Maximilian rendered the labor of selecting from the different departments of the Verreaux collection, one requiring great care; and such work could only be done by one possessing scientific knowledge. This labor was performed with great assiduity and skill by Mr. Elliot. A large number of the selections from this collection embraced the rarest specimens, as they were required only to enlarge and complete our collections already obtained.

Our negotiations resulted in purchasing the following specimens from the different departments of this well-known collection, viz.: about 2,800 mounted birds, 220 mounted mammals, and 400 mounted skeletons of mammals, birds, reptiles and fishes, at a cost of about \$16,000 in gold. In this connection I may state, that the price asked for the collection from which the above were selected was \$45,000 in gold. Mr. Elliot informed me that these specimens, with those previously procured, would render the remaining portion of the Verreaux collection, after our selections were withdrawn from it, of little value to our Museum.

In addition to the above purchases, at the earnest solicitation of Mr. Elliot I purchased from M. Vedray about 250 specimens of mounted mammals and Siberian birds, which were regarded as very rare by scientific collectors. The price paid was \$1,000 in gold.

Particular pains were taken to obtain the cheapest rate of freight, and the Cunard Line having made the lowest bid, orders were given to forward the Paris collections in their steamers. The work of preparing the specimens for shipment was at once begun, and nearly all the selection from the Verreaux collection, and the specimens purchased from M. Vedray, have already arrived, and are now safely stored in the Arsenal Building on Central Park

We were fortunate in enlisting the services of Mr. Edward R. Andrews, of the firm of Jas. W. Tucker & Co., at Paris, who volunteered to give his personal attention to any business connected with the Museum without charge.

The following resumé of the collections purchased by the Museum may be interesting to the Board of Trustees, namely: 9,500 birds, 870 mounted mammals, 2,000 fishes and reptiles, and one of the most interesting collections in Europe, consisting of over 400 mounted skeletons of mammals, birds, reptiles and fishes. These purchases have been made from our fund, which does not exceed \$45,000 currency.

The presence of Mr. Elliot in Europe, and the personal interest he feels in the success of the Museum, are of the greatest importance to us, and he can render the Museum most valuable service in making separate purchases of such specimens as would greatly increase the importance of our collection. We have now reached a point when it would be a questionable policy to purchase any large collection of mammals or birds entire, as a great portion of such a purchase would only furnish us with duplicates. On the other hand, judicious investments can be constantly made in increasing our species and specimens, and it would be a wise decision to authorize Mr. Elliot to make selections from time to time for the Society, if our exchequer would warrant it. illustration, the American bird, now extinct, called the "Great Auk," could be purchased at this time from a private collection It is the only specimen known for sale, and after it has gone into a public collection, it may be years before another specimen can be procured at any price. The same will apply to various other animals we could have procured, namely, a fine dromedary, and an Australian buffalo; but our instructions were confined to the purchase of specific collections and we did not feel warranted in buying others.

The present condition of the Museum, with the acquisition of so large a property, may well be regarded by the public with favor, and fully satisfy the contributors to the fund; and, in my opinion, an appeal to the public would be responded to liberally at this time.

Feeling impressed with the great importance of the enterprise we have in charge, and of the interest the public will take in its success, I beg to present this informal report of my participation in the business of the Museum during the last three months of the past year, for your consideration.

Respectfully submitted.

WILLIAM T. BLODGETT.

To the Trustees of the American Museum of Natural History:

Gentlemen—As a contribution to the collections of Natural History which you are forming for the benefit of the public, I take the liberty to offer for your acceptance a collection of North American Insects of all orders, except Lepidoptera.

This collection, formed by me during my residence in this country, contains about one thousand species of beetles, in about 2000 specimens and about 1800 specimens of the other orders. In all, about 3,800 specimens.

Small as this collection is, when compared to the total number of insects existing in this country, I hope that it will prove useful in giving an impulse to the forming of further collections in this branch of natural history.

The specimens are, with very few exceptions, named and properly classified. The only conditions which I put upon the acceptance of this collection are:

First—That it shall be preserved from injury by being transferred as soon as possible to entomological cabinet boxes, constructed upon the model used in the Berlin Museum, and also in Prof. Agassiz's Museum of Comparative Zoology in Cambridge; such boxes, as a prolonged experience has shown, are entirely proof against the most dangerous enemy of collections, the destructive beetles Anthenus.

Second—That the collection should be rendered as useful as possible by being made accessible to the public, as far as consistent with its safety and preservation.

The collection has been temporarily arranged in a cabinet of twenty drawers, kindly lent for the purpose by Mr. Coleman T. Robinson, and is now ready for delivery.

A collection of insect architecture, principally galls, which I also intend to present to the Museum of Natural History, has not been put in order from want of the show cases necessary for its exhibition.

I must distinctly state that I look upon the present arrangement of these collections merely as a temporary one, affording materials for a future popular entomological collection such as it is desirable to have established in the Museum, a collection always open for public inspection, and affording every person, desirous to learn, the means of acquiring a general knowledge of the classification of insects, and of naming at least the more striking forms among their specimens.

I cannot conclude without returning my sincere thanks to Mr. C. T. Robinson for the facilities and the assistance he most generously tendered me in the arrange-

ment of the collection. Without these facilities it would have been impossible, in such a short time, to put these collections in shape for the purpose of presenting them to you.

I am, Gentlemen, very respectfully, yours,

R. OSTEN SACKEN.

NEW YORK, JANUARY 25th, 1870.

To the Trustees of the American Museum of Natural History:

Gentlemen—I wish to present to you a collection of American and European Lepidoptera, consisting of about three thousand species, represented by at least ten thousand specimens. This collection will be ready for delivery as soon as suitable drawers are furnished by the Museum for its reception. The Butterflies will require twenty and the Moths forty drawers similar in size to those in which the valuable collections presented by Baron Osten Sacken are arranged.

I will be glad to add to your Library one hundred volumes of books on Entomological and Conchological subjects,

I am, gentlemen, yours, very respectfully,

COLEMAN T. ROBINSON.

# PARTIAL LIST OF BOOKS,

Presented by C. T. Robinson.

BRINCKLE, W. D. Remarks on EntomologyPhilade	lphi	a, 1852
CRESSON, E. T. Hymenoptera of CubaPhiladel	phia	., 1865
ORURY, DRW. Illustrations of Exotic Entomology, 3 vLo	ndor	n, 1837
ALMAN, J. W. Analecta Entomologica	folm	., 1823
ESPER, J. C. Die (Europäischen) Schmetterlinge. 8 v Erlangen,	177	7-1830
GROTE & ROBINSON. Synonymical Catalogue of N. A. Sphingids	е	
Philade	lphi	a. 1865
do Lepidopterological ContributionsNew	•	
GAEDE, H. M. Beiträge zur Anatomie der Insecten		
GERMAR PROF. Die Versteinerten Insecten Solenhofen's		1837
HAGEN, H. Synopsis of the Neuroptera of North America		
Washir		
KLUG, DR. F. Entomologiae Brasilianae		1825
LE CONTE. JOHN L. Coleoptera of Kansas and New Mexico, Was	h'gt	'n 1859
do New species of North American Coleoptera	11	1863
do List of the Coleoptera of North America.	**	1863
do Classific'n of the Coleoptera of N. America.	68	1861-2
LOEW & OSTEN SACKEN, Monographs of the Diptera of North		
America.	44	1861-2
MELSHEIMER, F. E. Catalogue of the Coleoptera of the United		
States.	44	1853
MORRIS, JOHN G. Catalogue of the Lepidoptera of N. America	44	1860
do Synopsis of the Lepidoptera of N. America.	44	1862
OSTEN SACKEN. Catalogue of the Diptera of N. America.	44	1858
PROCEEDINGS of the Entomological Society of Philadelphia		1861-67
PACKARD, A. S. Guide to the Study of InsectsSa	lem.	1868-9
PUTNAM & PACKARD, Notes on Bees	Sale	m, 1864
ROBINSON, C. T. American Tortricidae	elph	ia, 1869
SCUDDER, S. H. Fossil Neuropterous Insects	osto	on, 1865
do Catalogue of the Orthoptera of N. America Wash	ing	t'n 1868
SANBORN, F. G. Economical Entomology		. Boston
STAINTON, H. T. Manuel of Butterflies and MothsL		
TRANSACTIONS of the American Entomological Society, Philadelp	hia,	1868-70
TRIMEN, R. Introduction to Classification of InsectsL	onde	on. 1839
WESTWOOD J O. Introduction to Classification of Insects . L.	onde	on 1838

#### CONCHOLOGY.

CONCHOLOGI.
BINNEY AMOS. Terrestrial Molluscs of the United States. 4 vols., 8vo
BINNEY, W. G. Bibliography of North American Conchology
BLAINVILLE, H. DE. Manuel de Malacologie et de Conchyhologie.
2 v., 8vo
BOURGUIGNAT, M. J. R. Malacologie de la Bretagne. 8voParis 1860.
BOURGUIGNAT, M. J. R. Methodus Conch. Denominationis. 8vo. Paris, 1860
CHENU, J. C. Receuil de Coquilles non figurées par Lamarck. Folio
CUVIER, M. DE. Histoire et Anatomie des Mollusques. 4toParis, 1817
GUERIN, F. E. Dictionaire d'Histoire Naturelle, 9 vols., 4to, Paris, 1837-40
HALDEMAN, S. S. Monograph of the F. W. Univalves of the U. S.  8vo
JOURNAL de Conchyliologie. 10 vols., 8vo
LAMARCK, G. B. P. A. de. Hist. Nat. des Animaux Sans Vertebres.
11 vols., 8 vo
LEA, ISAAC. Observations on the Genus Unio. 10 vols., 4to. Phila., 1827-70
MOQUIN, TANDON. Mollusques Terr. et Fluv. de France. 3 vols.,
4toParis, 1855
NATURGESCHICHTE der Würmer. 4toLeipzig, 1842
PHILIPPI, R. A. Conchylien. 3 vols.,
ROSSMAESSLER, E. A. Land und Süsswasser Mollusken. 3 vols.,
4to
SAY, THOMAS. American Conchology. 3 vols., 8voPhiladelphia
SAY, THOMAS. American Conchology. 8vo
TRYON, GEO. W., JR. Monograph of the Pholadacea. 8voPhila., 1862
Cl Chamanana

#### CATALOGUE OF SPECIMENS

#### ILLUSTRATING THE GEOLOGY OF PALESTINE AND SINAL.

Presented by A. L. Rawson, Esq.

LEBANON. Limestones, Jurassic and Cretaceous; fossils, in clay slate; marl; ironstone.

GALILEE AND HAURAN. Basalt; grey and black; limestone; marls.

JUDEA. Limestones, dolomite; fossil Cidaris.

JORDAN VALLEY. Chalky marl; limestones; conglomerate; gravel; clay.

DEAD SEA. Limestone; sandstone; marl; chalk; bitumen stone; salt, and water.

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DESERT OF RAMLEH. Red sand; sandstone.

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#### ON CONDITION THAT THE PRECEEDING AMOUNT BE RAISED TO \$100 000

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Robert L. Stuart.	-		1,000	A. G. Phelps Dodge,		1.000
Alexander Stuart,	-	-	1.000			

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THE

# Second Annual Report

OFTHR

AMERICAN MUSEUM

# NATURAL HISTORY.

JANUARY, 1871.

## New=Fort

PRINTED FOR THE MUSEUM, BY GRONGE F. NESHITF & CO., COR. PEARL AND PINE STREETS

#### THE

# Second Annual Report

OF THE

## AMERICAN MUSEUM

OF

# NATURAL HISTORY.

JANUARY, 1871.

#### New=Fork:

PRINTED FOR THE MUSEUM,

By Ggc. F. Nashitt & Co., cor. Pearl and Pine Streets.

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# American Museum of Natural History.

#### Trustees and Officers.

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ROBERT COLGATE,
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RICHARD M. BLATCHFORD,
ADRIAN ISELIN,
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#### JOHN DAVID WOLFE.

Vice-Presidents

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THEODORE ROOSEVELT.

Treasurer:

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A. G. PHELPS DODGE,

WILLIAM T. BLODGETT.

HOWARD POTTER.

Finance Committee.

HENRY G. STEBBINS,

BENJAMIN B. SHERMAN.

Auditing Committee.

ROBERT COLGATE,

HENRY PARISH

MORRIS K. JESUP.

# REPORT.

The Trustees of the American Museum of Natural History, have the pleasure of presenting this, their Second Annual Report, with copies of their Charter, Constitution, By-Laws, the letters received presenting property to the Museum, and the Report of the Treasurer.

The large and valuable collections, which it was announced in their last Report had been purchased in Europe, have been received during the past year in perfect order, and are now safely deposited in the Arsenal Building in Central Park.

They comprise the entire Museum of the late Prince Maximilian, of Neuwied, Germany, one of the most celebrated private collections in Europe, and especially valuable to the scientific investigators of zoology on account of the large number of types, it contains, the results of the Prince's extensive explorations in South America, and rare specimens secured during a long life devoted to this branch of Natural History; also the Mammals and Siberian birds, numbering 250 specimens, purchased of M. Vedrey, in Paris, and nearly all the selection, comprising 220 mounted Mammals, 2,800 mounted birds and 400 mounted skeletons of mammals, birds, reptiles and fishes from the great collection of the late Edward Verreaux, of Paris.

The Elliot collection of birds, consisting chiefly of North American species and comprising over 2,500 specimens, have been carefully mounted by Mr. John G. Bell, and placed on mahogany stands.

The 10,000 specimens of Lepidoptera presented by Mr. Coleman T. Robinson, and the 4,000 specimens of beetles and insects of other orders, donated by Baron R. Osten Sacken, have also been deposited in the Museum, and are now being prepared for exhibition to the public.

Mr. R. A. Witthaus, Jr., has presented a fine collection of foreign beetles, which he is carefully labelling and placing in the insect cases on the second floor.

In addition to the collections presented by Mr. Robinson, he has accepted the position of Curator of Entomology, without compensation. The Trustees are also under many obligations to Baron Osten Sacken who has rendered valuable assistance in the arrangement of the departments embracing his collection.

The Trustees have been ably seconded in their laborious duties connected with the organization and development of the various departments of the Museum, by Professor Albert S. Bickmore, whose energy in carrying out the views of the Trustees, has contributed largely to its present means, and we therefore take pleasure in recognizing his great usefulness.

It is with special pleasure that the Trustees are able to report that the Department of Public Parks have approved their plans for cases, and that they are already completed. The Commissioners have caused the second and third stories to be ceiled, painted and rendered very attractive, and have prepared a convenient room for the Trustees and their Committees on the first floor, and also three well appointed work-rooms in the fourth story, where the Curators are arranging and labelling the specimens to be placed on exhibition.

The Trustees would also express their thanks to Hon. Henry Hilton, for his uniform courtesy and the personal interest he has displayed in the success of the institution.

The living animals on the first story have been removed, and the whole building thoroughly cleansed. The stoves formerly used to heat the building have been replaced by steam apparatus, and every precaution taken to preserve the Museum property from the possibility of damage by fire.

The Curators have been very greatly assisted in arranging and providing for the preservation of the collections by the kindness of the Superintendent, the Superintending Architect, and other executive officers of the Department at the Arsenal.

Valuable donations of Mollusca have been received from Professor Bickmore, Mr. Robinson, Mr. Haines and Mr. Steward, and other specimens from other generous donors, as shown in the appended list.

A petition signed by many of our most prominent citizens, was presented to the Legislature of the State, during its present session, asking that "the Department of Public Parks be authorized to erect a suitable fire-proof building upon the public lands in the city under their charge, for the establishment and maintenance therein of a Museum of Natural History by The American Museum of Natural History, at an aggregate cost of Five Hundred Thousand Dollars," and the Trustees have the pleasure to state that through the courtesy and kind interest of the Department of Public Parks, a section in conformity to the petition was introduced into the bill pertaining to the Public Parks of the City, and that it has become a law, which section we annex to our Report.

Hon. Peter B. Sweeny, President of the Department of Public Parks, has also promised his influence to secure due consideration of our views and plans in carrying into effect the provisions of the above law.

We have therefore, every encouragement to expect that in the immediate future our brightest anticipations will be realized; and relying upon a continuance of that generous support so freely extended to us heretofore, that our Museum will become worthy of the great metropolis it will adorn, and hoping soon to have it opened not only as an attraction for visitors from all parts of the United States, but as a school in which our own children as well as strangers will acquire information, of which they would otherwise be deprived, we feel that too much stress cannot be laid upon the importance of the institution as a means of public education.

The Trustees therefore appeal to all who have at heart the interests of our city, for the means for the future development of our institution.

## JOHN DAVID WOLFE,

President.

THEODORE ROOSEVELT,

Secretary.

All communications should be addressed, American Museum of Natural History, Central Park, New-York.

#### INCORPORATION.

#### AN ACT TO INCORPORATE THE AMERICAN MUSEUM OF NATURAL HISTORY.

Passed April 6, 1869.

The People of the State of New-York, represented in Senate and Assembly, do enact as follows:

SECTION 1. John David Wolfe, Robert Colgate, Benjamin H. Field, Robert L. Stuart, Adrian Iselin, Benjamin B. Sherman, William A. Haines, Theodore Roosevelt, Howard Potter, William T. Blodgett, Morris K. Jesup, D. Jackson Steward, J. Pierpont Morgan, A. G. P. Dodge, Charles A. Dana, Joseph H. Choate, and Henry Parish, and such persons as may hereafter become members of the corporation hereby created, are hereby created a body corporate, by the name of "The American Museum of Natural History," to be located in the City of New-York, for the purpose of establishing and maintaining in said city a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation.

SEC. 2. Said Corporation shall have power to make and adopt a Constitution and By-Laws, and to make rules and regulations for the admission, suspension, and expulsion of its members, and their government, the number and election of its officers, and to define their duties, and for the safe keeping of its property, and, from time to time, to alter and modify such Constitution, By-Laws, Rules and Regulations. Until an election shall be held pursuant to such Constitution and By-Laws, the persons named in the first section of this Act, shall be, and are hereby declared to be the Trustees and Managers of said Corporation and its property.

SEC. 3. Said Corporation may purchase and hold, or lease any real and personal estate necessary and proper for the purposes of its incorporation, provided they shall not hold real estate which shall exceed one hundred thousand dollars in value.

SEC. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes.

SEC. 5. This Act shall take effect immediately.

STATE OF NEW YORK,
OFFICE OF THE SECRETARY OF STATE,

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office at the city of
Albany, this fourteenth day of April, in the year one thousand eight hundred and sixty-nine.

D. WILLERS, JR., Deputy Secretary of State.

At a meeting of the Trustees, held at the residence of Theodore Roosevelt, Esq., April 8, 1869, the above charter was unanimously accepted by a majority of the Trustees.

## AN ACT

TO DONATE TO THE AMERICAN MUSEUM OF NATURAL HISTORY A COLLECTION FROM THE DUPLICATE SPECIMENS OF NATURAL HISTORY BELONGING TO THE STATE.

PASSED MAY 8, 1869, BY A TWO-THIRDS VOTE.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. The curator of the State Cabinet, under direction of the regents of the university, is hereby authorized to select from the duplicate specimens of natural history belonging to the State, and those which the State may acquire, and from all other specimens of natural history which may be disposed of by the regents or the State, the first and best series of specimens, subject, however, to the rights of other institutions under existing laws, and label the same with their proper scientific names, and present them in the name of the State to the American Museum of Natural History, in the City of New-York, all of which is to be done at the expense of said Museum.

SEC. 2. This Act shall take effect immediately.

STATE OF NEW-YORK,
OFFICE OF THE SECRETARY OF STATE, } ss.:

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office, at the City of

Albany, this seventeenth day of August, in the year one
thousand eight hundred and sixty-nine.

D. WILLERS, JR.,

Deputy Secretary of State.

#### EXTRACT

#### FROM LAW RELATIVE TO DEPARTMENT OF PARKS.

\$ 2. The Board of Commissioners of the Department of Public Parks. in the City of New-York, is hereby authorized to contract, erect, and maintain in and upon that portion of the Central Park formerly known as Manhattan Square, or any other public park, square or place in said city, a suitable fire-proof building for the purpose of establishing and maintaining therein, under suitable rules and regulations, to be prescribed by the said Board from time to time, a Museum and Gallery of Art, by the Metropolitan Museum of Art, incorporated by chapter one hundred and ninety-seven, laws of eighteen hundred and seventy, or other institutions of like character; also, a suitable fire-proof building for the purpose of establishing and maintaining therein, under rules and regulations to be prescribed by the said Board from time to time, a Museum of Natural History, by the American Museum of Natural History, incorporated by chapter one hundred and nineteen, laws of eighteen hundred and sixty-nine, or other institutions of a like character, at an aggregate cost not exceeding a sum of which the annual interest at the rate of interest at which a fund or stock shall be issued, is thirty-five thousand dollars for each of said buildings, for the use of said corporations or other institutions of a like character; and it shall be the duty of and lawful for the Comptroller of the City of New-York to create and issue in the manner in this Act provided, such additional amounts of a public fund or stock, to be denominated the "Museums of Art and Natural History stock," as shall be necessary to provide the money required for erecting said buildings be an amount not exceeding the aforesaid limitations.

## CONSTITUTION

OF THE

American Museum of Natural History,

IN THE CITY OF NEW-YORK.

#### ARTICLE I.

THIS Corporation shall be styled the American Museum of Natural History.

#### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

#### ARTICLE III.

The Trustees shall meet quarterly on the second Monday of every February, May, August and November, at an hour and place to be designated on at least one week's written notice from the Secretary, and shall, annually, at the quarterly meeting in November, elect the officers and committees for the ensuing year. They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

#### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, an Executive Committee, an Auditing Committee, and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

#### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee, and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing,

at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report, at the annual meeting, of the receipts and disbursements of the past year, with such suggestions, as to the financial management of the Museum, as he may deem proper.

#### ARTICLE VI.

The Executive Committee shall consist of five, who shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meetings of the Trustees, without the express sanction of the Trustees.

#### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

#### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

#### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

#### ARTICLE X.

By-Laws may, from time to time, be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at any meeting of the Trustees by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

#### ARTICLE XI.

The contribution of two thousand five hundred dollars to the funds of the Museum at one time, shall entitle the person giving the same to be a Patron of the Museum.

The contribution of one thousand dollars, at one time, shall entitle the person giving the same to be a Fellow in Perpetuity.

The contribution of five hundred dollars, at one time, shall entitle the person giving the same to be a Fellow for Life.

Any person may be elected by the Trustees to either of the above degrees, who shall have donated to the Museum Books or Specimens to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly, under the seal of the Museum. The Trustees may also elect Honorary Fellows of the Museum in their discretion. All persons receiving such degrees and diplomas shall be entitled, at all times, to free admission to the Museum and its Exhibitions, but shall not, by virtue of such degrees or diplomas, become members of the Corporation.

#### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

NEW-YORK, December 23, 1869.

Andrew H. Green, Esq., Comptroller of the Central Park :

DEAR SIR—The Trustees of the American Museum of Natural History having purchased the extensive collection of Manimals, Birds, Fishes, &c., belonging to the late Prince of Neuwied, the Elliot collection of Birds, besides a part of the Verreaux and other collections of specimens of Natural History, desire to know if the Commissioners of the Central Park will receive them on deposit within the Central Park, and they would suggest the following as the conditions upon which they would like to deposit them, namely:

First—The Commissioners of the Park to provide accommodations in the two upper stories of the building known as the Arsenal and such other rooms as shall from time to time be necessary for the exhibition of the collections deposited by the American Museum, and shall cause them to be furnished with glass cases suitable for the preservation and exhibition of such collections.

Second—The Trustees of the American Museum to employ their own Curators for the care and arrangement of their collection, and to paythem their salaries, all such persons to be subject to the regulations of the Park Commissioners.

Third—The Police force for the protection of the property and the employees for the cleansing and general care of the rooms to be employed and paid by the Park Commissioners.

Fourth—The Trustees and Curators of the American Museum to have free access at all reasonable times to the rooms occupied by their collections.

Fifth—The collections so deposited to be exhibited to the public at least three days in the week in the name of the American Museum of Natural History, the Trustees to have the right to close the collections at such times as shall be necessary for the arrangement and rearranging of the specimens, subject to the regulations of the Park Commissioners.

Sixth—The collections already acquired, and those which may from time to time be acquired and so deposited, to remain the property of the American Museum of Natural History, to be removed by them immediately after the expiration of six months' previous notice in writing to the Commissioners of the Park, or within six months after receiving a written notice from the Commissioners, asking them to withdraw their property from the Park.

Awaiting the favor of an early reply, I am,

Very truly yours,

W. A. HAINES, Chairman Executive Committee.

OFFICE OF THE BOARD OF COMMISSIONERS OF THE CENTRAL PARK, BANK OF COMMERCE BUILDING, 31 NASSAU St., New-York, Jan. 21, 1870.

DEAR SIR—I have the pleasure to acknowledge the receipt of your letter of the 23d ultimo, relating to the deposits of certain collections with the Park Commissioners by the American Museum of Natural History. The terms upon which it is proposed to make these deposits are such as will, I think, secure the object that the Museum and the Park Commissioners equally desire, to wit, an establishment that shall afford opportunity for popular instruction and amusement, and for the advancement of the Natural Sciences. If the plan which insures and combines in this enterprise the interests and means of the private citizen, with those of the public, is productive of all the good results that may reasonably be expected, it will probably be made at once an example and incentive for uniting the energies of those interested in other branches of science and art in similar undertakings.

In accepting these extensive and valuable collections on the conditions specified, permit me to express, on behalf of the Park Commissioners, their high appreciation of the enlightened sentiment that has provided so generously for all interested in this department of science, and, at the same time, the hope that this auspicious beginning may, by the continued augmentation of similar liberalities, become an unequalled treasury of science alike honorable to the public spirit of the citizens by whom it has been inaugurated, and an indispensable aid to those engaged in efforts to increase the knowledge of the science that it is intended to illustrate.

Very respectfully and truly,

ANDREW H. GREEN, Comptroller of the Park.

W. A. HAINES, Esq.,

Chairman of the Executive Committee of the American Museum.

The above was confirmed by the action of the present Board, per letter below, in answer to our inquiry addressed to the Honorable Peter B. Sweeney, President of the Department of Public Parks.

DEPARTMENT OF PUBLIC PARKS, 81 NASSAU STREET, NEW-YORK, June 14th, 1870.

W. A. HAINES, Esq.,

Chairman Executive Committee American Museum of Natural History:

SIR—At a meeting of the Executive Committee of the Department of Public Parks, held this day, the following resolution was adopted:

Resolved, That the arrangements made by the late Central Park Commissioners with the American Museum of Natural History, and all matters pertaining thereto be referred to Commissioner Hilton, with power to carry out the same, procure the necessary cases, prepare the second and third floors of the Arsenal building for the Exhibition, and make the necessary arrangement therefor.

Respectfully,

GEORGE M. VAN NORT,

C. D. P. P.

#### To the Honorable the Legislature of the State of New-York :

The undersigned, citizens of the City of New-York, respectfully petition that authority may be given to the Department of Public Parks in said city to erect suitable fireproof buildings upon the public lands in said city under their charge, for the establishment and maintenance therein of a Museum of Art by The Metropolitan Museum of Art, incorporated by Act of April 13, 1870, and a Museum of Natural History by the American Museum of Natural History, incorporated by Act of April 6, 1869, at an aggregate cost not exceeding five hundred thousand dollars for each corporation.

JOHN DAVID WOLFE	13 Madison Avenue.
JOHN TAYLOR JOHNSTON	8 Fifth Avenue.
JAMES BROWN	. 38 East 37th Street.
ROBERT L. STUART	
WILSON G. HUNT	
S. J. TILDEN.	
WM. C. BRYANT	. Roslyn L. I.
ROBERT COLGATE	
D. JACKSON STEWARD	
E. D. MORGAN	
ADRIAN ISELIN	23 East 26th Street.
WILLIAM T. BLODGETT	182 Broadway.
BENJ. H. FIELD	21 East 26th Street.
JOHN A. DIX	3 West 21st Street.
I. N. PHELPS	229 Madison Avenue.
JAMES STOKES	37 Madison Avenue.
RICHARD MORTIMER	20 East 23d Street.
SAMUEL B. F. MORSE	5 West 22d Street.
JAMES B. COLGATE	22 East 23d Street.
DARLING, GRISWOLD & CO	Fifth Avenue Hotel.
ARNOLD, CONSTABLE & CO	Canal Street.
SAMUEL L. M. BARLOW	! Madison Avenue.
W. M. HALSTED	584 Fifth Avenue.
WM. S. GAIDLER	8 East 23d Street.
B. H. HUTTON	144 Duane Street.
D. WILLIS JAMES	Park Avenue, 39th Street.
W. E. DODGE, JR	262 Madison Avenue.
BENJ B. SHERMAN	16 West 20th Street.
THEODORE ROOSEVELT	28 East 20th Street.
EDWARD MATTHEWS	101 Fifth Avenue.

MORTON, BLISS & CO	30 Broad Street.
J. PIERPONT MORGAN	6 East 40th Street.
JAMES M. BROWN	31 East 30th Street.
HOWARD POTTER	37 East 37th Street
A. A. LOW	31 Rueling Slip
W. A. HAINES	976 Broadway
S. H. WALES.	520 Fiel Avenue
RICHARD BUTLER	45 West 48th Street
I I PRINCEPE	45 West 40th Street.
J. F. KENSETT	Association Building.
C. L. TIFFANY	
WILLIAM S. ANDREWS	7 Murray Street.
GEORGE OPDYKE	50 West 47th Street.
PARKER HANDY	22 West 10th Street.
JOHN H. HALL	63 Park Avenue.
WM. L. ANDREWS	
WILLIAM J. HOPPIN	
SAMUEL G. WARD	103 Madison Avenue.
LUCIUS TUCKERMAN	220 Madison Avenue
GEORGE WILLIAM CURTI	S Roslyn L. I
HENRY G. MARQUAND	01 Wast Och Street
HENRY CLEWS	42 Wall Street.
ROBERT HOE, JR	29 West 19th Street.
WM. H. RAYNOR	137 West 42d Street.

NEW-YORK, June 27, 1870.

WILLIAM A. HAINES, Esq., Chm. Ex. Com., Am. Mus. Nat. Hist.

DEAR SIR:—Allow me to present to the American Museum of Natural History, through you, a collection of land and freshwater shells, collected in Switzerland and Wurtemburg.

Yours very respectfully,

FRANK DAULTE.

BROOKLYN, N. Y., April 16, 1870.

To the Trustees of the American Museum of Natural History.

GENTLEMEN:—Having received from Col. Nicholas Pike, U. S. Consul at Mauritius, some bones of that extinct bird, the Dodo, I take pleasure in presenting the most complete set of them to you for the Museum.

Yours respectfully,

J. CARSON BREVOORT.

NEW-YORK, Sept. 1, 1870.

W. A. HAINES Esq., Chairman Ex. Committee.

DEAR SIR:—I desire to present to the American Museum of Natural History my collections contained in thirteen boxes now placed in the Arsenal Building, Central Park. They comprise a part of the shells and alcoholic mollusca which I collected during my travels in the East Indian Archipelago; also four skeletons of the sea otter from Alaska. The alcoholic collection contains most of the species found on the shores of Amboyna and the three islands adjacent, in sufficient numbers to afford ample material for studying their anatomy. It was chiefly to obtain such specimens and to ascertain beyond a doubt their precise habitat, that I travelled to the Mollucas.

Respectfully yours,

ALBERT S. BICKMORE.

NEW-YORK, Sept. 29, 1870.

W. A. HAINES, Esq.

DEAR SIR:—I have taken the liberty of directing to your care the package herewith sent. It contains copies of my two works on the Fossils of South Carolina, to be presented to the Library of the American Museum of Natural History, now in course of formation at the Park.

Very respectfully yours,

FRANCIS S. HOLMES.

NEW-YORK, Nov. 1, 1870.

To the Trustees of the American Museum of Natural History.

Gentlemen:—I wish to give the Museum a Conchological Collection consisting of about one thousand species, represented by four thousand specimens. Yours very respectfully, COLEMAN T. ROBINSON.

NEW-YORK, April 8, 1871.

To the Trustees of the American Museum of Natural History.

GENTLEMEN:—I beg you to favor me by accepting a small collection of exotic coloeloptera, which I herewith present to the museum.

Hoping that this small contribution will soon be lost among others, I remain yours respectfully, R. A. WITTHAUS, Jr.

No. 9 East 32D Street, \\
New-York, April 10, 1871.

To the Trustees of the American Museum of Natural History, Central Park. N. Y.:

GENTLEMEN:—I herewith beg your acceptance of the following donation to the Conchological Department of the American Museum of Natural History: 50 species, 100 specimens of shells from my own collection.

Wishing you every success, I remain very respectfully yours,

ALBERT STORER.

#### PATRONS.

By the payment of twenty-five hundred dollars.

JOHN DAVID WOLFE.
JAMES BROWN,
ALEX. T. STEWART.

## FELLOWS IN PERPETUITY,

By the payment of one thousand dollars.

ROBERT L. STUART, WILLIAM T. BLODGETT, D. JACKSON STEWARD, WILLIAM E. DODGE, PETER COOPER, WILLIAM H. ASPINWALL, ROBERT BONNER, B. H. HUTTON, EDWARD CLARK, JAMES M. CONSTABLE, ROBERT COLGATE. THEODORE ROOSEVELT, MORRIS K. JESUP, A. G. PHELPS DODGE, D. N. BARNEY, I. X. PHELPS, JAMES STOKES, D. WILLIS JAMES, EDWARD MATHEWS, RICHARD ARNOLD, WILLIAM T. GARNER.

## FELLOWS FOR LIFE,

By the payment of five hundred dollars.

WILLIAM A. HAINES,
J. PIERPONT MORGAN.
BENJAMIN II. FIELD.
HOWARD POTTER,
CHARLES W. GRISWOLD,
SAMUEL F. B. MORSE.
RUTHERFORD STUYVESANT.
MEREDITH HOWLAND,
MARSHALL O. ROBERTS.
\*JOHN ALSTYNE,
O. B. POTTER,
JONATHAN THORNE,
WILLIAM E. DODGE, JR.,

LEVI P. MORTON.
BENJAMIN B. SHERMAN,
ADRIAN ISELIN,
ALFRED B. DARLING,
A. A. LOW,
RICHARD MORTIMER,
THOMAS A. VYSE, JR.,
GEORGE GRISWOLD GRAY.
GOUVENEUR KEMBLE,
SAMUEL HAWKS,
BENJAMIN AYMAR,
JOHN SNEDEN.
GEORGE BLISS.

## MEMBERS FOR LIFE,

By the payment of two hundred and fifty dollars.

HENRY PARISH, HENRY I. BARBEY, THEODORE W. RILEY, ROBERT R. MINTURN, C. N. POTTER, WM. 1. COGSWELL, JOHN K. MYERS, HENRY CHAUNCEY, JAMES W. GERARD, JAMES M. BROWN, WILLIAM M. HALSTED,

a Deceased.

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ROBERT COLMATE, Auditing Committee. Examined and Approved.

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Third and Fourth

# ANNUAL REPORTS

OF THE

# AMERICAN MUSEUM

OF

# NATURAL HISTORY.

NOVEMBER, 1872.

New-Hork :

PRINTED FOR THE MUSEUM.

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New-Dork:

PRINTED FOR THE MUSEUM.

MDCCCLXXII.



# American Museum of Natural History.

#### Trustees and Officers.

ROBERT L. STUART.
ROBERT COLGATE.
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ADRIAN ISELIN.
BENJAMIN B. SHERMAN.
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THEODORE ROOSEVELT.
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ANDREW H. GREEN.
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THEODORE ROOSEVELT.

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MORRIS K. JESUP.

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#### Auditing Committee.

ROBERT COLGATE.

THEODORE ROOSEVELT.

JOSEPH II. CHOATE.

## FOURTH REPORT.\*

Since our last Annual Report, it has been our painful duty to record the loss of our honored associate and President, Mr. John David Wolfe. Having long held a distinguished place among New York's eminent citizens, he departed at last, full of years and honors, and left behind him a name and memory which will ever be gratefully cherished by all who Possessed of large wealth he gave it knew him. freely to every good cause; blessed with abundant leisure he devoted it to self culture, and to the development of whatever tended to the relief and improvement of those about him. A lover of Science he lent a friendly hand to its advocates and disciples. He entered with zeal into the project of this Museum of Natural History, hoping and believing that it would prove an honor to his native city, and an important means of education to its citizens and their children. It owes its foundation in a large measure to his liberal aid and wise counsels, and whatever success may be in store for it, it will always count among its best treasures the name and character of its first President.

The Institution has also sustained a great loss in the death of Mr. Coleman T. Robinson, its Curator of Entomology and one of its largest contributors.

<sup>\*</sup>The Third Annual Report is added as an Appendix.

The past year has been one of marked growth and increasing prosperity to the Museum. Twenty thousand dollars have been raised to pay off all obligations on the collections, including the rare and artistically mounted specimens selected from the extensive property of Madame Verreaux and Madame Verdey, of Paris, and all these valuable collections have been safely received and are now placed on public exhibition. More donations of specimens have been received during the past few months than the three years previous. A list of them, many of which are of high value will be found later in the report.

To enable the Museum to exhibit these additions, the Department of Public Parks has completed several new cases on the upper two stories, filling up all the available room, and has also appropriated a part of the lower floor, which will soon be occupied.

The plans for the new building to be erected, have been completed, and the preparation of the ground is already far advanced.

The Trustees would express their thanks to the Department, its Architects, and to its Executive Officers on the Park for their uniform courtesy, and the personal interest they have displayed in the success of the institution.

The Mammals, Birds, and Insects have been so completely arranged by Professor Bickmore and Dr. Holder, as to give the whole exhibition an improved and very attractive character. Mr. Theodore L. Mead is kindly transferring to insect-proof boxes, the Robinson collection of Lepidoptera, which has been found to contain twenty thousand specimens, and includes many of his types.

The Museum is constantly receiving offers of specimens and books, at very reasonable prices, among which, we would refer to the very important letter annexed from Dr. John C. Jay, of Rye, offering to present his celebrated collection of shells, containing over 50,000 specimens, when our institution can purchase his library, consisting of Conchological and other scientific works.

A very important collection of the fossils of South Carolina, from the Pleiocene and Post Pleiocene periods, has been offered, and a large and choice collection of minerals, also rare mammals and skeletons; and the fact that one of the largest private collections of birds, and rare works on Ornithology in the world is soon to be offered for sale in Europe, compels us to ask that our present subscription list of \$80,000 be increased to \$200,000 at once.

On nearly every day during fair weather, our halls have been thronged by visitors, not only from our own city and state, but from all parts of the country, numbering frequently from 5,000 to 10,000. Large numbers of pupils from the common schools of our city and its suburbs have come in bodies to the Museum, under the care of their teachers, who have been enabled, by means of our collections, to impart much useful instruction.

Scientific men, and advanced scholars from several colleges, have come to the city solely to profit by the opportunity the Museum can already offer them, to examine rare and unique specimens.

The privileges which subscribers will hereafter enjoy are stated in the first By-Law. As the importance of this institution in promoting the study of

Natural History in America is now beginning to be made manifest, the Trustees confidently appeal to all who have at heart the interest of our city and country, for the means to enable it to accomplish its important mission.

R. L. STUART,

President.

THEODORE ROOSEVELT,

Secretary.

All communications should be addressed, American Museum of Natural History, Central Park, New-York.

RYE, WESTCHESTER Co., N. Y. (November 4th, 1871.)

To the Trustees of the American Museum of Natural History,

GENTLEMEN—Having devoted a large part of my life to the science of Conchology, I am deeply interested in the great enterprise so nobly inaugurated by the citizens of New York, for the establishment of a Museum of Natural History which shall be fully worthy of our metropolitan city.

My collection of shells comprises fourteen thousand species, twenty thousand varieties, and fifty thousand specimens, and has cost me many years of continued labor, and over twenty-five thousand dollars.

My library consists of 850 bound volumes, many of them obtained by giving unlimited orders, and is probably the most complete of its kind in America. It has cost over \$10,000, but if the friends of science in New York City will enable you to purchase it at that price, I will present to the Museum my entire collection of shells described above.

Believing that your institution will enjoy continued and increasing prosperity and soon become of national importance, and awaiting the favor of an early reply,

I am,

Very truly yours,

JOHN C. JAY.

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### INCORPORATION.

### AN ACT

### TO INCORPORATE THE AMERICAN MUSEUM OF NATURAL HISTORY.

Passed April 6, 1869.

The People of the State of New-York, represented in Senate and Assembly, do enact as follows:

Section 1. John David Wolfe, Robert Colgate, Benjamin H. Field, Robert L. Stuart, Adrian Iselin, Benjamin B. Sherman, William A. Haines, Theodore Roosevelt, Howard Potter, William T. Blodgett, Morris K. Jesup, D. Jackson Steward, J. Pierpont Morgan, A. G. P. Dodge, Charles A. Dana, Joseph H. Choate, and Henry Parish, and such persons as may hereafter become members of the corporation hereby created, are hereby created a body corporate, by the name of "The American Museum of Natural History," to be located in the City of New-York, for the purpose of establishing and maintaining in said city a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation.

Sec. 2. Said Corporation shall have power to make and adopt a Constitution and By-Laws, and to make rules and regulations for the admission, suspension, and expulsion of its members, and their government, the number and election of its officers, and to define their duties, and for the safe keeping of its property, and, from time to time, to alter and modify such Constitution, By-Laws, Rules and Regulations. Until an election shall be held pursuant to such Constitution and By-Laws, the persons named in the first section of this Act, shall be, and are hereby declared to be the Trustees and Managers of said Corporation and its property.

SEC, 3. Said Corporation may purchase and hold, or lease any real and personal estate necessary and proper for the purposes of its incorporation, provided they shall not hold real estate which shall exceed one hundred thousand dollars in value.

SEC. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes.

Sec. 5. This Act shall take effect immediately.

STATE OF NEW YORK, OFFICE OF THE SECRETARY OF STATE, \$ 88.

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

(SEAL.) Given under my hand and seal of office at the city of Albany, this fourteenth day of April, in the year one thousand eight hundred and sixty-nine.

D. WILLERS, JR.,

Deputy Secretary of State.

At a meeting of the Trustees, held at the residence of Theodore Roosevelt, Esq., April 8, 1869, the above charter was unanimously accepted by a majority of the Trustees.

### AN ACT

TO DONATE TO THE AMERICAN MUSEUM OF NATURAL HISTORY A COLLECTION FROM THE DUPLICATE SPECIMENS OF NATURAL HISTORY BELONGING TO THE STATE,

Passed May 8, 1869, by a two-thirds vote.

The People of the State of New-York, represented in Senate and Assembly do enact as follows:

Skc. 1. The Curator of the State Cabinet, under direction of the Regents of the University, is hereby authorized to select from the duplicate specimens of natural history belonging to the State, and those which the State may acquire, and from all other specimens of natural history which may be disposed of by the Regents of the State, the first and best series of specimens, subject, however, to the rights of other institutions under existing laws, and label the same with their proper scientific names, and present them in the name of the State to the American Museum of Natural History, in the City of New-York, all of which is to be done at the expense of said Museum.

SEC. 2. This Act shall take effect immediately.

STATE OF NEW-YORK,
OFFICE OF THE SECRETARY OF STATE, S.

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office, at the City of Albany, this seventeenth day of August, in the year one thousand eight hundred and sixty-nine.

D. WILLERS, JR.,

Deputy Secretary of State.

New-York, December 23, 1869.

ANDREW H. GREEN, Esq., Comptroller of the Central Park:

DEAR SIR—The Trustees of the American Museum of Natural History having purchased the extensive collection of Mammals, Birds, Fishes, &c., belonging to the late Prince of Neuwied, the Elliot collection of Birds, besides a part of the Verreaux and other collections of specimens of Natural History, desire to know if the Commissioners of the Central Park will receive them on deposit within the Central Park, and they would suggest the following as the conditions upon which they would like to deposit them, namely:

First—The Commissioners of the Park to provide accommodations in the two upper stories of the building known as the Arsenal and such other rooms as shall from time to time be necessary for the exhibition of the collections deposited by the American Museum, and shall cause them to be furnished with glass cases suitable for the preservation and exhibition of such collections.

Second—The Trustees of the American Museum to employ their own Curators, for the care and arrangement of their collection, and to pay them their salaries all such persons to be subject to the regulations of the Park Commissioners.

Third—The Police force for the protection of the property, and the employees for the cleansing and general care of the rooms, to be employed and paid by the Park Commissioners.

Fourth.—The Trustees and Curators of the American Museum to have free access at all reasonable times to the rooms occupied by their collections.

Fifth—The collections so deposited to be exhibited to the public at least three days in the week in the name of the American Museum of Natural History, the Trustees to have the right to close the collections at such times as shall be necessary for the arrangement and rearranging of the specimens, subject to the regulations of the Park Commissioners.

Sixth—The collections already acquired, and those which may from time to time be acquired and so deposited, to remain the property of the American Museum of Natural History, to be removed by them immediately after the expiration of six months' previous notice in writing to the Commissioners of the Park, or within six months' after receiving a written notice from the Commissioners, asking them to withdraw their property from the Park.

Awaiting the favor of an early reply, I am,

Very truly yours,

W. A. HAINES,

Chairman Executive Committee.

Office of the Board of Commissioners of the Uentral Park, Bank of Commerce Building,
31 Nassau St., New-York, Jan. 21, 1870.

Dear Sir.—I have the pleasure to acknowledge the receipt of your letter of the 23d ultimo, relating to the deposits of certain collections with the Park Commissioners by the American Museum of Natural History. The terms upon which it is proposed to make these deposits are such as will, I think, secure the object that the Museum and the Park Commissioners equally desire, to wit, an establishment that shall afford opportunity for popular instruction and amusement, and for the advancement of the Natural Sciences. If the plan which insures and combines in this enterprise the interests and means of the private citizen, with those of the public, is productive of all the good results that may reasonably be expected, it will probably be made at once an example and incentive for uniting the energies of those interested in other branches of science and art in similar undertakings.

In accepting these extensive and valuable collections on the conditions specified permit me to express, on behalf of the Park Commissioners, their high appreciation of the enlightened sentiment that has provided so generously for all interested in this department of science, and, at the same time, the hope that this auspicious beginning may, by the continued augmentation of similar liberalities, become an unequalled treasury of science, alike honorable to the public spirit of the citizens by whom it has been inaugurated, and an indispensable aid to those engaged in efforts to increase the knowledge of the science that it is intended to illustrate.

Very respectfully and truly.

ANDREW H. GREEN.

Comptroller of the Park,

W. A. HAINES, Esq.,

Chairman of the Executive Committee of the American Museum.

To the Honorable the Legislature of the State of New-York:

The undersigned, citizens of the City of New-York, respectfully petition that authority may be given to the Department of Public Parks in said city to erect suitable fire-proof buildings upon the public lands in said city under their charge, for the establishment and maintenance therein of a Museum of Art by The Metropolitan Museum of Art, incorporated by Act of April 13, 1870, and a Museum of Natural History by the American Museum of Natural History, incorporated

by Act of April 6, 1869, at an aggregate cost not exceeding five hundred thousand dollars for each corporation.

JOHN DAVID WOLFE	. 13 Madison Avenue.
JOHN TAYLOR JOHNSTON	, 8 Fifth Avenue.
JAMES BROWN	.38 East 37th Street.
ROBERT L. STUART	154 Fifth Avenue.
WILSON G. HUNT.	82 White Street.
S. J. TILDEN	15 Gramerey Park
WM. C. BRYANT	
ROBERT COLGATE.	14 West 99d Street
D. JACKSON STEWARD	
E D MODGAN	111 Pich Avenue,
E. D. MORGAN	.411 Fifth Avenue.
ADRIAN ISELINWILLIAM T. BLODGETT	. 23 East 26th Street.
WILLIAM T. BLODGETT	. 182 Broadway,
BENJ. H. FIELD	
JOHN A. DIX	
I. N. PHELPS	. 229 Madison Avenue,
JAMES STOKES	
RICHARD MORTIMER	
SAMUEL B. F. MORSE	5 West 22d Street
JAMES B. COLGATE	22 East 93d Street
DARLING, GRISWOLD & CO	Fifth Anoma Hatal
ARNOLD, CONSTABLE & CO	Canal Character Hotel.
SAMUEL L. M. BARLOW	. 1 Madison Avenue.
W. M. HALSTED	
WM. S. GAIDLER	.8 East 23d Street.
B. H. HUTTON	. 144 Duane Street.
D. WILLIS JAMES	Park Avenue, 39th Street.
W. E. DODGE, JR	.262 Madison Avenue,
W. E. DODGE, JR. BENJ. B. SHERMAN. THEODORE ROOSEVELT.	. 16 West 20th Street.
THEODORE ROOSEVELT	.28 East 20th Street.
EDWARD MATTHEWS	101 Fifth Avenne
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MORTON, BLISS & CO	30 Broad Street,
J. PIERPONT MORGAN	30 Broad Street,
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J. PIERPONT MORGAN.  JAMES M. BROWN.  HOWARD POTTER.	30 Broad Street, .6 East 40th Street, .31 East 30th Street, 37 East 37th Street,
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### EXTRACT

FROM

### LAW RELATIVE TO DEPARTMENT OF PARKS.

SECTION 2. The Board of Commissioners of the Department of Public Parks, in the City of New-York, is hereby authorized to contract, erect, and maintain in and upon that portion of the Central Park formerly known as Manhattan Square, or any other public park, square or place in said city, a suitable fireproof building for the purpose of establishing and maintaining therein, under suitable rules and regulations, to be prescribed by the said Board from time to time, a Museum and Gallery of Art, by the Metropolitan Museum of Art, incorporated by chapter one hundred and ninety-seven, laws of eighteen hundred and seventy, or other institutions of like character; also, a suitable fire-proof building for the purpose of establishing and maintaining therein, under rules and regulations to be prescribed by the said Board from time to time, a Museum of Natural History, by the American Museum of Natural History, incorporated by chapter one hundred and nineteen, laws of eighteen hundred and sixty-nine, or other institutions of a like character, at an aggregate cost not exceeding a sum of which the annual interest at the rate of interest at which a fund or stock shall be issued, is thirty-five thousand dollars for each of said buildings, for the use of said corporations or other institutions of a like character; and it shall be the dnty of and lawful for the Comptroller of the City of New-York to create and issue in the manner in this Act provided, such additional amounts of a public fund or stock, to be denominated the "Museums of Art and Natural History stock," as shall be necessary to provide the money required for erecting said buildings by an amount not exceeding the aforesaid limitations.

## CONSTITUTION

OF THE

# American Museum of Natural History.

IN THE CITY OF NEW YORK.

### ARTICLE 1.

This Corporation shall be styled the American Museum of Natural History.

### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

#### ARTICLE III.

The Trustees shall meet quarterly on the second Monday of every February, May, August and November, at an hour and place to be designated on at least one week's written notice from the Secretary, and shall, annually, at the quarterly meeting in November, elect the officers and committees for the ensuing year. They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, an Executive Committee, an Auditing Committee, and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

#### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee, and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in

books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report, at the annual meeting, of the receipts and disbursements of the past year, with such suggestions, as to the financial management of the Museum, as he may deem proper.

#### ARTICLE VI.

The Executive Committee shall consist of five, who shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meetings of the Trustees, without the express sanction of the Trustees.

#### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

#### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

### ARTICLE X

By-Laws may, from time to time, be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at any meeting of the Trustees by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

#### ARTICLE XI.

The contribution of two thousand five hundred dollars to the funds of the Museum at one time, shall entitle the person giving the same to be a Patron of the Museum.

The contribution of one thousand dollars, at one time, shall entitle the person giving the same to be a Fellow in Perpetuity.

The contribution of five hundred dollars, at one time, shall entitle the person giving the same to be a Fellow for Life.

Any person may be elected by the Trustees to either of the above degrees, who shall have donated to the Museum Books or Specimens to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly, under the seal of the Museum. The Trustees may also elect Honorary Fellows of the Museum in their discretion.

All persons receiving such degrees and diplomas shall be entitled, at all times, to free admission to the Museum and its Exhibitions, but shall not, by virtue of such degrees or diplomas, become members of the Corporation.

### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

## BY-LAWS.

### I

Patrons giving \$2,500, each receive 10 (blank) Season Tickets and 1 Subscriber's Ticket.

Fellows in Perpetuity giving \$1000, each receive 5 (blank) Season Tickets and 1 Subscriber's Ticket.

Fellows for Life giving \$500, each receive 4 (blank) Season Tickets and 1 Subscriber's Ticket.

Members giving \$250, each receive 3 (blank) Season Tickets and 1 Subscriber's Ticket.

Associate Members giving \$100, each receive 2 (blank) Season Tickets and 1 Subscriber's Ticket.

Annual Subscribers of \$10 yearly, each receive 1 (blank) Season Ticket and 1 Subscriber's Ticket.

### II.

Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

### III.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Fellow in Perpetuity" of the Museum, unless by a unanimous vote of a quorum of the Board, excepting Trustees ex-efficio.

## DONATIONS.

1871.

Nov 8.—Mrs. R. A. WITTHAUS, New York City.
12 Crustaceans.

Nov .10.—Mrs. BENSON, New York City.

1 Case Insects and Dried Fish.

Dec. 1.—HALLOWELL GRANITE CO., Hallowell, Me.
1 Block Granite.

Dec. 1.—Mr. CHAS. GISSLER, Hoboken, N. J. 1 Collection, small Marine Crustaceans.

Dec. 5.—Mrs. JOS. R. REED, New Bedford, Mass. 1 Collection Shells.

1872.

Jan. 10.—Mr. H. W. McCOON,

2 Hornet's Nests.

Jan. 18.—Mr. JOSIAH DOW, through G. W. Dow.

Stuffed Crocodile.

1 Bottle Shaped Bird's Nest.

1 Crocodile Skin.

2 Squirrel Skins, Hindostan.

Jan. 22.—Mr. THEODORE L. MEAD, New York City.
55 Species, 81 Specimens Diptera—Colorado, West
Virginia and Florida.

Jan. 22.—Messrs. SINCLAIR & MILNE, New York City.

4 Blocks Sandstone.

1 Block Marble.

Jan. 31.—BODWELL GRANITE CO., Fox Islands, Me.

2 Blocks Granite, Fox Island, Me.1 Block Red Granite, Jonesboro, Me.

Feb. 2.—BIGELOW BLUESTONE CO., Malden, Ulster Co., N.Y. 2 Blocks Bluestone.

Feb. 2.—Mr. GEO, N. LAWRENCE, New York City. 1 Monkey's Skin.

Feb. 14.—The Misses BRUCE, New York City.
1 Collection Shells.

- Feb. 14.—Dr. A. M. LORYEA, East Portland, Oregon.

  1 Vertebra of Whale.
- Feb. 15.—Mr. G. M. BRAINERD, Rockland, Me. Fragments of Meteorite from Searsmont, Me.
- Feb. 19.—Mr J. P. BERRIDGE, Hudson, N. Y. 1 Block Shell Marble.
- Feb. 19.—Mr. THEODORE L. MEAD, New York City.
  3 Specimens Silicified Wood, South Park, Colorado.
- Feb. 28.—Mr. H. HERRICK, New York City.
  3 Birds Nests.
  12 Species, 29 Specimens Birds Eggs.
- Mar. 1.—Mr. CHARLES BUNTING, New York City.
  Blade of Saw-Fish.
- Mar. 4.—Mrs. WILLARD PARKER, New York City.
  2 Specimens Phyllium.
  2 "Phasmida.
- Mar. 5.—Mr. J. H. BATTY, New York City.
  3 Birds Nests.
- Mar. 5.—Mr. D. JACKSON STEWARD, New York City. 2 very large Specimens Crystalized Quartz.
  - 2 Very large Specimens Crystalized Quartz.
    2 Specimens Ammonites.
- Mar. 15.—Mr. ALEX. C. LANIER, through Chas. Lanier, Lafayette, Ind.
  - 1 Whooping Crane.
  - 1 Hornet's Nest.
- Mar. 15.—Mr. CHAS. GISSLER, Hoboken, N. J. 2 Specimens Crustacea.
- Mar. 27.—MUSEUM COMP. ZOOLOGY, Cambridge, Mass. Bulletin No. 2.
- Apr. 4.—Mr. D. JACKSON STEWARD, New York City.
  3 Esquimaux Fish and Bird Spears.
  - 11 War Lances.
  - 3 " " Fiji Islands.
  - 4 Obsidian Lances, New Zealand.
  - 1 War Club.
  - 2 Wooden Flags, Fiji Islands.
  - 1 Fish Spear, Kingsmills Islands.
  - 1 Esquimaux Harpoon.
  - 1 Sharks-Teeth Sword.

- Apr. 10.-Mr. P. T. BARNUM, N. Y. City.
  - 1 Fur Seal, mounted.
  - 1 Giraffe.
  - 1 Baboon and Skull of do.
- Apr. 10.—Mr. JOHN WALLACE, New York City. 1 Virginia Deer, mounted.
- Apr. 12.—CONCORD GRANITE CO., Concord, N. II.

  1 Block Granite.
- Apr. 25.—Mr. A. H. UNDERHILL, New York City.
  1 Pair Moose Antlers.
- Apr. 26.—Dr. R. E. KUNZE, New York City. 47 Species, 60 Specimens Birds Eggs.
- Apr. 29—Mrs. JOHN S. KENYON, Tremont, Westchester Co. 1 Collection Shells and Minerals.
- Apr. 29.—Mr. N. H. BISHOP, Manahawkin, N. J. 1 Snake, mounted, from Cuba. 1 Skin, Turkey Buzzard.
- Apr. 29.—Dr. F. W. LEWIS, Philadelphia, Pa. Fragment Antler used in Stone Age.—Zurich.
- May 1.—Mr. J. H. BATTY, New York City. 4 Birds Eggs.
- May 1.—Mr. FULLER, New York City.
  2 Specimens Insect Architecture.
- May 1.—VAN AMBURGH & CO'S MENAGERIE. 2 Emu Eggs.
- May 9.—Mr. D. P. WEBSTER, New York City.

  1 Specimen Jamesonite,—Utah.
- May 9.—Mr. D. JACKSON STEWARD, New York City.
  1 Specimen Madrepora.
- May 9.—MINNESOTA HIST. SOCIETY.
  Annual Report.
- May 14.—Mr. W. W. DREW, Blissfield, Mich., through Нултт Frost, Esq.
  - Map of New York City in 1728.
- May 17.—Mr. D. P. WEBSTER, New York City.

  Specimens of Lead and Silver Ore, Bismuth.
- May 24 Mrs. JUSTUS LAWRENCE, Yonkers, N. Y.
  1 Specimen Silicified Wood, Calistoga, Cal.

- May 31.—Mr. N. R. MOSELEY, New York City. Bones of 4 Human Ears.
- May. 31.—Mr. CHAS. B. HILLHOUSE, New York City. 16 Species, 19 Specimens Birds Eggs.
- May 31.—Mr. CHAS. F. CRARY, New York City.

  1 White Egret,—Florida.
- May 31.-Mr. P. T. BARNUM, New York City.
  - 1 Iguana.
  - 1 Human Hand.
  - 2 Snakes.
  - 1 Phasmida.
- May 31.—RUTLAND MARBLE CO., West Rutland, Vt. 7 Blocks Marble.
- May 31.—FRANCESTOWN SOAPSTONE CO., Nashua, N. H. 1 Block Soapstone.
- May 31.—Mr. JNO. M. MASTERTON, Tuckahoe, N. Y. 1 Block Westchester Marble.
- June 1.—Mr. LEOPOLD SAND, New York City.

  1 Wild Boar, Europe.
- June 1 .- Mr. L. LEVI.

1 Fossil Shark Tooth.

- June 1.—Mr. STUART, New Orleans, La. 1 Specimen Cinnamon Garnet,
- June 1.—Mr. CHARLES DRAKE, New York City.
  25 Specimens Echinoderms, Pacific O.
- June 1.—Mr. DURAND, through ROBT. COLGATE.

  1 Specimen Double Cocoanit.
- June 4 .- Dr. J. SIMMS, West Exeter, N. Y.
  - 34 Skulls Flat Head Indians,-Columbia R.
  - 1 Pair Horns Rocky Mountain Sheep.
  - 1 Vertebra Cetacean,-Pacific Ocean.
  - 3 Embalmed Flat Head Indians.
- June 19.—Miss EVELYN G. & Mr. WENDELL BAKER & EVERT J. WENDELL.
  - 38 Nests, Canaan, Ct.
- June 4.—Mr. FRANK CARRYL, Franklin, N. J.
  1 Nest with 3 Eggs.

June 6.—Mrs. J. C. THOMPSON, through Capt. Mills.
1 Specimen Iron Ore—Washington Mts., Morris Co.,

1 Specimen Iron Ore—Washington Mts., Morris Co., N. J.

June 6.—PACIFIC MAIL S. S. CO. Collected by J. A. Mc-NEIL, Esq.

24 Gorgonias.

10 Shells.

3 Starfish.

Carophylia.

June 7.—ALEX. MACDONALD, FIELD & CO., Aberdeen, Scotland.

4 Polished Blocks Granite.

June 12.—Dr. N.-R. MOSELEY, New York City.
1 Adult Skull showing spongy layer.
1 Infant Skull.

June 28.—Capt. JOHN BICKMORE, Tenant's Harbor, Me. 1 Stone Bowl, Owensville, Ohio.

July 3.—Mr. FRANK CARRYL, Franklin, N. J. 20 Birds Nests and 30 Eggs of various species.

July 6.—Mr. OZIAS CRAIN, Fillmore, Minn.
1 Specimen Cecropia Moth, —Long Branch, N. J.

July 6.--Mr. CHAS. GISSLER, Hoboken, N. J. 12 Bottles Specimens Crustacea.

July 6.—Mr. JOHN RICE, Albany, N. Y.
1 Specimen Plotus anhinga, Florida.

July 6.—Prof. F. S. HOLMES, Charleston, S. C. Plates of Holbrook's Icthvology.

July 10.—Mr. C. FRED. HOLDER, New York City.
Jaw of White Shark, Tortugas, Fla.

July 11.—Mr. WILLIAM GRAU, New York City.
1 Alligator Mounted,—Florida.

July 26.—VAN AMBURGH & CO'S MENAGERIE. Skulls of Gnu and Baboon.

July 29.—Mr. J. W. SHACKFORD, New York City. 1 Specimen Moss,—Catskill Mts.

Aug. 1.—Received from EUROPE through the SMITHSONIAN INSTI-TUTION, Washington, D. C.

> HUNGARIAN ROYAL SOCIETY OF NATURAL HISTORY, Pesth, Report for 1870, and 2d Vol. Nos. 10-18.

- OFFENBACH SOCIETY OF NATURAL HISTORY, 11th and 12th Reports. 2 Vols.
- Institute of the Grand Duchy of Luxembourg, Publications. Vol. 12th, 1872.
- Francis-Caroline Museum, Austria-On the Ems, Linz, 1871. 1 Vol.
- STEIRMARK, Nat. History Proceedings, Vol. 2, Part 3, 1871. 1 Vol.
- ROYAL SOCIETY OF TASMANIA, Monthly Notices of Meetings for 1870. 1 Vol.
- ROYAL GEOLOGICAL INSTITUTE, Vienna Proceedings, 1871. 1 Vol.
- Monograph on the Chrysomelidae, by C. Stal. From the Author. 1 Vol.
- NATURAL HISTORY SOCIETY OF LUNEBERG, 1868, 1869. Reports.
- Aug. 3.—Mr. A. W. VOGDES, Lexington, Ky. Collection Shells and Indian Ornaments, Ft. Fetterman, Wyoming Territory.
- Sept. 2.—Mrs. BENJAMIN H. FIELD, New York City. 1 Stalactite, Antiparos, Greece.
- Sept. 4.—Prof. ALBERT S. BICKMORE, Museum, Central Park.
  1 Complete Skeleton Irish Deer, mounted.
- Sept. 7.—OSWEGO FALLS BROWN STONE QUARRY CO. Fulton, N. Y.
  - 1 Block Brown Stone.
- Sept. 24.--P. T. BARNUM, New York City.
  1 Giraffe Skull.
- Sept. 26.—Messrs. AUGUSTUS TABER & BROS., New York City.
  - 2 Blocks Scotch Granite, -Aberdeen, Scotland.
  - 3 "Marble, Red. Green and Black,—Kilkenny, Ireland.
  - 4 Blocks Marble,—Levantine, Dove, Black and Gold, Bardilla,—Italy.
- Sept. 28.—Professor F. NAGLE.
  - Collection Marine Shells—Curação, Oruba, Buen-Ayre.

Sept. 28 .- Mr. F. G. MEYER, Brooklyn, N. Y.

7 Spiders, 1 Scorpion.

2 Whip Scorpions, 1 Lizard.

12 Insects.-Para and Rio.

Sept. 28.—Mr. WM. M. HALSTEAD, New York City.
7 Ichtbyosaurus tenuirostris,—Wurtemburg.

Sept 28.—Mr. A. C. VANALSTYNE, Johnston, Fulton Co., N. Y. Fragment Granite Bowlder

Sept. 28 .- Mr. J. VERREAUX, Paris .- 586 Insects, viz:

209 Coleoptera, 180 Lepidoptera.

60 Hymenoptera, 51 Hemiptera.

36 Neuroptera, 34 Diptera.

16 Orthoptera,-Paris.

Sept. 28.—VAN AMBURGH & CO'S MENAGERIE, 1 Skin of large Lioness.

Sept. 28.—Mrs. JOSHUA GILBERT, St. Augustine, Fla. 1 Vase of Shell Limestone.

Oct. 9.—Mr. JORDAN DOWNS, North Louisburg, O. 1 Polished Stone Axe.

2 Lance Heads.

Oct. 9.—Mr. THEODORE ROOSEVELT, Jr., New York City.

1 Bat, 12 Mice, 1 Turtle.

1 Skull, Red Squirrel.

4 Birds Eggs.

Oct. 9.—Central Park Zoological Collection.

1 Wapiti.

1 South American Deer.

1 Fawn.

1 Young Leopard.

1 Musk Deer.

1 Prairie Wolf.

1 Small Baboon.

9 Monkeys.

1 Coatimundi.

1 Ichneumon.

1 Swan.

1 Guinea Pig.

1 Hog Snake.

- Oct. 9.—Mr. FRANK CARRYL, Franklin, N. J. 9 Birds Eggs.
- Oct. 10.—Mr. J. D. CHEEVER, New York City.
  30 Birds Eggs.
  1 Humming Bird's Nest.
- Oct. 14.—Mr. CHAS. BINNINGER. 20 Stone Arrow Heads.
- Oct. 21.—Mr. R. H. DELAFIELD, New York City. 2 Hornet's Nests.
- Oct. 28.—Lieut. A. W. VOGDES, U. S: Λ., Lexington, Ky. 43 Fossils.
- Oct. 29.—Mr. THOMAS C. ACTON, New York City. 5 large ears Corn.

### PATRONS,

By the payment of Twenty-Five Hundred Dollars.

JOHN DAVID WOLFE.\*
ROBERT L. STUART.
JAMES BROWN.

A. T. STEWART, GEO, SHEPARD PAGE, A. G. PHELPS DODGE.

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By the payment of One Thousand Dollars.

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By the payment of Five Hundred Dollars.

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LUCIUS TUCKERMAN.

\* Deceased.

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\*Deceased.

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### APPENDIX.

## THIRD ANNUAL REPORT, 1871.

The Trustees of the AMERICAN MUSEUM OF NATURAL HISTORY have the pleasure of presenting this, their Third Annual Report, with copies of their Charter, Constitution, By-Laws, the letters received—presenting property to the Museum—and the Report of the Treasurer. The remaining part of the Verreaux Collection, purchased in Paris, which was delayed by the Franco-Prussian war, and subsequent seizure of the French capital, has been received in perfect order and safely deposited with the other Museum property in the Arsenal Building on Central Park.

The most valuable donation which the Museum has received during the year, is the Great Auk, now extinct, presented by Robert L. Stuart, Esq. It is the rarest specimen in our large collection of birds.

A full series of the corals of Florida has been purchased of Capt. Medary, U. S. A.

The cases for exhibiting the Museum specimens, commenced last year by the Department of Public Parks, were completed in the Spring, and a temporary arrangement of most of the collections was made, and a Reception, to which our subscribers were invited, was held on 27th of April; and though a severe storm occurred on that day, so large a number of our prominent citizens were present that the hearty interest of all classes in the prosperity of our institution was assured at its very opening. Since that date the Museum has been open every week-day to the public, and on Wednesdays and Saturdays it has been literally thronged by hundreds and even thousands, not only of our own citizens, but by visitors from every land to our metropolitan city. The attendance on many days may be safely estimated at over 10,000.

The exhibition cases first completed proving insufficient for the proper display of the entensive collections of birds and mammals, the Department built similar cases around the octagons at the corners of the building, increasing the exhibition space for such specimens in the second story nearly two-thirds, and in the upper story one-third, and giving both halls a pleasing effect of completeness. This work was finished on the first of August, and since that time the large collections of birds and mammals have been entirely re-arranged, and the specimens not previously exhibited have been placed in their proper families. The birds are divided into four principal groups, according to their geographical distribution. On the second floor are the birds of South America, and of Africa: on the third floor those of North America, and of Europe, arranged according to the system of Professor Lilljeborg, each family having a large label containing its scientific and common name. The North American birds have each a label with its scientific name, sex and habitat, and its common name in large type; and this system of labelling, alike acceptable to the scientific and cursory observer, will be extended as rapidly as possible throughout the collections on exhibition.

The Curators have been greatly assisted in their work by the kindness of the Superintendent, the Superintending Architect, and other executive officers of the Department at the Arsenal.

A letter endorsed by a large number of our leading citizens, has been addressed to the Department, asking, in accordance with our original agreement with the Park Commissioners, "that-Monday and Tuesday of each week be reserved for the Commissioners of Parks, the Trustees of the Museum, all persons contributing or desiring to contribute money or specimens, those wishing to examine the Museum specimens for the purpose of special study, the teachers and pupils of public schools and the inmates of charitable and benevolent institutions of the city, the admission on those days to be by tickets issued by the Trustees, in accordance with a plan to be approved by the Department," in order that the Museum may be used for educational purposes as well as to afford recreation for the public. These propositions, which will combine both of these desirable objects, have been agreed to by the Department, and a special notice to that effect

has been posted at the Arsenal Building, informing the public that tickets for those days can be obtained by calling at the office of the Department of Public Parks, No. 265 Broadway, or of the Secretary of the Museum. A similar notice has been sent to all the Natural History Societies in the country. This arrangement, by furnishing opportunities to teachers to explain the specimens to their classes, will make the Museum an important part of the educational system of our city, and afford facilities for students from other places.

JOHN DAVID WOLFE, President.
THEODORE ROOSEVELT, Secretary.

NEW-YORK, November 14th, 1871.

Dr.

JNIV. OF MICH. MAY 27 1907

THE

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## ANNUAL REPORTS

OF THE

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OF

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# American Museum of Natural History.

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## SIXTH ANNUAL REPORT.

THE past year has been rendered one of the most eventful in the history of the Museum, by the laying of the corner stone of the new fire-proof building provided for our Collections by the liberality of the People of this City. It has also been a most prosperous year, from the fact that the Institution has been placed on a more permanent basis by the increase of Annual Members, paying ten dollars yearly. Thus the current expenses of the Museum will be defrayed. and subscriptions of \$100 and upwards be reserved for increasing and improving its Collections. The responses to invitations for such membership have been most gratifying, and the list of members, which is appended to this Report, has been increased during the past eleven months from 350 on the first day of January to 1100, and promises soon to be sufficiently large to enable the Museum to secure the additional aid of gentlemen of high scientific attainments, who are much needed to classify properly the many specimens it is constantly receiving, as well as to render it an efficient institution, not only for popularizing the study of Natural History, but for promoting original scientific research.

The maintenance of the Museum in this manner has not only increased its number of active supporters, but has opened the way for large gifts of new and interesting collections. The largest of these do-

nations has been made by Miss Catharine L. Wolfe, the daughter of our late esteemed President, and will be known as the "Wolfe Memorial Gift." It consists of a collection of shells numbering 50,000 specimens, and a valuable library of rare conchological and scientific works, of about one thousand volumes. both formed by Dr. John C. Jav, of Rye. The shells are on exhibition in ten table cases, 4½ feet wide by 16 feet long, on the second floor, and the carefully selected library may be used at any time by original investigators in conchology.

The Department of Entomology has received an important addition in the gift from Mr. R. A. Witthaus, Jr., of 8,000 specimens of American Coleoptera,

representing 2,000 species.

The Smithsonian Institution has presented a complete suite of all its publications, and a collection of birds' nests. Many friends have also kindly remembered us, and presented valuable specimens, among which are a finely mounted skin and skeleton of the Manatee, from Mr. D. G. Elliot.

Since February, \$13,000 have been subscribed, chiefly by the Trustees, for the purchase of new and attractive collections during 1874, and the Museum has secured a complete series of sixteen skeletons of the Moas, or Gigantic Fossil Birds of New Zealand, the largest of which is over ten feet high.

The Department of Anthropology has been increased by the purchase of Dr. E. H. Davis's collection of Indian Antiquities, which contains many typical and rare forms of pre-historic workmanship.

A Department of Mineralogy has been added to the attractions of the Museum by the purchase from Mr. S. C. H. Bailey of his collection of minerals, numbering 7,000 cabinet specimens, and many duplicates suitable for exchange.

A small but choice series of preparations, illustrating the habits and development of various European insects, has been purchased, and is on exhibition on the walls of the middle hall. Over the windows have been placed a part of the specimens received in previous donations. Two more cases of finely mounted birds and rare mammals have been received from Madame Verreaux, completing the purchase begun three years ago.

On the 2d of June, the Corner Stone of the New Building was laid, in that part of Central Park west of Eighth Avenue. In view of the widely-extended interest manifested in the occasion, and of its importance as a public movement in the cause of science and scientific education, the Trustees extended an invitation to all who felt interested, to be present, and especially invited their Excellencies, the President of the United States and the Governor of the State of New York, His Honor the Mayor of the City, and Professor Joseph Henry, Secretary of the Smithsonian Institution, to assist in the ceremonies. These invitations were accepted with emphatic expressions of sympathy with the objects of the Museum.

General Grant, accompanied by the Secretary of State, the Secretary of War, and the Secretary of the Navy was present, and by laying the corner stone signified the national importance of the undertaking, and General Dix's remarks also attested the favor with which the establishment and rapid growth of the Museum is regarded by the people of the State.

At the hour appointed for the ceremony, a large concourse of invited guests and citizens had gathered at the site of the new edifice. The addresses delivered on that occasion are appended to this Report.

The Trustees would express their thanks to the Department of Public Parks, its architects and executive officers on the Park, for their uniform courtesy and the personal interest they have displayed in the success of the Museum.

The number of visitors has been steadily increasing, and has frequently amounted to 10,000 in a single day. Teachers have brought their pupils in large numbers to our halls, and by means of our rare collections have been enabled to impart much valuable instruction. The Museum is also attracting scientific men and advanced scholars, by the advantage it can afford them for scientific investigation.

The privileges which subscribers will enjoy are stated in the first By-Law; and as the importance of the Museum in instructing the public and promoting the study of Natural History throughout our land, is manifest, we confidently appeal to all our public-spirited citizens for the means to enable it to extend yet more widely its sphere of influence.

R. L. STUART,

President.

WM. T. BLODGETT,

Secretary.

All communications should be addressed, American Museum of Natural History, Central Park, New-York.

At a Special Meeting of the Trustees, held March 10th, 1874, the following letter was received:

To the Trustees of the American Museum of Natural History.

GENTLEMEN—My father's official connection with your Board, and his warm interest in the original inception and foundation of the Museum of Natural History, have enlisted in it my own interest and led me to desire, if I might, to contribute in some way to its enlargement and improvement.

An opportunity to do this has presented itself in connection with the collection of works on Conchology and of specimens illustrating those works, amounting in all to some fifty thousand in number, collected by Dr. JOHN C. JAY, and worthy, in the opinion of those most competent to judge, of a place among the other objects of interest in Natural History, already assembled within the walls of the Museum.

Having purchased this Library and the collection of shells connected with it, I beg to ask from your Board, the acceptance of both as a contribution to the Museum of Natural History, and as a gift by which I am anxious to perpetuate the memory of one who was its earliest President, and one of its warmest friends.

So soon as I may be apprised of the acceptance of this gift, I shall take measures for its delivery to the Curator of the Museum, and meantime I am, with sincere wishes for the prosperity of the important enterprise committed to you,

Gentlemen,

Very Truly Yours,

[Signed.]

CATHARINE L. WOLFE.

New York, March 6, 1874.

The following Resolutions were unamimously adopted:

Resolved—That the Trustees of the American Museum of Natural History acknowledge with feelings of the warmest satisfaction the note of Miss Catharine L. Wolfe, of March 6th, 1874, proposing to present to the Museum the collection of works on Conchology and of specimens illustrating those works, amounting to fifty thousand, collected by Dr. John C. Jay, and they accept the same in grateful remembrance of its first President, John David Wolfe, and as a gratifying evidence of the continued interest in the Museum of the donor herself.

RESOLVED—That the Collection be accordingly named the Wolfe Memorial Gift, and be as such, separately placed and preserved in the Museum.

RESOLVED—That these Resolutions be engrossed, and signed by the President, and be presented by him in person in the name and on behalf of the Board of Trustees, To the Trustees of the American Museum of Natural History.

Gentlemen—I desire to offer for your acceptance, a collection of North American Colcoptera, consisting of about 2000 species, represented by some 8000 specimens.

As my esteemed friend, Baron OSTEN-SACKEN, has already presented your Museum with an exceedingly full and well arranged collection of Coleoptera for public inspection, I desire that my donation may form the nucleus of a cabinet, to be devoted exclusively to the use of persons specially interested in the study of Entomology, and to this end I beg to impose the condition that the specimens shall be preserved either in boxes such as those in which they now are, or in drawers such as are in use in the Museum of Comparative Zoology at Cambridge.

I will state here that my collection contains a large amount of unnamed material, and a number of duplicates. It will require some labor to arrange the former; the latter will be useful for exchanges.

The Collection will be ready for delivery as soon as you will be ready to receive it in your new building, which I trust may be soon completed.

I am, Gentlemen,

Yours Respectfully,

R. A. WITTHAUS, JR.

November 10th, 1873.

## PURCHASES.

\$1.775 60	Nov. 9. By Balance Cash, 1st Nov. 1874	9. B	Nov.			
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	" B. L. Stuart	31	May			٠.
	F. W. Stevens		April	&c. Mdse, Ex. Deutchland	i œ	April
200 00	" S. W. Phoenix		Mar			
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# MAINTENANOE.

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#### INCORPORATION.

#### AN ACT

#### TO INCORPORATE THE AMERICAN MUSEUM OF NATURAL HISTORY.

Passed April 6, 1869.

The People of the State of New-York, represented in Senate and Assembly, do enact as follows:

Section 1. John David Wolfe, Robert Colgate, Benjamin H. Field, Robert L. Stuart, Adrian Iselin, Benjamin B. Sherman, William A. Haines, Theodore Roosevelt, Howard Potter, William T. Blodgett, Morris K. Jesup, D. Jackson Steward, J. Pierpont Morgan, A. G. P. Dodge, Charles A. Dana, Joseph H. Choate, and Henry Parish, and such persons as may hereafter become members of the corporation hereby created, are hereby created a body corporate, by the name of "The American Museum of Natural History," to be located in the City of New York, for the purpose of establishing and maintaining in said city a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation.

SEC. 2. Said Corporation shall have power to make and adopt a Constitution and By-Laws, and to make rules and regulations for the admission, suspension, and expulsion of its members, and their government, the number and election of its officers, and to define their duties, and for the safe keeping of its property, and, from time to time, to alter and modify such Constitution, By-Laws, Rules and Regulations. Until an election shall be held pursuant to such Constitution and By-Laws, the persons named in the first section of this Act, shall be, and are hereby declared to be the Trustees and Managers of said Corporation and its property.

SEC. 3. Said Corporation may purchase and hold, or lease any real and personal estate necessary and proper for the purposes of its incorporation, provided they shall not hold real estate which shall exceed one hundred thousand dollars in value.

Sec. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes.

SEC. 5, This Act shall take effect immediately.

STATE OF NEW YORK, OFFICE OF THE SECRETARY OF STATE,  $\frac{1}{3}$  ss.

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office at the city of Albany, this fourteenth day of April, in the year one thousand eight hundred and sixty-nine.

D. WILLERS, JR., Deputy Secretary of State.

At a meeting of the Trustees, held at the residence of Theodore Roosevelt, Esq., April 8th, 1869, the above charter was unanimously accepted by a majority of the Trustees.

#### CONSTITUTION

OF THE

### American Museum of Natural History,

IN THE CITY OF NEW YORK.

#### ARTICLE I.

This Corporation shall be styled the American Museum of Natural History.

#### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

#### ARTICLE III.

The Trustees shall meet quarterly on the second Monday of every February, May, August and November, at an hour and place to be designated on at least one week's written notice from the Secretary, and shall, annually, at the quarterly meeting in November, elect the officers and committees for the ensuing year. They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

#### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, an Executive Committee, an Auditing Committee, and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

#### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee, and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report, at the annual meeting, of the receipts and disbursements of the past year, with such suggestions, as to the financial management of the Museum, as he may deem proper.

#### ARTICLE VI.

The Executive Committee shall consist of five, who shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meetings of the Trustees, without the express sanction of the Trustees.

#### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

#### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

#### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

#### ARTICLE X.

By Laws may, from time to time, be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at any meeting of the Trustees by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

#### ARTICLE XL

The contribution of two thousand five hundred dollars to the funds of the Museum at one time, shall entitle the person giving the same to be a Patron of the Museum.

The contribution of one thousand dollars, at one time, shall entitle the person giving the same to be a Fellow in Perpetuity.

The contribution of five hundred dollars, at one time, shall entitle the person giving the same to be a Fellow for Life.

Any person may be elected by the Trustees to either of the above degrees, who shall have donated to the Museum Books or Specimens to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly, under the seal of the Museum. The Trustees may also elect Honorary Fellows of the Museum in their discretion.

All persons receiving such degrees and diplomas shall be entitled, at all times, to free admission to the Museum and its Exhibitions, but shall not, by virtue of such degrees or diplomas, become members of

the Corporation.

#### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.



#### BY-LAWS.

I.

Patrons giving \$2500 are each entitled to 10 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Fellows in Perpetuity giving \$1000 are each entitled to 5 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Fellows for Life giving \$500 are each entitled to 4 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Members giving \$250 are each entitled to 3 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Associate Members giving \$100 are each entitled to 2 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Annual Subscribers of \$10 yearly are each entitled to 1 Subscriber's Ticket, and 10 Complimentary Tickets for a single admission.

11.

Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

П1.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Fellow in Perpetuity" of the Museum, unless by a unanimous vote of a quorum of the Board—excepting Trustees ex-officio.

#### DONATIONS.

#### 1573.

January	1-ANTHONY	PECK,	JR.,	Clinton,	N.	Y.
	Jeon O					

- " 1-CENTRAL PARK MENAGERIE, Zenick (Surieata Zenick),
- " 1—J. D. CHEEVER, New York, Nest of Humming-Bird.
- " 10-WILLIAM A. HAINES, Irvington, N. Y. Three Fresh-Water Shells.
- " 11-WILLIAM MITCHELL, New York. Two Indian Stone Arrow-heads.
- " 20-J. B. HOLDER, American Museum. Three Indian Stone Arrow-heads, One Indian Stone Gauge, Massachusetts.
- " A. R. REED, Hot Springs, Arkansas.
  One Albino Mole.
- " FRANK CARRYL, New Jersey, Specimen of Petrified Wood,
- " WILLIAM LINTZ, New York.
  Specimen of Bark Cloth, South America.
- " ROBERT LAWRENCE, New York.

  Thirty-eight specimens (tweuty species) of Birds Eggs.
- " F. MARQUAND, New York. Very fine specimen of Pelican—Mounted.
- " GEORGE S. PAGE, New York, Brook Trout (24 inches in length), 2 lbs. weight.
- " PROF. F. S. HOLMES, Charleston, S. C. Block of Phosphate Rock, Ashley River.
- " JOSEPH BATTY, Bath, N. Y. Twenty-five specimens (fifteen species) of Birds' Eggs.
- " Through SMITHSONIAN INSTITUTION, Fourteen volumes of "Transactions," Foreign Societies.
- " Through E. STEIGER, Esq., New York.
  Proceedings Historical Society, Stiermark, 1871. 2 vols.
- " Two volumes of Bergman's Memoir of Lindovicius Capanus Valckenarius, and Bandet's Life and Works of W. J. Blaen.
- " JUDGE McCURDY, Lyme, Conn. Block of Red Granite.
- " " WILLIAM DEANS.
  Scales of Sturgeon.



- February 5—Mrs. EMILY BEAUTEGEAT, New York. Lantern-Fly (Falcon), and 14 jars of Reptiles.
  - " JOHN B. PERRY, Cambridge, Mass. Review of Lyell's Elements of Geology. 1 vol.
  - DEPARTMENT OF THE INTERIOR.
     Hayden's Reports, Geological Survey of Wyoming, Montana and Nebraska. 3 vols, and 1 pamphlet.
  - " 15—HAROLD HERRICK, New York. Eight Birds' Nests (four species).
  - " 17-Dr. J. E. MANIGAULT, Charleston, S. C. Skeleton of Domestic Turkey.
  - " 24—DEPARTMENT OF THE INTERIOR. One vol. Ninth Census, 1870.
  - " " J. W. WEBSTER, Troy, N. Y.
    Mounted specimen of Red Fox.
  - " " ROBERT BROWN, New York. Craw-fish, Squilla, and one specimen Limax.
- March 10-WM. A. CONKLIN, Central Park Managerie. Night Heron's Egg.
  - " CHARLES DRAKE, New York, Ball of Hair from Cow's Stomach.
  - " ROBERT L. STUART, New York.
    Organ-pipe Coral, very large and fine.
  - " 31—Mrs. JACOB F. WYCKOFF. Specimens of Lapis lazuli, Maluchite, and Lead.
  - " DEPARTMENT OF THE INTERIOR.
    Two volumes Census.
  - " WM. A. CONKLIN, Central Park Managerie, Two Heron's Eggs, Specimens of Iron Pyrites.
  - " C. J. MAYNARD, Ipswich, Mass. Catalogue of Manuals of Florida.
- April 11—Dr. CHARLES MILLER, New York. Pelvis of Elephant.
  - " WILLIAM A. HAINES, Irvington, N. Y.
    Albino Crow, and Woodchuck (Arctemus).
  - " 15—GEORGE N. LAWRENCE, New York. Sixty Pamphlets on Ornithology,
  - " " MINTHORNE TOMPKINS, New York. Scorpion (living specimen), Cuba.
  - " 17—SMITHSONIAN INSTITUTION, Washington, Skeletons of seven species of Birds.
  - " 22-PROGRAMME of the Royal High School, Chemnitz. 1 vol. pamph.
  - " 23—J. LACY UNDERHILL, New York. Eight Stone Arrow-heads, Columbia River.

May 12-J. CARSON BREVOORT, New York. Insect Architecture.

" " Mrs. CHARLES H. ROGERS.
Specimen of the Lace-bark Tree, Cuba.

June 14-Prof. R. DEMCKER, Central Park. Tanagra Cyanoptera.

" " WM. A. CONKLIN, Central Park. Turkeys' Eggs and Swan's Eggs.

July 2-Through the SMITHSONIAN INSTITUTION.

Memoir Acad. Real das Scien. Lisbon. 17 vols. Annual Report Free Library, Manchester, England. 1 vol. Catalogue of a series of Photographs in the British Museum. 1 vol.

Nas vereins für Naturkunde. Jahrbücher Weisbaden. 1 vol.

S. Hohr. Naturfonschender Gesellschaft. 4 vols. Zurich. W. Koch. Phys. Ökons Gesellschaft. 3 vols. Königsberg. K. K. Geol. Reichsanstalt-Wien. 2 vols.

August 25—CENTRAL PARK MENAGERIE. American Hound-Fish (Mustellus Canis).

September 3—F. S. WEBSTER, Troy, N. Y. Two Mounted Pigeons.

> " HERMANN MULLER, New York. Two hundred and sixty-eight specimens of insects, with glass

" L. J. SMITH, N. Y.
Basaltic Rock, from Giant's Cave.

" REV. J. W. SHACKELFORD, New York. Euplectella—"Glass Sponge."

" Dr. J. MORROW, New York. Specimen of Rattlesnake,

" Dr. J. W. FRANCIS, Newport, R. I. Skeleton of Sword-Fish.

" PROF. DEMCKER, Central Park.
One South American Creeper.

"CLIMATE, GEOLOGY, FAUNA, &c., of Brazil. Government of Brazil. 1 vol.

" FRANCIS CHEEVER, New York.
Sixty-two species Marine Shells, and Echini.

" 26—WILLIAM B. DE GARMO, New York.
Fifty specimens of Corals from Bermuda.
Lot of Stalactics, "
Four specimens Corallines, "
Twenty-two Gorgonias, "
Lot of Shells and Dried Fruit. "

October 11—ANTHONY PECK, Jr., Clinton, Oneida Co., N. Y. Trilobite, from Clinton Rock.

" C. H. ATKINS, Coram, N. Y. Hornet's Nest.

- October 11—D. G. ELLIOT, New York.

  Splendid mounted specimen of Bengal Tiger, and two cases of
  mounted Lemurs.
  - " PROF. DEMCKER, Central Park.
    Whiddah Bird,
  - " E. O. DUNNING, New Haven, Conn. Lower Jaw of "Mound Builder."
  - " D. JACKSON STEWARD, New York. Tooth of Mammoth (Elephas primigenias).
  - " Through the U. S. FISHERY COMMISSION.
    One hundred and fifty species of Invertebrates, and twenty species of Fishes, from Casco Bay, Portland, Me.
  - " " CENTRAL PARK MENAGERIE. Capybara, South America.
  - " " CHARLES DRAKE, New York.
    One large Echinoderm.

#### November 18—Dr. THEO. HILGARD, Washington, D. C. Collection of Lichens.

- " ROBERT L. STUART, New York.
  Twenty specimens of East Indian Coral.
- " 20-Mrs. JOHN B. EATON, U. S. Army. Six specimens Carolina Bat.
- " Miss MARY GELSTON, Fort Hamilton. Local Lepidoptera.
- " 26—WILLIAM L. BREESE, New York. Three eggs of Gannet; one of Razor-billed Auk; one of Arctic Puffin; Two of Arctic Tern.
- " WILLIAM A. CONKLIN, Central Park. Quill of Condor,
- " FRED. LACY UNDERHILL, Central Park. Specimen of "Satin-earth."
- 29—Dr. J. W. FRANCIS, Newport, R. I. Sixteen specimens (seven species) of Fishes.
- " F. S. PERKINS, Burlington, Ill. Two Copper Implements (pre-bistoric).
- " F. S. OSBORN, New York, Eggs of four species of Birds.
- " FREDERICK SCHUCHARDT, New York.
  Portrait of Prince Maximilian.
- " MARTIN GOLDSMITH, Camden, N. J. Cuttle-Fish (very large), from Cape May.
- " PEABODY MUSEUM OF ARCHÆOLOGY, Six pamphlets Annual Reports, 1 to 6 inclusive,
- " J. B. ANDREWS, New York. Trap-door, Spiders and Nests, from Mentone, France, and one vol. on "Harvesting Ants and Trap-door Spiders."

- November 29—THEO. ROOSEVELT, Jr., New York. Sixteen Skins of Birds from Africa.
  - " " A. L. RAWSON.

Geological specimens from Arabia and Syria.

" ATTI DELLA REALE AC, LUC, DI SCIENZE, Lettre et Arti.
1 vol.

#### 1874.

January 6—F. S. OSBORN, New York.
Twenty-five specimens (eight species) of Bird's eggs.

" B. H. WILLIAMS. Echinoderm, from Mendocino, Cal.

April 20-J. E. SERRANO.

Wasp's Nest, and Skin of Snake.

" " PROF. DEMCKER, Central Park.
Three Skius of Paroquets.

May 22-J. C. HEATON.

Skin of Snake, from Victoria, Texas.

" 29-A. C. VAN NOSTRAND. Limestone from White-Deer Mountain, Pa.

" 30—Dr. E. H. DAVIS, New York. Papers relating to Archaeology. Suite of Fresh-Water Shells, Mississippi Valley. One Box Minerals, from South America.

June 15-JOHN SEMCHEN, N. Y.
Orange File-fish (Monocanthus auranticus).

" 18-II. LAMB, Norwalk, Conn. Petrified Wood,

" J. H. McCULLOUGH. One pair Fossil Horus from Buffalo Swamp, Georgia. One pair Deer's Antlers.

" " WILLIAM HILL, One specimen of Moth,

July 3—ANDREW J. COLEMAN, Red Bank, N. J. Three Nests; Eggs of Turtle.

" 16—PEABODY MUSEUM. Seventh Annual Report,

" 25—WARREN DRUMMOND, New Jersey. Samples of Porcelain Clay, from Woodbridge, N. J.

September 2—WM, A. CONKLIN, Central Park. Egg of Box-Turtle,

> " Dr. SAMUEL A. FRANCIS, Newport, R. I. Scales of the Tarpon.

" Mr. BISHOP, of Honolulu, Sandwich Islands. Large specimen of Organ-pipe Coral.

October 28-ALFRED R. YOUNG, New York. Collections of Pressed Algae. October 30—Capt. BENDIRE, U. S. Army.
Collection of Insects and Reptiles from Arizona.

" 30-SMITHSONIAN INSTITUTION,

"Contributions to Knowledge," vols. II. to XVIII. inclusive. Set of "Reports of Smithsonian Institution," 9 vols., and Misc. Pub., vols. 3 to 10.

- " D. G. ELLIOT, New York.
  Collection of Insects, and Insect Architecture.
- " SMITHSONIAN INSTITUTION.
  Fifty specimens of Bird's Nests.

Specimen of Eland.

- " DR. JOHN J. MASON, New York.
- Collections of Brains of Mammals and Birds.

  " VAN AMBURG & CO.
- November 7—PROCEEDINGS HISTORICAL SOCIETY, Steinmark, for 1872-3.
- 2 vols.
  " D. G. ELLIOT, New York.
  - Mounted specimen of Manatus Americanus, and mounted skeleton of same.
  - " FERNDSZETTUDOÁNYI, KÖSLÖNG, Pesth. Nos. 29, 32 to 40.
  - " " Through SMITHSONIAN INSTITUTION,

Trans, Royal Society of Hungary, 1 vol.

Bulletin of Royal Society, Copenhagen, 1872. No. 2, April and September.

Pub. Royal Inst. Grand Ducal, of Luxembourg. Vol. XIII. 1873.

Eloge de Jean. Theo Lacordaire from University of Lege.

1870. Mittheilungen des Nat. Vereines, für Steinmark. Gratz, 1872.

1 vol.

Paper and Proceedings of Royal Society of Tasmania, for 1871. 1 vol.

Met. Observations, Hobart Town, Tasmania. 1 pamphlet.

Verhandlungen der K. K. Geol, Reich. April, 1873. 2 pamphlets.

Schriften des Nat, Vereines for Schl. Holstein, 1873, 1 uol. Schriften der Koniglichen Phys. Okonom. Ges. Konigsberg, 1872. 1 pamphlet.

- " 9—JOHN P. HAINES. Trap-column from Giant's Causeway.
- " CAPT, JOHN H. MORTIMER, Ship "Issue Webb," Sixteen species of Pteropods and Jelly-fishes from Pacific and Atlantic Oceans,

#### PATRONS,

TATRONS,					
By the payment of Twe	aty-Five Hundred Dollars.				
Miss C. L. WOLFE, \$10,000	JAMES BROWN, \$2,500				
JOHN DAVID WOLFE,* 5,000	A. T. STEWART, 2,500				
ROBERT L. STUART, 4,300	A. G. PHELPS DODGE, . 2,500				
ROBERT COLGATE, 2,550					
FELLOWS IN	PERPETUITY,				
By the payment of (	One Thousand Dollars.				
MORRIS K. JESUP, \$2250	EDWARD CLARK, \$1000				
	D. N. BARNEY,* 1000				
FREDERICK W. STEVENS, 2000	I. N. PHELPS, 1000				
D. JACKSON STEWARD, . 1750					
JAMES M. CONSTABLE, . 1750	D. WILLIS JAMES, 1000				
JOHN B. TREVOR, 1750					
	WILLIAM T. GARNER, 1000				
ADRIAN ISELIN, 1750	JAMES LENOX, 1000				
WILLIAM T. BLODGETT, . 1700	ALEXANDER STUART, 1000				
WILLIAM E. DODGE, JR., . 1500					
WILLIAM A. HAINES, 1250					
J. PIERPONT MORGAN, . 1256	COLEMAN T. ROBINSON, . 1000				
HOWARD POTTER, 1250	BENJAMIN B. SHERMAN, . 1000				
JOSEPH W. DREXEL, 1300	DAVID J. ELY, 1000				
WILLIAM E. DODGE, 1000	BENJAMIN AYMAR, 1000				
RICHARD ARNOLD, 1000	JONATHAN THORNE, 1000				
PETER COOPER, 1000					
WILLIAM H. ASPINWALL, 1000	ABRAM S. HEWITT, 1000				
B. H. HUTTON, 1000					
ROBERT BONNER, 1000					
Administration of the Control	to the state of th				
FELLOWS	FOR LIFE,				
By the payment of I	Pive Hundred Dollars.				
BENJAMIN H. FIELD, \$750	JOHN SNEDEN,				
CHARLES W. GRISWOLD, . 500	GEORGE BLISS, 500				
SAMUEL F. B. MORSE,* 500					
RUTHERFURD STUYVESANT, 500	HANSON K. CORNING, 500				
MEREDITH HOWLAND, 500	HUGH AUCHINCLOSS, 500				
MARSHALL O. ROBERTS, . 500	ROBERT GORDON, 500				
JOHN ALSTYNE,* 500	STEWART BROWN, 500				
O. B. POTTER, 500					
LEVI P. MORTON, 500	ABRAM DUBOIS, 500				
ALFRED B. DARLING, 500					
A. A. LOW, 500					
· · · · · · · · · · · · · · · · · · ·	The state of the s				

500 THOMAS BARRON, . .

500 H. M. SCHIEFFELIN, . .

500 !

500 S. WHITNEY PHOENIX, .

500 GEORGE W. CASS, . . .

RICHARD MORTIMER, JR., .

THOMAS A. VYSE, JR., . ..

GEORGE GRISWOLD GRAY,

GOUVERNEUR KEMBLE, .

SAMUEL HAWK, .

500

500

500

#### MEMBERS,

By the payment of Two Hundred and Fifty Dollars.

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#### ADDRESSES

AT THE

#### LAYING OF THE CORNER STONE,

JUNE 2d, 1874.

#### PRAYER BY REV. S. H. TYNG, D. D.

O Lord, our God! blessed be Thy great and glorious name, which is exalted above all blessing and praise! Thou, even Thou, art Lord alone. Thou hast made heaven, the heaven of heavens, with all their host,—the earth, and all that is therein,—the seas, and all that therein is, and Thou preservest them all. The host of heaven worshipeth Thee!

Whither shall we go from Thy Spirit, and whither shall we flee from Thy presence? If we ascend into heaven, Thou art there; if we make our bed in hell, behold Thou art there. If we take the wings of the morning, and dwell in the uttermost parts of the sea, even there shall Thy hand lead us, and Thy right hand shall hold us. Such knowledge is too wonderful for us; it is high, we cannot attain unto it.

O Lord, our Lord! how excellent is Thy name in all the earth! who hath set Thy glory above the heavens. When we consider the heavens, the work of Thy hands; the moon and the stars which Thou hast ordained—what is man that Thou art mindful of him, or the son of man that Thou visitest him? Thou hast made him a little lower than the angels; Thou hast crowned him with glory and henour. Thou madest him to have dominion over the works of Thy hands. Thou hast put all things under his feet.

O Lord, how manifold are Thy works! in wisdom hast Thou made them all. The earth is full of Thy riches. This great and wide sea also, wherein are creatures immunerable, both small and great; these all wait upon Thee, and Thou givest them their meat in due season. Thou makest the grass to grow upon the mountains, and herbs for the service of man. Before Thee the mountains break forth in singing, and all the trees of the field shall clap their hands, from the cedar that dwelleth in Lebanon, even unto the hyssop which springeth out of the wall. Thou hast commanded us to commemorate Thy wisdom and Thy power; to teach unto those who come after us the glory of Thy works—as wonderful in the least of the beings that breathes in Thy mercy, as in the nightiest that displays and magnifies Thy power. Thou hast manifested Thyself and Thy wisdom, as truly in the lilies of the field as they grow as in the leviathan, who is the king over all children of pride.

To honor Thee in all these works of Thy hand, would we crect the building over the foundation of which we now ask Thy protection and Thy blessing. May it perpetuate the remembrance and the study of Thy wisdom and goodness, as all Thy works declare them, and as the knowledge and thankfulness of men thus combine to make them known. Great and marvellous are Thy works, Lord God Almighty! just and true are all Thy ways, thou King of Saints!

We would humbly, gratefully praise Thee, in all the works of Thy hands and in the wonders of Thy pardoning love to the children of men. May Thy gracious blessing rest upon our beloved country—upon the land which Thou gavest us to inhabit—upon the President of these United States—upon all whom thou hast established in authority among this people. Prosper, we beseech Thee, all our institutions and efforts for the advancement of human learning. Give habits of righteousness and truth to all our people. Uphold and edify every plan for the advancement of public and private virtue, and every effort to reform and rescue the outcast and the neglected among our people.

And above all give peace to our nation—prosperity to Thy Gospel of Salvation—and the maintenance of Thine own supreme authority, in the name and person of our Lord and Saviour, Jesus Christ. In whose words we would gratefully say,—

Our Father, who art in heaven, Hallowed be Thy name. Thy kingdom come. Thy will be done on earth, as it is done in heaven. Give us this day, our daily bread. And forgive us our trespasses, as we forgive those who trespass against us. Lead us not into temptation, but deliver us from evil. For thine is the kingdom, and the power and the glory, forever and ever. AMEN.

## ADDRESS by Robert L. Stuart, Esq., President of the Museum, in behalf of the Trustees.

WE have assembled on this occasion by the invitation of the Trustees of the American Museum of Natural History, to lay the Corner Stone of the generous edifice which, by the wise liberality of the State of New York, has been provided for the perpetual use of the Museum, and, in the appropriate presence of the Chief Magistrates of the City, the State, and the Nation, to dedicate the structure to the public service for which it is designed.

In this view it may not be unbecoming for the Trustees briefly to relate the course of events which have brought this undertaking to its present advancement, and to declare the purposes which have actuated them in the efforts they have made to establish, on a permanent foundation, a Museum which, as they hope, will be worthy of recognition as a National Institution.

It had long been a subject of regret to many citizens interested in the cause of education and culture, that this great city, the most prominent seat of American civilization, should remain entirely destitute of any adequate means for the study of Natural History, while all the other principal branches of science and knowledge found within it their professors and their colleges, which invited students from all parts of the land, and furnished them with suitable facilities for acquiring the special education which they sought. It was also considered that a department of knowledge which has in recent years assumed so large a share of attention and so marked a place in every scheme of Liberal Education, should have in this city a grand collection of specimens, free to the inspection of its own citizens as a source of public amusement, and open to the use of the teachers and scholars of its public and private schools as a means of general instruction.

It was for these purposes that the Legislature of the State of New York, by an Act passed on the 6th of April, 1869, created the Trustees and their successors a body corporate by the name of "The American Museum of Natural History," to be located in the City of New York, for the purpose of establishing and maintaining in said city a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation. Under this Charter the Trustees immediately organized, and have, during the five years which have since elapsed, devoted no inconsiderable amount of time and thought, as well as of money, to carrying into practical operation its useful provisions. Having by their own contributions, and those of many public-spirited citizens who evinced a substantial interest in the project, obtained the necessary means, they purchased the extensive collection of Mammals, Birds, Fishes, etc. belonging to the late Prince Maximilian of Neuwied, the Elliott collection of Birds, besides a large part of the celebrated Verreaux and other collections of specimens of Natural History, and thus found themselves in possession of a suitable nucleus for a complete collection, but without any proper building or place of deposit, where the specimens might be at the same time safely preserved and made available for the popular use and enjoyment.

this stage in their enterprise, the Trustees, being thus able to furnish a substantial guarantee of their earnest determination to accomplish what they had taken in hand, turned in their hour of need to the Commissioners of the Central Park, who by their uniform devotion to the trusts committed to their care had done so much to advance the welfare and the pleasure of their fellow citizens, and proposed to deposit their collections, for safe keeping and exhibition, within the limits of the Park itself, and add the Museum to the already great attractions of this favorite place of resort. The Trustees were met by the Commissioners with the most enlightened and liberal sympathy, and the proposition was accepted by them with the declaration on the part of the Commissioners, which the event has justified, that the proposed plan of co-operation, which insured and combined in the enterprise the interests and means of the private citizen with those of the public, would probably be made an example and incentive for uniting the energies of those interested in other branches of Science and Art in similar undertakings.

Thus by the favor of the Park Commissioners, at the close of the year in which the Charter of the Museum was granted, its valuable treasures first acquired were deposited and arranged under the protection of the People, in the Arsenal building in the Park, according to written articles of agreement, by which, although remaining the inviolable property of this private corporation, they were secured and preserved for the free instruction and enjoyment of all who chose to visit them.

From that time to the present the Trustees acknowledge with gratitude the untiring sympathy and co-operation of the Commissioners and their successors in the Department of Public Parks, by means of which the public has been enabled to enjoy the full benefit of all which the Trustees have succeeded in acquiring. The fact that the rooms which were allotted to the use of the Museum have been visited daily by thousands of all ages and classes, and that the public interest in its success has steadily and rapidly increased, is a satisfactory proof of the wisdom of that joint arrangement.

It very soon however became evident by the rapid growth of the Museum, and the constant additions which accrned to its collections, that the temporary accommodations which were the best that the Park Commissioners have thus far been able to afford, were altogether inadequate for the purpose to which they were devoted, and accordingly

the Legislature, in response to the Petition of a large number of influential Citizens interested in the cause, by an Act in 1871 relative to the Department of Public Parks, authorized the Commissioners to erect upon Manhattan Square, a suitable fire-proof building for the purpose of establishing and maintaining the Museum therein, under rules and regulations to be prescribed from time to time by the Commissioners, and in the same connection and by the same act the like provision was made for a similar building for the use of "The Metropolitan Museum of Art," the foundations of which are already being prepared by the Commissioners on the opposite side of the Park.

By this double act of munificence on the part of the people of the State, the City of New York has been endowed with two institutions of education and ornament which, though now in their infancy, will at no distant day be recognized as of great and permanent public advantage, and whatever jealousy may justly pertain to appropriations of public money to private uses can in no way apply to this Museum of Natural History. Its Trustees have no personal objects to serve—no private ends to accomplish. They can gain nothing for themselves from this or from any future endowments which the wise policy of the Legislature may furnish to carry out and perfect this undertaking. Their aims will be all attained, if the people of the City shall justly appreciate its value, and if its accumulating treasures shall be fieely and wisely used by all who seek them.

We should not do entire justice to this occasion if we failed to record the gratitude of the Trustees and the community, to one eminent citizen whose memory is still fresh with us, and will long be kept green by the perennial growth of the charities which he founded and sustained.

To John David Wolff, the first President of this Museum, we are much indebted for its successful establishment. He entered with zeal into the project of its creation, believing that it would prove an honor to his native City, and an important means of education to its citizens and their children, and dying at a ripe old age, he commended its care and support to those who have the means and the disposition to do something for the public welfare.

In recalling, with pride, the progress that has already been made towards the realization of their plans, the Trustees desire to place on record their high appreciation of the services of Professor Albert S. Bickmore, whose zealous devotion to the interests of the Institution, and untiring industry in carrying out the wishes of the Executive Committee, have done much to advance the prosperity of the Museum.

We lay here to-day the Corner Stone of an edifice which shall be dedicated forever to the study and the culture of Natural History. These massive foundations already securely laid give promise of the most solid permanence in the superstructure. The wise forethought of the Park Commission, in reserving for the future use of the Museum the remainder of Manhattan Square, has provided amply for its continued growth.

The presence on this occasion of the President of the United States, who has kindly consented to assist us in these ceremonies, assures us of that public interest which is necessary to sustain the undertaking.

The cheering words of the Governor will doubtless lend the countenance of the State to support this institution which has been founded by its bounty, and finally, the Trustees, in pledging once more their own efforts for its success, would be speak for it that popular favor without which it must surely languish and decay.

## The Hon. H. G. Stebbins, President of the Department of Parks, spoke as follows:

When the arrangements for the celebration of the ceremony which has brought us here to-day were made, the duty was assigned to the Hon. Salem H. Wales, then President of the Park Commission, to represent the Department on this important occasion. He has since then resigned his office as Commissioner and gone abroad. It devolves upon me to perform the duty which he had expected to fulfill.

As he had prepared an Address for this occasion I shall take the liberty of reading it, and of expressing my sincere regret that he is not here to carry out the programme we had agreed upon. Mr. Wales, in that case, would have said—

The Legislature of the State of New York, at its session of 1864, placed Manhattan Square, a piece of property belonging to the City, situate between 77th and 81st streets and 8th and 9th avenues, consisting of about 19 acres, under the control and management of the Commissioners of the Central Park; and it was made the duty of the Board to enclose, lay out, grade, regulate, drain and improve the same; and by subsequent enactment in 1868 the Board was authorized

to erect, establish, conduct and maintain on the Central Park, a Meteorological and Astronomical Observatory, a Museum of Natural History and a Gallery of Art, and the buildings therefor, and to accept gifts, devises and bequests upon suitable conditions.

Although the Board of Commissioners was thus early clothed with ample authority to establish within the Park a variety of museums that would afford the means of popular cultivation and innocent recreation, yet they have felt that, to insure the proper management of such institutions, it would be better to leave them to the care of private associations than for the Board to expend public money in the purchase of specimens of Natural History or works of Art; and in giving encouragement to private organizations, the Board made known at its outset that not only the object of the Association must be approved, but its sound organization and undoubted ability to command the means necessary to accomplish its purposes according to a high standard of excellence, must be first demonstrated. It was, therefore, with feelings of great satisfaction, that the Commissioners, on the 30th of December, 1868, received a letter from a number of well-known citizens, inquiring if the Board was disposed to provide for the reception and development of a Museum of Natural History.

In reply to this letter the Comptroller of the Park wrote, that "the Commissioners will very gladly receive the Collection to which you allude, and will use their best exertions toward the establishment of a Museum of Natural History of an extent and excellence in all its departments that will be creditable to the City; and in their efforts toward the development of such an institution, the Commissioners of the Park will highly esteem your valuable co-operation."

In pursuance of the anthority vested in the Commissioners of the Central Park, and in accordance with suitable rules and regulations, the building known as the Arsenal, situate on the east side of the Park, was carefully fitted up and arranged for the temporary reception and proper exhibition of a rare and most valuable collection of objects of Natural History, which had been gathered under the patronage of the American Museum of Natural History—a society composed of some of our most public spirited citizens, and offering every guarantee of the successful accomplishment of the object for which they were incorporated.

Such has been the zeal and earnestness displayed by this Society in the prosecution of its work, that the space already allotted in the

Arsenal building is now wholly inadequate for the proper display of their precious Collections, and the Department of Public Parks has determined to construct a much more extensive edifice, which in its general design and purpose should equal the largest museums of the Old World. We are here to-day to lay the Corner Stone of such an edifice, and as the representative on this occasion of the Department of Public Parks, I take great pleasure in assuring the Trustees and the friends of the Society of the great interest felt by the Commissioners in the success of this worthy enterprise. To the stranger who comes here to-day these rugged foundation walls and these rough surroundings are not well calculated to make a pleasant impression; but to us who have watched the rapid growth northward of this city, and who were familiar with the barren and rocky ground upon which the Central Park has been created, it requires but little strain upon the imagination to conceive of the speedy occupation of all these vacant lots by substantial dwellings, and to picture to ourselves the spot upon which we now stand, known as Manhattan Square, as covered by the proposed Museum of Natural History, costing, ere its final completion, not less than \$6,000,000, and embracing a collection of objects of scientific interest second to none other in the world. As a people we are sometimes accused of excessive practical and money-making characteristics; and it cannot be denied that in all the varied arts and appliances which minister to the material progress of mankind we have shown remarkable energy. The Patent Office at Washington is a stately monument that bears witness to the patient genius which has wrought out the wonderful inventions now so largely employed in all the busy affairs of the country; and while it is true that mechanical and agricultural fairs and exhibitions have extended their good influences throughout every State and county in the land, it must be acknowledged that the same attention has not been given to the collection of objects of Natural History, of which our country has almost an infinite variety.

With the acquisition of wealth and the introduction of ease and luxury in the homes of the rich, there comes most naturally the enlarged and more noble thought of doing something not only to amuse, but also to instruct the people.

The subject of museums is beginning to assume new importance in the estimation of the people.

Hitherto, small and comparatively worthless collections have been

gathered by private enterprise, and employed chiefly for purposes of That which is temporary and speculative must now give way to something more enduring and instructive, and it seems to me that our thanks are especially due to the Society of Natural History for acting the part of pioneers in this great field of science, and for the zeal which they have shown in the prosecution of the work. far as the Department which I now represent is concerned, I do not hesitate to promise all the assistance it can lawfully render. We encourage it as not only an object of public interest which shall serve to attract hitherward strangers from all parts of the land, but also as a means of intellectual pleasure, profit and relief to our over-burdened people, and as affording a school where the children of the rich and poor alike can come to study the wonders of nature which are here to be gathered together, and freely exposed for the common benefit of all, It is believed that the museums on the Park will become valuable auxiliaries of that great free public educational system which is already the pride of our city, as well as the source of useful practical information to agriculturists, merchants and manufacturers throughout the land. In this country we popularize knowledge, and give to science a holiday air, and instead of putting our collections, as some have proposed, "into cold catacombs of science, and long gloomy galleries in which nature is classified, ticketed, stuffed and covered with dust in a manner well adapted to create weariness rather than to attract people to the study of natural objects," it is our purpose to provide such structures as shall furnish agreeable entertainment to the general visitor, while at the same time offering valuable aid to common school education.

With the hearty co-operation of the Natural History Society, sustained by the genius of Olmsted and the architectural skill of Vaux, and certain of the sympathy of an enlightened people, the Department of Public Parks looks confidently forward to the successful completion of the magnificent scheme, the commencement of which may now be pronounced as fully inaugurated.

What Mr. Wales has said, and I have just read, will convey a full conception of the purposes of the structure which is formally begun to-day. I feel it to be a great honor to assist in the commencement of a work which will, I trust, be hastened to completion before the Centennial of our Independence; here to stand as a magnificent memorial of what our City has been able to accomplish under free

institutions, and to become a part of the material resources that will ultimately go to the creation, around this Park, of the home of a

National University.

What nobler exhibitions could be given of the crowning achievements of this municipality than those which this Museum and its sister institution, the Art Gallery, will afford? This peerless pleasure ground for the people, which will proudly boast of these twin jewels as its legitimate offspring, will contain within itself in miniature the records of the progress of the country. Its wilderness spots remain as souvenirs of what the whole tract was a few short years ago—when a prophetic Samuel B. Ruggles saw the possibilities that are now accomplished facts. Its artistic decorations and its Museums of Art and Natural History will show the best results of a high civilization, and of a liberality directed by the wisest forethought and the most cultured taste.

#### ADDRESS OF GOVERNOR DIX.

LADIES AND GENTLEMEN:

I did not come here with the expectation of addressing you. You may find it difficult to believe what I say when you see me present, and my name in the published order of exercises as a speaker. But, I can assure you, that I had no intimation from any quarter that such a service was expected of me, and no knowledge that such a notice had been given to the public until I saw the programme a day or two ago, by pure accident. I only say this to exonerate myself from the possible imputation of having made an engagement and failed to perform it; and to tender to you an apology which I am sure you will, under the circumstances, deem a valid one, for responding in the most summary manner to your kindness and courtesy.

I am very much gratified to be with you on an occasion of so much interest. It is pleasant to stand amid this brilliant assemblage of beauty and fashion, and of those solid qualities, by which the welfare and prosperity of cities and communities are wrought out. It is pleasant to see a great metropolitan city like this, casting aside for the moment the habiliments of its industry, to lay the foundation of a Museum in which the dead past is to be linked to the living present; to be followed as we trust, at no distant day, by a repository of art, where the ages that have gone by may be kept in our remembrance, by gathering together the memorials of their achievements; where

the stately march of Empires may be chronicled to some extent, by the exhibition of what they have done for social embellishment, and where the gorgeousness and profusion of Nature may be emulated by the creative genius of Art.

I know no locality so suitable as this, for such a Museum of artistic treasure; no locality in which Art has already done so much for Nature. Most of us remember when, but a few years ago, this whole district, which now forms the Central Park, was an unsightly and shapely mass—"rudis indigestaque moles." Now it is a very miracle of rural beauty, where the most unpromising and stubborn natural feature has been made to blend and harmonize with the general aspect of order and grace.

But, ladies and gentlemen, I am forgetting that I only arose to apologise to you for sitting down again; and if I go on, you may impute to me the common frailty which Horace ascribes to singers—that they can never be induced to sing when they are asked, and never stop when nobody wants to hear them. But I cannot sit down without saying, it is appropriate that the foundation of this Cosmopolitan Museum should be laid by the foremost man of our time, who in the field did so much by his calm, unconquerable and unconscions valor, to save the life of the nation, and who in the Cabinet stands forth as its fearless champion, to maintain its honor and its plighted faith.

# ADDRESS OF PROF. JOSEPH HENRY.

MR. PRESIDENT, LADIES AND GENTLEMAN:

My address will have one element which I doubt not will elicit your approbation. I was requested to limit it to ten minutes, and therefore it will of necessity have the merit especially appreciated on a warm day, that of shortness. Being thus instructed as to time, I trust I shall be excused if I do not as fully develop as could be wished the several propositions which I intend to present in connection with the interesting occasion on which we are assembled. The first of these propositions is that modern civilization tends to congregate the population of countries into large cities, that cities tend to increase

more rapidly than the general population. These effects may be referred to two causes, first, the education of the working classes, and secondly, to the introduction of labor-saving machines. These causes are notably illustrated in New England, where the masses are more highly educated than in any other part of the world. No sooner does the young New-Englander approach manhood, after having enjoyed the benefits of a common school education, than he abandons the plow and the spade and hurries to the city or the manufacturing village to obtain more intellectual and less toilsome employment. The vacuum which is thus produced is, however, more than filled by the invention. it may be by the same individual, of patent machines actuated by steam or horse-power, which will do, in many cases, a hundred fold more work in a given time than the man himself could accomplish. Another proposition to which I would call your attention is that cities in proportion to their extent and rapidity of growth engender habits of thought and of action of a character the reverse of progress, and which, if unrestrained, would tend to disintegrate society and resolve it into its primitive barbarous elements; that these principles are eminently applicable in New York, which, including the whole population at the mouth of the Hudson, is now a vast city, and is destined to become, I say it without hesitation, the largest city in the world: no other city having so large a country tributary to it in the richest productions of the soil and mine, and no other city so favorably situated in regard to geography and topography to secure these tributaries perpetually to itself. There are in fact but two outlets for water communication from the immense region of the basin of the Mississippi, namely, that along the river itself into the Gulf of Mexico near New-Orleans and that along the great lakes and the Hudson, terminating at New-York in the Atlantic Ocean.

It is therefore of the first importance that those who possess the intelligence, the influence, and the power, who from the experience of the past are impressed with the tendencies as to the future, should endeavor to provide all the means possible to avert evils similar to those with which this city has been afflicted, and which tend to afflict it in a still greater degree in the future.

Among these means I would of course place in the first rank a liberal support of the Christian minister and the Christian missionary, but the labors of these may be greatly aided by whatever tends to neutralize the intensified selfishness engendered by the struggle in a large city for supremacy, and the unfavorable effort of extreme exclusion from intercourse with nature, and above all, the ready indulgence of degrading passions. This is especially the province of museums of art and nature. They not only offer a substitute for immoral gratifications by supplying intellectual pleasures, but may also be rendered sources of moral and even religious instruction. The establishment. the beginning of which we are about to inaugurate is, in accordance with the views we have presented, worthy of the enterprise and intelligence of those who conceived and who have thus far developed it. It is to be a temple of nature in which the productions of the inorganic and organic world, together with the remnants of the past ages of the human family are to be collected, classified, and properly exhibited. It is to be rendered an attractive exhibition which shall arrest the attention of the most unobserving of those who, having been confined all their lives to the city, have come to consider edifices of brick and of stone as the most prominent objects of the physical world.

We have learned from the interesting address of the President of the Museum, that already large collections of specimens in natural history and ethnology have been secured. But such a collection, however well arranged and interestingly displayed, is still wanting in an essential element of higher usefulness. I allude to the spiritual part of its constitution, to the controlling, intellectual, and moral soul which shall direct its operations and instruct the multitudes who may flock to the exhibition for amusement or the gratification of mere curiosity, in a craving for novelties. How incomparably greater would the importance of this museum be were there connected with it a professor, who at stated periods of the year would give courses of free lectures on the objects which it contains, who would expound the laws of the phenomena of nature, who would point out the operations of that mysterious principle called life, who would discourse upon the changes the world has undergone during geological periods, and who would reconstruct the history of man in primitive times from the remnants of his previous existence which have been gathered in this institution.

For example, what an effect would be produced on thousands of the inhabitants of this vast city if it were announced that an Agassiz. filled with enthusiastic sympathy with his subject and his audience, and capable of mingling moral considerations with scientific principles, of directing attention from nature to nature's God, of not only enlightening the heads, but of warming the hearts of his audience, were to give free courses of instruction.

Such an announcement would be hailed with intense interest by thousands, and the amphitheater of the museum would be crowded to overflowing with receptive and admiring auditors. I need only suggest such an arrangement to find, I doubt not, an appreciation of its importance in every one of my hearers, and the hope felt or expressed that the directors of this establishment will endeavor to provide an endowment for the support of such a feature of the museum. have not yet done. The development of the institution would not yet be complete were it even furnished with all the appliances I have mentioned. There is still another duty which this city owes to itself and to the civilized world; I allude to an endowment for the support of a college of discoverers, of a series of men capable not only of expounding established truths but of interrogating nature and of discovering new facts, new phenomena, and new principles. The blindness of the public to the value of abstract science and to the importance of endowments for its advancement is truly remarkable. No country in the world is so much indebted for its progress in power and intelligence to science than ours, and yet no country does so little to encourage or advance it. Nearly all that is done in this line, is by professors in colleges, badly paid, and generally overworked. It is not every one, however well educated, that is capable of becoming a first-class scientist; like the poet, the discoverer is born, not made, and when one of this class has been found he should be cherished, liberally provided with the means of subsistence, fully supplied with all the implements of investigation, and his life consecrated to the high and holy office of penetrating the mysteries of nature. What has been achieved in the knowledge of the forces and operations of nature and the use to which this knowledge has been applied in controlling and directing these forces to useful purposes, constitutes the highest claim to glory of our Yet it is a melancholy fact that, notwithstanding the reputation for wealth and intelligence possessed by our people, for the only institution intended especially for the advancement of science in this country we are indebted to a foreigner, James Smithson, and that a very large portion of the income of this has wrongfully been devoted to the erection of a costly edifice and the embellishment of grounds. and expenditures on other local objects unnecessary for the realization of the intentions of the founder. I am happy, however, to say that after 25 years of incessant efforts in one line by the directors, Congress has at length been induced to indicate an intention of redressing the evil, and enabling the establishment to devote its whole energies to the advance of science, the evident design of the testator. New York at present is the wealthiest, most powerful, and influential city of the Union, and is destined in the future to be more so. But do not be offended with me if I say in perfect candor and with the desire of doing good, that it has done less than any other city, in proportion to its means, to advance science. More than 75 years ago, Boston established the American Academy of Arts and Sciences, which, annually ever since, has given to the world the result of original labors in the way of new discoveries.

Philadelphia before the revolution, under the auspices of Franklin, established the American Philosophical Society, which has still a vigorous existence, and continues to annually send its transactions to New-York, also, more than foreign societies in exchange for theirs. 50 years ago, commenced to establish a Philosophical Society, which expired, however, in giving birth to a single memoir by De Witt Clinton on the importance and value of such an establishment. also true that among so many people there have been some who have been zealously devoted to science, and have done honor to it and the world, such as a Redfield (I speak only of the dead), who established the laws of storms, and a Torrey, who devoted an unobtrusive, industrious and productive life, to the advance of chemistry, mineralogy, Boast not of wealth, nor of refinement, while original powers of intellect, the choicest gift of heaven to man, is at a discount I appeal to the millionaires of this city, if any one of them is desirous of perpetuating his name and of living in the memory of mankind long after he has departed this life, to endow, connected with the Park Museum, a College of Discoveries, with the additional means of printing and disseminating over the world the results of its labors. I refer him to the effects which are being produced in regard to the name of James Smithson, a scion of one of the noble houses of England, who rightfully anticipated that through the endowment of his institution his name would live in the history of mankind when the titles of his proud ancestors were extinct or forgotten. Every year a publication is issued from this institution, filled with an account of new discoveries made under its auspices, which is distributed to more than 2,000 foreign institutions. This publication, bearing the name of Smithsonian Contributions to Knowledge, thus renders the name of the founder ubiquitous with continual repetitions, until now, it has become

as familiar as a household word in every part of the civilized world. What, in comparison to this, are local monuments, pyramids of flint, statues of brass, or obelisks of marble? These are seen but by the few and are constantly subjected to the slow but sure destroyer, time; while the other is everywhere present, and is as enduring as civilization itself. The operations of the universe are unlimited, and in the great book of nature, man has scarcely read more than the title-page or the preface. It was the saying of La Place, "What we know is nothing; what we do not know is immense; indeed every advance of knowledge but enlarges the sphere of our ignorance." How many problems of the highest interest are pressing upon us even in the line of biology. What is vitality? Is it an unintelligent force of nature, like that of attraction, producing crystallization, or an intelligent principle operating by the ordinary forces of nature, producing results indicating design and consequent intention? Can dead matter be made alive under the influence of certain conditions without propagation from parents—this is a question which cannot be solved a priori, and must wait the decision of refined experiments. It has been reduced to a fact that either every breath of air we inhale, that every portion of the earth's atmosphere, is teeming with the germs of living organisms, or that dead matter may spring into life in accordance with the process of what is called spontaneous generation. science every advance in the way of discovery gives us a higher point of view for making excursions into the regions of the unknown, and the man of science, however extended his vision, however multiplied his resources, can never want for worlds to conquer.

God has created man in his own intellectual image, and graciously permitted him to study His modes of operation, and rewards his industry in this line by giving him powers and instruments which affect in the highest degree his material welfare. It was the recognition of the importance of original science that rendered France a few years ago the center of civilization of the world. The celebrated Museum, called the Garden of Plants, was not a museum, as it were, of dead specimens for the gratification of ordinary curiosity, but the theatre of the labors of a Cuvier, a St. Hilaire, and of the many distinguished men which have rendered the scientific annals of that country immortal.

Germany owes her ascendency at the present day not only to the general education of her people, but to the means which she has provided for the discovery of new truths. England is becoming awakened to the importance of the same object, and a portion of the immense income of her universities is now devoted to the support of original investigators.

With the hope that you will excuse the plainness of some of my remarks, and attribute them to my ardor for the advancement of knowledge, and a desire to stimulate the inhabitants of this city to efforts in the line in which I am most interested, rather than to a tendency to indulge in depreciation or cynical criticism, I must close my address and throw myself upon your indulgence for having involuntarily, as it were, exceeded the limit of my time.

At the conclusion of Professor Henry's address, the Superintendent of the Museum read the following list of articles in the box to be placed in the corner stone:

- 1. Reports and Circulars of the Museum.
- Reports of the Department of Public Parks for 1870, 1871 and 1872.
- 3. Manual of the State Legislature.
- 4. Congressional Directory.
- 5. Daily Papers—the "New York Tribune," "Times," "World," "Herald," "Sun," "Evening Post," "Mail," "Express," "Commercial Advertiser," "Journal of Commerce," "Staats-Zeitung," and the "Courier de Etats-Unis," "Appleton's Journal," "Harper's Weekly Illustrated Paper," and "Frank Leslie's Weekly Illustrated Paper."
- 6. One Dollar and fractional parts in currency.
  One Dollar and fractional parts in coin.

The Treasurer deposited the Box in the Corner Stone, which was then haid by

HIS EXCELLENCY

GEN'L U. S. GRANT,

PRESIDENT OF THE UNITED STATES.

The exercises closed with a Benediction pronounced by the Rev. Henry C. Potter, D. D.

### APPENDIX.

# FIFTH ANNUAL REPORT, 1873.

The increase of our collections for public exhibition has required seven new upright cases, which have been promptly built by the Department of Public Parks in the lower hall. Two new ones have also been placed in the upper hall, and the remaining space available for exhibition on that floor will soon be occupied.

Contracts have been made by the Department for the granite, mason and iron-work of the new fire-proof edifice on Manhattan Square, between 8th and 9th Avenues, and 77th and 81st Streets, and the walls, floors and roof are to be completed by next November. The foundations and basement story are already finished, and the extraordinary thickness and careful construction of their walls give an assurance that the structure, when completed, will be of the most enduring character.

The birds have been re-arranged by Professor Bickmore and Dr. Holder; the South American collection having been transferred from the second floor to the new cases in the lower hall, and the fine series of skeletons purchased of Verreaux substituted in their place. The birds of Australia and the Pacific Islands have been separated from those of Europe and Asia, and placed in a faunal collection by themselves, thus completing the geographical arrangement commenced when the Museum was first opened to the public. Manuscript has also been prepared for a popular guide-book for visitors.

A Department of Anthropology has been formed, and a collection of rare implements made by the aborigines of Porto Rico has been presented by the Trustees. A number of valuable contributions of such specimens have been received, and this new department promises to be one of the largest and most interesting features of the Museum.

An important collection of fossils has been purchased of Prof. Francis S. Holmes, of Charleston, S. C., containing the types of the species figured in the "Pliocene Fossils of South Carolina," by Tuomey and Holmes, and Holmes' "Fossils of the Postpliocene;" also a very choice and full collection of sharks' teeth, from the Eocene beds of the same region.

Many valuable donations have been received. Among the most important are the gifts of Mr. D. G. Elliot and Wm. B. DeGarmo.

THE

# SEVENTH

# ANNUAL REPORT

OF THE

# AMERICAN MUSEUM

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# NATURAL HISTORY.

DECEMBER 1st, 1875.

New Hork :

PRINTED FOR THE MUSEUM.

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NEW YORK

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New york :

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New york :

PRINTED FOR THE MUSEUM.

MDCCCLXXV.



# American Museum of Antural History.

### TRUSTEES.

ROBERT L. STUART.
WILLIAM A. HAINES.
HOWARD POTTER.
ROBERT COLGATE.
BENJAMIN H. FIELD.
ADRIAN ISELIN.
THEODORE ROOSEVELT.
ANDREW H. GREEN.
MORRIS K. JESUP.
D. JACKSON STEWARD.

J: PIERPONT MORGAN.
JOSEPH H. CHOATE.
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JOHN B. TREVOR.
JAMES M. CONSTABLE.
WM. E. DODGE, JR.
JOSEPH W. DREXEL.
FREDERICK W. STEVENS.
ABRAM S. HEWITT.
CHARLES LANIER.

### PRESIDENT.

ROBERT L. STUART.

VICE PRESIDENTS.

WILLIAM A. HAINES.

THEO. ROOSEVELT.

SECRETARY.

D. JACKSON STEWARD.

TREASURER.

J. PIERPONT MORGAN.

Executive Committee.

WILLIAM A. HAINES.
THEODORE ROOSEVELT.

ANDRREW H. GREEN. MORRIS K. JESUP.

WM. E. DODGE, JR.

Finance Committee.

J. PIERPONT MORGAN. | ADRIAN ISELIN. FREDERICK W. STEVENS.

Auditing Committee.

ROBERT COLGATE. | THEODORE ROOSEVELT.

JAMES M. CONSTABLE.

Prof. ALBERT S. BICKMORE, Superintendent. Dr. J. B. HOLDER, Assistant.

# SEVENTH ANNUAL REPORT.

Since the establishment of our institution, each year has witnessed some distinct feature of progress.

The past season has been characterized in a manner no less favorable than its predecessors. The most prominent object to which the efforts of the Trustees have been directed since our last report, has been the establishment of the Geological Department of the Museum upon such a basis, both as to its extent and authority, as to render it of high and permanent scientific value; and secondly to secure for our accommodation the completion of the new edifice now in progress under the authority of the Commissioners of the Central Park.

The first of these objects has, we think, been satisfactorily accomplished by the purchase of the private collection of Professor James Hall, for so long a period the distinguished head of the Commission for the geological survey of the State of New York.

The value of this collection is so well known to scientific men, that it needs only a brief reference, and we are sure that the friends and promoters of the enterprise in which we are engaged, will regard it as a matter of congratulation that a collection so rich and so vast, is now to be brought forth from comparative seclusion, placed at the great centre of population, and made accessible to all. It constitutes a great Museum in its special department, having more than

5,000 of its typical forms already illustrated, and comprises the tangible results of Prof. Hall's lifework. As this work was done from the basis of the New York geological formations, and large collections were made from the Western States for the fuller and more complete illustration and the fixing of the New York geological nomenclature, it became a matter of just pride with us to secure, against the intelligent and liberal competition of foreign scientific bodies, the interesting and authentic examples of a work so extensive and important; especially as these would remain the perpetual record of a scientific enterprise under the authority of the State of New York, extending over a period of forty years, and undertaken at a time when the science of Geology had scarcely a name, and no place or position in this country.

To examine in detail and to arrange systematically that portion which should remain as the permanent property of the Museum, will require a laborious and careful survey of a great amount of material, of which no full examination has been made since it left the field, and which remains in many instances in the original cases. When this has been done, large numbers of very desirable duplicates will remain, which can be made effective in valuable exchanges, and thus our Museum will be able to secure in this or related departments important series of specimens attainable in no other way. The price paid for the Hall Collection is \$65,000, of which sum \$40,000 have already been subscribed by the Trustees and a few friends of the Museum, so that we feel justified in appealing to our liberal-minded citizens to aid us in securing the remainder.

At an early period of the present year the Trustees addressed a memorial to the Legislature, in which reference was made to the benefits which our Institution was designed to confer upon the public, as well as to the cordial interest which is felt in its success by large numbers of our citizens, and asking that the sum of \$200,000 be appropriated for equipping and furnishing the new fire-proof edifice on Manhattan Square. This measure, receiving the hearty coöperation of his Honor the Mayor and the Comptroller of the City, and of the Commissioners of the Department of Public Parks, was promptly passed by the Legislature.

The Commissioners have prepared plans and specifications for the cases and all interior constructions, and it is probable that the building will be entirely completed and ready for occupation early next summer.

Our collections have been enriched by several important purchases and by many generous gifts, the number and value of the latter being unusually large.

The Department of Anthropology has been increased by the purchase of the Hon. E. G. Squier's rare collection of antiquities, formed during his several years of sojourn and travel in Central and South America; also in this department, to a former contribution is added a new and valuable one by the Hon. Geo. B. Glover, of Shanghai.

Among the more important additions to our other departments are the following: a unique series of eight mounted and eight unmounted specimens, representing thirteen species, of the Moas or gigantic fossil birds of New Zealand, purchased last year and now placed on exhibition: mummies from Columbia River, presented by Dr. J. Simms, and from Alaska

by the Alaska Commercial Co.: thirteen boxes of copper and iron ores from Lake Superior, presented by Samuel Sloan, Esq., and a collection of minerals from the Western States, presented by Prof. A. E. Foote: several mounted mammals and birds from Beirout, Syria, presented by the Rev. D. Stuart Dodge: many fine specimens of carboniferous plants from Pennsylvania, presented by Thomas Ingham, Esq.: the W. J. Hays' Collection of mounted heads of the Moose, Buffalo and Cariboo: skulls and antlers of many species of deer, and a large picture of a herd of buffalo, all presented by the generous friends of the lamented artist: Mr. D. G. Elliot's gift of over eleven hundred fine skins of birds of North America, and several mounted mammals.

The Maintenance Fund, received from our Annual Members, has provided for a limited corps of curators, and enabled us to purchase the Squier collection. The services of additional curators are now required by the constant and rapid growth of our Museum, and it is hoped that the list of such subscribers will be largely increased during the ensuing year.

The number of visitors to our halls has been steadily increasing. The turnstile recently placed at the entrance to the Museum has given the following surprising results, and affords a most satisfactory proof of the popularity of the institution:

### NUMBER OF VISITORS.

		Week	ending	Saturday,	September	18th,		17,082
**	46	46	"	44		25th, 2d.	•	13,327 15,204
44	44	**	44	44	October	9th.	•	17,778
44 .	94	**	44	66	44	16th.	•	13,385
44	46	44	44	44	66	23d.	:	18,328
44	66	64	44	**	44	30th.		14.935
64	44	44	44	46	November	6th	Ť	18 904

Whole number for October, 70,846 Total for eight weeks, . 128,943 Average per week, . 16,118

From the above statistics, it will appear conclusively that while the efforts of the Board of Trustees have been directed to the establishment of an institution with high scientific aims, they have not failed at the same time to make some appropriate return for the liberal aid of the City by contributing to the attractions of the Central Park, a highly appreciated source of popular enjoyment, truly refining in its tendencies, and calculated to direct the thoughts and aims of many into congenial channels of observation and study.

We cannot conclude this brief report without a sincere and respectful tribute to the memory of our late associate, Mr. William T. Blodgett, a gentleman who, while he possessed a nature in peculiar and earnest sympathy with the liberal and graceful arts, was from the beginning the friend and zealous promoter of the interests of this Museum, an institution whose appropriate though not exclusive field enters largely into the severe domain of science. We shall miss his active coöperation, his generous and ready aid, and the intercourse of the ever genial and courteous gentleman.

ROBERT L. STUART,

President.

D. JACKSON STEWARD,

Secretary.

All communications should be addressed, American Museum of Natural History, Central Park, New York.

# PURCHASES.

1874.   1872
To paid F. Squiter, balance due on Collection of Antiquistry (1994)  To paid F. Squiter, balance due on Collection of Antiquistry (1994)  Brown, Shipley & Co., 4778,178, 8 1974, 8 1974,
OT ::::::
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1873. Jan. 25. Jan. 25. Jan. 25. Jan. 25. Jan. 25. Jan. 27. Jan. 2

# MAINTENANOE.

\$3,422 12 000 000 \$13,618 47 HOWARD POTTER, Treasurer. 10,596 35 ċ The Smerican Museum of Butural Bistory in account with HOWARD POTTER, TREASURER. and moneys to cover insurance, . Annual Subscriptions, with interest " Subscriptions of \$100, . Nov. 9th. By Balance Cash this date, - Auditing Committee. ; ROBERT COLGATE, THEODORE ROOSEVELT, JAMES M. CONSTABLE, 1874. 909 37 964 80 2,000 00 889 \$13,618 47 \$2,469 95 4,600 00 1,785 55 Paid for Squier Collection of Antiquities from Cen-Examined and approved, Printing, Stationery and Receptions, NEW YORK, November 1st, 1875. Balance Nov. 1st, 1875, tral and South America, Small Purchases, Insurance, . Salaries, Dr. Labor, 574.

### INCORPORATION.

### AN ACT

### TO INCORPORATE THE AMERICAN MUSEUM OF NATURAL HISTORY.

Passed April 6, 1869.

The People of the State of New-York, represented in Senate and Assembly, do enact as follows:

Section 1. John David Wolfe, Robert Colgate, Benjamin H. Field, Robert L. Stuart, Adrian Iselin, Benjamin B. Sherman, William A. Haines, Theodore Roosevelt, Howard Potter, William T. Blodgett, Morris K. Jesup, D. Jackson Steward, J. Pierpont Morgan, A. G. P. Dodge, Charles A. Dana, Joseph H. Choate, and Henry Parish, and such persons as may hereafter become members of the corporation hereby created, are hereby created a body corporate, by the name of "The American Museum of Natural History," to be located in the City of New York, for the purpose of establishing and maintaining in said city a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation.

SEC. 2. Said Corporation shall have power to make and adopt a Constitution and By-Laws, and to make rules and regulations for the admission, suspension, and expulsion of its members, and their government, the number and election of its officers, and to define their duties, and for the safe keeping of its property, and, from time to time, to alter and modify such Constitution, By-Laws, Rules and Regulations. Until an election shall be held pursuant to such Constitution and By-Laws, the persons named in the first section of this Act, shall be, and are hereby declared to be the Trustees and Managers of said Corporation and its property.

SEC. 3. Said Corporation may purchase and hold, or lease any real and personal estate necessary and proper for the purposes of its incorporation, provided they shall not hold real estate which shall exceed one hundred thousand dollars in value.

SEC. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes.

SEC. 5. This Act shall take effect immediately.

STATE OF NEW YORK, OFFICE OF THE SECRETARY OF STATE, \$88.

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office at the city of Albany, this fourteenth day of April, in the year one thousand eight hundred and sixty-nine.

D. WILLERS, JR., Deputy Secretary of State.

At a meeting of the Trustees, held at the residence of Theodore Roosevelt, Esq., April 8th, 1869, the above charter was unanimously accepted by a majority of the Trustees.

## CONSTITUTION

OF THE

# American Museum of Natural History,

IN THE CITY OF NEW YORK.

### ARTICLE I.

This Corporation shall be styled the American Museum of Natural History.

### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

### ARTICLE III.

The Trustees shall meet quarterly on the second Monday of every February, May, August and November, at an hour and place to be designated on at least one week's written notice from the Secretary, and shall, annually, at the quarterly meeting in November, elect the officers and committees for the ensuing year. They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, an Executive Committee, an Auditing Committee, and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee, and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report, at the annual meeting, of the receipts and disbursements of the past year, with such suggestions, as to the financial management of the Museum, as he may deem proper.

### ARTICLE VI.

The Executive Committee shall consist of five, who shall have the control and regulation of the Collections. Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meetings of the Trustees, without the express sanction of the Trustees.

### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

### ARTICLE X.

By-Laws may, from time to time, be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at any meeting of the Trustees by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

### ARTICLE XI.

The contribution of two thousand five hundred dollars to the funds of the Museum at one time, shall entitle the person giving the same to be a Patron of the Museum.

The contribution of one thousand dollars, at one time, shall entitle the person giving the same to be a Fellow in Perpetuity.

The contribution of five hundred dollars, at one time, shall entitle the person giving the same to be a Fellow for Life.

Any person may be elected by the Trustees to either of the above degrees, who shall have donated to the Museum Books or Specimens to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly, under the seal of the Museum. The Trustees may also elect Honorary Fellows of the Museum in their discretion.

All persons receiving such degrees and diplomas shall be entitled, at all times, to free admission to the Museum and its Exhibitions, but shall not, by virtue of such degrees or diplomas, become members of the Corporation.

### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

# BY-LAWS.

### T

Patrons giving \$2500 are each entitled to 10 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Fellows in Perpetuity giving \$1000 are each entitled to 5 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Fellows for Life giving \$500 are each entitled to 4 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Members giving \$250 are each entitled to 3 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Associate Members giving \$100 are each entitled to 2 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Annual Members, \$10 yearly, are each entitled to 1 Subscriber's Ticket, and 10 Complimentary Tickets for a single admission.

### II.

Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

### III.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Fellow in Perpetuity" of the Museum, unless by a unanimous vote of a quorum of the Board—excepting Trustees ex-officio.

# DONATIONS.

### 1874.

November 18-Mastodon's Tooth, presented by Mr. Root.

### December 9-Dr. E. H. DAVIS.

One Box Minerals-Collected by Dr. Berendt in Mexico. from South America. One Box Fluviatile Shells.

MRS. GWYNNE.

Collection of Shells and Minerals.

21-A. R. YOUNG.

One Stone Axe, Southport, Conn. One Obsidian Lance Head, Ohio. Two Specimens of Coral. One Spider. Sixteen Specimens Algae. One Mummy of Crocodile, Egypt.

- 30-CAPT, CHAS, P. MERRITT. Collection of Shells from Montevideo.
  - GEO. TENNEY. Specimen of Marble from Jennyjump, Warren Co., N. J.
- CHAS. E. MILLER. Specimen of Chrysobothris fulvoguttata.

### 1975.

January 4-Dr. CHAS. W. GREENLEAF. One Menobranchus. One Lota inornata.

15-REV. L. HOLZER, Church of the Holy Redeemer, N. Y. Tarandus rangifer (Reindeer.) Two very fine specimens of Skins from Finmarken, Lapland. A series of Photographs of the Costumes of Laplanders.

February 1-GEO. W. LAWRENCE.

Copy "Proceedings Lyceum Natural History," New York, containing "Birds of Costa Rica."

### March 3-D. G. ELLIOTT.

One Felis caracal. Hab. India.

Felis rufa. Hab. Cal.
Felis chaus, Boyos Country, Abyssinia.
Felis mitis, Brazil.

" Felis serval, Sierra Leone.

" Felis javanensis, Sumatra. " Felis caffra, Cape of Good Hope.

" Hylobates syndactyla, Hab. Sumatra.

April 27.-Received through the SMITHSONIAN INSTITUTION, Washington, D. C.

"Verein für Naturkunde." Weisbaden.

"Mittheilungen des Naturevissen schaftlichen Vereins für Steiermark." 1873.

"Vierteljahrsschrift de Naturforschenden Gesellschaft in Zürich." 1873.

"Verhandlungen der K. K. Geologischen Reichsanstalt." 1874. Wein.

12 Pamphlets and 1 Folio from the Royal Hungarian Society of N. H. Budapest 22d Annual Report on the Working of the Public Free

Libraries. Manchester, Eng. 1873-4.

April 29.-A. W. VOGDES, U. S. Army. Audubon's "Synopsis of Birds of America."

May 1.-DR. SAMUEL W. FRANCIS, Newport, R. I. One Torpedo Fish.

12.—OTTO M. BUEHLER, N. Y. Two Skulls and two femora of Maoris, from Chatham Islands.

" 14-PROF. CHARLES RAU.

One implement of war, with carved handle and stone axe attached. New Zealand.

One large war club. New Zealand.

One small "

One Sword, with shark's teeth. Pacific Islands.

Received from the Regents of the University of the State of New York, Albany.

The tenth to the twenty-second, inclusive, of the "Annual Reports on the condition of the State Cabinet of Nat-ural History. Albany, 1857 to 1869.

" 29-HISTORICAL SOCIETY OF STEIERMARK.

One vol. "Beifräge zur kunde Steiermarkischer Geschichts-

quellen." Graz, 1874. One vol. "Mittheilungen zur kunde Steiermarkischer Geschichtsquellen." Graz, 1874.

" "-Received one vol, "Observations Météorologiques faites a Luxembourg," Par F. Reuter, 1874

One vol. "Publications de L'Institut Royal Grand-ducal de Luxembourg." 1874.

June 10—Received from State Geological Collection, Albany, through Prof. James Hall, Curator. Three photographs of the Cohoes Mastodon.

" 30-S. K. SATTERLEE, Rye, N. Y. Reptiles from New England.

July 1-R. W. MERCER, Cincinnati, Obio. Two fine Trilobites.

5-OTTO M. BUEHLER, N. Y. Photographs of Chatham Islands, taken on the Transit of Venus Expedition.

July 30-Received through the SMITHSONIAN INSTITUTION, Washington, D. C.

"Monthly Notices of Papers and Proceedings of the Royal Society of Tasmania, for 1873.

"Jahres-Bericht der Naturforschenden Gesellschaft Grau-bündens, 1873-4." Chur.

"Naturgeschichtliche Beiträge zur Kenntniss der Umgebungen von Chur." 1874.

" Verhandlungen der Kaiserlich-Königlichen Geologischen Reichsanstalt, 1874." Wien.

" - Received from the ROYAL COLLEGE OF SURGEONS, London, Eng. One vol. "Observations on Geology." John Hunter.

"Catalogue of Fossil Plants."

Invertebrata." Reptilla and Pisces."

" Memoir on the Mylodon."

Nautilus Pompilius."

Histological Catalogue. Vol. I

" Memoranda on Vegetation." John Hunter. ..

Vol. I. 1-1913 Osteological Catalogue. II. 1914-5906.

Physiology Gallery. Vol. I.

August 1-SAMUEL SLOAN, New York.

..

Thirteen boxes specimens Copper and Iron Ores, from Lake Superior District.

10-THEOPHILUS KRAMER, Houston, Texas.

Eggs of the "Phrynosomma (Orbiculare) Mexicana," in alcohol.

September 15—JOHN H. KEMP, New York.
One large birch-bark Canoe, with paddles, made by the Penobscot Indians of Maine.

18-W. A. CONKLIN, New York.

One specimen of Amphioxus, from Naples, Italy.

24-JAMES JACKSON, Paris, France.

One piece Granite, from St. Francis Harbor, Granby Island, Coast of Labrador.

One piece Granite, from Lobster Bay, Coast of Labrador.

Four pieces Amazonite, from Bad Bay, "
One pair each of Esquimaux boots and mittens, from St. Francis Harbor, Granby Island, Coast of Labrador.

"-WILLIAM A. HAINES, New York,

Eight Crystals of Beryl. Portland, Conn.

One specimen Quartz.

Hornblende, "

Tourmaline. 44 Mica.

October 1-A, R. YOUNG, New York.

Two specimens of the Echinus from St. Thomas, W. I.

"-JOHN H. KEMP, New York. One large specimen of fossil Coral. October 2-Prof. D. S. MARTIN, New York.

One large specimen Cryolite from Iviguck, Greenland, brought by the steamer Juniata, of the Expedition in search of Capt. Hall.

3-REV. STUART DODGE, Beirout, Syria.

One mounted Badger, one Marten, two mounted Squirrels, one Hedgehog, four Turtles, one Snake, one Dove, one Sparrow, five Rollers, two Cuckoos, one Heron, two Ravens, six Foxes, all from Beirout, Syria.

5-B, W. WILLIAMS.

Collection of Marine Shells and Minerals from various lo-Collection of Pebbles from the seashore, Mendocino, Cal. One Arrow-head, Wyndham Co., Conn. One Butterfly,

7-W. A. CONKLIN.

One Arrow-head, Squam, Monmouth Co., N. J. One Spine of Star Fish, Squam, "

9-By the friends of the late Artist, Mr. W. J. HAYS.

Five Male Moose Heads, mounted.

Three " " Skulls. 4.6 Antlers

One Elk Head with antlers, mounted.

" Skull, Antlers, with piece of skull.

..

dlsconnected.

" Male Buffalo Head, mounted. Two \*\* Skulls, with horns.

One Cow Skull

Antelope Head and Horns, mounted.

one horn broken.

Skull, with horn.

" Young Antelope Skull.

pair horns Rocky Mountain Sheep.

" Black-tail Deer Antlers.

Two " Musk Ox Horns.

One skull and horns South American Red Deer.

Seven heads American Deer, mounted. Antlers.

Twelve pairs

One pair Walrus Horns.
"English Pheasant, and five other birds.

" Royal Bird of the Incas.

Three Ducks, ten large Grouse.

One Deer's Head, horns in the velvet.

" Rocky Mountain Goat's Head.

" Antelope Head.

Two Fawns, two Hares, one White Squirrel. One Gray Rabbit, three Ermine or Mink, one Otter. One Porcupine, one Prairie Dog, one Wild Turkey. Three young Prairie Chickens, 1 Snipe, 1 Woodcock. Five large Quail, six young Quail, two young Woodcock. One young Snipe, one Woodpecker, one Weasel.

9-JUDGE H. W. ROBINSON, New York. One Head and Antlers of the "Black-tailed Deer" of Colorado.

November 12-G. A. BOARDMAN, Calais, Maine. Seven specimens of the young of American Sea Birds.

### November 13-THOMAS INGHAM.

125 specimens of fossil Plants.

98 " European and other fossils.

30 " Teeth.

14 Stone implements, and a lot of Minerals.

15-J. F. WISSMAN, New York.

One specimen of earthen pottery dug from an ancient mound at Cajamarca, Peru.

"-JOHN JAY BARGIN, New York.

One Hornet's Nest.

20-Prof. B. H. WHITFIELD, Clinton, Miss.

46 specimens of Tertiary fossils.

112 Indian Arrow-heads.

Celts

28 Valves of Ostrea. 1 box duplicates of Rostellaria.

27-MRS. JOHN CROSBY BROWN, New York.

32 specimens of Shark's Teeth and other fossils from the Phosphate beds of Charleston, S. C.

December 2—Received "The Twenty-third Annual Report on the Working of the Public Free Libraries," Manchester, Eng.

"Publications de L'Institut Royal Grand Ducal de Lux-

embourg. 1875.

"-G. C. WALLICH, M. D.

One pamphlet "On the True nature of the so-called Bathybius." By G. C. Wallich, M. D.

5-ALFRED PELL. New York.

Three volumes of "Nature."

"-Mrs. J. ODELL.

Spine of the Drum Fish, Long Branch, N. J.

30-Dr. SAMUEL W. FRANCIS, Newport, R. I. One Rough-legged Hawk.

31-Hon. GEO. B. GLOVER, Shanghai, China.

No. 1. One set of Chess.

Dominoes, 32 pieces.
 of bamboo.

4. Three Bamboo Slips.

5. Cup and Saucer and 6 Dice.

6. Bamboo Box and 32 Slips.

7. Sixty-seven Ivory Counters.

Card Board for playing games.
 Box containing 140 slips of bone.

10. One Wooden Chess Board,

11. A Game of "Stations."
12. Variation of the same.

13. Complicated Dominoes, 131 pieces.

14. Thirty-two pieces of Bamboo.

15. One six-sided Top.

16 Cards used in playing "Pigeon Ticket."

17. Dominoes for playing "Snatching the House-Sparrow," 148 pieces.

18. Playing Cards.19. Books giving rules for the games

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Merriam, Henry E.

Noyes, Henry, D., M. D. Oakley, H. A. Obarrio, Gabriel O'Connor, Chas, O'Connor, Thos. H. Odell, Jonathan Odell, Mrs. Jonathan Olcott, F. P. Olmstead, Dwight H. Olmsted, Fred, Law Olyphant, R. M. Olyphant, Robert Onativia, J. V. Orton, William Osborn, Frederick S. Osgood, S. S. Osgood, Mrs. S. S. Ostrander, C. V. B. Otis, F. N., M. D. Ottendorfer, Dr. Oswald Owen, E. H. Owen, Joshua T. Paddock, Eugene H. Palmer, Cortland Pancoast, George Parish, Henry Parsons, Arthur W. Parsons, Geo. W. Parsons, John E. Patterson, Joseph W. Patterson, Thomas C. Payne, Wm. H. Peabody, Arthur J. Peaslee, E. R., M. D. Peckham, Walton H., M. D. Peet, William E. Pell, Alfred Pell, John H. Pell, Robt. L. Penfold, Edmund Penfold, Wm. Hall Perkins, C. L. Perkins, James D. Perley, Joseph L. Perry, John G., M. D. Perry, Myron Peters, Geo. A., M. D. Pfeiffer, Carl Phelps, Benj. K. Phelps, Chas. Harris Phelps, Geo. D. Phelps, Mrs. J. J. Phelps, Royal Phelps, Wm. Phillips, J. B. Phillips, L. J. Phoenix, Phillips Pierra, Fidel G. Pinkney, J. H. Pinkus, F. S.

Platt, John R. Platt, Sam'l R. Pondir, John Popham, Wm. H. Poppenhusen, Adolph Porter, Hon, John K. Post, Alfred C., M. D. Post, E. A. Potter, Miss Grace H. Potter, Rev. H. C., D. D. Potter, Howard Potter, Miss Lizzie Potter, Miss M. N. Powell, William Powers, Geo. W. Powers, Thomas J. Powers, Wm. P. Preston, Wm. I. Prime, Frederick Prime, Rufus Prince, Gen. Henry Prince, J. D. Purdon, James Purdy, J. F. Purdy, Wm. Macneven Purssell, James Pyne, M. Taylor Pyne, Percy R. Pyne, Percy R., Jr. Quintard, E. A. Rader, Louis B. Rader, Max Ramsay, C. G. Ray, Robert Raynolds, C. T. Raynor, Samuel Redfield, Amasa A. Rees, Norman I. Reid, Whitelaw Renwick, W. R. Requa, J. M. Rice, E. T. Richards, J. W., M. D. Riker, John L. Riker, Wm. J. Riley, Chas. V. Riley, H. Chauncey Ripley, George Ritter, John Peter Robb, J. Hampden Robbins, George A. Robinson, Geo. B. Robinson, John R. Robinson, R. A. Rode, Charles Roelker, Bernard Rogers, Chas. H. Rogers, John Rollins, Daniel G., Jr. Roosa, D. B. St. J., M. D.

Roosevelt, Jas. A. Roosevelt, Theodore Roosevelt, Theodore, Jr. Roosevelt, W. E. Rosenbaum, A. S. Rosenfeld, L. Ross, William B. Rothschild, Victor H. Routh, Henry de B. Rusch, Adolph Russell, Charles H. Rütten, August Ryan, Columbus Rylance, J. H., D. D. Sabine, G. A., M. D. Sandford, Charles F. Sandford, Rollin Sands, H. G., M. D. Sands, Joseph Sands, Samuel S. Satterlee, S. R. Sayre, Lewis A., M. D. Schafer, Samuel M. Schafer, Simon Schaus, Wm. Schell, Edward Schermerhorn, C. A. Schlessinger, B. Schmidt, Oscar E. Scholle, A. Scholle, J. Schumacher, Fred'k Schuyler, Philip. Schwendler, Fred. Scribner, J. Blair Scudder, Linus Sexton, Samuel, M. D. Shaler, Gen. Alexander Shaw, James M. Shea, Hon. George Sheafe, J. F. Shearman, Wm. Pitt Shethar, Samuel Shoards, Rev. Joseph F. Sinclair, John Sistare, George K. Skidmore, Jeremiah Skidmore, Samuel T. Skidmore, William L. Slawson, J. B. Sloan, Samuel Sloane, William Sloane, Wm. D. Slocovich, G. Smith, Charles S. Smith, Edward F. Smith, Geo. W. Smith, Hanbury, M. D. Smith, H. Erskine Smith, J. F., M. D.

Smith, James J. Smith, L. Bayard Smith, Rev. Cornelius B. Smith, Sam'l M. Smith, S. S. Smith, Thos. C. Smith, U. J.
Smith, Wm. Alex.
Smith, Wm. Henry
Smyth, B. L.
Snead, Thomas L. Solomon, B. L. Solomon, S. B. Southworth, Henry C. Soutter, Mrs. J. H. Speir, Gilbert M. Spies, A. W. Spencer, Hon. James C. Squires, Robert Starin, John H. Steers, Henry Steinway, Albert Stengel, Prof. Frederick Stephenson, John Sterling, A. F. Stevens, John W. Stevenson, V. K. Steward, Campbell Steward, D. Jackson Steward, Mrs. D. Jackson Stewart, David Stewart, Mrs. Lispenard Stone, David M. Stone, Geo. E. Storer, Albert Storm, Thomas Stoughton, Hon, E. W. Stout, Richard Strange, A. B. Strong, Charles E. Strong, W. L. Stuart, Alexander Stuart, Mrs. Mary Stuart, Robert L. Stuart, Homer H. Sturges, Thomas T., Jr. Sturgis, Appleton Sturgis, Frederick R., M. D. Sturgis, Miss Margaret B. Sturgis, Mrs. Russell Stuyvesant, A. V. H. Stymus, W. Pierre Sutherland, John Sutherland, John L. Sutherland, Josiah Sutton, E. B. Suydam, D. Lydig Swan, Otis D. Swan, Saml., M. D. Swan, Wm. H.

Swinton, John Swords, Henry C Tailer, Edward N., Jr. Taintor, Chas. M. Talcott, James Tappan, J. Nelson Taylor, Aug. C. Tefft, Charles G. Terbell, H. S. Terry, Mrs. Frederic P. Therasson, L. F. Thompson, S. C. Thompson, W. Prall Thomson, James Thomson, Wm. H., M. D. Thurber, H. K. Tieman, Peter C. Tilford, John M. Tillotson, L. G. Titus, James H. Tobias, Samuel I. Todd, A. J. Todd, Wm. James Tomes, Francis Tompkins, Wm. G. Toucey, J. M. Tousey, Sinclair Townsend, Effingham Townsend, H. D. Townsend, J. L. Townsend, John P. Townsend, R. W. Tows, F. H. Tracy, William Tracy, Chas. Tracy, J. Evarts Trevor, H. G. Trevor, John B. Trevor, Mrs. John B. Trotter, George Troup, Miss Louisa Trow, John F. Trowbridge, Edwin L. Tuck, Edward Turney, P. W. Valentine, Lawson Van Buren, Wm. H., M. D Van Dusen, Samuel B. Van Rensselaer, K. Van Nostrand, David Van Winkle, E. S. Vanwoert, J. V Varnum, James M. Verhuven, H. F. Vermilye, W. R. Vermilye, Wm. M. Von Hoffman, Louis A. Von Post, Herman C. Von Volkenburgh, P. Waite, Chas. C.

Walker, Edward Walker, Evan T. Walker, Francis T. Wall, Charles Wall, Michael W. Wallach, Adolph Wallack, Lester Walz, Isidor, M. D. Ward, John E. Ward, Mrs. M. H. Warren, J. Kearney Watson, Col. B. F. Watson, John H. Watson, Wm. Webb, Gen, Alex. S. Webb, Mrs. Gen. A. S. Weber, John Webster, David, M. D. Webster, Sidney Weed, Hon. Thurlow Weeks, Francis H. Weeks, John A. Welch, Uriah Welling, Chas. H. Wenman, James F. Weston, Theodore Wetherbee, Gardner Wheeler, De Witt C. Wheeler, J. W. Wheelock, Geo. G., M. D. Wheelock, W. A. Wheelwright, B. F. White, Norman Whitlock, William, Jr. Whitney, Alfred R. Wiechers, W. A. Wiley, Franklin Wiley, W. H. Williams, John S. Williamson, David B. Wilson, John Winston, F. S. Winthrop, Robert Witherbee, S. H. Witthaus, R. A. Witthaus, Mrs. R. A. Wood, Hon. Fernando Wood, Isaac F. Wood, J. L. R. Wood, John D. Wood, Mrs. John D. Woollett, Sidney Woodruff, Hon. L. B. Work, John C. Wotherspoon, Henry H. Wright, Charles L. Wright, Samuel V. Wright, Wm. Woolsey Wyckoff, J. F. Young, Mason

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EIGHTH AND NINTH

## ANNUAL REPORTS

OF THE

American Museum of Natural History.

JANUARY 1st, 1878.

New York:

PRINTED FOR THE MUSEUM.

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### ANNUAL REPORTS

OF THE

# American Museum of Natural History.

JANUARY 1st, 1878.

PRINTED FOR THE MUSEUM.

# American Museum of Natural History.

### Trustees.

ROBERT L. STUART.
WILLIAM A. HAINES.
THEODORE ROOSEVELT.
HOWARD POTTER.
ROBERT COLGATE.
BENJAMIN H. FIELD.
ADRIAN ISELIN.
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Vice-Presidents.

WILLIAM A. HAINES. | THE

THEO. ROOSEVELT.

Secretary.

D. JACKSON STEWARD.

Treasunen.

J. PIERPONT MORGAN.

Executive Committee.

WILLIAM A. HAINES. THEODORE ROOSEVELT. ANDREW H. GREEN.

MORRIS K. JESUP.

WM. E. DODGE, JR.

Finange Committee.

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Auditing Committee.

ROBERT COLGATE.

THEODORE ROOSEVELT.

JAMES M. CONSTABLE.

PROF. ALBERT S. BICKMORE, Superintendent.

DR. J. B. HOLDER, Assistant Superintendent.

PROF. R. P. WHITFIELD, Curator of Geology.

# Rinth Annual Report.

1877.

THE Trustees of the American Museum of Natural History have the pleasure of presenting this, their Ninth Annual Report, to the Patrons, Fellows and Members of the Museum.

In 1870, after an Act of Incorporation had been granted by the Legislature, and the Elliot, Maximillian and Verreaux collections had been secured, an agreement was made with the Department of Public Parks, that these attractive specimens should be temporarily exhibited in the Arsenal building, in the Central Park, while the City was erecting a suitable edifice, absolutely fireproof, and part of a general plan to be completed, by the addition from time to time of similar sections, as the increasing collections of the Museum might require more space for public exhibition. This agreement has been fully carried out. In accordance with an Act of the Legislature, passed in 1870, the Department offered the Trustees that portion of the Central Park formerly known as Manhattan Square, as a location. This was accepted, and a building has been erected from plans prepared by the Architects of the Department, and approved by a Committee of our Board, the cases and interior arrangements having been planned, principally, from suggestions by our Superintendent.

Last year the Legislature passed an Act authorizing and directing the Department to make and enter

into a contract with the Museum for the occupation by it of the buildings erected or to be erected on the square, and for transferring thereto and establishing and maintaining therein its museum, library and collections, and carrying out the objects and purposes set forth in its charter. In compliance with the provisions of this law, an agreement has been made with the Department, which is hereto annexed, and provides, among other things, that the Museum shall enjoy the exclusive use of the whole of said building, under rules and regulations contained in the contract; that its exhibition halls shall be open to the public. free of charge, on Wednesday, Thursday, Friday and Saturday of each week, and on Monday and Tuesday to subscribers and students: and that the Trustees may appoint, direct, control and remove all persons employed in the building and the museum, library and collections therein contained.

The directors of the principal museums in America, and a number of scientific gentlemen connected with similar institutions in Europe, have already carefully examined the structure, and pronounce it particularly satisfactory, in respect to light, space, durability, elegance of finish, and every convenience for the visitor and the scientific student.

This edifice was opened to the public, by the President of the United States, on the 22d day of December, in the presence of the Trustees, the Commissioners of Public Parks, the State and City authorities, and a large assemblage of our most prominent citizens, and scientific men of the country. Addresses were delivered on that occasion by ROBERT L. STUART, Esq., President of the Museum; Hon. W. R. MARTIN, President of the Department of Public Parks; President

ELIOT, of Harvard University, and Professor Marsh, President of the American Association for the advancement of Science, which are appended to this report.

The new arrangements, including the selection and removal to this building of a very large part of our collections, hitherto deposited in the Arsenal, and their scientific classification, have required, during the past summer and autumn, the exercise of a great deal of care, labor and thought, on the part of the gentlemen to whom the work has been entrusted by the Board: and here, we would perhaps be considered as having failed in our duty, did we not recognize in an especial manner, the zealous co-operation of Prof. Bickmore, and others, particularly at a period which brings to a definite and satisfactory conclusion, the initial movement in our history, with which they have been so closely identified.

The reptiles, fishes, corals, minerals and duplicates, are still exhibited in the Arsenal, for want of space in the new building, which contains the rarer and more attractive specimens, displayed in cases that suitably show their beautiful forms and colors, and invite critical scientific examination.

The Anthropological department has received the following additions. By donation:—from Mr. John H. Pell, sixty articles of Indian dresses and arms; from Capt. J. H. Mortimer, a series of the implements of the Esquimaux of Alaska; from Mr. H. G. Marquand, over two hundred pieces of Missouri mound pottery; from Mr. D. J. Steward, a collection of rude stone implements from Goshen, N.Y.; from Dr. Jacob Knapp, Louisville, Ky., stone axes and arrow-heads. By purchase:—several lots of Missouri mound pottery, from H. de Mor-

gan; the Bement collection, illustrating the Stone age of Denmark, and the two-thirds purchase of the rare and carefully selected collection of Col. Charles C. Jones, Jr., of Georgia, containing the specimens described and figured in his "Antiquities of the Southern Indians."

The very important collection of implements used by the prehistoric men of the valley of the Somme, in northern France, numbering over three thousand carefully selected specimens, which was brought over by Mr. H. de Morgan, from Amiens, has been purchased and deposited by the President of the Museum. It is stated to be the most complete and valuable series of such objects extant, (that of Boucher de Perthes, at Abbeville, only excepted), and will afford to investigators of that popular branch of Natural Science in America, a means of comparing their specimens with a standard series of the earliest Stone age in Europe.

The purchase of the Hall Collection, has made the Departments of Geology and Palaeontology so important, that the services of a special curator have been required, and Prof. R. P. Whitfield has been employed to take charge of that part of our collections. He has unpacked and placed in the cases of the upper exhibition hall, the types and rarer specimens of the "James Hall" and other collections, and is now preparing a series of maps, to show by different colors the areas of the surface of our continent occupied by the several formations.

Valuable gifts have been made to this department, by Mr. Robert L. Stuart and Professor Hall.

The Wolfe gift of the Jay collection of books on Conchology, is placed in a library specially prepared with cases and shelves of iron. Important works have been given by the States of New Hampshire, Wisconsin and Minnesota. Dr. Hayden's Geological survey has been received from the Department of the Interior, and the publications of many foreign societies from the Smithsonian Institution.

The very valuable library of Icthyological and Scientific Books, gathered at great expense and care, by Mr. James C. Brevoort, (unlimited orders having been given for rare works during many years), has been purchased by the President of the Museum, and will soon be deposited in the Library. It is regarded as by far the most extensive collection of works upon Fishes in this country.

The great assemblage on the day of opening the new building, and the large numbers who daily frequent its halls, show that the usefulness of the Museum is constantly increasing, and we confidently appeal to all our public spirited citizens, to unite with the Trustees in sustaining and promoting the prosperity of an institution which exists only as a means of advancing the higher education and increasing the esthetic and scientific attractions of the city in which we live.

D. JACKSON STEWARD,

Secretary.

# PURCHASES.

# ċ. The American Museum of Ratural Pistory in acot with J. PIERFONT MORGAN, Treasurer. Dr.

	18.73
Dec 27 Balance for nacking and shipping Hall Collection to Museum. \$872-77	\$7,172
The state of the s	" 5, R. L. Kennedy 500 00
1876.	20, Hugh Auchincloss 500
Ang. 1, Paid Commissions 212 50	Dec. 2, John Taylor Johnston or p. t. Ellar & Con. 1,000 00
July 6, Paid Prof. Hall, 2d payment on Geological Collection 1 18,750 00	1000
" Interest on same 656 00	** 80, A. H. Brown
" On account of 8d payment,	3
1 950 00	i. B. Colgate
	26, A. H. Brown
" Interest on balance due to Oct. 14, 1876 \ 2,839 07	Feb. 4, Samuel Willetts. 100 00 00 12 12 12 12 12 12 12 12 12 12 12 12 12
Balanco carried forward 977 61	-
	8, F. K. Halsey
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	Tues L'Abler
	" 10 Theo. Rosevelt
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	" 11, Jos. II. Choato
	5. Richard T. Haines, \$250; Mrs. W. A. Haines, \$100; Miss E. S.
ao aro ora	Nov. 8, Rob't L. Stuart 1,000 00
0.00 (0.00 m)	803.087.96
Management of American	
ROBERT COLGATE	[E. & O. E.] NEW YORK, November 8th, 1876.
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# MAINTENANCE.

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# PURCHASES.

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168 00 664 61		=	And	24	s	2	Robt. L. Stuart
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	18	897 61					

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J. PIERPONT MORGAN, Treasurer.

\$11.827 61

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Examined and approved, AMES M. CONSTAILE, Auditing Committee.

# MAINTENANCE.

1876-7.	1876-7.	
Salaries	Balance, Nov. 8, 1876	\$250 56
Printing and Stationery 592 05	By repayment of advance to Supt. for the payment of	
Centennial Expenses 838 18	petty bills	200 00
Small Purchases	By subscription of John Pondir	100 00
Insurance 622_66	Annual subscriptions and money from Department Pub-	
Labor 1,784 46	lic Parks14,881 91	4,881 91
Freight and Expressage 483 7.9	Balance due Treasurer, December 31, 1877 1,009 37	1,009 37
Commissions and Traveling Expenses 547 29		
Postage and Custom House " 174 01		
Sundries 701 71		
Coal 349 75		
Carpenter Work and Fitting 894 22		
\$16,741 84	18	\$16,741 84
Examined and approved. AMNES M. CONSTANTE. Auditing Committee.	[E. & O. E.] Naw Your, December 31st, 1877.	

### INCORPORATION.

### AN ACT

TO INCORPORATE THE

# American Museum of Natural History,

Passed April 6, 1869.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. John David Wolfe, Robert Colgate, Benjamin H. Field, Robert L. Stuart, Adrian Iselin, Benjamin B. Sherman, William A. Haines, Theodore Roosevelt, Howard Potter, William T. Blodgett, Morris K. Jesup, D. Jackson Steward, J. Pierpont Morgan, A. G. P. Dodge, Charles A. Dana, Joseph H. Choate, and Henry Parish, and such persons as may hereafter become members of the corporation hereby created, are hereby created a body corporate, by the name of "The American Museum of Natural History," to be located in the City of New York, for the purpose of establishing and maintaining in said city a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation.

- SEC. 2. Said Corporation shall have power to make and adopt a Constitution and By-Laws, and to make rules and regulations for the admission, suspension, and expulsion of its members, and their government, the number and election of its officers, and to define their duties, and for the safe keeping of its property, and, from time to time, to alter and modify such Constitution, By-Laws, Rules and Regulations. Until an election shall be held pursuant to such Constitution and By-Laws, the persons named in the first section of this Act, shall be, and are hereby declared to be the Trustees and Managers of said Corporation and its property.
- SEC. 3. Said Corporation may purchase and hold, or lease any real and personal estate necessary and proper for the purposes of its incorporation, provided they shall not hold real estate which shall exceed one hundred thousand dollars in value.
- SEC. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes.
  - Sec. 5. This Act shall take effect immediately.

STATE OF NEW YORK,
OFFICE OF THE SECRETARY OF STATE, \$88.

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office at the city of Albany, this same fourteenth day of April, in the year one thousand eight hundred and sixty-nine.

D. WILLERS, JR., Deputy Secretary of State.

At a meeting of the Trustees, held at the residence of Theodore Roosevelt, Esq., April 8th, 1869, the above charter was unanimously accepted by a majority of the Trustees.

# CONSTITUTION

OF THE

# American Museum of Katural History,

IN THE CITY OF NEW YORK.

### ARTICLE I.

This Corporation shall be styled the American Museum of Natural History.

### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

### ARTICLE III.

The Trustees shall meet quarterly on the second Monday of every February, May, August and November, at an hour and place to be designated on at least one week's written notice from the Secretary, and shall, annually, at the quarterly meeting in November, elect the officers and committees for the ensuing year. They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, an Executive Committee, an Auditing Committee, and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee, and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report, at the annual meeting, of the receipts and disbursements of the past year, with such suggestions, as to the financial management of the Museum, as he may deem proper.

### ARTICLE VI.

The Executive Committee shall consist of five, who shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meetings of the Trustees, without the express sanction of the Trustees.

### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

### ARTICLE X.

By-Laws may, from time to time, be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at any meeting of the Trustees by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

### ARTICLE XI.

The contribution of two thousand five hundred dollars to the funds of the Museum at one time, shall entitle the person giving the same to be a Patron of the Museum.

The contribution of one thousand dollars, at one time, shall entitle the person giving the same to be a Fellow in Perpetuity.

The contribution of five hundred dollars, at one time, shall entitle the person giving the same to be a Fellow for Life.

Any person may be elected by the Trustees to either of the above degrees, who shall have donated to the Museum Books or Specimens to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly, under the seal of the Museum. The Trustees may elect Honorary Fellows of the Museum in their discretion.

All persons receiving such degrees and diplomas shall be entitled, at all times, to free admission to the Museum and its Exhibitions, but shall not, by virtue of such degrees or diplomas, become members of the Corporation.

### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

### BY-LAWS.

### I.

Patrons giving \$2,500 are each entitled to 10 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Fellows in Perpetuity giving \$1,000 are each entitled to 5 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10

Tickets for a single admission.

Fellows for Life giving \$500 are each entitled to 4 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Associate Fellows giving \$250 are each entitled to 3 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Members giving \$100 are each entitled to 2 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to 1 Subscriber's Ticket, and 10 Complimentary Tickets for a single admission.

### II.

Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

### III.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Fellow in Perpetuity" of the Museum, unless by a unanimous vote of a quorum of the Board—excepting Trustees ex-officio—nor be eligible unless his name shall be presented by the nominating committee at a Regular Quarterly Meeting prior to the meeting at which said election shall take place.

### CONTRACT

### WITH THE DEPARTMENT OF PUBLIC PARKS

FOR THE OCCUPATION OF THE NEW BUILDING.

This Agreement, made and concluded on the twenty-second day of December, in the year one thousand eight hundred and seventy-seven, between the Department of Public Parks of the City of New York, the party of the first part, and the American Museum of Natural History, party of the second part, Witnesseth:

Whereas, by an Act of the Legislature of the State of New York, passed April 22d, 1876, entitled "An Act in relation to the powers and duties of the Board of Commissioners of the Department of Public Parks, in connection with the American Museum of Natural History, and the Metropolitan Museum of Art," the said party of the first part is authorized and directed to enter into a contract with the said party of the second part, for the occupation by it of the buildings erected or to be erected on that portion of the Central Park in the City of New York, known as Manhattan square, and for transferring thereto and establishing and maintaining therein its museum, library and collections, and carrying out the objects and purposes of said party of the second part; and

Whereas, a building contemplated by said act has now been erected and nearly completed and equipped in a manner suitable for the purposes of said Museum, as provided in the first section of the Act of May 15, 1875, known as Chapter 351, of the Laws of 1875, for the purpose of establishing and maintaining therein the said museum, as provided by the said last-named act, and by the Act of April 5, 1871, known as Chapter 290, of the Laws of 1871; and,

Whereas, it is desired as well by the said party of the first part, as by the said party of the second part, that, immediately upon the completion and equipment of said building, the said party of the second part should be established therein, and should transfer thereto its Museum, Library and Collections, and carry out the objects and purposes of the said party of the second part.

Now, therefore, it is agreed by and between the said parties as follows, namely:

First.—That the said party of the first part has granted and demised and let, and doth, by these presents, grant, demise and let, unto the said party of the second part, the said buildings and the appurtenances thereunto belonging, to have and to hold the same so long as the said party of the second part shall continue to carry out the objects and purposes defined in its charter, or such other objects and purposes as by any future amendment of said charter may be authorized; and shall faithfully keep, perform, and observe the covenants and conditions herein contained on its part to be kept, performed, and observed, or until the said building shall be surrendered by the said party of the second part, as hereinafter provided.

Secondly.—That neither the party of the first part, its successor or successors, nor the Mayor, Aldermen and Commonalty of the City of New York, shall be in any manner chargeable or liable for the preservation of the said building or the property of the party of the second part which may be placed therein, against fire, or for any damage or injury that may be caused by fire to the said property; but it is agreed that, damages as aforesaid excepted, the said party of the first part will keep said building, from time to time, in repair.

Thirdly.—That as soon after the completion and equipment of said building as practicable, said party of the second part shall transfer to, and place and arrange in, said building, its museum, library, and collections, or such portion thereof as can be properly displayed to the public therein, and shall have and enjoy the exclusive use of the whole of said building, subject to the provisions herein contained, and the rules and

regulations herein prescribed, during the continuance of the term hereby granted, or until a surrender thereof, as herein provided.

Fourthly.—That the exhibition halls of said building shall, on Wednesday, Thursday, Friday and Saturday of each week, and on all legal or public holidays, except Sundays, be kept open and accessible to the public, free of charge, from nine o'clock A. M. until half an hour before sunset, under such rules and regulations as the party of the second part shall, from time to time, prescribe; but on the remaining days of the week the same shall be only open for exhibition to such persons, upon such terms as the said party of the second part shall from time to time direct. But all professors and teachers of public schools of the City of New York, or other institutions of learning in said city, in which instruction is given free of charge, shall be admitted to all the advantages afforded by the said party of the second part, through its Museum, Library, apparatus, and collections, or otherwise, for study, research and investigation, free of any charge therefor, and to the same extent and on the same terms and conditions as any other persons are admitted to such advantages, as aforesaid.

Fifthly.—That the Museum, Library and collections, and all other property of the said party of the second part, which shall or may be placed in said building, shall continue to be and remain absolutely the property of said party of the second part, and neither the said party of the first part nor the said the Mayor, Aldermen and Commonalty, shall by reason of said property being placed in said building, or continuing therein, have any right, title, property or interest therein; nor shall the said party of the second part, by reason of its occupation and use of said building under this agreement, acquire, or be deemed to have any right, title, property or interest in said building, except so far as expressly granted by this agreement.

Sixthly.—That the said party of the second part shall, on or before the first day of May, in every year, during the continuance of this agreement, submit to the said party of the first part, its successor or successors, a detailed printed report of the operations and transactions of the said party of the second part, and all its receipts and payments, for the year ending with the 31st day of December next preceding.

Seventhly.—That said party of the first part shall have, at all times, access to every part of said building for general visitation and supervision, and also for the purpose of the performance of the duties devolved upon it by the laws of the State of New York, or of the City of New York. That the police powers and supervision of said party of the first part shall extend in, through and about said building. That the said party of the second part may appoint, direct, control and remove all persons employed within said building, and in and about the care of said building, and the museum, library and collections therein contained.

Eighthly.-That said party of the second part may, at any time, after the expiration of three, and before the expiration of six months from the date of the service of a notice in writing to said party of the first part, its successor or successors, or to the Mayor of the City of New York, of its intention so to do, quit and surrender the said premises and remove all its property therefrom; and upon and after such notice, the said party of the second part, shall and will, at the expiration of the said six months, quietly and peaceably yield up and surrender unto the said party of the first part and its successors all and singular the aforesaid and demised prem-And it is expressly understood and agreed by and between the parties hereto that if the said party of the second part shall omit to do, perform, fulfill or keep any or either of the covenants, articles, clauses and agreements, matters and things herein contained, which on its part are to be done, performed, fulfilled or kept, according to the true intent and meaning of these presents, then and from thenceforth this grant and demise shall be utterly null and void. And in such case it shall and may be lawful for said Department to serve or cause to be served on the said party of the second part a notice in writing declaring that the said grant hereinbefore made has become utterly null and void, and thereupon

the said party of the first part, its successor or successors (ninety days time being first given to the said party of the second part to remove its property therefrom); may re-enter, and shall again have, repossess and enjoy the premises aforementioned, the same as in their first and former estate, and in like manner as though these presents had never been made, without let or hindrance of the said party of the second part, anything herein contained to the contrary notwith-standing.

Ninthly.—And it is further expressly understood, and agreed, by, and between, the parties hereto, that this agreement may be wholly cancelled and annulled, or, from time to time, altered, or modified, as may be agreed, in writing, between the said parties, or their successors, anything herein contained to the contrary in anywise notwithstanding.

In witness whereof, the party of the first part hath caused this agreement to be executed by their President and Secretary, pursuant to a resolution of the Board of Commissioners of said Department, adopted at a meeting held on the thirtieth day of January, A. D. 1878, and the said party of the second part hath caused the same to be executed by their President, and their official seal affixed thereto, pursuant to a resolution of the Trustees of the American Museum of Natural History adopted at a meeting held on the twelfth day of February, A. D. 1877.

### In presence of

D. PORTER LORD.

### JAMES F. WENMAN,

President Department of Public Parks of the City of New York.

### WILLIAM IRWIN,

Secretary Department of Public Parks of the City of New York,

SEAL of the American Museum of Natural History.

### ROBERT L. STUART.

President American Museum of Natural History. STATE OF NEW YORK, City and County of New York, ss:

On this 12th day of February, in the year 1878, before me personally came James F. Wenman, President of the Department of Public Parks of the City of New York, and William Irwin, Secretary of the said Department of Public Parks, with both of whom I am personally acquainted, and both of whom being by me duly sworn, said that they reside in the City and County of New York, that the said James F. Wenman is the President, and the said William Irwin is the Secretary of the said Department of Public Parks, and that they signed their names to the foregoing agreement by order of the "Board of Commissioners" of the said Department of Public Parks, as such President and Secretary.

W. C. BESSON,

[SEAL.] (73) Notary Public N. Y. Co.

STATE OF NEW YORK, City and County of New York, ss.:

On this 12th day of February, in the year 1878, before me personally came Robert L. Stuart, the President of the American Museum of Natural History, with whom I am personally acquainted, who being by me duly sworn, said that he resides in the City and County of New York, that he is the President of the "American Museum of Natural History," and that he knows the corporate seal of said museum, that the seal affixed to the foregoing agreement is such corporate seal, that it is affixed thereto by order of the "Board of Trustees" of said American Museum of Natural History, and that he signed his name thereto by the like order, as President of said Museum.

W. C. BESSON,

[SEAL.] (73) Notary Public, N. Y. Co.

Recorded in the office of the Register of the City and County of New York in Liber. 1426 of Cons., page 402, February 16, A. D. 1878, at 9 o'clock  $\Lambda$ . M., and examined.

Witness my hand and official seal,

FREDERICK W. LOEW,

[SEAL.] Register.

# DONATIONS.

#### Jan. 1st, 1876 to Dec. 31st, 1877.

February	18—HISTORICAL	SOCIETY	OF STEIERMA	RK.
	"Beitrage	zur Kunde	Steiermarkischer	Geschichtsquellen."-

Graz, 1875.

"Mittheilungen zur Kunde Steiermarkischer Geschichtsquellen "—Graz, 1875.

- quellen."—Graz, 1875.
- " 23-AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, through F. W. Purnam, Secretary. "Memoirs of the American Association for the Advancement of Science." No. 1. Salem, Mass.
- " 29-D. W. FERGUSON, N. Y.
  - 1 specimen Spondylus longitudinalis, Lamk., from Gulf of California.
- " 29—RUSSELL STURGIS, N. Y. 64 specimens of Birds in skins, from Trinidad, S. A.
- March 8.—STATE OF NEW JERSEY, through Prof. Geo. H. Cook, New Brunswick.
  - 1 Box Geological Specimens.
  - "16.—BRYCE M. WRIGHT, London, Eng. 2 specimens of Ammonites, from Lyme Regis and Folkestone.
    - Shark's Tooth, from the Chalk of Kent.
       Apiocrinus, Parkinsoni, Bradford, Wilts.

  - " 22—CENTRAL PARK ZOOLOGICAL COLLECTION, N. Y., through
    W. A. CONKLIN, Director.

    Vocante Manager (Manager Manager), Hab. Ropped.
    - 1 Moor Macaque (Macacus Maurus). Hab. Borneo.
  - " 27—D. W. FERGUSON, N. Y.
    3 species of Shells.
    1 " Sponge.
- April 4—ALBERT STORER, N. Y.
  60 specimens of Shells.
  1 Neptune's Cup from Ceylon.
  - " 15-EDMUND E. CAREY, Hamilton, Bermuda.

    1 large specimen Pipe Sponge.
  - " 20—EDWARD DELAFIELD, N. Y.
    1 case of Game Birds (Mounted).
    1 large Trilobite.

April 20—JOHN CROSBY BROWN, N. Y.
4 rare Fossils from Phosphate Beds of Charleston, S. C.

May 1-GEORGE N. LAWRENCE, N. Y.

Descriptions of 5 new species of American Birds; also of a new species of Jay, of the genus Cyanocitta; also of a supposed new species of the genus Cyanocorax—Original papers, illustrated.

" 4—ROBERT L. STUART, N. Y. 600 Birds' Eggs from Norway and Sweden.

" 5-J. B. SNIFFEN, N. Y.

1 Stalactite from Mammoth Cave, Ky. Specimens of Lime Stone, from Texas. 1 specimen Coquina, Southern Florida.

" 10-ALBERT LINDSAY, New Vernon, N. J.

3 Stone Pestles.
3 " Hatchets.

5 Arrow Heads.

" 10-ROBERT L. STUART, N. Y.

1 large polished Ammonite, from England. 1 specimen Scolopendra Gigas (Giant Centipede.) Hab. East Indies.

- " 16—HOWARD BECK AND MISS M. N. BECK, Sparkill, Rockland Co., N. Y. Collection of 500 Shells, (general.)
- " 16-A. P. MOREWOOD.

Specimen of Tree Fern, from Tamsui, Formosa, China.

- " 16—MUSEUM OF COMPARATIVE ZOOLOGY, Cambridge, Mass. 68 specimens, 61 species of Fishes, collected on the Hassler and Thayer Expeditions.
- " 17—Dr. MORRILL WYMAN, through Dr. J. O. STONE, N. Y. "Memoir on Fresh-Water Shell Mounds of the St. Johns River," Florida, by Jeffries Wyman.
- " 27-W. G. BINNEY.

"Notes on American Land Shells." Vol. II, part IV, by himself.

" 31-DR. J. M. DELGADO, N. Y.

4 Anatomical Specimens: preparations of human arterial venous and nervous systems. 1 specimen Human Arm.

" 31-E. LEONARD CORNING, Zürich, Switzerland.

I Model of the Lake Dwellings made under the direction of Dr. Keller.

1 Vol. English translation, "On the Lake Dwellings," by Dr. Keller.

305 specimens of the Oeningen fossil flora identified by Prof. Oswald Heer.

Stone implements, agricultural products, pottery, ornaments, samples of cloth, and "Lake Dwelling" antiquities.

June 1—THOMAS BLAND, N. Y.
"A Descriptive Catalogue of the Scalidæ of the West India Islands," by O. A. L. Mörch, M.D.

" 20—MASTER JOSEPH GREENBAUM, N. Y. 1, slab of Old Red Sandstone containing Fossil Fish. June 30-GEO. A. CRISSON, N. Y.

Collection of Shells from Turks Island, West Indies.

" 30-CAROLINE D. MARWEDEL, San Francisco, Cal.

I fine specimen of the Bark of the Big Trees of Calaveras Grove, Cal.

30-Mrs. JOHN W. THOMSON, N. Y.

Specimen of Chinese Pheasant.

30—FRANK CARRYL, Franklin, N. J. 16 Birds' Nests.

" 30-Mrs. THEODORE RILEY, N. Y.

A collection of minerals, pottery, implements, utensils, ornaments, etc., from various parts of the world,

" 30-Prof. B. H. WHITFIELD, Clinton, Miss.

Portions of 5 humeri (human.)

8 pieces of Pottery, 2 Clay Pipes, 6 Stone Implements, from the Mounds of Madison County, Miss.

30-CHAS. TRAUTMANN, N. Y.

1 pair Horns of Kudoo, from Zambei, S. A.

44 Gemsbock, "

" 30-EDWARD P. SLEVIN, N. Y.

A collection of Birds and Bird Skins, from Egypt. 1 Flying Fish.

" 30-M. H. STAFFORD, N. Y.

Specimens of Perforated Stones, found in Stafford Creek, Onondaga Co., N. Y.

July 1-JOHN E. YOUNGLOVE.

2 species Fossil Coral, Bowling Green, Ky.

24 specimens Pentremites.

1-GEN. JOHN P. HATCH, Lt. Col. 4th Cavalry. 1 Comanche Shield and Bow.

Arrows.

2 Chevenne 1 Bone Scraper.

" 14-LOUIS BISANG.

1 Diadem Spider.

" 14-HUGH AUCHINCLOSS, N. Y.

A monumental mass of Rock Salt.

August 31-T. NELSON DALL, JR.

1 Vol .- "A Study of the Rheetic Strata of the Val di Ledro in the Southern Tyrol," by himself.

September 3-G. A. TUTHILI, N. Y.
Specimen of Petrified Oak, also specimen of Iron Ore, from Timber Brook Mine, N. J.

6-C. W. NEVINS, Towarda, Pa.

1 specimen Phasma Femoratum ("Walking Stick.")

14—EMANUEL J. ATTINELLI, N. Y. Specimens of the Bark and Wood of the Big Trees of California, Minerals, Fossils, etc.

19-ST. JULIEN FILLETTE, N. Y.

1 Humming-bird's Nest, Americus, Georgia.

1 Gnat's Nest.

1 Duck's Egg, peculiarly black, Chester, S. C.

- October 6-STATE OF OHIO, through Hon. H. H. Robinson, State Librarian, Columbus, Ohio.
  - Report on the Geological Survey for 1870. Vol. I, 1873. Vol. II, 1874.
  - Paleontology. Vol. 1, 1873. Vol. 2, 1875. And Maps, 1870, 1873, 1874.
  - " 9-STATE OF MICHIGAN, through Hon. W. J. BAXTER, Secretary of State, Lausing, Mich.
    Vol. I and II, 1869 to 1873 and Maps-"Survey of the Upper Peninsula."
  - 12—CHAS. G. SMITH, N. Y. Specimen of Zeus Capillaris (Hair-finned Dory), taken in a seine at Gardner's Bay, L. I.
  - " 12—FRANCISCO BAMONTE. Specimens of Clothing from the Huacas, Ancon, Peru.
  - " 12—GEO. N. LAWRENCE, N. Y.
    Bulletin No. 4 of "Natural Museum."
  - " 16—Capt. JOHN H. MORTIMER, N. Y.
    1 Specimen of Asbestiferous Silicified Wood, Nevada.
  - " 17—Hon. TOWNSEND HARRIS, N. Y.
    6 specimens of Glass Rope Sponge.
    1 Shark's Tooth.
  - " 23—STATE OF INDIANA, through Dr. G. M. Levette, Indianapolis. Reports on Geological Survey, 1869, '70, '72, '73, '74, and '75.
  - " 24—MAJOR BEEBE, Brooklyn, N. Y. A collection of minerals, stone axes, arrow-heads, sharks' teeth, shells, etc.
- November 2-LACKAWANA COAL AND IRON CO.

  16 specimens Iron Ore, from the mines of N. J.
  - " 10-Miss MARY GELSTON, N. Y.
    Natural Mat of the Roots of the Willow (Salix Vitellina.)
  - " 12—DAVENPORT, Iowa, ACADEMY OF NATURAL SCIENCES. Vol. I, 1867-1876; Proceedings.
  - " 15—HENRY F. LYMAN, Cleveland, O. 3 pieces of Pink Coral, Operculi of Turbo.
  - 20—DEPARTMENT OF THE INTERIOR, Washington, D. C., through
    Dr. F. V. HAYDEN, U. S. Geologist.
    Geological Survey of the Territories, Vol. X
    " of Colorado and the Territories, 1874.
    " Bulletins Nos. 1, 4, 5 and 6. 2d Series.
- December 2—Through the SMITHSONIAN INSTITUTION, Washington, D. C. 3 packages publications of foreign societies.
  - " 2—SMITHSONIAN INSTITUTION, Washington. "Contributions to Knowledge,"—Vols. XX and XXI.
  - 2—Dr. G. E. MANIGAULT, Charleston, S. C. Skelewon of Turtle (Emys servata.)
  - " 22—JOHN WILSON, N. Y. 1 Indian Pipe, from Yankton, Dakota.
  - " 22—ROBERT L, STUART, N. Y. "Catalogue of Shells collected at Panama, with notes, etc.," by C. B. Adams.

- December 28-DEPARTMENT OF PUBLIC PARKS, N.Y., through WM. IRWIN, Sec'y. "Third Annual Report,"—May 1st '72 to Dec. 31st, '73.
  - 29-UNION IRON CO., Buffalo, N. Y. 75 specimens of Iron Ore.
  - 44 29-Dr. H. G. PIFFARD, N. Y. 129 Vols, of "Buffon's Natural History."
  - 66 29-STATE OF NEW JERSEY, through GEO. H. COOK, State Geologist, New Brunswick. "Geology of N. J.," 1 Vol. and Atlas, 1868.

Annual Reports, 1870 to 1875.

- 29-ISAAC JOHNSON, Spuyten Duyvel, N. Y. I large specimen Asbestos, found on land of the donor.
- 41 29-Rev. CHARLES P. BUSH, N. Y. Annual Reports of the American Board of Commissioners for Foreign Missions, from 1838 to 1876.
- 29—TRABER & AUBERY, Cincinnati, O.
   A large series of Ores from the "Hanging Rock Iron Region,"
   Ky., including specimens from the Hecla Iron and Mining Co. and the Etna Iron Works.
- 29-EASTERN KENTUCKY R. R., through H. W. BATES, Vice Pres't, Cincinnati, O. Specimens of Iron Ore from the "Hanging Rock Iron Region," Ky.
- 29-CENTRAL PACIFIC R. R., through J. R. Scupham, San Fran-
  - 14 boxes Geological Specimens, Ores and Building Stones.
- 44 29-SOUTH AND NORTH ALABAMA R. R., through PROF. GESNER. Geological Sections and Ores.
- 29-M. S. MEPHAM & BRO., St. Louis, Mo. 7 boxes Minerals.
- 29—HUSSEY & HOWE MINING CO., through HERMAN VEEDER. Agent, Plattsburgh, N. Y. 3 specimens Iron Ores, from the Arnold Iron Mine.

- 29-WOODWARD'S GARDENS, San Francisco. .. 300 Bird Skins.
- 29-ARGENTINE REPUBLIC, through E. OLDENDORFF, Commissioner 44 to the Centennial Exhibition. 2 Silver Ornaments worn by the Natives of San Luis.
- 29—GOVERNMENT OF JAMAICA, through Robt. Thompson, Director of the Botanical Gardens, Kingston. 4.4 58 boxes of Woods and Agricultural Products, illustrating the industrial wealth of Jamaica.
- .. 29-GOVERNMENT OF BERMUDA, through Major-Gen'l Lefroy,
  - 6 boxes of Woods and Agricultural Products.
- 29-GOVERNMENT OF CANADA, through A. R. C. SELWYN, F. R. S., Director Geological Survey.
  - 6 boxes Ores and Building Stones.
- 29-GOVERNMENTS OF GERMANY, SPAIN, PORTUGAL, BRA-ZIL, MEXICO, TURKEY, NEW ZEALAND, SANDWICH ISLANDS, HAWAIIAN ISLANDS, BAHAMA ISLANDS, TASMANIA AND TRINIDAD.

Specimens illustrating the mineral, agricultural and economic wealth of their respective countries.

1877.

January 1—Through the SMITHSONIAN INSTITUTION, Washington, D. C. 11 packages of the publications of foreign societies.

February 12— "The Archeological Collection of the U. S. Museum." Chas. Rau, 1876.

- " 14-HISTORICAL SOCIETY OF STEIERMARK.
  "Mittheilungen & Beiträge für 1876."
- " 14-CONSUL OF PERU, N. Y.
  "El Peru." Tomo I. Lima, 1874.
- ' 14—BUREAU OF EDUCATION, Washington, D. C. Through Gen'L John Eaton, Commissioner. Reports for 1875 and 1876.
- " 27-D, JACKSON STEWARD, N. Y.
  5 Wooden Fish-Hooks with Lines.
  1 pair Autelope Horus.
  1 Shell Ornament.
- " 27-JOHN O'BRIEN. Wooden Image of Alligator found at Clifton, S. I.
- " 27—Miss H. E. WIER. Stone Pestle from Ferrisburg, Vt.
- 27—BODWELL GRANITE CO, Vinalhaven, Me. 1 Slab of Granite with Glacial Markings.
- March 3—Mrs. Rev. M. S. CULBERTSON, Brooklyn.

  Wearing Apparel of the natives of the Sandwich Islands,
  Foochow and China.
  - " 7—STATE OF VERMONT, through Hon. H. A. Huse, State Librarian, Montpelier. 2 vols. Reports on the Geological Survey of the State.
  - " 7—D. JACKSON STEWARD, N. Y. 1 Terra Cotta Vase from Peru.
  - " 12—Prof. ALBERT S. BICKMORE, N. Y. Gatalogue of the Library of the Royal Geographical Society, London, 1865—1871.
  - " 13—CAPT. JOHN H. MORTIMER, N.Y. Implements and Utensils from the Aleutian Islands.
  - 15—MUSEUM OF COMPARATIVE ZOOLOGY, Cambridge, Mass. Report for the year 1876.
  - " 23—Sir JOHN EVANS, London, England.
    "Note on International Code of Archaeological Symbols."
  - 23—Dr. JAMES KNAPP, Louisville, Ky. A collection of Arrow and Spear Heads and Stone Implements.
  - " 23-Prof. D. S. MARTIN, N. Y.
    Bow and Arrows from the Cherokee Country.
  - " 26-WM. A. CONKLIN, N. Y.
    1 Papoose Cradle.
    1 Indian Arrow, iron point.

March 26-E. A. HOYT, N. Y.

Specimen of the Monocanthus Massachusettssesis.

' 28-C. B. BILYIEU, N. Y.

1 Skin of Crow. 1 Skin of Scarlet Tanager.

April 3—FRANKLIN C. HILL, Princeton, N. J.
2 Photograph Drawings of the Harpalus Caliginosus.

" 3-CHARLES MANN.

"Memorial of J. A. Lapham."

" 6-MISS ELIZABETH SWANSON.

7 Birds Eggs from Caithnesshire, Scotland.

" 6—DEPARTMENT OF THE INTERIOR, Washington, D. C. 9 vols. Publications.

Mounted Map of the U. S.

" 10—BODWELL GRANITE CO.
2 Blocks of Polished Granite.

" 11-ALBERT STORER, N. Y.
Collection of Shells.

" 28-Dr. J. V. MANSFIELD, N. Y.

Specimen of the Boa Constrictor, Centipede and Vampire, in alcohol.

" 28—WISCONSIN ACADEMY OF SCIENCES, ARTS AND LETTERS, through JOHN E. DAVIES, Sec'y, Madison. Vol. III of "Transactions," 1875-6.

" 30-JOHN F. BURNS.

2 Arrows from the Desolate Is., South Pacific.

" 30—GOVERNMENT OF JAMAICA, through ROBERT THOMPSON, Esq., Director Botanical Gardens, Kingston.
"Report on the Jamaica Exhibit at the Centennial."

May 1—GEN'L JOHN H. PELL, N. Y.
Implements and Utensils of the Sioux, Cheyennes and
Arraphoes Indians, captured by Gen. Sully's Expedition,
1863 and 1864.

" 2—DEPARTMENT OF THE INTERIOR, Ottawa, Canada, through Hon. E. A. MEREDITH, Deputy Minister. Annual Reports for 1874, 1875 and 1876.

" 3—SOCIETY OF NATURAL SCIENCES, Buffalo. Bulletin No. 4. Vol. III, 1877.

" 3—DEPARTMENT OF THE INTERIOR, Washington, D. C. Notes on a collection of Noctuid Moths, A. R. GROTE.

Hayden's Reports, 1867 to 1874.
9 vols. Publications.

" 12-FRANKLIN C. HILL, Princeton, N. J.
Photograph of Mosquito Eggs.

" 12—GEOLOGICAL COMMISSION OF BRAZIL.

"Archivos do Museu Nacional do Rio de Janiero." Vol. I,
1816.

" 12-W. A. CONKLIN, N. Y.

Fossil Calamite Stem, New Jersey Stone Gauge.

" 16—AMERICAN ETHNOLOGICAL SOCIETY.
Vol. I and II. Transactions of.

- May 19—GEO. W. GILBERT, Pilot Town, Fla.
  12 pieces Plain and Ornsmented Pottery from Botten
  Island, Fla.
  - " 19—BARON C. R. OSTEN-SACKEN, Cambridge, Mass. Pamphlets on "Western Diptera."
  - " 22—DEPARTMENT OF THE INTERIOR, Washington. 6 vols. Publications.
- June 6—Prof. J. S. NEWBERRY.
  A collection of Lepidoptera from Ecuador, S. A.
  - " 16—Dr. O. FINSCH, Bremen. "Catalog der Austellung Ethnographischer und Naturavissenschaftlicher Sammlungen, Bremen, 1877.
  - " 16-R. W. MERCER, Cincinnati, O. Wax Cast of Stone Image.
  - " 25-WM. HOWLAND PELL, Flushing, N. Y. "Medicine Man's" Pipe, from Miss.
  - " 26-ALBERT K. FISHER.
    8 Bird's Nests, with Eggs.
  - " 27—H. G. MARQUAND, N. Y. Skulls and Fragments from the Mounds at New Madrid, Mo.
  - " 29-DR. T. CLEANEY, Cincinnati, O. 1 box Stone Implements.
- July 14—W. L. GRAY, Newark, N. J. Corundum from Shaft at Mineral Hill, Pa.
  - " 15-WARD M. GASLAY.
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- September 5-W. R. STERLING, Philadelphia, Pa. Specimens of Magnetite Ore.
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  - " 20—Prof. N. H. WINCHELL, Minneapolis, Minn. Second and Fourth Annual Reports of the Geological Survey of Minnesota.
  - 20—Prop. C. HART MERRIAM, New Haven. "A Review of the Birds of Connecticut."
  - " 20—HISTORICAL SOCIETY OF STEIERMARK.
    "Mittheilungen" and "Beiträge" for 1877.
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Slocovich, G.

Smith, Charles S Smith, Edward F. Smith, Geo. W. Smith, Hanbury, M. D. Smith, H. Erskine Smith, L. Bayard Smith, Roswell Smith, Rev. Cornelius B. Smith, Samuel M. Smith, Wm. Alex. Smith, Wm. Henry Soutter, Mrs. J. F. Spier, Hon. Gilbert M. Spies, A. W. Spencer, Hon. James C. Squires, Robert Starin, Hon. John H. Steers, Henry Stengel, Prof. Frederick Sterling, A. F. Stevens, A. O. Stevenson, V. K. Steward, Campbell Stewart, David Stewart, Mrs. Lispenard Stone, David M. Storer, Albert Strange, A. B. Strong, Charles E. Strong, W. L. Stuart, Alexander Stuart, Mrs. R. L. Stuart, Robert L. Stuart, Homer H. Sturgis, Appleton Sturgis, Miss Margaret B. Sturgis, Mrs. Russell Stuyvesant, A. V. H. Stymus, W. Pierre Sutherland, John Sutherland, John L. Sutherland, Hon. Josiah Suydam, D. Lydig Swords, Henry C. Tailer, Edward N., Jr. Taintor, Chas. M. Talcott, James Tappan, Hon. J. Nelson Taylor, Aug. C. Tefft, Charles G. Terbell, H. S. Thompson, S. C. Thompson, W. Prall Thomson, James Thomson, Wm. H., M. D. Thurber, F. B. Thurber, H. K. Tiemann, Peter C. Tillotson, L. G. Titus, James H.

Tobias, Samuel I. Todd, A. J. Todd, Wm. James Tomes, Francis Toucey, J. M. Tousey, Sinclair Townsend, John P. Townsend, R. W. Tracy, Chas. Tracy, J. Evarts Trevor, H. G. Trevor, John B. Trevor, Mrs. John B. Trotter, George Troup, Miss Louisa Trowbridge, Edwin L. Tuck, Edward Valentine, Lawson Van Dusen, Samuel B. Van Nostrand, David Van Winkle, Hon. E. S. Varnum, James M. Vermilye, J. D.

Vermilye, Wm. M. Von Post, Herman C. Von Volkenburgh, P. Waite, Chas. C. Wales, Hon. Salem H. Walker, Evan T. Walker, Francis T. Wall, Charles Wall, Michael W. Wallach Adolph Wallack, Lester Ward, Mrs. M. H. Watson, Col. B. F. Webb, Gen. Alex. S. Webb, Mrs. Gen. A. S. Weber, John Webster, Sidney Weed, Hon. Thurlow Weeks, Francis H. Weeks, John A. Wenman, Hon. James F. Wheeler, J. W.

Wheelock, Geo. G., M. D. White, Norman Whitney, Alfred R. Wickham, Hon. W. H. Wiechers, W. A. Wiley, W. H. Williamson, Hon. David B. Wilson, John Winston, F. S. Winthrop, Robert Witherbee, S. H. Wood, Hon. Fernando Wood, Isaac F. Wood, John D. Wood, Mrs. John D. Work, John C. Wotherspoon, Henry H. Wright, Charles L. Wright, Samuel V. Wright, Wm. Woolsey Wyckoff, J. F. Young, Mason

# ADDRESSES

AT THE

OPENING OF THE NEW BUILDING, DEC. 22, 1877.

## PRAYER BY REV. WM. ADAMS, D. D.

Almighty God, our Father in heaven, taught to acknowledge Thee in all our ways, we would begin, continue, and end these services with worshipping Thee as the maker of the heavens and the earth. The heavens declare Thy glory, and the firmament showeth Thy handiwork. Day unto day uttereth speech, and night unto night showeth knowledge; though their testimony concerning Thee is not in audible language, yet their line is gone out through all the earth, and their words unto the end of the world.

While sun, moon, and stars proclaim thine eternal wisdom and power, we bless Thee for the more explicit revelation Thou hast given of Thyself, in Thy word, and in the person of Thy Son, Jesus Christ. With all this light shining upon us, we thank Thee that Thou hast endowed us with rational faculties, capable of studying Thy word and thy works, promising to us the spirit of wisdom and revelation in the knowledge of Thyself.

We thank Thee for the Institution in whose interest we are now assembled, designed to collect those objects which reflect upon us the proof of Thy creative wisdom, in forms which awaken delight and devotion; the cedar which groweth on Lebanon, and the hyssop which springeth out of the wall, the beasts of the field, the fowls of the air, all creeping things, the treasures hid in the sand, and whatsoever passeth through the paths of the sea. May these halls be consecrated not to vain show and idle curiosity, but to true science and a devout study of the works and ways of God.

Thanking Thee for all which is done for the external decoration of the City in which we dwell, may its inhabitants cultivate those Christian virtues of integrity, honesty, industry, the spirit of knowledge, and the fear of the Lord which are at once our ornament and our protection.

Bless this city of our habitation, our whole country, the President of these United States and all magistrates, that we may lead quiet and peaceable lives in all honesty and godliness, knowing that this is acceptable unto Thee through Jesus Christ. Thus by all methods of our education here on the earth, prepare us for an abundant entrance into that city not made with hands, eternal in the heavens, where no longer with dim and imperfect vision, but with open face, we shall behold the glory of the Lord, and changed into his image shall be with him and like him forever. All which we ask in the name of Jesus Christ, to whom be all glory forever. Amen.

ADDRESS by Robert L. Stuart, President of the Museum, in behalf of the Trustees.

LADIES AND GENTLEMEN:

We have assembled for the purpose of opening to the public, the collections of our Museum, and the Building which the city has erected for their preservation and exhibition.

This day, when our collections are displayed for the first time, begins a new and most important era in our history—and it will be proper on this occasion, to review briefly the generous efforts put forth by our municipality, and its citizens, in this way, for the public good, and to indicate some of the fields of usefulness which this Institution is evidently destined to occupy.

For many years, those of our people who were privileged to travel abroad, were constantly reminded of the fact, that in our own wealthy and influential metropolis there were no such institutions for the higher cultivation of the people, and their instruction and recreation, as the Museums existing not only in the capitals of Europe, but even in places of moderate population. Many of the students of natural science, who grew up in our midst, moved away to the neighboring cities, which possessed such attractions, and New York came to be regarded as so given over to the accumulation of wealth, as to be too sterile a soil for the cultivation of the higher branches of education.

At the close of the year 1868 an unexampled opportunity presented itself, for securing the nucleus of a Museum of Natural History. Edward Verreaux of Paris, the largest collector of such specimens in the world, died; and his whole collection was offered for sale. It was at once determined. that at last, an earnest effort should be made, to secure a part of these specimens, and our citizens responded so liberally, that not only were the means obtained to purchase the choicest specimens of the Verreaux collection, but also the Elliot collection of the Birds of North America, and the entire Museum of Prince Maximillian, of Neuwied, Germany. With this ample proof of the interest taken by our citizens in this branch of Natural Science, the State Legislature, on April 6th, 1869, passed a special Act, creating such of the principal subscribers as were willing to serve, a body corporate by the name of the American Museum of Natural History, for the purpose of establishing and maintaining in said city, a Museum and library of Natural History, encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation.

Negotiations were then opened with the city, represented by the Commissioners of the Central Park, who had nearly completed our elegant public pleasure ground, and were ready to add to its attractions, such means for the further instruction of our people as would be afforded by such an Institution.

The agreement made with the Park Department, was to the effect that the Arsenal building should be fitted up with cases, as a temporary place for exhibiting a part of our specimens, until a suitable fire-proof structure could be completed.

A petition, signed by many of our most prominent citizens, was presented to the Legislature, who authorized the Department of Public Parks to expend a sum sufficient for such a building, and to set aside as much of the public lands under their charge as they should deem necessary, for a site for such structure, and its future extensions. By virtue of this law, this square of 184 acres was offered by the Department, and accepted by the Trustees of the Museum, and plans were pre-

pared by the Architects of the Department, for a building to be completed in sections, of which this is one.

On June 2d, 1874, in the presence of the Governor of the State, the Mayor of the City, the Commissioners of the Department of Public Parks, the Trustees of the Museum, and many distinguished guests, President Grant laid the corner stone of this edifice.

Soon after the Museum was opened to the public in the Arsenal, applications were received from many of our ablest naturalists, desiring to examine our specimens, and in this way we were confirmed in our judgment, that a series of rooms should be provided in the new building for the use of those, who with such facilities could enlarge the boundaries of Science, by their original investigations.

Accordingly, the Legislature was petitioned for an additional sum, which they promptly granted, for equipping and furnishing the building; and so judiciously and carefully has this fund been expended, that the structure stands completed as you behold it to-day (within the appropriation).

Curators of similar institutions in this country, and prominent scientific gentlemen from abroad, have carefully examined this edifice, and pronounce it, both in the conception of the whole plan, and in execution of the portion completed, comparing favorably with any building heretofore constructed.

Its durability, abundance and perfect diffusion of light, and elegance of finish are evident to all. It is in all respects adapted to our wants, for the preservation, exhibition, and investigation of the collections therein contained.

While the Building has been progressing, the Museum has been constantly receiving large and choice collections.

The daughter of the first President and liberal friend of the Museum has presented as a memorial of her father, the Jay collection of shells, and library of rare Conchological and other scientific works.

We consider it also a matter in which the Museum is to be congratulated, that the Trustees and a few of its friends, have secured to this city, by purchase, the great Geological and Palaeontological collection of Prof. James Hall, of Albany,

for New York has by far excelled all her sister states, in the liberal amounts she has continuously appropriated for her geological survey, and the importance of this scientific work is recognized by the whole world, in adopting the nomenclature her geologists have proposed.

Our great upper hall is nearly filled with the types and

choice specimens of this one collection.

Two-thirds of the sum necessary for the Museum to possess this property is already subscribed.

Almost daily, some rare specimens, not previously in the Museum, are brought to the building, until our collections not only fill this great edifice, but also the Arsenal, and every year the additions have been steadily increasing, until even at our present rate of growth, specimens would be accumulated sufficient to fill three buildings like this, before they could be completed, if begun this day.

The course pursued by the Museum in securing the typical collection of Prof. Hall, and placing it here where it will ever be safe from all possibility of injury by fire and accessible to all, indicates our wishes to aid original investigators in science, and this purpose is further shown by the suite of rooms in the Mansard story prepared for those whose labors will not only help to develop the great natural resources of our own land, but will add to the present knowledge of the most learned in all parts of the world.

Our desire is to aid in the creation, even more than in the diffusion of knowledge.

The structure which we here dedicate, is one of the largest buildings devoted solely to Natural History, yet completed in any land; but it forms only a small fraction of the whole great plan, and we cordially invite the generous co-operation of all our citizens, being encouraged to hope for the full realization of our plans, by the presence of this distinguished assembly—the Commissioners of the Park, and his honor the Mayor, representing the City—by a communication from his Excellency the Governor representing the State, and by the presence of the President of the United States, in testimony of the interest taken by the whole nation in our efforts to promote the public good.

ADDRESS by Hon. Wm. R. Martin, President of the Department of Public Parks.

MR. PRESIDENT, LADIES AND GENTLEMEN:

To-day the promises of the past four years are performed. You are in a completed building, its six stories filled with treasures. Yet it is the opening only to a great future.

As you approached, you saw that the building is but a section of an unfinished whole. It is bordered by avenues unregulated, by excavations for future foundations, by subgraded park work, and yet, within, it is a royal abode for science. The collections, complete as they seem, when you listen to the men who are making them, are but their beginnings royal though they be. The satisfaction we all feel, this day, is supported by the promise of that which is to come. All that is not behind us is before us, and the future is better than the past.

I think I interpret the feelings of all, when I say that the strong impression made here is, that we stand in the presence of something which shall endure. At the moment, the scenes we have left outside seem transitory; the spectacle in which we participate becomes sublime. It is because we are in the presence of Science—of nature, whose history and whose mysteries the hand of man has discovered and unveiled. The breadth of her dominion is opened to us. The lines of her history are written in these rocks, her beauty gleams in the plumage of these birds. The whole earth is filled with her glory—how much more this house which we have made.

It is needless for us to say whether the great teacher makes the great University, or whether the great opportunity produces the great teacher. It is enough that they live together. It is the pride of the great city of New York that it has created the Central Park for the health and enjoyment of the people, and in doing so, has made it by the adornment of Art as beautiful as it could be made. But this is not all; it has led to an appreciation of Art and of Science. As you traversed the Park you saw the beginning of a Meteorological Observatory, a place for History, and on either hand, two tem-

ples erected by the people; to-day, this one opened to Science, and a few months hence another to Art.

Beyond this thorough appreciation the next step must be creative. With such aids as are here afforded the human mind will be aroused. Men will gather here to study and to teach; to explore and to discover. I record it as the supreme satisfaction of this day that it is to this purpose that all the plans are fitted. The idea on which Talleyrand justified the French revolution is sometimes true of education—" what principles can not do, a man must." It is not for curiosity, not for instruction alone, but to awaken here the great teacher, to encourage here the great discoverer—that glorious possibility which we proudly name man.

By the authority of the People of the State the people of the city have erected this building. The Department I have the honor to represent have been charged with the design and construction. While from all other forms of human work we gather to give honor to the men of Science, I ask you to remember Mr. Olmsted. I call you to witness the fidelity and ability of the architects, Mr. Vaux, and Mr. Munckwitz, and the skill and patience of the artisan, the mechanic and the laborer.

On behalf of the city, Mr. PRESIDENT, we welcome you to this Museum, in which you and we are henceforth associated for the advancement of true science among the people.

# ADDRESS of Charles W. Eliot, President of Harvard University.

In whose honor are the chief personages of the nation, state, and city, here assembled? Whose palace is this? What divinity is worshipped in this place? We are assembled here to own with gratitude the beneficent power of natural science; to praise and thank its votaries, and to dedicate this splendid structure to its service. The power to which we here do homage is the accumulated intelligence of our race applied generation after generation to the study of Nature; and this palace is the storehouse of the elaborated materials which that intelligence has garnered, ordered, and illuminated. What has natural science done for mankind that it should be

thus honored? In the brief moments allotted to me I can but mention three pregnant results of the scientific study of Nature.

In the first place, natural science has engendered a peculiar kind of human mind—the searching, open, humble mind, which, knowing that it cannot attain unto all truth, or even to much new truth, is yet patiently and enthusiastically devoted to the pursuit of such little new truth as is within its grasp, having no other end than to learn, prizing above all things accuracy, thoroughness, and candor in research, proud and happy not in its own single strength, but in the might of that host of students, whose past conquests make up the wondrous sum of present knowledge, whose sure future triumphs each humblest worker in imagination shares. Within the last four hundred years this typical scientific mind has gradually come to be the kind of philosophic mind most admired by the educated class; indeed, it has come to be the only kind of mind, except the poetic, which commands the respect of scholars, whatever their department of learning. In every field of study, in history, philology, philosophy, and theology, as well as in natural history and physics, it is now the scientific spirit, the scientific method, which prevails. The substitution in the esteem of reasonable men of this receptive, fore-reaching mind for the dogmatic, overbearing, closed mind, which assumes that it already possesses all essential truth, and is entitled to the exclusive interpretation of it, is a most beneficent result of the study of natural history and physics. It is an achievement which has had much to do with the modern increase of liberty in human society, liberty individual, political and religious; it is an achievement of the highest promise for the future of the race.

The second result which I wish to specify is the stupendous doctrine of hereditary transmission, which during the past thirty years, or within the lifetime of most of those who hear me, natural science has developed and enforced by observations and comparisons covering the whole field of organized life. This conception is far from being a new one. Our race has long practised, though fitfully and empirically, upon some crude and fragmentary forms of this idea. Tribes, clans,

castes, orders of nobility, and reigning families, are familiar illustrations of the sway of this idea; in killing, banishing, and confining criminals mankind has in all ages been defending itself, blindly, to be sure, but with effect, against evils which incidentally flow from hereditary transmission; but it has been reserved for natural science in this generation to demonstrate the universality of this principle, and its controlling influence upon the families, nations, and races of men, as well as upon all lower orders of animate beings. It is fitting that natural history should have given this demonstration to the world; for the basis of systematic natural history is the idea of species, and the idea of species is itself founded upon the sureness of hereditary transmission-upon the ultimate fact that individual characteristics are inheritable. the knowledge of heredity, recently acquired by science, permeates society, it will profoundly affect social customs, public legislation, and governmental action. It will throw additional safeguards around the domestic relations; enhance the natural interest in vigorous family stocks; guide wisely the charitable action of the community; give a rational basis for penal legislation; and promote both the occasional production of illustrious men and the gradual improvement of the masses of mankind. These moral benefits will surely flow from our generation's study of heredity.

Finally, modern science has discovered and set forth the magnificent idea of the continuity of creation. It has proved that the development of the universe has been a progress from good to better, a progress not without reactions and catastrophes, but still a benign advance toward ever higher forms of life with ever greater capacities for ever finer enjoyments. It has laid a firm foundation for man's instinctive faith in his own future. From the sight and touch of what the eternal past has wrought, it deduces a sure trust in what the eternal future has in store.

"And present gratitude Insures the future's good; And for the things I see I trust the things to be."

It has thus exalted the idea of God—the greatest service which can be rendered to humanity. "Each age must wor-

ship its own thought of God," and each age may be judged by the worthiness of that thought. In displaying the uniform, continuous action of unrepenting Nature in its march from good to better, science has inevitably directed the attention of men to the most glorious attributes of that Divine intelligence which acts through Nature with the patience of eternity and the fixity of all-foreseeing wisdom. Verily, the infinite, present Creator is worshipped in this place. dred life-times ago a Hebrew seer gave utterance to one of the grandest thoughts that ever mind of man conceived, but applied it only to his own little nation, and coupled it with barbarous denunciation of that nation's enemies. thought, tender and consoling toward human weakness and insignificance as a mother's embrace, but sublime also as the starry heights and majestic as the onward sweep of ages, science utters as the sum of all its teachings, as the supreme result of all its searching and its meditation, and applies alike to the whole universe and to its last atom-"the eternal God is thy refuge, and underneath are the everlasting arms."

# ADDRESS by Professor O. C. Marsh, President of the American Association for the Advancement of Science.

The opening of this Museum to-day is an important event in the annals of American Science, and one from which great results are sure to follow. We see around us, here, already, treasures of nature from every land, and representing all periods of the earth's history. Not merely a few typical specimens, as in most new museums, but rich series, illustrating the marvellous diversity of Nature, both in the present and in the past. Such treasures, arranged with system, and to the best advantage, as here, arrest the attention of every observer, and invite study. This alone is a grand work accomplished, and yet we are told, this is but the beginning.

The great Museums of the world are in the great cities; and it is fitting that New York, one of the few great centers of culture, should at last take her proper place in Science, and found a Museum, worthy of herself, for the diffusion of knowledge among her citizens. But there is something higher

than the diffusion of knowledge to strive for here, and that is the increase of knowledge. The old idea of a Museum was a show-room; the modern idea makes it a workshop, as well. If this institution is to hold high rank in Science, as we hope, it will not be in consequence of the spacious halls before us, crowded though they be with the rarest of Nature's products: but, rather, it will come through the small workrooms in the attic, where the naturalist, with microscope or scalpel, has patiently worked out discoveries that add to the sum of human knowledge. This Museum will fail of its highest good, fail even to achieve more than a local influence, unless the workrooms above are made the most important feature of the whole. These vast collections will spread the elements of Natural Science among the people of New York, and the surrounding region; but the quiet workers in the attic, who pursue Science for its own sake, will bring the Museum renown throughout the world.

There is yet a more important reason for making this institution a center for original research. The science of to-day stands face to face with great problems. The antiquity of Man; the origin of the human race; and even the origin of Life itself, are among the questions which the present age submits to science, and to which it demands an answer. problems are to be solved by Science, America must do her full share of the work, for the materials are here. In all that pertains to ancient life, the Western Continent possesses countless treasures, unknown in other lands. These, as I believe, . are to unlock many mysteries in Biology, and render important aid toward the solution of the profounder questions I have American Science can thus repay its debt to the Old World, where science began, and gathering new facts, from broader and richer fields within her own borders, carry forward, with the vigor and enthusiasm of youth, the never-ending search for Truth.

If the American Museum of Natural History, opened today under such favorable auspices, does not take å prominent part in this great work, it will not do justice to its founders, or to its opportunities. But with such a foundation as we have here, and such resources as wait to unfold their secrets within walls yet to be reared on this commanding site, I venture to predict for Natural Science in America greater triumphs than have hitherto been won in any land.

# APPENDIX.

# Kighth Annual Report. 1876.

The Hall Collection, which was purchased last year, has all been safely received and is now securely stored in the new building, in a room specially prepared for this purpose by the Department of Public Parks. The locality and geological formation of each individual specimen were carefully identified by Prof. Hall. The whole collection had been so distinctly labelled when it was gathered, and had been preserved with such scrupulous care that this great labor progressed rapidly notwithstanding its magnitude.

The donations to the Museum during the past year have been numerous, and of especial value. The principal nations of the world, and most of our own States, displayed at the International Exhibition, at Philadelphia, collections illustrating their mineral wealth and other natural resources. The central location of our institution, at the commercial metropolis of the nation caused these exhibitors to be desirous that their specimens, gathered at great labor and expense, should be displayed in New York, where they would be placed on exhibition, and always seen by the great number of visitors who frequent our halls from all parts of our own country and from foreign lands.

The following Governments and States have presented portions of their exhibits: Jamaica, her entire exhibit containing a rich display of her tropical woods; Bermuda, her woods; a part of the woods of Brazil, the Argentine Republic, Mexico, the Hawaiian Islands, and Turkey; minerals from the Governments of Canada, Spain, Brazil, Tasmania, and New Zealand. Minerals and building stones from

the following States: Maine, Pennsylvania, Ohio, Kentucky, Indiana, Michigan, Tennessee, Virginia, and California; 21 boxes of iron ores from the Hanging Rock region, through Messrs. Traber & Aubrey, Cincinnati; a series of the iron ores smelted by the Lackawanna Coal and Iron Co.; a specially selected collection of the minerals of Missouri, from M. S. Mepham & Bro., St. Louis; three cases, 10 feet high, displaying the coal and iron wealth of the lands along the route of the South and North Alabama R. R. Co., through Prof. Gesner, and 300 carefully prepared skins of the birds of the Pacific Coast, from the Woodward Gardens, San Francisco. From Japan has been received all her exhibit of building stones, rocks, ores, and clays, and one-half of her woods in exchange for duplicates of our Mammals.

A series of the fishes collected by Prof. Agassiz, on the Hassler Expedition, has been received from the Museum of Comparative Zoology, Cambridge. The Anthropological Department has been presented with an important series of pottery and stone implements from the mounds of Mississippi, by Prof. Whitfield, of Clinton.

To the Library has been added by donation the Reports of the Geological Surveys of Michigan, Indiana, and Ohio, and through the Smithsonian Institution the publications of many foreign societies.

## ARRANGEMENT OF THE COLLECTIONS

# Exhibited at the Opening of the Rew Building.

December 22d, 1877.

#### THE BUILDING.

The building now completed is one section of a plan that can be extended until it occupies the entire area of Manhattan Square, which contains 18 ½ acres. A photographic copy of the ground plan is displayed on the right hand side entrance, showing that marginal park-like areas border the structure upon the outside, and within are four open courts; also a map indicating the relative position of the square to the Central Park, and the approaches proposed, in order to make it accessible from the region of the Lake.

This building has been erected by the City, and the collections displayed are purchased by private subscriptions, and are the property of the Museum.

Each hall is 170 feet long by 60 wide, inside the walls. The lowest story is 18 feet high; the second, or principal story, including the gallery, is 30 feet; the upper story 22 feet, and the mansard story 16 feet in height.

On the left hand side of the entrance are plans of the new Museum of Natural History, now in process of erection by Her Majesty's Government at South Kensington, London, and beneath it a plan of the British Museum, the red line indicating the boundary of our square on the same scale.

## COLLECTIONS EXHIBITED IN THE LOWER STORY.

The desk cases ranged through the middle of the lower hall are filled with the Jay collection of Shells, presented by Miss C. L. Wolfe, as a memorial of her father, the first President of the Museum. Passing to the northern end of the room, we come to a group mounted by Prof. WARD, of Rochester, consisting of a Camel from Armenia, a Moose from Nova Scotia, and a Wapiti from the Rocky Mountains.

#### ECONOMIC DEPARTMENT.

- On each side of the northern door, three cuses being an actual geological section along the route of the South and North Alabama Railway Company.
- Case A contains Building Stones from Japan, and Marbles from Ireland, Italy, and Vermont. The desk-case next in order is filled with exquisite Wax Fruits from the Iowa Horticultural Society.
- Case C. (Panels 1 to 10): Woods from Japan. (11-13): Woods from Bermuda.
- Case D. (1-3): Woods from Bermuda. (4-10): Woods from Jamaica. (11-13): Woods from America.

## MAMMALS.

- Case F. (2): Wild Buffalo from the forests of the Czar in Lithuania. (6-8): Seals and Manatee,
- Case F. Male, Female, and Young of American Buffalo, mounted by WARD.
- Case G. (2): Llama from Peru. (6 and 7): Big Horn Sheep from Rocky Mountains. (8): Ram from Morocco.
- Case H. (1 and 3): Caribou or American Reindeer. (7): Albino Deer, Alps. (8): Fallow Deer, Europe.
- Case F. (2): Chamois, Alps. (6-10): Antelopes, Africa.
- Case F. (1-4): Larger Deer from Siam. In front, African Antelopes.
- Case L. Old World Monkeys.
- Case M. New World Monkeys.
- Case N. The Cat Family. (3): Siberian Tiger. (6-8): Lion from Barbary.

  This and most of the Animals in the hall were mounted by EDWARD VERREAUX, of Paris.
- Case O. (1 and 2): Civet Cats. (3): Ichneumons. (6 and 8): Grizzly Bear, formerly kept alive in the Park Menagerie. (11): Coatimundis. (12 and 13): Skunks and Weasels.
- Case P. (1 and 2): Sloths and Armadillos. (3): Otters. (4-8): Dogs and Wolves. (10-13): Bats.
- Case Q. (1): Rats and Mice. (2): Rabbits, and on lower shelf, Chinchillas.
  (4): Marmots. (6-8): Upper shelves, Flying Squirrels; lower shelves, Porcupines. (10-13). Squirrels.
- Case R. Marsupials.
- Case T. Pigs; and in center, Malay Tapir.

#### SECOND FLOOR OR PRINCIPAL HALL.

#### BIRDS.

- Case A and Case B. (1-4): Systematic collection of Birds and their skeletons illustrating the Families and Sub-Families of the classification adopted (that of Professor LILLJEBORG, of Upsala, Sweden), from the Thrush to the Penguin.
- Case B. (6) Commence Ellior collection of North American Birds, the Sub-Family genus and species, and its common names are shown on the labels. This collection fills also Cases C, D, E, and F.
- Case G. Humming Birds, nearly all from Central and South America.
- Case H. Commences Birds of South and Central America. Verreaux and Maximilian collections fills Cases H, I, J, K, and L.
- Case H. (7): Lower shelf, Cock of the Rock. (8): Middle and lower shelves, Chatterers and Bell Birds. (10): Middle shelf, Umbrella Birds.
- Case I. (1): Lower, and (2): Top, Great Macaws of Brazil and Amazon Valley. (3 and 4): Toucans. (6): The Trogons, with plumage of green and gold and scarlet, and below Jacmars, in bronze tints. (10): Night Hawks.
- Case J. (4): Condors from Andes.
- Case K. (1 and 2): Curasows.
- Case L. (2): Middle shelf, Spur-Winged Screamer. (3): Scarlet Ibises.
- Case M. Commences Birds of Europe and Asia, which fills N, O, P, and Q.
- Case N. (8-13); Pheasants.
- Case O. (1 and 2): Pheasants and Peacocks.
- Case P. (7): Lower shelf, Hornbills.
- Case Q. (8): Two-Tailed Starlings. (12): Pittas.
- Case R. Birds of Africa; also in S and F.
- Case R. (7): Adjutant Storks.
- Case S. (4): Bee-eaters. (5 and 6): Plantain-eaters. (7): Hornbills.

#### GALLERY.

## ARCHÆOLOGICAL DEPARTMENT.

Cases A, B, C and D. Collection of the Implements of the Pacific Islanders, deposited by Mrs. E. E. STURGIS.

Case A. Spears and Lances.

Case B. Masks from Solomon Islands, used in religious ceremonies.

Case C. Elegantly carved War Clubs.

Case F. and G. Indian Dresses and Weapons.

Case H. Porto Rico Collars and Stone Axes, and Peruvian Antiquities and Pottery.

Case I. (1 and 2): Mexican. (3 and 4): Georgia Pottery.

Case J. Skulls from Maryland, Skeleton from Cave in Kentucky, and rude stone implements from Goshen, N. Y., presented by D. J. Stewart, Esq.

Cases K, L, M, N and O. Skeletons.

Cases P. Q. R. S and T. Birds from Australia and Pacific Islands.

Case T. (3): Birds of Paradise.

RAILING CASE. North and most of west side, DE MORGAN collection of Stone Implements from the Valley of the Somme, in the northern part of France. This collection, which is deposited by the President of the Museum, is regarded as the most complete of its kind, except that of BOUCHER DE PERTHES at Abbeville. Then follow on the west side collections from the "Swiss Lake Dwellings," the BEMENT series, representing the Stone Age of Denmark, and specimens from various parts of our own country. South side, SQUIER & DAVIS' collections from the Mississippi Valley. On the east side, specimens from Porto Rico, South Carolina, part of the DE HAAS collection, deposited by Mr. D. J. STEWARD, and the large and choice collection made by Col. CHAS. C. JONES, Jr., of Georgia described and figured in his "Antiquities of the Southern Indians."

#### UPPER OR THIRD FLOOR.

## JAMES HALL COLLECTION.

- Case A. (3 and 4): Geological Map of New York State, and illustrating the classification generally adopted. Below are volumes published by the State Survey, and most of the specimens figured in them are on exhibition in the Hall, and are indicated by green tickets, as an illustration of the scientific importance of this collection.
- Case B. (1-4): And adjoining Table Case contains 200 out of about 250 existing types of the Potsdam in America. The Cases are filled with specimens illustrating the various formations, as follows:
- Case B. (6 and 7): Calciferous. (8-10): Canadian. (11-13): Birds-Eye, Black River.
- Case C. (1-7): New York Trenton. (8-13): Western Trenton.
- Case D. (1-2): Utica, State. (3): New York, Hudson River. (4-10): Western, Hudson River. (11): Medina Sandstone. (12 and 13): Clinton.
- Case E. (1 and part of 2): Clinton. (2-9): The New York Niagara. (10): Coraline. (11-13): Niagara of Indiana.
- Case F. (1-6): Western Niagara. (7 and 8): Guelph and Onondaga Salt. (10-13): Lower Helderberg.
- Case G. (1 and 2): Remainder of Lower Helderberg. (3 and 4): Oriskany Sandstone of New York. (5 and 7): Oriskany Sandstone of Maryland. (8-10): Schoharie Grit. (11-13): Corals of the Upper Helderberg.
- Case H. (1-10): Upper Helderberg. (11-12): Marcellus Shales. (13): Hamilton Plants.
- Cases I, J, and K contains Fossils of the New York Hamilton group.
- Case L. (1 and 2): Western Hamilton. (3): Tully Limestone. (4): Genesee Slate. (5-7): Portage. (8-13): Chemung.
- Case M. (1-7): Chemung. (8-10): Catskill. (11-13): Waverly.
- Case N. (1): Waverly. (2 and 3): Burlington Division of the Lower Carboniferous. (4-11): Keokuk Division. (12-13): Warsaw Division.
- Case O. (1): St. Louis Division. (2 and 3): Chester Division. (4-13): Plants of the Coal Period.
- Case P. (1-3): Other Fossils of the Coal Period. (4): Fishes of the Triassic Rocks of the Connecticut Valley, presented by President R. L. STUART.

- (5-9): Fishes from the same, from Hall's collection. (10): Fossil Tracks, presented by R. L. STUART, Esq. (11-13): Cretaceans from the Atlantic States.
- Case Q. (1 and 2): Cretaceans from the Upper Missouri region, collected by MEEK and HAYDEN. (3-12): Eccene Tertiary, from various localities. (13): Miccene.
- Case R. (1-6): Vertebrate remains from the Upper Missouri. (7): Post Pleiocene, from Lake Champlain. (8-13): Collection of European Fossils, embracing Primordial to Carboniferous.
- Case S. (1-2): Saurian remains from the Liassic of England. (2-3): Jurassic and Cretaceous Fossils, from Europe. (4): Cretaceous and Tertiary Collections, from various sources. (5-9): Pleiocene and Post Pleiocene collection of South Carolina (Holmes' collection), containing many types and figured specimens forming the basis of Tuomey and Holmes' on South Carolina. (10): Cretaceous and Liassic Fossils, containing some large Ammonites. (12-13): Eocene Fossils, from the Paris Basin Beds of France. (18): Plants of the Miocene Formation of Switzerland.
- Case T. Fossil Birds from New Zealand, and a collection of Fossils and Minerals, illustrating the geology of Yesso, Japan. The Table Cases ocntain Fossils from the various formations represented in the Upright Cases, near which they are placed, except the two and a half on the west side, and near the north end, the first of which is filled with Vertebrate remains from Holmes' collection, and the others with a special collection of Brachiopoda, from various formations in Europe.

## THE ATTIC STORY.

The attic story is divided into a series of work-rooms for scientific men, who are carrying on original researches. The first room on the right is the Library, and contains the conchological works gathered by Dr. John C. Jan, and presented to the Museum by Miss C. L. Wolfe.

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# THE TENTH

# ANNUAL REPORT

OF THE

Amegican Musqumof Natural History

CENTRAL PARK, NEW YORK.

JANUARY 1st, 1879.

### Dew York :

CORLIES MACY & CO., STATIONERS AND PRINTERS,

39 NASSAU STREET.

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# ANNUAL REPORT

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JANUARY 1ST, 1879.

PRINTED FOR THE MUSEUM.



Districtory Google

# American Museum of Katural History.

#### Trustees.

ROBERT L. STUART.
WILLIAM A. HAINES.
HOWARD POTTER.
ROBERT COLGATE.
BENJAMIN H. FIELD.
ADRIAN ISELIN.
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CHARLES LANIER.

PROF. ALBERT S. BICKMORE, Superintendent.

Dr. J. B. HOLDER, Assistant Superintendent.

PROF. R. P. WHITFIELD, Curator of Geology.

# Centh Annual Report,

#### 1878.

THE Trustees of the American Museum of Natural History have the pleasure of presenting this, their Tenth Annual Report, to the Patrons, Fellows and Members of the Museum.

During the past year marked progress has been made in the more exact scientific classification of our own collections, and in receiving on deposit, and thus rendering available to the scientific men of our country, several collections which have been the subject of elaborate examination, and have, therefore, become standards of comparison for all subsequent investigation.

To farther aid the student in his original researches, we have received on deposit the several special Libraries of great value subsequently mentioned, and the large general Library of the New York Academy of Sciences.

The Treasurer's Annual Report is annexed, showing that the Trustees, including a small sum from other citizens, have contributed \$17,650, mostly for payment on account of the Hall collection of fossils, and from the city the sum of \$12,500 has been received, to partly defray the necessary maintenance.

The cases in the lower hall have been perfected by the addition of shelves, and the whole collection of mammals scientifically arranged. Several members of the Board of Trustees have purchased and presented the mounted mammals exhibited by Prof. H. A. Ward at the Centennial Exhibition at Philadelphia, consist-

ing of a camel, moose, elk, male and female and young of the bison, male and female of the Rocky Mountain sheep, caribou, grizzly bear, hooded seal, skeleton of dugong, and many smaller specimens. A large painting, "The Wounded Bison," by the late W. J. Hays, has been deposited by his widow, and is placed on the first landing of the stairway.

In the department of Ornithology, the birds of North America have each been carefully identified, and the name written underneath the stand of those that are mounted. A selection has been made from the skins presented by Mr. D. G. Elliot, to be mounted and added to the collection on exhibition, and the remainder divided into series for study and duplicates for exchange.

Three hundred and eighteen specimens, representing 295 species of the duplicate birds from various countries, have been forwarded to the Smithsonian Institution, and we shall receive in exchange nearly all the species and specimens necessary to render our collection of North American birds complete.

The number of our specimens in this department is as follows:

Exhibition Collection, mounted and including a few to be mounted	8,893
Duplicates (in skins)	
Study Collection (in skins)	461
Total	10,512

At the opening of the Museum, one year ago, our Ethnological and Archæological collections, which are exhibited on the gallery floor, occupied only the eastern side of the room, but now they fill all but two cases on the western side, and in these will be exhibited additions to this department, which have been already shipped from California and Canada.

The principal gifts have been a series of fine stone implements of Ireland, presented by Mr. T. W. U. Robinson, of Durham, England; insignia and ornaments of Chinese officials, presented by Hon. Geo. B. Glover; three models of cliff dwellings in Colorado, by a member of the Board; a small collection of rare stone implements from New York State, and some collected by Dr. C. C. Abbott in New Jersey, presented by Mr. James Muhlenberg Bailey.

From the estate of the late Dr. A. Habel we have received 50 specimens terra cotta vases and figures from San Salvador and Peru.

Many rare implements have been added to the Sturgis Collection, and Mr. G. L. Feuardent has deposited three cases full of stone and bronze implements and pottery from the different Swiss Lakes, and bones and implements of stone from the Dordogne Caves, in Southern France, obtained from the Marquis de Vibray, the whole forming a most interesting series, because it supplements the unique collection from the Somme Valley, deposited by the President of the Board.

In the Geological department the work of opening the duplicate fossils of the Hall Collection has been completed, and they have been arranged in drawers in the attic story. In the Exhibition Hall the collections have been examined and the duplicate material selected therefrom, commencing with the Archæan formation to the Chemung group of the Devonian age inclusive. The specimens have been zoologically arranged under 26 geological formations, and under 35 geographical areas, and the number which remains for exhibition up to the Chemung is 52,298, each one of which has been separately and carefully examined. Of these, the typical and figured specimens number 5,265, most of which are

represented in that important series of scientific works, "The Natural History of the State of New York." These numbers indicate that the whole series of specimens which will be selected for permanent exhibition from the Hall Collection will amount to 80,000 or 100,000, and the whole number of typical and figured specimens at about 7,000.

We have received from the estate of the late Carlos Cobb, through Mrs. E. F. Peterson, a select series, mostly on large slabs, of the fossils of the Waterlime Group, containing 27 types of Pterygotus, Eurypturus and other Crustacea.

Mr. Samuel Sloan has presented several remarkably large and perfect slabs of coal plants from the anthracite mines at Scranton, Pa.

Mr. D. J. Steward has forwarded several large slabs of Schoharie grit from Goshen, Orange Co., N. Y., and many separate fossils.

Mr. A. Woodward has presented and arranged 114 rocks, illustrating the geology of Manhattan Island, and also assisted the Curator of that department.

By exchange with Prof. C. H. Hitchcock, of New Hampshire, we have obtained a relief map of that State and 2,000 specimens of rocks representing the work done by its geological survey under his direction.

From the estate of the late Dr. A. Habel we have received 70 specimens of rocks and fossils from Peru, all of which are new to the collection.

We have received on deposit, and arranged in drawers, where each specimen is secure and accessible, the collection of rocks and fossils gathered by the United States National Survey of the 40th parallel, Mr. Clarence King in charge. It contains 3,523 fossils, 3,880 rocks, and also 2,800 microscopic sections of rocks, which are

described by Prof. Zirkel, of Leipsig, Germany, in Vol. VI. of the elaborate reports of that careful survey. In the adjoining room are the fossils, rocks and minerals collected by Prof. Raphael Pumpelly during his extensive travels in California, China and Japan, and the specimens upon which he has prepared many scientific papers.

In the same room are the lithological collections of Major T. B. Brooks, which contain the rocks described by him and Prof. Julien in the Geological Reports of the States of Michigan and Wisconsin; also a full series from Austria, identified by the lithologist of the survey carried on by that Government, and a similar series representing the lithological work done by the Geological Survey of Sweden.

The lithology of New York and other States received in the Hall Collection fills 78 boxes of 1½ cubic feet each, and contains the many sections across the State made by Mather and others. The Geological Survey of New Jersey have forwarded specimens of their clays, and will hereafter send, year by year, specimens illustrating the progress of their work.

The 2,000 lithological specimens received from Prof. Hitchcock are each labeled by him, and illustrate fully the volumes published by his survey.

Arrangements are being perfected for the rapid increase of this remarkable amount of valuable material, purchased or deposited with us, for the use of those connected with the surveys of the various States or the nation.

Prof. M. E. Wadsworth, of the Geological Survey of California, worked during a part of the summer on the specimens described by Prof. Zirkel, and Prof. McGoldrick, of St. Xavier's College, in this city, is studying n this department and aiding us in its arrangement.

To render these collections available to the investigator, we have paid particular attention during the past year to the gathering into this fire-proof structure of libraries of scientific works in the various departments of natural science that come within the province of our institution, with the following gratifying degree of success:

	Vola.	Pamphlets.
Jay Library on Conchology, presented by Miss C. L. Wolfe	997	180
Brevoort Library on Fishes and General Zoology, deposited by		
the President of the Board	2,083	1,599
Scientific Works from various donors	576	293
Library on Mining and Physical Geology, deposited by Mr.		
Clarence King	2,430	1,652
Library of the New York Academy of Sciences, deposited by the		
Society for safe keeping	4,621	1,537
Prof. Whitfield's Library on Palæontology	352	381
Prof. Bickmore's Library on Ethnology and Archeology	908	420
Total	11,967	6,062

The Library of the New York Academy is particularly rich in serials, received from over two hundred similar Scientific Societies in all parts of the world. The Museum also is constantly receiving important additions from foreign Societies, through the Smithsonian Institution, and from the geological surveys of the several States and the nation.

Miss C. L. Wolfe has presented an excellent portrait of her father, the late John David Wolfe, the first President of the Museum, which was painted by Mr. D. Huntington, and is placed in the hallway of the principal floor.

A commodious entrance has been added to our building during the past summer, and, at the request of the owners of the surrounding property, the sum of \$20,-

000 has been appropriated by the Board of Estimate and Apportionment to be expended in improvements upon our Square during 1879.

The New York and Metropolitan Elevated Railroads have nearly completed their joint route on Ninth Avenue to our building, and soon the Museum will be accessible by a ride of a few minutes from any part of the city.

Our contract with the Department of Public Parks provides that on Wednesdays, Thursdays, Fridays, Saturdays and holidays, the Museum shall be open to the public free of charge, but Mondays and Tuesdays are reserved for the study and rearrangement of the collections, and on these days visitors to the city are admitted, and those contributing money or specimens. A member paying \$10 yearly receives a ticket of admission for himself and family on these days, and to the spring and autumn receptions, and complimentary tickets for friends. The privileges of Fellows and Patrons contributing larger sums are stated in the By-Laws.

A considerable balance being still due Professor Hall on account of his collection, and a number of the specimens on exhibition having been deposited with privilege of purchase upon advantageous terms, we confidently appeal to our public-spirited citizens to join us in enlarging and perfecting the interesting collections on public exhibition, and increasing the facilities which will attract the scientific men of our country more and more to our city.

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	" Cornelius Vanderbilt	1,000 00	
	" Joseph H. Choate		
	" Robert Colgate		
	" Joseph W. Drexel	1,000 00	
	Jas. M. Constable		
Sas, Advertising and Music at Receptions. 215 69	" W. E. Dodge, Jr.		
	" John B. Trevor	200 00	
Paid Prof. H. A. Ward, for Collection of Mounted	" Charles Lanier	200 00	•
Mammals 2.500 00	" Robert L. Stuart.	1.300 00	
	" Frederic W. Stevens.	1,000 00	
Collection.	" Morris K. Jesup.		
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[E. & O. E.] NRW YORK, January 10th, 1e79.

J. PIERPONT MORGAN, Treasurer.

ROBERT COLGATE.

Examined and approved, JAMES M. CONSTABLE.

CHARLES LANIER.

### INCORPORATION.

#### AN ACT

TO INCORPORATE THE

# American Museum of Ratural History,

Passed April 6, 1869.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. John David Wolfe, Robert Colgate, Benjamin H. Field, Robert L. Stuart, Adrian Iselin, Benjamin B. Sherman, William A. Haines, Theodore Roosevelt, Howard Potter, William T. Blodgett, Morris K. Jesup, D. Jackson Steward, J. Pierpont Morgan, A. G. P. Dodge, Charles A. Dana, Joseph H. Choate, and Henry Parish, and such persons as may hereafter become members of the corporation hereby created, are hereby created a body corporate, by the name of "The American Museum of Natural History," to be located in the City of New York, for the purpose of establishing and maintaining in said city a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation.

Szc. 2. Said Corporation shall have power to make and adopt a Constitution and By-Laws, and to make rules and regulations for the admission, suspension, and expulsion of its members, and their government, the number and election of its officers, and to define their duties, and for the safe keeping of its property, and, from time to time, to alter and modify such Constitution, By-Laws, Rules, and Regulations. Until an election shall be held pursuant to such Constitution and By-Laws, the persons named in the first section of this Act shall be, and are hereby declared to be the Trustees and Managers of said Corporation and its property.

SEC. 3. Said Corporation may purchase and hold, or lease any real and personal estate necessary and proper for the purposes of its incorporation, provided they shall not hold real estate which shall exceed one hundred thousand dollars in value.

Sec. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes.

SEC. 5. This Act shall take effect immediately.

STATE OF NEW YORK,
OFFICE OF THE SECRETARY OF STATE,

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office at the city of Albany, this ball. of fourteenth day of April, in the year one thousand eight hundred and sixty-nine.

D. WILLERS, JR., Deputy Secretary of State.

At a meeting of the Trustees, held at the residence of Theodore Roosevelt, Esq., April 8th, 1869, the above charter was unanimously accepted by a majority of the Trustees.

# CONSTITUTION

OF THE

# American Museum of Ratural History,

IN THE CITY OF NEW YORK.

#### ARTICLE I.

This Corporation shall be styled the American Museum of Natural History.

#### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

#### ARTICLE III.

The Trustees shall meet quarterly on the second Monday of every February, May, August and November, at an hour and place to be designated on at least one week's written notice from the Secretary, and shall annually, at the quarterly meeting in February, elect the officers and committees for the ensuing year. They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

#### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, an Executive Committee, an Auditing Committee, and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

#### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee, and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report at the annual meeting, of the receipts and disbursements of the past year, with such suggestions, as to the financial management of the Museum, as he may deem proper.

#### ARTICLE VI.

The Executive Committee shall consist of five, who shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meeting of the Trustees, without the express sanction of the Trustees.

#### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

#### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

#### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

#### ARTICLE X.

By-laws may, from time to time, be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at any meeting of the Trustees by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

#### ARTICLE XI.

The contribution of two thousand five hundred dollars to the funds of the Museum, at one time, shall entitle the person giving the same to be a Patron of the Museum.

The contribution of one thousand dollars, at one time, shall entitle the person giving the same to be a Fellow in Perpetuity.

The contribution of five hundred dollars, at one time, shall entitle the person giving the same to be a Fellow for Life.

Any person may be elected by the Trustees to either of the above degrees, who shall have donated to the Museum Books or Specimens to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly, under the seal of the Museum. The Trustees may elect Honorary Fellows of the Museum in their discretion.

All persons receiving such degrees and diplomas shall be entitled, at all times, to free admission to the Museum and its Exhibitions, but shall not, by virtue of such degrees or diplomas, become members of the Corporation.

#### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

# BY-LAWS.

#### Τ.

Patrons giving \$2,500 are each entitled to 10 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Fellows in Perpetuity giving \$1,000 are each entitled to 5 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Fellows for Life giving \$500 are each entitled to 4 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Associate Fellows giving \$250 are each entitled to 3 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Members giving \$100 are each entitled to 2 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to 1 Subscriber's Ticket, and 10 Complimentary Tickets for a single admission.

#### II.

Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

#### III.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Fellow in Perpetuity" of the Museum, unless by a unanimous vote of a quorum of the Board—excepting Trustees ex-officio—nor be eligible unless his name shall be presented by the nominating committee at a Regular Quarterly Meeting prior to the meeting at which said election shall take place.

### CONTRACT

#### WITH THE DEPARTMENT OF PUBLIC PARKS

FOR THE OCCUPATION OF THE NEW BUILDING.

This Agreement, made and concluded on the twenty-second day of December, in the year one thousand eight hundred and seventy-seven, between the Department of Public Parks of the City of New York, the party of the first part, and the American Museum of Natural History, party of the second part, Witnesseth:

Whereas, by an Act of the Legislature of the State of New York, passed April 22d, 1876, entitled "An Act in relation to the powers and duties of the Board of Commissioners of the Department of Public Parks, in connection with the American Museum of Natural History, and the Metropolitan Museum of Art," the said party of the first part is authorized and directed to enter into a contract with the said party of the second part, for the occupation by it of the buildings erected or to be erected on that portion of the Central Park, in the City of New York, known as Manhattan Square, and for transferring thereto and establishing and maintaining therein its museum, library and collections, and carrying out the objects and purposes of said party of the second part; and

Whereas, a building contemplated by said Act has now been erected and nearly completed and equipped in a manner suitable for the purposes of said Museum, as provided in the first Section of the Act of May 15, 1875, known as Chapter 351. of the Laws of 1875, for the purpose of establishing and maintaining therein the said museum, as provided by the said last-named Act, and by the Act of April 5, 1871, known as Chapter 290, of the Laws of 1871; and

Whereas, it is desired as well by the said party of the first part, as by the said party of the second part, that, immediately upon the completion and equipment of said building, the said party of the second part should be established therein, and should transfer thereto its museum, library and collections, and carry out the objects and purposes of the said party of the second part;

Now, therefore, it is agreed by and between the said parties as follows, namely:

First.—That the said party of the first part has granted and demised and let, and doth, by these presents, grant, demise and let, unto the said party of the second part, the said buildings and the appurtenances thereunto belonging, to have and to hold the same so long as the said party of the second part shall continue to carry out the objects and purposes defined in its charter, or such other objects and purposes as by any future amendment of said charter may be authorized; and shall faithfully keep, perform and observe the covenants and conditions herein contained on its part to be kept, performed and observed, or until the said building shall be surrendered by the said party of the second part, as hereinafter provided.

Secondly.—That neither the party of the first part, its successor or successors, nor the Mayor, Aldermen and Commonalty of the City of New York, shall be in any manner chargeable or liable for the preservation of the said building or the property of the party of the second part which may be placed, therein, against fire, or for any damage or injury that may be caused by fire to the said property; but it is agreed that damages as aforesaid excepted, the said party of the first part will keep said building, from time to time, in repair.

Thirdly.—That as soon after the completion and equipment of said building as practicable, said party of the second part shall transfer to, and place and arrange in, said building, its museum, library and collections, or such portion thereof as can be properly displayed to the public therein, and shall have and enjoy the exclusive use of the whole of said building, subject to the provisions herein contained, and the rules

and regulations herein prescribed, during the continuance of the term hereby granted, or until a surrender thereof, as herein provided.

Fourthly.—That the exhibition halls of said building shall, on Wednesday, Thursday, Friday and Saturday of each week, and on all legal or public holidays, except Sundays, be kept open and accessible to the public, free of charge, from nine o'clock A. M. until half an hour before sunset, under such rules and regulations as the party of the second part shall, from time to time, prescribe; but on the remaining days of the week the same shall be only open for exhibition to such persons, upon such terms as the said party of the second part shall from time to time direct. But all professors and teachers of public schools of the City of New York, or other institutions of learning in said city, in which instruction is given free of charge, shall be admitted to all the advantages afforded by the said party of the second part, through its museum. library, apparatus and collections, or otherwise, for study, research and investigation, free of any charge therefor, and to the same extent and on the same terms and conditions as any other persons are admitted to such advantages, as aforesaid.

Fifthly.—That the museum, library and collections, and all other property of the said party of the second part, which shall or may be placed in said building, shall continue to be and remain absolutely the property of said party of the second part, and neither the said party of the first part nor the said the Mayor, Aldermen and Commonalty, shall by reason of said property being placed in said building, or continuing therein, have any right, title, property or interest therein; nor shall the said party of the second part, by reason of its occupation and use of said building under this agreement, acquire, or be deemed to have any right, title, property or interest in said building, except so far as expressly granted by this agreement.

Sixthly.—That the said party of the second part shall, on or before the first day of May, in every year, during the continuance of this agreement, submit to the said party of the first part, its successor or successors, a detailed printed report of the operations and transactions of the said party of the second part, and all its receipts and payments, for the year ending with the 31st day of December next preceding.

Seventhly.—That said party of the first part shall have, at all times, access to every part of said building for general visitation and supervision, and also for the purpose of the performance of the duties devolved upon it by the laws of the State of New York, or of the City of New York. That the police powers and supervision of said party of the first part shall extend in, through and about said building. That the said party of the second part may appoint, direct, control and remove all persons employed within said building, and in and about the care of said building, and the museum, library and collections therein contained.

Eighthly.-That said party of the second part may, at any time, after the expiration of three, and before the expiration of six months from the date of the service of a notice in writing to said party of the first part, its successor or successors, or to the Mayor of the City of New York, of its intention so to do, quit and surrender the said premises and remove all its property therefrom,; and upon and after such notice, the said party of the second part shall and will, at the expiration of the said six months, quietly and peaceably yield up and surrender unto the said party of the first part and its successors all and singular the aforesaid and demised prem-And it is expressly understood and agreed by and between the parties hereto, that if the said party of the second part shall omit to do, perform, fulfill or keep any or either of the covenants, articles, clauses and agreements, matters and things herein contained, which on its part are to be done, performed, fulfilled or kept, according to the true intent and meaning of these presents, then and from thenceforth this grant and demise shall be utterly null and void. And in such case it shall and may be lawful for said Department to serve or cause to be served on the said party of the second part a notice in writing declaring that the said grant hereinbefore made has become utterly null and void, and thereupon the said party of the first part, its successor or successors (ninety days' time being first given to the said party of the second part to remove its property therefrom), may re-enter, and shall again have, repossess and enjoy the premises aforementioned, the same as in their first and former estate, and in like manner as though these presents had never been made, without let or hindrance of the said party of the second part, anything herein contained to the contrary notwith-standing.

Ninthly.—And it is further expressly understood, and agreed, by and between the parties hereto, that this agreement may be wholly canceled and annulled, or, from time to time, altered, or modified, as may be agreed, in writing, between the said parties, or their successors, anything herein contained to the contrary in anywise notwithstanding.

In witness whereof, the party of the first part hath caused this agreement to be executed by their President and Secretary, pursuant to a resolution of the Board of Commissioners of said Department, adopted at a meeting held on the thirtieth day of January, A. D. 1878, and the said party of the second part hath caused the same to be executed by their President, and their official seal affixed thereto, pursuant to a resolution of the Trustees of the American Museum of Natural History adopted at a meeting held on the twelfth day of February, A. D. 1877.

In presence of

D. PORTER LORD.

#### JAMES F. WENMAN.

President Department of Public Parks of the City of New York.

#### WILLIAM IRWIN,

Secretary Department of Public Parks of the City of New York.

#### ROBERT L. STUART,

President American Museum of Natural History.

SEAL
of the American
Museum of
Natural History.

STATE OF NEW YORK, City and County of New York, ss.:

On this 12th day of February, in the year 1878, before me personally came James F. Wenman, President of the Department of Public Parks of the City of New York, and William Irwin, Secretary of the said Department of Public Parks, with both of whom I am personally acquainted, and both of whom being by me duly sworn, said that they reside in the City and County of New York, that the said James F. Wenman is the President, and the said William Irwin is the Secretary of the said Department of Public Parks, and that they signed their names to the foregoing agreement by order of the "Board of Commissioners" of the said Department of Public Parks, as such President and Secretary.

W. C. BESSON,

SEAL.

(73) Notary Public, N. Y. Co.

STATE OF NEW YORK, City and County of New York, ss.:

On this 12th day of February, in the year 1878, before me personally came Robert L. Stuart, the President of the American Museum of Natural History, with whom I am personally acquainted, who being by me duly sworn, said that he resides in the City and County of New York, that he is the President of the "American Museum of Natural History," and that he knows the corporate seal of said museum, that the seal affixed to the foregoing agreement is such corporate seal, that it is affixed thereto by order of the "Board of Trustees" of said American Museum of Natural History, and that he signed his name thereto by the like order, as President of said Museum.

W. C. BESSON,

SEAL

(73) Notary Public, N. Y. Co.

Recorded in the office of the Register of the City and County of New York in Liber. 1426 of Cons., page 402, February 16, A. D. 1878, at 9 o'clock A. M., and examined.

Witness my hand and official seal,

FREDERICK W. LOEW

SEAL.

Register.

# DONATIONS.

#### 1878.

CAPTAIN HENRY ERBEN, U. S. Navy.

1 specimen of the Samoan Pigeon (Didunculus).

REV. GEORGE WILSON, Glenluce, Wigtonshire, Scotland, through PROF. J. J. STEVENSON.

86 species Marine Shells from the shores of Scotland. 77 species Fresh Water and Land Shells, identified by PROF. DUNN, of Edinburgh.

1 piece of Cyclopterus Hibernicus, from Purtonhaugh, Scotland; a fragment of the Slab figured in HUGH MILLER'S "Testimony of the Rocks," p. 453.

BUREAU OF EDUCATION, Washington, D. C., through Gen. John Eaton, Commissioner.

"Contributions to the History of Medical Education in the United States, 1776-1876."
"Circulars of Information," etc. Nos. 1 and 2, 1877; No. 1,

Report of the Commissioner, 1876.

ISAAC F. WOOD, N. Y.

Drawing of a Fish.

GEORGE N. LAWRENCE, N. Y.

"Descriptions of New Species of Birds from the Island of Dominica." Original paper.

STATE OF MICHIGAN, through Hon. W. J. Baxter, Secretary of State. Vol. III. of the "Geological Survey of Michigan, 1873-1876."

NOVA SCOTIAN INSTITUTE OF NATURAL SCIENCE.

Vol. IV., Parts III. and IV., of "Proceedings and Transactions, 1876-"77."

STATE OF NEW YORK, through Hon. Allen C. Beach, Secretary of State, Albany. Census of the State, 1875.

L'ACADEMIE RGYALE DE COPENHAGUE.

Bulletin No. 2, April-September, 1877.

Report for 1878.

H. H. HILL, Cincinnati, O. 2 casts of Sculptured Faces.

1 cast of Grinding Stone. 1 Ornament.

HON. GEO. B. GLOVER, Shanghai, China, Collection of 500 Chinese Coins, arranged chronologically from B. C. 245 to the present day.

T. M. TRIPPE, Orange, N. J.

1 Skull and fragments of Pottery from the Mounds of Southwestern Colorado.

27 STATE OF NEW JERSEY, through Prof. Geo. H. Cook, State Geologist. "Report on Clays," 1878. Annual Report, 1877. 13th Annual Report Rutgers Scientific School, 1877. 5th Annual Report New Jersey State Board of Agriculture, 1877. MINNESOTA HISTORICAL SOCIETY, St. Paul. Proceedings, No. 1. Annual Report, 1877. PROF. A. S. BICKMORE, N. Y. Knife and Scabbard and Arrow used by the Ainos, Island of Yesso. Knife and Scabbard used by the Japanese Noblemen. Malay Cleaver and Sheath, from Amboina. CAPTAIN CHAS. BATES, Ship Java, 2d, Martha's Vineyard, Mass. A collection of Reptiles, Fishes and Insects, in alcohol, from

ROBERT L. STUART, N. Y.

Specimen of Preserved Head of S. A. Indian. Specimen of Preserved Rat.

L. H. AYME, N. Y.
6 bones of the Moa, from New Zealand. A collection of Algæ and Plants, from New Zealand. Lot of Shells and Fossils.

2 eggs of the Penguin. 4 bottles of Fishes, Reptiles and Insects.

12 Numbers " Proceedings of Royal Society of Tasmania." PHILIP HECHT, N. Y.

1 pair Moccasins, 1 bead Necklace, from the Munueconjoux Indians, Cheyenne. 1 skin of Ermine,

J. SABIN, N. Y.

9 Volumes Sabin's Reprints.

Duke of York Islands.

SCHOOL OF MINES, Sydney, New South Wales, through Prop. Thos. Egleston, Columbia College, New York. 2 Geological Maps of New South Wales.

WM. H. COHEN, N. Y.

1 fossil Ostrea.

W. B. DEGARMO, N. Y.

1 Calabash Fruit-Bermuda, A collection of Coral and Shells.

1 Fish.

Several specimens of the Tropic Bird (Phaeton).

FREDERICK ERATH, N. Y. 1 skull.

DEPARTMENT OF THE INTERIOR, Washington.

"Exploration of the Colorado River," Powell.
"Tertiary Flora," Lesquereux.
Bulletins 1, 2 and 3, Vol. 4, U. S. Geological Survey.
"10 and 12, National Museum.
"Birds of Colorado Valley," Coues.

"Entomological Commission," 1877.

"Miscellaneous Publications," No. 10.

"Catalogue of Indian Photographs."

ERNEST FESTE, N. Y.

4 Stalactites, from banks of the Mississippi, near St. Louis.

HISTORICAL SOCIETY OF STEIERMARK. "Mittheilungen und Beiträge," 1878.

THOMAS BLAND, N. Y.

Head-dress of a Seneca Chief.

CINCINNATI SOCIETY OF NATURAL HISTORY, Cincinnati, Ohio. Journal-Vol. 1, Nos. 1 and 2, 1878.

SMITHSONIAN INSTITUTION, Washington, D. C.

12 packages of the Publications of Foreign Societies.

MRS. WILLARD PARKER.

Ethnological collection from Zulu, Africa. A collection of Indian Ornaments and Utensils.

ALEXANDER BAMAUNI, Brooklyn.

Necklace of Stones worn by the Aborigines of Mexico. GEORGE SYKES, Peekskill, N. Y.

Several Stone Implements and fragments of pottery.

D. JACKSON STEWARD, N. Y. 2 large Slabs of Schoharie Grit.

WAR DEPARTMENT, Washington, Bureau of Engineers, through Gen. A. A. Humphreys, Chief. "Survey of the 40th Parallel," Vols. 1, 2, 3, 4, 5 and 6, with Atlas.

A. H. ALEXANDER, West Hoboken. Larynx of Howling Monkey.

H. G. MARQUAND, N. Y.

Indian Antiquities, from the Mounds of Missouri.

PEABODY MUSEUM OF ETHNOLOGY AND ARCHÆOLOGY, Cambridge, Mass.

Eleventh Annual Report.

PROF. R. E. C. STEARNS.
"List of his Contributions to Natural History."

M. PREVOST.

1 Porcupine Fish. 2 Fangs of Serpent. Ball of hair from stomach of a cow. Cube crystal of Native Salt. 1 Nest of Oriole.

MRS. H. PAINE, N. Y.

Collection of Shells (general).

A. C. YATES.

Specimen of preserved "Native Food."

HON. R. C. WINTHROP, Boston.

"Correspondence of Hartlib, Haak, Oldenburg and others of the founders of the Royal Society, with Governor Winthrop, of Connecticut-1661-1672."

ROYAL ACADEMY OF SCIENCES, Lisbon.

2 Pamphlets on the Botany of Portugal.

GUSTAVUS H. ROBINSON, U. S. Army, Davies Island, N. Y. 1 specimen of Cuttle Fish, caught near the island.

STATE OF ALABAMA, through EUGENE A. SMITH, State Geologist. Reports on the Geological Survey-1875, 1876.

THOMAS W. U. ROBINSON, Durham, England.

A collection of Stone Implements, Arrow Heads, etc., from England and Ireland.

1 copy of Greenwell's "British Barrows."

ESTATE OF THE LATE CARLOS COBB, Buffalo, N. Y., through М18ч E. F. Совв.

A collection of Minerals, Fossils and Shells.

HUGH N. CAMP, N. Y.

I specimen of Lead Ore from the mine of the St. Joseph (Mo.) Lead Company.

#### PATRONS,

#### By the Payment of Twenty-five Hundred Dollars.

19,500	JAMES M. CONSTABLE\$3,650
10,500	WILLIAM E. DODGE, JR 3,500
5,550	JOSEPH W. DREXEL 3,050
5,000	HUGH AUCHINCLOSS 3,000
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4,250	A. G. PHELPS DODGE 2,500
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3,750	
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-j	and they are the
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<sup>\*</sup> Deceased.

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Isham, W. B.
Ivison, Henry
Jackson, W. H., M.D. Jacobson, Frederick Jaffray, E. S. Jaffray, Robert Jarvis, Nathaniel, Jr. Jenkins, Wm. L. Johnson, A. J. Johnson, John E. Jones, George Jones, Walter R. T. Jordan, C. N. Kelly, Eugene Kemp, Edward Kemp, John H. Kennedy, John S. Kerner, Charles H. Keyes, George Kidder, Jerome, M.D. King, A. J.

Moir, James

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Requa, J. M.
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Riker, John L.
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### ARRANGEMENT OF THE COLLECTIONS

OF THE

# American Museum of Ratural History,

January 1st, 1879.

[Note.—A Visitors' Guide is in course of preparation, but large additions having just been recessitating a re-arrangement of the collections, the present schedule is now published for gratitious distribution.]

### THE BUILDING.

The building now completed is one section of a plan that can be extended until it occupies the entire area of Manhattan Square, which contains 18½ acres. A photographic copy of the ground plan is displayed on the right-hand side entrance, showing that marginal park-like areas border the structure upon the outside, and within are four open courts; also a plan and views showing the proposed improvements on our Square during the present year.

This building has been erected by the City, and the collections displayed are purchased by private subscriptions, and are the property of the Museum.

The lowest story is 18 feet high; the second, or principal story, including the gallery, is 30 feet; the upper story 22 feet, and the rooms in the mansard story 16 feet in height. Each hall is 170 feet long and 60 wide inside the walls.

On the left-hand side of the entrance are plaus of the new Musenm of Natural History, now in process of erection by Her Majesty's Government at South Kensington, London, and beneath it a plan of the British Museum, the red line indicating the boundary of our Square on the same scale.

### COLLECTIONS EXHIBITED IN THE LOWER STORY.

The desk-cases ranged through the middle of the lower hall are filled with the Jay collection of Shells, presented by Miss C. L. Wolfe, as a

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memorial of her father, the first President of the Museum. Passing to the northern end of the room, we come to a group, consisting of a Camel from Armenia, a Moose from Nova Scotia, and a Wapiti from the Rocky Mountains, mounted by Prof. H. A. Ward, of Rochester, and presented by Hugh Auchingloss, Esq.

### ECONOMIC DEPARTMENT.

On each side of the northern door, three cases, being an actual Geological Section along the route of the South and North Alabama Railway Company.

- Case A contains Building Stones from Japan, and Marbles from Ireland, Italy and Vermont. The desk-case next in order is filled with exquisite Wax Fruits from the Iowa Horticultural Society, made by Col. Brackett.
- Case B. (1-3): Woods from Bermuda. (4 to 10): Woods from Jamaica. (11-13): Woods from America.
- Case C. (Panels 1 to 10): Woods from Japan. (11-13): Woods from Bermuda.

### SKELETONS.

- Case D. (1-7): Crustacea above, and below skeletons of fish, turtles, Manatee and Dugong. (8-13): Birds.
- Case E. (1-6): Skulls of Carnivora, below Marsupials, Rhinoceros (7): Llama. (8): Skulls and Anatomy of Man. (10-11): Monkeys. (12): Rodents.

### MAMMALS.

- Case F. Order Quadrumana. Old World Monkeys.
- Case G. (1-10): New World Monkeys. (11-12): Lemurs. Order Cheiroptera, Bats.
- Case H. (1-3): Bats. Order Insectivora, (3): Hedgehogs. Order Carnivora, (4-13): Lion, Leopards, Tiger, Cats.
- Case I. (1-4): Cats. (5-7): Genets. (8): Ichneumons. (10-13): Dogs and Foxes.
- Case J. (1-2): Martens, Ermines. (3): Fishers. (4-5): Skunks and Coatimundis.
- Case K. Grizzly Bear, formerly living in Park Menagerie; Hooded Seal, Greenland.
- Case L. Order Sirenia, (1-2): Manatee. Order Angulata, Sub-Order Perissodactyla, (6-8): Malay Tapir. Sub-Order Artiodactyla, (3): Babirusa. (10-13): Llama, Caribou.
- Case M. (4): Fallow Deer. (8): European Stag.

- Case N. (5): Axis Deer. (10): Roebuck. (12): Musk Deer.
- Case O. Male, Female and Young of Buffalo.
- Case P. (1-2): Wild Buffalo, Europe, forests of the Czar, very rare. (3-10): Antelopes, South Africa.
- Case Q. (1-3): Spring-bok, Siberian Antelope, Chamois. (4-10): Morocco Sheep, Male and Female of Rocky Mountain Sheep. Order Hyracoidea, (13): Hyrax or Rock Rabbit.
- Case R. (1-4): Order Rodentia, Mice, Jumping-Mice. (6): Dormice. (7-8): Below Beavers, above Flying Squirrels. (10-13): Squirrels.
- Case S. (4): Chinchilla. (6): Porcupines. (8): Rabbits. (10-11): Order Edentata, Sloths, Armadillos. Order Marsupialia, (12-13): Opossums, Tasmanian Wolf.
- Case T. (1-4): Kangaroo. (5-6): Above Koala, Wombats. Order Monotremata, (6): Below Duckbills and Echidna.

On the stair-way, first landing, a painting, "The Wounded Bison," by the late W. J. Hays.

### SECOND FLOOR OR PRINCIPAL HALL.

Hallway, at the head of the main stairs, a portrait of Mr. John David Wolfe, presented by Miss C. L. Wolfe.

### BIRDS.

- Case A (1-6) and Case B (1-4): Systematic collection of Birds and their skeletons, illustrating the Families and Sub-Families of the classification adopted (that of Professor LILLJEBORG, of Upsala, Sweden), from the Thrush to the Penguin.
- Case B. (6): Commence Elliot collection of North American Birds, the sub-family, genus and species and its common names are shown on the labels. This collection fills also Cases C, D, E and F.
- Case G. Humming Birds, nearly all from Central and South America.
- Case H. Commences Birds of South and Central America. Verreaux and Maximilian collections fill Cases H, I and J.
- Case H. (7): Lower shelf, Cock of the Rock. (8): Middle and lower shelves, Chatterers and Bell Birds. (10): Middle shelf, Umbrella Birds.

- Case I. (1): Lower, and (2) Top, Great Macaws of Brazil and Amazon Valley. (3 and 4): Toucans. (6): The Trogons, with plumage of green and gold and scarlet, and below, Jacmars, in bronze tints. (10): Night Hawks. (13): Condors from the Andes.
- Case J. (2): Curasows. (5): South American Ostrich.
- Case K and Case L. Birds of Australia and the Pacific Islands.
- Case M. Commence Birds of Europe and Asia, which fill N. O, P and Q.
- Case N. (6): Quail, Europe and the Himalayas. (7): Sand Grouse, Syria. (8-13): Pheasants.
- Case O. (1 and 2): Pheasants and Peacocks. (7 and 8): Eagles and Vultures.
- Case P. (1-3): Owls. (4): Rollers. (7): Lower shelf, Horn-bills. (8-10): Cuckoos.
- Case Q. (1-2): Ravens, Rooks, Crows. (3): Jays. (4): Orioles. (8): Two-Tailed Starlings. (12): Pittas.
- Case R. Birds of Africa, also in S and T. (1-4): Water Birds. (6-8): Storks. (10): Bustards.
- Case S. (3): Rollers. (4): Bee-eaters. (5 and 6): Plantaineaters. (7): Hornbills.
- Case T. (2): Remarkably changeable colored Starlings.

### GALLERY.

### ARCHÆOLOGICAL DEPARTMENT.

- Cases A, B, C and D. Sturgis collection of the Implements of Pacific Islanders.
- Case A. Spears and Lances.
- Case B. Masks from New Ireland, used in religious ceremonies.
- Case C. Elegantly carved War Clubs, Hervey Island.
- Case D. (1-2): Paddles, Samoa, New Ireland. (3): top, Savage Island. (3-4): Battle Axes, New Zealand, New Britain.
- Cases E and F. War Clubs, Fiji Islands, Solomon Islands.
- Case G. (1-2): Ornaments, New Ireland, Fiji Islands. (3-4): Shark's Teeth, Weapons, Kingsmills Island.
- Case H. Kava Bowls, Tonga Island. Models of Canoes, Fiji Island.
- Case I. Chinese Musical Instruments, presented by Hox. Geo. B. Glover. Malay Krises.

- Case J. War Spears and Dresses, Pacific Islands.
- Case K. (1-4): Fish and Bird Spears, Bows, Harpoons and Dresses of Eskimos. (5-6): Dresses of Indians, Rocky Mountains.
- Case L. Dresses of Sioux Indians.
- Cases N and O. Models of Cliff Dwellings and Villages of the Pueblos, Colorado and New Mexico.
- Case P. Pottery from Mounds of Missouri, presented by Mr. H. G. MAROUAND.
- Case Q. Stone Rings, Porto Rico; Pottery from Mexico and Central America.
- Case R. Pottery from Peru.
- Cases S and T. Stone Implements from Swiss Lake Dwellings and Caves in southern France, Feuardent collection, and from England and Ireland, presented by Mr. T. W. A. Robinson, of Durham.
- Railing Case. North and west of west side, DE Morgan collection of Stone Implements from the Valley of the Somme, in the northern part of France. This collection, which is deposited by the President of the Museum, is regarded as the most complete of its kind, except that of Boucher De Perthes, at Abbeville. Then follow on the west side, collections from the "Swiss Lake Dwellings," the Bement series, representing the Stone Age of Denmark, and specimens from various parts of our own country. South side, Squier & Davis' collections from the Mississippi Valley. On the east side, specimens from Porto Rico, South Carolina, part of the De Haas collection, deposited by Mr. D. J. Steward, and the large and choice collection made by Col. Chas. C. Jones, Jr., of Georgia, described and figured in his "Antiquities of the Southern Indians."

### UPPER OR THIRD FLOOR.

### JAMES HALL COLLECTION.

On entering the room, near the centre of the floor is seen the fossil Skeleton of the Moa (Dinornis giganteus), an extinct bird from New Zealand.

The Table Cases arranged along the middle of the room contain Fossils from the various formations, represented in the Upright Cases, opposite which they are placed, except the two and a half on the west side, and near the north end, the first of which is filled with Vertebrate remains from Holmes' collection, and the others with a special collection of Brachiopoda, from various formations in Europe.

- Case A, on the left as you enter. (Panel 3 and 4): A Geological Map of New-York State, illustrating the classification generally adopted. Below are volumes published by the State Survey, illustrating the fossils of the several formations of the State, most of the specimens figured in them being on exhibition in the Hall. Such type specimens are indicated by green tickets, and illustrate the scientific importance of this collection. (1 and 2): Rocks and Minerals of the Laurentian Period. (5): Of the Huronian, and in 6, Rocks representing the geology of New York Island.
- Case B. (1-4): and adjoining Table Case, contains 200 types and figured specimens of Fossus from the Potsdam formation of America. Other parts of this and the following cases are filled with specimens illustrating the various formations, as follows:
- Case B. (6-7): Calciferous. (8-10): Canadian. (11-13): Chazy, Birds-eye and Black-River.
- Case C. (1-7): New York Trenton. (7-13): Western Trenton.
- Case D. (1-2): Utica Slate. (3): New York Hudson River. (4-10): Western Hudson River. (11): Medina. (12-13): Clinton.
- Case E. (1-2): Clinton. (3-10): New York Niagara. (11-13): Niagara of Indiana.
- Case F. (1-6): Western Niagara. (7): Guelph Limestone. (8): Onondaga Salt Group. (10-13): Lower Helderberg.
- Case G. (1-3): Remainder of Lower Helderberg. (4-8): Oriskany Sandstone [opposite Table Case, Oriskany of Maryland.] (9-12): Schoharie Grit. (13): Corals of New York Upper Helderberg.
- Case H. (1-6): New York Upper Helderberg. (7-11): Western Upper Helderberg. (12-13): Marcellus Shale. (13, upper part): Plants of Hamilton Group.
- Cases I and J, and (1-3) in Case K, New York Hamilton. And (4-6) Western Hamilton.
- Case L. (1-3): Tully Limestone, Genessee Slate and Portage Group. (4-13): Chemung Group.
- Case M. (1-2): Chemung Group. (3-4): Catskill. (5-10): Waverly Group. (11 and 12): Lower Carboniferous Limestones, Burlington Division. (13): Keokuk Division.

- Case N. (1-4): Keokuk Division. (5-7): Warsaw Division. (8-9): St. Louis Division. (10-11): Chester Division. (12-13): Fossil Plants of the Coal Measures.
- Case O. (1 and 2): Remaining Plants of the Coal Measures. (3-6): Invertebrates and Fish of the Coal Measures. (7-10): Fishes and Tracks of the Triassic Sandstones, including many presented by R. L. Stuart, Esq. (11-13): Invertebrates of the Atlantic Coast. Cretaceous.
- Case P. (1-3): Plants and Invertebrates of the Upper Missouri Cretaceous. (4-11): Invertebrates of the Eocene. (12-13): Invertebrates of the Atlantic Coast Miocene.
- Case Q. (1-2): Cretaceans from the Upper Missouri region, collected by Meek and Hayden. (3-12): Eocene Tertiary, from various localities. (13): Miocene.
- Case R. (1-6): Vertebrate remains from the Upper Missouri.
  (7): Post Pleiocene, from Lake Champlain. (8-13): Collection of European Fossils, embracing Primordial to Carboniferous.
- Case S. (1-2): Saurian remains from the Liassic of England. (2-3): Jurassic and Cretaceous Fossils, from Europe. (4): Cretaceous and Tertiary Collections, from various sources. (5-9): Pleiocene and Post Pleiocene collections of South Carolina (Holmes' collection), containing many types and figured specimens forming the basis of the work of Tuomey and Holmes on South Carolina. (10): Cretaceous and Liassic Fossils, containing some large Ammonites. (12-13): Eocene Fossils, from the Paris Basin Beds of France. (13): Plants of the Miocene Formation of Switzerland.
- Case T. Fossil Birds from New Zealand, and a collection of Fossils and Minerals, illustrating the geology of Yesso, Japan.

### THE ATTIC STORY.

The attic story is divided into a number of rooms for Libraries and Laboratories for scientific men who are carrying on original researches. In these rooms are the collections of the National Survey of the 40th Parallel, Mr. Clarence King in charge; the rocks and minerals gathered by Prof. R. Pumpelly during his travels, and work on various State Surveys; and the choice and large lithological collections of Maj. T. B. Brooks, containing the rocks described in the Michigan and Wisconsin State Reports, and a full series from Austria, Sweden, and 2,000 specimens illustrating the lithology of New Hampshire. The following are the libraries of scientific works already gathered in this fire-proof structure:

	Vols.	Pamphins.
Jay Library on Conchology, presented by Miss C. L. Wolfe	997	180
Brecoort Library on Fishes and General Zoology, deposited by		
the President of the Board	2,083	1,599
Scientific Works from various sources	576	293
Library on Mining and Physical Geology, deposited by Clarence		
King, Esq	2,430	1,652
Library of the New York Academy of Sciences, deposited for safe-		
keeping by the Society	4,621	1,537
Prof. Whitfield's Library on Palæontology	352	381
Prof. Bickmore's Library on Ethnology and Archæology	908	420
Total	11,967	6,062

### ARSENAL BUILDING,

### Near Fifth Avenue and Sixty-fourth Street.

The collections exhibited here are such as cannot be placed before the public in the new building, Eighth Avenue and Seventy-seventh Street, for want of space.

### ENTRANCE.

In the entrance, or the first floor, is a skeleton of a large Walrus, from Alaska, deposited by the Park. On the south and west sides are Mammals; on the north side a group, representing an Arab dispatch-bearer, who, while crossing a desert on a swift-traveling camel, is attacked by a lion and lioness. The lioness is represented as fatally wounded and dying, her limbs already rigid, while the lion springs in fury upon the Arab, who is attempting to defend himself with a curved dirk or scimitar, and the camel, aware of its danger, turns its head toward its rider and cries for help. This work was mounted by Edward Verreaux, of Paris, and received the highest prize at the Exposition of 1867.

Passing up the northern stair-way we come to the

### SECOND STORY.

Along the east and north sides are Corals, Sea-fans and Shells. On the west side, mounted Fishes, from the Maximilian Collection. Northern case, lower shelf, an Eel 15 inches in girth; lower shelf, next case, the blue Dolphin, which frequently changes its colors when it dies. Next case, lower shelves, the Angel Fishes, conspicuous on account of their long fins and bright colors. Large case, alligator 12 feet long, from Florida; Snakes and Lizards. Large case, Turtles; unmounted Skeleton of Elephant; large Birch Trees nearly gnawed off by beavers for their dams; large Nests made by Hor-

nets. Three southern cases, mounted Fishes, Porcupine Fish, Gar-pike, Sharks.

South and east sides, the Maximilian Collection of reptiles and fishes preserved in alcohol. Table eases, eight filled with Shells, two with Sea-urchins and Sea-fans, and one with Birds' Nests and Eggs.

Ascend the northern stair-way to

### THIRD STORY.

East and north sides, minerals. Lower shelves, large masses of Crystallized Quartz, from cave in Ellenville, N. Y., presented by D. J. Steward, Esq.

West side, three cases, economic minerals, Iron Ores, Coals and Slates from Centennial Exhibition, and fine collection of Missouri minerals, from M. S. Mepham & Bro. Central case, east side, four Moose Heads, and Bison and Caribou Head, W. J. Hays' collection. West side, Fibres from Jamaica Exhibit; Cocoons and Seeds, Turkish Exhibit. South-west cases, Birds, mounted and unmounted. Southeast case, Mammals from the Holy Land. Three cases of Insects, presented by Baron Osten-Sacken and Dr. R. A. Withhaus.

J. C. Oleuz.

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THE ELEVENTH

# ANNUAL REPORT,

Swerican Museum of Natural History,

CENTRAL PARK, NEW YORK,

77th Street and 8th Avenue.

→ FEBRUARY 10TH, 1880. ►

NEW YORK:

THITCHENER & GLASTAETER, PRINTERS,

1880.



## THE ELEVENTH

## ANNUAL REPORT

OF THE

American Museum of Natural History,

CENTRAL PARK, NEW YORK,

(77TH ST. AND STH AVE.)

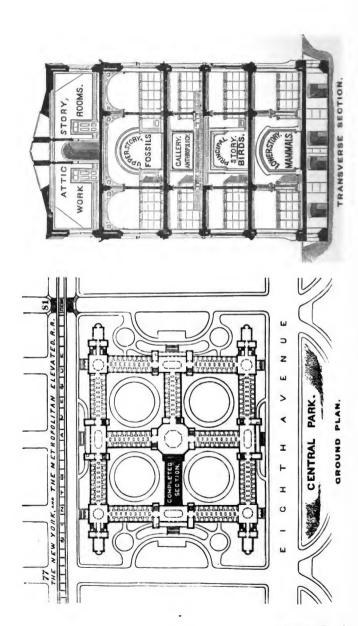
FEBRUARY 10th, 1880.

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THITCHENER & GLASTAETER, BOOK AND JOB PRINTERS.

14 & 16 Vesey Street.

1880.



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# Eleventh Annual Report.

1879.

The Trustees of the American Museum of Natural History have the pleasure of presenting this, their Eleventh Annual Report, to the Patrons, Fellows and Members of the Museum.

It is now our pleasure to state that the institution is entirely out of debt. The sum due on the James Hall Collection of fossils and for deficiency in maintenance during the past year has amounted up to this date to \$28,179.37. The friends of the Museum have given \$3,000, and the sum of \$27,250 has been subscribed by the members of our Board of Trustees to cover this indebtedness and leave a small balance in the treasury. From the city. \$10,076.54 have been received towards maintenance, and from the Annual Subscribers and other Members, \$8,206.80, making the total amount paid in to the Treasurer for purchases and maintenance since Jan. 1, 1879, the date of the last report, \$47,033.34.

The opening of the Manhattan Elevated Railway to the depot on the northwest corner of our square at Ninth Avenue and 81st Street, has rendered the Museum accessible by a ride of a few minutes from any part of the city, and has been followed by a large increase in the number of our visitors.

The Department of Public Parks has a completed system of sewerage which has drained the depression between the hills that originally stood on our Square, so that now we shall hope to have one of the healthiest locations on Manhattan Island. The improvement of the grounds is still in progress, and the Board of Apportionment has set apart \$20,000 for its continuance during the present year.

The rearrangement and scientific labelling of the collections, which began last year, have made steady progress, and produced a marked improvement in the exhibition; also the important additions to the Museum mentioned below have been catalogued and displayed in the cases of the public halls or arranged in drawers in the laboratories of the upper story so as to be immediately accessible to all students carrying on original research.

To the Department of Mammals have been added a fine mounted specimen of the rare Rocky Mountain Goat, presented by Mr. Percy R. Pyne; five skulls and eight carefully prepared specimens illustrating the structure of various parts of the human anatomy, presented by Dr. J. J. Milhau; a lower jaw of the sperm whale and a walrus head, presented by Mr. W. H. Bartlett of New Bedford; and three highly polished shells of sea turtle from Florida, presented by Mr. Robert L. Stuart. A large specimen of the long-nosed monkey of Borneo, has been purchased and lately mounted, and placed on exhibition. The Park Department, from its menagerie, has presented a Striped Hyena, a Harnessed Antelope, and a young Llama.

In two of the desk cases, made vacant by moving specimens on the gallery floor, are exhibited a series of very rare and valuable shells, deposited by Mr. W. A. Haines.

In the department of Ornithology, we have received from the Smithsonian Institution, as a partial exchange for the specimens we forwarded last year, 89 species and 104 specimens of bird skins, which, with a selection made by Mr. D. G. Elliot from the large series formerly presented by him, numbers 657 skins which are ready to be mounted and placed in the cases on the second floor. Mr. Alfred Van Deusen has presented 9 species, 17 specimens, of skins from South America. A remarkably large and finely colored specimen of the Wild Turkey, mounted by Mr. Bell, was presented by the late Mr. Alexander Stuart, and a bird's skull, mounted with the bones separate, but retaining their relative position, presented by Mr. Elliot.

In the Department of Ethnology and Archæology much labor has been performed in carefully marking numbers in paint upon the specimens, so that they can be freely handled by students in this popular branch of natural science without the possibility of the loss of their locality.

Large and valuable additions are being constantly made to our collections upon the gallery floor, and with the important deposits of similar specimens from all parts of our country, now rapidly accumulating in our workrooms, the material will soon be gathered for making an exhaustive study of American Archæology. Mr. Hugh Auchincloss has presented a collection of Indian and Eskimo dresses and implements, made by Prof. Robert Bell, on the shores of Hudson's Bay.

Mr. Percy R. Pyne has presented a collection of Indian stone implements made by the late Hon. Brantz Mayer, which were principally gathered by Prof. Nicollet, at the headwaters of the Mississippi.

Mr. F. W. Stevens has presented one-half, and Mr. Gifford Pinchot one-fourth of a series of similar implements from New York State, and Mr. Peter C. Cornell has presented one-half and Mr. B. G. Arnold onefourth of another series from the mounds in Ohio.

Prof. S. S. Haldemann, of Chickies, Pa., has presented a rare collection of the dresses, weapons, and implements of the Indian tribes of British Guiana. Jonathan Thorne has presented a celt or stone axe found in its original handle, probably the only specimen on exhibition from the States bordering on the Atlantic ocean.

Mr. Thomas Cleneay, of Cincinnati, has presented an important collection from the mounds in the Ohio Valley. It consists of grooved axes, celts, pestles, flint knives, and selected arrow heads, a detailed list of which is given in the record of donations.

Mr. James Terry, of Hartford, has availed himself of the facilities the Museum affords for original investigation, and has brought his great archæological collections to our laboratories. When packed for shipping it filled one car and weighed five and a half tons. is the result of ten years assiduous collecting, supplemented with liberal purchases. The area from which it has been gathered commences on the north at Connecticut and includes various parts of the coast States to Alabama, and the interior States of Ohio, Indiana, and Illinois. The series of stone implements from Tennessee is very extensive. There are 800 pieces of

pottery from Missouri and Arkansas, the larger part of which are ornamented with representations of the human face or the figures of animals. From California there are 60 ollas or spherical stone pots, 120 stone mortars, 100 serpentine dishes of elegant finish, and over 40 pipes. The chipped implements of that coast excel in the delicacy of finish the finest ones found in Denmark.

Mr. Andrew E. Douglass has also made a very important deposit of specimens, mostly from the mounds of Florida.

In the Geological department, commencing with the Chemung group, the arrangement of the specimens for exhibition, and the selection of duplicate material has been completed for the palæontological collections, and there are now on exhibition in the upper hall the following series:

0		
	Selected Specimens.	Types and Figured Specimens.
Prof. James Hall's Collections.—American	76,011	5,579
"—European	3,878	5
" F. S. Holmes' Collection	3,930	203
Miscellaneous Collections.—American	. 2,339	
" —European	. 2,432	
		-
Total on Exhibition	88,590	5 787
Loaned to Prof. Hall	. 843	843
Total Palæontological Specimens selected for Exh	i-	
bition in the Museum	. 89,433	6,630

Other specimens have been loaned to Professor Hall for the continuation of his scientific work, some of which will probably be figured, making the total of types and figured specimens nearly or quite seven thousand. The duplicate fossils selected from the Hall

and other collections have been arranged to the completion of 10 sets, as follows:

		Species	Specimens
lst (	Collection		5,198
2d	64	1,290	3,908
3d	41		3,397
4th	4.6		3,180
5th	4.4	951	2,827
6th	4.6	842	2,458
7th	41	797	2,221
8th	4.1	707	2,380
9th	**	691	2,324
10th	41	658	2,178
		Total9,656	30.071

Each species in each collection has a separate written label containing the generic and specific name, the author's name, the locality and geological formation, and a number which corresponds to a catalogue, a copy of which is provided with each collection.

Each series has been carefully packed in wooden boxes that are plainly marked, and the whole is now ready for immediate delivery. Several collections have been identified for individuals, the specimens being retained in payment for the list of identifications returned. In this work we have been aided by Mr. A. Woodward, who has given his labor to the Museum.

In lithology, the standard series of rocks deposited by Major T. B. Brooks, from Austria, Norway and Sweden, and from Michigan and Wisconsin, have been placed in drawers in the work-rooms with their microscopical sections. These specimens, together with those of the 40th parallel survey described by Prof-Zirkel, have become of such interest, and are so entirely accessible, that scientific experts have come from various parts of the country to study them during the past year.

Important additions have been made to the libraries deposited with us for safe keeping, and the volumes and pamphlets already gathered in the elegant study rooms of our fire-proof building for the benefit of original investigators, number as follows:

	Vols.	Pam- phlets,
Jay Library on Couchology, presented by Miss C. L. Wolfe	997	180
Brevoort Library on Fishes and General Zoology, deposited by		
the President of the Board	2,083	1,599
Scientific Works from various donors	634	341
Library on Mining and Physical Geology, deposited by Mr. Clarence King	2,430	1,652
Library of the New York Academy of Sciences, deposited by		
the Society for safe keeping	4,939	1,847
Prof. Whitfield's Library on Palæontology	530	461
Prof. Bickmore's Library on Ethnology and Archæology	987	540
Total	19.000	6,620
1960	12,000	0,020

Students from a number of institutions have come to the city for the purpose of consulting some works these libraries contain, which are either unique or not to be found elsewhere in America.

Our contract with the Department of Public Parks provides that on Wednesdays, Thursdays, Fridays, Saturdays and holidays, the Museum shall be open to the public free of charge, but Mondays and Tuesdays are reserved for the study and rearrangement of the collections, and on these days visitors to the city are admitted, and those contributing money or specimens. A member paying \$10 yearly receives a ticket of admission for himself and family on these days, and to the spring and autumn receptions, and complimentary tick-

ets for friends. The privileges of Fellows and Patrons contributing larger sums are stated in the By-Laws.

An illustrated Guide is in course of preparation, but until it is completed, and as an immediate means of rendering the Museum a source of instruction an assistant will be in attendance on Mondays and Tuesdays to receive Members and their friends, and explain the plan of the institution and the specimens on exhibition

The Trustees intend that the Museum shall be made particularly interesting to the youth of our city, and a plan is under consideration for rendering it a direct benefit to the teachers and pupils of our public schools, and therefore a very important element in our system of public education.

. Several rare collections, supplementing those already acquired, are now offered us upon very advantageous terms, and now that the institution has been freed from all liabilities by subscriptions from the Trustees, and a By-Law enacted preventing any purchase being made hereafter, unless the funds to pay for the same are first provided, we confidently appeal to our public-spirited citizens to join us in securing such important additions, and by increasing the facilities for study at the Museum, render our city more and more attractive to the scientific men of our country, and our institution increasingly instructive to our own citizens.

February 10th, 1880.

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TREASURER.
MORGAN,
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29	1879. Salaries \$8,840 00	8,840	00	1879.	1879. Balance January 1st, 1879	ry 1st, 187	61			\$93 77
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	Collections purchased	2,443	00		***	Heber R.	. Bishop	" Heber R. Bishop	1,250 00	0
	Coal	1,087 49	49			Hugh Au	chincloss.	Hugh Auchincloss	250 00	0
	Insurance on Collections in Arsenal Building	150	00		:	Abram S.	. Hewitt.	Abram S. Hewitt	250	0
	Printing and Stationery	609	10		4	Frederic	W. Steven	Frederic W. Stevens	200	0
	Postage, Car-fare, Commissions and Traveling				:	Percy R.	Pyne	Percy R. Pyne	290 00	0
	Expenses	564 71	1		:	J. A. Bos	stwick	J. A. Bostwick	1,000 00	0
	Freight, Expressage and Custom House Ex-					B. G. Art	nold	B. G. Arnold	100 00	0
	benses	152 13	13		By Dividend Atlantic Mutual Insurance Com	Atlantic A	futual Ins	surance Com		
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[E. & O. E.] NEW YORK, January 5th, 1890.

Examined and approved, AMSS M. CONSTABLE, Auditing Committee. CHARLES LANIER.

J. PIERPONT MORGAN, Treasurer.

1880. To repayment of money borrowed December	1880. By Balance January 5th, 1880	\$218 22
Feb. 10. 31st, 1879	Feb.10. By Cash from Robert L. Stuart	3.000 00
To Paid Prof. Hall balance due 26,429 37	" J. Pierpont Morgan	2,000 00
Ralance carried forward	" Robert Colgate	2,000 00
	" Hugh Auchincloss	1,500 00
	F. W. Stevens	2,000 00
	" Abram S Hewitt	2,000 00
	" Joseph H. Choate	200 00
	Benjamin H. Field	200 009
	" Adrian Iselin	1,500 00
	" Percy R. Pyne	1,250 00
	. " W. E. Dodge, Jr	750 00
\	" Charles Lanier	1,000 00
	John B. Trevor	2,000 00
	· Oliver Harriman	200 00
	" Joseph W. Drexel	1,500 00
	" James M. Constable	2,000 00
	M. K. Jesup	1,500 00
	C. Vanderbilt	1,000 00
	" Andrew H. Green	250 00
	" Edward Clark	1,000 00
	Jonathan Thorne	200 00
	" D. O. Mills	200 00
And the second s		
\$28,968 22		\$28,968 22
To come the second of the seco	NEW YORK, FEBRUARY 19TH, 1880.	

J. PIERPONT MORGAN, TREASURER.

## INCORPORATION.

### AN ACT

TO INCORPORATE THE

# American Museum of Natural History,

Passed April 6, 1869.

The People of the State of New York, represented in Senate and Assembly do enact as follows:

Section 1. John David Wolfe, Robert Colgate, Benjamin H. Field, Robert L. Stuart, Adrian Iselin, Benjamin B. Sherman, William A. Haines, Theodore Roosevelt, Howard Potter, William T. Blodgett, Morris K. Jesup, D. Jackson Steward, J. Pierpont Morgan, A. G. P. Dodge, Charles A. Dana, Joseph H. Choate and Henry Parish, and such persons as may hereafter become members of the corporation hereby created, are hereby created a body corporate, by the name of "The American Museum of Natural History," to be located in the City of New York, for the purpose of establishing and maintaining in said city a Museum and Library of Natural History, of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction and recreation.

- SEC. 2. Said Corporation shall have power to make and adopt a Constitution and By-Laws, and to make rules and regulations for the admission, suspension and expulsion of its members, and their government, the number and election of its officers, and to define their duties, and for the safe keeping of its property, and, from time to time, to alter and modify such Constitution, By-Laws, Rules and Regulations. Until an election shall be held pursuant to such Constitution and By-Laws, the persons named in the first section of this Act shall be, and are hereby declared to be the Trustees and Managers of said Corporation and its property.
- SEC. 3. Said Corporation may purchase and hold, or lease any real and personal estate necessary and proper for the purposes of its incorporation, provided they shall not hold real estate which shall exceed one hundred thousand dollars in value.
- SEC. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes.
  - SEC. 5. This Act shall take effect immediately.

STATE OF NEW YORK,
OFFICE OF THE SECRETARY OF STATE, 88.

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and of the whole of said original law.

Given under my hand and seal of office at the city of Albany, this fourteenth day of April, in the year one thousand eight hundred and sixty-nine.

D. WILLERS, JR., Deputy Secretary of State.

At a meeting of the Trustees, held at the residence of Theodore Roosevelt, Esq., April 8th, 1869, the above charter was unanimously accepted by a majority of the Trustees.



## CONSTITUTION

OF THE

# American Museum of Natural History,

IN THE CITY OF NEW YORK

### ARTICLE I.

This Corporation shall be styled the American Museum of Natural History.

### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

### ARTICLE III.

The Trustees shall meet quarterly on the second Monday of every February, May, August and November, at an hour and place to be designated on at least one week's written notice from the Secretary, and shall annually, at the quarterly

meeting in February, elect the officers and committees for the ensuing year. They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, and Executive Committee, an Auditing Committee and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practical; and shall make a full report at the annual meeting, of the receipts and disbursements of the past year, with such suggestions, as to the financial management of the Museum, as he may deem proper.

### ARTICLE VI.

The Executive Committee shall consist of five, who shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meeting of the Trustees, without the express sanction of the Trustees.

### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

### ARTICLE X.

By-Laws may, from time to time, be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at any meeting of the Trustees, by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

### ARTICLE XI.

The contribution of two thousand five hundred dollars to the funds of the Museum, at one time, shall entitle the person giving the same to be a Patron of the Museum.

The contribution of one thousand dollars, at one time, shall entitle the person giving the same to be a Fellow in Perpetuity.

The contribution of five hundred dollars, at one time, shall entitle the person giving the same to be a Fellow for Life.

Any person may be elected by the Trustees to either of the above degrees, who shall have donated to the Museum books or specimens to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly, under the seal of the Museum. The Trustees may elect Honorary Fellows of the Museum in their discretion.

All persons receiving such degrees and diplomas shall be entitled, at all times, to free admission to the Museum and its Exhibitions, but shall not, by virtue of such degrees or diplomas, become members of the Corporation.

### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

## BY-LAWS.

### Ī.

Patrons giving \$2,500 are each entitled to 10 Complimentary Season Tickets, 1 Subscriber's Ticket and 10 Tickets for a single admission.

Fellows in Perpetuity giving \$1,000 are each entitled to 5 Complimentary Season Tickets, 1 Subscriber's Ticket and 10

Tickets for a single admission.

Fellows for Life giving \$500 are each entitled to 4 Complimentary Season Tickets, 1 Subscriber's Ticket and 10 Tickets for a single admission.

Associate Fellows giving \$250 are each entitled to 3 Complimentary Season Tickets, 1 Subscriber's Ticket and 10 Tickets for a single admission.

Members giving \$100 are each entitled to 2 Complimentary Season Tickets, 1 Subscriber's Ticket and 10 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to 1 Subscriber's Ticket and 10 Complimentary Tickets for a single admission.

### II.

Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

### III.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Fellow in Perpetuity" of the Museum, unless by a unanimous vote of a quorum of the Board—excepting Trustees ex-officio—nor be eligible unless his name shall be presented by the nominating committee at a Regular Quarterly Meeting prior to the meeting at which said election shall take place.

### IV.

No indebtedness shall (except for the current expenses) be incurred by the Trustees of the Museum, nor by any of its committees, officers or employees, unless there are at the time sufficient moneys in the Treasury to pay the same.

## DONATIONS

### 1879.

By bequest of the late DR A. HABEL, through his executor, HUGH D. BROWN. A collection of Geological Specimens, Pottery, several Mummies, etc., all from San Salvador and Peru.

DR. C. C. ABBOTT, Trenton, N. J.

"Second Report on the Paleolithic Implements from the Glacial Drift.'

By the late ALEXANDER STUART, N. Y.

A fine specimen of the Wild Turkey,

Through the SMITHSONIAN INSTITUTION, Washington, D. C.

Journal 1876, 1877 and 1878 Society of Natural History of Zurich. "Verhandlungen der K. K. Geologischen Reichsanstalt 1878;

April and May, 1879.

"Wetterauische Gesellschaft fur die Gesammte Natur-Kunde zu Hanau."-Bericht, December, 1873, bis Jan., 1879.

"Forhandlinger i Videnskabs-Selskabet I., Christiania, 1876, 1877 and 1878.

"Fortegnelse over Separat-Aftryk af Christinia," 1878.

"Bidrag til Kundskaben om Norges Arktiske Fauna"-I. Bloddyr of Dr. G. O. Sars, Christiania, 1878.

"Om Poncelet's Betydning for Geometrien," Christiania, 1878.

"Om Stratifikationens Spor af Dr. Theodore Kjerulf," Christiania, 1877.

"Det Kongelige Norske Videnskabers Selskabs Skrifter i det 19 de Aarhundrede."-Throndhiem, 1878.

"Jahres-Bericht der Naturforschen den Gesellschaft Graubundens." 1876 and 1877.

"Aanteekeningen van Het Provinciaal Utrechtsch Genootschap van Kunsten en Wetenschappen," 1877 and 1878.
"Verslag van Het Provinciaal Utrechtsch Genootschap van

Kunsten en," Wetenschappen," 1877 and 1878.

"Verhandeling over de Verdamping Van Water," etc. Dr. J. E. Enklaar, Utrecht, 1878.

"Prize Essay on Evaporation," by Samuel H. Miller, Utrecht,

Anales del Museo Nacional De Mexico-Tomo I-Entrega 6a.

JOHN WOLFE, N. Y.

1 Stone Axe.

Lot of Fossils and Shells.

CINCINNATI SOCIETY OF NATURAL HISTORY, Cincinnati, Ohio.

Journal—Vol. I, No. 4, January, 1879.

"Vol. II, No. 1, April, 1879.

-Vol. II, No. 2, July, 1879.

PROF. J. W. POWELL, Washington, D. C.

5 Relief Maps, geologically colored, of the Colorado Cañon and Henry Mountains.

Relief Map of the High Plateau Region of Utah.

SMITHSONIAN INSTITUTION, Washington, D. C.

Annual Report, 1877. Vols 1, 2, 3, 13, 14 and 15 of the "Miscellaneous Collections."

JONATHAN THORNE, N. Y.

Stone Axe in its original wooden handle, the only specimen known to have been found in the Eastern States. Found in the bed of a brook at Thornedale, Dutchess Co., N. Y., in 1850.

MRS. L. W. JOHNSON, Hong Kong.
Models of Chinese Woman's Feet.

Chinese Knife and Chop Sticks.

L'ACADEMIE ROYALE DE COPENHAGUE. Bulletin, 1878-September to December. 1879-to May.

DR. OCTAVIUS A. WHITE, N. Y.
Several Fossil Vertebrae, fragments of Bone and Shark Teeth from the phosphate beds of South Carolina.

ROBERT L. STUART, Esq., N. Y. Block of Shell Limestone, from Anastasia Island, Florida. 3 Turtle Shells, polished-Florida. Fine Specimen of "Floating Coral."-Florida.

E. A. WEMPLE, N. Y.

A section of the Trunk of a Fossil Tree (Sigillaria) from the Coal Measures of Scotland.

HON. A. J. LESPINNASSE, U. S. Consul at Merida, Mexico. 7 Skins of Birds, from Mexico. 1 Shark Skin, from Mexico.

W. H. BARTLETT, New Bedford, Mass. Lower Jaw of a Sperm Whale. Head of the Walrus.

GEORGE N. LAWRENCE, Esq., N. Y. Several pamphlets, "completing the West India Catalogues."

LEONARD B. PASSMAN, Elizabeth, N. J. Specimen of "Corydalus Cornutus."

DR. J. T. B. HILLHOUSE.

Spiders' Nests from San Joaquin Valley, California.

D. JACKSON STEWARD, Esq., N. Y. 4 boxes Schoharie-Grit Fossils. Several large specimens from Goshen, N. Y. 2 fine Fossil Trilobites from same locality.

STATE OF INDIANA, through JOHN COLLETT, Esq., Chief of Bureau of Statistics and Geology, Indianapolis.

8th, 9th and 10th Annual Reports of the Geological Survey of Indiana.

ROYAL MUSEUM OF NATURAL HISTORY OF BELGIUM, Brussels. "Description des Ossements Fossiles des Environs D'Anvers." Vols I and II with plates and plates of Vol IV.

PROF. A. S. BICKMORE, N. Y.

Various Reports and Publications of Scientific Societies. Stone Arrow Heads and several lots of Clave and Fossils illustrative of a geological section at Gay Head, Mass.

D. D. WHITLOCK, Bedford, Westchester Co., N. Y. Block of Rose Quartz.

JOHN REINER, Wurtsboro, Sullivan Co., N. Y. Several Stone Arrow Heads, Axes and Ornaments.

HON. CHAS. WOLCOTT BROOKS, San Francisco, Cal.
"Japanese Wrecks, etc., Ethnologically considered."

E. J. FISHER, Sergeant Co. H, 4th U. S. Cavalry. Scalp of Cheyenne Indian.

3 Arrow Heads.

PROF. O. C. MARSH, New Haven, Conn.
Cast of the left Femur of "Atlantosaurus immanus," a Fossil
Reptile from Colorado.

HERBERT H. SMITH.

Calabash Cup and Bird-shaped Bowl from the lower Amazon.

INDIAN MUSEUM, Calcutta.
Annual Report, 1878.

DEPARTMENT OF THE INTERIOR, Washington.

Report of the Commissioner of Education, 1877.

"U. S. Geological Survey, Hayden, 1876.

MUSEUM D'HISTOIRE NATURELLE, Paris.
"Nouvelle Archives," Deuxième Serie, 1878.

ALFRED VAN DEUSEN, Hudson, N. Y.

17 Birds (9 species) from South America.
MRS. JOHN MILHAU, N. Y.

32 Volumes Buffon's Natural History.—Paris, 1827. DR. JOHN J. MILHAU, U. S. A. N. Y.

1

2 Human Skulls.

" Skull-Oregon Flat Head.

" -Peruvian.

" — Separated Bones.

" — Shows the Medullary Membranes, Ear Structure, etc.
" — Shows the Arterial Circulation of Cranium.

Specimen of the Human Spine and Aorta.

" " Hand.—Ligamentary.
" Foot.— "

.. .. .. Knee Joint.
.. Elbow Joint.
.. Clavicle, etc.

1 piece Silver Ore from the Ophir Mine, Nevada. Horns of the Elk.

H. WELD. N. Y.

1 Hornet's Nest.

ROYAL SOCIETY OF TASMANIA.

Report for 1877.

PROF. S. S. HALDEMANN, Chickies, Lancaster Co., Pa. A collection of Indian Implements, Ornaments and Utensils.

ROBERT LOGAN, Esq., N. Y.

Block of Marble from Bay of Fundy.

STATE OF ALABAMA, through EUGENE A. SMITH, State Geologist.

Report of Progress of the Geological Survey of Alabama for 1877
and 1873.

UNIVERSITY OF TOKIO, Japan.

" Memoir on the Shell Mounds of Omori," by Edward S. Morse.

THOMAS CLENEAY, Cincinnati, O.

443 specimens of Stone Implements found in the Ohio River Valley.

E. DOREMUS, Esq., Rondout, N. Y.

10 specimens of Fossil Coral from the Coralline Limestone near Rondout.

C. T. HATHAWAY, N. Y. 3 Fossil Shells from the Miocene Formation at Yorktown, Va.

PROF. W. B. DWIGHT, Vassar College.

6 Fossils (Corals and Shells) from the Trenton and Calciferous Rocks near Newburg, Pleasant Valley, and Rochdale, N. Y.

MRS. M. C. VERMEULE, Staten Island.

Fossil Leaf from the Miocene of Europe.

SIDNEY DILLON, Esq., N. Y.

A Fossil Turtle from the Miocene of Colorado, and some Concretions from the same State.

## EXCHANGES

PROF. A. G. WETHERBY, Cincinnati, O.

60 specimens of lower Carboniferous Fossils in exchange for names.

BERLIN H. WRIGHT, Penn Yan, N. V.

136 species of Fossils from the Hamilton Group near Penn Yan in exchange for names.

SMITHSONIAN INSTITUTION, Washington, D. C.

104 specimens (89 species) of Birds as part of an exchange of specimens from the Museum collection.

PROFESSORS McBRIDE & CALVIN of the Iowa University, Iowa City, Iowa. 38 species of Fossils in exchange for specimens from the Hall

collection.

J. M. CLARK, Canandaigua, N. Y.

51 specimens of Hamilton Group Fossils in exchange for names.



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# In Memoriam.

THE Museum has been called to mourn the loss of one of its original founders and First Vice-President,

#### WILLIAM A. HAINES.

who departed this life on the 5th day of March, 1880, in the fifty-eighth year of his age.

The following resolutions were unanimously adopted at a special meeting of the Board of Trustees:

RESOLVED. That this Board has received the tidings of the sudden death of our Vice-President, Mr. W. A. HAINES, with profound sorrow,

Not only was Mr. Haines one of the number from whom this Institution received its first impulse, but as Chairman of its Executive Committee, at the expense of much valuable time, he continued the supervision of its interests with unabated zeal.

His natural tastes, no doubt, exercised a strong influence over Mr. Haines in his early efforts for the establishment of the Museum.

He was deeply interested in some of the branches of the Natural Sciences. and in one specialty, as a collector and exact student, in the whole range of the subject, he had probably no superior among us.

His collection remains in its fullness and beauty, a monument of his

youthful enthusiasm, which the steady and engrossing pressure of business

life never extinguished.

In his relations to this Board Mr. Haines brought to the discharge of his duties a trained capacity for business; but it is not to the memory of the valued and efficient officer, whose tastes and acquirements brought him into entire harmony as well as active co-operation with its aims, and inspired large and hopeful views of its future, that we now bring our united tribute, so much as to that of the man himself. His death leaves a vacancy in the hearts of those among us who have known him longest and best.

As the useful and upright citizen we can measure him calmly at his just value, but as the friend and intimate, in his considerateness and equipoise, his sympathy and warmth, and in the whole moulding and outcome of the man, there was that which drew us to him, not only with sincere esteem,

but with strong fraternal regard.

A sense of private and personal loss may not obtrude conspicuously in the official tribute which we pay so sadly to the memory of our deceased Vice-President; but while we feel called upon to recognize in him, in a rare degree, the possession of those valuable qualities which must enter freely into the undertakings of our daily life, in their appropriate direction and successful issue, we should be untrue to what is best in ourselves and most to be prized in a just estimate of the character of men, did we confine our view to these alone.

He was not only the sound and judicious adviser and the energetic man of business, but much more. There was about him a quality of refinement united to singular purity, and a temper in which decision and sweetness

remarkably combined.

These made up, largely, that characteristic individuality which touched the deeper springs within us, so that while as a Board we record our testimony of the loss which we have sustained in him as one of our most prominent and active officers, we also deeply mourn the friend and brother whom we shall see no more.

H-51

The Thirteenth

# ANNUAL REPORT

OF THE

# MERICAN MUSEUM OF NATURAL HISTORY,

CENTRAL PARK, NEW YORK,

77th Street and 8th Ave.

FEBRUARY 15th, 1882.

NEW YORK.

PRESS OF MITCHELL A. C. LEVY, Nos. 90 & 92 White Street.

1882.

#### THE THIRTEENTH

# ANNUAL REPORT

OF THE

# AMERICAN MUSEUM OF NATURAL HISTORY

CENTRAL PARK, NEW YORK.

77TH ST. AND 8TH AVE.

FEBRUARY 15th. 1882.

# American Museum of Natural History.

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# 13th Annual Beport.

1881.

THE Trustees of the American Museum of Natural History have the pleasure of presenting this, their Thirteenth Annual Report, to the Patrons, Fellows, and Members of the Museum.

In 1875, the Commissioners of the Department of Public Parks adopted plans prepared by Mr. Frederick Law Olmsted for drives and footpaths from Central Park to our Square at Eighth Avenue and 77th and 81st Streets, but for want of funds no progress was made with this important work. The Trustees therefore were obliged to assume the onerous task of asking the Legislature to provide the means for completing this necessary improvement. The Park Department unanimously approved of our proposition, and we received important and hearty co-operation from the Mayor and Comptroller. The bill resulting from our conferences with these authorities of the City, was promptly passed by the Legislature and became law, and the Department, at our request, have publicly advertised and let the work which the contracts require shall be completed by next June.

The improvements upon our Square have been making rapid progress and have been the subject of frequent commendation by the visitors to our building and our own citizens who are interested in the completion and perfection of our system of public parks.

The rapid growth of the Economic Department has been the principal feature in the increase of our collections during the past year. The woods referred to in our last report as being in the course of collection by a corps of experienced botanists under the direction of Prof. Charles S. Sargent, have been nearly all received. Our new building being already filled to overflowing, the Department has given us the upper story of the Arsenal for a temporary place where these specimens may be exhibited at once on account of their importance to architects and builders, and the artizan and laboring classes of our citizens. The work of preparing them for exhibition is begun and they will be displayed to the public during the coming autumn.

The specimens of Building and Ornamental Stones forming the other portion of this Economic Department are now gathered at Washington and will be ready for exhibition at the same time. Nothing but the stern necessity of want of space would warrant us in placing such costly collections where they may be destroyed by fire in a few hours, and this illustrates the imperative need that measures be immediately taken for securing the erection by the City of another section of our fire-proof edifice.

The improvements upon the collections began last year have been vigorously carried on during the past twelve months. The Mammals which were purchased in various places, and were mounted on many different kinds of stands, have all been transferred to pedestals of polished cherry and now present a uniform and elegant appearance.

The Birds have been mostly transferred from the

white stands on which they were mounted, in Europe, to stands of polished Mahogany, and this improvement, which is still in progress, will be completed during the present year. Partitions have been placed in the cases on the east side of the Main Hall and new labels attached to a part of the Birds of North America. One hundred species, one hundred and twenty-five specimens of skins have been received from the U. S. National Museum as a portion of the exchange due us for specimens we have forwarded in previous years. A guide to the Collection of Mammals and one to that of Birds have been nearly completed.

In the Ethnological Department there has been received a very large and valuable collection illustrating the ethnology of British Columbia, gathered by Dr. J. W. Powell, Superintendent of Indian Affairs in that part of the Dominion of Canada. This collection has been made at the expense of Mr. H. R. Bishop of this city, who has presented it to the Museum. A similar series of specimens from the West Coast of Africa, gathered by Mr. O. Jackson and other agents of Messrs. Yates & Porterfield of this city, has been presented by Mr. C. P. Huntington.

Mr. Robert L. Stuart has purchased and presented to the Museum the remaining undivided third part of the collection made by Col. Chas. C. Jones Jr., illustrating the Antiquities of our Southern Indians.

In the Geological Hall, the cases on the east side have been completed and the preliminary arrangement and labelling of specimens in them have been finished. Eight of the table cases formerly at the Arsenal have been made into sixteen shorter ones and placed in the alcoves, and are now occupied by the fossils formerly

in the cases in the centre of the hall, while in the latter have been exhibited the series of Minerals known as the Bailey Collection. These specimens have been supplied with labels on which is being added the localities and names of the species in writing. Complete labels have also been placed in several of the alcove cases occupied by fossils. The skeletons of fossil birds from New Zealand, which had become somewhat impaired by the dry atmosphere of the rooms, have been saturated with glue and remounted. Early in the year a short guide to the Geological Hall was prepared and printed, and is sold in the building.

Many fine specimens of plants of the Devonian Age have been obtained by exchange from Principal Dawson, of McGill College, Canada, for the eighth series of duplicates of the Hall Collection, and are displayed in the alcove cases,

The relief-map of New Hampshire, purchased from Prof. C. H. Hitchcock has been encased and partially colored geologically. A friend of the Museum has authorized us to complete and letter it at his expense,

which work will soon be undertaken.

The part of our collection, which needs to be rearranged and newly labeled, and to be largely developed by additions of lately discovered species is the Department of Conchology. The Museum already possesses in the valuable Wolfe gift, made in memory of our first President, an admirable nucleus for a complete collection in this, one of the most popular branches of natural history.

An Herbarium of North American Plants, preserved with remarkable taste and care, has been received from the late Stephen Whitney Phænix, and forms the beginning of a new Department of special interest to those scientists devoting themselves to the study of Botany

The Brevoort Library on Fishes and other branches of Zoology, presented by Mr. Robert L. Stuart, and the Jay Library of conchological works, presented by Miss C. L. Wolfe, have been catalogued, and arranged so that any volume or pamphlet can be referred to without a moment's delay, and a librarian is now employed who has continual supervision over our books and those of the New York Academy of Sciences. These two series of volumes with moderate additions every year would soon become one of the best libraries in our land for those naturalists pursuing original scientific researches.

The Museum has commenced the issuing of bulletins, of which the first has already been published: containing three original papers on scientific subjects.

The lectures given by the Superintendent in the Department of Public Instruction to the Principals and Teachers of our public schools, were so constantly attended and in all respects so successful that the Board of Education addressed the Trustees a letter expressing their thanks for the instruction given, and asking if a larger room could not be provided where at least fifty teachers could be accommodated. Regarding this as the most direct means of making a return to the city for the liberal grants it has made for the erection and partial maintenance of their building, the Trustees, at their own expense have had work-rooms B and C made into a small lecture hall, and a course of lectures is now being delivered by the Superintendent upon Physical Geography, to be followed by another course on Zoology. The interest of the teachers in these lectures, as manifested by their constant attendance during the stormiest weather, makes this to be one of the best means the Institution can adopt in order to reach and benefit every family in our citý which has a child in the public schools, and the Board of Education have indicated their estimation of the importance of this work in the following circular to the principals and teachers:

HALL OF THE BOARD OF EDUCATION, City Superintendent's Office.

November 11th, 1881.

#### TO THE PRINCIPALS AND TRACHERS:

In accordance with a resolution of the Board of Education, and upon the recommendation of the Committee on Course of Study and School Books, the undersigned hereby directs the attention of all teachers to the fact that the American Museum of Natural History, possessing a large and costly collection of specimens, illustrative and useful in many departments of science, is now complete, and open to the general public for visitation and inspection. The Trustees of this Museum, through the President of their Board, Mr. Morris K. Jesup, have specially extended an invitation to the teachers and scholars of the public schools, in which invitation the desire is expressed that the Museum may be utilized in the service of public education.

The undersigned therefore suggests and advises that the means of assistance in prosecuting the study of natural science, thus courteously and definitely placed at the disposal of the schools, be rendered as available for the purpose mentioned and made as practically useful as circumstances will permit.

By frequent reference to the existence of the Museum and its many treasures in the Department of Natural History, the Principals and Teachers could and should awaken the interest of the children, and by precept and example, could induce and encourage them to take advantage of the opportunity thus presented. The fact, that teachers from the several schools have traveled great distances in inclement weather to attend a course of Saturday lectures at the Museum, and were amply rewarded for their time and effort, is proof of the Museum's usefulness from an educational point of view; and an announcement of what had been done and is going to be done by teachers, would necessarily be productive of great effect upon the minds of the pupils. The elements of Natural Science, taught orally in our schools, are best presented by those who have an objective acquaintance with that about which they speak and lecture, and the pupil who can pass from the world of books and oral statements into

actual contact with the very things of which the books and statements give only imperfect pictures, is in possession of advantages which it would be inexcusable to neglect.

Teachers and Pupils should, therefore, on Saturdays and holidays, devote some portion of their time to the Museum and its collections.

Good instruction makes discipline easy. A visit by the meritorious pupils of the class, in company with the teacher, as a reward for satisfactory service during the week or month, would not only increase the pupil's knowledge, but also constitute an effective agency in securing order, interest and attention in the class room, and would thus make the teacher's labor less arduous and exhausting.

The Museum of Natural History is in Seventy-eighth street, between Eighth and Ninth avenues. It opens every day, except Sunday, at nine o'clock A.M., and closes half an hour before sunset.

Very respectfully,

JOHN JASPER,

City Superintendent.

The institution has now become of such importance in promoting public education that it should at once be placed on a permanent basis. The sum received from the city this year, after providing for the necessary work on the building, has been but little more than half of the amount required for merely maintaining the collections already acquired. This large deficiency as well as all sums for the purchase of new specimens has been given by the Trustees and a few of our citizens. To enable the Museum to continue its present important work and to extend its labors into new fields of usefulness, there is now needed an Endowment Fund, of which the interest only would be expended. The usefulness of the Institution is now so fully established and so generally recognized that we confidently appeal for assistance in making up this Fund to all the public-spirited citizens of our metropolis.

# Dr. THE AMERICAN MUSEUM OF NATURAL HISTORY in acc't with J. PIERPONT MORGAN, Treas. Cr.

1881.	1881.
Labor   Labo	January 1st. By Balance from last account  By Gash from Morrie K. Jesup.  By Gash from Morrie K. Jesup.  Percy R. Pyne  Robert L. Start.  1,000 60  A Vanderbill  F. W. Stewens  Propert C. Vanderbill  F. W. Stewens  Robert Colgane  D. W. Ackinchoss  Botto  H. W. Droxelt  C. W. Droxelt  D. W. Droxelt  D. W. Droxelt  D. Harriman  D
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\$86,139 15   EXECUT. PVNE.   Stamined and approved   CHARLY E. ANIER.   Anditing Committee.   OLIVER HARRINAN.   Anditing Committee.	\$36199 IS [E. & O. E.] NEW YORK, February 19th, 1982.  I PIERPONT MODOLE T.

## CONSTITUTION

OF THE

American Museum of Natural History,

#### IN THE CITY OF NEW YORK

#### ARTICLE I.

This Corporation shall be styled the American Museum of Natural History.

#### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

#### ARTICLE III.

The Trustees shall meet quarterly on the second Monday of every February, May, August and November, at an hour and place to be designated on at least one week's written notice from the Secretary, and shall annually, at the quarterly meeting in February, elect the officers and committees for the ensuing year. They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees, or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof at least three days before the meeting is held.

#### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, and Executive Committee, an Auditing Committee and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons, having a majority of the votes cast, shall be deemed duly elected.

#### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all the meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practical; and shall make a full report at the annual meeting, of the receipts and disbursements of the past year, with such suggestions, as to the financial management of the Museum, as he may deem proper.

#### ARTICLE VI.

The Executive Committee shall consist of seven, of whom the President and Secretary shall be two. They shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meeting of the Trustees, without the express sanction of the Trustees.

#### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

#### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

#### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

#### ARTICLE X.

By-Laws may, from time to time, be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at any meeting of the Trustees, by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

#### ARTICLE XI.

The contribution of two thousand five hundred dollars to the funds of the Museum, at one time, shall entitle the person giving the same to be a patron of the Museum.

The contribution of one thousand dollars, at one time, shall entitle the person giving the same to be a Fellow in Perpetuity.

The contribution of five hundred dollars, at one time, shall entitle the person giving the same to be a Fellow for Life.

Any person may be elected by the Trustees to either of the above degrees, who shall have donated to the Museum books or specimens to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly, under the seal of the Museum. The Trustees may elect Honorary Fellows of the Museum in their discretion.

All persons receiving such degrees and diplomas shall be entitled, at all times, to free admission to the Museum and its Exhibitions, but shall not, by virtue of such degrees or diplomas, become members of the Corporation.

#### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

## BY-LAWS.

#### I.

Patrons giving \$2,500 are each entitled to 10 Complimentary Season Tickets, 1 Subscriber's Ticket, and 10 Tickets for a single admission.

Fellows in Perpetuity giving \$1,000 are each entitled to 5 Complimentary Season Tickets, 1 Subscriber's Ticket and 10 Tickets for a single admission.

Fellows for Life giving \$500 are each entitled to 4 Complimentary Season Tickets, 1 Subscriber's Ticket and 10 Tickets for a single admission.

Associate Fellows giving \$250 are each entitled to 3 Complimentary Season Tickets, 1 Subscriber's Ticket and 10 Tickets for a single admission.

Members giving \$100 are each entitled to 2 Complimentary Season Tickets, 1 Subscriber's Ticket and 10 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to 1 Subscriber's Ticket and 10 Complimentary Tickets for a single admission.

#### II.

Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

#### III.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Fellow in Perpetuity" of the Museum, unless by a unanimous vote of a quorum of the Board — excepting Trustees ex-officio—nor be eligible unless

his name shall be presented by the nominating committee at a Regular Quarterly Meeting prior to the meeting at which said election shall take place.

#### IV.

No indebtedness shall (except for the current expenses) be incurred by the Trustees of the Museum, nor by any of its committees, officers or employees, unless there are at the time sufficient moneys in the Treasury to pay the same.

## DONATIONS

#### 1881.

S. T. HAMMOND, Springfield, Mass. 1 piece of Rose Quartz.

WM. H. BARTLETT, New Bedford, Mass. 1 Arctic Whale Bone.

DER HISTORISCHE VEREIN FUR STEIERMARK, Graz. Mittheilungen, XXVIII, & XXIX. Heft. Beitrage, 17. Jahrgang.

Festschrift zur Erinnerung an die Feier, etc. NATURWISSENSCHAFTLICHE VEREIN FUR STEIER-DER

MARK, Graz. Mittheilungen, 1879 & 1880. "Das Chemische Institut."

HON. FRANCIS KERNAN. Bulletin No. 5, publications of the U.S. Entomological Commission —"The Chinch-Bug."

HON. CLARENCE KING, Director of the U. S. Geological Survey, Washington. 1st Annual Report-1880.

MRS. S. S. HALDEMANN, Chickies, Pa.

A collection of Ethnological Specimens from British Guiana. A series of Stone Implements from Pennsylvania, etc.

FREE PUBLIC LIBRARY, Liverpool, England. 28th Annual Report.

DEPARTMENT OF PUBLIC WORKS, Chicago, Ills. 3d Annual Report-1878

L'ACADEMIE ROYALE DE COPENHAGUE. Bulletin 1880-No. 2.

BUFFALO SOCIETY OF NATURAL SCIENCES, Buffalo, N. Y. Bulletin, Vol. III, No. 5.

JED. HOTCHKISS, Editor and Publisher, Staunton, Virginia.
"THE VIRGINIAS," a Mining and Scientific Journal — Vol. I, 1880.

ABIEL ABBOT, New York.

1 Ocean Fish. 1 Whale's Tooth.

1 Specimen Branch Coral.

MINNESOTA HISTORICAL SOCIETY, St. Paul. Biennial Report, 1881.

ROBERT L. STUART, Esq., N. Y.
1 Volume "Conchologia Indica."

11 pieces-Fragments of Roman Pottery.

DEPARTMENT OF THE INTERIOR, Washington, D.C.

Report of the Commissioner of Education, 1878.

"Library Aids."

Bulletins 1 and 2, Volume 6.—Hayden.

" 6-Entomological Commission.
Resources of Alaska,—Petroff.
First Annual Report, U.S. Geological Survey.—King.

PROF. GEO. H. COOK, State Geologist of New Jersey. Annual Report, 1880.

LUCIEN CARR, (the author.)

"Notes on the Crania of New England Indians."

"Observations on Crania."

SMITHSONIAN INSTITUTION, Washington, D.C. Report for 1879.

"Contributions to Knowledge," Vol. 23.

"Miscellaneous Collections," Vols. 18, 19, 20, 21
"The Silk Goods of America," Wyckoff.

2 specimens 1 species of fossils.

Through the SMITHSONIAN INSTITUTION, Washington, D.C. Museo National de Mexico.

Anales, Tomo II. Entréga 3ª, 4ª, 5ª. K. K. Geologischen Reichsanstalt, Wien.

Verhandlungen, Jahrgang 1880. The Norwegian North-Atlantic Expedition, 1876-78.

Fishes, by R. Collett. Zoology.

III. Gephyrea. 2. Chemistry. I. II. III. by H. Tornoe.

Royal Society of Tasmania.

Report and Proceedings for 1879.

L'Institute Royale Grand-Ducal de Luxembourg. Publications - Tome XVIII, 1881.

Naturforschenden Gesellschaft Graubundens, Chur Jahres-Bericht 1877-78-1878-79 und 1879-80.

Naturforschenden Gesellschaft, Zurich. Vierteljahrsschrift 1879 und 1880.

London Society of Arts, England. Journal 1879-80. Vol. 28.

Der Offenbacher Verein für Naturkunde. Bericht-19th, 20th and 21st,-1877-80.

ASTOR LIBRARY, New York.

32d Annual Report, 1880.

ANDREW E. DOUGLASS, Esq., N. Y.

21 Crania of Indians, West Coast of Florida.

F. M. ROGERS.

1 fine grooved Indian Axe, Bay Shore, L. L.

JOHN MICHELS, Esq., N. Y.
1 piece of Teak from ship "Royal George."

GEOLOGICAL SURVEY OF ALABAMA, through Eugene A. Smith, State Geologist, Montgomery. Report of Progress for 1879 and 1880.

W. W. JEFFERIS, West Chester, Pa.

14 Mineralogical specimens.

C. D. WALCOTT, N. Y.

1 Mineralogical specimen.

J. W. DEEMS, Brooklyn.

3 specimens Minerals.

HENRY W. BELKNAP, Hartford, Conn. 16 specimens of South American and other Birds.

PEABODY MUSEUM, Cambridge, Mass. 14th Annual Report.

R. D. LACOE, Pittston, Pa.

"Coal Flora of Pennsylvania," by Lesquereux.

CAPT. JOHN M. DOW, N. Y.

A Life-size Stone Image with arms akimbo, unearthed in a trench at the foot of the Volcano of Turraalba, Costa Rica, presented to Captain Dow by the Governor of Cartago.

G. A. BOARDMAN, Calais, Me.

I specimen of the Young of the Petrel. Gullimot.

OESTERREICHISCHER INGENIEUR & ARCHITEKTEN VEREIN. Wien.

II. Bericht des Hydrotechnischen Comités, etc., etc." 1881.

MINISTERIO DE FOMENTO, Mexico. Revista, Cientifica Mexicana, Tomo 1. Num. 16.

Revista Mensual Climatoligica Agosto de 1881. Boletin del - Tomo VI, Num. 131.

- Tomo V, 1881. Anales de -

INDIAN MUSEUM, Calcutta.

Annual Report and Lists of Accessions, April '80 to March '81

SIEBENBURGISCHEN VEREINS FUR NATURWISSENSCHAFT in Hermannstadt. Verhandlungen und Mittheilungen, XXXI, Jahrgang.

NEW YORK ACADEMY OF SCIENCES, N. Y.

Transactions 1881-82.

MUSEUM OF COMPARATIVE ZOOLOGY, Cambridge, Mass. Through Prof. A. Agassiz, Curator. Annual Report 1880-1,

REV. S. D. PEET, Chicago, Ills.

The Am. Antiquarian and Oriental Journal, Vol. IV. No. 1.

JOHN J. NATHANS, N. Y., through Mr. W. A. Conkling, N. Y. A large Richly Ornamented Vase from Mexico.

P. R. SLEIGHT, Lagrange, N. Y. A series of Indian Bones.

WM. DELL HARTMAN, M.D., (the author) Westchester, Pa.
"Observations on the Species of the Genus Partula."

PROF. JAMES HALL, (the author) Albany, N. Y.
"Corals & Bryozoans of the Lower Helderberg Group." '80.

"Bryozoans of the Upper Helderberg Group." 1881.

UNIVERSITY OF TOKIO, JAPAN. Through Hon. H. Kato, President of the Department of Law, Science and Literature.
"Geology of the Environs of Tokio," by Dr. D. Brauns. '81.
"Measurements of the Force of Gravity," by Dr. T. C. Mendenhall .- 1881.

BERNARD QUARITCH, London, England. Catalogues for 1881.

C. P. HUNTINGTON, Esq., N. Y.

A collection of specimens illustrating the Ethnology of the West Coast of Africa and Zululand, and a Manuscript Map of same.

H. R. BISHOP, Esq., N. Y.

A collection of specimens illustrating the Ethnology of British Columbia.

GEOLOGICAL SURVEY OF CANADA.

7 specimens, 4 species fossils. F. O. FRENCH Esq., N. Y.

Casing and painting Geological Map of New Hampshire.

PROF. O. C. MARSH, New Haven, Conn. Casts of Bones of Fossil Toothed Birds, 26 pieces.

SANDERSON SMITH, Esq., Staten Island.
85 specimens, 33 species Cretaceous and Tertiary Fossils from

England.
PROF. J. W. DAWSON, Montreal, Can.
295 specimens, 30 species. Post Pliocene Fossils, Canada.
12 specimens, 7 species Coal-plants.

4 "2 species Graptolites.
M. K. JESUP, Eso. N. Y.

M. K. JESUP, Esq., N. Y.
A large and beautiful collection of Fossils and Minerals comprising many of great value. Fossils 1062. Minerals 185.

F. A. CALKINS, Esq., N. Y. Several Blocks of Cemented Gravel, Peekskill.

JOHN WILSON, Esq., N. Y.

12 specimens Cretaceous Fossils from Colorado.

PROF. W. B. DWIGHT, Vassar College.
6 slabs of Trenton Limestone, with Fossils,

PROF JULES MARCOU, Cambridge, Mass.

10 Trilobites and other Primordial Fossils.

MADISON UNIVERSITY, Hamilton, N. Y.

71 specimens Fossils in exchange for labeling done for them by curator.

## PATRONS,

#### By the Payment of Twenty-five Hundred Dollars.

ROBERT L. STUART, \$24,953	JOHN D. WOLFE* \$5,000
M155 C. L. WOLFE 10,500	ABRAM S. HEWITT 4,250
ROBERT COLGATE 10,375	C. VANDERBILT 4,100
FREDERIC W. STEVENS 7,950	J. PIERPONT MORGAN. 3,750
MORRIS K. JESUP 7,850	CHARLES LANIER . 8,750
PERCY R. PYNE 7,640	THEODORE ROOSEVELT* 3,300
JAMES M. CONSTABLE . 7,450	D. JACKSON STEWARD 3,250
JOHN B. TREVOR 7,250	EDWARD CLARK 3,000
ADRIAN ISELIN 7,200	A. G. PHELPS DODGE 2,500
HUGH AUCHINCLOSS 5,800	JAMES BROWN* 2,500
JOSEPH W. DREXEL 5,550	A. T. STEWART* 2,500
WILLIAM E. DODGE, JR 5,200	S. WHITNEY PHŒNIX* 2,500
JAMES M. CONSTABLE       7,450         JOHN B. TREVOR       7,250         ADRIAN ISELIN       7,200         HUGH AUCHINCLOSS       5,800         JOSEPH W. DREXEL       5,550	D. JACKSON STEWARD 8,250 EDWARD CLARK 3,000 A. G. PHELPS DODGE 2,500 JAMES BROWN* 2,500 A. T. STEWART* 2,500

# FELLOWS IN PERPETUITY, By the Payment of One Thousand Dollars.

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D. N. BARNEY* \$1,000
I. N. PHELPS 1,000
JAMES STOKES* 1,000
D WILLIS JAMES 1,000
EDWARD MATTHEWS 1,000
WILLIAM T. GARNER* 1,000
JAMES LENOX* 1 000
A. H. BARNEY 1,000
COLEMAN T. ROBINSON* 1,000
BENJAMIN B. SHERMAN 1,000
DAVID J. ELY* 1,000
JONAS G. CLARK 1,000
JOHN ANDERSON* 1,000
JOHN JACOB ASTOR 1,000
CATHÉRINE L. SPENCER* 1,000
JAS. GORDON BENNETT, 1,000
CYRUS W. FIELD 1,000
ALEX. H. BROWN, M.P 1,000
J. A. BOSTWICK 1,000
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# FELLOWS FOR LIFE, By the Payment of Five Hundred Dollars.

13g the Lagitette of 1	TO LA TOTAL POLICE POLICE P.
SAMUEL WILLETTS\$800	A. A. LOW \$500
ROBERT GORDON 700	RICHARD MORTIMER, JR. 500
HOWARD POTTER 650	THOS. A. VYSE, JR 500
C. V. S ROOSEVELT 600	GEORGE G. GRAY* 500
CHARLES W. GRISWOLD., 500	GOUVERNEUR KEMBLE*, 500
SAMUEL F. B MORSE* 500	SAMUEL HAWK 500
RUTHERF'D STUYVESANT 500	JOHN SNEDEN 500
MEREDITH HOWLAND 500	GEORGE BLISS 500
MARSHALL O. ROBERTS*, 500	R. A WITTHAUS, M. D 500
JOHN ALSTYNE* 500	THOMAS BARRON* 500
O B. POTTER 500	GEORGE W. CASS 500
HON. LEVI P MORTON 500	H. M. SCHIEFFELIN, 500
HANSON K. CORNING* 500	FREDERICK A. LIBBEY 500
STEWART BROWN* 500	ROB'T LENOX KENNEDY, 500
ABRAM DUBOIS 500	F. R. HALSEY 500
TIFFANY & CO 500	CYRUS W. FIELD, Jan. 500
LUCIUS TUCKERMAN 500	Hon. FREDERICK BILLINGS 500
ALERED B DARLING 500	

## ASSOCIATE FELLOWS.

#### By the Payment of Two Hundred and Fifty Dollars.

JOHN P. HAINES	JAMES W. PINCHOT 250
HENRY PARISH 250 HENRY L BARBEY 250	
THEODORE W. RILEY* 250	STEPHEN R. LESHER 250
ROBERT B. MINTURN 250 C. N. POTTER* 250	
WM. L COGSWELL* 250	EFFINGHAM TOWNSEND . 250
JOHN K. MYERS* 250	ANDREW H. GREEN 250
HENRY CHAUNCEY 250	

#### MEMBERS.

#### By the Payment of One Hundred Dollars.

By the Payment of One Hunarea Douars.		
WILSON G. HUNT \$200	JAMES R. WOOD, M.D \$100	
PETER C. CORNELL 200	WM. M. KINGSLAND 100	
CONSTANCE B ANDREWS 100	WM. DENNISTOUN* 100	
FORDYCE BARKER, M D 100	IAMES LOW 100	
GEORGE E. BELCHER, M.D. 100	TOWNSEND HARRIS* 100	
ADDISON BROWN 100	ROWLAND G. MITCHELL, JR. 100	
JOHN B. CORNELL 100	ROBERT G. REMSEN 100	
A. DALRYMPLE 100	PROF. E A FOOTE 100	
WM. BUTLER DUNCAN 100	JAMES KNIGHT, M.D 100	
LOUIS ELSBERG, M.D 100	E. OELBERMANN 100	
JAMES FRASER 100	R. G. DUN 100	
WILLIAM H. GEBHARD 100	A. JACOBI. M.D 100	
JOHN F. GRAY, M.D 100	JOHN PONDIR 100	
JOHN A. HADDEN 100	Miss E. S. HAINES 100	
BENJAMIN HART 100	MRS. W. A. HAINES 100	
C. P. HUNTINGTON 100	ALEX. HADDEN, M D 100	
CHAS. H KALBFLEISCH 100	JAS. MUHLENBERG BAILEY 100	
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THE FOURTEENTH

# ANNUAL REPORT

OF THE

# American Museum of Natural History

(CENTRAL PARK, NEW YORK,)

77th Street and 8th Avenue.

MAY 1st. A. D. 1883.

PRINTED FOR THE MUSEUM.

WM. C. MARTIN, PRINTER, No. 111 JOHN STRZET.

1883.

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1883.

# American Museum of Natural History.

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### FOURTEENTH ANNUAL REPORT.

### 1882.

The Trustees of the American Museum of Natural History herewith present their Fourteenth Annual Report, to the Patrons, Fellows and Members of the Museum.

The improvements proposed by the plans prepared at the expense of the Trustees, and adopted by the Department of Public Parks, for connecting Manhattan Square with Central Park at 77th and 81st Streets, have been completed, and our building with its costly and interesting collections is now accessible to our citizens visiting the Park in carriages or on foot. The roadway connecting Eighth Avenue at 81st Street with the Westerly Drive has been finished, and the roadway and stone bridge at 77th Street were opened last Thanksgiving Day; and the very marked increase in the number of our visitors proves the importance of this accessibility in the estimation of the public. These improvements have been completed for considerably less than the appropriation provided, so that it is hoped ample means remain for properly improving the area of the Park between the two entrances and the Eighth Avenue and the Westerly Drive. Plans have been matured for the completion of the system of walks which these roadways render necessary. Signs have been prepared for guiding visitors by the most direct paths to the Museum, and during the coming season it is expected this whole portion of the Park will be finished in the same complete manner as other parts of our public pleasure ground.

On Manhattan Square all the filling has been brought in, and the surface of the borders and the southern half has been covered with mould, and partly planted. The work is now so far advanced that it will be completed during the coming summer, with the sum already appropriated by the Board of Apportionment.

The purpose of the Trustees to add, if possible, every year new and instructive specimens to the Museum, but more especially to

complete the collections already begun, has led to making contracts with Prof. H. A. Ward, of Rochester, for all the mammals of North America, as far south as the Rio Grande between Texas and Mexico, as is necessary to supplement our present collection and make it complete in every respect. One consignment of these specimens has been received, which includes a remarkably fine group of walruses from Alaska. A second contract made with Prof. Ward is to provide the Museum with specimens of all the monkeys of the world, and during the year the Museum will receive from both these contracts large and valuable additions.

All the mammals on exhibition have been fully and satisfactorily labeled, and the specimens to arrive will be provided with labels as rapidly as they are placed in the cases.

"Visitors' Guides," with photographic views of the different Halls, have just been issued.

The rapid growth of the Economic Department, particularly that portion illustrating the forestry of the United States, has necessitated the construction of a large glass case, in two sections, extending along the middle of the Lower Hall; and the Wolfe collection of shells, now on that floor, will be moved to the Upper Hall where they will be better and more satisfactorily placed, in connection with their allied fossil forms.

The grand effect of our exhibition halls may be somewhat impaired by an overcrowding of cases upon their floors when all the additions to our collections are received, but it will illustrate the imperative necessity for an immediate application to the City for the erection of another wing, of the same form and dimensions as the one now occupied. If such an additional structure were begun at once, it is thought more specimens would be gathered, at the present rate of growth, by the time such building would be completed, than it could properly display.

In the collection of Birds, in the Main Hall, the transferring from stands of various forms and materials to a uniform series of mahogany has been completed, and the Birds of North America have been labeled.

In the Gallery, the costly dresses, implements, carvings and other specimens illustrating the ethnology of British Columbia, which were gathered during 1881, by Dr. J. W. Powell, Superin-

tendent of Indian Affairs in that province, at the expense of Mr. H. R. Bishop, have been placed on exhibition. Another supplementary series, collected during the past summer, has been shipped from San Francisco, and a great war canoe, sixty-two and a half feet long and over eight feet beam, is now on its way on a steamer of the Pacific Mail Company, who, with the Panama Railroad Company, are bringing it to us without expense.

In the Geological Hall the labeling of the collections has been steadily progressing. The Geological sections illustrated by specimens of rock from New Hampshire and Vermont, purchased from Prof. C. H. Hitchcock, have been partially placed on exhibition in case S, and the relief map of New Hampshire has been finished by means generously given by a friend of the institution.

In the Mineralogical Department the labeling has been progressing satisfactorily.

In the Lecture Department the instruction given by the Superintendent has proved very attractive; the Lecture Hall at times has been overcrowded and made thereby uncomfortable. A course of twenty lectures upon Zoölogy was begun last fall, ten to be delivered last autumn and ten this spring. The last series began with an attendance of 101 and ended with 154.

The great importance and value of this instruction is shown by the following extract from the Report of the City Superintendent of Public Schools to the Board of Education:

## "City Supt's Office, BOARD OF EDUCATION, No. 146 Grand Street,

New York, February 12th, 1883.

My DEAR SIR:

The following is an extract from my annual report for the year 1882, which will soon be ready for publication:

"It seems proper to state that the lectures delivered by Prof. Albert S. Bickmore, at the Museum of Natural History, have been productive of very good results in this department of study. These lectures, introduced about three years ago, as an experiment, have so grown in attractiveness and utility, that the class of thirty-five teachers has become one hundred and fifty, representing every Grammar Department

in the system, and irregularity in attendance has almost disappeared. The Museum of Natural History thus, through the teachers, reaches the pupils of our schools, and through the latter making itself felt in in nearly every household of our great city, is demonstrating its usefulness to the community at large. To Morris K. Jesup, Esq., Chairman of the Committee in charge of the Museum, and to the other members of the Committee, great credit is due for the commendable public spirit which they have displayed in this matter from the very beginning, and to Prof. Bickmore, who has so ably interpreted and carried out the Committee's views, the thanks of the teachers are due for the patience, ability and kindness he has shown."

Very truly,

JOHN JASPER,

MORRIS K. JESUP, Esq.

City Superintendent."

In the Library the Jay and Brevoort catalogues have been identified during the past year, and cards written for all the books and pamphlets. These cards are arranged under subjects so that the student can ascertain at a glance what the Library contains upon the subject he is investigating. Lists have also been made of the volumes needed to complete the works on conchology and general zoölogy. Nine hundred and fifty volumes and seven hundred and fifty pamphlets have been received, mostly from the national and state governments upon application by the librarian. A detailed list of these accessions is given in the appendix. A unique and very valuable series of about 350 quarto volumes of voyages and travels has been deposited by Mr. H. J. Jewett.

Bulletin No. 2, upon Conchology, and No. 3, upon Palæontology, have been issued and three hundred copies distributed to the leading societies, libraries and scientific men.

The Trustees, as a Board and as individuals have been called to mourn the loss of Mr. ROBERT L. STUART, whose name has been associated with the Museum from its earliest inception, and who was for nine years its President. The minute entered on the records of the Board of Trustees, expressing a sense of the loss the institution has sustained, and the generous and noble character of its late President, are appended to this report.

To meet the payment for the specimens purchased of Professor Ward, and to provide for necessary cases, and for other improvements that are imperatively needed, the sum of \$14,000 must be raised. To properly maintain the collections of the Museum requires about \$25,000, of which \$15,000 is provided by the City. The Trustees are anxious that the balance of \$10,000 shall be made up by members paying \$10 yearly, so that all sums of \$100 and more that may be given may be reserved for the purchase of new specimens.

The privileges of Patrons, Fellows and Members will be found in the By-Laws.

The Museum, to fully occupy its continually widening field of usefulness, demands two things: first, provision by the City for the erection of another wing; and secondly, an endowment, the interest of which shall be sufficient to develop the present admirable nucleus into a museum commensurate with the prospective greatness of our nation; and the Trustees hereby respectfully appeal to all our public spirited citizens to join them in commencing such an endowment by raising, by subscription, a sum not less than \$300,000.

# Dr. The Smerican Augeum of Batural Bistory in account with J. PIERPONT MORGAN, TREAS. Cr.

Salaries         \$12,690 00         Janual           Labor         4,460 75         Coal and Supplies         1,700 59         Altering Cases and Repairs on Building.         978 11         Printing and Stationery.         299 39         Poatace Expressive and Car Fare.         301 63	January 1st. By Balance from 1881 Account
Labor. 4,460 75  Coal and Supplies 1,700 59  Altering Cases and Repairs on Building. 978 11  Printing and Stationery. 299 39  Postate Expressive and Car Fare. 301 63	By Cash from Frederick Billings 500
Coal and Supplies 1,700 59 Altering Cases and Repairs on Building 978 11 Printing and Stationery 299 39 Pontate Expressive and Car Fare. 301 63	
	" Isidor Straus
	" Jacob Schiff 100 00
	" E. J. Donnell 100 00
Traveling Expenses and Advertising 233 78	" Edward Winslow 100 00
Insurance on Collections at Arsenal 58 62	" W. D. Nichols 100 00
Publishing Bulletin and Annual Report 1,165 00	" James Terry 100 00
Improvements on the Collections 778 93	" The Sale of Guides 12 00
Birds and Minerals Purchased 572 25	From the Department of Public Parks and
Books Purchased 179 27	Annual Members18,091 49
Labels and Lecture Tickets Printed 225 69	
Balance carried to 1883 Account 627 93	
824,271 94	\$24,271 94
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Examined and approved { PERCY R. PYNE, } Auditing Committee.

### CONSTITUTION

OF THE

# American Museum of Natural History,

IN THE CITY OF NEW YORK.

### ARTICLE I.

This Corporation shall be styled the American Museum of Natural History.

### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State, of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

### ARTICLE III.

The Trustees shall meet quarterly, on the second Monday of every February, May, August and November, at an hour and place to be designated, on at least one week's written notice from the Secretary, and shall annually, at the quarterly meeting in February, elect the Officers and Committees for the ensuing year.

They shall also meet at any other time to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees, or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

### ARTICLE IV.

The Officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, an Executive Committee, an Auditing Committee and a Finance Committee, all to be elected from the Trustees. All these Officers shall hold their offices for one year, and until their successors shall be elected.

The election of Officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all the meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report at the annual meeting, of the receipts and disbursements of the past year, with such suggestions as to the financial management of the Museum, as he may deem proper.

### ARTICLE VI.

The Executive Committee shall consist of seven, of whom the President and Secretary shall be two. They shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meetings of the Trustees, without the express sanction of the Trustees.

### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

### ARTICLE IX

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

### ARTICLE X.

By-Laws may from time to time be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

• Such By-Laws, when once adopted, may be amended at any meeting of the Trustees, by a vote of a majority of those present after a month's notice in writing of such proposed amendment.

### ARTICLE XI.

The contribution of \$1000 or more to the funds of the Museum,

at one time, shall entitle the person giving the same to be a Patron of the Museum, who shall have the right in perpetuity to appoint the successor in such patronship.

The contribution of \$500, at one time, shall entitle the person giving the same to be a Fellow, who shall have the right to appoint one successor in such fellowship.

No appointment of a successor shall be valid, unless the same shall be in writing, endorsed on the certificate, or by last will and testament.

The contribution of \$100, at one time, shall entitle the person giving the same to be a Life Member.

Any person may be elected by the Trustees to either of the above degrees, who shall have given to the Museum books or specimens, which shall have been accepted by the Executive Committee, to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly under the seal of the Museum.

The Trustees may also elect Honorary Fellows of the Museum in their discretion.

### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

### BY=LAWS.

### 1

Patrons giving \$1000 are each entitled to 1 Subscriber's Ticket, 5 Complimentary Season Tickets and 10 Tickets for a single admission.

Fellows, giving \$500, are each entitled to 1 Subscriber's Ticket and 10 Tickets for a single admission.

Life Members, giving \$100, are each entitled to 1 Subscriber's Ticket and 5 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to 1 Subscriber's Ticket and 2 Tickets for a single admission.

[NOTE.—A Subscriber's Ticket admits two persons to the Museum every day except Sunday, and to all Receptions and Special exhibitions, and may be used by any member of the Subscriber's family.

The Single Admission Tickets admit the bearers to the Museum on reserved days (Mondays and Tuesdays) and are issued to Subscribers for distribution among friends and visitors.]

### II.

Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

### III.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Patron" of the Museum, unless by a unanimous vote of a quorum of the Board—excepting Trustees ex-officio—nor be eligible unless his name shall be presented by the nominating committee at a Regular Quarterly Meeting prior to the meeting at which said election shall take place.

### IV.

No indebtedness shall (except for current expenses) be incurred by the Trustees of the Museum, nor by any of its Committees, Officers or employés, unless there are at the time sufficient moneys in the Treasury to pay the same.

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## In Memoriam.

At a Special Meeting of the BOARD OF TRUSTEES of the AMERICAN MUSEUM OF NATURAL HISTORY, held December 14th, 1882, the following resolutions in regard to the death of

#### Mr. ROBERT L. STUART,

were unanimously adopted and ordered to be entered upon the record.

By the death of Mr. Robert L. Stuart another of the founders of the Museum of Natural History, in Central Park, has passed away. It is therefore

RESOLVED. That in view of the loss of one who has proved himselt so strong and reliable a friend of the interests, it becomes this Board to recognize the event with appropriate expressions of its unferinged sorrow.

Mr. STUART was elected to the office of President of the Board upon the decease of Mr. John D. Wolfe, and retired from the position on account of failing health, to the great regret of the whole Board.

Mr. STUART had a large share in the promotion of the prosperity of the Museum from its origin. Although a man of active business habits and without the possession of extensive cientific acquirements, he was by no means destitute of considerable knowledge of classification in some very interesting departments, and there was also that in his mental and moral constitution, which found its appropriate exercise in an undertaking so large in its plan and so entirely designed for the public gratification and improvement. His contributions to its cabinets and treasury were worthy of his reputation and character as a public benefactor; but, while we cannot speak too highly of him in the relations he sustained to this Board, we ought not to lose sight of the man as he was, the space he filled and the work he wrought. His life touched so largely and at so many points the benevolent enterprises of the day, that in the best sense he might be regarded as a public man.

Were we able, it would be an agreeable task to recite his great and manifold benefactions, public and private. His large-hearted bounty flowed in a perpetual stream.

The world has grown since Mr. STUART came upon the stage of action, and in some of its aspects Mr. STUART has come up to the full measure of its growth

Dark as may be some of the portents of our time, their grand characteristic, in permanent power, is yet to be found in the force and development of moral ideas. There have been long ages in the world's history in which the law of charity was almost unknown. It is a vital force among men to-day, and it flourishes by the aid of striking examples as well as by the influence of high and pure precept. There is nothing better on the earth, and in all its varied manifestations it is destined to mould society and to become the living bond to bind the world together.

It was the happy and peculiar condition of Mr. STUART's life to exemplify among us one of its phases in a manner as useful to the community as it was rare and exceptional in extent.

Although the architect of his own fortune, and occupied by the cares of a creat and engrossing business, a man of sagacity, understanding well the value and power of money, he escaped its almost universal contagion and, though living in a day characterized by the temptations and opportunities of inordinate accumulation, through the force of a liberal and generous spirit he became one of the early pioneers among us in the gracious and noble art of great giving.

Here, there is no mistaking the position he occupied in this community. He was loyal to the cause of humanity and a conspicuous example of that which by common consent entitles the memory of men to a place of high honor.

Possessing a decided christian faith, and loving the tried paths of integrity, he regarded with stern disapproval the modern legerdemain of the markets by which one takes but does not give.

Mr. STUART presented in his life another pleasing and softening aspect of character. He took a singular satisfaction in all things beautiful—in fine volumes, in flowers, birds and shells, and in objects curious and rare. He loved the arts by which men live and by their taste and plastic skill make our homes more beautiful to the eye and to the mind.

Life presented to Mr. STUART many rational sources of enjoyment as well as a wide field of usefulness, and in his death a figure to which we have been long accustomed, of large proportions and remarkable qualities, has gone out of some of the best circles of influence at this great metropolitan centre. 31 d. Russell

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THE FIFTEENTH

## ANNUAL REPORT

OF THE

American Museum of Natural History

(CENTRAL PARK, NEW YORK,)

77th Street and 8th Avenue.

MARCH, A. D. 1884.

PRINTED FOR THE MUSEUM.

WM. C. MARTIN, PRINTER, 111 JOHN STREET.

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#### FIFTEENTH ANNUAL REPORT.

#### 1883.

The Trustees of the American Museum of Natural History herewith present their Fifteenth Annual Report, to the Patrons, Fellows and Members of the Museum.

The Treasurer's Report shows a gratifying increase in receipts from Life and Annual Members, and from Special Contributions other than those from the Trustees, thus relieving the Board of a part of the heavy expenditures for maintaining the Museum during the year.

A considerable increase in the number of visitors to the Museum is also a cause for congratulation.

The work on the improvements to the grounds surrounding the Museum shows satisfactory progress and signs of early completion. For this we are indebted to the kind cooperation of the Department of Parks.

By the operations of the contract entered into a year ago for the purchase of all the birds and mammals necessary to complete the Collections of the Museum, north of the Rio Grande, over eighty American mammals and one hundred birds have been added to the Collections during the year. There were also added fine specimens of the Gorilla and Chimpanzee, with some fifty other monkeys from all parts of the world.

The Skeleton of a Whale, given to the Museum some years ago by the late Peter Cooper, has also been placed on exhibition for the first time.

Guides to the Collections of birds and mammals have been prepared and placed on sale, and many have availed themselves of this means to study the Collections.

Dr. Edgar A. Mearns has made a large donation of skins of North American and European birds, and their eggs, which supplements in an important degree our series on exhibition. He has also given a suite of the skins of our native birds, as the beginning of a STUDY COLLECTION, to remain unmounted and be reserved for the use of specialists in that department. It is hoped that this gift may be followed by others from those interested in the formation of such a Collection. Dr. Mearns has also been employed to identify, label and catalogue all our European birds, a work now satisfactorily completed.

Through the liberality and coöperation of Mr. Jos. W. Drexel, an entire change has been made in the Insect Department. Suitable cases have been constructed, and the entire collection, except types and specially rare specimens, has been placed on exhibition, and now forms one of the attractive features of the main hall. A STUDY COLLECTION has also been begun in this department.

The Department of Archæology has received a large and valuable gift from Mrs. Robert L. Stuart, being an extensive series of the stone implements of the Palæolithic and Neolithic periods of France and Switzerland.

To the Powell Collection Mr. Heber R. Bishop has added the large Canoe suspended in the main hall, and the four heraldic posts in the hallway.

In the Geological Department the Curator, Professor Whitfield, has carried forward the preliminary labelling, and has begun to place the permanent labels. The labelling of the Collection of Minerals has also been completed.

By the liberality of Miss C. L. Wolfe, the Museum has been enabled to employ a specialist to properly arrange and label the Wolfe Memorial Collection of Shells, and that work is still in progress.

The attendance by the teachers of the public schools upon the lectures given by the Superintendent, Prof. A. S. Bickmore, has been well maintained, and this instruction has received the attention it so justly merits.

To the Museum Library has been added, during the year, 440 volumes, 444 numbers and parts, and 300 pamphlets. To accommodate these and the large additions made to the library of the New York Academy of Sciences, we have been obliged to construct additional temporary cases in the corridor, our library-room being already overcrowded.

Bulletin No. 4, on the Atlantic Whales, was issued during the

early part of the year, and distributed to institutions and individuals all over the world.

A bequest of \$5000 (the first the Museum has received) has been paid by the executor of the estate of the late Hon. Wm. E. Dodge, and the Trustees have thought best to place on record the following resolution regarding the same and other bequests that it is hoped may from time to time be made:

"Whereas, the Board of Trustees of the Museum of Natural History in Central Park regard it as highly important to constitute a permanent endowment fund of which the interest only shall be applied to the use of the Museum, as shall be deemed most expedient by the Board, and therefore it is resolved that the Board do hereby establish a fund to be called a permanent endowment fund."

" Resolved, that the bequest of the late Wm. E. Dodge of \$5000 be hereafter known as the Wm. E. Dodge Fund, and that the same shall constitute a part of the permanent

endowment fund."

It is the desire and aim of the Trustees to place the Collections of the Museum in such condition that they may be as useful and instructive to visitors as possible. The limited means at the disposal of the institution permits of only moderate advancement in this important feature.

The Trustees beg to again call attention to the urgent necessity for an additional section to the Museum building. The already overcrowded state of the present structure makes another wing an imperative necessity.

It is believed that the city, which has been so liberal hitherto in all matters of education and culture, will be ready to grant the means for such an additional edifice, if an endowment fund for the steady development of the institution be supplied from private sources, and the Trustees again appeal to all public-spirited citizens to join them in commencing such a fund.

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#### CONSTITUTION

OF THE

## American Museum of Natural History,

IN THE CITY OF NEW YORK.

#### ARTICLE I.

This Corporation shall be styled the American Museum of Natural History.

#### ARTICLE II.

The several persons named in the Charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property and business of the Corporation, and in case of the death, accepted resignation, or removal from the State, of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of at least three-fourths of the Trustees present.

#### ARTICLE III.

The Trustees shall meet quarterly, on the second Monday of every February, May, August and November, at an hour and place to be designated, on at least one week's written notice from the Secretary, and shall annually, at the quarterly meeting in February, elect the Officers and Committees for the ensuing year. They shall also meet at any other time to transact special business

on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees, or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

#### ARTICLE IV.

The Officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary and a Treasurer, an Executive Committee, an Auditing Committee and a Finance Committee, all to be elected from the Trustees. All these Officers shall hold their offices for one year, and until their successors shall be elected.

The election of Officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

#### ARTICLE V.

The President, and in his absence, the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee and of the Auditing Committee, and shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all the meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report at the annual meeting of the receipts and disbursements of the past year, with such suggestions as to the financial management of the Museum as he may deem proper.

#### ARTICLE VI.

The Executive Committee shall consist of seven, of whom the President and Secretary shall be two. They shall have the control and regulation of the Collections, Library and other property of the Museum; and shall have power to purchase, sell and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meetings of the Trustees, without the express sanction of the Trustees.

#### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this Committee.

#### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

#### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

#### ARTICLE X.

By-Laws may from time to time be made by the Trustees, providing for the care and management of the property of the Corporation, and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at any meeting of the Trustees, by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

#### ARTICLE XI.

The contribution of \$1000 or more to the funds of the Museum, at one time, shall entitle the person giving the same to be a Patron

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of the Museum, who shall have the right in perpetuity to appoint the successor in such patronship.

The contribution of \$500, at one time, shall entitle the person giving the same to be a Fellow, who shall have the right to appoint one successor in such fellowship.

No appointment of a successor shall be valid, unless the same shall be in writing, endorsed on the certificate, or by last will and testament.

The contribution of \$100, at one time, shall entitle the person giving the same to be a Life Member.

Any person may be elected by the Trustees to either of the above degrees, who shall have given to the Museum books or specimens, which shall have been accepted by the Executive Committee, to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue Diplomas accordingly under the seal of the Museum.

The Trustees may also elect Honorary Fellows of the Museum in their discretion.

#### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

### BY=LAWS.

Patrons giving \$1000 are each entitled to 1 Subscriber's Ticket, 5 Complimentary Season Tickets and 10 Tickets for a single admission.

Fellows, giving \$500, are each entitled to 1 Subscriber's Ticket and 10 Tickets for a single admission.

Life Members, giving \$100, are each entitled to 1 Subscriber's Ticket and 5 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to 1 Subscriber's Ticket and 2 Tickets for a single admission.

[Note.-The Exhibition Halls of the Museum are open free to the public on Wednes-

days, Thursdays, Fridays and Saturdays, and on all public holidays.

Mondays and Tuesdays are reserved for Subscribers and their friends, Students

and Contributors, when admission is by ticket.

A Subscriber's Ticket admits two or more persons on Mondays and Tuesdays to all parts of the Museum, including the Library; also to the Lectures (when given in the public Exhibition Halls) and to all Receptions and Special Exhibitions. It may be used by any adult member of the Subscriber's family.

The Single Admission Tickets admit the bearers to the Museum on reserved days (Mondays and Tuesdays) and are issued to Subscribers for distribution among

friends and visitors.]

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Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

III.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Patron" of the Museum, unless by a unanimous vote of a quorum of the Board-excepting Trustees ex-officio-nor be eligible unless his name shall be presented by the nominating committee at a Regular Quarterly Meeting prior to the meeting at which said election shall take place.

No indebtedness shall (except for current expenses) be incurred by the Trustees of the Museum, nor by any of its Committees, Officers or employés, unless there are at the time sufficient moneys in the Treasury to pay the same.

## LIST OF ACCESSIONS-1883.

#### DONATIONS.

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- PROF. JOS. LE CONTE (the author), Berkely, Cal.
  - "On certain Remarkable Tracks, found in the Rocks of Carson Quarry."
  - "On Mineral Vein Formation."
  - "On the Genesis of Metalliferous Veins."
- G. C. BROADHEAD, State Geologist, Pleasant Hill, Mo.
  - "Carboniferous Rocks of Eastern Kansas," (The author).
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- DR. ANTONIO DE GREGORIO (the author), Palermo, Sicily.
  - "Sulla Fauna delle Argilla Saegliose di Sicilia."
    - "Nota sul Rilevamento della carta geologica di Sicilia." "Su talune forme e specie nuove Malta e Sicilia."
  - "Una gita sulle Madonie e sull'Etna,"

  - "Sulla costituzione di una Societià geologica internazionale."
  - "Studi su talune ostriche viventi e fossili, 1883," "Moderne nomenclature des coquilles des Gastéropodes et des Pélécy-
  - podes, 1883." "Moderne nomenclature des coquilles dans un grand tableau."
    - "Elenco di fossili dell' orizzonte a Cardita Jouannetti Bast, 1883,"
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- Dr. A. RENARD, Brussels, Belgium.
  - "Analyses de la Vésuvienne d'ala et de Monzoni."
  - "Recheres sur la composition et la structure des Phyllades Ardennies."
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  - "The Virginias," a Mining and Scientific Journal. Vol. IV, 1-6, 8-12.
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- U. P. JAMES (the author), Cincinnati, Ohio.
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JOSEPH F. JAMES (the author), Cincinnati, Ohio.

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EDWARD POTTS (the author), Philadelphia, Pa.

"Fresh Water Sponges."

J. S. FAY (the author), Wood's Holl, Mass. Wood's Holl. The Track of the Norseman.

W. M. DAVIS (the author), Boston, Mass.

"Structural value of the Trap Ridges of the Connecticut Valley."

PROF. A. S. PACKARD, Jr. (the author), Providence, R. I.

"The Systematic Position of the Archipolypoda."

"Repugnatorial Pores in the Lysiopetalidæ. "Notes on Lepidopterous Larvæ."

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"Anatomy of the Invertebrata,"-Siebold,

"Entozoa."—Cobbold.

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C. WACHSMUTH, Esq., Burlington, Ia.

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THE 16th

American Museum of Natural History,

CENTRAL PARK, NEW YORK.

(77th Street and 8th Avenue.)

# ANNUAL REPORT OF THE TRUSTEES,

CONSTITUTION, BY-LAWS, AND LIST OF MEMBERS

FOR THE YEAR

1884-5.

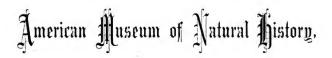


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1885.



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# ANNUAL REPORT OF THE TRUSTEES FOR THE YEAR 1884-5.

The Trustees of the AMERICAN MUSEUM OF NATURAL HISTORY present this their Sixteenth Annual Report to the Patrons, Fellows, and Members of the Museum.

The Treasurer's account shows the receipts of the year to have been \$35,770.21. This includes \$5,000.00 received from the estate of the late Wm. E. Dodge, contributed to found a permanent endowment fund; also \$7,601.60 contributed by the Trustees to make up the annual deficiency. The expenditures were \$26,667.49 for maintenance, and \$3,798.36 for improvements and additions.

These purchased additions were mostly new species, and comprise 44 specimens of North American birds, 29 specimens of North American mammals, and 20 monkeys; also specimens of minerals, fossils, and insects, and 17 volumes of needed books for the Library.

The large additions to the Museum by *donation* and *exchange* will be found in the list of accessions appended.

Much of the growth of the Library has been found to be due to the Museum Bulletins, prepared by the Curators, and sent to corresponding institutions and libraries all over the world in exchange for their publications.

A large increase in the number of visitors has been noticed during the year. This is a gratifying indication of the increasing popularity of the Museum.

The collection of American Forestry specimens, the preparation of which has been in progress during the past three years, is expected to be placed on public exhibition this spring. This collection, it is hoped, will prove another popular attraction to the Museum, and be the means of largely increasing the knowledge and information of the

people on the subject of our forests, now demanding so large a share of public attention.

The collections of European and North American birds and mammals have recently been relabelled to conform to the latest scientific nomenclature.

Only one hundred and forty-five species of birds, and one hundred and seventeen species of mammals, remain to be supplied to make the American collections in these two departments complete, and it is expected that most of these will be furnished during the year.

In the geological and mineralogical department, the improvements on the exhibition cases have been finished, and the labelling and cataloguing of the collections is now going on rapidly.

The arranging and labelling of the Wolfe memorial gift of shells has also made satisfactory progress during the year.

The printed Guides to the different collections have proved to be very popular. The supply has lately become exhausted, and a new series to all the departments is now under preparation, and will soon be placed on sale at the Museum. These new Guides will be amply illustrated, and cover all the latest arrangements and improvements made in the collections and the halls during the past few years. The small price at which they are sold places them within the reach of everybody, and, in their use, the public will find an easy and popular method of studying the collections.

At the recent session of the Legislature, an appropriation was made as follows:

[Item for the Annual Appropriation Bill.]

<sup>&</sup>quot;For the State Superintendent of Public Instruction, to enable him to establish and maintain in connection with the American Museum of Natural History in Central Park, in the city of New York, a course of free instruction, to be given by the Curators of said Museum, and to be illustrated by its collections, to the teachers of the common schools of said city, and through them to their pupils, and to the teachers of the common schools and of the normal schools throughout the State who may wish to avail themselves of this training, and to furnish the several State normal schools with such appliances and apparatus as may be hereby supplied to the schools of said city, and are necessary for the proper presentation to their teachers and pupils of this instruction on human and comparative anatomy, physiology, and zoology, and other subjects upon which the Board of Education of said city may require that oral instruc-

tion shall be given, the sum of eighteen thousand dollars, to be paid by the Treasurer on the warrant of the Superintendent of Public Instruction, countersigned by the Comptroller."

In accordance therewith, and with the kind co-operation of the Hon. Wm. B. Ruggles, State Superintendent of Public Instruction, and the Board of Education of this city, a new department has been created in the Museum called "The Department of Public Instruction," and a course of lectures to the teachers of the State and city schools is now in progress and meeting with great success.

They are given by Prof. Albert S. Bickmore, and are illustrated by the collections of the Museum and by means of the stereopticon.

Specimens and apparatus to aid in the reproduction of this instruction have been supplied to the New York city schools and the normal schools of the State, with very gratifying results.

These lectures, the subjects of which are given in the appendix, have been planned for four years, twenty in each year. Like those now in progress, *all* will be richly illustrated with original views and drawings specially prepared for the course.

Although the lecture hall of the Museum was recently enlarged to double its former capacity, the number of those desiring to avail themselves of this instruction again exceeds the dimensions of the hall, and many who come cannot gain admittance.

To provide a suitable place for this educational training, plans have been matured to enlarge the Museum by the addition of the rotunda as planned in the original designs for the entire building.

This addition, it is estimated, would give room for a lecture hall capable of seating twelve hundred persons, and afford a part of the extra space now so urgently wanted for new collections.

The public demand for access to the lectures is becoming so great that such a necessary measure for the public good cannot be long delayed, and it is hoped the Legis-

lature will be willing to grant the necessary aid to carry out this laudable object.

To widen still further the benefits of this new department of the Museum, it is proposed, as soon as a suitable hall is provided, that these lectures, and especially those illustrating the physical features and the great natural resources of our country, shall be repeated to the working classes of the city.

In this way the rich collections of the Museum, such as that of woods, will become of direct utility to all those who labor or are in any way interested in these materials; and, hereafter, as the Museum acquires additional collections, it must become an increasingly important aid in the education of the artisan and laborer.

It must not be forgotten, however, that with all this increased usefulness comes also increased expenditures, and a larger deficiency to be made up at the close of the year.

The Trustees have, therefore, to appeal to all public-spirited citizens to aid them. One thousand additional annual members at ten dollars a year each would place the institution on a self-sustaining basis, and it is hoped this fact needs only to be made known to the public, who are so much benefited by the Museum, to secure for it the desired amount at the earliest day.

MORRIS K. JESUP,

President.

# THE AMERICAN MUSEUM OF NATURAL HISTORY, in account

1884		REC	EI	PT:	s.		
Balance from 1883 account,							\$ 292 69
Fron	the Estate of Wm. E. Do	odge,					5,000 00
* *	Joseph W. Drexel,						801 60
**	Morris K. Jesup, .						500 00
	James M. Constable,						500 00
4.4	H. R. Bishop,						500 00
4.4	D. O. Mills,						500 00
+ +	Charles Lanier, .						500 00
* *	Percy R Pyne, .						500 00
* *	Hugh Auchincloss, .						500 00
* *	Adrian Iselin, .						500 00
• •	C. Vanderbilt,						500 00
4.4	Robert Colgate, .						500 00
**	J. Pierpont Morgan, .						500 00
**	John B. Trevor, .						300 00
4.6	Oliver Harriman, .						250 00
	Wm. E. Dodge, Jr.,						250 00
**	Chas. G. Landon, .						250 00
* *	Hon, Abram S. Hewitt,						250 00
4.6	Albert Mathews,						100 00
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4.4	Loomis L. White, .						100 00
4.6	Frederick B. Wendt,						100 00
* *	Anson Phelps Stokes, .						100 00
4.4	Mrs. Mary J. Morgan,						100 00
* *	Dr. Henry F. Walker,						100 00
4.4	Samuel P. Avery, .						100 00
* *	Benjamin Brewster, .						100 00
4.4	Isaac P. Chambers,						100 00
4.4	John N. A. Griswold, .						100 00
4.4	The State Superintendent	of )					
	Public Instruction,	í					2,160 50
**	The sale of Guides, .						170 00
6.6	Interest on Permanent }						
	Endowment Funds, 1						225 00
**	The Department of Publi	c Par	ks	)			-
	and Annual Mer	mbers,	,	ý			18,825 42

\$35,770 21

Examined SPERCY R. PYNE, Auditing and approved. CHARLES LANIER, Committee.

# with J. PIERPONT MORGAN, TREASURER.

1884.	EXPENDIT'U	RES.		
Paid for	Salaries,		\$14,170 00	
* 6	Labor,		. 4,836 6	5
44	Altering cases and repairs on )			
	building, etc.,		. 1,960 81	t
**	Coal,		1,515 1:	2
**	Supplies,		. 289 96	5
44	Publishing Bulletin and Annual Re	port,	701 8	7
**	Printing and Stationery, .		. 963 4	7
• • •	Reception,		. 490 81	1
4.6	Advertising,		. 108 15	;
**	Postage and Car Fare, .		. 356 51	t
**	Poisoning Materials,		. 77 32	
	Expressage, Travelling, and	)		
	Custom House Expen	ses, j	. 81 03	1
44	Lectures and Photographic Establis	hment,	829 90	
**	Interest on debit balances, 1884.		. 253 02	
44	Labels,	•	42 87	\$26,677 49
	Improvements on the Collections,		. \$1,954 88	
4.6	Birds and Mammals purchased,		1,566 ox	,
+4	Minerals purchased,		. 178 50	
44	Books and Periodicals purchased,		98 98	3,798 36
Purchase	d Bonds for the "Permanent Endov	vment )		
	Fi	and," 5		5,051 68
				\$35.527 53
	Balance carried to 1885 accoun	it,		242 68
			/	

\$35.770 21

[E. & O. E.] NEW YORK, January 27, 1885.

J. PIERPONT MORGAN, Treasurer.

# CONSTITUTION

OF THE

# American Museum of Natural History,

IN THE CITY OF NEW YORK.

#### ARTICLE I.

This Corporation shall be styled the AMERICAN MUSEUM OF NATURAL HISTORY.

#### ARTICLE II.

The several persons named in the charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, shall be the Trustees to manage the affairs, property, and business of the Corporation, and in case of the death, accepted resignation, or removal from the State of any Trustee, a new Trustee shall be elected to fill his place by the remaining Trustees; but no election of a Trustee shall be held except at a quarterly meeting of the Trustees, on written notice of not less than one week, specifying that such election is to be held, and the vacancy which is to be filled; and every election of Trustees shall be by ballot, and no person shall be deemed to be elected a Trustee unless he shall receive the votes of of at least three-fourths of the Trustees present.

# ARTICLE III.

The Trustees shall meet quarterly, on the second Monday of every February, May, August, and November, at an hour and place to be designated, on at least one week's written notice from the Secretary, and shall annually, at the quarterly meeting in February, elect the officers and committees for the ensuing year. They shall also meet at any other time

to transact special business on a call of the Secretary, who shall issue such call whenever requested so to do, in writing, by five Trustees, or by the President, and give written notice to each Trustee of such special meeting, and of the object thereof, at least three days before the meeting is held.

#### ARTICLE IV.

The officers of the said Corporation shall be a President, a First and Second Vice-President, a Secretary, and a Treasurer, an Executive Committee, an Auditing Committee, and a Finance Committee, all to be elected from the Trustees. All these officers shall hold their offices for one year, and until their successors shall be elected.

The election of officers shall be by ballot, and the persons having a majority of the votes cast, shall be deemed duly elected.

#### ARTICLE V.

The President, and in his absence the First or Second Vice-President, shall preside at all the meetings of the Museum and of the Trustees.

The Secretary shall keep a record of the proceedings of the Trustees, of the Executive Committee, and of the Auditing Committee, and shall preserve the seal, archives, and correspondence of the Museum, shall issue notices for all the meetings of the Trustees, and attend the same.

The Treasurer shall receive and disburse the funds of the Museum. He shall keep the accounts of the Museum in books belonging to it, which shall be at all times open to the inspection of the Trustees. He shall report in writing, at each quarterly meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report at the annual meeting of the receipts and disbursements of the past year, with such suggestions as to the financial management of the Museum as he may deem proper.

#### ARTICLE VI.

The Executive Committee shall consist of seven, of whom

the President and Secretary shall be two. They shall have the control and regulation of the Collections, Library, and other property of the Museum; and shall have power to purchase, sell, and exchange specimens and books, to employ agents, to regulate the manner and terms of exhibiting the Museum to the public, and generally to carry out in detail the directions of the Trustees; but the Executive Committee shall not incur any expense or liability for the Museum exceeding two thousand dollars at one time, or exceeding, in all, ten thousand dollars, in the interval between the quarterly meetings of the Trustees, without the express sanction of the Trustees.

#### ARTICLE VII.

The Auditing Committee shall consist of three, and it shall be their duty to examine and certify all bills presented against the Corporation; and no bills shall be paid unless first approved in writing by at least two members of this committee.

#### ARTICLE VIII.

The Finance Committee shall consist of three, including the Treasurer, and it shall be their duty to take charge of and invest the funds of the Museum in its name, and to take all proper measures to provide means for its support.

#### ARTICLE IX.

A majority of the Trustees for the time being shall constitute a quorum for the transaction of business, but five Trustees meeting may adjourn and transact current business, subject to the subsequent approval of a meeting at which a quorum shall be present.

#### ARTICLE X.

By-Laws may from time to time be made by the Trustees, providing for the care and management of the property of the Corporation; and for the government of its affairs.

Such By-Laws, when once adopted, may be amended at

any meeting of the Trustees, by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

#### ARTICLE XI.

The contribution of \$1000 or more to the funds of the Museum, at any one time, shall entitle the person giving the same to be a Patron of the Museum, who shall have the right in perpetuity to appoint the successor in such patronship.

The contribution of \$500, at one time, shall entitle the person giving the same to be a Fellow, who shall have the right to appoint one successor in such fellowship.

No appointment of a successor shall be valid, unless the same shall be in writing, endorsed on the certificate, or by last will and testament.

The contribution of \$100, at one time, shall entitle the person giving the same to be a Life Member.

Any person may be elected by the Trustees to either of the above degrees, who shall have given to the Museum books or specimens, which shall have been accepted by the Executive Committee, to the value of twice the amount in money requisite to his admission to the same degree, and the President and Secretary shall issue diplomas accordingly under the seal of the Museum.

The Trustees may also elect Honorary Fellows of the Museum in their discretion.

#### ARTICLE XII.

No alterations shall be made in this Constitution, unless at a regular quarterly meeting of the Trustees; nor by the votes of less than two-thirds of all the Trustees; nor without notice in writing of the proposed alteration, embodying the amendment proposed to be made, having been given at a regular meeting.

# BY-LAWS.

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Patrons giving \$1000 are each entitled to I Subscriber's Ticket, 5 Complimentary Season Tickets, and 10 Tickets for a single admission.

Fellows, giving \$500, are each entitled to I Subscriber's

Ticket, and 10 Tickets for a single admission.

Life Members, giving \$100, are each entitled to I Subscriber's Ticket, and 5 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to I Subscriber's Ticket, and 2 Tickets for a single admission.

[Note,—A Subscriber's Ticket admits two persons to the Museum every day except Sunday, and to all Receptions and Special Exhibitions, and may be used by any member of the Subscriber's family.

The Single admission Tickets admit the bearers to the Museum on reserve days (Mondays and Tuesdays) and are issued to Subscribers for distribution among friends and visitors.]

#### H:

Any Trustee who shall fail to attend three consecutive Regular Quarterly Meetings of the Board, shall cease to be a Trustee, unless excused by the Board.

#### III.

No gentleman shall hereafter be eligible to the position of a Trustee who shall not be a "Patron" of the Museum, unless by a unanimous vote of a quorum of the Board—excepting Trustees *ex-officio*—nor be eligible unless his name shall be presented by the nominating committee at a Regular Quarterly Meeting prior to the meeting at which said election shall take place.

#### IV.

No indebtedness shall (except for current expenses) be incurred by the Trustees of the Museum, nor by any of its committees, officers, or employees, unless there are at the time sufficient moneys in the Treasury to pay the same.

# LIST OF ACCESSIONS—1884.

## DONATIONS.

## LIBRARY.

MORRIS K. JESUP, New York City.

Les Torrents.—De Batelica.

Traité Pratique du Reboisement et du Gazonnement des Montagnes. By P. Demontzey.

Reboisement des Montagnes, 1861-1878.

Le Reboisement et le Regazonnement des Alpes, 1864. Mathieu.

Les Torrents des Alpes et le Pâturage. Marchand.

Monographies de Travaux exécutés dans les Alpes, les Cévennes et les Pyrénées.

MRS. ROBERT L. STUART, New York City.

Catalogue of the Library of the late R. L. Stuart.

MISS ELLEN COLLINS, New York City.

Episodes of Insect Life.

REV. W. A. LEIGHTON, B. A. (the author), England. The Lichen-Flora. Third edition.

A. B. EMMONS (the author), N. Y.

"Notes on the Rhode Island and Massachusetts Coals."

W. J. McGEE (the author), Washington, D. C.

The drainage system and distribution of the Loess of Eastern Iowa. "Modifications proposées dans la nomenclature géologique."
"On the Origin and Hade of Normal Faults."

"Theory of Glacial Climate."

I. C. RUSSELL (the author), Washington, D. C.

"Sketch of the Geological History of Lake Lahontan."

JOHN H. CASWELL, New York City.
Report of the Pacific Railroad Survey. Vols. I.-XII., 1855-60. Report of the U. S. Coast Survey. 1866.

WM. BEUTTENMÜLLER, New York City.

Biography of Elisha Kent Kane.—Elder.

Commerce and Navigation of the United States. 1880. India and its People.—Read.

Report of the Board of Commissioners on Irrigation, California. Census Bulletins. Nos. 6, 12, 27, 34, 36-40, 42, 43, 46-48, 50-54, 56-58, 61-63, 64, 66, 70, 73, 74, 77, 78, 80, 81, 84-86, 89-93, 95-120, 122-129, 132, 134-199, 200-244, 246-260, 262-272, 274, 275, 277, 279-290, 292-294, 296, 299, 300-303, 305.

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Report of the Commissioner relating to the Condition of the Indians of Massachusetts.

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Annual Report on the Foreign Commerce, U. S. 1882. Commerce and Navigation of the United States. 1882. Cotton Goods Trade of the World.

Specimen pages of the American Cyclopædia.

"Breeding of the Harlequin Duck (Histrionicus minutus)."
"On a bird new to Northern North America."

"Ravages of a rare Scolytid Beetle in the Sugar Maple of North-

C. HART MERRIAM (the author), Locust Grove, N. Y. Mammals of the Adirondacks. A Review of the Birds of Connecticut.

eastern New York."

#### "On Birds about Point de Monts, Canada. "On Birds of the Adirondack Region." "Gentry's Nests and Eggs of Birds of the United States." "Remarks on some of the Birds of Lewis County, Northern N. Y. PROF. A. S. BICKMORE. New York City. "On Pourtalesia, a genus of Echinoidea." By Sven Loven. Forestry Bulletin. No. 2. May, 1884. Circular No. 2, U. S. Entomological Commission. American Meteorological Journal. Vol. I., 1. Proceedings of the Amer. Asso. Adv. Sci. Vol. XXXI. "Uber Vogel der Sudsee." By Dr. O. Finsch. "Discovery of Mound Relies at Devil River, Lake Huron."-Mason. "Languages of Africa."—Mason. "Ethnology of Vega."—Mason. "Geological relations of the Limestone Belts of Westchester Co." J. D. Dana "Extracts from the Will of William S. Vaux. Deceased." Illustrated Guide and Catalogue of Woodward's Garden. Programme of the Thirty-first Meeting Amer. Asso. Adv. Sci. Second annual report American Taxidermists. 1881-82. Notes on the Eastern Cities and Museums of the United States. By Agnes Crane. Abridgment of the Nautical Almanac. 1883. The Tribune Almanac. 1883. The Evening Journal Almanac. Report of the Director-General, International Cotton Exposition. Die Ebbe und fluth in der Rhede von Finme. By E. Stahlberger. DB. A. v. KLIPSTEIN (the author), through Prof. A. S. Bickmore. Beiträge zur Geologischen und Topographischen Kenntniss der Ostlichen Alpen. Band II. Abth. I. II. III. 1871-83. Beiträge zur Geolog. Kenntniss der Ostlichen Alpen. Band I. 1845. Hon. R. P. FLOWER, M. C., New York City War of the Rebellion. Series I. Vols. X. XI.

Vol. VIII. Newspapers and Periodicals. Alaska, Fur-seal Islands, and Ship-building. JARED MILLER, Brooklyn, N. Y.

Tenth Census of the United States. Vol. II. Manufactures, etc.

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Vol. III. Statistics of Agriculture. Vol. IV. Transportation. Vol. V. VI. Cotton Production.

Vol. VII. Valuation, Taxation, etc.

Viaje de la Comission astronómica Mexicana al Japon.
 By F. D. Covarrubias.
 Old Streets of New York. By John J. Post.

FRANK VINCENT, Jr. (the author), New York City.

Norsk, Lapp. and Finn. Through and through the Tropics. Land of the White Elephant.

C. F. HOLDER (the author), New York City. Elements of Zoology.

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GEO. N. LAWRENCE (the author). New York City.
"New species of Pigeon of the genus Engyptila."

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"Ceratiocaridæ from the Chemung and Waverly Groups."

SANDERSON SMITH, New Brighton, Staten Island, N. Y.
An account of recent progress in Zoology. 1879-1881.
"Notes on American Land Shells." By W. G. Binney.

R. E. CALL and C. E. BEECHER (the authors).

"Notes on Nevada Shells."

Prof. T. C. CHAMBERLIN, State Geologist, Beloit, Wis.
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"Georgistics of Chambing Mannings"

"Correlation of Terminal Moraines."

PROF. N. H. WINCHELL, State Geologist of Minnesota, Minneapolis. Tenth Annual Report. 1881. Eleventh Annual Report. 1882. Geological and Natural History Survey. 1872-1882. Vol. I. Geology.

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M. JULES MARCOU (the author), Cambridge, Mass.
"Note sur la Géologie de la California."
Second Geological Survey of Penn., Report, M. M.

JED HOTCHKISS, Editor and Publisher, Staunton, Va.
"The Virginias," a Mining and Scientific Journal. Vol. V. 1884.

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W. FAXON (the author), Cambridge, Mass.
"Descriptions of Species of Cambarus."

R. D. LACOE (the author), Pittston, Pa.
"Catalogue of the Paleozoic Fossil Plants."

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N. S. GOSS (the author), Topeka, Kansas.

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U. P. JAMES (the author), Cincinnati, Ohio.

"Descriptions of Fossils from the Cincinnati Group."

"Descriptions of Three Species of Fossils."
"On the Conodonts and Fossil Annelid Jaws."

PROF. LEO. LESQUEREUX (the author), Columbus, Ohio.

"On Fossil Fruits of Brandon, Vt."

"On the Origin and Formation of Prairies."
"On the remains of Land Plants in the Lower Silurian."

"On the Plants of the World before Man.

"Coal Beds of the Rocky Mountain region." "Lignite Formations of the Rocky Mountains."

"Report on the recent additions of Fossil Plants." "On some specimens of Permian Fossil Plant from Colorado."

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C. D. WALCOTT (the author), Washington, D. C.

"Pre-Carboniferous strata in the Grand Cañon of the Colorado and Arizona

"The Cambrian System in the United States and Canada."

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V. 1882-83; VI, 1883-84; VII. 1-8, 1884. Explanation of terms used in Entomology.

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Section of concretion in banded aphanite, Ellenville, N. Y.

UNITED STATES GEOLOGICAL SURVEY, through Arnold Hague, Esq. 4 photographs of the Geyser Region of the Yellowstone Park.

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Skull of Rhinoceros sondiacus.

Felis leopardus. Wild Donkey.

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Skeleton of Chelonia virgata.

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- The Alleghanies and Niagara. The Mississippi Valley 2. 7. Mexico and Central America.
- The Yellowstone National Park, 3. 8. The West Indies.
  - Monument Park. The Andes. 9.
  - The Canons of the Colorado. 10. The Amazon.

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#### ZOOLOGY.

## Fishes.

- 11. Herring and Shad. 13. Halibut and Flounder.
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#### Sharks and Rays. 15. Reptiles.

- 17. Snakes and Lizards. Salamanders and Frogs.
- Birds.

  18. Swimming Birds and Waders. | 19. Pheasants and Grouse. 20. Eagles and Owls.

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#### USEFUL MINERALS.

1. Coal and Petroleum.

2. Iron and Lead. 1

Silver and Gold.

#### ARTICLES OF FOOD.

Wheat and Rice. 4.

Tea and Coffee.

Sugar and Salt. 5.

Indian Corn and Tobacco.

#### MATERIALS FOR CLOTHING.

8. Wool and Furs.

Cotton and Hemp. 9. 10. Silk and Flax.

SPRING OF 1887.

## ZOOLOGY.

## Birds

13. Woodpeckers and Toucans.

Trogons and Humming Birds. 12. 15. · Crows and Birds of Paradise.

14. Parrots and Cockatoos.

#### Mammals.

16. Kangaroos and Opossums. Squirrels and Mice.

17.

18. Elephants and Antelopes.

19. Sheep and Oxen. Swine and Deer.

# FOURTH COURSE, 1887 and 1888.

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1. The Atmosphere Rain, Ice, and Glaciers Scandinavia and the Alps. Thibet and the Himalayas.

#### RACES OF MANKIND.

5. The Nile and its Peoples. 8. China and the Chinese. Japan and the Japanese.

6. India and its Peoples. The Mediterranean and its | Peoples.

10. The Arctic Regions and the Eskimos.

## ZOOLOGY.

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11. The Horse and Rhinoceros. The Whales and Manatees. 12 13. Dogs and Seals.

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Monkeys of the New World. 15. 16. Monkeys of the Old World.

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