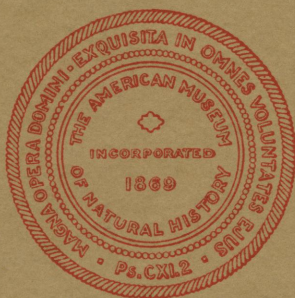


SIXTY-FIFTH ANNUAL REPORT  
OF  
THE AMERICAN MUSEUM  
OF NATURAL HISTORY



"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."

REPORT OF THE TRUSTEES  
FOR THE YEAR 1933

1869

CITY OF NEW YORK

1933

Issued May 1, 1934



## SERIAL SCIENTIFIC PUBLICATIONS

### NATURAL HISTORY, Journal of The American Museum:

Volumes I-XXXIII, 1900-1933. An illustrated bimonthly magazine devoted to records of scientific research, exploration and discovery, of the development of museum exhibitions and of museum influence on education. Contributors include the scientific staff, explorers and Members of the American Museum and other eminent naturalists. Issued free to all classes of membership, or on subscription \$3.00.

### BULLETIN of The American Museum:

Volumes I-LXVII, 1881-1933. Scientific records of explorations and collections of the Museum, in Geology, Palæontology, Mineralogy, Zoology, and, originally, Anthropology. Distributed in exchange to over 400 libraries and institutions of science and learning throughout the world. \$5.00-\$10.00 per volume.

### ANTHROPOLOGICAL PAPERS of The American Museum:

Volumes I-XXXIV, 1906-1933. Discoveries, explorations and researches in Archæology, Anthropology and Ethnology among the extinct and living races of man. Distributed to over 300 institutions and scientists throughout the world. 25c.-\$5.00 a part.

### AMERICAN MUSEUM NOVITATES:

Nos. 1-680, 1921-1933. Devoted to publication of preliminary announcements and descriptions of new forms in the fields of Zoology, Palæontology, Geology and Mineralogy. 15c. each.

### MEMOIRS of The American Museum:

Volumes I, III, VI and IX, 1893-1909; contributions by Whitfield, Osborn, Beutenmuller, Matthew, Lumholtz, Emmons, Matthews, Brown, McGregor, Hussakof, Dean.

Volumes II, IV, V, VII, VIII and X-XV constitute the Jesup North Pacific Expedition Series.

Volumes I-III of the New Series, 1912-1921, devoted to Zoology and Palæontology, \$2.00-\$12.00 a part. This terminates the serial form of publication. Beginning with the forthcoming work by Henry Fairfield Osborn, "Evolution of the Proboscidea," the Memoirs will be issued without serial numbers.

## SPECIAL SCIENTIFIC PUBLICATIONS

### A REVIEW OF THE PRIMATES:

By Daniel Giraud Elliot, 1913. A monographic treatise in three quarto volumes. Paper, \$35.00; morocco, \$45.00.

### BIBLIOGRAPHY OF FISHES:

By Bashford Dean, 1916-1923, covering the entire literature of fishes to 1914 and embracing 45,000 titles arranged alphabetically by authors. 3 volumes, \$15.00.

### THE BASHFORD DEAN MEMORIAL VOLUME:

Article I, 1930, \$1.25; Article II, 1931, 60c.; Article III, 1931, \$1.75; Article IV, 1932, \$2.50; Article V, 1933, \$1.00.

(Publications continued on third page of cover)

# THE AMERICAN MUSEUM OF NATURAL HISTORY



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## SIXTY-FIFTH ANNUAL REPORT

*To the Trustees of The American Museum of Natural History  
and to the City of New York*

BY PRESIDENT FREDERICK TRUBEE DAVISON

**M**Y first year in the President's office, and entering upon its duties as a layman, have given me some very decided impressions. No one who has the privilege of measuring the influence of the Museum at the present time could fail to be filled with admiration at the great accomplishments of my distinguished predecessor, Professor Henry Fairfield Osborn, who for twenty-five years exerted outstanding qualities of leadership in the scientific and educational worlds. His work was not confined to purely scientific or educational activities, but carried with it a great spiritual force which has left a real mark not only on the city, but on the entire nation.

Under his guidance, the Museum has established a fundamentally sound policy in accomplishing its mission, which falls into two general parts—first, scientific, and second, educational. Professor Osborn gathered around him a group of men and women, each holding a fine position in his or her particular field of scientific activity, which has given the institution a high place the world over. Their work is the keystone of the Museum's usefulness. Without it, progress and continuing influence would be impossible. That work must be extended and expanded.

In my effort to obtain a conception of the range of their activities, I have been greatly impressed at the extent of their work. Their research covers practically the whole field of natural science, from astronomy to microscopic organisms, but all directed in a field of legitimate Museum operation, and with an eye not alone to pure science but in an effort to make simple and attractive to the layman, child and adult alike, the mysteries of nature.

That the educational value of the Museum is becoming increasingly appreciated is evident from the figures showing how many people came in direct contact with the institution. In 1933 we had 1,102,096 visitors within our halls.

At the same time, direct contacts were made with over 31,000,000 school children, in addition to the large number of individuals and institutions reached by our magazine, *Natural History*, and our scientific publications.

In times of financial distress, when so many of our citizens are turning to institutions of this character during their leisure hours, it is of the utmost importance that we develop our scientific work, on the one hand, and extend our educational work on the other, in order that the former may become available, not alone to the comparatively restricted scientific world, but to the public as a whole.

In addition to the ordinary activities of the Museum, its facilities have been made available, to the limits of its resources, to various programs for the unemployed.

In spite of a substantial reduction in appropriations made to the Museum by the City and the corresponding shrinkage in our endowment income, there have been several notable contributions during the past year, made possible by the public-spirited interest of a number of individuals, together with a very evident desire on the part of the City administration and the Federal Government to coöperate in our educational program to the extent possible under present conditions.

In 1929, the late Mr. Harry Payne Whitney offered to give \$750,000 for the construction of the South Oceanic Bird Wing, on condition that the City would provide a like amount of money. This gift was accepted by the City, but in view of the fact that the financial situation was such that no more funds could be appropriated or bonds sold in the regular routine, the City in 1933 was still a quarter of a million dollars short of its pledge. The Trustees of the Museum offered to purchase at par \$250,000 of City bonds in order to provide the necessary funds for the City to carry out its obligation to the Whitney Estate, which offer was readily accepted by the City. Consequently, at the present time, completion of that great project, made possible by Mr. Whitney's generosity and that of his family, is definitely assured, and the Rothschild collection, presented to the Museum by Mrs. Whitney and which still lies unpacked, will soon find a proper final resting place and be available to scientists the world over for scientific purposes.



Mr. Charles Hayden and the Reconstruction Finance Corporation have made it possible for us to realize one of the important objectives laid down by the Trustees several years ago, of having a Planetarium. Mr. Hayden very generously provided sufficient funds to purchase a Zeiss Projection Planetarium, together with a Copernican Planetarium, the Federal Government agreeing to purchase bonds for the construction of the building, the whole to be known as the HAYDEN PLANETARIUM. The State and City Governments coöperated in this project, thus assuring the people of New York one of the most dramatic and fascinating aids to education ever devised.

Exploration in many of its various forms is the very life-blood of progress in natural science, and in this modern age a new vehicle has entered that field and holds a position of fundamental importance—the airplane.

In all its history, the Museum has given its enthusiastic support to sound exploration and is proud of the gifts which have been made of equipment used in all parts of the world on fruitful expeditions. A very notable addition to our exhibits has been made in this past year through the donation by Colonel and Mrs. Charles A. Lindbergh of the plane which they used in flying across the Arctic regions and the Pacific Ocean, and later in their exploration flights over Greenland, Iceland, the North Atlantic, Europe, the South Atlantic Ocean and South America. Probably no exploratory expeditions by air have ever been so well equipped as those conducted by Colonel and Mrs. Lindbergh, and their gifts to the Museum are proving not alone of great interest but of real educational value.

One of the warmest friends the Museum has ever had was the late Dr. I. Wyman Drummond, who, for some time prior to his death, was a member of our Scientific Staff and who had already made many gifts to our collections. Shortly after Dr. Drummond's death, his sister, Mrs. William Herbert, very generously presented to the Museum Dr. Drummond's magnificent collection of carved ivories, jade and amber. There probably is no finer collection of its kind anywhere in the world, and the Trustees are profoundly grateful to Mrs. Herbert and her family for making this collection available to the public through the American Museum of Natural

History. It is a fitting memorial to Dr. Drummond's great work in the field of his particular interest, and his devotion to this institution.

These notable additions to the Museum have been accompanied by many others of great importance, too numerous to mention in a report which must be brief in the interest of economy. The Director will enlarge somewhat on this subject in his report.

The Museum, like every other organization in the country, has been pinched by the financial depression. Our problem has been and will continue to be for some time to come, one of fulfilling our duty to the public and at the same time of making both ends meet. As a result of the decrease in City appropriations, we have been obliged to close ten halls daily and to curtail our work in every possible direction.

The question was raised as to the advisability of instituting pay days. After careful consideration it was decided not to do this. The Trustees felt that every conceivable effort should be made to keep our doors open "free every day in the year."

That the year 1933 was ended with a balanced budget was made possible by the loyalty and generosity of all the employees who cheerfully made a substantial contribution out of their own pockets to that end. They are continuing to do that during the present fiscal year, and I want them to know that their interest and efforts are deeply appreciated. After all, they are the ones who make the wheels go round, and to have made sacrifices in these times as they have done for the work to which they are devoting their lives, is high tribute to their loyalty.

During the coming months, the work of the Museum must go on with increased vigor and within our financial limitations. Its influence can and should be broadened on a national scale. The demands are heavier than ever before in our history. More people than ever are turning to us for assistance, particularly along educational lines. The future presents a challenge which is stimulating and which must be met. I am confident that it will be met through the joint effort of the Trustees, our entire staff, our members, and our friends throughout the country.

## II. SCIENTIFIC AND EDUCATIONAL PROGRESS

GEORGE H. SHERWOOD, Director

The scientific and educational program for 1933 was greatly handicapped by the serious reduction in budget funds. This has meant the curtailment or suspension of many activities and has called for many sacrifices on the part of our Staff. So far as regular budget funds were concerned, all field work was eliminated and no specimens or collections could be purchased. The attention of the Staff has been focused chiefly upon the carrying on of internal activities, upon the completion of researches in hand and upon maintaining and developing our service to the public. In the carrying on of this program and in making the many necessary readjustments to meet the present economic conditions, the Director has had the loyal and sympathetic support of the entire personnel of the Museum. Much has been accomplished which is worthy of note.

### NEW EXHIBITIONS

Completion of exhibitions has held the foremost place in the work schedule.

Early in the year the *Hall of Ocean Life* was put in shape for a preliminary opening to the public. This building was structurally finished in 1925, but it had not been practicable to complete the installations for public exhibition because of the necessity of using the building for the temporary setting up of African Hall groups and for storage purposes. In 1933, the African Hall groups were moved to the African Hall Section and the regular exhibits in the Hall of Ocean Life were made ready for public display. This Hall, probably the largest of its kind, contains the great whales and other sea mammals, a beautiful series of murals depicting oceanic life and whaling days, a Bahaman Coral Reef and the recently acquired Lindbergh plane. This hall has a strong appeal for the visiting public.

Splendid progress has been made toward the completion of the Bahaman Coral Reef Group, being prepared under the direction of Doctor Miner, and it will be ready for exhibition early in 1934. This group represents ten years of research, study and preparation and will surpass any exhibit of its kind in the world.

Another new exhibition made available to the public early in the year was the central corridor in the *Hall of Primates*. This corridor contains six habitat groups showing some of the most interesting monkeys and their relatives in their natural habitats, which has added greatly to the interest in this hall.

In the *Birds of the World Hall* on the second floor, designed to show the great bird faunal areas of the world, two more groups were completed and opened, namely, the Congo Forest Group, the gift of the late Mrs. Dwight Arven Jones, and the New Forest Bird Group, presented by Mrs. Carll Tucker. The latter has been dedicated to the late Lord Grey of Fallodon and commemorates the day when he took Colonel Roosevelt aside to study English birds. Thus, seven of the twelve groups planned by Doctor Chapman for this hall have been finished, and the eighth, the Gobi Desert Group, is well advanced. This hall is one of the most beautiful and attractive in the Museum.

The superb collection of fossil mammals has been rearranged in the *Osborn Hall of the Age of Mammals*, recently dedicated by the Trustees to Professor Henry Fairfield Osborn in appreciation of his extraordinary contributions to the science of vertebrate palaeontology. The series of halls of fossils, developed under Professor Osborn's supervision, is the most comprehensive display of past life on the earth to be found anywhere.

Through the generous support of Mr. Lincoln Ellsworth, the *Corridor of Geography*, containing our memorabilia of Arctic and Antarctic exploration, has been recased and rearranged. To the collection has been added two maps representing the North Polar and South Polar caps, on which the routes of great explorers are charted. The South Polar cap has been on special exhibition in Memorial Hall and on it has been plotted daily the progress of the Ellsworth Expedition and the Byrd Expedition, a feature which has attracted much public interest.

In many of the other halls refinement of the exhibits and improvement in the arrangements have been going forward. The overcrowding in the *J. A. Allen Hall of North American Mammals* has been relieved and the *North Asiatic Mammal Hall* has been renovated to receive local mammal groups and other specimens and to make a more attractive approach to the splendid *Vernay-Faunthorpe Hall of South Asiatic Mammals*.

## PREPARATION

The most conspicuous progress in preparation and installation has been made in the preparation of the groups for the *Akeley African Hall*, which has received special attention in order to meet our obligations to the City and to the generous friends who have made these groups possible. Doctor Clark and his staff have brought four of these groups practically to completion, namely:

Sable Antelope —Gift of Arthur S. Vernay

African Buffalo —Gift of George Eastman

Giant Eland —Gift of Charles Oliver O'Donnell

Greater Koodoo—Gift of Daniel E. Pomeroy

They are now going ahead actively with the Lion Group, presented by Mr. and Mrs. G. Lister Carlisle, Jr., and the Gorilla Group, provided for by gifts of Mr. Julius F. Stone and his family, while preparation work is proceeding satisfactorily on the specimens and accessories for other groups for this great Memorial.

## EDUCATION

One of the fundamental ideas of the Founders of the Museum was that it should be an institution for education. This ideal is continually before us, and the Museum for years has been exerting a great influence in the educational field. Its activities in this field may be grouped under two main headings, namely:

### TECHNICAL EDUCATION—GENERAL EDUCATION

Under the first is our School Service, college and university contacts, teacher training courses, and adult education program. Under the second heading is our public guide service, special exhibitions, conventions, and other public meetings and contributions to leisure time problems and to outdoor education.

In spite of reduced funds and although the Board of Education for financial reasons was obliged to withdraw the corps of teachers which had been previously assigned to the Museum to supplement our own teaching staff, we have been able to continue our educational program in practically all its branches.

What is meant by the Museum's "School Service?" It means that small nature collections and other visual instruction aids are loaned free to any public school in Greater New York. It means that lantern slides and motion picture films of the Museum are available for supplementing classroom instruction. It means that lectures and talks in the exhibition halls, special instruction

for the sight conservation classes, and expert guidance through the halls are being given to school children and their teachers. It means that five auto-trucks are daily delivering loan material to the schools and thereby are placing at the disposal of teachers aids which they cannot get in any other way. This is a service that is used by more than 93% of the schools of the City and made more than 31,000,000 contacts with school children in 1933. The following statistical table indicates the extent of this service and its importance:

	1930	1931	1932	1933
Attendance at lectures, classes and guiding.....	247,629	226,552	220,482	191,556
Children's Science Fair....	39,250	30,657	37,275	44,745
Visitors to Bear Mountain Nature Trails.....	200,000	283,000	300,000	350,000
Contacts made by lending lantern slides.....	15,588,403	17,392,790	17,019,882	17,014,690
Contacts made by lending motion picture films....	3,764,505	7,423,708	10,458,181	9,012,628
Contacts made by lending circulating collections....	3,210,741	2,590,753	3,816,863	4,775,176
	<hr/> 23,050,528	<hr/> 27,947,460	<hr/> 31,852,683	<hr/> 31,388,795

But our educational program goes a great deal farther than this. An important—if not the most important—contribution of the Museum to technical education is the teacher training courses, which give practical instruction in how to recognize objects in nature and how to use visual aids. During the year five of these training courses have been given by our Staff, and the over-registration is a clear indication that they are of real value to teachers.

The Department has continued its contacts with colleges and universities of the City and vicinity. Several courses have been given at the Museum for which college credit is given. These institutions are finding it most helpful to make more intensive use of our collections in their own courses.

In the field of General Education the Museum has made its contribution by serving as host to visiting educational and scientific bodies. These included the Fiftieth Anniversary Meeting of the American Ornithologists' Union, which included the finest exhibition of bird paintings ever brought together; the Children's



Science Fair in coöperation with the American Institute, also the Congress of the Junior Science Clubs; the Flower Show of the New York Horticultural Society; a series of symphony concerts, given in our Auditorium by the New York Civic Orchestra, under the auspices of the State Department of Education; a conference of unemployed teachers, conducted by the New York State Department of Education, and many others. Members of the educational staff of the Museum are serving on the Adult Education Council, on the President's N. R. A. Committee on the Use of Leisure Time.

In outdoor education, the Museum has continued to operate the Trailside Museum and the Nature Trails at Bear Mountain in coöperation with the Commission of the Interstate Park. This work is immediately in charge of Mr. William H. Carr, and the Museum's share is financed through contributions from Mr. Felix M. Warburg. Mr. Carr reports that the attendance for the summer of 1933 was more than 350,000.

The Department sponsors one Club activity for school children, the Junior Astronomy Club. Its one hundred and fifty active members attend lectures and discussions, make observations, and write and publish the *Junior Astronomy News*, which goes to one hundred and fifty associate members of the Club, in twenty-six States, and in London and Paris.

### LIBRARY AND PUBLICATION

The importance to the Museum of publication cannot be over-emphasized. It is through this means that the results of its explorations and researches are made known to other scientists and institutions, and through exchanges with them our Library is constantly enriched. Books are the tools of the scientific worker. The most outstanding gift to the Library for many years is that of more than two hundred rare and valuable works presented in connection with the famous I. Wyman Drummond collection of carved ivories, jade and amber, through the generosity of Mrs. William Herbert. These fill a long-felt need for works of reference in this field.

The output of our Printing and Publishing Department compares favorably with that of other years. Our own regular publications include the *Bulletin*, *Novitates*, *Anthropological Papers*, *Memoirs*, and the popular publications *Natural History*, *Hand-*

*books, Guide Leaflets and School Service series.* Some 3,842 pages were published in 1933. Among the important volumes that have appeared, mention should be made of "Fifty Years of Museum Work," the autobiography and bibliography of the late Dr. Frederic Augustus Lucas, former Director of the Museum. This forms an interesting commentary on the development of museums in America. Another autobiography that appeared in 1933 is "The Autobiography of a Bird Lover" by Dr. Frank M. Chapman. (D. Appleton-Century Co., Inc.) This fascinating volume is virtually the history of the Museum's Department of Ornithology.

Continued progress has been made in Professor Osborn's great Memoir on the Proboscidea, which embodies his study of twenty-three years on the elephants.

## RESEARCH

There is no clear demarcation between exploration and research. Every exploration is research, and many problems of research are carried on in the field. In general, however, in referring to research in the Museum, we have in mind scientific studies which are carried on at the Museum as distinguished from those that are being made on an expedition. The suspension of many of our field activities has enabled the members of our Scientific Staff to devote more time to the carrying on of their researches on the collections that have been previously accumulated and in undertaking new problems of study in the Museum laboratories. These studies include identification of specimens, the establishment of their relationships, problems of geographical distribution, anatomical investigations and experimental study of reactions to environments. During 1933, progress was made in many of these problems.

An instance of the practical application of the experience and knowledge of one of our Staff members was the service which Doctor Reeds rendered to the engineers of the Dock Department of the City in determining the cause of certain rock slides in the excavations for the three new piers which are being constructed on the North River at the foot of 47th to 52nd Streets. Doctor Reeds prepared a report upon the geological and structural features of the rock on these pier sites, which has proven most valuable to the engineers.

Doctor Noble has continued his interesting and significant studies in experimental biology. Attention has been given to

animal societies and it has been found that aggregation is a distinct advantage to some species, for it lowers the respiratory rate and in this way decreases water loss. In the laboratory the physiology of hibernation was studied in the light of this and other new information. The importance of gaudy color in the social life of vertebrate animals was investigated. The sense organs utilized in the social life of reptiles were examined histologically and the studies on the hormones controlling the development of the colors of animals were continued. The experiments and studies by Doctor Lutz give further proof that certain insects in their everyday life see ultraviolet color which is invisible to the human eye and that they distinguish minute differences in patterns of ultraviolet and make use of them in returning to their nests.

These studies of Doctor Noble and Doctor Lutz and their associates are adding much to the information on animal behavior.

Through the James Arthur Fund for Research on the Anatomy and Evolution of the Human Brain, Doctor Gregory has instituted studies which it is believed will yield scientific contributions of merit and a series of exhibits illustrating the evolution of the brain. Doctor Gregory has also continued his investigations on man's place among the anthropoids.

### EXPLORATION

The American Museum of Natural History has for many years taken a leading part in intensive exploration. Frequently we have had as many as thirty-five or forty expeditions in the field during a single year. During 1933 all expedition work supported from regular budget funds had to be suspended. Nevertheless, eighteen expeditions, financed privately or through special funds, have been in the field and produced excellent results. These represented the Museum in New Guinea, North and South America, South Seas, Africa, Panama and the West Indies, Malay Peninsula, and India.

#### NEW GUINEA

Doctor Margaret Mead, Assistant Curator of Ethnology, completed her work in the Sepik District of the Australian Mandate, among tribes of the Prince Alexander Mountains, the Yuat River and Aibom Lake, in the Sepik River Valley, in New Guinea. For the past two years she has been studying primitive peoples and their culture. Her extensive ethnological collections have already been received at the Museum. Financed by the Voss Fund.

Mr. Richard Archbold, Research Associate in the Department of Mammalogy, sailed for New Guinea on January 19. The expedition will spend more

than a year collecting birds, mammals, reptiles, amphibians and fishes, along the coast and in the interior of New Guinea. Considerable collections have already been obtained. Financed by Mr. Archbold.

#### THE SOUTH SEAS

*The Whitney South Sea Expedition*, under the leadership of Mr. William F. Coultas, has been working around numerous outlying islands of New Guinea including the Admiralties and the Bismarck Archipelago. Very important collections have been received at the Museum. Financed by the Whitney Fund.

#### SOCIETY ISLANDS

Mr. Roswell Miller and Doctor Harry L. Shapiro visited Tahiti during the early autumn. Mr. Miller took undersea colored motion pictures while Doctor Shapiro finished some anthropometric work which he had begun four years ago. Financed by Mr. Miller.

#### INDIA

Professor P. Mitra has been carrying on studies of the hill tribes of Assam and Burma for the purpose of recovering as much of the ancient culture as possible while these people still live. He has sent an ethnological collection and a report of one group to the Museum. Financed by the Voss Fund.

#### MALAY PENINSULA

For several years Mr. Arthur S. Vernay has been endeavoring to secure for the Museum a specimen of the rare *Rhinoceros sondaicus*. Success seemed to be in sight this past summer when his associate, Major G. S. Rowley, shot a supposed *sondaicus* but it proved to be a large *Sumatran Rhinoceros*. This also highly desired specimen has been presented to the Museum by Mr. Vernay who assures us that he will continue his efforts until he eventually obtains a *sondaicus*. Financed by Mr. Vernay.

#### AFRICA

President F. Trubee Davison returned from Africa the middle of October with five elephants to complete the group in the new African Hall. He obtained other important specimens for the general collection as well as the elephants. Financed by President Davison.

*The Phipps-Bradley Expedition*. A splendid series of over one thousand mammals has been secured from Angola, Africa. Among them are some extremely important specimens, notably those representing two genera of insectivores. Financed by Mr. John H. Phipps.

#### SOUTH AMERICA

*Patagonia*. Doctor George G. Simpson left in September for Patagonia to continue his studies on Late Tertiary mammals. He reports the discovery of extremely large deposits where important specimens are in great abundance, and many have already been removed. Financed by Mr. Horace S. Scarritt.

Mr. Junius Bird spent part of the year in Tierra del Fuego on archaeological studies. He spent most of his time on Navarin Island and at Lago Fañjano, investigating the prehistoric shell heaps. Financed by the Voss Fund.

*Bolivia.* Doctor Wendell C. Bennett and Mr. Junius Bird left in late autumn for Bolivia to make an archaeological study of the antiquities of the Bolivian highlands. If permits can be obtained from the government, excavations will be made of some of the archaeological sites discovered on the Bennett-Phillips Expedition of 1932. Financed by the Voss Fund.

#### BRITISH WEST INDIES

Doctor Roy W. Miner and Mr. Chris E. Olsen, accompanied by Mr. Roswell Miller, made undersea observations of the coral reefs off Rose Island and Andros Island in connection with the completion of the Coral Reef Group in the Hall of Ocean Life. Financed by Mr. Miller, Mr. Junius S. Morgan, Mr. Clarence L. Hay and Mr. E. S. Toothe.

Mr. John Armstrong went to Santo Domingo for the collection of invertebrates and reptiles and amphibians. Financed by Mr. Armstrong.

#### PANAMA CANAL ZONE

Doctor Frank E. Lutz, accompanied by Mr. Herbert F. Schwarz and Mr. E. Irving Huntington as volunteer assistants, continued research and collection of insects in Panama. Financed by the Entomological Fund.

#### NORTH AMERICA

Mr. Barnum Brown spent several months in the Lower Cretaceous beds of Wyoming, Montana and South Dakota. He uncovered two great Sauropod dinosaurs somewhat smaller than *Brontosaurus* which probably represent species unknown to science. He also discovered a very interesting small carnivorous dinosaur about the size of a jack-rabbit which represents a completely new type. Financed by the Frick Fund.

Mr. Childs Frick continued his palaeontological investigations in western North America. Financed by Mr. Frick.

Doctor Chester A. Reeds continued his study of the varved clays in the Hackensack and Passaic River basins of New Jersey. Financed by Mr. Frick.

The Bartlett-Norcross Expedition to Fox Basin brought back a considerable collection of Arctic birds for the Museum. Financed by Mr. Norcross.

#### THE ANTARCTIC

Rear Admiral Richard E. Byrd expects to obtain a group of Antarctic seals for the Hall of Ocean Life.





### III. ADMINISTRATION, OPERATION, BUILDING

GEORGE H. SHERWOOD, Director

WAYNE M. FAUNCE, Assistant Director

#### PROGRESS OF CONSTRUCTION DURING 1933

During the past year a number of important building projects of the American Museum have been materially advanced. The Roosevelt Memorial is progressing toward dedication on October 27, 1934, the seventy-sixth anniversary of the birth of Theodore Roosevelt. The architectural, artistic and exhibitional elements in this great three-and-a-half-million-dollar Memorial have been carefully developed by the Roosevelt Memorial Trustees in consultation with the Buildings and Plans Committee of the Museum Trustees and with various staff committees of the Museum. Of importance second only to the Memorial itself are the Easterly Approaches across Central Park in which Professor Osborn, on behalf of the American Museum, has taken a leading part for the past twenty-two years. The proposed approach plans have the support of several important local and national organizations interested in the Memorial, and it is hoped that with the advent of the new municipal administration, under Mayor La Guardia and Park Commissioner Moses, adequate approaches to the Roosevelt Memorial across Central Park may be provided before the opening of the Memorial in 1934.

Excellent progress has been made with the habitat groups in the new Akeley Memorial African Hall. The case construction work is keeping well ahead of the preparation program and sufficient funds are available to provide cases for all the groups for which material has been collected, so that it will be possible to open the partially completed hall in presentable condition soon after the dedication of the Roosevelt Memorial. Exhibition cases for the Jurassic Dinosaur Hall on the fourth floor of the African Section have been constructed by our own mechanics, and special intra-case lighting will be provided. The biological laboratory equipment on the sixth and seventh floors has been completed under a City contract, and the Department of Experimental Biology is already occupying its splendid new laboratories.

Except for work on the detailed plans for equipment of the Whitney Wing, there has been no building activity in this section during the year, on account of the temporary inability of the City to advance the funds which it had previously appropriated. The arrangement of habitat groups on the second floor is being studied by means of a scale model, and we are preparing to order, or undertake the construction of, practically all the equipment for this building as soon as funds are available. There is a balance in the appropriation, which should be ample for this purpose.

The Administrative Staff and Astronomical Department have given an enormous amount of time to the plans for the new Planetarium and to the negotiations with the Reconstruction Finance Corporation, which culminated in a loan of \$650,000 from the Corporation for the construction of the building. Together with the munificent gift of \$150,000 by Mr. Charles Hayden, this sum will provide for a two-story and basement building with complete equipment, including a Copernican Planetarium, as well as a Zeiss Projection Planetarium. At the present time, the architects, Trowbridge and Livingston, are preparing detailed plans and specifications which should be ready in time to advertise the construction contract by April 1, 1934.

On May 2, 1933, the occasion of the fifth annual Members' Visiting Day, the Hall of Ocean Life was opened to the public. Prior to the opening a large amount of construction work by our own forces was necessary. During the autumn the Museum's large auditorium was provided with complete sound motion picture equipment, together with a special elevating screen and ornamental draperies, which greatly improve the appearance of the front of the hall. The magnificent Drummond Collection of Ancient Jade and Amber is being installed in the Southwest Tower on the fourth floor, and in addition to building eight cases to augment those donated with the collection, the Drummond Memorial Room will be redecorated to harmonize with the beautiful specimens of the collection.

The rearrangement and recasing of the exhibits in the Corridor of Geography on the first floor are nearly completed. Through the generosity of Mr. Lincoln Ellsworth, the Museum has been enabled to construct two large new cases and prepare two new polar maps which will greatly enhance the attractiveness and teaching value of this collection—one of the most popular in the Museum.

Professor Osborn has presented two bronze tablets for the west entrance of the Osborn Hall of the Age of Mammals, one bearing the names of American Museum curators and scientists whose efforts have enriched the hall, and the other indicating the nature of the collections on exhibition in the hall. With appropriate ceremonies, these tablets were unveiled on March 6.

A number of cases which crowded the North American Mammal Hall on the second floor have been withdrawn and rearranged in a temporary exhibit in the next hall east—the future North Asiatic Hall. By additional lighting and other changes, the North American Mammal Hall has been greatly improved. With emergency workers provided by the Civil Works Administration through the City of New York, considerable work has been done toward cutting a passageway from the School Service basement to the basement runway in the North Wing. This same group of temporary workers is converting the old boiler room into a garage for Museum cars, which will free the old garage space for lumber storage and also enable the Museum to enlarge the seating capacity of the school children's cafeteria. Emergency workers have been employed as well on patching and painting in the basement, carrying out a much needed improvement.

### **PUBLICITY**

During the spring of 1933, this department concluded its series of radio talks given by members of the scientific staff over a coast-to-coast network through the courtesy of the Columbia Broadcasting System. These talks met with hearty response throughout the country and in Canada and were of especial value to the Museum since they were given in connection with the American School of the Air program, an outstanding educational event.

This work has been carried on under the direction of Mr. George N. Pindar.

Because of the many duties connected with the office of Registrar and as a member of the Pension Board, also in connection with the Roosevelt Memorial, Mr. Pindar resigned from the Chairmanship of the Committee on Public and Press Information, and Mr. Hans Christian Adamson was appointed to the Chairmanship of this Committee. With somewhat increased facilities and more time available for the work, we are pleased to report that our

press relations and general publicity have been extended during the year. Through the cooperation of the newspapers and broadcasting companies, much has been done to bring our work before the public, and appreciation is extended to them, as well as to the members of our staff who have helped in the extension of the educational influence of the Museum.

STATISTICS OF NUMBERS REACHED BY THE MUSEUM AND ITS  
EXTENSION EDUCATIONAL SYSTEM

	1929	1930	1931	1932	1933
Lectures to School Children and classes visiting the Museum for Study.....	157,168	214,153	226,552	220,482	159,538
Meetings of Scientific Societies and Other Meetings and Lec- tures.....	45,936	56,640	20,330	23,042	18,528
Total.....	203,104	270,793	246,882	243,524	178,066
Attendance in Exhibition Halls	712,529	876,601	882,309	789,741	924,030
Total attendance for all Purposes.....	915,633	1,147,394	1,129,191	1,033,265	1,102,096
Lectures to Pupils in the Schools	26,456	19,512	8,248	23,006	31,818
Number reached by Motion Picture Service.....	1,725,865	3,764,505	7,423,708	10,458,181	9,012,628
Number reached by Lantern Slide Service.....	8,550,181	15,588,403	17,392,790	17,019,882	17,014,690
Number reached by Circulating Collections.....	1,857,729	3,194,647	2,567,537	8,816,863	4,775,176
Bear Mountain Nature Trails..			283,000	300,000	350,000
Grand Total.....	13,075,864	23,714,461	28,804,474	32,651,197	32,286,408

### REPORT OF THE REGISTRAR

The Registrar's Department has the unique distinction of finding itself in the position to report that the past year, which has tended to exert a somewhat paralyzing influence on most activities, certainly has not diminished the appreciation of the American Museum felt by many of its friends as expressed in their gifts. Our accession list compares very favorably with the year 1932, in fact, if taken item by item instead of by collections, would run considerably larger. That the American Museum should have been chosen as the depository of such an immense and important group of jade, ivories, lapis, skilfully wrought bronzes and amber, collected by Dr. I. W. Drummond in the course of his long and eventful life, is a piece of good fortune that can be appreciated only after a study of this marvellous collection which is as varied as it is rich in unusual pieces.

In addition to the accessions mentioned in another part of this report, other outstanding gifts have been received which deserve especial mention: Mr. George D. Pratt presented a Peruvian collection of 113 pieces, consisting of clay, shell, metal

and wooden objects and some remarkable feather work from Nazca and Chimu sections of the coast of Peru. From Mr. Alfred C. Berolzheimer were received two American wapiti, three Shiras moose and three pronghorn antelope. Mrs. James Norman Hill presented a valuable collection of cut and uncut gem stones. Mrs. Charles C. Kalbfleisch also presented a fine collection of gem stones. A bronze bust of Professor Henry Fairfield Osborn was received which had been arranged for by Mrs. Osborn before her death. The gift which created great popular interest was that of the Lindbergh plane and equipment.

The work of preparing the accession lists and checking up on loaned material occupies no small amount of time in the different departments in order that the records in this department may be accurately kept, and it is to be said that the departments cooperate willingly in this detailed work. The Registrar's office is the focal point for a great variety of queries regarding material in the Museum. It is, therefore, imperative that our records be as nearly correct as possible that the many inquiries received may be promptly and intelligently answered. The lists show that 607 gifts were accessioned during the year, 10 transfers, 42 exchanges, 61 purchases, and 52 items from expeditions.

The department, by special request from editors, has supplied articles bearing upon the Museum's work for incorporation in magazines, encyclopedias and year-books.

The shipping department reports 3,766 incoming shipments, involving the handling of 9,544 pieces, and 2,811 outgoing shipments requiring the packing of 4,841 pieces. The delivery truck covered 3,732 miles, making 476 stops.

The work of the Welfare Committee, through the operation of its First Aid Room, established some years ago by the Museum, is proving of great value. The nurse in charge has reported that during the past year a total of 2,282 examinations and treatments have been given. Of this number, there were 19 cases coming within the Workmen's Compensation Law: 951 medical cases; 710 redressings, and 602 new cases, physical examinations, food certifications, etc. The homes of twenty-one employees were visited during the year, in which the nurse assisted and directed in the care of injured or ill employees. The First Aid Room is open to all employees, as well as to visitors at the Museum. We feel that the establishment of this work has been amply justified.

The work of the Pension Board, of which the Registrar is Secretary, is contained in a separate report. We are pleased to note here that on January 9, 1933, on recommendation of the Pension Board, the Board of Trustees passed a resolution that employees who have been placed on the retired list, after a service of thirty years or longer, may as a further appreciation of their service be elected as Life Members or Patrons of The American Museum of Natural History.



## IV. FINANCIAL ADMINISTRATION

JAMES H. PERKINS, Treasurer

FREDERICK H. SMYTH, Bursar

### BUDGETARY FUNDS OF 1933

The Treasurer reports that the Budget as approved on February 8, 1933, and as revised during the year was \$1,266,753.29. Receipts for the year aggregated \$1,202,805.24, a decrease of \$63,948.05 from budget estimates.

It is expected that \$25,000 of this decrease will be received during the current year (Charles S. Keene Foundation—\$20,000; interest on Chicago, Rock Island and Pacific Railway Company 4s of 1988—\$5,000), thereby reducing the income shrinkage for 1933 to \$38,948.05 below the budget estimates and bringing the total receipts for the year 1933 to \$1,227,805.24.

The estimated disbursements, as approved in the February Budget, were \$1,266,753.29 (balanced with receipts). The disbursements, however, were \$1,221,364.60, to which should be added \$5,954.18 obligations carried forward to 1934 for the Experimental Biological work, making a total against the budget for 1933 of \$1,227,318.78.

Therefore, with the decrease of \$38,948.05 in receipts and a decrease of \$39,434.51 in disbursements, the closing of the books at December 31, 1933, showed an excess of income over expenditures of \$486.46.

### SUMMARY OF ALL ACCOUNTS

In order that our financial statement for the year may be quickly grasped, we have brought together all receipts of the City Maintenance, General, and Morris K. Jesup Fund Accounts, \$1,227,805.24, and disbursements of these accounts, \$1,221,364.60. Also included are the receipts, \$304,736.11, and the disbursements, \$183,361.96, of the Special Funds Account.

The former three accounts constitute our Budgetary Funds, and the latter the restricted funds which are for specific purposes.

**SUMMARY OF RECEIPTS AND DISBURSEMENTS  
FOR ALL PURPOSES, 1933**

**Receipts**

City of New York for Maintenance.....		<u>\$420,614.75</u>
Trustees' Funds:		
Balance, January 1, 1933.....		\$174,858.48
Income from Endowment Funds.....	\$698,616.77	
Contributions of Trustees.....	67,387.43	
Contributions of Members and Friends.....	44,202.62	
Membership Dues.....	51,932.00	
Sale of Publications and Exchanges..	16,355.01	
Interest on Credit Balances.....	223.82	
Contributions of Foundations.....	5,000.00	
Contributions of Employees for Gen- eral Purposes.....	50,568.91	
Natural History Advertising.....	2,731.56	
Group Preparation, General Prepara- tion.....	50.00	<u>937,068.12</u>
Total Income, Trustees' Funds.....		<u>\$1,111,926.60</u>
Total Income, all sources.....		<u><u>\$1,532,541.35</u></u>

**Disbursements (Operating Costs)**

**Scientific and Research:**

Geology and Invertebrate Palaeontology	\$15,044.91
Mineralogy.....	10,159.86
Mammalogy.....	41,572.19
Central Asiatic Exploration and Research	21,513.67
Ornithology.....	37,772.93
Vertebrate Palaeontology.....	81,222.86
Professor Osborn's Science Fund.....	4,779.45
Comparative Anatomy.....	18,392.51
Anthropology.....	45,021.46
Ichthyology.....	18,204.50
Herpetology and Experimental Biology	29,339.27
Lower Invertebrates.....	16,436.26
Entomology.....	23,172.47
Library.....	30,157.21
Astronomy.....	3,031.56
	<u>\$395,821.11</u>

**Printing, Books and Publications:**

Printing and Publishing.....	<u>\$99,232.77</u>
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**Preparation and Exhibition:**

Preparation and Exhibition.....	\$139,076.76
Vertebrate Palaeontology.....	20,447.30
	<u>\$159,524.06</u>

**Educational—Public School Work:**

Public Education.....	<u>\$80,753.24</u>
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**Administration and Operation:**

Administration.....	\$290,447.68
General Supplies and Expenses.....	39,542.92
Heating and Lighting.....	121,001.21
Repairs and Installation.....	76,240.38
Special Repairs.....	8,024.78
Pension Fund.....	31,524.66
Engineers' Services.....	4,941.03
Architects' Services.....	350.00
Group Life Insurance.....	9,544.02
Legal Services.....	2,780.80
Financial Administration.....	80,005.39
	<u>\$664,402.87</u>

\$1,399,734.05

**Payment in part of Deficit of 1931.....**

4,982.51

**Contributions for General Purposes 1932**

(Transferred to Annual Members).....	<u>10.00</u>
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Total, all costs..... \$1,404,726.56

Balance, December 31, 1933..... 127,814.79

\$1,532,541.35

**PERMANENT ENDOWMENT FUND, 1933**

The Treasurer, who is also Chairman of the Finance Committee, desires to report that there have been received the following bequests:

James Norman Hill.....	\$100,000.00
Alfred W. Jenkins.....	5,000.00
Caroline B. Sellew (on account).....	2,500.00
Sarah A. Turnbull.....	3,055.00
	<u>\$110,555.00</u>

The Chairman also reports that during 1933 an amortization payment of \$20,000.00 was received on account of one of our Real Estate Mortgages. With this amount added to the cash on hand, January 1, and new bequests received, the Finance Committee purchased securities of a par value of \$166,000.00 at an aggregate cost of \$182,902.50, leaving a cash balance of \$10,713.61 on hand at the present time. The Finance Committee ordered the sale of certain of our stock holdings and the reinvestment of the proceeds in other stocks in order to obtain a more satisfactory yield and to diversify the list of stocks held. The book value of the Endowment Fund increased \$100,438.70 during the year.

The Endowment Fund on December 31, 1933, amounted to a book value of \$15,005,137.86, comparing with the holdings at January 1 as follows:

	Jan. 1, 1933	Dec. 31, 1933
Railroad Bonds.....	\$7,462,224.75	\$7,469,937.25
Railroad Stocks.....	0.00	40,871.15
Public Utility Bonds.....	3,955,631.75	4,130,821.75
Industrial Bonds.....	935,581.25	935,581.25
Industrial Stocks.....	502,930.50	451,920.25
Government Bonds.....	122,823.44	122,823.44
Investment Trust Bonds.....	201,352.50	201,352.50
Real Estate Mortgages.....	1,450,700.00	1,430,700.00
Real Estate Property.....	110,416.66	110,416.66
Charles M. Jesup Trust.....	100,000.00	100,000.00
	<u>\$14,841,660.85</u>	<u>\$14,994,424.25</u>
Uninvested Cash.....	63,038.31	10,713.61
	<u>\$14,904,699.16</u>	<u>\$15,005,137.86</u>

The market value of the securities, according to a compilation made December 31, 1933, is \$13,571,405.66, a decrease from book value of 9.4%, compared with a decrease of 18.1% shown by the market value of December 28, 1932.

The income received on the Endowment Fund for the year 1933 was \$698,616.77, a yield of 4.64% on the value at which the securities were carried on our books at the year-end, \$15,005,-137.86. The income was reduced as the result of defaults of interest on certain real estate mortgages and railroad bonds held, the total loss from these causes, based on current estimates, amounting to approximately \$54,241.50. These properties which are not now producing income will, it is hoped, be restored to an income basis through ultimate sale or adjustment of the current defaults.

In conclusion, the Chairman wishes to call the attention of the Board to important gratuitous assistance rendered the Museum by our Financial Advisers, Messrs. Arthur M. Anderson and Charles D. Lanier, who have given a great deal of study to the Museum's holdings.

The Treasurer submits herewith the Financial Statement for 1933.





**FINANCIAL STATEMENT, 1933**  
**ENDOWMENT AND INVESTMENT**

	Par Value	Book Value
<b>UNRESTRICTED ENDOWMENT FUNDS:</b>		
General Endowment Fund.....	\$1,823,400.00	\$1,775,940.48
George F. Baker Fund.....	211,600.00	139,311.10
Wood Fosdick Fund.....	910,150.00	894,489.19
Anna M. Harkness Fund.....	989,700.00	978,030.82
Collis P. Huntington Fund.....	50,000.00	50,088.05
John D. Rockefeller, Jr., Fund.....	913,225.00	1,079,116.65
The Sage Fund.....	1,666,300.00	1,512,749.02
Sixtieth Anniversary Endowment.....	1,488,050.00	1,524,312.25
Wood Fosdick Trust Fund.....	110,416.66	110,416.66
<b>RESTRICTED ENDOWMENT FUNDS:</b>		
Morris K. Jesup Fund.....	5,745,100.00 } £110,000 }	5,795,914.47
Anthropology Special Fund.....	1,100.00	1,083.25
James Arthur Research Fund.....	37,700.00	30,991.25
Matilda W. Bruce Fund.....	12,000.00	12,002.00
Bashford Dean Ichthyological Library Fund.....	4,100.00	3,898.50
Anson W. Hard Library Fund.....	5,100.00	5,109.50
J. P. Morgan Fund.....	477,150.00	444,402.01
Osborn Palaeontologic Research Fund.....	4,000.00	3,218.75
Physical Anthropology Fund.....	12,200.00	11,564.00
Margaret Olivia Sage Fund.....	1,000.00 } £2,000 }	9,995.00
The Boyce Thompson Mineral Collection Fund.....	50,000.00	50,000.00
Jonathan Thorne Memorial Fund.....	29,300.00	28,347.75
Ralph Winfred Tower Memorial Fund.....	23,100.00	22,348.55
Vertebrate Palaeontology Field Fund.....	25,500.00	25,000.75
Vertebrate Palaeontology Special Fund.....	1,100.00	1,083.25
Frederick G. Voss Anthropology and Archaeology Fund.....	307,800.00	300,054.50
Wallace Memorial Fund.....	14,000.00	14,274.50
<b>RESTRICTED INVESTMENT FUNDS:</b>		
African Hall Group Fund.....		50,000.00
The Boyce Thompson Mineral Collection Installation Fund.....	20,600.00	20,682.00
	\$14,933,691.66 } £112,000 }	\$14,894,424.25
Uninvested Cash.....		10,713.61
		<u>\$14,905,137.86</u>

# **ENDOWMENT AND INVESTMENT ACCOUNT**

## **Receipts and Disbursements, 1933**

### **GENERAL ENDOWMENT FUNDS—(Unrestricted Funds):**

	Balance Jan. 1 1933	Receipts	Disbursements	Balance Dec. 31, 1933
General Endowment Fund:	\$29.57			
Amortization Payment....		\$20,000.00		
Purchase of Securities.....			\$20,022.50	\$7.07
George F. Baker Fund.....	1.02			1.02
Wood Fosdick Fund.....	53.54			53.54
Anna M. Harkness Fund....	18.75			18.75
John D. Rockefeller, Jr., Fund:	68.81			
Sale of Securities.....		95,409.77		
Purchase of Securities.....			95,417.90	60.68
The Sage Fund:	6.81			
Sale of Securities.....		55,514.18		
Purchase of Securities.....			55,483.25	37.74
Sixtieth Anniversary Endowment:	54,066.15			
Bequest of				
James Norman Hill....		100,000.00		
Alfred W. Jenkins.....		5,000.00		
Caroline B. Sellew.....		2,500.00		
Sarah A. Turnbull.....		3,055.00		
Purchase of Securities.....			154,598.00	
	\$54,066.15	\$110,555.00	\$154,598.00	\$10,023.15
<b>Total General Endowment</b>	<b>\$54,244.65</b>	<b>\$281,478.95</b>	<b>\$325,521.65</b>	<b>\$10,201.95</b>

### **SPECIAL ENDOWMENT FUNDS—(Restricted Funds):**

Morris K. Jesup Fund.....	\$50.16			\$50.16
J. P. Morgan Fund.....	1.95			1.95
Osborn Palaeontologic Research Fund.....	42.50			42.50
Physical Anthropology Fund	81.23			81.23
Ralph Winfred Tower Memorial Fund.....	79.00			79.00
Sixtieth Anniversary Endowment:				
James Arthur Research Fund	79.37			79.37
Bashford Dean Ichthyological Library Fund,.....	43.50			43.50
Vertebrate Palaeontology Field Fund.....	46.25			46.25
Wallace Memorial Fund...	20.00			20.00
<b>Total Special Endowment</b>	<b>\$443.96</b>			<b>\$443.96</b>

## ENDOWMENT AND INVESTMENT ACCOUNT (Continued)

### SPECIAL INVESTMENT FUNDS—(Restricted Funds):

	Balance Jan. 1, 1933	Receipts	Disbursements	Balance Dec. 31, 1933
The Boyce Thompson Mineral Collection Installation Fund: \$8,349.70				
Purchase of Securities.....			\$8,282.00	\$67.70
<b>Total Special Investment Fund.....</b>	<b>\$8,349.70</b>		<b>\$8,282.00</b>	<b>\$67.70</b>

### SUMMARY

General Endowment Funds..	\$54,244.65	\$281,478.95	\$325,521.65	\$10,201.95
Special Endowment Funds...	443.96			443.96
Special Investment Funds...	8,349.70		8,282.00	67.70
<b>Total Endowment and In- vestment.....</b>	<b>\$63,038.31</b>	<b>\$281,478.95</b>	<b>\$333,803.65</b>	<b>\$10,713.61</b>
Interest on Credit Balances:				
Interest earned on Bank Balances.....		\$141.74		
Transferred to General Account			\$141.74	
	<u>\$63,038.31</u>	<u>\$281,620.69</u>	<u>\$333,945.39</u>	<u>\$10,713.61</u>

## CITY MAINTENANCE ACCOUNT\*

## Receipts, 1933

## Capital Fund:

Balance, January 1, 1933.....	\$12,502.03
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## Department of Parks, City of New York, 1932:

## Expenses for Other than Personal Service:

1415 General Plant Supplies.....	\$582.44	
1419 General Plant Materials.....	1,274.18	
1420 Special Repairs (Building Materials)	351.59	
1421 Repairs and Replacements.....	289.76	2,497.97
Total.....		\$15,000.00

## Department of Parks, City of New York, 1933:

Salaries, Regular Employees.....	\$381,839.23	
Salaries, Temporary Employees (Special Repairs).....	5,543.00	\$387,382.23

## Expenses for Other Than Personal Service:

1410 Fuel Supplies.....	\$16,136.00	
1411 Office Supplies.....	2,521.00	
1412 Laundry, Cleaning and Disinfecting Supplies.....	1,641.00	
1413 Motor Vehicle Supplies.....	556.77	
1414 Educational and Recreational Supplies.....	229.00	
1415 General Plant Supplies.....	2,187.00	
1416 Wearing Apparel.....	1.00	
1417 Office Equipment.....	71.00	
1418 General Plant Equipment.....	219.00	
1419 General Plant Materials.....	6,154.00	
1420 Repairs and Replacements.....	237.00	
1421 Telephone Service.....	1,913.00	
1422 Fixed Charges.....	1,366.75	33,232.52

Total net receipts for the maintenance of all departments.....		420,614.75
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	<u>\$435,614.75</u>
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\*The annual appropriation of the City can be used only for the maintenance of the Museum, and is inadequate for this purpose. It cannot be used for the purchase of specimens or for the expenses of exploring and collecting expeditions. The deficiency in maintenance for 1933, amounting to \$368,000.00, has been met from the Trustees' General Account.

**CITY MAINTENANCE ACCOUNT**

**Disbursements, 1933**

**Administration and Operation:**

Administration.....	\$226,553.26	
General Supplies and Expenses.....	8,110.08	
Heating and Lighting.....	67,113.54	
Repairs and Installation.....	47,482.11	
Special Repairs.....	5,543.00	
Financial Administration.....	<u>28,649.00</u>	\$383,450.99

**Scientific and Research:**

Mineralogy.....	\$1,683.00	
Mammalogy.....	1,537.00	
Ornithology.....	1,537.00	
Vertebrate Palaeontology.....	780.00	
Anthropology.....	1,537.00	
Lower Invertebrates.....	3,001.00	
Library.....	<u>2,878.50</u>	12,953.50

**Printing, Books and Publications:**

Printing and Publishing.....		7,157.86
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**Educational—Public School Work:**

Public Education.....		<u>17,052.40</u>
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**Total net disbursements for the maintenance of all departments....:   \$420,614.75**

**Capital Fund:**

Balance, December 31, 1933.....		15,000.00
		<u>\$435,614.75</u>

## GENERAL ACCOUNT

## Receipts, 1933

Balance, January 1, 1933

Cash.....		\$210,751.52	
Loans Receivable:			
Sixtieth Anniversary Endowment.....	\$82,404.12		
African Hall Construction.....	41,117.19		
Authorized Deficit 1931.....	29,884.68	153,405.99	
		<u>\$364,157.51</u>	
Reserved for Payment of Bank Loan.....		350,000.00	
Available Cash.....			\$14,157.51
Income from Investments and Trust Fund:			
General Endowment Fund.....	\$81,957.34		
George F. Baker Fund.....	8,087.17		
Wood Fosdick Fund.....	42,017.35		
Anna M. Harkness Fund.....	46,344.00		
Collis P. Huntington Fund.....	2,499.50		
Charles M. Jesup Trust Fund.....	4,076.05		
John D. Rockefeller, Jr., Fund.....	48,076.66		
The Sage Fund.....	72,689.55		
Sixtieth Anniversary Endowment.....	64,678.15	\$370,425.77	
Interest on Credit Balances.....		223.82	
Income Advanced by General Account Pending Collection..		25,000.00	
*Membership Fees:			
Fellows.....	\$500.00		
Life Members.....	400.00		
Sustaining Members.....	5,025.00		
Annual Members.....	33,260.00		
Associate Members.....	12,747.00	51,932.00	
Sale of Publications.....		6,708.68	
Subscriptions to Natural History.....		1,815.40	
Natural History Advertising.....		2,731.56	
Sales and Exchanges.....		1,654.03	
Contributions of Trustees for General Purposes:			
Felix M. Warburg.....		10,000.00	
Contributions of Employees for General Purposes.....		50,568.91	
Contributions for General Purposes:			
Anonymous.....	\$1,500.00		
Albert R. Brand.....	200.00		
David Todd Bulkley.....	100.00		
Ida T. L. Schwarz.....	100.00		
Other Contributions.....	115.25	2,015.25	
Contributions for Special Purposes:			
Cleveland H. Dodge Foundation, Inc.....		5,000.00	
Subscriptions for Group Preparation (transferred from Special Fund).....		50.00	
Total net receipts for the development of all departments.....			528,125.42
Contributions of Trustees for General Purposes, 1934:			
Childs Frick.....		1,000.00	
		<u>\$543,282.93</u>	

\*Membership Fees includes \$14,788.20 for Subscriptions to Natural History.

**GENERAL ACCOUNT**  
**Disbursements, 1933**

**Administration and Operation:**

Administration.....	\$63,536.07	
General Supplies and Expenses.....	31,432.84	
Heating and Lighting.....	53,887.67	
Repairs and Installation.....	28,758.27	
Special Repairs.....	2,481.78	
Architects' Services.....	350.00	
Engineers' Services.....	4,941.03	
Legal Services.....	2,780.80	
Pension Fund.....	31,524.66	
Group Life Insurance.....	9,544.02	
Financial Administration.....	51,356.39	\$280,593.53

**Scientific and Research:**

Geology and Invertebrate Palaeontology..	\$6,215.20	
Mineralogy.....	837.00	
Mammalogy.....	7,284.62	
Ornithology.....	5,525.51	
Central Asiatic Exploration and Research.	1,850.00	
Vertebrate Palaeontology.....	7,870.15	
Comparative Anatomy.....	5,539.66	
Anthropology.....	7,260.45	
Ichthyology.....	3,887.35	
Herpetology and Experimental Biology....	11,089.94	
Lower Invertebrates.....	5,156.15	
Entomology.....	9,955.42	
Library.....	19,714.60	
Astronomy.....	3,031.56	95,197.61

**Printing, Books and Publications:**

Printing and Publishing.....	72,782.99
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**Preparation and Exhibition:**

Preparation and Exhibition.....	30,141.25
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**Educational—Public School Work:**

Public Education.....	52,134.40
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**Total net disbursements for the development of all departments.... \$530,849.78**

Reduction of Deficit of 1931..... 4,982.51

Contributions for General Purposes, 1932 (Transferred to Annual Members) 10.00

Available Cash Balance—December 31, 1933..... 7,440.64

\$543,282.93

**ALLOCATION OF BANK LOAN****Balance, December 31, 1933:**

Cash..... \$177,082.31

Loans Receivable:

Sixtieth Anniversary Endowment..... \$85,915.69

African Hall Construction..... 43,479.29

Authorized Deficit of 1931..... 25,963.35 \$155,358.33

Advanced by General Account Pending Collection:

Charles S. Keene Foundation 1932 and

1933..... \$20,000.00

General Endowment Fund..... 2,510.00

George F. Baker Fund..... 846.00

Wood Fosdick Fund..... 1,266.00

John D. Rockefeller, Jr., Fund..... 378.00 25,000.00 180,358.33

\$357,440.64**Less:**

Reserved for Payment of Bank Loan..... 350,000.00

Balance—Available for 1934..... \$7,440.64



**MORRIS K. JESUP FUND ACCOUNT\*****Receipts, 1933****Trustees' Restricted Funds:**

Balance, January 1, 1933.....		\$6,663.55
Income from Morris K. Jesup Fund.....	\$254,771.74	
Sale of Publications.....	2,506.27	
Sales and Exchanges.....	966.00	

<b>Total net receipts for the development of all departments.....</b>	<b>258,244.01</b>	
	<b><u>\$264,907.56</u></b>	

**Disbursements, 1933****Scientific and Research:**

Geology and Invertebrate Palaeontology..	\$6,340.15	
Mineralogy.....	5,640.00	
Mammalogy.....	16,346.90	
Central Asiatic Exploration and Research.	6,792.11	
Ornithology.....	25,439.96	
Vertebrate Palaeontology.....	17,875.66	
President Osborn's Science Fund.....	4,779.45	
Comparative Anatomy.....	11,726.85	
Anthropology.....	20,640.02	
Ichthyology.....	13,833.60	
Herpetology and Experimental Biology...	13,393.52	
Lower Invertebrates.....	6,969.11	
Entomology.....	12,913.08	
Library.....	5,919.11	168,609.52

**Printing, Books and Publications:**

Printing and Publishing.....		17,476.27
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**Preparation and Exhibition:**

Preparation and Exhibition.....	\$58,374.47	
Vertebrate Palaeontology.....	20,447.30	78,821.77

<b>Total net disbursements for the development of all departments....</b>	<b>\$264,907.56</b>	
	<b><u>\$264,907.56</u></b>	

\*Disbursements of this account are made as the Board of Trustees may direct, for the purchase of specimens, for the expenses of field parties, and for the support of scientific work.

### SPECIAL FUNDS ACCOUNT

#### Receipts and Disbursements, 1933

	Balance Jan. 1, 1933	Receipts	Disbursements	Balance Dec. 31, 1933
<b>Astronomy</b>				
Astronomic Fund:.....	\$151.73			\$151.73
Totals.....	\$151.73			\$151.73
<b>Geology and Invertebrate Palaeontology</b>				
Ellsworth Arctic Exhibition Fund:				
Lincoln Ellsworth.....		\$2,000.00	\$2,000.00	
Meteorite Fund:				
Lincoln Ellsworth.....		698.05	348.05	350.00
Varve Clay Investigation Fund: 38.66				
Childs Frick.....		300.00	141.51	197.15
Totals.....	\$38.66	\$2,998.05	\$2,489.56	\$547.15
<b>Mineralogy</b>				
Matilda W. Bruce Fund:.. 2.98				
Interest.....		302.00	283.86	21.12
J. P. Morgan Fund—Mineralogy:				
Transferred from Reserve		1,000.00	1,000.00	
The Boyce Thompson Mineral				
Collection Fund:..... 3,075.00				
Interest.....		2,250.00		5,325.00
The Boyce Thompson Mineral				
Collection Installation Fund:				
Interest.....		557.38		557.38
Wallace Memorial Fund:.. 248.75				
Interest.....		699.50	716.00	232.25
Totals.....	\$3,326.73	\$4,808.88	\$1,999.86	\$6,135.75
<b>Mammalogy</b>				
Archbold Mammal Fund:.. 4,988.74				
Richard Archbold.....		8,594.59	13,550.94	32.39
Belgian Congo Study Fund:				
Robert T. Hatt.....		705.67		
Marcelle Roigneau.....		676.24	1,381.91	
		\$1,381.91	\$1,381.91	
George S. Bowdoin Whale				
Model Fund:..... 750.00			750.00	
Giant Panda Fund:				
C. Suydam Cutting.....		100.00	100.00	
Mammal Fund:				
Childs Frick.....		750.00		750.00
North American Mammal Fund: 300.00				300.00
Olympic Peninsula Fund:				
Boone and Crockett Club		400.00	400.00	
Ottley-Anthony Sudan				
Expedition Fund:.... 827.44				
Gilbert C. Ottley.....		1,500.00	214.64	2,112.80
Special Canine Fund..... 188.12			26.18	161.94
Totals.....	\$7,064.30	\$12,726.50	\$16,423.67	\$3,357.13

## SPECIAL FUNDS ACCOUNT (Continued)

	Balance Jan. 1, 1933	Receipts	Disbursements	Balance Dec. 31, 1933
<b>Asiatic Exploration and Research</b>				
Central Asiatic Expeditions				
Fund:.....	\$15,384.89		\$11,088.36	\$4,296.53
Sale of Publications.....	30.00	\$1,763.36	1,783.20	10.16
Totals.....	\$15,414.89	\$1,763.36	\$12,871.56	\$4,306.69
<b>Ornithology</b>				
English Bird Group Fund:				
Mrs. Carl Tucker.....		2,000.00	2,000.00	
Ornithological Fund:.....	5.87		2.10	3.77
Margaret Olivia Sage Fund:				
Interest.....		427.88	427.88	
Special Bird Fund.....	805.41		805.41	
Whitney South Sea Expedition Fund:.....	10,599.66			
Mrs. Harry Payne Whitney		5,000.00	2,035.07	13,564.59
Totals.....	\$11,410.94	\$7,427.88	\$5,270.46	\$13,568.36
<b>Vertebrate Palaeontology</b>				
American Pliocene Fund—				
Vertebrate Palaeontology: 1,644.63				
Childs Frick.....		23,500.00	22,985.05	2,159.58
J. P. Morgan Fund—				
Vertebrate Palaeontology:				
Transferred from Reserve		23,362.65	23,362.65	
Osborn Palaeontologic Research Fund:.....	197.24			
Interest.....		192.50	349.25	40.49
Scarritt Patagonian Expedition Fund:.....	1,790.24			
Horace S. Scarritt.....		6,500.00	6,682.83	1,607.41
Vertebrate Palaeontology Field Fund:.....	19.92			
Interest.....		1,209.00	1,200.00	28.92
Vertebrate Palaeontology Special Fund:.....	23.84			
Interest.....		49.50		73.34
Vertebrate Palaeontology Student Fund:				
R. R. Williams.....		100.00	100.00	
Western Field Fund:				
Refund.....		17.27	17.27	
Totals.....	\$3,675.87	\$54,930.92	\$54,697.05	\$3,909.74
<b>Comparative Anatomy</b>				
James Arthur Research Fund:	414.82			
Interest.....		1,750.00	1,028.00	1,136.82
Comparative Anatomy Fund:				
Childs Frick.....		750.00		750.00
Carried Forward.....	\$414.82	\$2,500.00	\$1,028.00	\$1,886.82

## SPECIAL FUNDS ACCOUNT (Continued)

	Balance Jan. 1, 1933	Receipts	Disbursements	Balance Dec. 31, 1933
Brought Forward.....	\$414.82	\$2,500.00	\$1,028.00	\$1,886.82
Introduction to Anatomy Fund:	156.52			
William K. Gregory.....		50.00		
Harris Weinstein.....		10.00	98.00	118.52
	<u>\$156.52</u>	<u>\$60.00</u>	<u>\$98.00</u>	<u>\$118.52</u>
Totals.....	<u>\$571.34</u>	<u>\$2,560.00</u>	<u>\$1,126.00</u>	<u>\$2,005.34</u>
<b>Anthropology</b>				
Anthropology Special Fund:	23.84			
Interest.....		49.50		73.34
Carnegie Conference Fund.	<u>394.10</u>		<u>250.00</u>	<u>144.10</u>
Middle American Research Fund:				
Miss Julia Bourgeois.....		50.00		50.00
Physical Anthropology Fund:	765.65			
Interest.....		468.50	38.31	1,195.84
Physical Anthropology of Quebec Fund:.....	<u>140.00</u>			<u>140.00</u>
Frederick G. Voss Anthropology and Archaeology Fund:	3,027.37			
Interest.....		13,851.00	15,295.68	1,582.69
Totals.....	<u>\$4,350.96</u>	<u>\$14,419.00</u>	<u>\$15,583.99</u>	<u>\$3,185.97</u>
<b>Ichthyology</b>				
Bashford Dean Ichthyological Library Fund:.....	239.64			
Interest.....		203.50	428.55	14.59
Purchase of Fish Specimens Fund:.....	<u>322.25</u>		<u>55.00</u>	<u>267.25</u>
Totals.....	<u>\$561.89</u>	<u>\$203.50</u>	<u>\$483.55</u>	<u>\$281.84</u>
<b>Herpetology and Experimental Biology</b>				
Special Biological Research Fund No. 1:.....	156.99		156.99	
Special Biological Research Fund No. 2:.....	3,698.82			
Estate of Percy R. Pyne.		1,000.00	4,698.82	
Totals.....	<u>\$3,855.81</u>	<u>\$1,000.00</u>	<u>\$4,855.81</u>	
<b>Lower Invertebrates</b>				
Coral Reef Group Fund:				
Clarence L. Hay.....		250.00		
Roswell Miller, Jr.....		700.00		
Junius S. Morgan.....		250.00		
E. S. Toothe.....		110.00	1,310.00	
		<u>\$1,310.00</u>	<u>\$1,310.00</u>	
Totals.....		<u>\$1,310.00</u>	<u>\$1,310.00</u>	

## SPECIAL FUNDS ACCOUNT (Continued)

	Balance Jan. 1, 1933	Receipts	Disbursements	Balance Dec. 31, 1933
<b>Entomology</b>				
Entomological Fund:.....	\$1,400.50			
Albert R. Brand.....		\$16.60		
Ida T. L. Schwarz.....		100.00	\$303.97	\$1,213.13
	<u>\$1,400.50</u>	<u>\$116.60</u>	<u>\$303.97</u>	<u>\$1,213.13</u>
Totals.....	<u>\$1,400.50</u>	<u>\$116.60</u>	<u>\$303.97</u>	<u>\$1,213.13</u>
<b>Library</b>				
Anson W. Hard Library Fund: 12.00				
Interest.....		254.50	266.50	
Library Fund:				
F. E. Church.....		50.00		
Cyril F. Dos Lassos....		50.00		
Bernard Heineman.....		50.00		
Ogden L. Mills.....		165.00	315.00	
		<u>\$315.00</u>	<u>\$315.00</u>	
Ralph Winfred Tower Memorial Fund:				
Interest.....		\$1,063.50	\$1,063.50	
Totals.....	<u>\$12.00</u>	<u>\$1,633.00</u>	<u>\$1,645.00</u>	
<b>Printing and Publishing</b>				
Anthropological Handbook Fund:.....	1,910.49			
Sales.....		655.85		\$2,566.34
Brewster-Sanford Publication Fund:.....	<u>1,223.49</u>			<u>1,223.49</u>
Comparative Anatomy Publication Fund:....	351.77		351.77	
Mammal Publications Fund	<u>900.00</u>		163.88	<u>736.12</u>
J. P. Morgan Fund—Printing and Publishing:				
Transferred from Reserve		1,200.00	1,200.00	
Natural History Publication Fund:				
Starling W. Childs.....		100.00	100.00	
Totals.....	<u>\$4,385.75</u>	<u>\$1,955.85</u>	<u>\$1,815.65</u>	<u>\$4,525.95</u>
<b>Public Education</b>				
Carnegie Corporation of New York Fund:.....	<u>3,545.45</u>		437.98	<u>3,107.47</u>
Educational Lecture Fund:				
Tuition Fees.....		124.00	124.00	
Nature Trails Fund:				
Commissioners of Palisades				
Interstate Park.....		50.00		
William B. Hope.....		50.00		
Nellie M. Welton.....		7.00		107.00
		<u>\$107.00</u>		<u>\$107.00</u>
Pupil Parent Fund.....	<u>164.46</u>			<u>164.46</u>
Carried Forward.....	<u>\$3,709.91</u>	<u>\$231.00</u>	<u>\$561.98</u>	<u>\$3,378.93</u>

## SPECIAL FUNDS ACCOUNT (Continued)

	Balance Jan. 1, 1933	Receipts	Disbursements	Balance Dec. 31, 1933
Brought Forward.....	\$3,709.91	\$231.00	\$561.98	\$3,378.93
School Fund:				
Subscriptions.....		5.00		
Guiding Fees.....		24.75		
Lectures.....		131.67		161.42
		<u>\$161.42</u>		<u>\$161.42</u>
Special Education Fund:...	2,076.62			
Felix M. Warburg.....		10,000.00	9,427.81	2,648.81
Jonathan Thorne Memorial Fund:.....	1,059.82			
Interest.....		1,172.00	801.65	1,430.17
Voice Amplifier Fund.....	775.00		775.00	
Totals.....	<u>\$7,621.35</u>	<u>\$11,564.42</u>	<u>\$11,566.44</u>	<u>\$7,619.33</u>
Preparation and Exhibition				
African Hall Group Fund:	1,935.46			
Edna A. Stone.....		3,000.00		
Franz T. Stone.....		6,000.00		
Natalia S. Stone.....		3,000.00		
Theodora M. Stone.....		3,000.00		
Interest.....		375.00		
Increased by the consoli- dation of the following:				
African Hall Prepara- tion Fund—Gorilla Group.....	22,463.19			
African Hall Preparation Special Fund.....	4,750.00	125.00		
Carlisle-Clark African Expedition Preparation Fund.....	14,467.62			
Impalla Group Fund..	23,418.10			
O'Donnell-Clark Afri- can Expedition Fund	19,698.71		32,995.01	
	<u>\$86,733.08</u>	<u>\$15,500.00</u>	<u>\$32,995.01</u>	<u>\$69,238.07</u>
Davison African Expedition Fund:				
F. Trubee Davison.....		17,566.03	17,566.03	
Totals.....	<u>\$86,733.08</u>	<u>\$33,066.03</u>	<u>\$50,561.04</u>	<u>\$69,238.07</u>

**SPECIAL FUNDS ACCOUNT (Continued)**

	Balance Jan. 1, 1933	Receipts	Disbursements	Balance Dec. 31, 1933
<b>Administration</b>				
Administration Fund:				
F. Trubee Davison.....		358.35	358.35	
Totals.....		<u>\$358.35</u>	<u>\$358.35</u>	
Balance January 1, 1933.....	<b>\$150,565.80</b>			
Total net receipts for the de- velopment of specific de- partments.....		<b>152,842.34</b>		
Total net disbursements for the development of specific departments.....			<b>183,361.96</b>	
Balance December 31, 1933.....				<b>120,046.18</b>
J. P. Morgan Fund Reserve:	3,471.66			
Interest.....		23,419.00	25,562.65	1,327.97
Group Preparation Fund Re- serve—General Prepara- tion for 1933:				
Mrs. Herbert L. Satterlee		50.00	50.00	
Totals.....	<u>\$154,037.42</u>	<u>\$176,311.34</u>	<u>\$208,974.61</u>	<u>\$121,374.15</u>

## SPECIAL FUNDS ACCOUNT—1933

## SUMMARY

	Balance Jan. 1, 1933	Receipts	Disbursements	Balance Dec. 31, 1933
Astronomy.....	\$151.73			\$151.73
Geology and Invertebrate Palaeontology.....	38.66	\$2,998.05	\$2,489.56	547.15
Mineralogy.....	3,326.73	4,808.88	1,999.86	6,135.75
Mammalogy.....	7,054.30	12,726.50	16,423.67	3,357.13
Asiatic Exploration and Re- search.....	15,414.89	1,763.36	12,871.56	4,306.69
Ornithology.....	11,410.94	7,427.88	5,270.46	13,568.36
Vertebrate Palaeontology...	3,675.87	54,930.92	54,697.05	3,909.74
Comparative Anatomy.....	571.34	2,560.00	1,126.00	2,005.34
Anthropology.....	4,350.96	14,419.00	15,583.99	3,185.97
Ichthyology.....	561.89	203.50	483.55	281.84
Herpetology and Experimental Biology.....	3,855.81	1,000.00	4,855.81	
Lower Invertebrates.....		1,310.00	1,310.00	
Entomology.....	1,400.50	116.60	303.97	1,213.13
Library.....	12.00	1,633.00	1,645.00	
Printing and Publishing.....	4,385.75	1,955.85	1,815.65	4,525.95
Public Education.....	7,621.35	11,564.42	11,566.44	7,619.33
Preparation and Exhibition..	86,733.08	33,066.03	50,561.04	69,238.07
Administration.....		358.35	358.35	
Balance, January 1, 1933.	150,565.80			
Total net receipts for the development of specific departments.....		152,842.34		
Total net disbursements for the development of specific departments ..			183,361.96	
Balance, December 31, 1933				120,046.18
J. P. Morgan Fund Reserve:				
Interest.....	3,471.62	23,419.00	25,562.65	1,327.97
Group Preparation Fund Reserve— General Preparation for 1933:				
Mrs. Herbert L. Satterlee.		50.00	50.00	
Totals.....	\$154,037.42	\$176,311.34	\$208,974.61	\$121,374.15



**THE AMERICAN MUSEUM OF NATURAL HISTORY  
CORPORATE STOCK ACCOUNT**

**1933**

**Receipts:**

Department of Parks, City of New York:

C. D. P. 123 M.....	\$31,381.00
Interest on Credit Balances.....	1.32
	<u>\$31,382.32</u>

**Disbursements:**

Payroll of Mechanics, etc.....	\$31,381.00
Interest on Credit Balances (To General Account).....	1.32
	<u>\$31,382.32</u>

## INCIDENTAL ACCOUNT

1933

Balance, January 1, 1933.....		\$5,796.22
Receipts:		
Individuals and Societies.....		7,610.67
Group Life Insurance:		
Employees' Premium Payments.....	\$9,452.92	
Loans.....	4,766.16	14,219.08
Interest on Credit Balances.....		17.83
		<u>\$27,643.80</u>
Disbursements:		
Individuals and Societies.....		\$5,068.68
Group Life Insurance:		
Premiums.....	\$9,498.21	
Loan Instalments.....	4,720.87	14,219.08
Interest on Credit Balances (to General Account).....		17.83
Balance, December 31, 1933.....		8,338.21
		<u>\$27,643.80</u>

All the foregoing accounts have been

Examined and	{	OGDEN L. MILLS	{	<i>Auditing Committee.</i>
Approved		CORNELIUS V. WHITNEY		
		H. RIVINGTON PYNE		

E. and O. E.

New York, December 31, 1933.

JAMES H. PERKINS, *Treasurer.*

ADAMS AND TROY  
Certified Public Accountants  
110 East 42nd Street  
New York

MR. OGDEN L. MILLS,  
*Chairman*, Auditing Committee,  
American Museum of Natural History,  
77th St. and Central Park West,  
New York, N. Y.

DEAR SIR:

We have audited the cash transactions of The American Museum of Natural History for the year ended December 31, 1933.

According to the usual custom, certain collections to and including January 19, 1934, have been treated as of December 31, 1933, in order to obtain the benefit for the period then ended, of revenue earned during said period, but which became due and payable on January 2, 1934.

\* \* \* \* \*

WE HEREBY CERTIFY, that in our opinion, subject to the foregoing comment, the receipts and disbursements for the year then ended were properly accounted for and correctly stated upon the records.

(Signed) ADAMS AND TROY  
Certified Public Accountants.

New York, February 6, 1934.



**TREASURER'S REPORT**  
**OF THE**  
**PENSION FUND**  
**OF**  
**THE AMERICAN MUSEUM OF NATURAL HISTORY**  
**FOR THE YEAR 1933**

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**SUMMARY**

	Par Value	Book Value
Investment Fund.....	\$823,691.63	\$794,767.36
Endowment Fund.....	1,258.37	1,140.39
	<u>\$824,950.00</u>	<u>\$795,907.75</u>

## PENSION FUND ACCOUNT

## Receipts, 1933

Balance, January 1, 1933.....			\$11,920.10
Contributions of Subscribing Employees:			
Deductions of 3% from Payrolls of All			
Accounts.....	\$30,924.56		
Personal Payments of Subscribing Employees	600.10	\$31,524.66	
Contributions of Board of Trustees:			
To equal contributions of Subscribing			
Employees.....		31,524.66	
Income from Investment Fund.....	\$34,288.70		
Income from Endowment Fund.....	50.34	34,339.04	
Interest on Repayment of Contributions and Interest.....		5.61	
Interest on Deferred Contributions.....		1.12	
Interest on Credit Balances.....		27.72	97,422.81
Investment Fund:			
Sales and Redemption of Securities and Amortization Payments.....			8,501.25
			<u>\$117,844.16</u>

Examined and { GEORGE D. PRATT }  
 Approved { GEORGE T. BOWDOIN } *Auditing Committee*

PENSION FUND ACCOUNT

Disbursements, 1933

Payments to Subscribers and Beneficiaries:			
Return of Contributions.....	\$6,032.63		
Interest on Contributions Returned.....	472.40	\$6,505.03	
Service Pensions "A".....	\$10,653.89		
Service Pensions "B".....	1,564.50		
Service Pensions "C".....	4,678.73		
Pension in Event of Illness, Dismissals, etc.	3,305.29	20,202.41	
Death Gratuities:			
Section 13			
Sub-Div. 3-B (1).....	\$1,630.83		
Sub-Div. 1-B.....	1,582.35		
Sub-Div. 3-A.....	1,247.47	4,460.65	\$31,168.09
Expenses.....			68.06
Investment Fund:			
Securities Purchased.....			70.027.50
Balance, December 31, 1933:			
On Deposit:			
United States Trust Company of New York.....	\$15,580.51		
National City Bank of New York (Bursar's Account) ..	1,000.00	16,580.51	
		<u>\$117,844.16</u>	

E. & O. E.

NEW YORK, December 31, 1933

JAMES H. PERKINS, *Treasurer.*

## PENSION FUND—SPECIAL FUNDS ACCOUNT

## Receipts, 1933

## Welfare Fund:

Balance, January 1, 1933.....		\$1,127.91
Refunds from Secretary.....	\$60.36	
Interest on Credit Balances.....	<u>2.45</u>	<u>62.81</u>
		<u><u>\$1,190.72</u></u>

Examined and { GEORGE D. PRATT }  
 Approved { GEORGE T. BOWDOIN } *Auditing Committee.*

## PENSION FUND—SPECIAL FUNDS ACCOUNT

## Disbursements, 1933

## Welfare Fund:

Assistance and Relief.....	\$81.36	
Expenses.....	<u>.02</u>	<u>\$81.38</u>
Balance, December 31, 1933:		
Deposited with the United States Trust Company of New York.....		<u>1,109.34</u>
		<u><u>\$1,190.72</u></u>

E. and O. E.

NEW YORK, December 31, 1933.

JAMES H. PERKINS, *Treasurer.*



ADAMS AND TROY  
Certified Public Accountants  
110 East 42nd Street  
New York

MR. GEORGE D. PRATT,  
*Chairman, Auditing Committee,*  
Pension Board of the American Museum of Natural History  
77th Street and Central Park West,  
New York, N. Y.

DEAR SIR:

We have audited the cash transactions of the Pension Fund of The American Museum of Natural History for the year ended December 31, 1933.

According to the usual custom, certain collections to and including January 6, 1934, have been treated as of December 31, 1933, in order to obtain the benefit for the period then ended, of revenue earned during said period, but which became due and payable on January 2, 1934.

\* \* \* \* \*

WE HEREBY CERTIFY, that in our opinion, subject to the foregoing comment, the receipts and disbursements for the year then ended were properly accounted for and correctly stated upon the records.

(Signed) ADAMS AND TROY  
Certified Public Accountants.

New York, February 6, 1934.



## V. MEMBERSHIP

CLARENCE L. HAY, Secretary

WAYNE M. FAUNCE, Assistant Executive Secretary

The Museum officers have been greatly encouraged by the loyal support which our members have given throughout the period of economic stress. Many members have found it impossible to continue their financial contributions of membership dues, but others have taken their places to a large extent. Although the reduction in membership during 1933, due to deaths, resignations and transfers, amounted to 1,943, the gratifying number of 1,045 new members joined the Museum and there was a net loss of only 898. On December 31, 1933, there were 10,479 members enrolled in the various classes, as follows:

Endowment Members.....	11	Fellows.....	92
Benefactors.....	23	Honorary Life Members.....	74
Associate Founders.....	23	Life Members.....	1,105
Associate Benefactors.....	48	Corresponding Members....	24
Patrons.....	210	Sustaining Members.....	226
Honorary Fellows.....	20	Annual Members.....	3,747
Associate Members.....		4,876	

In membership dues \$51,932 was contributed by members during 1933. For this financial aid, for their interest in promoting the Museum's work and for their coöperation in disseminating scientific information, the Trustees are deeply grateful.

During the year nine lectures for members and eight lectures for children of members were given in the regular spring and autumn courses. There were also three special lectures for members. Weekly, beginning July 7 and continuing through the balance of the year, the New York Civic Orchestra of eighty-six musicians has given a series of afternoon symphony concerts in the Museum auditorium, under the auspices of the Department of Education of the State of New York. These musical treats have been very popular, attracting a good attendance of members and friends.

Visiting Day, May 2, was exceedingly popular. It was the occasion of the formal opening and pre-view for members of the new Hall of Ocean Life, and also gave our members and their guests the first opportunity since his inauguration to meet President Davison.

**CHANGES IN THE BOARD OF TRUSTEES**

Upon the retirement of President Henry Fairfield Osborn from the Presidency of the Museum, on January 9, 1933, in order that he might devote himself to his scientific researches, Professor Osborn was elected Honorary President for life. His resignation, after twenty-five years as President of the Board of Trustees, was accepted with great regret. Mr. Frederick Trubee Davison was elected to the Presidency.

At the meeting of the Board of Trustees held on May 1, 1933, the resignation of Mr. Felix M. Warburg from the Board, because of ill-health, was accepted with regret. Mr. Warburg had been a member of the Board of Trustees for twenty-three years. His service on the Executive and other Committees has been greatly appreciated, as well as his large financial contributions in furtherance of the Museum's work. Mr. Warburg's son, Mr. Frederick M. Warburg, was elected to fill this vacancy, in the Class of 1933.

Also at the May meeting of the Board, Mr. John D. Rockefeller, 3rd., was elected to fill the vacancy due to the resignation of Mr. Frederick F. Brewster, reported last year.

At the Annual Meeting of the Board, held on January 8, 1934, the following officers were re-elected: President, F. Trubee Davison; First Vice-President, J. P. Morgan; Second Vice-President, Cleveland E. Dodge; Treasurer, James H. Perkins; Secretary, Clarence L. Hay.

Also at the Annual Meeting on January 8, 1934, the following Trustees whose terms expired at this meeting, were re-elected to the Class of 1938: George F. Baker, Archer M. Huntington, Junius S. Morgan, A. Perry Osborn, Kermit Roosevelt, and Frederick M. Warburg.

In accordance with the Constitution of the American Museum, the Mayor, the Comptroller, and the President of the Park Board are ex-officio members of the Board of Trustees. Upon the retirement of Mr. Charles W. Berry as Comptroller in the latter part of 1933, Mr. George McAneny was appointed Comptroller, and automatically succeeded to this place as ex-officio member of the American Museum Board of Trustees. Upon the resignation of Mr. Walter R. Herrick from the Presidency of the Park Board, in the spring of 1933, Mr. John E. Sheehy was appointed President of the Park Board, and thus became an ex-officio member of the American Museum Board.

On January 1, 1934, the newly elected Mayor Fiorello H. La Guardia, and Comptroller W. Arthur Cunningham became ex-officio members of the Board of Trustees, and early in the year the Honorable Robert Moses was appointed Commissioner of Parks, thus becoming an ex-officio member of our Board.

#### CHANGES IN ADMINISTRATIVE AND SCIENTIFIC STAFFS

On January 9, 1933, the title of Dr. George H. Sherwood, Director and Executive Secretary, was changed to Executive Secretary and Director. The title of Mr. Wayne M. Faunce was changed from Assistant Director (General Administration) and Assistant Secretary to Assistant Executive Secretary and Assistant Director (General Administration).

The title of Dr. Roy Chapman Andrews was changed from Vice-Director (in Charge of Exploration and Research) to Vice-Director.

Mr. Hans Christian Adamson was appointed Assistant to the President.

Because of many other official duties connected with the Museum, Mr. George N. Pindar resigned from the Chairmanship of the Committee on Public and Press Information. Mr. Hans Christian Adamson was appointed to the Chairmanship of this Committee.

Hugh S. Rice, B.S., was appointed Associate in Astronomy.

H. J. Clausen, Ph.D., was appointed Assistant Curator in the Department of Amphibians and Reptiles and Experimental Biology.

Mr. Arthur S. Vernay was appointed Field Associate in Mammalogy.

It is with profound regret that we record the death on April 15, 1933, of Isaac Wyman Drummond, Ph.D., Research Associate in Ancient Jade and Amber.

Leah B. Richards, A.M., Staff Assistant in the Department of Amphibians and Reptiles and Experimental Biology, resigned from the Staff on September 28.

On January 8, 1934, Mr. E. L. Bell was appointed Research Associate in Lepidoptera, and Mr. Francis L. Jaques was appointed Staff Associate in the Department of Preparation.

At the same meeting, the Department of Herpetology and Experimental Biology was separated into two departments, the Department of Herpetology and the Department of Experimental Biology, with Dr. G. Kingsley Noble as Curator of both departments.



**VI. APPENDIX**  
**ADMINISTRATION OF THE YEAR 1934**

**BOARD OF TRUSTEES**

**Honorary President**

HENRY FAIRFIELD OSBORN

**President\***

F. TRUBEE DAVISON

**First Vice-President**

J. P. MORGAN

**Treasurer**

JAMES H. PERKINS

**Second Vice-President**

CLEVELAND E. DODGE

**Secretary**

CLARENCE L. HAY

**ELECTIVE TRUSTEES**

**Class of 1934**

CHAUNCEY J. HAMLIN

SUYDAM CUTTING

FREDERICK H. OSBORN

HENRY FAIRFIELD OSBORN

GEORGE D. PRATT

A. HAMILTON RICE

**Class of 1935**

GEORGE T. BOWDOIN

CORNELIUS V. WHITNEY

J. P. MORGAN

DANIEL E. POMEROY

HENRY W. SAGE

H. RIVINGTON PYNE

**Class of 1936**

DOUGLAS BURDEN

CLEVELAND EARL DODGE

CHILDS FRICK

JAMES H. PERKINS

JOHN D. ROCKEFELLER, 3rd.

LEONARD C. SANFORD

**Class of 1937**

F. TRUBEE DAVISON

LINCOLN ELLSWORTH

MADISON GRANT

CLARENCE L. HAY

OGDEN L. MILLS

WILLIAM K. VANDERBILT

**Class of 1938**

GEORGE F. BAKER

ARCHER M. HUNTINGTON

JUNIUS S. MORGAN

A. PERRY OSBORN,

KERMIT ROOSEVELT

FREDERICK M. WARBURG

**EX-OFFICIO TRUSTEES**

FIORELLO H. LA GUARDIA

(MAYOR OF THE CITY OF NEW YORK)

W. ARTHUR CUNNINGHAM

(COMPTROLLER OF THE CITY OF NEW YORK)

ROBERT MOSES

(COMMISSIONER OF PARKS)

---

\*The President is *ex-officio* a member of all Committees.

### STANDING COMMITTEES OF THE TRUSTEES

#### Executive Committee

CLEVELAND EARL DODGE,  
*Chairman*  
F. TRUBEE DAVISON  
JAMES H. PERKINS  
CLARENCE L. HAY  
GEORGE T. BOWDOIN  
CHILDS FRICK  
JUNIUS S. MORGAN  
DANIEL E. POMEROY  
GEORGE D. PRATT  
KERMIT ROOSEVELT  
A. PERRY OSBORN

} ex-  
officio

#### Finance Committee

JAMES H. PERKINS, *Chairman*  
GEORGE F. BAKER  
GEORGE T. BOWDOIN  
A. PERRY OSBORN  
JUNIUS S. MORGAN  
FREDERICK H. SMYTH,  
*Assistant Secretary*

#### Advisers to the Finance Committee

ARTHUR M. ANDERSON  
CHARLES D. LANIER

#### Nominating Committee

MADISON GRANT, *Chairman*  
GEORGE F. BAKER  
DOUGLAS BURDEN

#### Auditing Committee

OGDEN L. MILLS, *Chairman*  
CORNELIUS V. WHITNEY  
H. RIVINGTON PYNE

#### Counsel to the the Board of Trustees

LEWIS L. DELAFIELD

### SPECIAL COMMITTEES OF THE TRUSTEES

#### Buildings and Plans

HENRY FAIRFIELD OSBORN,  
*Chairman*

ROBERT MOSES,  
*Park Department*

CHAUNCEY J. HAMLIN,  
*Roosevelt Memorial*

LEONARD C. SANFORD

CORNELIUS V. WHITNEY,  
*Whitney Memorial*

DANIEL E. POMEROY,  
*African Hall*

CLARENCE L. HAY,  
*Middle American Hall*

JUNIUS S. MORGAN,  
*Oceanic Hall*

CHILDS FRICK,  
*Vertebrate Palaeontology*

ROSWELL MILLER,  
*Engineering Consultant*

WAYNE M. FAUNCE,  
*Assistant Executive Secretary*



**SPECIAL COMMITTEES OF THE TRUSTEES—Continued**  
**Sixtieth Anniversary Endowment**

F. TRUBEE DAVISON, <i>General Chairman</i>	JUNIUS S. MORGAN
JAMES H. PERKINS, <i>Treasurer</i>	A. PERRY OSBORN
GEORGE T. BOWDOIN	DANIEL E. POMEROY
DOUGLAS BURDEN	HENRY W. SAGE
CLEVELAND E. DODGE	LEONARD C. SANFORD
CHILDS FRICK	GEORGE H. SHERWOOD,
CLARENCE L. HAY	<i>Secretary of the Committee</i>

**Pension Board\***

**Trustees and Employee Members**

FREDERICK M. WARBURG, <i>Chairman</i>	A. PERRY OSBORN
GEORGE D. PRATT	HARRY F. BEERS
GEORGE T. BOWDOIN	GEORGE N. PINDAR
	HAROLD E. ANTHONY

**DEPARTMENTAL COMMITTEES**

**Library and Publications**

GEORGE T. BOWDOIN, <i>Chairman</i>
MADISON GRANT
A. HAMILTON RICE
OGDEN L. MILLS
IDA RICHARDSON HOOD, <i>Curator</i>

**Education**

FREDERICK M. WARBURG, <i>Chairman</i>
GEORGE D. PRATT
CHAUNCEY J. HAMLIN
GEORGE H. SHERWOOD,

*Curator-in-Chief*

**Geology and Geography**

A. HAMILTON RICE, <i>Chairman</i>
DOUGLAS BURDEN
CHESTER A. REEDS, <i>Curator</i>

**Mineralogy and Morgan Hall**

GEORGE F. BAKER, <i>Chairman</i>
J. P. MORGAN
H. RIVINGTON PYNE
HERBERT P. WHITLOCK, <i>Curator</i>

**Vertebrate Paleontology**

CHILDS FRICK, <i>Chairman</i>
DOUGLAS BURDEN
HENRY FAIRFIELD OSBORN,
<i>Honorary Curator-in-Chief</i>

**Anthropology and Comparative  
Anatomy**

CLARENCE L. HAY, <i>Chairman</i>
MADISON GRANT
FREDERICK H. OSBORN
FREDERICK TILNEY
CLARK WISSLER, <i>Curator-in-Chief</i>
WILLIAM K. GREGORY, <i>Curator</i>

**Astronomy and Planetarium**

A. CRESSY MORRISON, <i>Chairman</i>	O. H. CALDWELL
H. RIVINGTON PYNE	JOHN A. KINGSBURY
CHARLES J. LIEBMAN	CLYDE FISHER, <i>Curator</i>

\*Established by the Trustees in 1913.

**DEPARTMENTAL COMMITTEES—Continued**  
**Advisers to the Astronomy Committee**

HENRY NORRIS RUSSELL, Princeton  
 GEORGE ELLERY HALE, Mount Wilson  
 HARLOW SHAPLEY, Harvard  
 SAMUEL ALFRED MITCHELL, University of Virginia  
 HOWARD RUSSELL BUTLER, Princeton

**Asiatic Halls and Asiatic Collections**

KERMIT ROOSEVELT, *Chairman*  
 ARTHUR S. VERNAY  
 SUYDAM CUTTING  
 WILLIAM J. MORDEN  
 H. E. ANTHONY, *Curator*

**African Hall and African Collections**

DANIEL E. POMEROY, *Chairman*  
 A. PERRY OSBORN  
 HENRY W. SAGE  
 H. E. ANTHONY, *Curator*  
 JAMES L. CLARK, *Preparation*

**North American Mammals**

MADISON GRANT, *Chairman*  
 CHILDS FRICK  
 DOUGLAS BURDEN  
 KERMIT ROOSEVELT  
 JOHN D. ROCKEFELLER, 3rd.  
 H. E. ANTHONY, *Curator*

**Birds of the World**

LEONARD C. SANFORD, *Chairman*  
 CORNELIUS V. WHITNEY  
 FRANK MICHLER CHAPMAN,  
*Curator-in-Chief*

**Rothschild Collection**

LEONARD C. SANFORD, *Chairman*  
 MRS. GERTRUDE VANDERBILT  
 WHITNEY  
 LORD ROTHSCHILD  
 FRANK MICHLER CHAPMAN,  
*Curator of Birds*  
 ROBERT CUSHMAN MURPHY  
 GEORGE H. SHERWOOD, *Director*

**Ocean Life and Oceanic Hall**

JUNIUS S. MORGAN, *Chairman*  
 GEORGE T. BOWDOIN  
 WILLIAM K. VANDERBILT  
 H. E. ANTHONY,  
*Curator of Mammalogy*

**Marine Life**

GEORGE T. BOWDOIN,  
*Chairman*  
 CLARENCE L. HAY  
 WILLIAM K. VANDERBILT  
 ROY W. MINER, *Curator*

**Insect Life**

JOHN D. ROCKEFELLER, 3rd.,  
*Chairman*  
 HERBERT F. SCHWARZ  
 WILLIAM C. WOOD  
 FRANK E. LUTZ, *Curator*

**Fishes**

CLEVELAND EARL DODGE,  
*Chairman*  
 WILLIAM K. VANDERBILT  
 WILLIAM K. GREGORY,  
*Curator-in-Chief*

**Amphibians and Reptiles**

DOUGLAS BURDEN, *Chairman*  
 H. RIVINGTON PYNE  
 G. KINGSLEY NOBLE, *Curator*

**Wild Life Protection**

MADISON GRANT, *Chairman*  
 GEORGE D. PRATT  
 H. E. ANTHONY  
*Staff Member*

## ADMINISTRATIVE OFFICERS FOR 1934

### **Executive Secretary and Director**

GEORGE H. SHERWOOD

### **Vice-Director**

ROY CHAPMAN ANDREWS

### **Vice-Director (Preparation and Exhibition)**

JAMES L. CLARK

### **Assistant Executive Secretary and Assistant Director (General Administration)**

WAYNE M. FAUNCE

### **Assistant Treasurer**

UNITED STATES TRUST COMPANY OF NEW YORK

### **Bursar**

FREDERICK H. SMYTH

### **Registrar**

GEORGE N. PINDAR

### **Assistant Bursar**

FRANCIS BUSHELL

### **Assistant Registrar**

ETHEL L. NEWMAN

### **Superintendent of Buildings**

J. B. FOULKE

### **Chief of Construction**

H. F. BEERS

### **Chief Engineer**

HENRY J. LANGHAM

---

### **Assistant to the President**

HANS CHRISTIAN ADAMSON

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## ADMINISTRATIVE COMMITTEES FOR 1934

### **Operation, Construction, Transportation**

WAYNE M. FAUNCE, *Chairman*

H. F. BEERS

GEORGE N. PINDAR

H. J. LANGHAM

FREDERICK H. SMYTH

J. B. FOULKE

GEORGE H. SHERWOOD, *ex-officio*

### **Finances**

FREDERICK H. SMYTH

GEORGE H. SHERWOOD

### **Safety**

WAYNE M. FAUNCE, *Chairman*

H. F. BEERS

J. B. FOULKE

H. J. LANGHAM

### **Welfare of Employees**

A. PERRY OSBORN, *Chairman*

GEORGE N. PINDAR

FREDERICK M. WARBURG

**SCIENTIFIC STAFF FOR 1934****1. OFFICERS OF ADMINISTRATION**

FREDERICK TRUBEE DAVISON, LL.D., President\*

GEORGE H. SHERWOOD, Ed.D., Director\*

**Director's Cabinet in Planning and Exhibition**

ROY CHAPMAN ANDREWS, Sc.D., Vice-Director

JAMES L. CLARK, D.Sc., Vice-Director (Preparation and Exhibition)

WAYNE M. FAUNCE, Sc.B., Assistant Executive Secretary and  
Assistant Director (General Administration)

FREDERICK H. SMYTH, Bursar

GEORGE N. PINDAR, Registrar

**2. SCIENTIFIC STAFF****ASTRONOMY**

CLYDE FISHER, Ph.D., LL.D., Curator

HUGH S. RICE, B.S., Associate in Astronomy

**MINERALOGY**

HERBERT P. WHITLOCK, C.E., Curator

**VERTEBRATE PALÆONTOLOGY**

HENRY FAIRFIELD OSBORN, D.Sc., LL.D., Honorary Curator-in-Chief

CHILDS FRICK, B.S., Honorary Curator of Late Tertiary and  
Quaternary Mammals

WALTER GRANGER, D.Sc., Curator of Fossil Mammals

BARNUM BROWN, A.B., Curator of Fossil Reptiles

GEORGE GAYLORD SIMPSON, Ph.D., Associate Curator of Vertebrate Palæontology

CHARLES C. MOOK, Ph.D., Associate Curator of Geology and Palæontology

EDWIN H. COLBERT, A.M., Assistant Curator

RACHEL A. HUSBAND, A.M., Staff Assistant

WALTER W. HOLMES, Field Associate in Palæontology

**GEOLOGY AND INVERTEBRATE PALÆONTOLOGY**

CHESTER A. REEDS, Ph.D., Curator

---

\*The President and the Director are *ex-officio* members of all Scientific Staff Committees

### **LIVING INVERTEBRATES**

ROY WALDO MINER, Ph.D., Sc.D., Curator  
WILLARD G. VAN NAME, Ph.D., Associate Curator  
FRANK J. MYERS, Research Associate in Rotifera\*  
HORACE W. STUNKARD, Ph.D., Research Associate in Parasitology  
A. L. TREADWELL, Ph.D., Research Associate in Annulata

### **ENTOMOLOGY**

FRANK E. LUTZ, Ph. D., Curator  
A. J. MUTCHLER, Associate Curator of Coleoptera  
C. H. CURRAN, M.S., D.Sc., Assistant Curator  
WILLIS J. GERTSCH, M.A., Assistant Curator  
FRANK E. WATSON, B.S., Staff Assistant in Lepidoptera  
WILLIAM M. WHEELER, Ph.D., LL.D., Research Associate in Social  
Insects  
CHARLES W. LENG, B.Sc., Research Associate in Coleoptera  
HERBERT F. SCHWARZ, M.A., Research Associate in Hymenoptera  
E. L. BELL, Research Associate in Lepidoptera

### **LIVING AND EXTINCT FISHES**

WILLIAM K. GREGORY, Ph.D., Curator-in-Chief†  
JOHN T. NICHOLS, A.B., Curator of Recent Fishes  
E. W. GUDGER, Ph.D., Bibliographer and Associate  
FRANCESCA R. LA MONTE, B.A., Assistant Curator  
CHARLES H. TOWNSEND, Sc.D., Research Associate  
C. M. BREDER, Jr., Research Associate  
LOUIS HUSSAKOF, Ph.D., Research Associate in Devonian Fishes  
WILLIAM BEEBE, Sc.D., Research Associate in Oceanography  
VAN CAMPEN HEILNER, M.S., Field Representative

### **HERPETOLOGY**

G. KINGSLEY NOBLE, Ph.D., Curator  
CLIFFORD H. POPE, B.S., Assistant Curator  
HARVEY BASSLER, Ph.D., Research Associate

### **EXPERIMENTAL BIOLOGY**

G. KINGSLEY NOBLE, Ph.D., Curator  
H. J. CLAUSEN, Ph.D., Assistant Curator  
BERTRAM G. SMITH, Ph.D., Research Associate

---

\*Research Associates are honorary appointments.

†Also Research Associate in Paleontology and Associate in Physical Anthropology.

DOUGLAS BURDEN, M.A., Research Associate  
FRANK S. MATHEWS, M.D., Research Associate  
HOMER W. SMITH, Sc.D., Research Associate  
O. M. HELFF, Ph.D., Research Associate  
CHARLES E. HADLEY, Ph.D., Research Associate  
S. W. HANDFORD, A.B., Research Associate

### **ORNITHOLOGY**

FRANK M. CHAPMAN, Sc.D., Curator-in-Chief  
ROBERT CUSHMAN MURPHY, D.Sc., Curator of Oceanic Birds  
JAMES P. CHAPIN, Ph.D., Associate Curator of Birds of the  
Eastern Hemisphere  
JOHN T. ZIMMER, M.A., Associate Curator of Birds of the West-  
ern Hemisphere  
ERNST MAYR, Ph.D., Associate Curator of Birds  
ALBERT R. BRAND, Associate in Ornithology  
ELSIE M. B. NAUMBURG, Research Associate

### **MAMMALOGY**

H. E. ANTHONY, M.A., Curator  
ROBERT T. HATT, Ph.D., Assistant Curator  
GEORGE G. GOODWIN, Assistant Curator  
G. H. H. TATE, M.A., Assistant Curator of South American  
Mammals  
T. DONALD CARTER, Assistant Curator of Old World Mammals  
RICHARD ARCHBOLD, Research Associate  
WILLIAM J. MORDEN, Ph.B., Field Associate  
ARTHUR S. VERNAY, Field Associate

### **COMPARATIVE AND HUMAN ANATOMY**

WILLIAM K. GREGORY, Ph.D., Curator  
H. C. RAVEN, Associate Curator  
S. H. CHUBB, Associate Curator  
MARCELLE ROIGNEAU, Staff Assistant in Comparative Anatomy  
J. HOWARD MCGREGOR, Ph.D., Research Associate in Human  
Anatomy  
DUDLEY J. MORTON, M.D., Research Associate  
FREDERICK TILNEY, M.D., Ph.D., Research Associate

**ANTHROPOLOGY**

CLARK WISSLER, Ph.D., LL.D., Curator-in-Chief  
N. C. NELSON, M.L., Curator of Prehistoric Archaeology  
GEORGE C. VAILLANT, Ph.D., Associate Curator of Mexican  
Archæology  
HARRY L. SHAPIRO, Ph.D., Associate Curator of Physical  
Anthropology  
MARGARET MEAD, Ph.D., Assistant Curator of Ethnology  
W. C. BENNETT, Ph.D., Assistant Curator of Anthropology  
CLARENCE L. HAY, A.M., Research Associate in Mexican and  
Central American Archæology  
MILO HELLMAN, D.D.S., Research Associate in Physical  
Anthropology  
GEORGE E. BREWER, M.D., LL.D., Research Associate in Somatic  
Anthropology  
RONALD L. OLSON, Ph.D., Research Associate in Peruvian  
Archæology  
WILLIAM W. HOWELLS, M.A., Associate in Physical Anthropology

**ASIATIC EXPLORATION AND RESEARCH**

ROY CHAPMAN ANDREWS, Sc.D., Curator-in-Chief  
WALTER GRANGER, D.Sc., Curator of Palæontology  
CHARLES P. BERKEY, Ph.D., Sc.D. [Columbia University], Re-  
search Associate in Geology  
AMADEUS W. GRABAU, S.D. [The National Geological Survey of  
China], Research Associate  
PÈRE TEILHARD DE CHARDIN [The National Geological Survey  
of China], Research Associate in Mammalian Palæontology

**PREPARATION AND EXHIBITION**

JAMES L. CLARK, D.Sc., Vice-Director (In Charge)  
ALBERT E. BUTLER, Associate Chief  
FRANCIS L. JAKUES, Staff Associate

**3. EDUCATION, LIBRARY AND PUBLICATION STAFF**

**EDUCATION**

GEORGE H. SHERWOOD, Ed.D., Curator-in-Chief  
CLYDE FISHER, Ph.D., LL.D., Curator of University, College and  
Adult Education  
GRACE FISHER RAMSEY, Associate Curator  
WILLIAM H. CARR, Assistant Curator

DOROTHY A. BENNETT, A.B., Assistant Curator  
 HERMAN A. SIEVERS, Staff Assistant  
 JOHN SAUNDERS, Staff Assistant  
 FARIDA A. WILEY, Staff Assistant  
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 L. WALES HOLDEN, Staff Assistant  
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The Corporation consists of a self-perpetuating Board of thirty Trustees, elected for terms of five years. Also, *ex-officio*, The Mayor, The Comptroller, and the President of the Park Board of the City of New York.

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### HISTORY

PRESIDENCY OF JOHN DAVID WOLFE, 1869-1872.

1869 Museum incorporated. Constitution adopted as drafted by Joseph H. Choate.

1870 First home secured, the Arsenal, Central Park.

PRESIDENCY OF ROBERT L. STUART, 1872-1881.

1874 Cornerstone of first section of building laid by President Ulysses S. Grant.

1878 Contract adopted between Trustees and Department of Parks, as drawn up by Andrew H. Green and Joseph H. Choate.

1880 Educational work with the schools inaugurated by Professor Albert S. Bickmore.

PRESIDENCY OF MORRIS K. JESUP, 1881-1908.

1892 Museum opened to the public on Sundays.

1887-1905 The City of New York appropriated \$4,218,820.95 for seven new building sections, II-VIII.

1907 Museum opened free to the public every day in the year.

1908-1917 Mr. and Mrs. Jesup bequeathed \$6,000,000 to the Museum.

PRESIDENCY OF HENRY FAIRFIELD OSBORN, 1908-1933.

1908 Constitution amended making The Mayor, the Comptroller and the President of the Department of Parks, *ex-officio* members of the Board of Trustees.

1921 Greater New York Charter amended, placing the Museum on the same basis as Public Schools with respect to Corporate Stock Appropriations, by Chapter 618 of the Laws of 1921.

1921-1925 The City of New York appropriated \$2,233,800 for new Sections, IX-XI, and Equipment and Alterations of old Sections.

1924 The State of New York provided for the Theodore Roosevelt Memorial (Educational). Cost \$2,500,000 (Chapter 615, Laws of 1924).

1929 Appropriation of \$3,550,000 by the City of New York for construction of African Hall, Power Plant and Service Building, and South Oceanic Wing.

Contribution of \$750,000 by Harry Payne Whitney for one-half cost of South Oceanic Wing.

PRESIDENCY OF F. TRUBEE DAVISON, 1933-

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"The Natural History of Central Asia": 12 quarto volumes.

Vol. I. "The New Conquest of Central Asia," by R. C. Andrews and others, 1932. \$10.00.

Vol. II. "The Geology of Mongolia," by C. P. Berkey and F. K. Morris, 1927. \$10.00.

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Vol. IV. "The Permian of Mongolia," by A. W. Grabau, 1931. \$10.00.

Vol. V. "The Topography of Mongolia," by C. P. Berkey, L. B. Roberts, and W. P. T. Hill. (In preparation.) Route-maps of 1925 (45 in number) ready for this volume. For sale at \$7.50 per set.

Vol. VI. "The Fossil Reptilia of Mongolia," by H. F. Osborn and W. Granger. (In preparation.)

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**HISTORY, PLAN AND SCOPE of The American Museum of Natural History:** Its Origin, Growth of Its Departments. Trustees' edition, 50 copies, published February 14, 1910; Curators' edition, 600 copies, published July 1, 1911.

### **THE STORY OF THE MUSEUM'S SERVICE TO THE SCHOOLS:**

The Museum in Education. By George H. Sherwood, Curator-in-Chief, Department of Education. Reprinted from Natural History, XXX, No. 5, 1930.

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