University Legisland







THE AMERICAN MUSEUM OF NATURAL HISTORY

INCORPORATED IN 1869

"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"

BY

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

HOWARD POTTER
WILLIAM T. BLODGETT
MORRIS K. JESUP
D. JACKSON STEWARD
J. PIERPONT MORGAN
A. G. PHELPS DODGE
CHARLES A. DANA
JOSEPH H. CHOATE

HENRY PARISH



MEMBERSHIP

There are more than four thousand members of the Museum, residents of the United States and other countries, who support its educational and scientific work and enjoy its lectures, publications and other privileges. The number of Members in each class is as follows:

Associate Members		363	Patrons		113
Annual Members .	. 2	,880	Associate Benefactors		21
Sustaining Members		80	Associate Founders		11
Life Members		717	Benefactors		5
Fellows		41	Founder		1

Full information regarding membership will gladly be furnished by the Secretary.

MEMBERSHIP FEES

Associate Members			Life Members	\$100
(annually)		\$3	Fellows	500
Annual Members			Patrons	1,000
(annually)		10	Associate Benefactors	10,000
Sustaining Members			Associate Founders .	25,000
(annually)		25	Benefactors	50,000

ENDOWMENT

The Endowment Fund was established in 1884. The Trustees especially desire to insure the permanent growth and welfare of the Museum through an increase of the General Endowment Fund.

FORM OF GIFT OR BEQUEST

I do herel	by give and	d bequeath	to "Th	ie An	MERICAN
Museum of	NATURAL	History"	of the	City	of New
York,					





The Honorable Joseph Hodges Choate
Founder and Trustee of The American Museum of Natural History 1869–1917

Schenke

FORTY-NINTH ANNUAL REPORT

OF THE

TRUSTEES

OF

THE AMERICAN MUSEUM OF NATURAL HISTORY

For the Year 1917



FOR THE FREE EDUCATION

OF THE PEOPLE

FOR EXPLORATION, RESEARCH

AND PUBLICATION

NEW YORK
Issued May 1, 1918

9H 71 46A1 1717-18

CONTENTS

										F 2	AUE
Membership							•			•	3
Membership Fees	•	•	•	•	•	•	•	•	•	•	3
Endowment											3
Form of Gift or Bequest											3
Board of Trustees											I 2
COMMITTEES OF THE BOARD OF TRUSTEES.											13
Administrative Officers of the Museu	M										14
SCIENTIFIC STAFF											15
REPORT OF THE PRESIDENT											17
Additional Endowment Needed											18
Cost of School Work											19
Patriotism and Public Education											10
Service of Joseph H. Choate											20
The Tax on Education											20
War Service of Staff				:							24
National Service											24
Liberty Field Hospital Unit Model .											26
Exploration and Research											26
Arctic America											26
North America and Antilles											27
South America											28
Asia											29
Africa											30
African Hall											31
Polynesia and the Philippines				•		•	•	•	•	٠	31
Membership and Staff											32
Service of Joseph H. Choate											32
Service of Anson W. Hard				•		•		•			34
Service of Louis P. Gratacap						•		•			34
Appointments and Promotions	•	•	•			•	•		•	•	35
Public Activities of the Staff							•				37
Welfare of Employees											39
Liberty Loan Subscriptions											39
Hospitality to Societies											40

									_	AUE
Building and Equipment	•							•	•	42
Case Construction and Equipment					٠				•	42
Special Gifts and Acknowledgments									•	42
GENERAL ADMINISTRATION OF THE M	US!	EUN	ſ.			•			٠	45
Popular Publications										45
Practical Use of Exhibits										45
New Exhibits										46
Printing and Labeling										47
Summary of Printing	. 1	(.								47
Care of Building and Equipment										48
Attendance										48
Statistics of Numbers Reached	bу	the	Mu	seum	and	Its	Ex	tens	ion	
Educational System										49
REPORTS OF THE CURATORS										51
Public Education in the Museum and	in	the	Scho	ols .						51
Y. M. C. A. War Work										52
Circulating Collections										53
Public Health Charts										
Comparative Statistics Relating to										
Past Seven Years				_						54
The Museum and the Public Libra										55
Lending of Lantern Slides .										55
Lectures to School Children .										56
Cooperation with High Schools as						•	•			56
Education for the Blind						•	•			57
Docent Service										57
Cooperation with Barnard College						•	•			58
						•	•			-
Photographic Work							•			58
Reference File of Negatives and		_	-			•	•		•	58
Changes in Staff						•	•	• •		59
Acknowledgments	٠	•				•	•		•	59
Geology, Geography and Past Life on	the	e Ea	arth							59
Work in the Arctic										59
Development of the Department										
Plan of Arrangement of Exhibits						•			•	60
T										
T							•			
0 10 2011										
							•		•	61
Important Accessions	•	•				•	•		٠	
Eith Floor Poor	•	•		•		•	•		•	02

Contents	9
----------	---

										P.	AGE
Minerals and Gems										•	62
Biographical Sketch of Louis Pope				Fr	ederi	c A.	Lu	cas		•	62
Annual Report of Curator Gratacap)			٠	٠		٠	٠	•	•	64
Woods and Forestry											67
Murals											67
Exhibits											67
Staff											68
Existing Invertebrates								•			68
Staff				٠	•			•		٠	68
Research and Publication	٠			•	•		٠		٠		68
Shell Collections				•	•						69
General Invertebrate Collections				•				٠			
Insects and Spiders											
Accessions	•	٠		•	٠		•	•	•	•	71
Recent and Extinct Fishes; Existing I	Rent	tiles	and	Bat	rach	ians					72
Fishes											72
Fishes											72
Study Collections											73
Field Work											73
Research and Publication											73
Economic Ichthyology											74
Reptiles and Amphibians											75
Accessions and Exchanges											75
											76
Exhibition											77
Exhibition	•	•		·	•	•					,,
Mammals and Birds										•	80
Accessions								٠	•	٠	80
Field Expeditions					•				•		81
Study Collections								٠		•	83
Installations										•	83
Research and Publication											84
Extinct Vertebrates											86
											86
											87
•											87
Skeleton of a Glyptodont .											87
Mural Paintings											87
											88
The Oldest Tertiary Mammals											88
Research Work											88
Existing and Extinct Races of Men											89
Acquisitions								•			89
Exhibition and Study Collection											90
Habitat Groups and Murals .											91

*																	
	Field Research			٠		٠	٠	•	•	•	•	•	٠	•	٠	٠	92
	Research in the Muser					٠		•	•		٠			٠	٠	٠	93
	Public Lectures	٠	٠	-	٠		•	٠	٠					•	٠	•	93
	Publications			٠				٠	٠	•	٠		٠	٠	٠		93
Anat	omy and Physiology																94
Publ	ic Health																95
(General War Activities	s .															95
•	Other Services of Stat	ff in	C	onne	ecti	on v	vitl	ıW	ar	Pr	oble	ems					96
1	Present Status and Fu	ture	D	evel	opn	nent	of	Fo	bod	Ex	hib	it					96
]	Insect Exhibit																97
]	Need for Exhibition S	расе															98
]	Bacteriological Museu	m a	nd	Re	seaı	rch											98
The	Library																99
		٠															101
	rechnical Publications																101
	Popular Publications			•		٠	•	٠	•	٠	•	٠	٠	•	•	٠	101
GENERAL	SUMMARY																
CIENTERM	DOMMAKI	•		•	•	•	•	•	•	•	•	•	•	•	•	٠	105
FINANCE	es, Maintenance,	Eni	ov	VMI	ENI												107
]	Establishment of Morr	is K	. J	esu	ρБ	und	Α	ccoi	unt								107
	Comparison of Receipt																107
	Receipt by Check End																107
	Endowment and Inves																108
	City Maintenance Acc																100
	Trustees' General Acc																109
	Special Funds Account																110
	Crocker Land Expedi																110
	Corporate Stock Acco																110
	Museum Building Fun																
	Pension Fund Account																110
Finar	icial Statement	٠	٠	•	•	•	•	٠	•	•	•	•	٠	٠	٠	٠	113
MEMBER	SHIP																T 2 -
	Privileges of Members																
	Lectures to Members										•	•					131
	Lectures for the Child										•	•		٠			131
	Special Lectures								•	٠	•	٠	٠	•			132
	Status of Membership						•		•		•	•		٠			133
									•			•	٠	٠			134
																	134
,	Deceased Trustees and	Me	mt	ers	•	•	•	•	•	•	•	•	•	٠	٠	٠	136
LIST OF	Trustees and Ter	MS	OF	SE	rrvi	ICF											

	C	on	ten	ts										ΙI
. 16														PAGE
List of Members		•		•	•	٠	•	٠	•	٠	•	٠	٠	. 139
Founders		•	•				٠	٠	٠	•	•		٠	. 139
Benefactors	•			•			•	٠	•	٠	٠	•		. 139
Associate Founders	٠		-				•	•		٠	•	٠	•	. 139
Associate Benefactors .					٠	٠	•	•	٠	٠	•	٠	٠	. 140
Patrons	•		•			٠	٠	•	٠	•	•	٠	٠	. 140
Fellows		٠			•	•		•	٠	•			٠	. 143
Honorary Fellows									•	•		٠	٠	. 144
Life Members						٠		•	•	٠	•	•	٠	. 144
Sustaining Members .											٠		٠	. 156
Annual Members														. 157
Associate Members										•			٠	. 180
List of Accessions														. 185
Public Education														. 185
Geology and Invertebrate	Pal	æon	tol	оgy										. 186
Mineralogy														. 186
Woods and Forestry .														. 188
														. 188
Ichthyology and Herpeto														. 192
Mammalogy and Ornitho														. 194
Vertebrate Palæontology														. 198
Anthropology														. 198
														. 201
Act of Incorporation														. 203
							·				-			
CONTRACT WITH THE DEPARTM	IEN'	r o	F F	AR	KS	٠	٠	•	•	٠	•	•	•	. 205
Constitution														. 211
By-Laws														. 217
LEGISLATION														. 220
FIFTH ANNUAL REPORT OF TH	. T	12 87	CTC	NT T	٠ .	D.C.								
								•			٠		٠	. 223
Financial Statement of th	ie Pe	ensi	on	rur	ıa									. 235

BOARD OF TRUSTEES FOR 1918

President

HENRY FAIRFIELD OSBORN

First Vice-President CLEVELAND H. DODGE Second Vice-President J. P. MORGAN

Treasurer HENRY P. DAVISON Secretary ADRIAN ISELIN

EX-OFFICIO

JOHN F. HYLAN
MAYOR OF THE CITY OF NEW YORK

CHARLES L. CRAIG COMPTROLLER OF THE CITY OF NEW YORK

WILLIAM F. GRELL
PRESIDENT OF THE DEPARTMENT OF PARKS

ELECTIVE

Class of 1918

A. D. JUILLIARD CLEVELAND H. DODGE ARCHER M. HUNTINGTON FELIX M. WARBURG

HENRY C. FRICK

Class of 1919

HENRY FAIRFIELD OSBORN JAMES DOUGLAS GEORGE F. BAKER

Class of 1920

PERCY R. PYNE
ARTHUR CURTISS JAMES
WALTER B. JAMES

Class of 1921

CHARLES LANIER R. FULTON CUTTING FREDERICK F. BREWSTER WILLIAM AVERELL HARRIMAN

Class of 1922

ADRIAN ISELIN OGDEN MILLS
THOMAS DEWITT CUYLER MADISON GRANT
HENRY P. DAVISON

COMMITTEES OF THE BOARD OF TRUSTEES FOR 1918

Executive Committee

J. P. MORGAN, Chairman
HENRY FAIRFIELD OSBORN, Ex-officio
FREDERICK F. BREWSTER ADRIAN ISELIN
HENRY P. DAVISON ARTHUR CURTISS JAMES
CLEVELAND H. DODGE A. D. JUILLIARD
OGDEN MILLS

Auditing Committee

FELIX M. WARBURG, Chairman THOMAS DEWITT CUYLER WILLIAM AVERELL HARRIMAN

Finance Committee

HENRY P. DAVISON, *Chairman*GEORGE F. BAKER R. FULTON CUTTING
HENRY C. FRICK

Nominating Committee

Committee on Building and Plans

PERCY R. PYNE, Chairman
HENRY FAIRFIELD OSBORN, Ex-officio
MADISON GRANT FELIX M. WARBURG
WALTER B. JAMES WILLIAM F. GRELL, Commissioner of Parks

Committee on Pensions

FELIX M. WARBURG, Chairman
ADRIAN ISELIN WALTER B. JAMES
PERCY R. PYNE

Advisory Committee on Mural Painting, Decoration, Sculpture and Architecture

EDWIN H. BLASHFIELD DANIEL C. FRENCH BRECK TROWBRIDGE

ADMINISTRATIVE OFFICERS OF THE MUSEUM

FOR 1918

Director

FREDERIC A. LUCAS

Assistant Secretary
GEORGE H. SHERWOOD

Assistant Treasurer

UNITED STATES TRUST COMPANY OF NEW YORK

Bursar

FREDERICK H. SMYTH

Superintendent of Building

J. B. FOULKE

Registrar
GEORGE N. PINDAR

Chief of Construction

H. F. BEERS

Chief Engineer

H. J. LANGHAM

SCIENTIFIC STAFF

FOR 1918

DIRECTOR

FREDERIC A. LUCAS, Sc.D.

GEOLOGY AND INVERTEBRATE PALÆONTOLOGY

EDMUND OTIS HOVEY, Ph.D., Curator CHESTER A. REEDS, Ph.D., Associate Curator of Invertebrate Palæontology

MINERALOGY

Curatorship vacant

WOODS AND FORESTRY

Mary Cynthia Dickerson, B.S., Curator Barrington Moore, M.F., Associate Curator

INVERTEBRATE ZOÖLOGY

W. M. Wheeler, Ph.D., Honorary Curator Henry E. Crampton, Ph.D., Curator Roy W. Miner, A.B., Associate Curator Frank E. Lutz, Ph.D., Associate Curator A. J. Mutchler, Assistant Willard G. Van Name, Ph.D., Assistant Frank E. Watson, B.S., Assistant

ICHTHYOLOGY AND HERPETOLOGY

BASHFORD DEAN, PH.D., Honorary Curator
JOHN T. NICHOLS, A.B., Assistant Curator of Recent Fishes
MARY CYNTHIA DICKERSON, B.S., Associate Curator of
Herpetology

MAMMALOGY AND ORNITHOLOGY

J. A. Allen, Ph.D., Curator
Frank M. Chapman, Sc.D., Curator of Ornithology
Roy C. Andrews, A.M., Associate Curator of Mammalogy
W. DeW. Miller, Associate Curator of Ornithology
H. E. Anthony, B.S., Assistant in Mammalogy
Herbert Lang, Assistant in Mammalogy
James P. Chapin, A.M., Assistant in Ornithology
Leo E. Miller, Assistant in Ornithology

SCIENTIFIC STAFF FOR 1918—Continued

VERTEBRATE PALÆONTOLOGY

HENRY FAIRFIELD OSBORN, Sc.D., LL.D., D.Sc., Honorary Curator W. D. MATTHEW, Ph.D., Curator Walter Granger, Associate Curator of Fossil Mammals Barnum Brown, A.B., Associate Curator of Fossil Reptiles William K. Gregory, Ph.D., Associate in Palæontology

ANTHROPOLOGY

CLARK WISSLER, Ph.D., Curator
PLINY E. GODDARD, Ph.D., Curator of Ethnology
ROBERT H. LOWIE, Ph.D., Associate Curator
HERBERT J. SPINDEN, Ph.D., Assistant Curator
N. C. Nelson, M.L., Assistant Curator
CHARLES W. MEAD, Assistant Curator
LOUIS R. SULLIVAN, A.M., Assistant Curator
LESLIE SPIER, B.S., Assistant
HERMAN K. HAEBERLIN, Ph.D., Assistant

ANATOMY AND PHYSIOLOGY

RALPH W. Tower, Ph.D., Curator Charles F. Herm, Assistant

PUBLIC HEALTH

CHARLES-EDWARD A. WINSLOW, M.S., M.A., Curator THOMAS G. HULL, Ph.D., Assistant

PUBLIC EDUCATION

GEORGE H. SHERWOOD, A.M., Curator G. CLYDE FISHER, PH.D., Associate Curator ANN E. THOMAS, PH.B., Assistant

BOOKS AND PUBLICATIONS

RALPH W. TOWER, Ph.D., Curator IDA RICHARDSON HOOD, A.B., Assistant Librarian

RESEARCH ASSOCIATES

M. D. C. Crawford, Textiles, Anthropology
Charles R. Eastman, Ph.D., Vertebrate Palæontology
W. Elmer Ekblaw, A.M., Geology
Alessandro Faberi, Physiology
Geo. Bird Grinnell, Ph.D., Ethnology
George F. Kunz, Ph.D., Mineralogy
Charles W. Leng, B.S., Coleoptera
J. Howard McGregor, Ph.D., Anthropology
A. L. Treadwell, Ph.D., Annulata

FORTY-NINTH ANNUAL REPORT

To the Trustees and Members of The American Museum of Natural History, and to the Municipal Authorities of the City of New York:

The President has the honor to submit his eleventh Annual Report, the forty-ninth in the history of the Museum, in what he trusts will prove to be a new and more interesting form. It is important to emphasize the fact that the Museum is primarily an educational institution, local and national, and that all exhibition, study, research and exploration, as well as the accumulation of specimens and collections and of books in our library, are contributory to this chief end—the diffusion of light and learning for the advancement of true civilization.

The plan set forth last year, that the fiftieth anniversary of the foundation of the Museum, April 6, 1919, should be celebrated by the opening of two new buildings, the Court of Ocean Life and the Southeast Wing, facing Central Park, is deferred because of the new conditions of economy and of national service created by the war for liberty.

In view of the stringency of the city's finances, several Trustees and other friends of the Museum* had offered to contribute \$618,008 for these new buildings; in fact, the building plan was announced (November 5, 1916), but on the declaration of war with Germany (April 6, 1917), it was deemed wise to postpone building until the conclusion of the war.

With the same patriotic purpose, the scientific staff of the Museum voted (February 19, 1917) to suspend all the explorations planned for the year and to organize the Museum immediately for national service. The entire scientific

^{*} Mr. George F. Baker, Mr. R. Fulton Cutting, Mr. Cleveland H. Dodge, Dr. James Douglas, Mr. George B. Hopkins, Mr. Archer M. Huntington, Mr. Adrian Iselin, Mr. Arthur Curtiss James, Mr. A. D. Juilliard, Estate of Helen C. Juilliard, Mr. Ogden Mills.

and administrative staffs, from the President down, at once enrolled and offered such service in expert advice, in scientific research and publication, and in personal enlistment as might forward the great cause. The activities of the year have thus been greatly modified: funds appropriated for exploration have been only partly used; research and publication have been increased on the part of the older men, and all the younger men have enlisted in some branch of national service, either in this country, in South and Central America, or in France. The best idea of the year's activities may perhaps be gained by the distribution of expenditures, which has been approximately as follows:

For maintenance, repair and care of the building and collections	\$305,000
For education in the public schools, high schools, colleges and in the Museum	15,250
For arctic exploration (rescue of the Crocker Land party)	72,000
For exploration (America), field salaries and expenses	40,000
For researches and studies on previous explorations and collections of the Museum	58,000
North America (birds, mammals and fishes) Antillean region (Porto Rico, Cuba, Lesser Antilles) South America (especially Colombia, Venezuela, Peru, Ecuador, Chile, Paraguay, Argentina and Brazil) Africa, especially the Congo region (birds, mammals, fishes) Polynesia and the Philippines	
For publications (scientific and popular) Bulletin, Memoirs, Journal, Handbooks, Annual Report	53,500
For exhibition and preparation for exhibition halls, salaries and materials	98,700

deficiency in the maintenance of the Museum of nearly \$60,000, due to the insufficiency of the City's appropriation.

Additional Endowment Needed

Trustees. To place the Museum on a secure financial foundation, at least \$1,000,000 additional endowment is needed for its annual operating and educational

At the beginning of the year 1917, there was an estimated

expenses.

An appropriation by the City of not less than \$15,000 annually is also needed to cover the large and increasing cost of public school educational work by the Cost of Museum. Between the years 1886 and 1904, School Work sums varying from \$18,000 to \$38,000 were appropriated annually by the State for similar work by the The Museum is at present carrying on much of the natural history work with the public schools and libraries of Greater New York; it has in circulation 712 loan collections which were distributed among 446 schools and were studied during the year by 1,075,076 school children. In connection with our natural history lectures in the schools, 63,111 lantern slides have been loaned to 84 schools, while 79,323 public school children have attended 103 lectures given for them by members of the Museum staff. With the aid of the Thorne Fund, instruction for the blind has included 31 lessons for blind children from the public schools. The Museum is prepared to provide the schools of New York from its unequaled collections of photographs, taken by its explorers in all parts of the world, which now number 46,565 negatives and 63,818 photographs. There is no large city in the world which offers such advantages to its school children in the study of the geography of land and sea, of insects, fishes, birds and mammals, and of all matters pertaining to public health.

PATRIOTISM AND PUBLIC EDUCATION

Two events of the year, wholly different in kind, have reminded us of the close connection between American patriotism and public education. The first is the death of that staunch supporter and exponent of public education, Joseph Hodges Choate; the second is the unprecedented action of Congress in putting a very heavy burden on education through taxing inheritances and bequests for educational purposes.

Our beloved and honored founder, Joseph Hodges Choate, bequeathed to us the inspiration of a life of intelligence, of fortitude and of patriotism, crowned by a final week of eloquent and forceful enunciation of the principles that should guide our country in this turning point in the world's history.* In his distinguished service of forty-eight years to the Museum,

from its foundation in 1869, Mr. Choate has Service of left an enduring monument, through his sa-Joseph H. Choate gacity as a lawyer, his persuasive power with the State and City authorities, his broad-minded view of the influence of the Museum in education, his belief in Sunday opening, his power as a writer, and as a speaker on all the historic occasions of the first half century of the Museum's history. Intelligence, education, the diffusion of light and learning among the people, and confidence in the uplifting power of the teachings of nature were the guiding principles of Mr. Choate's life as a Trustee of the Museum. From the period of his interview with William M. Tweed in Albany, in 1860, which resulted in the incorporation of the Museum, to his masterful argument; of 1909 for freedom from political control, we find him as one of the four guiding spirits of the institution, the others being Albert S. Bickmore, J. Pierpont Morgan, and, above all, Morris K. Jesup.

Free public education has always been a distinctive feature of American civilization. The only education which is really free is that which comes from endowment and the voluntary contributions of citizens. All public education, so called, is by taxation of certain classes for the benefit of others.

On September 8, 1916, the Congress of the United States passed a law‡ taxing all bequests, legacies, devises and gifts for education, philanthropy and religion in equal measure with expenditures for industry and for luxury. This tax is without precedent in federal legislation, for a law imposing a similar tax during the Spanish-American War was almost immediately amended to exempt such bequests and gifts. Moreover, thirty-eight of the leading States of the Union have exempted educa-

^{*} Mr. Choate was chosen as the principal orator and spokesman of the United States and of the municipality at the various meetings and banquets with which the Commissioners of Great Britain and of France were received and welcomed by the municipality of New York, in May, 1917. A fuller notice of his great service to the Museum is presented in subsequent pages of this report and is embodied in the Memorial Volume written by the President and printed by order of the Trustees.

[†] This legal brief was prepared with very great care on January 18, 1909. It affects the management not only of the American Museum but of its sister institutions.

[‡] Amended March 3, 1917.

tion, philanthropy and religion, both from direct tax and from taxation on legacies, bequests and gifts. The existing federal tax law, to use the language of the President of one of our southern colleges, is a "staggering blow" aimed at the life of our educational institutions. The very first response in this country to the new world conditions created by the war came from the students and staffs of the great endowed institutions of education and science. Museums, universities, colleges, technological schools, technical schools, medical schools, training schools for nurses, and laboratories, all built up during the past two centuries by private bequests, legacies, devises and gifts, hastened to service in response to the call of President Wilson, giving the brains and energies of their best experts and offering the bodily service of their youth for actual warfare. It is no exaggeration to say that without this scientific knowledge and training, the high expert knowledge of chemistry, physics, mechanics and technology which the men trained in these great endowed institutions have been able to offer the country. America would have no chance whatever of materially affecting the outcome of this war. This war is eighty-five per cent. science and fifteen per cent. human courage and endurance.

By action of the Trustees of the American Museum, at a special meeting held May 22, 1917, the President was authorized to arrange for the Museum to join with other institutions in the formation of municipal and national committees, representative of educational, charitable and religious institutions, to urge upon Congress tax exemption of bequests and legacies for philanthropic purposes. President Henry Fairfield Osborn was elected Chairman, the Committee being organized as follows:

Jacob H. Schiff
Edward W. Sheldon
R. Fulton Cutting
Nicholas Murray Butler
Robert W. de Forest
William W. Niles
Cleveland H. Dodge
Morgan J. O'Brien
Lewis Cass Ledyard
Felix M. Warburg
Henry Fairfield Osborn

Hebrew Institutions
Libraries
Protestant Philanthropic Institutions
Columbia University
Metropolitan Museum of Art
New York Zoölogical Society
Y. M. C. A. Institutions
Roman Catholic Institutions
New York Public Library
Hebrew Institutions
American Museum of Natural History

Through this Committee a General National Committee was organized representing endowed institutions in all parts of the United States, from Harvard University to the newest endowed colleges, together with religious and philanthropic institutions of all denominations, Hebrew, Roman Catholic and Protestant. With the concurrence of this General Committee, two measures were pressed upon Congress, as follows:

Amendment proposed by SENATOR HENRY L. MYERS OF MONTANA Exempting from Federal Taxation

"All bequests, legacies, devises, or gifts to the United States, or to any State, or to any political division thereof, for exclusively public purposes, and all bequests, legacies, devises, or gifts for uses of a religious, literary, charitable, or educational character, or for the encouragement of art, or to societies for the prevention of cruelty to children."

Amendment by
Senator Henry F. Hollis of New Hampshire
Adopted October 3, 1917
Exempting from Federal Taxation

"Contributions or gifts actually made within the year to corporations or associations organized and operated exclusively for religious, charitable, scientific, or educational purposes, or to societies for the prevention of cruelty to children or animals, no part of the net income of which inures to the benefit of any private stockholder or individual, to an amount not in excess of fifteen per centum of the taxpayer's taxable net income."

The following is part of a Memorial sent to the Sixty-fifth Congress:

As representatives of the free public educational and philanthropic institutions of the City of New York, which are in close touch with a population of 6,000,000, we regard a national inheritance tax which will in any way diminish the bequests and gifts to education, philanthropy and religion as a direct blow at one of the finest and strongest elements of American life—namely, education and public welfare through individual initiative, management and contribution.

More than three-fourths (\$3,742,647) of the income of the higher educational institutions of this City is derived from private benefactions, as against less than one-fourth (\$1,076,795) derived from public taxation. To the annual income for higher education from bequests and gifts should be added the combined annual contributions to the educational museums and public libraries of New York, namely, \$1,864,600.

In the United States, for the entire field of college, university and technological education only, the annual income (1914–1915) from private benefactions is \$36,842,421, as compared with \$38,061,768 from taxation (see Report of United States Commissioner of Education, 1916). In other words, the income from private endowment is equal to the income from public taxation. We believe this is entirely without parallel in any country.

Great individual contribution to education and philanthropy is a peculiarly American custom, which will be fostered and encouraged by wise governmental taxation and retarded by unwise or hostile legislation. Whatever new burdens we have to carry in order to support this great struggle for humanity, liberty and justice, let these burdens fall as lightly as possible upon education, philanthropy or religion, which are the mainsprings of our national life. At best they will undoubtedly suffer from the burdens of necessary taxation, and that these burdens may not be carried to the point of the reduction or elimination of such gifts, we urge that the present law be amended to exempt such bequests, legacies and gifts.

In this connection we point out that American opinion as embodied in the enactments of thirty-five States is practically unanimous in favor of such exemption.

The Hollis Amendment was especially supported by a Committee representing Columbia University, headed by Professor Samuel McCune Lindsay. The Hollis Amendment was approved by the Finance Committee of the United States Senate, and by the Ways and Means Committee of the House of Representatives, and was adopted by both Houses. Thus one very important result was secured, namely, that gifts for educational and philanthropic purposes to the extent of fifteen per cent. of income are exempt from taxation. It is extremely important

that the Myers Amendment, or a measure of equivalent purport, shall be adopted by the Sixty-sixth Congress.*

WAR SERVICE OF STAFF

When war seemed imminent, the scientific staff of the Museum organized for service, the older men for scientific work along various lines, the younger men for actual enlistment, the women for coöperation with the Red Cross and Hospital Supply Service.

The Museum has an honor roll of thirty-three employees in active service, including a number who have graduated from the Plattsburg camps.

Mr. Henry P. Davison, the Treasurer of the Museum, was appointed Chairman of the Red Cross War Council by President Wilson, and has rendered distinguished service to this country; Dr. Bashford Dean, Curator Emeritus of the Department of Ichthyology and Herpetology, was appointed Major in the Bureau of Ordnance, and his expert knowledge of armor is yielding important results; Dr. Frank M. Chapman, Curator of Ornithology, has left the Museum for the present, to serve as Director of the Bureau of Publications of the American Red Cross; Dr. Henry E. Crampton, Curator of the Department of Invertebrate Zoölogy, served as organizer and later as Vice-Chairman of the Committee on Engineering and Education of the Advisory Commission of the Council of National Defense, since its formation thirteen months ago: Curator Winslow was a member of the American Red Cross Mission to Russia, of which Dr. Frank Billings was the Chairman; Captain Barrington Moore, Associate Curator of the Department of Woods and Forestry, went to France last June and is head of one of the forestry divisions of the American service in France; Dr. Thomas G. Hull, of the Department of Public Health, has been called to Washington as Chief of the Division of Exhibits of the United States Food Administration.

The women organized into the American Museum War Re-

^{* &}quot;The strongest possible pressure should be brought to bear upon the Congress to take similar action now and to exempt, without delay, from the operation of the federal estate tax law, legacies and bequests to educational, philanthropic, and religious institutions." (Annual Report of President Butler, Columbia University in the City of New York, for 1916-1917.)

The American Duseum of Patural History Tuthe Service of Ode Country

•
name -
Henry & Crampton
Caurence Ferri
Barrington Moore
Charles & Camp
Cartos 1. Compie
John J. Finn
Seorge 917. Mackenzie
Frank M. Chapman
Charles & A. Winslow Henry Ruof
Howarth & Boyle
Charles A. Connoffy
Albert J. Keffy
Diussell' & Matthew
Robert Harrsch
Harold & Authory
James 9. Chapin
Ludlow Griscom
Leo E. Niller
Bashford Dean
Joseph S. McSarty
William Whitemeyer Harold K. Decker
S. H. Wolfe
Michael J. Silmartin
Benjamin F. Connolly
Daniel J. Nic Sarty
Thomas S. Hull
Louis Jonas
Joseph J. Connolly
Felix A. Barbarito

Clarence 92 Halter

Edwin Meyenberg . Chris Schroth

Attendant	
Associate Eurator of Woods and Forestr	£
Assistant in Vertebrate Palacontology	
Assistant in Manualogy	
Attendant	
Medical Examiner, Pension Board	
Curator of Ornithology	
Curator of Public Health	
Attendant	
Assistant in Crnithology	
Attendant	
Attenbaut	
Preparator	
Cleaner	
Ckaner Assistant in Mammalogy Assistant in Ornithelan	
Assistant in Cruthology	
Assistant in Crnithology	
Curator Smeritus in Ichthyology	
Attendant	
Preparator	
Assistant in Mammalogy	
Consulting Actuary, Pension Board	
Areman Cleaner	
Eleaner	
Cleaner	
Assistant in Public Health	
Preparator	
Assistant in Invertebrate Zoology	
Chauffeur	
Assistant in Herpetology	
Clerical Assistant Clerical Assistant	
Clerical Assistant	

Position in Muscum

Curator of Invertebrate Zoology

Machine Sun Company, 105th Infantry
Captain . Snaincers. A.E. J.
28 fleutenant, Field Artiflery
28 Leutenant, Company C. 312th Enfantry
Battery F. 79th Field Artillery
21. S. Taval Reserve
Director, Bureau of Publications, American Red Cross
American Red Cross Mission to Russia
lst Field Artiflery
21. S. Maval Base Hospital Do. 1, A. & J.
Sargent, Company J. 165th Jufantry, A. E.F.
Company &, 165th Infantry, A. E.F.
21. 5. Taox
U.S. Army
1st Lieutenant, Field Artillery
1st Lieutenant, Jufautry
of S. A. Co.
28 Meutenant, Intelligence
1st Leutenant, Aviation
Major, Bureau of Ordnance
Machine Sun Company, 105th Infantry
21. 5. 2 Tavy
21. S. Mavy
Captain, 2l. S. Army
2l. S. Army
2l.S. Army
Company S. 302d Ammunition Frain
Chief, Division of Exhibits, 21. 5. Food Administration
Corporal, Company F, 24th Engineers, A. S. F.
Battery E, 308th Field Artillery
Quartermaster's Dept.
N.S. Army
Stenographer, Ordnance
21.5.3 Cary
area - fac. K

Branch of Service and Rank in National Service

Vice Chairman Committee on Engineering and Solucation, Advisory Commission of the Council of Tational Defense December 1916 March 26, 1917 May 8th May 12th शिंबर 12th Tiur dune 1st hune 20th June 29th July 19th July 19th July 19th Aug 6th Aug 20th Aug 23rd Aug 25rd Aug 23td Aug 25rd Aug. 29th Aug.29th Sept. 221 Sept. Oct. 33 Oct. 8th Oct. 9th Oct. 15th Oct. 25 th Nov. 21st 9 cv. 281k Dec. 9th Dec. 17th

Dec. 27th

MEMBERS OF THE SCIENTIFIC, ADMINISTRATIVE AND MAINTENANCE STAFFS IN THE NATIONAL SERVICE, 1917

	•			

lief Association and allied themselves with the Red Cross and Navy League, turning out an average of fifty garments, one hundred knitted articles, and two thousand surgical dressings each month, and support a "Soldiers' Aid Committee," which supplies comfort kits and other gifts to the soldiers and officers who have enlisted from the Museum.

The Department of Public Health, under Curator Charles-Edward Amory Winslow, immediately began to arrange a special exhibition on food values and economies and to prepare a fifty-page handbook entitled "Health in War and Peace." The exhibition was first made in the American Museum, then in the Washington Irving High School and in the College of the City of New York. In all these institutions it has been used for practical intensive teaching purposes. The Health Department of the Museum, in coöperation with the departments of Mammals and Fishes, has advocated and listed various unutilized foods, such as seaweeds, marine mollusks, sharks and other unutilized food fishes, also whales and seals among marine mammals.

The Department of Public Education, in coöperation with the National War Work Council of the Y. M. C. A., has prepared a series of lectures accompanied by thousands of slides and many reels of motion picture films, for service among the allied troops at home and abroad.

The Department of Anthropology has been active in innovating and spreading the Mandan corn movement, a variety of corn adapted to extremely arid and elevated regions, which will result in greatly increasing the corn growing area of the United States, inasmuch as it will promote the cultivation of varieties of Mandan corn in localities where it has been found impossible to raise ordinary types of corn. This department has also been in coöperation with the Department of Mammals in an effort to provide proper clothing designed for aviation service, by submitting for Government inspection various fur and skin samples and garments made by the Eskimo in the arctic region.

At the beginning of the war a chemical exhibition was brought together and installed under the energetic direction of Dr. George F. Kunz, for the purpose of showing the progress in industrial chemistry made by this country and of encouraging American manufacturers to independent discovery along these lines.

Another important contribution by the Museum to the cause of the Allies is the model of the Liberty Field Hospital, most skilfully designed and constructed under the direction of President Osborn by Mr. Harry F. Liberty Field Hospital Unit Beers, Superintendent of Construction. Model model is on the unit construction principle. In sanitation it comprises the latest features of British, French and American field hospital designs, and approaches perfection especially for winter and summer use and in provision for openair treatment. The dimensions conform to the standards for field hospital wards adopted by Surgeon General Gorgas, and the model when complete will be submitted to the Surgeon General and to the Red Cross. When the war is over, these model hospitals can be converted into dwelling houses of any size in multiples of five feet and used in the reconstruction of devastated towns and villages.

Among other efforts to render national service may be mentioned the part taken by the Museum in the State Military Census registration, carried on by women volunteers from among the Museum's employees; the establishment of a Provost-Marshal's enlistment and exemption office in the Visitors' Room of the Museum, and the drastic means adopted toward the conservation of fuel by reducing the heat and light supply of the institution by one-half.

EXPLORATION AND RESEARCH

It is gratifying to report the safe return of all the members of our Arctic party which left the Museum about five years ago
(July 2, 1913). In coöperation with the American Geographical Society and the University of Illinois, the Museum undertook this expedition on the assurance by Rear Admiral Peary that a northern land existed. The original estimates of cost were \$50,000, but up to the present time the cost has risen to \$167,953, owing to the unprecedented weather and ice conditions on the west coast of Green-



MUSEUM WAR ACTIVITIES Surgical Dressings Class in Members' Room

	·	

land and the failure of the first two relief parties on the "Cluett" and on the "Danmark," necessitating a third outfit, on the S.S. "Neptune," under Commander Bartlett. Although the main object of the expedition was not attained, the supposed land proving to have been a mirage, interesting and important scientific results in geography, botany and zoölogy were secured. According to the terms of our agreement, the detailed geographical reports of Messrs. MacMillan and Ekblaw belong to the American Geographical Society; the other scientific reports will be brought together in a volume to be arranged by a special editorial committee composed of the leader of the expedition, Mr. Donald B. MacMillan, another member of the expedition, Mr. W. Elmer Ekblaw of the University of Illinois, Dr. Frank E. Lutz, Editor of the Museum Bulletin and Memoirs, and Mr. George H. Sherwood, Acting Chairman of the Crocker Land Committee. Mr. MacMillan's narrative volume, in which he has exclusive rights, will be published by Harper and Brothers. The following contributions have been made to the cost of this Expedition:

American Museum of Natural History	\$69,261.04
American Geographical Society	19,000.00
University of Illinois	10.000.00

The remaining expenses of \$33,000 are still to be raised by subscription or contribution.

The previous arctic work of the Museum, under Messrs. Stefánsson and Anderson, has been partly published in the Report of Mr. Stefánsson, and arrangements are being made with Dr. R. M. Anderson, now of the Geological Survey at Ottawa, Canada, to complete the zoölogical reports.

Exploration in North America for the year, especially in zoölogy and vertebrate palæontology, was largely discontinued because of the war. In anthropology, however, very important work in the Southwest, namely, the excavations of the buried cities of Aztec and Pueblo Bonito, was carried on through the continuation of the Southwest Fund generously contributed by Mr. Archer M. Huntington.

Of continued promise is the natural history survey of Porto Rico, undertaken in cooperation with the New York Academy of Sciences and the Government of Porto Rico. The plan, begun in 1913, is to make a complete survey of the island, its insect life, its botany, forests, plant and animal resources, its coast and fisheries. Several discoveries of very great interest have already been made and we look forward to the publication of a full series of three volumes of natural history reports by the New York Academy of Sciences, under the general direction of Dr. Nathaniel Lord Britton, Director of the New York Botanical Garden.

The chief event of the year in the prosecution of our scientific survey of South America was the publication of "The Distribution of Bird-Life in Colombia" by South America Dr. Frank M. Chapman, constituting Volume XXXVI of the Bulletin of The American Museum of Natural History. This contribution to the biological survey of South America represents the very highest standard of modern field exploration. It is the first completed scientific work of the intensive zoölogical survey of South America inaugurated in December, 1910, and conducted by Messrs. Chapman, Cherrie, Miller, Boyle, Richardson and Fuertes, under funds contributed by the Museum from the Jesup Fund, by Colonel Theodore Roosevelt, Mr. Cleveland H. Dodge and other friends of the Museum. The Museum also gratefully acknowledges the courtesies extended to it by the Colombian Government through its representatives in this country, and its administrators at the ports of Barranquilla, Buenaventura and Tumaco. Dr. Chapman's volume is a credit not only to the Museum but to American science. It sets a standard for all our work, not only in South America but in Africa and in other countries. courtesy, integrity and tact which our explorers carried into their South American work give promise of the establishment of new and friendly scientific relations with our sister republics of the south.

The next report to be issued in the South American series will be that by Mr. George K. Cherrie of the Roosevelt Expedition of 1916–1917.

Our work in Asia for the Asiatic Hall of the future has begun most auspiciously through the entire success of our first Asiatic Zoölogical Expedition under Mr. Roy Chapman Andrews, assisted by Mrs. Yvette Borup Andrews and Mr. Edmund Heller. The total cost of this expedition, namely \$14,000, was met partly by the Morris K. Jesup Fund and partly by generous contributions from the following Members of the Museum:

Mr. and Mrs. Sidney M. Colgate	\$425
Mrs. Adrian Hoffman Joline	100
Childs Frick	100
Lincoln Ellsworth	100
James B. Ford	500
Mr. and Mrs. Charles L. Bernheimer	400
Temple Bowdoin	500
Henry C. Frick	875

Landing in China in May, 1916, the party first explored the Province of Fu-kien, west of Formosa, where they were greatly assisted by the Reverend Harry R. Caldwell, a missionary of the finest type and a most worthy representative of our country in the Chinese Republic, also an enthusiast in natural science. We have recently enrolled him as one of our Life Members. After securing valuable collections in this region, the party proceeded to explore the Province of Yunnan, spending nine months in zoölogical and geographical exploration and bringing back priceless photographic records and a superb collection of 2,100 mammals, 800 birds and 200 reptiles, a large number of which, especially of the mammals, are new to the museums of this country. Issuing by way of Burma, the expedition was greatly aided by members of the British Government in India, to whom our very special acknowledgments are made in Mr. Andrews's report. His narrative volume will be published by D. Appleton and Company. He is now engaged upon a special scientific report which will appear in the American Museum Bulletin.

The American Museum Expedition to the Congo, after six years of arduous work in the field under Mr. Herbert Lang and Mr. James P. Chapin, returned to this country in 1915, since

which time the leaders and other members of the Museum staff have been engaged in the preparation and arrangement of the vast collections secured, in research and in publication.

Africa The total cost of the expedition and the preparation of the collections to date is \$73,797.28. Here again the best standards of modern scientific field work were observed, and the following publications, already issued, are highly regarded by naturalists:

The Skeletal Characters of Scutisorex Thomas, by Dr. J. A. Allen
The American Museum Congo Expedition Collection of Bats, by J. A.
Allen, Herbert Lang and James P. Chapin

A Note on the Lumbar Vertebræ of Scutisorex Thomas, by H. von W. Schulte

Fresh-Water Fishes of the Congo Basin obtained by the American Museum Congo Expedition, 1909-1915, by John Treadwell Nichols and Ludlow Griscom

Descriptions of Three New Birds from the Belgian Congo, by James P. Chapin

The Pennant-Winged Nightjar of Africa and its Migration, by James P. Chapin

Four New Birds from the Belgian Congo, by James P. Chapin

The Classification of the Weaver-Birds, by James P. Chapin

Parasitic Muscid Larvæ Collected from the African Elephant and the White Rhinoceros by the Congo Expedition, by Joseph Bequaert

Dentition of Hydrocyon and its supposed fossil Allies, by Charles R. Eastman

Fossil Fishes collected by the American Museum Congo Expedition, by L. Hussakof

A new Species of Trematode (Cladorchis gigas) parasitic in Elephants, by G. A. MacCallum

Shrews Collected by the Congo Expedition of the American Museum, by N. Hollister

These papers are being published in the American Museum Bulletin. The division of these collections, for study and description, thus far has been made as follows:

Smaller mammals, Dr. J. A. Allen (partly published)

Larger mammals, Mr. Herbert Lang (in preparation)

Fishes, Mr. John T. Nichols and Mr. Ludlow Griscom (published)

	<i>t.</i>
,	



DEPARTMENT OF MAMMALOGY
THE OKAPI

One of the rare animals secured by the Congo Expedition. Mounted for the proposed African Hall by Mr. Carl E. Akeley

Wasps and Spiders, Dr. Joseph Bequaert (nearly prepared for publication)

Butterflies, Dr. W. J. Holland, Director of Carnegie Museum, Pittsburgh

Molluscs, Dr. H. A. Pilsbry of the Philadelphia Academy of Sciences Birds, Mr. James P. Chapin

No less important than these technical and scientific reports will be the Narrative of the Congo Expedition of The American Museum of Natural History, which is in preparation by Messrs. Lang and Chapin. Mr. Chapin's work on the birds and on the narrative volume is temporarily interrupted by his commission as First Lieutenant in Infantry.

The mounting and sculpture of the animals for the African Hall are in charge of Mr. Carl E. Akeley, assisted by Mr.

African Hall

James L. Clark. During the past year two White Rhinoceroses have been completed and the first specimen of the Okapi is nearing completion. Progress has also been made on the great African Elephant Group.

Five years have now been devoted by Curator Henry E. Crampton to his exploration of the Polynesian Islands, under the Carnegie Fund, in coöperation with the American Museum. The first volume, entitled "Studies on the Variation, Distribution and Evolution of the genus Partula, a Species Inhabiting Tahiti," appeared in January, 1917, and will be followed in time by two other volumes, constituting a very important contribution to the land shell fauna of Polynesia, with a bearing on biological problems.

It is gratifying to report that our Philippine collections, which were secured by the Museum in 1904, at the time of the closing of the St. Louis Exposition, are now being carefully reviewed by Dr. Alfred L. Kroeber of the University of California, who has in preparation a handbook on this collection which will embody not only a review of the collection but will be a handbook to the ethnology, archæology and zoölogy of the Philippine Islands.

MEMBERSHIP AND STAFF

In the opening part of this report a broader tribute was paid to our senior and most distinguished associate, the Honorable Joseph Hodges Choate, whose death occurred on May 14, 1917. We may now record somewhat more in detail Mr. Choate's great services to the Museum:

JOSEPH HODGES CHOATE

was born at Salem, Massachusetts, on January 24, 1832, the son of Dr. George and Margaret Manning (Hodges) Choate. He graduated from Harvard College in 1852 with the degree of A.B., and from the Harvard Law School in 1854. He received the Honorary Degree of A.M. from Harvard in 1860, and the Honorary Degree of LL.D. in 1888. He also received the Honorary Degree of LL.D. from Amherst in 1887, Edinburgh, 1900, Cambridge, 1900, Yale, 1901, St. Andrew's, 1902, Glasgow, 1904, Williams, 1905, University of Pennsylvania, 1908, Union, 1909; and the degree of D.C.L. from Oxford in 1902. He was admitted to the Bar in Massachusetts in 1855, and in New York in 1856. He was presiding officer of the State Constitutional Convention of 1894; Ambassador to the Court of St. James from 1899 to 1905; representative of the United States at the Second Hague Conference in 1907; leading representative and orator of the City of New York on the occasion of the reception to the Commissions of Great Britain and of France, Wednesday, May 9. and Sunday, May 13, 1917. He passed away at his home in New York City on the evening of Monday, May 14, 1917.

He was a member of the original group of citizens who founded The American Museum of Natural History in 1869, and he served the Museum as Counsel and Trustee during the remainder of his life.

At a special meeting of the Trustees of The American Museum of Natural History, held May 22, 1917, in memory of Mr. Choate, the President was invited to prepare a Memorial, of which the following is an abstract:

"At the age of thirty-seven, in the month of February, 1869, Joseph Hodges Choate became one of the Founders of The American Museum of Natural History and served the institution continuously for forty-eight years, sending his last official letter to the President on May 5, 1917, and attending his last meeting of the Board of Trustees on May 7, 1917. At this time he was fresh and young in heart, powerful and vigorous in mind, and his interest in the Museum showed no abatement.

"The history of the Museum, as recorded in the Minutes of the Board of Trustees, shows that he was the author of the Charter, of the Act of Incorporation, of the original Constitution and By-Laws and of the Contract with the Department of Parks. Into these papers, which constitute the unique legal foundation of the Museum, he worked an entirely new conception, namely, provision for the independent and untrammeled management of the Museum by the most intelligent men of the city, combined with its establishment as a public institution, to be built and partly maintained by public taxation, and to be endowed and enriched with specimens brought together through private gifts and donations.

"This wise union of public and private endeavor led the way to a similar legal foundation for The Metropolitan Museum of Art, of which Mr. Choate was also the author. The foundation of these two Museums led to that of the several other great scientific and educational institutions of the City of New York, including The New York Botanical Garden and The New York Zoölogical Park; to these have been contributed, in the many years since their foundation, \$50,000,000 in private gifts. Thus Mr. Choate was, in a sense, the legal author of a system of institutions which now gives to the City of New York the lead among all the cities of the world."

For the full record of Mr. Choate's services, our Members are referred to the Memorial Volume which will be found in the Museum Library.

The Museum has suffered another loss through the death of Anson Wales Hard, who passed away on June 20, 1917.

Service of Anson W. Hard

At a meeting of the Board of Trustees held on November 12,1917, the Trustees paid the following tribute to the life of their colleague:

"The Trustees desire to record their respect and high esteem for their late colleague

ANSON WALES HARD

who died on June 20, 1917. Mr. Hard was elected a Trustee in 1894 and in the same year was elected a member of the Executive Committee, on which he served continuously for thirteen years. He was a member of the Auditing Committee for eighteen years and was its Chairman from 1908 to 1913.

"He was deeply and practically interested in the progress of the Museum. Among his most important gifts are a collection of Serape and Chimayo Blankets from Mexico and his frequent contributions of rare and valuable books to the Library.

"His broad sympathy and regard for his fellow man were evidenced through his service on the Committees organizing the Pension System for the employees of the Museum and as a member of the Pension Board. His interest in the institution was not confined to one department but extended to many. His gentle manner and his consideration of others bore evidence of his kindly and affectionate nature.

"For some years past, Mr. Hard was in delicate health and we have missed his genial presence. We desire to send to his family this expression of our warm appreciation of his character and of his generous contributions in time and gifts to The American Museum of Natural History."

In the sudden death of Louis Pope Gratacap the Museum lost its senior Curator, who had been in continuous and devoted service of Louis P. Gratacap mired by all his associates and honored and esteemed by his fellow-workers in the two branches of science to which he devoted his life, namely, mineralogy and conchology. The present beautiful and orderly

arrangement of our great collection of shells, probably one of the oldest and largest of its kind, is entirely due to the energy and devotion of Mr. Gratacap. The same is true of the orderly arrangement of our great collection of minerals and gems. No curator in the Museum could leave his task more complete and in more perfect condition for his successor or successors. Nor can any successor be found who covers such a broad field and covers it so well. Mr. Gratacap inherited from his French ancestors his enthusiasm for science, his love of the beautiful, and his genius for the systematic and orderly arrangement of the collections in his care. He was a man of singular modesty and never would acquiesce in the praise and appreciation which all felt were his due.

At the request of the President and the Faculty, the Trustees have appointed Messrs.

Edwin H. Blashfield, Daniel C. French and Breck Trowbridge

an Advisory Committee on Mural Painting, Decoration, Sculpture and Architecture, in order that the art works in connection with the scientific exhibits may be of the highest standard.

At a meeting of the Faculty, held on December 5, 1917, it was voted that the title "Honorary Curator" should be reserved for those who had actually performed curatorial service and that the title "Research Associate" should be applied only to those who are rendering expert service in a particular branch of science.

Acting upon this recommendation, the Trustees have appointed

Henry Fairfield Osborn, Honorary Curator of the Department of Vertebrate Palæontology.

Bashford Dean, Honorary Curator of the Department of Ichthyology and Herpetology.

William Morton Wheeler, Honorary Curator of the Department of Invertebrate Zoölogy.

The following, who have been on the staff under the title of Honorary Curator, are now designated as Research Associates:

George F. Kunz, Research Associate in Mineralogy. A. L. Treadwell, Research Associate in Annulata. Charles W. Leng, Research Associate in Coleoptera.

The following new appointments and promotions were made:

On December 26, 1916, Mr. Charles F. Herm was appointed Assistant in the Department of Anatomy and Physiology.

On January 1, 1917, Dr. Willard G. Van Name was appointed Assistant in the Department of Invertebrate

Zoölogy.

On January 1, 1917, Mr. Barrington Moore was appointed Associate Curator in the Department of Woods and Forestry.

On January 26, 1917, Mr. Alessandro Fabbri was ap-

pointed Research Associate in Physiology.

On February 5, 1917, Mr. Roy W. Miner was promoted from Assistant Curator to Associate Curator in the Department of Invertebrate Zoölogy.

On February 5, 1917, Dr. Frank E. Lutz was promoted from Assistant Curator to Associate Curator in the De-

partment of Invertebrate Zoölogy.

On February 5, 1917, Dr. G. Clyde Fisher was promoted from Assistant Curator to Associate Curator in the Department of Public Education.

On April 18, 1917, Mr. W. DeW. Miller was promoted from Assistant Curator to Associate Curator of Ornithology.

On July 1, 1917, Dr. H. K. Haeberlin was appointed Assistant in the Department of Anthropology.

On October 17, 1917, Mr. W. Elmer Ekblaw was appointed Research Associate in Geology.

On December 19, 1917, Mr. Roy Chapman Andrews was promoted from Assistant Curator to Associate Curator of Mammals, to take effect January 1, 1918.

- On December 19, 1917, Dr. Chester A. Reeds was promoted from Assistant Curator to Associate Curator of Invertebrate Palæontology in the Department of Geology and Invertebrate Palæontology, to take effect January 1, 1918.
- On December 19, 1917, Mr. Leo E. Miller was appointed Assistant in Ornithology, to take effect January 1, 1918.
- Dr. Joel Asaph Allen, after twenty-eight years of active service as editor of the scientific publications of the American Museum, tendered his resignation, in order to devote himself to the study of the ever increasing collections of the Department of Mammalogy and Ornithology, of which he is Curator.
- Dr. Frank E. Lutz, of the Department of Invertebrate Zoölogy, was appointed to succeed Dr. Allen, beginning his administration of the work on November 1.

PUBLIC ACTIVITIES OF THE STAFF

The national character of the Museum is emphasized by the fact that in addition to the federal service which various members of the staff have rendered they have participated in many scientific activities outside the Museum:

President Henry Fairfield Osborn, Dr. Charles D. Walcott of the Smithsonian Institution, and Director Frederic A. Lucas were appointed judges for the bestowal of the Daniel Giraud Elliot Gold Medal, the gift of Miss Margaret Henderson Elliot.

On October 2 President Osborn accepted membership on the General Committee of the United States Food Administration in New York City.

On the evening of November 15, President Osborn delivered an address on "The Origin and Nature of Life," at the anniversary celebration of the New York Academy of Medicine.

Director Frederic A. Lucas was elected an Honorary Member of the California Academy of Sciences. He was also elected Honorary President of the Keramic Society of Greater New York.

Dr. Frank M. Chapman was elected an Honorary Member of the British Ornithologists' Union, at the annual meeting of the Society, held on March 14, in London. (Not more than ten "Honorary Members" are recruited from eminent ornithologists residing abroad.)

At a special meeting of the Argentine Society of Natural Sciences (Buenos Aires) and the Ornithological Society of the Plata (Buenos Aires), Dr. Frank M. Chapman was made an Honorary Member of the Ornithological Society and a Corresponding Member of the Society of Natural Sciences.

At the dedication of the Museum of New Mexico at Santa Fé the Museum was represented by Dr. Clark Wissler, who gave an address on "The Opportunities of the New Museum," and by Mr. N. C. Nelson, who spoke on "Recent Archæological Discoveries in the Southwest."

The Museum was represented by Dr. Clark Wissler, Dr. P. E. Goddard, and Mr. N. C. Nelson at the joint convention of the American Anthropological Association and the American Folk-Lore Society which was held in Philadelphia, December 27–29. Professor A. L. Kroeber presided. A dinner was given on the evening of December 27 in honor of Dr. Wissler, in appreciation of his recent publication, "The American Indian." This book was the theme of the after-dinner discussion.

Dr. Robert H. Lowie, Associate Curator in the Department of Anthropology, left in August for California, where he is acting as Associate Professor in Anthropology during the academic year 1917–1918 in the University of California at Berkeley, in exchange with Dr. A. L. Kroeber, who becomes Associate Curator in the Department of Anthropology, January 1–July 1, 1918.

Dr. Thomas G. Hull, Dr. F. E. Lutz, Mr. Barrington Moore, and Dr. C. C. Mook were elected Fellows in the New York Academy of Sciences in December.

At the twelfth annual meeting of the American Association of Museums held in New York from May 21 to 23, Mr. Roy W. Miner was elected a councilor for a term of three years.

WELFARE OF EMPLOYEES

The Fifth Annual Report of the Pension Board has appeared and bears testimony to the efficient management of the Pension Fund under the Chairmanship of Mr. Felix M. Warburg.

The operation of the pension system is proving very satisfactory and is on a financially sound basis. There are now 256 subscribers to this fund. The invested funds amount to \$76,000, derived from the personal contributions of employees and Trustees since the establishment of the fund in 1913. The receipts through contributions of employees and the Board of Trustees for 1917 amounted to \$20,361.38. The disbursements during the year in pensions and gratuities amounted to \$5,434.66.

The requirement that all employees shall undergo physical examination before being accepted as permanent was undertaken primarily to safeguard the funds and has had an unforeseen beneficial result as it has brought to the attention of individual employees slight physical defects or tendencies, which, when treated under the advice of the medical examiner of the Board, have been either remedied or controlled.

Further steps have been taken in providing for the well-being of employees. Through friends of the Museum, endowed beds in the Mount Sinai and Presbyterian Hospitals have been placed at the disposition of the Pension Board for occupancy by employees in need of surgical or medical attention.

In June the President appointed Mr. Felix M. Warburg, Mr. Adrian Iselin, Mr. Frederick H. Smyth, and Mr. George N. Pindar, a Special Committee to formulate a plan whereby all the employees might have an opportunity to subscribe to the Liberty Loans. Under the plan evolved, each employee was permitted to subscribe for as many bonds as he wished, up to the amount of his accumulated contributions to the Pension Fund, and to pay for them by having \$2.50 a month on each \$50 bond deducted from his

salary. Through the generosity of two of our Trustees, funds were advanced for the purchase of the bonds desired and the plan was put in operation. There were 164 subscriptions to the first issue, amounting to \$13,150, and 95 to the second, amounting to \$9,100.

HOSPITALITY TO SOCIETIES

In accordance with the custom of many years, the Museum has provided meeting rooms for educational and scientific societies, notably the New York Academy of Sciences and Affiliated Societies, the American Association of Museums, the American Scenic and Historic Preservation Society, the National Association of Audubon Societies for the Protection of Wild Birds and Animals, the Horticultural Society of New York, the Junior Auxiliary of the New York Zoölogical Society. The Department of Education of the City of New York has held lectures in our auditorium, on Tuesday and Saturday evenings, as for many years past.

Assistance has been given to the War Department by providing quarters in the Visitors' Room for the Local Board, Division No. 129, of the Provost Marshal General's Office.

Several special exhibits were arranged during the year as follows:

Models and paintings of modern animals and a mural decoration of prehistoric animals, by Charles R. Knight, from December 15, 1916, to January 22, 1917.

Paintings and bronzes portraying the Early West, by William de la M. Cary, from February 16 to April 22.

The Horticultural Society of New York held its flower exhibitions in the halls on the first floor, January 13–14, February 17–18 and November 9–11, respectively.

Two exhibits of designs suitable for the decoration of textile fabrics, wall paper and keramics, from objects in the Museum, one held in March and one in December.

Pottery and chinaware of designs inspired by the Museum's collections of the primitive art of the Americas were exhibited by the Keramic Society of Greater New York, from April 25 to May 6.

Paintings, "The Whalers of New Bedford," by Clifford W. Ashley, from May 10 to June 10.

Paintings, "Under-the-Sea," by Harry L. Hoffman, from June 15 to October 6.

The annual exhibition of The Aquarium Society, October 12–14.

In early November the thirty-ninth anniversary of the New York Microscopical Society was celebrated with a public exhibit held in the Museum.

New Zealand paintings, by Miss Frances Del Mar, from November 21 to December 10.

On December 5, the Board of Water Supply of the City of New York opened an exhibit of the Catskill System of Waterworks, illustrated by models, maps, water-color pictures, rock-cores, drawings, photographs and charts.

Among the societies and organizations that held meetings here were:

American Academy of Arborists

American Asiatic Association

American Association of Museums

American Ethnological Society

American Medical Association

American Red Cross

American Scenic and Historic Preservation Society

Aquarium Society Catherine Abbé Club

Chautauqua Bird and Tree Club

City History Club of New York

Colonial Dames Club

Columbia University, classes

Department of Education, New York City, free public lecture courses

Elsie Rutgers Club

Forestry Club of the DeWitt Clinton High School

Gouverneur Morris Club

Horticultural Society of New York

Inkowa Club

Joan of Arc Club

Junior Auxiliary of the New York Zoölogical Society

Keramic Society of Greater New York

Linnæan Society of New York

National Association of Audubon Societies for the Protection of Wild Birds and Animals

Natural Science Committee of the Associate Alumnæ of the Normal College of the City of New York

New York Academy of Sciences

New York Entomological Society

New York Library Club

New York Microscopical Society

New York Mineralogical Club

New York State Historical Association

Swiss Scientific Society

Torrey Botanical Club

War Department—Local Board, Division No. 129, of the Provost Marshal General's Office

BUILDING AND EQUIPMENT

As has been already noted, construction of new buildings has been postponed until after the war. This delay will necessitate further congestion in the exhibition halls.

Case Construction and Equipment

Through the equipment fund, CDP 3E, a moderate amount of case construction for both exhibition and storage has been accomplished during the year. As a result of a special appeal by the President, the Board of Estimate, on December 28, 1917, granted a further release of \$42,438.01, which will provide for case construction during the current year. Of the original appropriation, \$111,808.77, the sum of \$101,513.99 has now been released. The details of the work carried on under these appropriations as well as under the allotment for Special Repairs will be found in the Report of the Director, pages 45 to 50.

SPECIAL GIFTS AND ACKNOWLEDGMENTS

In the list of Accessions, pages 185 to 201, will be found acknowledgments of the many gifts received by the Museum during the year 1917. Special mention may be made of the New York Zoölogical Society which has presented a large number of mammals, birds, reptiles and amphibians. Thus, through cooperation with the New York Zoölogical Society, rare animals which have served their purpose as living examples of their

species at the Zoölogical Park, continue their educational work in the Museum collections.

Other special gifts are: An ancestral tablet (for worship), from China, and a sacred belt, apron and head-dress of a lama of Tibet from Mrs. William Tod Helmuth; a fur coat made up in parka fashion, probably of marten skins, Alaska, from Mrs. E. H. Harriman; horns from Alaskan moose, spread 66 inches, engraved with Haida figures, from Juneau or Sitka, presented by J. M. Ellsworth. Five thousand feet of motion picture film of microscopic life, marine views, embryology and hatching of chick, and formation of crystals was the gift of Mr. A. Fabbri. More than 8,000 insects from China were received from the Reverend Harry R. Caldwell; an archæological collection of about 3,500 specimens from New York State and a series of ethnological specimens from North American Indians were presented by Mr. W. L. Hildburgh. A Chinese costume was given by Mrs. J. A. Finn; 517 birdskins from Ecuador by Mr. William B. Richardson; a mummified body of a man with a rabbit-skin blanket and some bone fragments, from a cliff cave in Tularosa Mountains of New Mexico, near Frisco River, were the gift of Dr. S. M. Strong, U. S. A.

The Spanish-American Iron Company of Santiago, Cuba, rendered much valuable service to the Museum through active coöperation with Mr. Anthony in the field. The company steamer and railroads were placed at Mr. Anthony's disposal, quarters at Daiquiri were given for several weeks, and horses and men were always had for the asking.

While in the field, the Asiatic Zoölogical Expedition was assisted very materially by the following gentlemen, without whose coöperation it would have been impossible to carry on the work, and it is a pleasure to acknowledge here the indebtedness of the American Museum to them: the Director of the Bureau of Foreign Affairs of the Chinese government; M. Georges Chemin Dupontès, Directeur de l'Exploitation de la Compagnie Française des Chemins de Fer de l'Indochine et du Yunnan, Hanoi, Tongking; M. Henry Wilden, Consul de France, Shanghai; M. Kraemer, Consul de France, Hongkong; Mr. Howard Page, Standard Oil Co., Yunnan-fu; Hon. Paul Reinsch, Minister Plenipotentiary and Envoy Extraordinary

to the Chinese Republic; Mr. J. V. A. McMurray, First Secretary of the American Legation, Peking; Mr. H. G. Evans, British-American Tobacco Co., Hongkong; Rev. William Hanna, Tali-fu; Rev. A. Kok, Li-chiang-fu; Ralph Grierson, Esq., Teng-yueh; Herbert Goffe, Esq., H. B. M. Consul General, Yunnan-fu; Rev. H. R. Caldwell, Yenping; Mr. C. R. Kellogg, Foochow, China; and the General Passenger Agent, Canadian Pacific Railroad, Hongkong.

GENERAL ADMINISTRATION OF THE MUSEUM

Frederic A. Lucas, Director

While the war has naturally affected the work of the Museum, yet its effects have been felt principally in a lessened number of expeditions, and satisfactory progress has been made in the care and installation of the collections, in research and in publication.

The slightly lessened sales of popular publications show the effect of "hard times," though the demand for the "General

Guide" is about the same as usual, 3,233 copies having been sold during the year, exhausting the edition of 1916; a new edition is now in press and will be issued early in 1918.

There were also sold 1,282 *Handbooks*, 2,179 leaflets and 978 reprints of articles in the *Journal*; all in all, 8,566 copies of the various publications.

Diminished sales of poster stamps and post cards also reflect the enforced economy of the year, and it is rather interesting to note that, aside from the Guide, the leaflets most often called for are those more particularly written with students in view. "The Ancient Civilizations of Mexico and Central America" has been added to the *Handbooks* series, and in line with the use by students of the Peruvian collections, Mr. Mead prepared a leaflet on "Peruvian Art" which has been much in demand; also a leaflet on "Insects and Disease" is in the hands of the printer.

As part of the publicity work, under the direction of Mr. Pindar, another large edition of the hotel circular has been printed and distributed, and a handsome calendar, with illustrations mainly taken from groups and other objects in the Museum, was prepared and sent to all the Members of the Museum as well as to others interested in its work.

What may be termed the practical uses of the collections continue to increase, and this year designers have extended their work from designs for fabrics to those for entire costumes, taking their motives

from the garments of primitive peoples, especially those of the Koryaks. Aside from these, sculptors and medalists have drawn upon the Museum for models for various animals and even the humble woodchuck has posed for the general good.

The rearrangement of the Primates Hall, which is about half completed, may well be classed with new exhibits, for the removal of the single specimens from cherry bases, cleaning and installing them without shelves and with new labels, have made the individual specimens "as good as new," and, in some cases, even better. Fine groups of African Red Monkeys and Spider Monkeys have been added, a group of Lemurs is well advanced and one of Howling Monkeys commenced.

The Apache Group was opened to the public on May 19, and the Virginia Deer Group was placed on exhibition in September. This last, showing deer at sunset in the Adirondacks, is one of the most beautiful groups in the Museum.

The first of the projected exhibits illustrating the structure and physical characters of man has been installed: it deals with cranial characters, gives a sketch of the history of craniometry, illustrations of the terms employed and principal measurements used, and examples of typical crania of different types and races.

The rearrangement of the Chinese Hall has not only given more room for display, but has added greatly to its appearance, so that this section of the Museum is now extremely attractive.

The rearranging of the North Pacific Hall has made good progress. An important change has been the covering of the columns, thereby transforming them from round cast iron to square, cement-faced pillars, on which, or against which, large objects such as house posts can be placed.

A number of additions have been made to the Birds of the World series, and many, especially among the birds of prey, have been remounted by Mr. Engel, so that the general standard of the exhibits has been greatly improved.

Progress has been made on the Elephant Group, though, like all other branches of work, this has been hampered by war conditions which have called for service elsewhere those engaged upon it. The close of the year finds the young male nearly



DEPARTMENT OF MAMIMALOGY AND ORNITHOLOGY

Specimens obtained through courtesy of Colonel Franklin Brandreth and Mr. Frederick Potter VIRGINIA DEER GROUP

finished, the female and young well advanced, and the huge male about one half done. The record White Rhinoceros is completed, as is the calf, and the female is well along in preparation.

The most important single piece completed during the year was the reproduction of the Manta, or Giant Ray, secured by Mr. Russell J. Coles, which was hung over the exhibits of fishes in November, and for the first time affords the public an idea of this most interesting creature.

Important additions have been made to the historical side of the collections through the gift of a large painting by Titian R. Peale of a herd of bison near the headwaters of the Platte, from studies made during the expedition under Long in 1820, and a portrait of Robert Havell, engraver of the first edition of Audubon's Birds of America, together with his last painting. For the first the Museum is indebted to Mr. John M. Hoffmire and Mr. Charles W. MacMullen, nephews of Mrs. Titian R. Peale, and for the latter to Mr. Robert Havell Lockwood, grandson of the engraver. The Museum had already acquired from Mr. Hoffmire a fine portrait of Peale together with the drawings and manuscript for his projected work on American Butterflies.

The printing office has turned out its customary amount of work, including this year 1,000 copies of each of the three leaflets, "Our Common Butterflies," "How to Col-Printing and lect Insects," and "Syllabus Guide to the Public Health Hall." There were also no less than 28,000 small booklets, sixteen pages each, issued in connection with the various lecture courses. Aside from these the printing may be roughly summarized as follows:

Summary of Printing—1917 1	mpressions
Letter-heads	84,000
Field and Reserve Collection Labels	59,105
Report, Requisition and Other Forms	151,245
Catalogue Cards, Tickets to Lectures, etc	322,114
Programs, Circulars, Invitations	141,735
Individual Labels 389	
Descriptive Labels 833	
· 1,222 (average of 5 each)	6,110
	764,309

The equipment and work of the printing office have increased to such an extent that the next logical step would seem to be raising it to such a point that it could do all the work of the Museum, save, possibly, the printing of the *Journal*.

The year has witnessed the completion of the iron storage racks in the Department of Vertebrate Palæontology, greatly increasing the storage space, safety and accessibility of the specimens. Work is well advanced on a series of four concrete storage rooms to replace the large wooden boxes over the west corridor, fifth floor, and here again their completion will add much to the security and ease of handling of the ethnological material.

This year also sees the gallery and cases built in the Osborn Library of Vertebrate Palæontology, where additional room was badly needed, and the galleries for birds and mammals in two of the office rooms.

Many additions have been made to the storage cases for mammals, birds and insects, and yet the growth of the collections has been such that the lack of appropriations in 1915 has put the construction work so far behind that it seems impossible to catch up with them. To paraphrase the well known dictum as to the requirements of civilization, one may say that the needs of a museum are for cases, more cases, and still more cases.

Another and most important item, for which special provision was made in the budget, has been the improving of the acoustics of the large auditorium, plans for which were submitted by Professor Wallace C. Sabine three years ago. The results have been extremely satisfactory to lecturers and audiences, and it is to be regretted that structural obstacles make it impossible to effect equal improvements in the heating and ventilation.

Since the subsidence of the epidemic of poliomyelitis, the attendance has become almost normal, though the disquiet attendance

Attendance tendant on the imminence of war and subsequent participation in it by the United States, has apparently had a deterrent effect on visitors, especially on those from out of town.

Museum attendance is more or less uncertain and it is usually impossible to assign any definite reasons for increase, and especially decrease, in the number of visitors. It can simply be said that they come or stay away as they choose, and the most intensive advertising—such as took place during the Tuberculosis Exhibition of December, 1908—fails to add permanently to the list.

In September, 1917, the Visitors' Room was turned over to the Local Board, Division No. 129, of the Provost Marshal General, War Department, and up to date is still in use as well as the adjoining Academy Room. Up to the time of its occupancy by the Local Board, nearly 20,000 visitors had made use of the Visitors' Room in 1917.

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

	1012	1014	TOTE	1916	TO 17
	1913	1914	1915	1910	1917
Board of Education Lectures Lectures to School Children and Classes visiting the	48,119	52,761	41,970	34,421	32,790
Museum for Study Meetings of Scientific So- cieties and Other Meetings	56,899	65,785*	61,437	58,842	57,463
and Lectures	33,357	32,939	22,542	28,495	25,549
Total	138,375	151,485	125,949	121,758	115,802
Halls	728,288	657,458	794,139	725,917	786,151
Total Attendance for all Pur-					
Lectures to Pupils in Local	866,663	808,943	920,088	847,675	901,953
Centers			32,800	37,400	38,525
lating Collections	1,378,599	1,273,853	1,238,581	1,118,322	1,104,456†
Grand Total	2,245,262	2,082,796	2,191,469	2,003,397	2,044,934

There has apparently been a steady gain in the attendance of students, or of those who make systematic use of the collections, although exact figures are available only for the Darwin Hall, where 11,841 were recorded—a gain of 5,174 during the past three years.

A permanent gain of 10,000 who really use the Museum is better than a temporary gain of 50,000 who come for one visit only. And the record of attendance shows that special events,

^{*} Includes pupils, estimated at 15,000, attending lectures in the Local Centers. † Includes 20,380 in the public libraries.

such as the flower show, which bring a large attendance for a few days, are not followed by any increase in regular attendance but rather by a drop. The attendance, however, of students, pupils and others, who come to really make use of the collections, shows a healthy and steady growth.

REPORTS OF THE CURATORS

PUBLIC EDUCATION IN THE MUSEUM AND IN THE SCHOOLS*

GEORGE H. SHERWOOD, Curator

The public educational work of the Museum may be separated into three major divisions:

Museum Extension to the Schools Natural History Teaching in the Museum The Photographic Work of the Museum

The extent of this practical educational work can be most effectively shown by citing the statistical summary of the work of the Department of Public Education for the year 1917.

The Circulating Nature Study Collections, 712 in all, have been in use in 446 schools, in which 1,075,076 children have had an opportunity to study them.

The lending of lantern slides, undertaken through special arrangement with the Department of Education of New York City, has had an astonishing development. The number of loans to public schools has increased from 491 to 935, while the number of slides circulated has risen from 38,912 in 1916 to 63,111 in 1917.

To pupils of the public schools, 103 lectures have been given by members of the staff, at which a total of 79,323 children were present. Of this number 40,798 came to the Museum, while in the case of the remaining 38,525, the lectures were taken to them in the schools.

The instruction for the blind included 31 lessons to blind children from the public schools with a total attendance of 345.

The special collections for libraries were exhibited in 9 branches of the New York Public Library and were studied by 29,380 people.

^{*} Under the Department of Public Education (see also pages 19, 25 and 185).

The reference series of negatives and photographs has received additions of 3,254 negatives and 3,128 photographs, the total reference file now numbering 46,565 negatives and 63,818 photographs.

The photographic department has made 1,547 negatives,

3,526 lantern slides and 13,623 prints.

While the regular Museum extension to the schools has been maintained at its previous high standard, the department has made a direct contribution to war work.

Appeals for help in the way of entertainment for soldiers have come to the Museum from the War Council

Y. M. C. A.
War Work

of the Y. M. C. A. and three ways have been developed in which the Museum is able to render practical assistance.

The department possessed several thousand uncatalogued lantern slides. Largely through the volunteer assistance of members of the department, these slides have been carefully sorted, and more than 4,000 from which lectures may be made have been presented to the Y. M. C. A.

The second method of assistance consists in preparing special lectures particularly designed to interest soldiers and sailors. These are called "Exploration Tales for Soldiers and Sailors." Their purpose is set forth in the following foreword which accompanies each lecture:

"The expeditions sent by The American Museum of Natural History to the remote parts of the earth not only have brought together wonderful natural history collections, but are filled with adventures that stir the blood. We believe that the tales of these experiences will appeal to the soldiers and sailors, since the successful explorer must possess in marked degree the qualities which make good fighting men. These stories are told by the explorers themselves with the hope that they will entertain, amuse and rest the boys in training and those at the front."

Each tale is fully illustrated with colored lantern slides, and the text which accompanies it is dictated by the explorer himself in the language which he would use in addressing the men in person. Already two of these recreational lectures have been completed and lent to the Y. M. C. A.—"Camera Hunting for Whales," by Roy Chapman Andrews, and "Bird Life on an Antarctic Island," by Robert Cushman Murphy. Two others, "Through the Brazilian Wilderness with Colonel Roosevelt," by George K. Cherrie, and "Some of My Mascots," by Ernest Harold Baynes, are nearly completed, and two by Carl E. Akeley on "African Big Game" are in course of preparation.

The third plan of coöperation with the Y. M. C. A. is to lend two-reel sets of the best motion pictures in the Museum under the title of "American Museum Exploration Series." These will include selected portions of the motion pictures taken in China and Japan by Roy Chapman Andrews on the Asiatic Zoölogical Expedition of the Museum, and the films secured by the Crocker Land Expedition in the Arctic.

At the request of Mrs. Henry R. Hoyt, of the Ladies' Social Welfare Committee of the Y. M. C. A., guides have been furnished for groups of sailors on shore leave from the United States naval vessels in the waters near New York. Such groups visit the Museum on Saturday afternoons and are conducted through the exhibition halls. The Museum is indebted to Miss Annie Lucas who has generously given her services as docent on the occasions of these visits.

A more detailed account of the regular activities of the department is given below:

Circulating collections of natural history specimens have been lent to the public schools of Greater New York, as has been done since 1904. These collections include Circulating practically everything called for in the course of nature study, and there are thousands of boys and girls in the schools of New York City who would have no other opportunity to see and to handle such natural history objects. More pupils are reached through this branch of the work of the department than through any other.

All specimens in the circulating collections, except those of insects, have been prepared so that they can be removed from the cases and actually handled by the pupils. That the privilege

of touching the specimen by the pupil adds to its teaching value, is practically the unanimous opinion of the teachers who use the material from the Museum. On the other hand, the necessary wear and tear resulting from the handling incur an added expense to the Museum in keeping certain collections, such as mounted birds, in good condition. However, in the case of the birds, when the number of years that many of the specimens have been in circulation and the number of times that they have been handled by the pupils have been considered, the results are not discouraging. However, on account of more and more stringent laws regulating the collecting of native birds, the department may be forced to put its loan collections under glass, so that they can not be handled by the pupils.

The loan collections have been increased by the issue of an improved edition of the series of public health charts entitled

"The Spread and Prevention of Communicable

Public Health Charts

Disease." Heretofore these had been prepared by a photographic process, while the new charts are in printed form, lighter in weight, more attractive in appearance, and it is thought they will prove to be more durable.

The Rockefeller Institute requested four sets of these charts for use in war work in France. Four sets of eleven charts each were prepared without captions so that French captions could be substituted. These, together with one complete set of fifteen charts with English captions, were presented by the Museum to the Rockefeller Institute.

Comparative Statistics Relating to the Circulating Collections for the Past Seven Years

	1911	1912	1913	1914	1915	1916	1917
Number of Collections in Use	512	537	597	675	671	704	712
Number of Schools of Greater New York Supplied	486	491	501	470	473	439	446
Number of Pupils Studying the Collections	1,253,435	1,275,890	1,378,599	1,273,853	1,238,581	1,118,322	1,075,076









THE House 11s breeds in steady, and z (tegs damps and fungify letter be called the Fifth 14s. Tree these dusty phases if often earries germs on its feet to food that we can not thus special discussions of this special discussion.

HOW DISEASE IS PREVENTED V



NE's own limbs may be stry disease geens, for during the day they fouch a hundred things a hich some one less may have inferted. This is the reason why the washing of the bands thoroughly before eating is so messars, and in the performance of this important data individual towels and some should always be used.

e with a deliberra.

HOW DISEASE GERMS SPREAD V



THY common derinking capmay spread distance. The last person who used it may have been recoming down with sarder fever are displates as one person may be it on other into the betaken fints the next person's month. If the latter girl has any harmful getter as bermonth, the latter box who is reaching for the gloss and the lag boy who is switching for it may be a switching for it are the properties.

HOW DISEASE IS PREVENTED II



If you wish to avoid discuse, never use a drinking up or glass-that some one cless has been using. We are you are thirdly and have no clean glass you can make us clean glass, you can the coclean glass, as shown in the picture at the left.

....

HOW DISEASE GERMS SPREAD VII





THESE little girls are doing sums with our peacel, which become in turn pute into her month. Whatever germs are little months will be well mixed, and if either child has any disease it will be likely to spread to the other.

CONTINUE A RE

HOW DISEASE IS PREVENTED VI



THE best way to keep well, and to resist disease is to stay auto-federoe during the day in the fresh air and wholesome parties wholesome games. Not only are these conditions conductive to good health, but also they aid the growth and development of the bady and keep it strong.

a cantilla and a second

DEPARTMENT OF PUBLIC EDUCATION

PUBLIC HEALTH CHARTS FOR TEACHING PURPOSES

There are 35 complete sets in circulation in the schools of Greater New York



The loan collections prepared for the public libraries of New York have been in constant circulation. They have been dis-

The Museum and the Public Libraries played in children's rooms and in reference departments, and have not only added interest to the reading of books on natural history and geography, but have stimulated

coöperation between libraries, the public schools and the Museum. They include specimens, models, mounted prints, labels and maps, and have been placed on exhibition largely through the coöperation of the Department of Anthropology. The material is loaned for a period of one or two months, and is carried to the library and returned by the Museum messenger. It is installed, however, by the librarian in charge.

Five of the libraries of the City that have not heretofore been in touch with the Museum have borrowed circulating exhibits during the year 1917. The library of San Antonio, Texas, and the Utica, New York, Public Library have also received loans of photographs and specimens. In all, 26,802 children and 2,578 adults have studied the exhibits.

During this year, the lending of lantern slides to the public schools has increased more than 66 per cent.

This encouraging result is doubtless partly due to the equipment of more schools for the use of the slides.

Number of Lantern Slide Loans made to	1916	1917
Public Schools	491	935
Number of Public Schools Borrowing		
Lantern Slides	63	84
Number of Lantern Slides Circulated	38,912	63,111

The file of lantern slides available for teachers contains 20,-900 slides. The slides in greatest demand during the past year illustrated (1) Industrial subjects, (2) Natural History, (3) Historical subjects, (4) Geographical subjects. Those which we have prepared in regular sets, each accompanied by a booklet of notes, were much more in demand than individual slides or slides in groups. There are now fourteen of these prepared lectures available.

Courses of lectures for school children, planned to supplement the regular school work, were given during the spring and autumn. For a number of years, the lec-Lectures to tures to school children, which have been given School Children in the Museum auditorium, have consisted of four courses in the spring and four courses in the autumn. A change was made this year in the autumn courses. Instead of four lectures a week, the same number of lectures was given, but they were arranged in two courses a week. Since it is a serious undertaking for a teacher to conduct a class to the Museum for a lecture and home during the rush hour, it was thought that teachers and pupils could attend a greater number of the lectures of the entire series if they did not occur so frequently.

Following is a summary of the Lecture Courses given during 1917:

-	of ectures	Attendance
Lectures to School Children Given in the Museum	73	40,798
Lectures to School Children Given Outside the Museum	30	38,525
Total Lectures to School Children	103	79,323
Lectures to Members of the Museum Lectures to Children of Members		8,557 4,916

In addition to the above series, there have been held in the Museum, lectures under the auspices of the City Department of Education, the American Scenic and Historic Preservation Society, the New York Academy of Sciences and Affiliated Societies.

Twice a year, during Regents' Week in January and again in June, biology classes from various high schools of Greater

New York come to the Museum with their

Coöperation with teachers for lectures and for definite laboratory work in the exhibition halls. During the year, pupils from nine high schools were represented, and laboratory work was done with Habitat Groups of North American Birds, North American Forestry, Public

Health, Insects, Habitat Groups of Reptiles and Amphibians, and in the Darwin Hall.

On Saturday, January 20, a special exhibition of motion picture film entitled "How Life Begins" was given, to which the teachers of Greater New York were invited. Dr. Fisher gave an introductory talk. The attendance was 527.

Evening lectures for adults, lessons for the "sight classes" of the public schools, and loans of natural history specimens and relief globes of the world have constituted the Museum's principal activities in its instruction for the blind. The course of study for the children consisted of a series of ten talks on natural science, geography and travel, industrial life and history. The teachers selected from three to five of the topics and came to the Museum with their pupils during school hours.

In the evening entertainments for the adult blind, an unusual experiment was made—a talk on "Wild Flowers of Summer," by Dr. G. Clyde Fisher. The Museum foyer was filled with freshly gathered flowers. About 200 blind examined the blossoms and leaves before hearing the lecture, and carried them home at its close. Through the courtesy of Mr. Lorillard Spencer, Jr., Mr. W. B. Holcombe and Mr. C. Elmore Smith, the Boy Scouts of Manhattan, Brooklyn and Richmond respectively, kindly acted as guides.

The Jonathan Thorne Memorial Fund supports the education for the blind. It provides not only for the running expenses of the work, but it adds new equipment to that already in stock. Through it, this year, a tellurian, a loom for hand weaving, models of Indian homes and primitive instruments for fire-making have been purchased.

Docent service is provided by the Department for teachers and classes visiting the Museum. This coöperation is not limited to the public schools, but is extended to include the private and parochial schools, and it is not confined to Greater New York. Guides are also furnished for members of the Museum and their friends when requested. The calls from these various sources are frequent and the time

required for this work is considerable. The constant demand for docents by teachers and classes and by Members of the Museum is an indication of the value of this kind of service. Several members of the department act as guides, and the service is free.

The students in anthropology at Barnard continued their laboratory work in the Museum from January until the end of the college year in June. They studied the Siberian, South Sea Island, Eastern Woodlands, Plains, Pueblo, North Pacific Coast, Peruvian and Mexican collections. The nineteen talks given by the Museum docent were arranged to supplement lectures on material culture, religion, and art.

One sign of growth of the Museum as a whole is seen in the ever increasing demands for photographic work. Illustrations for scientific publications, for *The American Museum Journal*, the Public Information Committee, newspapers, magazines and special writers, and lantern slides for the educational work of the Museum have fully occupied the time of our two photographers.

The photographic department has made 1,547 negatives, 3,526 lantern slides and 13,623 prints.

The Museum's collection of negatives has been increased during the year by 3,500 negatives from the Crocker Land Expe-The Asiatic Zoölogical Expedition dition. added 450 negatives, of which 128 were Paget Reference File of Negatives color plates. Both the ordinary black and and Photographs white negatives and the color plates of the Asiatic Expedition were made by Mrs. Yvette Borup Andrews, photographer of the expedition. The work of filing the negatives from these two expeditions, and the making, mounting and filing of the photographic prints from these negatives was in progress at the close of the year. The reference file now numbers 46,565 negatives and 63,818 photographs.

It was with regret that the department lost the services of Miss Kathryn I. Upson, Lantern Slide Librarian, who resigned to Changes in Staff in October. The position has been filled by Miss Virginia McGivney, a graduate of Barnard College who, through experience as a teacher in the New York City Schools, is fitted to assist in making the most effective use of the slides.

During the year 1917, the department has had the coöperation of the following firms and individuals: Mr. Alfred W. Abrams, of the Division of Visual Instruction, Department of Education, Albany, in lending lantern slides for use in lectures to school children; The New York Historical Society in permitting the use of books and in permission to photograph cuts, plates, etc., for lantern slides; The Exhibitors' Booking Agency in lending the motion picture films entitled "How Life Begins" for a special lecture to teachers; Mr. E. R. Sanborn of the New York Zoölogical Society in lending motion picture films of animals for use in a lecture to children of Members; Brown Brothers, Sarony, Inc., Janet M. Cummings and Collier's Weekly in lending photographs from which to make lantern slides.

GEOLOGY, GEOGRAPHY AND PAST LIFE ON THE EARTH*

EDMUND OTIS HOVEY, Curator

The Curator returned to the Museum on August 27 after an enforced absence of more than two years in the Arctic, whither he was sent in July, 1915, in charge of the first relief ship despatched to Etah to bring home the Crocker Land Expedition staff, property and collections. During the winter of 1915–1916, he prepared his report on the Heilprin Fund expedition to Martinique and St. Vincent as far as was possible without access to important publications needed for reference. As much time as practicable was occupied in

^{*} Under the Department of Geology and Invertebrate Palæontology (see also page 186).

making observations on the geology and glaciers of the Greenland coast from Cape York to Etah, supplementing the studies made in the same region and beyond by Mr. W. Elmer Ekblaw, the geologist of the expedition staff. Important collections were made and many photographs taken. The long sledge journey outward in the spring of 1917, from Etah to Godhavn, Disko Island, gave the Curator an opportunity to add to his notes on the geology of the country.

Many changes in the department have taken place during the long absence of the Curator. The practical or apparent abandonment of the construction of a gallery in the main exhibition hall has entailed radical changes in the possibilities of arrangement and installation. One of the results has been the concentration of the thousands of type fossils of the James Hall and other collections in table cases, almost filling the center of the hall.

Assistant Curator Reeds worked faithfully and with ability in his care of the department during the Curator's absence and he accomplished noteworthy results. I beg to quote from his departmental report upon the first eight months of 1917, while he was still in charge, as follows:

The difficulties encountered in the rearrangement of the collections were so numerous and the object and possibilities so indefinite that drawings to scale of two exhibition halls, showing a possible arrangement of cases and exhibits, were submitted by Assistant Curator Reeds as "The August 1, 1917, Plan." An illustrated report concerning the features of this plan, called "The Revision of an Established Collection," by Assistant Curator Reeds, was delivered on October 1.

The rearrangement of the thousands of identified specimens according to the various biologic groups, a work which was started in I916, was concluded by the end of February, 1917. This work permitted the assembling in small compass of all the specimens of an entire class or phylum. Furthermore, it enabled experts to work conveniently on their respective specialties.

A carefully selected set of bryozoan specimens for the biologic series was identified and arranged by Dr. J. J. Galloway. The "types" of the Schrammen sponges from northwest Germany were systematically studied and arranged by Dr. Marjorie O'Connell. She also prepared an extensive report entitled "The Structure and Classification of the Silicispongiæ as illustrated by the Schrammen Collection in The American Museum of Natural History." For a few weeks during the summer Dr. Elvira Wood collected illustrative material for the new panel extensions to the table cases which contain type specimens. She also prepared a preliminary sketch of an exhibit, composed of specimens and models, demonstrating "Recapitulation in the Pelecypoda."

In March, work was started on a large model of a section of the Grand Canyon of the Colorado in the vicinity of Grand Canyon, Arizona. Portions of the Bright Angel and Vishnu topographic sheets of the United States Geological Survey were Grand Canyon enlarged four diameters and serve as an excellent contour map for developing the various elevations. The shape of the model is irregular, owing to the hexagonal outline of the end of the upright case where it is to be installed. It is being built of wood in four sections in our laboratory. Two sections have been completed and a good beginning has been made on the third and fourth. Mr. Hill has been engaged on this work from the start, Mr. Brickner and Mr. Foyles for a part of the time. When the model is completed it is proposed to continue the topographic and geologic features of the model on a painted background—the whole to present a miniature picture of the region.

A card catalogue of the labeled specimens in the department has been begun and fifteen thousand cards have been typewritten.

Our general meteorite collection, which is second if not first in rank in this country and is one of the four best collections in the world, is temporarily displayed in separate alcoves in our main exhibition hall.

The most important accessions of the year have been the G. K. Greene and W. J. McConathy collections of invertebrate fossils, purchased in October. It has been estimated that the

Greene collection contains approximately 400,000 well preserved specimens, chiefly corals from the Devonian reef at the Falls of the Ohio, opposite Louisville, Ky. The Important Accessions

Museum is fortunate to have secured this collection, for it is one of the few fine collections of its kind in the United States. It represents the life work of one man and a large portion of that of his son. Approximately 500 species have been described and figured in G. K. Greene's "Contributions to Indiana Palæontology." The types of these species form a valuable part of the collection. The W. J. McConathy collection also consists chiefly of fossil corals from the Falls of the Ohio, and numbers approximately 7,000 specimens. With the addition of these two collections, the Museum will become a Mecca for students in fossil corals.

Other important accessions are: A series of beautifully preserved Tertiary fossils from Santo Domingo; a 70-pound mass of telluric iron from Ovifak, Disko Island, Greenland; the main portion of the meteorite fall at Plainview, Texas; specimens of the Scott City, Kansas, and Cookville, Tennessee, meteorites.

The extension of the fifth floor over the stairway at the northern end of the south central wing early in the year provided much-needed space for a geological laboratory.

In closing this report I desire to place on record my appreciation of the faithfulness and efficiency with which all the assistants employed in the department have discharged their various duties.

MINERALS AND GEMS*

Biographical Sketch of Louis Pope Gratacap by Frederic A. Lucas

In the death of Louis Pope Gratacap, which occurred on December 19, 1917, the Museum lost not only its Curator of Mineralogy but the Dean of its staff, for forty years a most loyal member of its force.

^{*} Under the Department of Mineralogy (see also pages 34 and 186).



LOUIS POPE GRAEMAND Curator of Mineralogy and Conchology

Born in Brooklyn November 1, 1851, after passing through the public schools he entered the College of the City of New York, and following his graduation in 1869, took a special course in geology and mineralogy in the School of Mines, Columbia College, whence he was graduated in 1876. In October of that year he came to the Museum, then in the formative period of its existence and housed in the old Arsenal Building, hoping and working for a home of its own. He was made Assistant Curator of Mineralogy in 1880 and Curator in 1900, at which time he was also placed in charge of the shells, the two subjects being united in one department in 1901, though separated at the time of reorganization in 1909. Thence, until the time of his death Mr. Gratacap held the two positions of Curator of the Department of Mineralogy and Curator of Mollusca in the Department of Invertebrate Zoölogy.

His record of more than forty years of continuous service in one museum is probably surpassed only by that of Dr. D. S. Lamb in the Army Medical Museum, Washington, D. C.

Mr. Gratacap was of French descent, and his precise and somewhat formal mode of speech and courteous manner ever carried with them the suggestion of a gentleman of the old school. This was heightened by the fact that he was a fluent speaker and the master of an extensive vocabulary, comprising many words unfamiliar to modern ears, and yet at the same time he was without the least trace of affectation—what might have seemed such in others was with him but the natural expression of a well-stocked, serious mind. He was just and fair-minded to the last degree—one of the few not the mark of unpleasant criticism—and almost the only man to my knowledge who ever expressed himself as considering his services properly remunerated. Generous and charitable, no one but himself will know how much help he gave to others, both of purse and personal assistance.

He was a ready writer as well as a fluent speaker and the greater part of his evenings and other spare time was devoted to writing. While most of his books were of a serious character, dealing with philosophical, political or religious topics, yet among them were several works of what might be called scientific fiction, such as A Woman of the Ice Age and The Certainty of a Future Life in Mars. There is not at hand a complete list of his publications, though one is being prepared by Dr. George F. Kunz, but aside from many scientific papers, including some on Museum history and methods, he was the author of about twenty books.

His love of neatness and order was reflected in the collections under his charge, which were left in most excellent condition. He

took a special interest in matters relating to the instructive display of minerals and shells, was ever looking for opportunities to better the exhibits and ever ready to listen to suggestions for their improvement. Always prompt and punctilious in official matters, what has proved to be his last reports on the departments in his charge were handed in a few days before his untimely death.

Annual Report of Curator Gratacap

The collection of minerals has attained a development which embraces its popular usefulness in those aspects of beauty and striking phenomena which appeal most naturally to the general public, and also in no small measure it has expanded in the acquisition of material of scientific significance. These two directions of growth are naturally related, even if divergent. They might prove mutually exclusive, if preponderance were allowed to one over the other, and the choice between them might easily incline toward securing specimens solely of extraordinary character, which, from size and perfection, elicit wonder or admiration. Quite usually such specimens would represent the better known minerals, and an emphasis of this sort would rob the collection of its eclectic value. It would disappoint an increasing attendance of students, for whom the collection is valued chiefly, because of its educational importance.

The collection has acquired more than 5,000 specimens since its instalment in the Morgan Hall, and these are fairly well distributed as regards their character over the twofold fields of interest. This comprehensiveness was already fully instituted in the original Bement Collection, which is its nucleus. It is not, however, always easy to guide expenditures, under necessary restrictions of resources, so as fairly to balance the claims of Science and Popularity. Rare or new species of minerals of intrinsic interest are quite frequently unattractive in appearance, and yet, if purchased, may prove expensive acquisitions. Unusual examples of common minerals command good prices, and specimens of phenomenal brilliancy excite competition and reach prohibitive values. The Museum Collection of Minerals depends for its growth almost wholly upon purchases, having at present no patron to augment it, and it is also deprived of the

sources of increase that might be found in the activities of a mineral or geological survey. Still, under such limitations, it has, quite surely, increased in interest, in importance, and in mineralogical celebrity and beauty. But the reflection is obvious that in all these years the collection has *simply grown*, and the time may now be considered imminent when the Department should be strengthened by progressive and original scientific research.

It seems imperative on this account to call attention to the development that might be expected, might, let me add, be required. The Curator has previously called attention to the importance of providing, in the planned additions of the new buildings, a chemical laboratory, in which should be provided instruments for optical and physical observations. It is these necessary adjuncts, with the provision of skilled workers, that would enormously expand the influence of this superb collection, and gather to it the scientific exhilaration and distinction which now it unfortunately lacks, and will lack, unless such steps are contemplated.

Problems of the most varied and interesting character in the mineral world, associated too with practical, with utilitarian questions, could receive attention, and immediately, in our neighborhood, the still unsolved perplexities of zeolitic deposition, in the traps and pillow-lavas of New Jersey, the genesis and mineral associations of the Pegmatites of Connecticut, the constitution and precise reference of the Serpentines, and the mineral make-up of the Cretaceous Marls would challenge debate and study, while within the treasures of the collection itself, remain, unsolicited, examples of rare crystallographic novelty.

More theoretical and abstract lines of interrogation into Nature's mineral laws might ensue, with experiments in the realm of the artificial production of minerals, in electric furnaces. Supplementing these features would follow lectures, instructions, and a more responsive, profitable and enthusiastic involution of the energies of the New York Mineralogical Club, with a wider suffrage and recognition among our citizens for the collection and its aims. Of all this I feel confident. The prospect enlarges with each review of its possibilities, but the

present Curator cannot, could not, assume or prepare its realization. This is a frank statement, frankly considered, frankly

presented.

The collection has been enriched this year by additions of very handsome minerals, while the crowding overflow, in the drawers, offers convincing testimony to the increasing wealth of its contents. A striking, possibly a unique, strip of Mountain Leather from Korea (now attached to the north wall): a large Amalgam from Mexico; superb cubical Cuprite, partially reduced to metallic Copper, from Arizona; some wonderfully developed Pyrites, extraordinary in size, and rich in faces, from Colorado: a Pollucite mass from Maine; a few exquisite Rubellites from California; a polished translucent slab of Californite (Vesuvianite); an Antimony mass (100 pounds) from Kern County, California (secured through the Director's Fund): beautifully tufted Calamine from Colorado; a wonderful Scheelite crystal from Sonora, Mexico; a Sphalerite slab, crystallized, from Colorado; rich lemon brown crystals of Barite in a large group from England; immense Betafites from Madagascar: some large Halites from Stassfurt; a very ornate group of Apophyllite from Poonah, India, and a gem-mass of Chrysoprase from California, are, amongst a great many other additions (see Accessions), worthy of especial emphasis.

The collection of "Unclassified Minerals," those commonly found in the successive Appendices to Dana's "System of Mineralogy" or in publications more recent, has reached large proportions and demands public exhibition.

The perennial value of the Bruce Endowment is acknowledged, the generosity of the General Appropriation, and the helpful financial assistance of the Director.

The additions mentioned above yield, upon analysis, the following result:

Gifts and Exchanges	3,447
Bruce Endowment	830
General Fund	819

The more costly specimens were secured with the Bruce Fund, and in several instances the generous assistance of the Director's Fund has proved invaluable.

WOODS AND FORESTRY*

Mary Cynthia Dickerson, Curator

There has been installed on a pedestal near the great redwood section in the Forestry Hall the bronze bust of Professor Charles Sprague Sargent, who brought together the Jesup Collection of North American Woods exhibited in the hall. The bust was executed by Mr. C. S. Pietro.

The quarter-size sketch prepared by Mr. Hobart Nichols for a mural decoration at the east end of the hall has been accepted.

It shows a sunny woodland interior opening out into a distant view of forested hills and mountains, at the season when the first hint of autumn coloring tinges the land-scape. It promises to put into the hall what will be, first, a satisfaction to the love of the beautiful in us all; second, an invitation to visit the enchantment of the original woodland and country-side; and, third, an exemplification of the greatest forestry principle, namely, that all steep slopes of the highlands of our country should be kept forested in order that the flow of streams may be equalized and floods and droughts minimized.

The work of the artist, Mr. Milton D. Copulos, has added very beautiful leaf, flower and fruit sprays to the hall. Among the new sprays are the laurel oak (Quercus imbricaria), black jack oak (Quercus Marilandica), post oak (Quercus minor), gray birch (Betula populifolia), Biltmore ash (Fraxinus Biltmoreana), black maple (Acer nigrum), and the large-leaved cucumber-tree (Magnolia macrophylla). This last specimen, a spray with flower and leaves of record size, is so monumental a piece of work that it will be exhibited in a special case.

The large hopes at the beginning of the year that progress might be made in the alcove forestry exhibits, planned to show reforestation, forest fires, etc., have come to little because of the demands of war. Mr. Barrington Moore, Associate Cura-

^{*} Under the Department of Woods and Forestry (see also page 188).

tor in the department, an early volunteer with rank as captain, spent a few months in an American camp, then went to France as an officer in the United States Forestry Regiment. With headquarters in Paris, a member of the Comité Interallié des Bois de Guerre, he has charge of the selection and acquisition of standing timber to be cut for war purposes. He has six hundred men under him to do the work in logging and deliver the timber to the Expeditionary Force, and his problem is to take out of a given forest as large a yield as possible and leave the forest silviculturally intact.

EXISTING INVERTEBRATES*

HENRY EDWARD CRAMPTON, Curator

In the last month of the year, the Department and the Museum suffered an irreparable loss through the death of Mr. Louis P. Gratacap, Curator of Conchology. Mr. Gratacap's devoted service of more than two score years and his patient and time-consuming labor for the development of the shell collections of the Museum call for the fullest and sincerest tribute.

At the beginning of the year Mr. Roy W. Miner and Dr. Frank E. Lutz were made Associate Curators. Mr. J. F. Connolly, a laboratory assistant, has entered the National Army.

On account of the disturbed conditions throughout America and the world, field work in invertebrate zoölogy has been confined to near-by areas, or has been carried on with direct reference to exhibition purposes, while special efforts have been directed toward research and publication. The Curator's volume on the Partulæ of Tahiti, published by the Carnegie Institution of Washington, appeared in January, as the first in the series on the variation, distribution and evolution of the genus; considerable progress has been made on the second and third volumes. Mr. Miner, ably assisted by several members of the preparation room staff, spent several weeks at the Biological Laboratory at

^{*} Under the Department of Invertebrate Zoölogy (see also pages 31 and 188).

Woods Hole, Massachusetts, securing material and sketches for a projected group which will exhibit the fauna and flora of the Sound bottom. Mr. Miner is continuing the work on the synonymy and bibliography of the American Myriapods. Dr. Van Name has practically completed his monograph on the West Indian Ascidians, which covers also the forms of related territories such as southern United States and Bermuda; this research is a valuable contribution to the work of the Museum, in connection with the Biological Survey of Porto Rico in coöperation with the New York Academy of Sciences. Professor G. A. MacCallum is engaged in studying the parasites collected by the Congo Expedition, and has already submitted for publication a paper on "A Trematode Parasitic in Elephants." A paper entitled "On the Anatomy of the Leech (Ozobranchus branchiatus Menzies)," by W. G. and G. A. MacCallum, is also in press and will appear shortly. Dr. Lutz has collected a large amount of material with special reference to the needs of exhibition work and has also made substantial progress in the study of North American bees of the group Apoidea. Mr. Mutchler has continued his able studies on the Coleoptera of Florida and the West Indies. Mr. Watson has devoted considerable time to the securing of illustrative material on the life histories of Lepidoptera. Dr. Bequaert completed during the year a large and important paper on African Vespidæ. As in former years, members of the New York Entomological Society and other entomologists, notably Mr. B. Preston Clark, have continued their generous cooperation.

Just prior to his death Curator Gratacap submitted an extensive report which included not only a statement of progress in conchology during the year but also an extensive analysis of its needs and purposes; the latter is especially valuable, as it is based on his long retrospect of the history and development of his division.

The work of Curator Gratacap during the year was restricted almost exclusively to labeling the study series of shells, the marine univalves and bivalves being entirely completed. The fresh-water shells, though still requiring some revision, are primarily classified and arranged. Some rare and beautiful

volutes have been added to the handsome collections obtained from Mrs. Oldroyd, while the Oldroyd purchase of last year is distributed. Tentative arrangements have been undertaken for the amplification of the West Coast shell collections through the cooperation of the Southwest Museum at Los Angeles. The D. Jackson Steward collection has been revised and steps have been taken to make its many duplicates available for exchange, in order to secure additional Philippine land shells. A few transparencies have been added to the series in the Hall of Shells, and, through the courtesy of the United States National Museum, two admirable photographs taken by Dr. Paul Bartsch have been secured which illustrate the habitats respectively of Cerion glans of the Bahamas and Helix (Cepolis) orum-reguli of eastern Cuba. Mr. Gratacap had taken up also the difficult question of a general catalogue and had made plans for bringing it to completion.

The Nahant Tide Pool Group, the most ambitious yet attempted, is nearing completion. Its construction has demanded the most careful work, in both field and laboratory, of Mr. Miner and the members of the preparation General Invertebrate staff, Mr. H. Mueller, Mr. S. Shimotori, Mr. C. E. Collections Olsen and the late Mr. Ignaz Matausch. The work on the Bryozoa Group has been resumed and will be prosecuted vigorously during the year 1918. The projected group showing the associations at the bottom of Vineyard Sound has already been mentioned. Substantial progress has been made in the construction of individual exhibits for the synoptic series, with especial reference to the Alcove of Protozoa. Many Infusoria and two beautiful Radiolaria (Heliodrymus dendrocyclus and Tholospira dendrophora) are especially noteworthy and are particularly valuable for class instruction. Another important item is the flagellate Proterospongia haeckeli. Other protozoan models and two of nudibranch mollusks are well toward completion, as is also a new panel to illustrate color inheritance in the "Four-o'clocks." A phylogenetic chart of the animal kingdom is in preparation and will be particularly useful for the study of the synoptic series. The educational value of the Darwin Hall has greatly increased during the year; the hall



DEPARTMENT OF INVERTEBRATE ZOÖLOGY

NAHANT TIDE POOL GROUP

SEA-ANEMONES AND HYDROIDS

Detail of group showing the marine life of a New England Tide Pool



was used by 11,841 pupils of 449 classes from 185 institutions, as compared with 6,667 pupils of 244 classes from 130 institutions in 1914. Dr. Van Name has been most successful in consolidating the general collections of invertebrates, giving particular attention to the arthropods and urochordates. Incidentally, duplicate series of Porto Rico collections have been selected for the Porto Rican Government, and much work has been done on the invertebrates of the Congo collection.

In an earlier paragraph the major work with insects and spiders has been described, and little needs to be added. exhibits in the Hall of Insects have been amplified so as to increase materially the educational value Insects and Spiders of the entire hall. The study collections have been used by numerous entomologists who have also contributed their services for the improvement of the collections. Mr. Mutchler's work with Coleoptera and Mr. Watson's with Lepidoptera have been particularly noteworthy, while Mr. Wunder has continued to be invaluable as a laboratory assistant. account of the large size of the groups in question, and also because of the variety and delicacy of the material, the principal problems are concerned with the installation and care of the rapidly growing collections.

While it is impracticable to enumerate all the valuable accessions of the year, the following may be noted. Among the general invertebrates are an extensive and important collection of Bryozoa, embracing many types, presented by Professor Raymond C. Osburn of the Ohio State University; the series of myriapods and arachnids given by Mr. Howard J. Notman; models of trematode and cestode parasites secured by Professor Dean in Japan; a collection of invertebrates from Florida presented by Dr. W. G. Van Name, and by purchase a series of well prepared marine invertebrates, including a number of rare forms. The entomological accessions are numerous, though for the most part of small series of specimens. Among the larger and more important items are the series of 243 Lepidoptera, including some very rare specimens, given by Mr. B. Preston Clark; nearly a thousand specimens

mens of various orders from Mr. W. S. Wright; a gift of 310 bees, representing 226 species, from the United States National Museum: 1.600 representatives of various orders from Mrs. J. B. Knapp; 28 specimens of mites, chiefly cotypes, presented by Mr. H. E. Ewing; nearly 300 insects, chiefly exotic, donated by Mr. Charles Wunder; 83 specimens of various orders, inclusive of many paratypes, as a gift from Mr. C. J. Drake; and a series of more than 500 insects, given by Mr. C. R. Kellogg of Foochow, China. Notable additions by gift to the shell collections are Cuban specimens from Mr. Barnum Brown; 44 specimens of Bulimulus from Mr. E. D. Crabb of Texas; specimens showing the economic uses of shells from the McKee and Bliven Button Company of Muscatine, Iowa; numerous specimens from Mr. W. H. Weeks, and a series of marine shells from Mrs. E. B. Peters. Through Professor Bashford Dean numerous and valuable specimens of Japanese species were secured by purchase, and a large series of marine shells was obtained through exchange with Mr. W. H. Weeks.

RECENT AND EXTINCT FISHES EXISTING REPTILES AND BATRACHIANS*

BASHFORD DEAN, Honorary Curator MARY CYNTHIA DICKERSON, Associate Curator of Herpetology

FISHES

The most notable fish placed on exhibition during 1917 is a copy of the great devilfish (Manta birostris) captured for the Museum in Florida by Mr. Russell J. Coles. It has been hung, as though swimming, over the fish cases on the second floor and in such a manner that visitors can obtain an impressive view of it looking down from the gallery above. Work is in progress on two marine groups, the more important of these, nearing completion, a large Blue Shark accompanied by a brood of young. The introduction into a group of this nature of true light and color effects has been made the subject of careful study by Dr. Dean, and, as a result, a mirror simulating the ocean surface seen from below has been introduced

^{*} Under the Department of Ichthyology and Herpetology (see also page 192).

across the top of the case. A subsidiary group will show lesser characteristically pelagic fishes.

As usual there have been additions in the cases of fishes arranged systematically and many labels have been printed, so that the entire exhibition of fishes is now adequately supplied with permanent labels.

The installation of a new system of racks for the alcoholic collections necessitated the rearrangement of this entire material (more than 7,000 separately catalogued specimens) and corresponding revision of the reference catalogue. This task has been completed, but certain improvements, notably in ventilation and lighting, will have to be made in the storage room before the collection reaches its maximum availability for study.

Owing to war conditions, the department has not attempted to carry on field work during the past year. It should be mentioned, however, that, during a short trip to Japan in the spring, Dr. Dean was able to purchase several specimens of especial value to the department, and that Dr. Eastman, who left for South America in June primarily in the interests of the Department of Vertebrate Palæontology, has also been making collections of fishes as opportunity offered.

In late March the Assistant Curator took advantage of an offer to accompany Mr. Herman Armour Nichols of Chicago on a three weeks' cruise in southern Florida, as this afforded him the opportunity to further investigate certain problems relating to Ground Sharks (*Carcharhinus*) in which the department became interested during the preceding summer. This short trip proved well worth while, and its results have been published in the Museum *Bulletin*.

The systematic report on the fresh-water fishes of the Congo Expedition, by Mr. John Treadwell Nichols and Mr. Ludlow Griscom, appeared in the Bulletin. It is doubtless the most important paper on a collection of African fishes ever published. This marks the completion of the necessary initial systematic study of the material, and it is hoped that a short paper, published later by Dr. East-

man on the "Dentition of *Hydrocyon* and its supposed Fossil Allies," will be followed by similar ones of philosophic interest.

During the past year, Dr. Dean's "Bibliography of Fishes" has been the most important fish work the Museum has had on hand. Since Dr. Eastman's departure for the field in June, editorial and compilation work on it have gone forward under Mr. Arthur W. Henn. Two volumes have been published during 1917. Volume I, Authors A-K, appeared in January, and Volume II. Authors L-Z, in June. Together these volumes comprise more than 1,400 pages and include more than 40,000 titles. They represent the culmination of nearly twenty-five years of effort and have been made possible by the cooperation and assistance of ichthyologists in all parts of the world. They have already proven a storehouse of ichthyological knowledge in every aspect—in anatomical, embryological, palæontological, systematic, fish-cultural and other phases—and have been received with cordial appreciation by the foremost workers in science. Work on a final volume, which will constitute a classified and subject index, facilitating rapid and convenient reference to all the literature of any given subject relating to fishes, is in an advanced state of preparation and should be completed in 1918.

At the outbreak of the war, the department expressed its desire to coöperate in any way with the United States Bureau of Fisheries, and we note with pleasure that on one rotwo occasions a Bureau of Fisheries agent in New York has been able to settle here questions which must otherwise have been referred to Washington. Mr. Russell J. Coles, a Life Member of the Museum and an enthusiastic amateur ichthyologist, to whose activity in other years we owe the Manta model and many other specimens of scientific value, has interested himself during the past summer in the utilization of sharks and rays as food, keeping in close touch with the Bureau of Fisheries and also with this department.

REPTILES AND AMPHIBIANS

The additions to the catalogued study collections for 1917 total 2,651 specimens—372 batrachians and 2,279 reptiles, not counting the Nicaragua collection (about 2,500 specimens). Notable among these additions are 133 specimens from the work of the Museum's Asiatic Zoölogical Expedition in high altitudes in Yunnan, China; 66 from John Graham, Yunnan; 36 from Manchuria, gift of Makoto Nishimura; 67 from high altitudes in North Carolina, gift of Morton L. Church; and many smaller collections from South America and the American Southwest.

Outstanding exchanges have been completed by shipments of material to the Institut de Butantan, São Paulo, Brazil, and the California Academy of Sciences, San Francisco. Notable receipts closing exchanges include 52 specimens from the Albany Museum, Grahamstown, South Africa; 10 from the Museum of Comparative Zoölogy, Cambridge; and several hundred specimens of Costa Rican and Colombian species, including 24 types described by Cope, from the Commercial Museum, Philadelphia. At the close of the year an exchange was arranged with the British Museum, and several shipments of North American frogs will be sent within the next few weeks for use by Dr. Boulenger in his revision of the genus *Rana*.

By temporary exchange or loan of material for mutual advantage in special work during 1917, the department has cooperated with the following American institutions: the United States National Museum, Washington; the Museum of Zoölogy, University of Michigan; the Museum of Comparative Zoölogy, Cambridge; and the Field Museum of Natural History, Chicago. In addition, courtesies have been received in the shape of loaned collections for comparative study from the Academy of Natural Sciences, Philadelphia, and from the Brooklyn Museum. The most important of outgoing collections loaned by the American Museum consists of our material from Peru, Bolivia, Ecuador and Chile, sent to Cambridge.

Mr. G. K. Noble was appointed a research assistant in June, and has been carrying on investigations on the Central and South American collections of the Museum. He Research and is at present on leave of absence to complete re-Publication search begun on Peruvian reptiles at Cambridge. One paper has been published in the American Museum Bulletin on the status of certain representatives of Eleutherodactylus, Cerathyla and Hyla, with a contribution to the discussion of the importance of the terminal phalanges in classification. He has completed, ready for publication, a second paper covering the amphibians of the Nicaragua Collection of the Museum. There is also on hand a completed paper on the snakes of the Nicaragua Collection by Clarence R. Halter, who was prevented from carrying out further work by a call to military

service. A paper is ready for publication on the turtles, crocodiles and lizards of the Congo Collection of the Museum (1,593 specimens, 52 species of 23 genera). Of the ten new forms described, 3 are geckos, 3 lacertids, 2 chamæleons, and 1 represents a new genus of *Crocodilia* related to the West African *Osteolæmus*. This work is in the hands of Mr. Karl P. Schmidt. Mr. Schmidt has also done the preliminary cataloguing and

identification for a paper on the snakes of the Congo.

Research on the reptile fauna of Lower California, in the hands of the Associate Curator, has led necessarily to a review of the reptile fauna of the Southwest, with critical study of distribution and revision of various genera of desert lizards. New species include three of *Sauromalus*, large chuckwallas related to the single species so long known from the Colorado Desert, and various island representatives of *Sceloporus*, *Callisaurus*, etc.

Much bibliographical work has been carried on in connection with research, forming records of permanent value to the department and to herpetology. The bibliographical work has been standardized in accordance with a system compiled from previous researches, including that recently carried out by the department of fishes of the Museum, and it will be brought together from the permanent card indexes for publication in the future by Messrs. Charles L. Camp, George K. Noble and Karl P. Schmidt. The Congo work has covered the cataloguing of

.20	.0
·	



DEPARAMENT OF ICHTHYOLOGY AND HERPETOLOGY
FLORIDA REPTILE GROUP
Detail of the Group

more than 890 titles on African herpetology, 2,500 cards; that on the American Southwest includes about 270 titles, 4,500 cards; work on Asian herpetology has necessitated the cataloguing of 300 titles, 900 index cards; and miscellaneous work, 500 titles, 600 index cards. Mr. Noble brings to this work a contribution in neotropical bibliography as follows: 382 titles, with 514 cards of new species of amphibians, 452 cards of new species of reptiles (post-Boulenger). Mr. Camp contributes on North American herpetology and morphological papers, about 3,000 titles, 900 index cards.

The 1917 publications include the paper by Mr. E. R. Dunn on the North Carolina mountain reptile and amphibian collection in the American Museum, the field work for which was done in the summer of 1916.

Progress has been made on small pieces of exhibition work such as the Florida Gopher Group and the New Zealand Sphenodon Group, but the major piece of exhibition on Exhibition hand for 1917 has continued to be the Florida Group, started in the summer of 1916. This is now virtually completed. The work was delayed greatly by the many months of absence from the Museum and the death in October of Mr. Ernest W. Smith. Mr. Smith has done the main work of assembling in all the groups in the reptile series, under the direction of the Associate Curator, also supervising the technique of assistants in the preparation of the masses of foliage. His death is a very great loss; there can scarcely be found anywhere a man with his skill in this particular line of work. The Florida Group has been continued to completion by Mr. Frederick H. Stoll, expert wax modeler and colorist. The background was painted by Mr. Hobart Nichols.

The group is the largest yet attempted in the Museum, the foreground having an area of about 275 square feet, and the background of about 475 square feet. When we look at such a group completed, it is difficult to comprehend how vast has been the amount of fine exact reproduction of nature entailed; how involved the principles and details of the basic construction and lighting to produce the effect of composition and perspective; what attention to accuracy and finish has been nec-

essary to gain this illusion of the natural, even on closest approach.

Like the other reptile and amphibian groups, this, on a larger scale, shows what can be accomplished with wax as a medium. The lifelike turtles, alligators, lizards, snakes, frogs and toads are but perfectly posed and colored casts from life—and, fortunately, years have proved that such wax casts are permanent through all variations of heat and cold in the New York climate.

The group is not simple; it is very complex and shows many species and many individuals. In planning the various reptile groups in the American Museum, where space is so much an item to be considered, it has been the feeling of the department that enough was not accomplished when a group set forth one theme or one or two species of animals, or when it was made a beautiful picture only; but that it should be as highly educational as possible in number of forms portrayed, in life histories and habits and in adaptation to the given environment—even though this should mean sacrifice, to some extent, of the æsthetic element, because of decreased simplicity.

It is to be noted that the very beautiful little white herons of the group were obtained through exchange with the Louisiana State Museum at New Orleans.

The color scheme of the group includes gray (varying to white) and green, enlivened by glimpses of red. There is the gray-white of lichen-grown tree trunks and knees, and of the hanging tillandsia, the summer green of sweet bay, myrtle, deciduous holly, and various tropical vines. On the river side of the group are white flowers of rare beauty belonging to the amaryllis family. In the center are the red, ripening berries of the holly and red lilies which grow commonly at this time of the year (early September) in the white sand among the saw palmettos. The field work for the group was done in the swamps and on the rivers within a radius of from twenty to sixty-five miles of Orlando, and all accessories and animals of the group are made directly from the living material.

It is hoped that the group will prove instructive in presenting in their natural haunt the many and very unusual reptile and amphibian species of the southeastern United States. It is an

accurate picture of the cypress swamps, which are rapidly disappearing through the effects of fire, lumbering, and the present movement for the drainage of the Florida swamp lands. It is hoped that, beyond these points, the group may succeed in giving one somewhat the rare experience that comes to the person who for the first time visits these unique swamps of our country. Reading and pictures have made us all familiar with the sand wastes, the turpentine pines, the palmettos, the prairies, the luxuriant vegetation along the rivers, the alligators, the diamond-back rattlers. But the cypress swamp itself is a different matter,—we are not prepared for that. No pictures and no reading can carry the effect of that to the mind. It might be on another planet, so different is it from anything else on this globe. In visiting the sequoia forests of the Pacific Coast, we are filled with wonder at the magnitude of the trees; at the sight of certain cactus growths on mountain slopes in the Southwest, we may receive a thrill as though entering some dimly remembered garden of ancient gods; but nothing has prepared us for the influence of the Florida cypress swamp in the full sunshine of afternoon. It is probably largely a matter of line and color. The lichen-white trunks, as austerely straight as the columns of a cathedral, gracefully curve outward at their fluted bases; these same curves are paralleled in the fantastic knees, while the broken canopy of branches above and the white trunks below are everywhere wreathed and festooned with swaying white tillandsia. The whole has a sculptural beauty as though carved out of living marble by some hand other than man's. The group in relatively so small a space can do little, of course, toward reproducing the vastness and massiveness of the original, but it attempts to suggest the spirit of the unusual beauty of this part of our country.

In addition to the work in herpetology, the editorship of *The American Museum Journal* has been carried.

MAMMALS AND BIRDS*

J. A. Allen, Curator

The work of this department was seriously interrupted during a large part of the year (1917) by the entry into the service of the United States of eight members of its staff, five of whom entered the training camp at Plattsburg, New York, in August, received commissions as lieutenants and were assigned to active duty at field camps in December. Curator Chapman entered the service of the American Red Cross in June, and was later made Director of its Bureau of Publications in Washington. members of the staff who have entered the United States service, with their assignments, are: Mr. H. E. Anthony, Assistant in Mammalogy, 1st Lieutenant, Field Artillery; Mr. James P. Chapin, Assistant in Ornithology, 1st Lieutenant, Infantry; Mr. Leo E. Miller, Assistant in Ornithology, 1st Lieutenant, Aviation: Mr. Carlos D. Empie. Mammalogy, 2d Lieutenant, Infantry; Mr. Ludlow Griscom, Ornithology, 2d Lieutenant. Intelligence; Mr. Howarth S. Boyle, Ornithology, Naval Base Hospital. Mr. Harold K. Decker entered the United States Navy in September.

Notwithstanding this handicap, the routine work of the department has progressed steadily, and large accessions have been received from expeditions which were already in the field or organized for field work at the beginning of the year.

The accessions have come mainly, as usual, from field expeditions, and have been important. Additions to the mammal collection comprise 2,600 specimens, of which 2,230 have been received from Museum expeditions; 40 by exchange, 160 by purchase and 175 by gift. The additions to the collection of birds number 3,950 specimens, of which about 3,000 were obtained through Museum expeditions, 413 by exchange with the São Paulo and Buenos Aires Museums, 294 by purchase, and a few by gift.

^{*} Under the Department of Mammalogy and Ornithology (see also pages 28, 29 and 194).

The American Museum Asiatic Zoölogical Expedition, under the leadership of the Assistant Curator of Mammals, Mr. Roy C. Andrews, left New York in March, 1916, for Field field work, mainly in the Province of Yunnan, Expeditions China, and returned in October, 1917. As stated in the report of this department for 1916, Mr. Andrews was accompanied by his wife, Mrs. Yvette Borup Andrews, official photographer of the expedition, and by Mr. Edmund Heller, well known as an expert collector and explorer. The expedition was eminently successful, obtaining 2,100 mammals, 800 birds and 200 reptiles, 10,000 feet of motion picture film, and 550 photographs, of which 150 are in natural colors. Collections were made at localities varying from 1,500 to 15,000 feet above sea-level and extending from the Burma frontier to the borders of Tibet. The mammals include large series of gorals and serows, the shrew-like Hylomys and large numbers of rodents and insectivores, nearly all previously unrepresented in our collections. As much of the region traversed had not before been visited by collectors, it is probable that this material will be found to contain many undescribed forms.

Mr. Waldron DeWitt Miller, Associate Curator of Ornithology, made a reconnaissance trip to Nicaragua, to familiarize himself with the physical conditions and the distribution of bird-life in that country, preparatory to the publication of a work on Nicaraguan birds, based on the large collections of birds made for the Museum by William B. Richardson in 1906–1909. As Mr. Miller was able to avail himself of Mr. Richardson's services as guide and assistant in his field work, he was successful in obtaining important results, both in the way of material and in first-hand knowledge of the faunal conditions. Mr. Miller's collection of 1,500 specimens enables him to add a considerable number of species to the list of known Nicaraguan birds. He was accompanied by Mr. Griscom of this department.

The work begun in Porto Rico by Assistant H. E. Anthony in 1916 was this year extended to Cuba, where several months were spent in exploring caves for the remains of extinct mammals. Despite the revolutionary conditions then prevailing, which considerably hampered his work and brought it to an

early close, Mr. Anthony secured a large amount of fossil mammal material and incidentally collected 130 bats, representing, in good series, most of the species known from the island.

Mr. George K. Cherrie returned early in the year from his work along the Paraguay River, undertaken in extension of the work in that region by the Roosevelt Brazilian Expedition in 1913–1914, of which Mr. Cherrie was a member. Colonel Roosevelt's strong interest in this region as a rich field for ornithological investigation has been shown by his contribution of financial aid for Mr. Cherrie's second visit, which was supported by Colonel Roosevelt and Mr. Cleveland H. Dodge. While Mr. Cherrie devoted his time largely to the study of the life-history of the striking bird life of the region, he also secured 750 specimens of birds to supplement his previous collection, and also a number of mammals.

The Crocker Land Expedition, under the direction of Mr. Donald B. MacMillan, returned toward the close of the year after an eventful sojourn of four years in Arctic America, where zoölogical as well as geographical and geological investigations were successfully prosecuted, resulting in important additions of both mammals and birds to the resources of the Museum.

The Museum's share of the mammals collected on the Collins-Day Expedition to South America have been received, numbering 147 specimens, which, in accordance with the terms of agreement respecting the results of the expedition, have been identified and reported upon by Mr. Wilfred H. Osgood of the Field Museum.

During the year the Brewster-Sanford Collection has been enriched by the addition of some 1,500 bird skins, of which about 1,000 were collected in the West Indies by Mr. Rollo H. Beck, after completing his several years of successful work in collecting pelagic birds along the coasts and islands of southern South America. The island of Santo Domingo, where he collected nearly 800 specimens and visited the high mountains of the interior as well as the coast district, proved of special interest, his collection containing several new forms, an account of which was promptly published by Curator Chapman in the current volume of the Museum Bulletin.

Dr. Dwight's collection of birds, which, like the Brewster-Sanford Collection, is available for scientific research at the Museum, is increased by frequent accessions, which during the present year number 2,000 specimens, and is now, with a total of 47,000 specimens, by far the largest and most scientifically valuable collection of North American birds extant.

The installation of the large number of metal storage cases mentioned in last year's report has made it possible to rearrange the research collections of both mammals Study and birds through the additional storage facilities thus provided; but lack of storage space is still a crying need, particularly for the proper installation of the osteological material, recently so greatly increased in amount and value through the immense accessions from the Congo Expedition. Storage space for the large mammal skins and skeletons is wholly inadequate, either for their safety or accessibility.

Good progress has been made during the year in the reorganization of the collection of mammals, chiefly under the direction of Assistant Anthony, and in the preparation of the larger skins, skulls and skeletons, mainly under the general supervision of Mr. Lang, who reports that 1,290 skins have been tanned and that 3,764 skulls and skeletons have been cleaned and made ready for study. The work is progressing rapidly and with satisfactory results, but will require several months more for its completion. The cataloguing of the recent accessions is well advanced, and the index catalogue is kept well abreast of the serial catalogue entries and the identification of the material.

The three large mammal groups placed on exhibition during the year are a Virginia Deer Group, an African Red Monkey

Installations

Group, and a South American Spider Monkey
Group. The Hall of Primates is being rearranged, and important desiderata have been supplied toward the completion of the Synoptic Hall of Mammals. A Newfoundland Dog, the gift of Mr. J. Alpin Graydon, has also been mounted for exhibition.

The Curator has concentrated his available time for research upon the Congo collection of mammals. The identification of the bats, begun in 1916, was concluded early in Research and 1917, and a report upon them, in coöperation Publication with Messrs. Lang and Chapin, has been published in the Museum Bulletin, forming an article of about 159 pages, illustrated with drawings by Mr. Chapin and field photographs by Mr. Lang; about one-half of the text consists of a systematic list of the species, the ecological and field notes by Messrs. Lang and Chapin constituting the remainder and forming an important contribution to the bionomics of the subject. Later a paper was prepared and published by the Curator on the remarkable skeletal characters of a peculiar shrew (Scutisorex Thomas) based on a fine series of specimens in the Lang-Chapin collection. This is followed in the Bulletin by a paper based on the same material by Dr. H. von W. Schulte, on the lumbar vertebræ of Scutisorex. A report on the Insectivores of this collection has been prepared and awaits publication, and a report on the Sciuromorphs is nearly finished.

Mr. Anthony, on returning from field work in Cuba, resumed the elaboration of his Porto Rico material, the results of his investigations being already in press as a contribution to the Museum *Memoirs*, under the title "The Land Mammals of Porto Rico, Living and Extinct." The subject is treated monographically, and, illustrated with numerous excellent text figures and plates, forms an important contribution to science, based mainly on the author's personal explorations in Porto Rico. Mr. Anthony has also published during the year three preliminary papers in the *Bulletin* on the same general subject.

Curator Chapman's account of his work in Colombia, announced in last year's report as in press, was published in November, under the title "The Distribution of Bird-Life in Colombia; A Contribution to a Biological Survey of South America," and forms Volume XXXVI of the Museum Bulletin. It comprises 740 pages of text, numerous maps and other text illustrations and forty-one plates, of which six are colored, the remainder being half-tones from field photographs illustrating the topographic features and faunal conditions of the

extensive areas traversed by the Museum's expeditions. Following an historical account of previous work relating to the ornithology of Colombia, and detailed itineraries of the eight Museum expeditions (1910-1915) in that country, resulting in the addition to the Museum's resources of nearly 16,000 birds and 1,600 mammals, the author discusses the life zones and faunas of Colombia, with special reference to the Colombian Andes, to which the expeditionary work was mainly restricted. The bird-life characteristic of each is listed, while a map in colors shows their extent and relationships, and another colored map shows the distribution of forested and unforested districts. Part II (pp. 170-639) is systematic, and entitled "A Distributional List of the Birds Collected in Colombia by the American Museum's Expeditions," numbering 1,285 species and subspecies. This comprises not only a detailed record of localities and number of specimens for each of the forms, but citations of their previous records for Colombia, with often technical comment on their status and relationships. An appendix contains a "Gazetteer of Colombian Collecting Stations," with a map showing their location, the routes followed by the American Museum's expeditions and the localities at which collections were made. This feature will be a boon to future workers on Colombian zoölogy. This volume is thus an important contribution not only to Colombian ornithology but to zoögeography, and an enviable monument to the author who has devoted the last five years to South American ornithological exploration, greatly to the credit of the American Museum.

Mr. Chapin's paper on "The Classification of the Weaver-Birds," published in May, is the fourth prepared by him on the ornithological results of the Congo Expedition. Other ornithological papers from this department are Mr. Leo E. Miller's field notes on the Cowbirds (Molothri) of Argentina, and Curator Chapman's on Mr. R. H. Beck's collection of birds from Santo Domingo (for the Brewster-Sanford Collection), describing three new species, with comment on others of special interest. In this connection mention should be made of the description of a new Albatross by Mr. Robert Cushman Murphy, based on material in the Brewster-Sanford Collection. Mr. George K. Cherrie has been engaged in the preparation of

his report on the birds of the Roosevelt South American Expedition, which is nearing completion.

An elaborate paper by Dr. H. von W. Schulte on the skull of *Kogia breviceps*, based on the material of this department, has been published in the *Bulletin*.

The publications of the department in the current volume of the *Bullctin* (Vol. XXXVII) comprise II papers, aggregating 305 pages, 32 plates, and 45 text figures. Seven of the papers relate to mammals and four to birds; they were contributed by eight authors, of whom six are official members of the department staff.

Illustrated articles relating to Museum expeditions from this department have been contributed to *The American Museum Journal* by Mr. George K. Cherrie ("To South America for Bird Study"), Messrs. Herbert Lang and James P. Chapin ("Bats of the Belgian Congo"), Mr. Leo E. Miller ("A Search for *Scytalopus*" and "A Glimpse into the Quichua Country of Southern Bolivia"), Dr. J. A. Allen ("Report from the Asiatic Zoölogical Expedition"), and Mr. Roy Chapman Andrews ("Little-known Mammals from China").

EXTINCT VERTEBRATES*

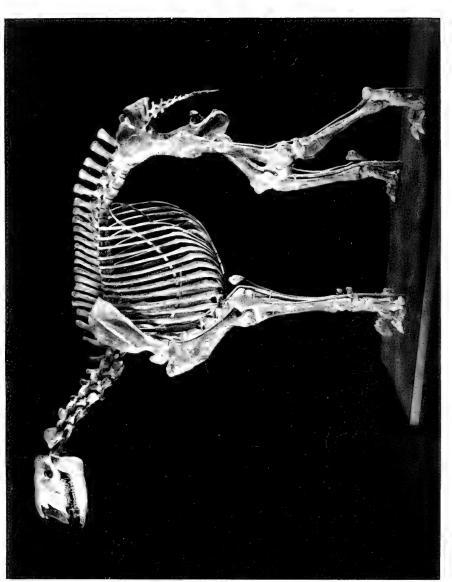
HENRY FAIRFIELD OSBORN, Honorary Curator W. D. Matthew, Curator

For reasons connected with the entrance of the United States into the world war, it was considered advisable to postpone the usual field work for the season of 1917. Preparation and research were continued during the year.

Further progress has been made in the preparation of the great collection of Cretaceous dinosaurs from Alberta and

Montana. One complete and two partial skeletons of a new type of duck-billed dinosaur *Pro*cheneosaurus have been finished; a skeleton of a great carnivorous dinosaur and a second and very fine one of Corythosaurus, besides two skulls of Stephanosaurus and two incomplete skeletons of Hypacrosaurus, are in preparation. All

^{*} Under the Department of Vertebrate Palæontology (see also page 198).



DEPARTMENT OF VERTEBRATE PAL EOMFOLOGA

Moropis

Clawed Ungulate from the Miocene of Nebraska. Skeleton recently placed on exhibition. One of seventeen skeletons



these, save the carnivorous dinosaur, belong to the group known as duck-billed dinosaurs, of which until a few years ago only a single kind was known.

The skeleton of the giant *Tyrannosaurus* has been removed from its temporary place in the Hall of the Age of Man and installed in the Dinosaur Hall, where it properly belongs.

The skeleton of the clawed ungulate *Moropus* has been mounted and placed in the center of the Tertiary Mammal Hall. This is a remarkably fine skeleton of a very curious and hitherto very rare animal. Others will be added later to form a group.

The fossil camel alcove has been revised and improved by the addition of a series of skulls and partial skeletons illustrating the evolution of this family in North America and its later migration to the Old World and to South America, where the camels and llamas still survive although they have become extinct in their old home.

In the Hall of the Age of Man, the skeleton of a glyptodont or tortoise armadillo *Lomaphorus* has been added to the series of extinct animals of South America. It is an interesting example of the great changes in the internal framework of these animals resulting from the massive turtle-like shell that covered them, and from their peculiar habits of life.

The most attractive feature of this hall will be the series of fine mural paintings by Mr. Charles R. Knight, gift of Mr.

Mural Paintings

J. P. Morgan. The first of these has been completed, representing a Pleistocene Life Scene of northern Europe, contemporary with prehistoric man. The animals shown, mammoth and reindeer, are especially characteristic of the Glacial Period of Europe, and are represented in the arctic environment to which they were adapted. A second mural, representing a Pleistocene Life Scene in North America, is well advanced. It shows in their natural surroundings the great American Mastodon, the extinct long-horned bison

and native horse, characteristic prehistoric animals of the Middle West. Preliminary studies have been made and approved for the remaining murals in this hall.

A skeleton of the great long-jawed mastodon Megabelodon has been purchased from the discoverer, Captain E. L. Troxell, and will be restored and mounted in the series of fossil Proboscideans. The Megabelodon was an animal equaling the great American Mastodon in bulk but having shorter legs and greatly elongated jaws. It inhabited North America during the Pliocene epoch.

A number of important specimens of the very primitive mammals of the oldest Tertiary formations have been prepared, especially the skeletons of *Ectoconus* and *Pantolambda*, skull of *Triisodon* and remains of various new or rare species of minute size. These specimens are of great scientific interest as they throw much light upon the origin and early evolution of the mammals.

The postponement of field expeditions has notably increased the amount of research work in the department. An important book published by Professor Osborn, "The Research Work Origin and Evolution of Life on Earth," discusses the broader evolutionary problems in the light of recent researches, especially in biochemistry and allied subjects, presenting new or little considered aspects of evolutionary theory. Professor Osborn has in press a revision of the later Tertiary fossil horses marking the completion of an important stage in his studies on the Evolution of the Horse. He has likewise continued his monographic revision of the sauropodous dinosaurs, assisted by Dr. Mook, and has the monograph upon the Titanotheriidæ nearly ready for the press. Dr. Matthew and Mr. Granger have continued or completed various studies upon fossil mammals, Mr. Brown upon dinosaurs, and Dr. Gregory upon the primates (monkeys and lemurs) and upon the very ancient reptiles of the Permian period. Some results of these various researches are contained in eight articles in the Museum Bulletin; the greater part are not yet in shape for publication.



DEPARTMENT OF ANTHROPOLOGY

IROQUOIS BONE COMBS

Specimens from the Hildburgh Collection. Presented by Dr. Walter L. Hildburgh

EXISTING AND EXTINCT RACES OF MEN*

CLARK WISSLER, Curator

An unusually large number of valuable collections was donated during the year, the full list of which will appear under the appropriate head. Among these is a large Acquisitions field collection by Dr. T. Mitchell Prudden from prehistoric ruins in the Mesa Verde District, Colorado. Dr. Prudden is noted for his scientific studies in Southwestern anthropology, in the course of which this collection was brought together. It is thus of the greatest scientific value. Also of great importance is a rich series of archæological specimens from Iroquois sites in western New York State donated by Dr. W. L. Hildburgh, an anthropologist of note. This collection was made by the donor and is accompanied by the original catalogue. Mrs. E. H. Harriman presented a remarkable coat of marten skins collected among the natives of Alaska in 1899. Our Tibetan collections were enriched by Mrs. William Tod Helmuth's gift of a rare carved Lamanistic belt and apron and Mrs. Florence Magee's presentation of one of the earliest known promissory notes issued in Lhasa. In this connection may be mentioned Mr. Marshall C. Lefferts' fine collection of Japanese armor mounted on effigies ready for exhibition. Our somatological collections have been enriched by gifts of Santa Barbara skulls from Mr. R. G. Hazard, five hundred skin and hair samples from Professor T. W. Todd, and a mummified body from New Mexico by Captain S. M. Strong. Mr. William W. Heaton presented a series of Lake Dweller specimens from Lake Geneva; Mr. Henry Hornbostel a large series of photographic studies in Maya architecture; and an ethnological collection from Colombia was presented by the Honorable Luis Febres Cordero, Governor of the Department of North Santander, Colombia.

Among the important purchases from the Jesup Fund were a fine wampum belt from the Iroquois Indians, a large collec-

^{*} Under the Department of Anthropology (see also pages 25, 27, 31 and 198).

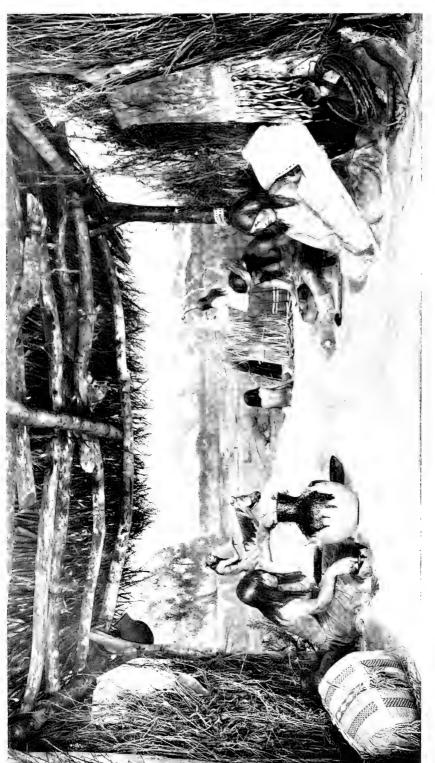
tion of baskets from the Chitimacha and other southern tribes, a particularly fine series of baskets from the Mission Indians of Southern California, a large series of prehistoric pottery from certain ruins in Arizona, a collection of fine swords and knives from Java, a rare and unusual sacred Tibetan book, a general collection of stone implements from western Europe, a collection of skeletons from the Canary Islands, and a number of unusual pieces of tapa cloth from Hawaii and Samoa.

Several important advances have been made in the development of our exhibition units. For one, we have placed upon view the initial exhibit of somatic, or racial, Exhibition and characters peculiar to man. The fundamental Study Collections plan for the development of our anthropological halls, which has governed our entire activities for a number of years, contemplates a comprehensive presentation of primitive cultures upon a geographical basis, by culture areas, each of which is to be supplemented by a somatological exhibit of the peoples themselves. The first unit of this series is a demonstration of principles in somatic classification, where, in compact and attractive form, Mr. Sullivan made a new and original presentation of the subject. With the labels and diagrams, this exhibit is a small illustrated handbook of physical anthropology. The greater part of the past year has been given to working out the units to accompany the culture area exhibits of North America. Of these, the one for the Plains Indians is about ready for installation.

The rearrangement of the Asiatic Hall, which was reported last year, has proceeded to the revision of the Chinese industrial collections. It now remains to work over the bronze and pottery exhibits to complete this undertaking. The remainder of the hall is given over to the wilder folk of Siberia. Some additional casing is necessary here to bring the arrangement up to the standard set by the Chinese section. During the early part of the year Associate Curator Lowie worked out the general tribal labels for the Siberian peoples, and later Mr. Spier prepared labels and details of arrangement for the tribal exhibits of the Chukchee and Koryak.

Important additions have been made to the archæological





DEPARTMENT OF ANTHROPOLOGY

APACIII GROUP

Background by Howard McCormicl; and Mahonri M. Young

exhibits. In the North American section, Mr. Spier installed a demonstration of results from inquiries into the antiquity of man at Trenton, New Jersey. Further, a section showing the prehistoric cultural characters of New England was completed. In the prehistoric section of the Southwest Hall, Assistant Curator Nelson installed an exhibit of Mimbres pottery from New Mexico. The Jesup North Pacific Hall is nearing completion. One great improvement has been brought about by concealing the ornate pillars supporting the ceiling behind totem poles and similar architectural features of native art. This more than any one change in the hall gives the final ethnic touch to the whole exhibit.

Another advance is in the arrangement of our study collections. A room on the storage gallery has been equipped for the use of special students, college classes, and members of the staff engaged in the intensive study of our collections. It has also been necessary to give additional space on the office floor to students of design and to the work of Mr. Crawford.

A group representing the Apache Indians was formally opened in May. This was designed as a companion to the Hopi group.

It depicts the life of the semi-nomadic peoples of Southwestern United States in contrast to the more sedentary peoples of which the Hopi are a type. The artists were Mr. Howard McCormick and Mr. Mahonri M. Young. The painted background represents a section of landscape on the San Carlos River near Rice, Arizona, reproduced here from sketches made upon the ground. The lighting system for the Hopi group was completely revised during the year and some small alterations made in the accessory construction. As now presented, the group is lighted as it would appear in the afternoon sunshine.

The plans for a Navajo group have been developed, in the background for which typical cliff ruins will appear. The preliminary construction is in place and it is contemplated that the background will be completed during 1918.

The murals for the Jesup North Pacific Coast Hall now occupy the two side walls, and it is expected that during 1918, the artist, Mr. Will S. Taylor, will begin on the large end

panels. Mr. Edwin W. Deming has submitted two large canvases for the side walls of the Plains Indian Hall.

Only minor collecting trips were made this year. The chief activities were at Aztec, New Mexico, where Mr. Earl H.

Morris continued the systematic excavation and repair of standing walls in the large pueblo ruin noted in last year's report. The funds for this undertaking were donated by Mr. Archer M. Huntington. A large portion of the ruin was uncovered and a fine series of specimens secured. Among these are thousands of pieces of worked turquoise and some unique examples of turquoise inlay. The pottery received contains the finest examples of black-and-white ware yet found in the Southwest.

Late in the summer, Assistant Curator Nelson made an inspection trip to Aztec and incidentally visited the lower borders of the Rio Grande pueblo area to get final data for the installation of a chronological exhibit in our Southwest Hall. Mr. Nelson traveled approximately four thousand miles on foot and by horse, visiting practically every ruin in that part of the country. While more exploration is desirable to complete our knowledge, the essential chronological steps in the development of pueblo culture are now evident. These will soon be demonstrated in our Southwest Hall. Further, in connection with the installation of the Zuñi chronological exhibit, it became necessary for Mr. Leslie Spier to return to Arizona for additional data. The results of this trip, now being worked out, promise to give us the required information.

Last April we learned that certain large shell-heaps in Florida were being dug away by steam shovels. Accordingly, Assistant Curator Nelson visited these sites, where by the courtesies of the contractors in charge, sections of the entire heaps were worked out. From this it appears that there were three well-marked periods in the development of Southeastern culture, a fact which will be of the greatest service in future studies in this area.

Assistant Curator Spinden spent most of the year in Central America in a general archæological survey upon which we cannot report at this time.

In the department laboratories important work is under way. The Curator has taken up the archæological data and collection returned by the Crocker Land Expedition. Research in The greater part of the collection is from Captain the Museum George Comer's kitchen midden at North Star Bay, Greenland. Messrs. Nelson and Spier have worked out chronological tables from our pottery collections from the Southwest. Mr. Louis R. Sullivan has continued his investigation of skeletal modifications due to function and the collection of hair and scalp samples for the investigation of racial differences. Incidentally, our entire somatological collection has been checked over and re-catalogued. A special investigation of stature and face form according to geographic distribution is now under way, the results of which will be incorporated in forthcoming exhibits.

The usual January lectures dealing with the methods and interpretations of anthropological data were given by Associate Public Lectures

Curator Lowie. The subject this year was "Culture and Ethnology," in four lectures, which have since appeared in book form. The continued good attendance for these highly technical courses justifies making them a permanent feature of our work with a view to reflecting the best scientific work of our staff.

A special series of three lectures on "Primitive Decorative Design" was given in February by Assistant Curator Spinden and Mr. M. D. C. Crawford.

Seven scientific papers were published during the year in the Publications

Anthropological Papers, by members of the department staff. A full list of these articles will be given under the head of Publications.

There was published also *Handbook* No. 3, by Dr. Herbert J. Spinden, "Ancient Civilizations of Mexico and Central America."

ANATOMY AND PHYSIOLOGY*

RALPH W. Tower, Curator

At the beginning of the year Mr. Alessandro Fabbri was appointed Research Associate in Physiology, and during the months of January to April he devoted a large amount of time, with the assistance of Mr. Herm, to the production of a microcinematograph showing the physiology of the heart and circulation in the vascular area of the embryonic chick. The work was executed in the research laboratory of Mr. Fabbri, which is superbly equipped for a study of this character. The film shows the rhythmic contractions of the embryonic heart, the contractility of the blood vessels and the phenomenon of circulation through the arteries, veins, capillaries and their various anastomoses. In fact, the film illustrates many details not readily observed by the eye with the aid of a microscope. The investigation has been temporarily suspended since Mr. Fabbri has been called into the Federal Service for the duration of the war.

Further investigation on the development of the red blood cell, especially in the bird, has been carried on in the laboratory at the Museum with a view to correlating the process in birds and mammals.

Mr. Herm has conducted some experiments in the production and use of a "loop" film. Such a device would permit moving pictures of a subject, such as a contracting muscle, to be exhibited for an unlimited time, thus allowing opportunity for more detailed inspection or for instructive explanation.

The department has mounted twelve skeletons for exhibition: a Phalanger, a Squirrel, a Secretary Bird, a Cassowary, a Rhea, a Manis, four Monkeys and two Baboons. There have been prepared also 812 skulls and 123 skeletons.

^{*} Under the Department of Anatomy and Physiology.



DEFARTMENT OF PUBLIC HEALTH
BALANCED MEAL
From Special Food Exhibit

PUBLIC HEALTH*

CHARLES-EDWARD AMORY WINSLOW, Curator

As soon as the United States declared war against Germany, the plans for the development of the Department of Public Health were so recast as to make the educational forces at its disposal of immediate service in the national crisis.

As a first step a special exhibit was prepared illustrating the principal problems of camp sanitation and military hygiene and showing in graphic form how our army is being protected against the dangers of disease. This exhibit, which was opened about the end of April, dealt with the purification of water in the field and the disposal of camp wastes, with the control of insect carriers of disease in army life, with the protection of the recruit by the use of vaccines and sera, with the food and the clothing of the soldier from a hygienic standpoint, and with the prevention of trench foot and other new medico-military problems of the present war.

The Department of Public Health had already made a beginning on an exhibit illustrating the problems of food supply as related to the public health as a distinct section of the permanent exhibition in our Hall of Public Health. It seemed that the development of an exhibit of this sort along the immediate practical lines of food conservation offered important possibilities of usefulness. All the energies of the department were therefore turned in this direction, and on May 23 a special exhibition on Food Values and Economies was opened in the Fover in connection with a public meeting on Conservation for War. at which addresses were made by the Honorable George W. Perkins, Chairman of Mayor Mitchel's Food Supply Committee, Professor Graham Lusk, of Cornell University, Dr. Hermann M. Biggs, New York State Commissioner of Health, and Dr. Walter B. James, President of the New York Academy of Medicine.

^{*} Under the Department of Public Health (see also pages 25 and 201).

In connection with this meeting there was prepared a special "Handbook of Health in War and Peace, a Manual of Personal Preparedness," which was placed on sale at the Museum and at the subway kiosks throughout the city.

The Food Exhibit was kept open in the Foyer through June, July, August, and September, with a gratifying increase in Museum attendance for this season of the year. It was then transferred to the Washington Irving High School and was displayed there for two months. On December 15 it was set up in the Lincoln Corridor of the College of the City of New York at the request of President Mezes.

Curator Winslow was given leave of absence at the end of June to accept an appointment as Deputy Commissioner and

Other Services of Staff in Connection with War Problems

member of the American Red Cross Mission to Russia. He conducted a survey of public health conditions in Russia and organized a plan for civilian relief in Petrograd along the lines of child welfare, returning to take up his duties at the

Museum in November. The success of the Food Exhibit was so great that Mr. Herbert C. Hoover asked for the release of Dr. Thomas G. Hull, who had been in charge of its preparation, to undertake work

for the Government along similar lines. Dr. Hull was given leave of absence November 1, and was appointed Chief of the Division of Exhibits of the United States Food Administra-

tion.

The Food Exhibit as at present installed at the City College fills six large museum cases. It illustrates in graphic form the

Present Status and Future Development of Food Exhibit

food needs of the body and the energy values and body building constituents of various foods. One set of models shows the percentage composition of a dozen typi-

cal foods in regard to protein, fat, carbohydrate, ash and water. A second series of twenty models shows the calorie value and cost of ordinary restaurant portions of different foods, and a third series of about seventy-five models (presented to the Museum by the Plastic Art Novelty and Specialty Company)

illustrates the amount of each food which will supply 100 calories of energy to the body. Tables set for breakfast, lunch and dinner show satisfactory dietaries for an individual, based on either a moderate or a restricted income.

Numerous exhibits are included dealing with unutilized food stuffs of various sorts, particularly seaweeds, marine mollusks and food fishes (shark, skate, etc.).

Food production problems are illustrated by photographs, models and specimens which tell the story of wheat and of corn from the grain fields through the flour mill, and from the bakery to the home.

The food conservation problems of the war are brought home by statistical diagrams and a series of striking colored cartoons prepared by Mr. A. Operti.

The plans for the development of the Food Exhibit in the future contemplate its extension along the line of practical food conservation in marketing and home use of foods and the making graphic of the particular food economies demanded from time to time by the United States Food Administration. In this important task we have been fortunate in securing the coöperation of the Department of Home Economics of Columbia University by an arrangement for the part-time service of assistants in that department.

The exhibits in the Hall of Public Health dealing with insect-borne diseases have been supplemented during the year by the addition of photographs and models illustrating the campaign against typhus fever in Serbia, and amplifying other material on insect-borne diseases.

A fine series of transparencies has been purchased, illustrating the parasites causing certain diseases, and a large model of the yellow fever mosquito, Aëdes calopus, prepared by Dr. B. E. Dahlgren, is almost completed.

The exhibits at present installed in the Hall of Public Health have been made more readily available for the use of teachers and students by the publication of a special "Syllabus Guide to Public Health Exhibits" by Mr. L. V. Coleman, giving in brief outline the principal facts which the student ought to know about Water Supply, Municipal Waste Disposal, and Insect-

borne Diseases, with parallel reference to individual numbered exhibits illustrating the points in question.

Through the cooperation of the Departments of Invertebrate Zoology and Public Health of the Museum, a somewhat exhaustive *Guide Leaflet* dealing with insects and disease has been prepared and is ready for publication.

Attention must be called at this time to the pressing need of the Department of Public Health for exhibition space to allow for future development. The present Hall of Public Health is practically filled. The Food Exhibit, which is being rapidly increased, may be shown outside the Museum for a time (as at the Washington Irving High School and at City College), but much of it should finally be installed at the Museum as a section of our permanent Public Health Exhibit, of which it forms an integral part.

The Museum of Living Bacteria, now under the immediate direction of Mr. William Rothberg, continues to fill a large

Bacteriological Museum and Research place in the scientific life of this branch of natural history. Ninety-eight new strains have been added to the collection, making the total number now under cultivation over eight hun-

dred. During the year ending December 1, 1917, 3,935 cultures were sent without charge to laboratories of universities and health departments, making a total of 18,980 cultures distributed since the opening of the laboratory in 1911; 143 new institutions have availed themselves of our service during the year, making 635 in all. It has been particularly gratifying to note that we have been able to supply cantonment medical officers, government bureaus at Washington, and medical research institutions in this country and abroad with cultures needed for special problems of military hygiene.

Changes in staff and the demands made by emergency war work have made heavy inroads upon time generally allotted for research. A monograph, by Curator Winslow, Dr. Kligler and Mr. Rothberg, on the classification of the colon-typhoid group of bacteria, has been completed, however, and is ready for publication.

THE LIBRARY*

RALPH W. Tower, Curator

The activities of the Library during the year just past have not been surpassed by those of any year in its history. Not only has work of the highest importance been accomplished by the skill and industry of the various members of the staff, but the department has benefited widely through the generosity of its many friends.

Among the accessions of the first importance are the following rare and unique volumes, received through the benefactions of Mr. Ogden Mills: De Bry, Peregrinationes in Indiam Orientalem, 1598-1613, a valuable first edition of nine parts in Latin which form companion volumes to the Peregrinationes in Indiam Occidentalem previously donated by Mr. Mills. The great usefulness of a work of this character cannot be too highly emphasized—researches in geography, anthropology and zoölogy are all dependent upon such sources of information. Again through the liberality of Mr. Mills, the collection of the handsomely illustrated monographs by John Gould have been completed, thus not only enriching the Library but supplying a most useful need to the scientists who are carrying on their researches at this institution. These are: A Monograph of the Macropodidæ or Family of Kangaroos, 1841-1842; Supplement to the Monograph of the Trochilidæ; The Birds of Asia in seven volumes, 1850-1883; Mammals of Australia in three volumes, 1845-1863; A Century of Birds from the Himalaya Mountains, 1832, and A Monograph of the Pittidæ, 1880-1881.

Through the courtesy of Mr. John M. Hoffmire, a nephew of Mr. Titian Ramsey Peale, the Library has received a copy of Lepidoptera Americana; or Original Figures of the Moths and Butterflies of North America; in their various Stages of Existence, and the plants on which they feed. Drawn on Stone,

^{*} Under the Department of Books and Publications.

and coloured from Nature; with their characters, synonyms, and remarks on their habits and manners, by Titian R. Peale—Curator of the Philadelphia Museum—Volume I, Number I, printed by William P. Gibbons, S. W. Corner Sixth and Cherry Streets, 1833. The present copy undoubtedly was the author's personal one, as it contains a printed "Proposals" on which are written the names of the various subscribers to the work. The part is otherwise composed of 14 unnumbered pages and calls for plates 3, 4, 5, 7. The plates present are, however, 2 to 10 and exist both in colored and uncolored form. There is also an unnumbered and uncolored plate of Morpho iris.

Other accessions are: The Danish Ingolf-Expedition, Volumes I-VI, Copenhagen, 1899-1916; Reports on the Collections made by the British Ornithologists' Union Expedition and the Wollaston Expedition in Dutch New Guinea, 1910-1913. Volumes I, II, London, 1916; Voyage aux Côtes de Guinée et en Amérique, par M. N., Amsterdam, 1719; Natural History of Carolina, Florida and the Bahama Islands, by Mark Catesby, Volumes I, II, London, 1771; The Coleoptera of the British Islands, by W. W. Fowler, Volumes I-VI, London, 1887-1913; Rhopalocera Exotica, being Illustrations of New, Rare and Unfigured Species of Butterflies, by Henley Grose-Smith & W. F. Kirby, Volumes I-III, London, 1887-1902; Les Insectes-Traité Elémentaire d'Entomologie, by Maurice Girard, Tomes I-III, et Atlas, Paris, 1873-1885; Trachten, Haus-, Feld- und Kriegsgeräthschaften der Völker Alter und Neuer Zeit, by Friedrich Hottenroth, Bände I, II, Stuttgart, 1884-1891; Historia de las Indias, by Bartolomé de Las Casas, Volumes I-V, Madrid, 1875-1876; Le Costume Historique, par M. A. Racinet, Volumes I-VI, Paris, 1876-1888, and Icones Ornithopterorum, by Robert H. F. Rippon, Volumes I, II, London, 1898-1906.

For the immediate future the section of the Library dealing with primitive languages, magic, charms and amulets is to be strengthened—the latter subjects with the assistance of Dr. W. L. Hildburgh, whose experience has already proved of much value.

The constantly increasing demands which are made upon the staff by the departments of the institution as well as the public

are seriously retarding the essential work within the Library. The proper adjustment of economy and efficiency will soon be lost, thus making quite imperative the appointment of another assistant in order to maintain the standard necessary to supply the proper service.

A gallery tier of shelving has been placed in the Osborn Library, thus doubling the available space for the installation of books. The new equipment, besides serving a distinct need for expansion, has also added much to the attractiveness of the room. It has been found possible to intercalate all the non-duplicate titles in Vertebrate Palæontology from the General Library, and thus for the first time the Osborn Library has become a distinct unit—classified and catalogued.

PUBLICATIONS

J. A. Allen, Editor

Two volumes of the Bulletin were issued during 1917: Volume XXXVI, by Frank M. Chapman, on the ornithology of Colombia (740 pages, 41 plates, 7 of them colored, Technical and 21 text figures), and Volume XXXVII, the Publications current volume for the year (920 pages, III plates, 5 of them colored, 117 text figures, and 5 maps). articles represent 32 contributors. Parts of five volumes of the Anthropological Papers (Dr. Clark Wissler, Editor) have been published, aggregating 868 pages and 230 text figures. Also Volume II of "A Bibliography of Fishes" (Authors L-Z, 701 pages); Volume I (Authors A-K) was issued in 1016. Two parts of Volume II (New Series) of the Memoirs are in press, unexpected delays in printing having prevented their publication in 1917, as intended.

The popular publications comprise the Forty-eighth Annual Report of the Trustees; Volume XVII of The American Museum Journal (edited by Miss Mary C. Dicker-Popular Son); Guide Leaflets Nos. 38, 39, 45, and 46, and Handbooks Nos. 3 and 6.

Following is a detailed list of the technical publications of the Museum, during 1917, arranged by departments:

DEPARTMENT OF GEOLOGY AND INVERTEBRATE PALÆONTOLOGY

Anna I. Jonas. "Pre-Cambrian and Triassic Diabase in Eastern Pennsylvania." Bull. XXXVII, pp. 173-181 and map.

DEPARTMENT OF INVERTEBRATE ZOÖLOGY

- John A. Grossbeck (edited by Frank E. Watson). "Insects of Florida. IV. Lepidoptera." Bull. XXXVII, pp. 1–147.
- H. E. Ewing. "New Acarina. Part II.—Descriptions of New Species and Varieties from Iowa, Missouri, Illinois, Indiana, and Ohio." Bull. XXXVII, pp. 149–172, pls. i-iv.
- Charles W. Leng and Andrew J. Mutchler. "Supplement to Preliminary List of the Coleoptera of the West Indies." *Bull.* XXXVII, pp. 191-220.
- Charles H. T. Townsend. "Second Paper on Brazilian Muscoidea Collected by Herbert H. Smith." Bull. XXXVII, pp. 221–233.
- Henry L. Viereck. "New Species of Bees of the Genus Andrena, from Equatorial Africa, in the American Museum of Natural History." Bull. XXXVII, pp. 235-239.
- Henry L. Viereck. "Contributions to our Knowledge of the Bee Genus Perdita Smith." Bull. XXXVII, pp. 241–242.
- Wm. T. M. Forbes. "Notes on West Indian Syntomidæ and Arctiidæ (Lepidoptera)." Bull. XXXVII, pp. 339-345, 5 text figs.
- Adolph Elwyn. "Effect of Humidity on Pupal Duration and on Pupal Mortality of *Drosophila ampelophila* Loew." Bull. XXXVII, pp. 347-353, I text fig.
- James A. G. Rehn and Morgan Hebard. "Studies in West Indian Earwigs (Dermaptera)." Bull. XXXVII, pp. 635-651, pls. lxii, lxiii.
- G. A. MacCallum. "A New Species of Trematode (Cladorchis gigas) parasitic in Elephants." Bull. XXXVII, pp. 865-871, pls. cviii-cx, 1 text fig.

DEPARTMENT OF ICHTHYOLOGY AND HERPETOLOGY

- Emmet R. Dunn. "Reptile and Amphibian Collections from the North Carolina Mountains, with especial reference to Salamanders." *Bull.* XXXVII, pp. 593-634, pls. lvii-lxi, and 7 text figs.
- John Treadwell Nichols and Ludlow Griscom. "Fresh-water Fishes of the Congo Basin obtained by the American Museum Congo Expedition, 1909–1915." With Field Notes by the Collectors, Herbert Lang and James P. Chapin. Bull. XXXVII, pp. 653–756, pls. lxivlxxxiii (4 colored), 31 text figs., 3 maps.
- Charles R. Eastman. "Dentition of *Hydrocyon* and its supposed Fossil Allies." *Bull.* XXXVII, pp. 757-760, pls. lxxxiv-lxxxvii, 3 text figs.
- L. Hussakof. "Fossil Fishes collected by the American Museum Congo Expedition." Bull. XXXVII, pp. 761-767, pl. lxxxviii, 7 text figs.

- G. K. Noble. "The Systematic Status of some Batrachians from South America." Bull. XXXVII, pp. 793-814, pls. xciii-xcvi, 7 text figs.
- John Treadwell Nichols. "Ichthyological Notes from a Cruise off Southwest Florida, with Description of Gobiesox yuma sp. nov." Bull. XXXVII, pp. 873-876, pl. cxi, 1 text fig.
- Bashford Dean. "A Bibliography of Fishes. Vol. II. Authors' Titles L-Z," 702 pages. Enlarged and Edited by Charles Rochester Eastman. (Special Publication.)

DEPARTMENT OF MAMMALOGY AND ORNITHOLOGY

- Frank M. Chapman. "The Distribution of Bird-Life in Colombia; a Contribution to a Biological Survey of South America." Bull. XXXVI, pp. i-x, 1-729, pls. i-xli (7 colored), 21 text figs.
- H. E. Anthony. "New Fossil Rodents from Porto Rico, with additional Notes on Elasmodontomys obliquus Anthony and Heteropsomys insulans Anthony." Bull. XXXVII, pp. 183-189, pl. v.
- James P. Chapin. "The Classification of the Weaver-Birds." Bull. XXXVII, pp. 243-280, pls. vi-x, 9 text figs.
- Frank M. Chapman. "Descriptions of New Birds from Santo Domingo and Remarks on Others in the Brewster-Sanford Collection." Bull. XXXVII, pp. 327-334.
- H. E. Anthony. "A New Rabbit and a New Bat from Neotropical Regions." Bull. XXXVII, pp. 335-337, pl. xxxiv.
- H. von W. Schulte. "The Skull of Kogia breviceps Blainv." Bull. XXXVII, pp. 361-404, pls. xxxv-xliii, 2 text figs.
- J. A. Allen, Herbert Lang, and James P. Chapin. "The American Museum Congo Collection of Bats." Bull. XXXVII, pp. 405-563, pls. xliv-lv, 26 text figs., 1 map.
- H. E. Anthony. "Two New Fossil Bats from Porto Rico." Bull. XXXVII, pp. 565-568, pl. lvi.
- Leo E. Miller. "Field Notes on Molothrus bonariensis and M. badius." Bull. XXXVII, pp. 579-592.
- J. A. Allen. "The Skeletal Characters of Scutisorex Thomas." Bull. XXXVII, pp. 769-784, pls. lxxxix-xcii, 8 text figs.
- H. von W. Schulte. "A Note on the Lumbar Vertebræ of Scutisorex Thomas." Bull. XXXVII, pp. 785-792.
- Robert Cushman Murphy. "A New Albatross from the West Coast of South America." Bull. XXXVII, pp. 861-864, I text fig.

DEPARTMENT OF VERTEBRATE PALÆONTOLOGY

Barnum Brown. "A Complete Skeleton of the Horned Dinosaur Monoclonius, and Description of a second skeleton showing Skin Impressions." Bull. XXXVII, pp. 281-306, pls. xi-xix, 4 text figs.

- W. D. Matthew and Walter Granger. "The Skeleton of Diatryma, a Gigantic Bird from the Lower Eocene of Wyoming." Bull. XXXVII, pp. 307-326, pls. xx-xxxiii, 1 text fig.
- Charles C. Mook. "Criteria for the Determination of Species in the Sauropoda, with Description of a New Species of Apatosaurus." Bull. XXXVII, pp. 355-360, 2 text figs.
- W. D. Matthew. "A Paleocene Bat." Bull. XXXVII, pp. 569–571, 1 text fig.
- William Diller Matthew. "Absence of the Pollex in Perissodactyla." Bull. XXXVII, pp. 573-577.
- Charles C. Mook. "The Fore and Hind Limbs of Diplodocus." Bull. XXXVII, pp. 815-819, 2 text figs.
- Walter Granger. "Notes on Paleocene and Lower Eocene Mammal Horizons of northern New Mexico and southern Colorado." Bull. XXXVII, pp. 821-830, pls. xcvii and xcviii, I map.
- W. D. Matthew. "The Dentition of Nothodectes." Bull. XXXVII, pp. 831-839, pls. xcix-cii.
- Walter Granger and William K. Gregory. "A Revision of the Eocene Primates of the Genus *Notharctus.*" Bull. XXXVII, pp. 841–859, pls. xciii-cvii.

DEPARTMENT OF ANTHROPOLOGY

- P. E. Goddard. "Beaver Texts." Anthrop. Papers, X, pt. V, pp. 295-397.
- P. E. Goddard. "Beaver Dialect." Anthrop. Papers, X, pt. VI, pp. 399-547, 191 text figs.
- Robert H. Lowie. "Plains Indian Age-Societies: Historical and Comparative Summary." Anthrop. Papers, XI, pt. XIII, pp. 877-1031.
- A. L. Kroeber. "Zuñi Kin and Clan." Anthrop. Papers, XVIII, pt. II, pp. 39-204, 3 text figs.
- Leslie Spier. "An Outline for a Chronology of Zuñi Ruins." Anthrop. Papers, XVIII, pt. III, pp. 207-331, 18 text figs.
- Robert H. Lowie. "Notes on the Social Organization and Customs of the Mandan, Hidatsa, and Crow Indians." Anthrop. Papers, XXI, pt. I, pp. 1-99.
- N. C. Nelson. "Contributions to the Archæology of Mammoth Cave and Vicinity, Kentucky." Anthrop. Papers, XXII, pt. I, pp. 1-73, 18 text figs.

POPULAR PUBLICATIONS

Forty-eighth Annual Report of the Trustees, 235 pages, 16 plates. The American Museum Journal, Volume XVII, 594 pages.

"Our Common Butterflies." By F. E. Lutz and F. E. Watson. Guide Leaflet No. 38, Third Edition, 31 pages, numerous illustrations.

- "How to Collect and Preserve Insects." By Frank E. Lutz. Guide Leaflet No. 39, Third Edition, 22 pages, with 12 text figures.
- "Syllabus Guide to Public Health Exhibits in the American Museum of Natural History; dealing with Water Supply, Disposal of Municipal Wastes and Insect-borne Diseases. An Outline for Teachers and Students." By Laurence V. Coleman. Guide Leaflet No. 45, 14 pages, and diagram plan of Hall of Public Health.
- "Peruvian Art, a Help for Students of Design." By Charles W. Mead. Guide Leaflet No. 46, 16 pages, 5 plates and frontispiece.
- "Ancient Civilizations of Mexico and Central America." By Herbert J. Spinden. *Handbook Series* No. 3, 238 pages, numerous illustrations.
- "Handbook of Health in War and Peace, a Manual of Personal Preparedness." By C-E. A. Winslow, with Foreword by Henry Fairfield Osborn. *Handbook Series* No. 6, 51 pages.

GENERAL SUMMARY

In reviewing the work of the year 1917, we observe that it has been very strong along the lines of public education, in the arrangement of the exhibition halls, in the care and cataloguing of our great collections, in scientific research and publication. Our biological survey of South America has made a very auspicious beginning and will now continue systematically through the labors of Chapman, Cherrie and Beck in birds and mammals, supplemented by those of Eastman in fishes. We are establishing new and influential scientific relations with our sister republics on the south, which will be the prelude to friendly economic and political relations, and thus of service to the cause of Pan-Americanism.

Our African collections have been made available, and a notable plan of research and publication has been developed in which Allen, Lang, Chapin, Bequaert, Wheeler and other distinguished zoölogists are taking part. Similarly, arrangements are on the way to coördinate and publish the valuable results of our Asiatic expeditions. In the meantime North American studies are progressing systematically, especially on birds, mammals, reptiles and fishes, recent and extinct, and on insect life through the labors of Lutz.

On the visible side of building, exhibition space and even of storage space, we have made little progress, but, despite the pressure of war conditions, we are making every possible endeavor with the municipal authorities and with our ever-widening circle of generous friends to increase the present exhibition space and to extend our building. The Museum is more than ever an integral part of the City's great educational system, and on the ground of its service to our schools and colleges alone, there are strong reasons for immediately extending the exhibition space of the building.

Respectfully submitted,
HENRY FAIRFIELD OSBORN,
President.

FINANCES, MAINTENANCE, ENDOWMENT

During the year 1917, several changes in recording the financial transactions have been made. It was deemed advisable to

Establishment of Morris K. Jesup Fund Account

separate the General Account into two accounts: First, the General Account, wherein are recorded the unrestricted funds of the Trustees, which include mainly the income

from the General Endowment, membership dues, subscriptions of Trustees for general purposes, interest on bank balances, and receipts from sales and exchanges of specimens and from sales of publications; second, the Morris K. Jesup Fund Account, which was created to carry out the intent of the Will of our late President Morris K. Jesup, and of the subsequent Will of his wife, Maria De Witt Jesup.

In order to show the increase of the main sources of receipts of the General and Morris K. Jesup Funds, Comparison in comparison with 1916, they are treated below of Receipts as one account:

	1916	1917
Income of General Endowment	\$57,211.88	\$58,459.86
Income of Morris K. Jesup Fund	202,050.86	267,009.06
Membership Dues	29,344.00	32,084.00
Sales and Exchanges and Sale of Publications	4,698.62	5,252.15
Subscriptions of Trustees for General Purposes .	43,500.00	59,000.00

The second modification contributing to greater efficiency in the method of conducting the finances of the Museum has been the substitution of endorsement on checks

Receipt by Check Endorsement

for receipted bills. Mr. Frederick H. Smyth, Bursar, formulated for the Museum a plan which would meet the requirements of the Department

of Finance of the City of New York. The Comptroller readily saw the wisdom of such a change, and, with the consent of the Department of Parks, permission was given to eliminate the submission of receipted bills and the signatures on payrolls

and to submit instead a tabulated statement of the firms from whom the Museum purchased the goods, on which the Director and the Assistant Secretary make the following certification: "We hereby certify that the above mentioned firms have delivered goods as shown; that the prices are just and reasonable: that there are on file in the Treasurer's Office endorsed checks for the sums set opposite their names, and that all details pertaining to the purchases are open for the inspection of the proper authorities." In the case of the payrolls, the following certification is made by the Director and the Assistant Secretary: "We hereby certify that the above mentioned employees have rendered services for the period specified on this payroll; that there are on file in the Treasurer's Office endorsed checks for the sums set opposite their names and all details pertaining to their services are open for the inspection of the proper authorities; and we hereby further certify that all persons named on this payroll, who are subject to the provisions of Chapter 622, Laws of 1894, are citizens of the United States." This change has brought about a greatly reduced number of vouchers and eliminates much needless signing by officers and employees.

On December 31, 1917, the Permanent Endowment was \$7,974,019.34, composed of securities valued at \$7,965,375 and uninvested cash of \$8,644.34. There are still held stocks of a bequest value of \$183,325 awaiting a favorable market for their sale and conversion into bonds that are legal for savings banks to hold. The Trustees authorized the Finance Committee to proceed with this change at the annual meeting in February, 1916.

During the year 1917, the executor of the estate of Maria De Witt Jesup made the final payment, on account of the bequest, of \$500,000, bringing the total to \$5,000,000. This, together with the original bequest of the late Morris K. Jesup of \$1,000,000, made the total gift to the Morris K. Jesup Fund \$6,000,000; on December 31, 1917, this Fund was composed of securities valued at \$6,656,563.80 and uninvested cash of \$6,303.70.

There were added to the General Endowment Fund, by gift from Mr. Frank W. Kitching, 121 shares of Anaconda Copper Mining Company stock, which had a market value of \$10,043 at the time of its acquisition. The receipts were further supplemented by membership dues of Patron, Fellow and Life Members to the amount of \$7,000.

Following the patriotic duty of citizens and organizations having funds available for investment, the Finance Committee subscribed for \$20,000 United States of America 10-25-year 4% Convertible Gold Bonds.

The appropriation for salaries and expenses for 1917 was \$200,000, as compared with \$197,342 for 1916; and the appropriation for special repairs to the building was City Maintenance \$12,700, whereas the amount for 1916 was \$15,657. Since the City's appropriation was practically the same for 1917 as for 1916, and because of the constantly increasing cost of supplies and the much needed increases of salaries to all classes of employees, the Trustees were obliged to make a much larger subscription for maintenance purposes than ever before. In 1917 this deficiency amounted to \$92,300.

The Treasurer's books show a balance on hand December 31, 1917, of \$163,511.82.

This balance is made up as follows:

Trustees' General

Proceeds of five notes of the United States Trust Company of New York \$150,000.00

13,511.82

As the greater portion of the income of invested funds is received on June 30 and December 31, and the principal expenditures are made prior to these dates, it has been necessary to increase the bank loan of the United States Trust Company of New York from \$75,000 to \$150,000. The Museum is not obligated to pay interest on this sum, except on the amounts necessary to meet the daily overdrafts.

It is gratifying to note that the subscriptions for Special Funds do not show a considerable decrease, in view of the urgent demands made upon all classes of our Special Funds citizens for war relief work. The special subscriptions for 1917 were \$17,391.21; in 1916 the sum received was \$22,588.82.

The Museum continued to act as Treasurer for the funds of the Crocker Land Expedition, and during the year the General Account loaned large sums to this Account, pending the receipt of subscriptions or special Crocker Land Expedition Fund gifts. On December 31, the Crocker Land Account Expedition Fund Account owed to the General Account the sum of \$33,000. It is hoped that subscriptions covering this deficiency will be made in 1918. In 1917 this Fund received \$50,000 from the General Account and the Morris K. Jesup Fund Account, this sum representing the unexpended incomes of both these accounts for 1916 and 1917, which were transferred by action of the Board of Trustees. In addition to this sum, there was transferred from the Morris K. Jesup Fund \$1,500 for special services of a field assistant, and from the Angelo Heilprin Exploring Fund \$500 for geo-

As explained in previous reports, the expenses connected with the equipment work are met largely through appropriations of corporate stock by the City. In 1917 the expenditures for these purposes amounted to \$9,496.74. On December 28, the Board of Estimate and Apportionment granted a further release of \$42,438.01, to provide for the continuation of this work.

logical work in North Greenland.

The need for additional building is so great that when in 1916 it became evident that the City could not provide new building for some time, several of the Trustees and other friends of the Museum personally subscribed to a building fund, and the moneys paid in now amount to \$106,050.83. Two subscriptions have been received during the year, namely, Mr. Archer M. Huntington, \$2,008.94, and Mr. George B. Hopkins, \$1,000.

All details pertaining to the Pension Fund Account and a full report by the Treasurer, who is *ex officio* member of this Fund, are noted on pages 223 to 239, inclusive.

Pension Fund Account

The plan inaugurated by the Special Committee appointed by the President to solicit subscriptions for the two Liberty Loans of 1917, whereby it was made possible for an employee to subscribe a minimum sum each month for 20 months, has made considerable extra work in the Bookkeeping Department. Special mention of the manner in which loans have been advanced by certain Trustees to finance this plan is made in the report of the Chairman of the Pension Fund.

Respectfully submitted,

H. P. DAVISON,

Treasurer.



Financial Statement 1917

PERMANENT ENDOWMENT

ENDOWMENT AND INVESTMENT ACCOUNT

RECEIPTS

1917

GENERAL ENDOWMENT FUND:*			
Balance	\$2,813 43		
Patron	1,000 00		
Fellow	500 00		
Life Members	5,500 00		
_		\$9,813 43	
Morris K. Jesup Fund:			
Balance	\$29,812 19		
Estate of Maria DeWitt Jesup	500,000 00		
Proceeds from Sale of Stocks	8,996 25		
_		538,808 44	
MARGARET OLIVIA SAGE FUND:			
Balance		2 89)
Interest on Credit Balances:			
Earnings to December 31, 1917		1,553 26)
		\$550,178 02	2
Examined and Approved FELIX M. WARBURG CHARLES LANIER THOMAS DEWITT CUYLER	Auditing Commi	ittee	

^{*} In 1917 there were added to the General Endowment Fund, by gift from Mr. Frank W. Kitching, 121 shares of Anaconda Copper Mining Company Capital Stock.

ENDOWMENT AND INVESTMENT ACCOUNT

DISBURSEMENTS

1917

GENERAL ENDOWMENT FUND:		
Purchase of Bonds	\$7,475	68
MORRIS K. JESUP FUND:		
Purchase of Bonds	532,504	74
Interest on Credit Balances:		
Transferred to Interest on Credit Balances, General		
Account	1,553	26
Cash on hand December 31, 1917	8,644	34

\$550,178 02

H. P. DAVISON, Treasurer

E. & O. E. New York, December 31, 1917

CITY MAINTENANCE ACCOUNT

RECEIPTS

1917

Capital Fund:		
Cash on hand January 1, 1917	\$13,919 09	
Department of Parks:		
Appropriation for 1916:		
Extraordinary Repairs	1,080 91	•
-		\$15,000 00
Department of Parks:		
Appropriation for 1917:		
Salaries and Expenses	\$200,000 00	
Special Repairs	12,700 00	
-		

Total net receipts for the maintenance of all departments	212,700 00
Interest on Credit Balances: Earnings to December 31, 1917	254 14
Loans	20,000 00

 $\begin{array}{c} \text{mined} & \left\{ \begin{array}{c} \text{Felix M. Warburg} \\ \text{Charles Lanier} \\ \text{THOMAS DEWITT CUYLER} \end{array} \right\} \end{array}$ Auditing Committee

CITY MAINTENANCE ACCOUNT*

DISBURSEMENTS

1917

Geology and Invertebrate Palæontology Mineralogy	\$2,093 52 1,134 97	
Mammalogy and Ornithology	3,884 73	
Vertebrate Palæontology	2,352 10	
Anthropology	3,191 60	
Ichthyology	805 63	
Herpetology	137 68	
Invertebrate Zoölogy	4,316 48	
Public Health	1,196 42	
Woods and Forestry	135 10	
Library	6,981 59	
Public Education	5,051 19	
Publications	3 00	
Heating and Lighting	29,075 08	
Repairs and Installation	31,511 03	
Special Repairs	12,700 00	
General Supplies and Expenses	13,247 27	
Administration	94,882 61	
Total net disbursements for the maintenanc	е	
of all departments	• • • • • • • • • •	\$212,700 00
Interest on Credit Balances:		
Transferred to Interest on Credit Balance	es. General	
Account	,	254 14
Loans		20,000 00
Capital Fund:		
Cash on hand December 31, 1917		15,000 00
		\$247,954 14

H. P. DAVISON, Treasurer

E. & O. E.

NEW YORK, December 31, 1917

^{*} 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 1917, amounting to \$92,300, has been met from the Trustees' General Account.

Trustees' Unrestricted Funds:

GENERAL ACCOUNT

RECEIPTS

1917

Trustees Chrestiteted Lunds.		_
Cash on hand January 1, 1917	\$8,480	28
Interest on Credit Balances		
Annual Members 28,900 00		
Sustaining Members		
Associate Members		
Sales and Exchanges		
Sale of Publications		
Contributions of Trustees for General Purposes:		
George F. Baker \$5,000 oo Adrian Iselin \$2,000 oo		
Frederick F. Brewster. 2,000 00 Arthur Curtiss James. 5,000 00 R. Fulton Cutting 1,000 00 Walter B. James 500 00		
Thomas DeWitt Cuyler 1,000 oo A. D. Juilliard 5,000 oo		
H. P. Davison 5,000 00 Charles Lanier 1,000 00		
Cleveland H. Dodge 5,000 oo Ogden Mills 5,000 oo James Douglas 2,000 oo J. P. Morgan 5,000 oo		
Henry C. Frick 5,000 00 John B. Trevor 1,000 00		
Archer M. Huntington 3,500 00 Felix M. Warburg 5,000 00		
59,000 00	0	
Annichated de la companya del la companya de la com	155,813	73
Total net receipts for the development of all departments	\$164,294	01
Loans:		
City Maintenance Account		
Morris K. Jesup Fund Account		
Bursar's Account		
Loans Receivable Crocker Land Expedition		
Fund Account	0	
American Red Cross:	132,800	00
Special Dividends	60	-
Special Dividends	00	50
Trustees' Restricted Funds:		
Cash on hand January 1, 1917 \$17,478 95		
Crocker Land Expedition Fund Account:		
Repayment of Loans, 1913–1916		
13,000 to	33,078	05
Proceeds of Notes held by United States Trust Company of New York	150,000	
	\$480,233	46
FELLY M WARRING) 4 111		
Examined and Approved FELIX M. WARBURG CHARLES LANIER THOMAS DEWITT CUYLER Auditing Committee		

GENERAL ACCOUNT*

DISBURSEMENTS

-	-	-

1917		
Geology and Invertebrate Palæontology	\$3,533 70	
Mineralogy	1,283 56	
Mammalogy and Ornithology	6,996 03	
Vertebrate Palæontology	4,397 19	
Anthropology	7,593 85	
<u>Ichthyology</u>	2,913 09	
Herpetology	1,860 34	
Invertebrate Zoölogy	7,295 28	
Anatomy and Physiology	111 79	
Public Health	2,327 64	
Library	1,651 05	
Public Education	3,210 12	
Preparation and Exhibition	5,574 60	
Publications	253 06 19,288 35	
Heating and Lighting	2,781 66	
Repairs and Installation	5,232 28	
General Supplies and Expenses	26,462 35	
Administration	28,989 57	
Pension Fund	10,167 20	
Interest on Bank Loans	2,146 97	
	2,140 9/	
Total net disbursements for the development of all depa Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916		\$144,069 68
	\$2,985 28	\$144,069 68
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916		\$1 44 ,069 68
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 " " 1917 Loans:	\$2,985 28 3,727 23	
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 " " 1917 Loans: City Maintenance Account	\$2,985 28 3,727 23 \$9,000 00	
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 " " 1917 Loans: City Maintenance Account Morris K. Jesup Fund Account	\$2,985 28 3,727 23 \$9,000 00 78,800 00	
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 " 1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00	
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 " 1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account	\$2,985 28 3,727 23 \$9,000 00 78,800 00	6,712 51
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 " 1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross:	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00	6,712 51
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 " 1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross: Contribution	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00	6,712 51
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 " 1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross: Contribution Morris K. Jesup Fund Account:	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00	6,712 51 132,800 00 60 50
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 " 1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross: Contribution Morris K. Jesup Fund Account: Transfer of Cash	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00	6,712 51
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 "1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross: Contribution Morris K. Jesup Fund Account: Transfer of Cash Cash on hand December 31, 1917: Cash in Bank	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00	6,712 51 132,800 00 60 50
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 "1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross: Contribution Morris K. Jesup Fund Account: Transfer of Cash Cash on hand December 31, 1917: Cash in Bank Proceeds of Notes held by United States Trust Com-	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00 \$13,511 82	6,712 51 132,800 00 60 50
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 "1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross: Contribution Morris K. Jesup Fund Account: Transfer of Cash Cash on hand December 31, 1917: Cash in Bank	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00	6,712 51 132,800 00 60 50 33,078 95
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 "1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross: Contribution Morris K. Jesup Fund Account: Transfer of Cash Cash on hand December 31, 1917: Cash in Bank Proceeds of Notes held by United States Trust Com-	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00 \$13,511 82	6,712 51 132,800 00 60 50 33,078 95
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 "1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross: Contribution Morris K. Jesup Fund Account: Transfer of Cash Cash on hand December 31, 1917: Cash in Bank Proceeds of Notes held by United States Trust Com-	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00 \$13,511 82	6,712 51 132,800 00 60 50 33,078 95
Contribution to Crocker Land Expedition Fund Account: Unexpended Income of 1916 "1917 Loans: City Maintenance Account Morris K. Jesup Fund Account Bursar's Account Crocker Land Expedition Fund Account American Red Cross: Contribution Morris K. Jesup Fund Account: Transfer of Cash Cash on hand December 31, 1917: Cash in Bank Proceeds of Notes held by United States Trust Company of New York to meet overdrafts	\$2,985 28 3,727 23 \$9,000 00 78,800 00 12,000 00 33,000 00 \$13,511 82	6,712 51 132,800 00 60 50 33,078 95 1163,511 82 \$480,233 46

New York, December 31, 1917

York
Sum reserved to meet pledges and obligations of 1917. \$4,086 18
Unexpended income of 1917. 9,425 64

13,511 82

\$163,511 82

MORRIS K. JESUP FUND ACCOUNT

RECEIPTS

1917

Trustees'	Restricted	Funds:
-----------	------------	--------

~						
(Jen	eral	Α,	200	1111	ŕ	۰

Transfer of cash on hand January I,	1917	\$33,078 95
Income from Morris K. Jesup Fund	\$267,009 06	
Sale of Publications	1,046 47	
Sales and Exchanges	230 95	
Interest on Credit Balances	393 35	
-		268,679 83
	_	

Total net receipts	for the development of all	
departments		\$301.758 78

Loans:

City Maintenance Account	\$11,000 00
General Account	78,800 00
Crocker Land Expedition Fund Account	58,000 00

\$449,558 78

FELIX M. WARBURG CHARLES LANIER THOMAS DEWITT CUYLER . Examined Auditing and Approved Committee

MORRIS K. JESUP FUND ACCOUNT *

DISBURSEMENTS

1917

Geology and Invertebrate Palæontology \$17,882 08 Mineralogy 2,086 71	
Mammalogy 26,324 39	
Vertebrate Palæontology 31,093 19	
Vertebrate Palæontology Research and Pub-	
lication Fund 5,474 78	
President Osborn's Science Fund 5,000 00	
Anthropology	
Ichthyology 6,650 54	
Dr. Dean's Research and Publication Fund 1,300 00	
Herpetology 5,652 69	
Invertebrate Zoölogy	
Anatomy and Physiology 3,574 99	
Public Health	
Woods and Forestry 6,254 69	
Library 11,482 92	
Public Education 8,547 83	
Preparation and Exhibition 38,913 60	
Publications	
General Supplies and Expenses 1,243 71	
Total not dishusassents for the development of all	
Total net disbursements for the development of all departments	\$240,877 22
departments	φ240,0// 22
Crocker Land Expedition Fund Account:	
Unexpended Income of 1916 \$7,014 72	
" " " 1917 36,272 77	
Loans:	43,287 49
City Maintenance Account \$11,000 00	
General Account	
Crocker Land Expedition Fund Account 58,000 oo	. 0
Cash on hand December 31, 1917:	147,800 00
Cash in Bank	†1 7, 594 07
	\$449,558 78

E. & O. E.

H. P. DAVISON, Treasurer

NEW YORK, December 31, 1917

^{*} 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.

of scientific work.

† The Treasurer's books show a balance on hand December 31, 1917, of \$17,594.07, which has been carried forward to 1918 to meet pledges and obligations contracted in 1917.

RECEIPTS

1917

GEOLOGY AND INVERTEBRATE PALÆONTOLOGY Angelo Heilprin Exploring Fund:	•			
Mr. and Mrs. Paul J. Sachs	\$500	00		
Balance	1,000	00	\$* #00 O	_
Mineralogy:			\$1,500 0	U
Matilda W. Bruce Fund:				
Balance	\$1 660	06 00		_
-			661 o	6
Mammalogy and Ornithology:				
Crandall Oölogical Fund: Balance	\$1.160	00		
Whale Model Fund:		00		
Balance South American Exploration Fund:	1,000	00		
Balance	1,033	30		
Balance	500	00		
Asiatic Zoölogical Expedition Fund:				
Charles L. Bernheimer	200	00		
Balance \$231 48				
Interest	659	36		
_	-37		4,552 6	6
Vertebrate Paleontology:				
Pleistocene Faunal Life Scenes Fund: Balance	¢=			
J. P. Morgan	\$500 6,000			
-		_	6,500 o	0
Anthropology:				
East Asiatic Fund: Balance	\$2,335	40		
Anthropology of the Southwest Fund: Balance \$489 67	Ψ2,335	49		
Archer M. Huntington 5,000 00	. .0.	۷.		
Aztec Ruin Fund:	5,489	07		
Archer M. Huntington	1,500			
Balance	43	71	9,368 8	7
Carried forward			\$22,582 59	9

DISBURSEMENTS

1917	
GEOLOGY AND INVERTEBRATE PALÆONTOLOGY:	
Angelo Heilprin Exploring Fund: Transferred to Crocker Land Expedition Fund Account for Geological Work in North Greenland	\$500 00
Mineralogy:	
Matilda W. Bruce Fund: Purchase of Minerals	659 00
Mammalogy and Ornithology:	
Peru Bird Fund: Purchase of South American Birds \$189 28	
Asiatic Zoölogical Expedition Fund: Transferred to Mammalogy and Ornithology, Morris K. Jesup Fund Account, for expenses of field assistant in China 200 00	389 28
VERTEBRATE PALÆONTOLOGY:	
Pleistocene Faunal Life Scenes Fund: For Murals in the Hall of the Age of Man	6,500 00
Anthropology:	
Anthropology of the Southwest Fund: Expenses of Field Work \$1,947 16 Transferred to Anthropology, Morris K. Jesup Fund Account, for expenses of field work	
Aztec Ruin Fund:	
Expenses of Field Work 1,500 00	6,447 16
Carried forward	\$14,495 44

RECEIPTS 1917

Brought forward		22,582 59
Ichthyology:		
Dodge Ichthyology Fund:	* ·	
Balance Fish Bibliography Fund:	\$714 17	
Balance		
Bashford Dean 700 oc	739 27	
Public Health:	739 -7	1,453 44
Public Health Fund: Balance		302 82
Public Education:		
Ionathan Thorne Memorial Fund:		
Balance \$300 25 Interest 1,084 20)	
Public Education Fund:	- \$1,384 48	
Balance	120 00	
Balance	. 115 69	
School Fund: Department of Education of the City o		
New York	. 1,204 13	
Barnard College	. 100 00	
Preparation and Exhibition:		2,924 30
Sea Elephant Preparation Fund:		
Balance		1,000 00
Publications: Jesup North Pacific Expedition Publication FurBalance Museum Journal Fund: Alfred Hafner \$5 0 Sylvanus G. Morley 10 0	. \$1,121 65	
	15 00	1,136 65
Total net receipts for the development of specidepartments		S29,399 8 0
Interest on Credit Balances: Earnings to December 31, 1917		429 50
	-	\$29,829 30
Examined and Approved FELIX M. WARBURG CHARLES LANIER THOMAS DEWITT CUYLER	luditing Committ	ee

DISBURSEMENTS

1917

Brought forward\$14,495 44 Public Health: Public Health Fund: Public Education: Jonathan Thorne Memorial Fund: For Services of instructors, transportation of the blind and expenses of special lec-\$848 55 Transferred to Public Educa-tion, General Account, for Special Work IO 00 \$858 55 School Fund: Loaning Slides to Public Schools 1,204 13 2.062 68 Publications: Museum Journal Fund: Transferred to Publications, Morris K. Jesup Fund Account, for special inserts 15 00 Total net disbursements for the development of specific departments\$16,729 37 Interest on Credit Balances: Transferred to Interest on Credit Balances, General Account 429 50 Cash on hand December 31, 1917 12,670 43

E. & O. E.

H. P. DAVISON, Treasurer

\$29,829 30

NEW YORK, December 31, 1917

CROCKER LAND EXPEDITION FUND ACCOUNT RECEIPTS 1917

Cash on hand January 1, 1917		\$3,533 33
SUBSCRIPTIONS: Miss Caroline F. Lester	\$10 00	
GENERAL ACCOUNT: Contribution of the unexpended incomes of 1916 and 1917	6,712 51	
MORRIS K. JESUP FUND ACCOUNT: Contribution of the unexpended incomes of 1916 and 1917		
Special Contribution from Department of Geology 1,500 00		
	44,787 49	
SPECIAL FUNDS ACCOUNT: Angelo Heilprin Exploring Fund	500 00	
SALE OF SPECIMENS	57 42	52,067 42
Loans: General Account Morris K. Jesup Fund Account	\$48,600 00 58,000 00	106,600 00
INTEREST ON CREDIT BALANCES: Earnings to December 31, 1917		47 96
	-	\$162,248 71
$ \begin{array}{c} \textbf{Examined} \\ \textbf{and Approved} \\ \end{array} \begin{cases} \begin{aligned} \textbf{Felix M. Warburg} \\ \textbf{Charles Lanier} \\ \textbf{Thomas DeWitt Cuyler} \end{aligned} \end{cases} $	Auditing Comm	ittee

CORPORATE STOCK ACCOUNT

RECEIPTS

1917		
DEPARTMENT OF PARKS	\$9,493 25	
Earnings to December 31, 1917	3 49	\$9,496 74
Examined and Approved FELIX M. WARBURG CHARLES LANIER THOMAS DEWITT CUYLER	Auditing Commi	ttee

CROCKER LAND EXPEDITION FUND ACCOUNT

DISBURSEMENTS

1017

	-2-1		
Disbursements of 1913, met General Account still uns Materials, Supplies and Equip Incidental Expenses Transportation Salaries	ubscribed	\$15,600 00 5,575 31 3,649 50 54,504 62	\$87,661 93
LOANS: General Account Morris K. Jesup Fund A			73,600 00
Cash on hand December	31, 1917		986 78

\$162,248 71

E. & O. E.

NEW YORK, December 31, 1917 H. P. DAVISON, Treasurer

CORPORATE STOCK ACCOUNT

DISBURSEMENTS

1917

PAYROLLS OF MECHANICS, ETC. \$9,493 25

INTEREST ON CREDIT BALANCES: Transferred to Interest on Credit Bal-

ances, General Account 3 49

\$9,496 74

E. & O. E.

NEW YORK, December 31, 1917 H. P. DAVISON, Treasurer

INCIDENTAL ACCOUNT

RECEIPTS

1917

Cash on hand January 1, 1917	\$207 13
Societies	
Interest on Credit Balances:	
Earnings to December 31, 1917 10 98	3,188 92
	\$3,396 05
Examined and Approved Felix M. Warburg Charles Lanier Thomas DeWitt Cuyler Auditing Commi	ttee
MUSEUM BUILDING FUND ACCOUN	TT
Receipts	
1917	
Cash on hand January 1, 1917	\$100,451 39
Subscriptions:	
Archer M. Huntington \$2,008 94 George B. Hopkins	
Interest on Credit Balances:	

2,590 50

Auditing

Committee

\$106,050 83

Earnings to December 31, 1917

Examined

FELIX M. WARBURG
CHARLES LANIER
THOMAS DEWITT CUYLER

INCIDENTAL ACCOUNT

DISBURSEMENTS

1917

DISBURSEMENTS FOR INDIVIDUALS AND Societies

\$2,988 08

INTEREST ON CREDIT BALANCES:

Transferred to Interest on Credit Balances, General Account

10 98 \$2,999 06

Cash on hand December 31, 1917

396 99 \$3,396 05

E. & O. E.

New York, December 31, 1917 H. P. DAVISON, Treasurer

MUSEUM BUILDING FUND ACCOUNT

DISBURSEMENTS

1917

Cash on hand December 31, 1917

\$106,050 83

\$106,050 83

E. & O. E.

NEW YORK, December 31, 1917 H. P. DAVISON, Treasurer

		•	
	-		
			•
•			
		•	

MEMBERSHIP

The number of Members of the Museum is greater than ever before despite the present disturbed conditions of the country, which are making such unusual demands upon the income of every citizen. This is a source of special gratification and encouragement to the Museum, since it indicates that the public service the institution is rendering is more widely appreciated than ever before.

It has often been stated that many become members of the Museum, not because they expect in person value received for the membership fee, but because they believe that the work the institution is doing for science and education is worthy of support. Unquestionably this civic pride is an important factor in maintaining the membership. On the other hand, a little reflection will show that every member is offered a very large personal return for his contribution. Every member receives copies of *The American Museum Journal*, a magazine which keeps the members in touch with Museum activities and presents in authoritative manner the results of the latest explorations and researches in natural science.

The lectures that are given annually to members compare favorably with those given in any lecture course in the City.

In 1917, more than 85 lectures were given to which

Lectures to Members were welcome

The spring course of lectures to Members was as follows: One by C. William Beebe, "In the Jungles of British Guiana," describing the work carried on at "Kalacoon," the tropical research station, ideally situated for studying the problems of habitat and distribution. In place of the lecture which was to have been given by Mr. Herbert W. Gleason, "In the High Sierras with John Muir," a lecture was given on practically the same region by Mr. Leroy Jeffers, with stereopticon views of that part of the country and also of the rocks

and surf in the region of Nahant, Massachusetts. The lecture by Herbert J. Spinden, "Our Debt to Ancient American Civilizations," called particular attention to the fact that more than half of our agricultural products are direct gifts from the American Indian. Mr. Leo E. Miller, "With Camera and Gun Through Western Colombia," dealt with Antioquia, a region of diversified physical characters and an unusually rich field for the naturalist.

The autumn course for members included the following lectures: Donald B. MacMillan, "The Search for Crocker Land." Mr. MacMillan had spent four years in the Arctic as leader of the Crocker Land Expedition organized by The American Museum of Natural History, The American Geographical Society and The University of Illinois. His narrative gave an account of the perils and disappointments of Arctic travel, and an intimate picture of the Cape York Eskimo, the most northerly inhabitants of the world. A. Radclyffe Dugmore, "The Romance of the Beaver and the Caribou," covered observations of a series of years. Captain Dugmore has seen service in France, where he was "gassed" in the battle of the Somme and invalided home. Frank M. Chapman, "The Southern Andes," concluded the story of the natural history reconnaissance made by him in South America in 1916. Dr. Chapman also established relations with the museums in the principal cities through which the expedition passed. Roy C. Andrews, "The Frontiers of a Forbidden Land," gave an account of the Asiatic Zoölogical Expedition's journey through southern and southwestern China, the mountains of the Tibetan frontier, the Burma border, the little known native tribes, and of conditions in the interior of China, illustrated by motion pictures and colored lantern slides from photographs taken by Mrs. Andrews.

The ninth and tenth series of Nature Stories for the Children of Members were given in 1917. In the spring course,

Mr. Robert C. Murphy gave a lecture entitled "Among the Penguins of South Georgia," and in the autumn course Mr.

Roy Chapman Andrews told of "The Children of the Far East."

In January the Department of Anthropology gave a series of four lectures on "Ethnology: The Science of Culture," by Dr. Robert H. Lowie.

Special Lectures

On January 10, under the auspices of The American Scenic and Historic Preservation Society and The American Museum of Natural History, a lecture was given by the Honorable Robert Sterling Yard, on "Our National Parks and Monuments," illustrated with beautiful colored stereopticon views.

On January 20, a series of remarkable motion pictures entitled "How Life Begins," was shown through the courtesy of the Exhibitors' Booking Agency of New York City. The pictures were made by Mr. George E. Stone, A.B., and Professor J. A. Long, Ph.D., of the University of California.

In February, three lectures on "Primitive Decorative Design" were given by Dr. Herbert J. Spinden and Mr. M. D. C. Crawford, under the auspices of the Department of Anthropology.

On February 8, the first exhibition of Prizma motion pictures was given, under the auspices of The American Museum of Natural History and The New York Academy of Sciences. These pictures are a faithful reproduction of objects in motion or at rest in natural colors and relief. The exhibition included pictures of the Grand Cañon of the Colorado, Niagara Falls, marine life and other subjects of natural science. A brief description of the method of producing the pictures was given by Ernest Fox Nichols, Sc.D., LL.D., Professor of Physics at Yale University.

On March 28, under the auspices of The American Museum of Natural History and The American Scenic and Historic Preservation Society, a lecture was given by Samuel Christopher Lancaster, on "The Scenic Beauty of Oregon," illustrated with lantern slides and Paget plates.

On May 21 and 23 addresses were given in connection with the Twelfth Annual Meeting of the American Association of Museums.

On May 23, addresses were given by President Osborn (presiding), the Honorable George W. Perkins and Doctors Graham Lusk, Hermann M. Biggs and Walter B. James, in

connection with the opening of a special exhibition illustrative of the most recent researches in Food Values and Economies.

On May 28, special addresses were given in connection with the Centennial Meeting of the New York Academy of Sciences, by Professor Michael Idvorsky Pupin, President of the Academy, by Dr. Nathaniel Lord Britton, and by Dr. John Hendley Barnhart.

On June 8, a lecture for the blind was given by Dr. Fisher on "Wild Flowers of Summer."

On October 2, addresses were given in connection with the Nineteenth Annual Meeting of the New York State Historical Association.

On December 5, Mr. Roy Chapman Andrews spoke on "Travels in Little Known China," at the meeting of the American Asiatic Association.

On December 17, under the auspices of the New York Academy of Sciences, an address was given on "Science and the War" by Dr. R. A. Millikan.

It is gratifying to report that the number of new members enrolled during 1917 was 412; the loss through death and resignation was 279, showing a net gain of 133. On December 31, 1917, the total membership was 4,242, divided into classes as follows:

Founder	r	Fellows 41
Benefactors	5	Honorary Fellows 10
Associate Founders	ΙI	Life Members 717
Associate Benefactors	21	Sustaining Members 80
Patrons	113	Annual Members 2,880
Associate Member	rs (no	n-resident) 363

NEW MEMBERS

The following was elected Associate Founder:

A. D. Juilliard

The following were elected Associate Benefactors:

Frederick F. Brewster Tames B. Ford

HENRY C. FRICK ADRIAN ISELIN

FRANK W. KITCHING*

* Deceased.

The following were elected Patrons:

HENRY P. DAVISON

DR. JAMES M. B. HARD

GEO. B. HOPKINS

PAUL J. SACHS

MRS. PAUL J. SACHS

Mrs. Wm. Tod Helmuth Mrs. Willard D. Straight

The following were elected Fellows:

CHARLES L. BERNHEIMER B. PRESTON CLARK

LOUIS T. HAGGIN

The following were elected Life Members through contribution of One Hundred Dollars:

THOMAS BARBOUR

JAMES H. BARR

R. CLIFFORD BLACK

AMOS P. PROUNT

CHAS H. LOWS

CHAS H. LOWS

Amos P. Brown Chas. H. Louis
Wm. Reynolds Brown Arthur F. Luke
George Bullock Malcolm S. Mackay

E. C. CONVERSE EDWARD MALLINCKRODT, JR.
GEORGE A. CROCKER, JR.
W. H. MARSHALL
GEORGE MERCER

MRS. WILLIAM H. CROCKER

MOREAU DELANO

MRS. C. N. DIETZ

HENRY L. DOHERTY

GEORGE MERCER

WM. H. NICHOLS

GEORGE NOTMAN

MRS. CHAS. ALBEI

HENRY L. DOHERTY MRS. CHAS. ALBERT PERKINS

LEWIS L. DUNHAM E. W. RICE, JR.

ALFRED I. DU PONT

MARSHALL FIELD

BRUCE FORD

WILLIAM LOUIS GARRELS

MRS. JAMES J. GOODWIN

GEORGE D. ROSENGARTEN

MRS. HORACE RUSSELL

EDMUND J. SCHEIDER

CHAS. A. SCHIEREN

ARCHIBALD T. SCOFIELD

E. H. R. Green Valentine P. Snyder

Mrs. James B. Haggin John A. Spoor
H. M. Hanna, Jr. Adolfo Stahl
W. P. Hardenberg Edw. R. Stettinius

HARRY S. HARKNESS Mrs. WARNER M. VAN NORDEN

EPH. A. KARELSEN

EDWARD DUDLEY KENNA

WM. M. KERR

IRVING B. KINGSFORD

SAMUEL N. VAUCLAIN

BENJAMIN L. WEBSTER

MRS. DELOS O. WICKHAM

WALTER C. WITHERBEE

WILLIAM M. WOOD

The following were made Life Members through Honorary Election:

ROBERT A. BARTLETT LOUIS AGASSIZ FUERTES
REV. HARRY R. CALDWELL PROF. C. R. KELLOGG
RAYMOND L. DITMARS DR. WM. DILLER MATTHEW

The following have become Sustaining Members:

Samuel Bird, Jr. Mrs. Pierpont Morgan Theodore H. Lamprecht C. H. Tenney

C. H. Zehnder

DECEASED TRUSTEES AND MEMBERS

Trustees

JOSEPH HODGES CHOATE ANSON WALES HARD

Founders

JOSEPH HODGES CHOATE HENRY PARISH

Associate Benefactor Frank W. Kitching

Life Members

BERTRAND F. BELL MRS. DANIEL S. LAMONT
MISS KATHARINE L. CAMMANN DR. PERCIVAL LOWELL
ZENAS CRANE O. H. PAYNE
SAMUEL ELLIOTT J. K. ROBINSON
REV. DR. HENRY FERGUSON WM. R. SCHMELZEL
CHARLES E. HANAMAN GEO. P. SHIRAS
N. W. HARRIS HENRY F. WALKER
FRANK D. HURTT FREDERICK B. WENDT

A complete list of members is appended.

Respectfully submitted,

Adrian Iselin, Secretary.

LIST OF TRUSTEES AND TERMS OF SERVICE

1869-1917

The Mayor of the City of New York	
The President of the Department of Parks	. 1908–
The Comptroller of the City of New York	. 1908–
Auchincloss, Hugh	
Baker, George F	. 1914–
Bickmore, Albert S.	
Bishop, H. R.	. 1882–1891
Blatchford, Richard M	
Blodgett, William T	. 1869–1875
Bowdoin, George S	. 1903–1913
Brewster, Frederick F	
Choate, Joseph H	. 1869–1917
Colgate, Robert	
Constable, James M.	
Cutting, R. Fulton	
Cuyler, Cornelius C.	
Cuyler, Thomas DeWitt	
Dana, Chas. A.	
Davison, Henry P.	
Dodge, A. G. Phelps	
Dodge, Cleveland H.	
Dodge, W. E., Jr.	, ,
Douglas, James	
Drexel, Joseph W	
Elliot, Daniel Giraud	
Field, Benjamin H.	
Frick, Henry C.	
Gerry, Elbridge T.	
Grant, Madison	
Green, Andrew H.	
Grinnell, Moses H.	
Haines, William A.	
Hard, Anson W.	
Harriman, Oliver	
Havemeyer, H. O.	
Havemeyer, Theodore A	
Haven, George G	
Hewitt, Abram S	. 1874–1903

Huntington, Archer M	1909-1912, 1914-
Hyde, Frederick E	1899–1909
Hyde, James H	1903–1907
Iselin, Adrian	1869–1905
Iselin, Adrian	1905–
James, Arthur Curtiss	1903–
James, D. Willis	
James, Walter B	
Jesup, Morris K	
Juilliard, A. D	
Kissel, Gustav E.	
Landon, Charles G	
Lanier, Charles	
Low, Seth	
Mills, D. O	
Mills, Ogden	1910–
Morgan, J. Pierpont	
Morgan, J. P.	1908–
Morton, Levi P.	
Osborn, Henry Fairfield	1901–
Ottendorfer, Oswald	
Parish, Henry	
Potter, Howard	1869–1880
Pyne, Percy R.	
Pyne, Percy R.	
Robb, J. Hampden	
Rockefeller, William	
Rogers, Archibald	
Roosevelt, Theodore	
Roosevelt, Theodore	
Sherman, Benjamin B.	1869–1874
Stebbins, Henry G	
Stevens, Frederic W.	
Steward, D. Jackson	
Stuart, Robert L.	
Trevor, John B.	
Trevor, John B.	
Vanderbilt, Cornelius	1878–1899
Warburg, Felix M.	1910-
Wickersham, George W	
Whitney, William C.	
Wolfe, John David	1809–1872

LIST OF MEMBERS

December 31, 1917

FOUNDERS

This class of members is composed of the incorporators of the Museum

WILLIAM T. BLODGETT*
JOSEPH H. CHOATE*
ROBERT COLGATE*
CHARLES A. DANA*
A. G. PHELPS DODGE
BENJAMIN H. FIELD*
WILLIAM A. HAINES*
ADRIAN ISELIN*

Morris K. Jesup*
J. Pierpont Morgan*
Henry Parish*
Howard Potter*
Theodore Roosevelt*
Benjamin B. Sherman*
D. Jackson Steward*
Robert L. Stuart*

JOHN DAVID WOLFE*

BENEFACTORS

Through honorary election

James M. Constable*
Cleveland H. Dodge
James Douglas
Archer M. Huntington
Arthur Curtiss James
Morris K. Jesup*
Mrs. Morris K. Jesup*

DARIUS OGDEN MILLS*
J. PIERPONT MORGAN*
HENRY FAIRFIELD OSBORN
PERCY R. PYNE, SR.*
MRS. ROBERT L. STUART*
CORNELIUS VANDERBILT*
WM. H. VANDERBILT*

ASSOCIATE FOUNDERS

Through honorary election

GEORGE S. BOWDOIN*
JAMES M. CONSTABLE*
CLEVELAND H. DODGE
WILLIAM E. DODGE, JR.*
HENRY O. HAVEMEYER*
ARCHER M. HUNTINGTON
ARTHUR CURTISS JAMES
A. D. JUILLIARD
CHARLES LANIER
OGDEN MILLS

J. P. Morgan
OSWALD OTTENDORFER*
PERCY R. PYNE, IST*
WILLIAM ROCKEFELLER
MISS PHEBE ANNA THORNE*
CHARLES E. TILFORD*
MRS. JOHN B. TREVOR
CORNELIUS VANDERBILT, IST*
FELIX M. WARBURG
WILLIAM C. WHITNEY

^{*} Deceased.

ASSOCIATE BENEFACTORS

Through honorary election

Hugh Auchincloss* EMIL C. BONDY* GEORGE S. BOWDOIN* Frederick F. Brewster IOSEPH H. CHOATE* ROBERT COLGATE* THOMAS DE WITT CUYLER BENJAMIN P. DAVIS* CLEVELAND H. DODGE WILLIAM E. DODGE, 2D* MRS. WILLIAM E. DODGE* Mrs. Josiah M. Fiske* TAMES B. FORD HENRY C. FRICK Anson W. Hard* ARCHER M. HUNTINGTON HENRY IDEN* ADRIAN ISELIN*

ADRIAN ISELIN ARTHUR CURTISS JAMES D. WILLIS JAMES* A. D. JUILLIARD Frank W. Kitching* CHARLES LANIER JOSEPH F. LOUBAT OGDEN MILLS J. P. Morgan HENRY FAIRFIELD OSBORN PERCY R. PYNE WILLIAM ROCKEFELLER Mrs. Russell Sage WM. R. SANDS* TACOB H. SCHIFF ROBERT L. STUART* IOHN B. TREVOR MRS. JOHN B. TREVOR

FELIX M. WARBURG

PATRONS

By contribution of \$1,000, or through honorary election

EDWARD D. ADAMS IOHN ANDERSON* JAMES ANGUS* HICKS ARNOLD* RICHARD ARNOLD* WILLIAM H. ASPINWALL* JOHN JACOB ASTOR* WILLIAM WALDORF ASTOR Hugh Auchincloss* BENJAMIN AYMAR* SAMUEL D. BABCOCK* GEORGE F. BAKER MRS. GUY ELLIS BAKER A. H. BARNEY* D. N. BARNEY* JAMES GORDON BENNETT Albert S. Bickmore* MRS. ALBERT S. BICKMORE Frederick Billings* HEBER R. BISHOP* George Bliss* GEORGE T. BLISS* MISS SUSAN DWIGHT BLISS MRS. WILLIAM H. BLISS WILLIAM T. BLODGETT* ROBERT BONNER* HENRY BOOTH -M. C. D. BORDEN* J. A. Bostwick* George S. Bowdoin* GEORGE DEXTER BRADFORD* FREDERICK F. BREWSTER ALEX. H. BROWN, M. P. JAMES BROWN* MISS MATILDA W. BRUCE* HERMON C. BUMPUS

^{*} Deceased.

JOHN L. CADWALADER* Mrs. Carnegie Andrew Carnegie Dr. Walter Channing **Јо**ѕерн Н. Сноате* JOHN J. CLANCY* EDWARD CLARK* JONAS G. CLARK* JAMES B. COLGATE* ROBERT COLGATE* FREDERICK A. CONSTABLE* Mrs. Frederick A. Constable JAMES M. CONSTABLE* GEORGE C. COOPER* PETER COOPER* Austin Corbin* ALEXANDER I. COTHEAL* ZENAS CRANE* JOHN D. CRIMMINS* JOHN J. CROOKE ROBERT FULTON CUTTING CORNELIUS C. CUYLER* THOMAS DEWITT CUYLER HENRY P. DAVISON DR. BASHFORD DEAN MRS. BASHFORD DEAN W. M. DONGAN DE PEYSTER L. P. DI CESNOLA* A. G. PHELPS DODGE CLEVELAND H. DODGE WILLIAM E. DODGE, 1st* WILLIAM E. DODGE, 2d* Mrs. William E. Dodge* TAMES DOUGLAS ANDREW E. DOUGLASS* JOSEPH W. DREXEL* Mrs. Isaac M. Dyckman* D. G. ELLIOT* Mrs. M. Schuyler Elliot JAMES R. ELY* LIEUT. G. T. EMMONS, U.S.N. BENTAMIN H. FIELD* CYRUS W. FIELD* CYRUS W. FIELD, JR.* IAMES B. FORD PROF. AUGUSTE FOREL

DR. WALTER B. JAMES

HENRY C. FRICK Mrs. Fredericka Gade* WILLIAM T. GARNER* ELBRIDGE T. GERRY - ROBERT W. GOELET LUDWIG MAX GOLDBERGER* TOEL GOLDENBERG* GEORGE J. GOULD John A. C. Gray* TOHN A. GROSSBECK* WILLIAM A. HAINES* Anson W. Hard* JAMES M. B. HARD Mrs. E. H. HARRIMAN OLIVER HARRIMAN* E. H. HARRISON* HENRY O. HAVEMEYER* THEODORE A. HAVEMEYER* George G. Haven* George G. Haven George A. Hearn* Mrs. Wm. Tod Helmuth ABRAM S. HEWITT* Mrs. Abram S. Hewitt* Miss S. M. Hitchcock* VERY REV. E. A. HOFFMAN. D.D., LL.D.* Mrs. Eugene A. Hoffman* SAMUEL V. HOFFMAN GEO. B. HOPKINS GEN. T. H. HUBBARD* Archer M. Huntington Mrs. Archer M. Huntington C. P. Huntington* Mrs. Henry Edwards HUNTINGTON B. H. HUTTON* B. T. BABBITT HYDE Dr. Frederick E. Hyde FREDERICK E. HYDE, JR. JAMES H. HYDE ADRIAN ISELIN* ADRIAN ISELIN ARTHUR CURTISS JAMES D. WILLIS JAMES*

^{*} Deceased.

CHARLES M. JESUP Morris K. Jesup* Mrs. Morris K. Jesup* H. J. JEWETT* J. TAYLOR JOHNSTON* Mrs. Isabelle Field Judson A. D. Juilliard JAMES R. KEENE* L. D. KELLOGG GUSTAV E. KISSEL* CHAS. G. LANDON* CHARLES LANIER LORD LEITH OF FYVIE JAMES LENOX* ADOLPH LEWISOHN MAJOR C. A. M. LIEBRECHTS SOLOMON LOEB* JOSEPH F. LOUBAT SETH LOW, LL.D.* Princess VILMA LWOFF-PARLAGHY JOHN B. MARCOU* PHILIPPE B. MARCOU EDWARD MATTHEWS Francis O. Matthiessen* GEORGE B. McCLELLAN DR. EDGAR A. MEARNS, U.S.A.* HERMAN A. METZ DARIUS OGDEN MILLS* OGDEN MILLS MASON MITCHELL I. PIERPONT MORGAN* I. P. Morgan HENRY FAIRFIELD OSBORN WM. CHURCH OSBORN W. H. Osborn* Mrs. Wm. H. Osborn* OSWALD OTTENDORFER* JOHN E. PARSONS* GEORGE FOSTER PEABODY DR. WM. PEPPER* I. N. PHELPS* S. WHITNEY PHŒNIX* HENRY CLAY PIERCE HENRY W. Poor* JOHN H. PRENTICE

PERCY R. PYNE PAUL J. RAINEY CLARK LOMBARD RING I. HAMPDEN ROBB* COLEMAN T. ROBINSON* JOHN D. ROCKEFELLER JOHN D. ROCKEFELLER, JR. WM. ROCKEFELLER COL. ARCHIBALD ROGERS MRS. MARY E. ROGERS* THEODORE ROOSEVELT* THEODORE ROOSEVELT EDWARD S. RUSS* PAUL J. SACHS MRS. PAUL J. SACHS Mrs. Russell Sage WM. SCHAUS F. Augustus Schermerhorn WILLIAM C. SCHERMERHORN* JACOB H. SCHIFF Mrs. Harriet L. Schuyler* HENRY SELIGMAN JESSE SELIGMAN* CHARLES H. SENPF* CHARLES S. SHEPARD EDWARD M. SHEPARD* BENJAMIN B. SHERMAN* WM. D. SLOANE* CHARLES E. SLOCUM, M.D., LL.D.* CHARLES SMETS JAMES BAKER SMITH* CATHERINE L. SPENCER* FREDERIC W. STEVENS D. Jackson Steward* A. T. STEWART* IAMES STOKES* J. G. PHELPS STOKES Mrs. WILLARD STRAIGHT ALEXANDER STUART* ROBERT L. STUART* Mrs. Robert L. Stuart* APPLETON STURGIS* Dr. Elizabeth M. Sturgis FRANK K. STURGIS Mrs. Frank K. Sturgis HENRY C. SWORDS

Percy R. Pyne*

* Deceased.

SAMUEL SWORDS*
JOHN T. TERRY
REV. RODERICK TERRY, D.D.
MRS. F. F. THOMPSON
EDWIN THORNE
JOEL WOLFE THORNE
JONATHAN THORNE*
JONATHAN THORNE
MISS PHEBE ANNA THORNE*
SAMUEL THORNE*
VICTOR CORSE THORNE
JOHN B. TREVOR
MRS. JOHN B. TREVOR

MRS. JOHN B. TREVOR

C. Vanderbilt*
Geo. W. Vanderbilt*
W. K. Vanderbilt
Harold Garrison Villard
Henry Villard*
Rodman Wanamaker
Felix M. Warburg
Edwin H. Weatherbee*
Prof. William M. Wheeler
William C. Whitney*
George W. Wickersham
Richard T. Wilson*
Mrs. Robert Winthrop
Miss C. L. Wolfe*
Iohn D. Wolfe*

FELLOWS

By contribution of \$500, or through honorary election

JOHN ALSTYNE* SAMUEL P. AVERY* CHARLES T. BARNEY* THOMAS BARRON* THE DUKE OF BEDFORD CHARLES L. BERNHEIMER CORTLANDT FIELD BISHOP DAVID WOLFE BISHOP* GEORGE BLISS* TEMPLE BOWDOIN ROBERT S. BREWSTER STEWART BROWN* WM. LANMAN BULL* JOHN L. CADWALADER* JAMES C. CARTER* CHARLES W. CASS* GEORGE W. CASS* Prof. Chas. F. Chandler B. PRESTON CLARK Mrs. Geo. W. Collord* HANSON K. CORNING* Mrs. Richard P. Dana* ALFRED B. DARLING* CHARLES DEERING WILLIAM DEMUTH* WM. EARL DODGE, 4TH

* Deceased.

ABRAM DUBOIS* CYRUS W. FIELD, JR.* TOSIAH M. FISKE* H. M. Flagler* HENRY FORD ROBERT GORDON GEORGE G. GRAY* CHARLES W. GRISWOLD* JOHN A. GROSSBECK* JAMES B. HAGGIN* Louis T. Haggin F. R. HALSEY MISS LAURA P. HALSTED* WM. H. HARBECK* Mrs. Henry O. Havemeyer SAMUEL HAWK* VERY REV. E. A. HOFFMAN, D.D., LL.D.*

H. B. Hollins
Paul Griswold Howes
Meredith Howland*
Samuel N. Hoyt*
D. B. Ivison*
Charles M. Jesup
Aymar Johnson
James H. Jones

Gouverneur Kemble* ROBERT LENOX KENNEDY* WHEATON B. KUNHARDT COL. ANTHONY R. KUSER PROF. WILLIAM LIBBEY A. A. Low* HENRY G. MARQUAND* EMERSON McMILLIN MISS CAROLINE L. MORGAN SAMUEL F. B. MORSE* RICHARD MORTIMER LEVI P. MORTON FRANCIS CHILD NICHOLAS LLOYD PHŒNIX PHILLIPS PHŒNIX HENRY W. Poor* HOWARD POTTER* O. B. POTTER* DR. WILLIAM RADLOFF MARSHALL O. ROBERTS* JOHN D. ROCKEFELLER C. V. S. ROOSEVELT* MRS. HERBERT L. SATTERLEE F. Augustus Schermerhorn H. M. Schieffelin* GRANT B. SCHLEY Mrs. Harriet L. Schuyler* PHILIP SCHUYLER* CHARLES H. SENFF* ELLIOTT F. SHEPARD* JOHN SLOANE* JOHN SNEDEN* D. C. STAPLETON CHARLES STEELE CHARLES D. STICKNEY* MISS CAROLINE PHELPS STOKES* MISS OLIVIA E. PHELPS STOKES MRS. FRANK K. STURGIS RUTHERFURD STUYVESANT* JOHN T. TERRY* Mrs. Ezra Ripley Thayer LEWIS S. THOMPSON JAMES THOMSON* TIFFANY & Co. LUCIUS TUCKERMAN* H. McK. Twombly* LEONIDAS A. VAN PRAAG* GEN. EGBERT L. VIELE, U.S.A.* THOS. A. VYSE, JR.* FREDERIC C. WALCOTT SAMUEL WILLETS* MRS. ROBERT WINTHROP R. A. WITTHAUS, M.D.* MISS CAROLA WOERISHOFFER*

HONORARY FELLOWS

Through election in recognition of distinguished scientific service to the Museum

ROALD AMUNDSEN
DR. BASHFORD DEAN
LIEUT. GEORGE T. EMMONS,

U.S.N.

GEO. BIRD GRINNELL BARON LUDOVIC MONCHEUR REAR-ADMIRAL ROBERT E. PEARY, U.S.N.

HON. THEODORE ROOSEVELT
DR. LEONARD C. SANFORD
SIR ERNEST HENRY SHACKLETON
VILHJALMUR STEFANSSON

LIFE MEMBERS

By contribution of \$100, or through honorary election

Ernest Kempton Adams*
Mrs. Maud W. Adams
C. R. Agnew

G. B. Agnew Carl E. Akeley John E. Alexandre*

^{*} Deceased.

ADMIRAL E. ALEXEIEFF Rev. ARTHUR HUNTINGTON ALLEN RICHARD H. ALLEN* F. D. ALLER BERNARD G. AMEND* F. LOTHROP AMES LARZ ANDERSON Mrs. Blanche L. Andrews* CONSTANT A. ANDREWS FRANCIS R. APPLETON Mrs. Martin Archer-Shee ALLISON V. ARMOUR S. T. Armstrong, M.D. MRS. WILLIAM ARMSTRONG BENJAMIN WALWORTH ARNOLD B. G. ARNOLD* EDWARD W. C. ARNOLD JOHN JACOB ASTOR* VINCENT ASTOR I. T. ATTERBURY* Mrs. Edgar S. Auchincloss, Jr. MRS. EMMA B. AUCHINCLOSS Hugh D. Auchingloss* SAM. SLOAN AUCHINCLOSS MISS FLORENCE AUDUBON MISS MARIA R. AUDUBON MISS M. ELIZA AUDUBON SAMUEL P. AVERY* SAMUEL P. AVERY MRS. JAMES C. AYER* MISS E. AYMAR* JULES S. BACHE JAMES A. BAILEY* IAS. MUHLENBERG BAILEY* MISS CHARLOTTE S. BAKER GEO. F. BAKER, JR. H. MARTYN BAKER EDWIN SWIFT BALCH ALBERT H. BALDWIN CARROLL BALDWIN JOSEPH C. BALDWIN* S. PRENTISS BALDWIN HENRY McC. BANGS DAVID BANKS* HENRY I. BARBEY* THOMAS BARBOUR

Mrs. P. Hackley Barhydt* THOMAS BARING FORDYCE BARKER, M.D.* MISS CORA F. BARNES* JAMES BARNES JOHN S. BARNES* JOHN HENDLEY BARNHART, M.D. JAMES H. BARR GEORGE D. BARRON I. O. Bartholomew* ROBERT A. BARTLETT BERNARD M. BARUCH W. H. Beadleston* C. WILLIAM BEEBE George E. Belcher, M.D.* BERTRAND F. BELL* Mrs. Christopher M. Bell* C. M. Bell, M.D.* Dennistoun M. Bell GORDON KNOX BELL Louis V. Bell WM. F. BELLER AUGUST BELMONT MISS BEATRICE BEND THOMAS G. BENNETT THEODORE BERDELL* C. M. Bergstresser CHARLES L. BERNHEIMER MRS. CHARLES L. BERNHEIMER JOHN E. BERWIND SAMUEL R. BETTS WILLIAM G. BIBB LYNFORD BIDDLE W. LYMAN BIDDLE MRS. ALBERT BIERSTADT* JOHN BIGELOW* MISS ELIZABETH BILLINGS FREDERICK BILLINGS* R. CLIFFORD BLACK* MRS. EMMONS BLAINE I. INSLEY BLAIR T. W. BLAKE Geo. BLEISTEIN MISS CATHERINE A. BLISS* CORNELIUS N. BLISS* CORNELIUS N. BLISS, JR.

^{*} Deceased.

ROBERT WOODS BLISS SAMUEL J. BLOOMINGDALE GEORGE BLUMENTHAL HENRY W. BOETTGER ROBERT BOETTGER EDWARD C. BOHDE A. K. Bolan* GEORGE C. BOLDT* W. B. BOURN FREDERICK G. BOURNE Louis J. Boury MRS. TEMPLE BOWDOIN* GEORGE W. BRACKENRIDGE MRS. WM. H. BRADFORD, SR. JOHN R. BRADLEY ANTHONY N. BRADY* TAMES C. BRADY HENRI M. BRAEM* COURTNEY BRANDRETH Bentamin Brewster* Frederick F. Brewster GEORGE S. BREWSTER WILLIAM BREWSTER Mrs. Samuel W. Bridgham CHARLES LYMAN BRINSMADE CHAS. P. BRITTON* WM. RUTGER BRITTON WILLIAM GOULD BROKAW Addison Brown* Amos P. Brown* DICKSON Q. BROWN FRANK G. BROWN* Geo. McKesson Brown George H. Brown* TAMES M. BROWN* STANLEY DOTY BROWN WM. REYNOLDS BROWN I. Hull Browning* MISS MATILDA W. BRUCE* DAVID LONEY BRUCE-BROWN* WILLIAMSON BUCKMAN George Bullock CAPTAIN GUY H. BURRAGE, U.S.N. R. L. Burton Toseph Bushnell THOMAS C. BUSHNELL*

* Deceased.

B. H. Buxton JOHN L. CADWALADER* REV. HARRY R. CALDWELL W. R. CALLENDER MRS. ALEX. CAMERON FREDERIC ALMY CAMMANN MISS KATHARINE L. CAMMANN* RICHARD CANFIELD* GEORGE B. CASE Mrs. George B. Case EDWARD PEARCE CASEY CHAS. M. CAULDWELL, M.D. ISAAC P. CHAMBERS* C. W. CHAPIN JAMES P. CHAPIN S. B. CHAPIN Mrs. Geo. H. Chatillon HENRY CHAUNCEY* EVERSLEY CHILDS I. E. CHILDS* Hugh J. Chisholm* E. Dwight Church* Frederic E. Church* JAMES A. CHURCH LESTER B. CHURCHILL B. Preston Clark F. AMBROSE CLARK ROBERT STERLING CLARK Augustus L. Clarkson* BANYER CLARKSON George C. Clausen* Mrs. George C. Clausen* CHAS. D. CLEVELAND TREADWELL CLEVELAND HENRY CLEWS WM. P. CLYDE ALEXANDER SMITH COCHRAN ADAM W. S. COCHRANE W. R. Coe CHARLES L. COLBY* W. W. Cole* BIRD S. COLER RUSSELL J. COLES EDWARD COLGATE* RICHARD M. COLGATE S. BAYARD COLGATE

MARCUS DALY

SIDNEY M. COLGATE MRS. SIDNEY M. COLGATE WILLIAM COLGATE ALFRED M. COLLINS MISS ELLEN COLLINS* SAMUEL D. COLLINS GEORGE W. COLLORD* SAMUEL POMEROY COLT CHESTER L. COLTON MRS. WILLIAM COMBE FRED. H. COMSTOCK WASHINGTON E. CONNOR MISS MARIE LOUISE CONSTABLE CHARLES H. CONTOIT* E. C. CONVERSE Mrs. E. C. Converse WM. L. CONYNGHAM* HAROLD J. COOK HENRY H. COOK* C. FORSTER COOPER EDWARD COOPER* HUGH L. COOPER THEODORE COOPER R. R. CORNELL JOHN J. CORNING DANIEL W. CORY Mrs. Sally Morris Cory* ALEX. I. COTHEAL* MISS ELLEN H. COTHEAL* CAPTAIN W. H. COTTINGHAM* JOHN LYMAN COX DAVIES COXE, M.D.* S. D. COYKENDALL* WILLIAM R. CRAIG ZENAS CRANE* GEORGE A. CROCKER, JR. MRS. WILLIAM H. CROCKER FREDERIC CROMWELL* JAMES CRUIKSHANK* WALTER GRAY CRUMP, JR. W. BAYARD CUTTING* MRS. W. BAYARD CUTTING MISS ELEANOR DE GRAFF CUYLER CHAS. M. DA COSTA* ALFRED G. DALE A. DALRYMPLE*

MRS. DAVID T. DANA BENJAMIN P. DAVIS* EDMUND W. DAVIS* MRS. GHERARDI DAVIS WM. T. DAVIS CHAS. STEWART DAVISON HENRY J. DAVISON* HENRY P. DAVISON LEE GARNETT DAY EDGAR DEAL THOMPSON DEAN* Andre de Coppet EDWARD J. DE COPPET GEORGE B. DE FOREST A. V. DE GOICOURIA ALFRED DEJONGE S. DE TONGE ALBERT DELAFIELD LEWIS L. DELAFIELD HENRI DECKERT DE LA MEILLAIE EUGENE DELANO MOREAU DELANO WARREN DELANO Dr. Carlos de la Torre J. H. DE MOTT* WILLIAM DEMUTH* CHAUNCEY M. DEPEW, JR. GEN. J. WATTS DE PEYSTER* CHARLES DE RHAM HENRY A. C. DE RUBIO F. W. DEVOE THEODORE DE WITT WILLIAM G. DE WITT ANTHONY DEY W. B. DICKERMAN MRS. C. N. DIETZ J. W. DIMICK* MRS. HENRY F. DIMOCK MRS. W. B. DINSMORE RAYMOND L. DITMARS CLEVELAND H. DODGE MRS. CLEVELAND H. DODGE MARCELLUS HARTLEY DODGE NORMAN W. DODGE* Peter Doelger*

^{*} Deceased.

HENRY L. DOHERTY PETER DONALD* T. E. DONNE E. J. Donnell* JAMES DOUGLAS JOHN WALDO DOUGLAS ANDREW E. DOUGLASS* MRS. HENRY DRAPER* HENRY C. DRAYTON Miss Ethel Du Bois MISS KATHARINE DU BOIS WILLIAM A. DU BOIS EDWARD L. DUFOURCO A. RADCLYFFE DUGMORE R. G. Dun* WM. BUTLER DUNCAN* DR. CARROLL DUNHAM DR. EDWARD K. DUNHAM JAMES H. DUNHAM* LEWIS L. DUNHAM Dr. Theodore Dunham GEO. ELSWORTH DUNSCOMBE ALFRED I. DU PONT COLEMAN DU PONT MAJOR BASIL HICKS DUTCHER U.S.A.

WILLIAM DUTCHER CLARENCE H. EAGLE GEO. EASTMAN THOMAS T. ECKERT, JR. CHARLES EDDISON CHARLES J. EDER WILLIAM FRANKLIN LUXTON EDWARDS Mrs. David S. Egleston GEORGE EHRET Louis J. Ehret CARL EICKEMEYER OTTO M. EIDLITZ SAMUEL ELLIOTT* JAMES W. ELLSWORTH LINCOLN ELLSWORTH AMBROSE K. ELY* Amos F. Eno*

* Deceased.

WM. P. ENO

DR. HENRY C. ENO*

A. F. ESTABROOK Dr. Evan M. Evans ALLEN W. EVARTS ALESSANDRO FABBRI EBERHARD FABER MRS. ERNEST A. FAIRCHILD PERCIVAL FARQUHAR EDWARD J. FARRELL DANIEL B. FEARING REV. DR. HENRY FERGUSON* CORTLANDT DE PEYSTER FIELD MARSHALL FIELD D. K. ESTE FISHER, JR. IOHN FITCH* WM. L. FLANAGAN* MAX C. FLEISCHMANN Dr. Austin Flint, Jr. PROF. A. E. FOOTE* BRUCE FORD JAMES B. FORD I. HOWARD FORD* IAMES FRASER* MRS. FRANK PIERCE FRAZIER C. LINCOLN FREE FRANCIS P. FREEMAN* CHARLES L. FREER Mrs. John French SETH BARTON FRENCH* CHILDS FRICK VARICK FRISSELL Louis Agassiz Fuertes DALLETT FUGUET HOWARD FUGUET ARTHUR D. GABAY ALFRED WARREN GALE GEORGE GARR* WILLIAM LOUIS GARRELS Francis P. Garvan E. H. GARY I. E. GATES* WILLIAM H. GEBHARD* THEODORE K. GIBBS* FRANK LEGRAND GILLISS DR. GEORGE H. GIRTY PARKE GODWIN* S. A. GOLDSCHMIDT

P. J. GOODHART Dr. Frederic G. Goodridge JAMES J. GOODWIN Mrs. James J. Goodwin STEPHEN T. GORDON* Mrs. W. R. GRACE GEORGE SCOTT GRAHAM MADISON GRANT NORMAN GRANT HORACE GRAY* **JOHN CLINTON GRAY*** ANDREW H. GREEN* E. H. R. GREEN MORRIS M. GREEN JOHN GREENOUGH MISS D. GREER* FRANKLIN U. GREGORY T. A. GRIFFIN* F. GRAY GRISWOLD TOHN N. A. GRISWOLD* JAMES B. M. GROSVENOR* DANIEL GUGGENHEIM S. R. GUGGENHEIM BERNARD G. GUNTHER FRANKLIN L. GUNTHER WILLIAM D. GUTHRIE ALEX. HADDEN, M.D.* JOHN A. HADDEN* ALFRED HAFNER CARL HAGENBECK* Mrs. James B. Haggin MISS E. S. HAINES JOHN P. HAINES RICHARD T. HAINES* W. A. HAINES* Mrs. W. A. Haines* GAYLORD C. HALL MISS LAURA P. HALSTED* WILLIAM M. HALSTED* WILLIAM GASTON HAMILTON* CHARLES E. HANAMAN* H. M. HANNA, JR. W. P. HARDENBERGH J. HORACE HARDING Mrs. Charles W. Harkness* CHAS. W. HARKNESS*

Mrs. Edward S. Harkness HARRY S. HARKNESS Mrs. Stephen V. Harkness Mrs. W. L. HARKNESS Mrs. Fletcher Harper CHARLES J. HARRAH E. H. HARRIMAN* ALAN C. HARRIS EDWARD D. HARRIS N. W. HARRIS* Francis B. Harrison GEORGE L. HARRISON, JR. BENJAMIN HART* DR. LOUIS HAUPT FREDERICK C. HAVEMEYER* WILLIAM F. HAVEMEYER* JACOB HAYS* Mrs. E. Herrman* GEORGE G. HEYE CHARLES C. HIBBARD* JAMES J. HIGGINSON* Mrs. James J. Higginson HUGH HILL FREDERIC DELANO HITCH* Mrs. Frederic Delano Hitch FRANCIS R. HITCHCOCK GARRET A. HOBART MRS. RICHARD MARCH HOE VERY REV. E. A. HOFFMAN, D.D., LL.D.*

GEO. B. HOPKINS Dr. WILLIAM T. HORNADAY THEO. D. HOWELL* MRS. FLORENCE HOWLAND* GEORGE T. HOWLAND, M.D.* ALFRED M. HOYT* ALFRED W. HOYT* JOHN SHERMAN HOYT MARK HOYT* MISS ROSINA S. HOYT THEODORE R. HOYT JOHN HUBBARD GEN. THOMAS H. HUBBARD* Dr. Alex. C. Humphreys RICHARD S. HUNGERFORD WILSON G. HUNT*

^{*} Deceased.

ARCHER M. HUNTINGTON C. P. HUNTINGTON* H. E. HUNTINGTON MISS HELEN HURD FRANK D. HURTT* KARL HUTTER* CLARENCE M. HYDE* Dr. Frederick E. Hyde JAMES H. HYDE HENRY IDEN* GEORGE ILES JOHN V. IRWIN MRS. C. H. ISHAM CHAS. B. ISHAM W. B. ISHAM* PAUL A. ISLER D. B. Ivison* JOHN B. JACKSON THEO. F. JACKSON* V. H. Jackson, M.D., D.D.S. A. Jacobi, M.D. MISS LAURA JACOBI S. K. JACOBS M. R. Jacobus ARTHUR CURTISS JAMES Mrs. Arthur Curtiss James Mrs. D. WILLIS JAMES* MRS. HENRY JAMES, JR. NORMAN JAMES DR. WALTER B. JAMES MICHAEL JENKINS* O. G. Jennings Mrs. Oliver G. Jennings Mrs. James R. Jesup WM. KENNON JEWETT R. D. O. Johnson Mrs. Adrian Hoffman Joline MISS C. O. JONES* Mrs. Edward H. Jones Mrs. A. D. Juilliard* Frederic A. Juilliard CHAS. H. KALBFLEISCH* Mrs. John Innes Kane EPH. A. KARELSEN MRS. E. KEEP-SCHLEY* ALEXANDER SANFORD KELLOGG

PROF. C. R. KELLOGG HENRY C. KELSEY WALTER SCHUYLER KEMEYS GEORGE KEMP* EDWARD DUDLEY KENNA FREDERIC H. KENNARD JOHN S. KENNEDY* RUDOLPH KEPPLER LEWIS SAYRE KERR, JR. SAMUEL KISSAM KERR WM. M. KERR George A. Kessler NATHANIEL T. KIDDER GEORGE GORDON KING JAMES GORE KING, JR. JOHN KING* JOHN ALSOP KING* IRVING B. KINGSFORD A. C. KINGSLAND* WM. M. KINGSLAND* D. P. KINGSLEY STANTON D. KIRKHAM WILLIAM ADAMS KISSAM ALFRED J. KLEIN ARNOLD KNAPP Percival Knauth* THEODOR WHITMAN KNAUTH GEORGE T. KNIGHT* JAMES KNIGHT, M.D.* H. R. KUNHARDT, JR. GEORGE F. KUNZ ALPHONSE H. KURSHEEDT EDWIN KUTTROFF Mrs. Adolf Ladenburg MRS. DANIEL S. LAMONT* HENRY LANG HERBERT LANG Woodbury G. Langdon Dr. F. Lange JACOB LANGELOTH* JOSEPH LAROCOUE* - Dr. J. V. LAUDERDALE JOHN BURLING LAWRENCE Mrs. Samuel Lawrence* JAMES M. LAWTON* MRS. JAMES M. LAWTON

^{*} Deceased.

MRS. FREDERIC S. LEE S. M. LEHMAN CHARLES W. LENG STEPHEN R. LESHER* ALFRED F. LICHTENSTEIN EDWARD H. LITCHFIELD Mrs. Frank Campbell Littleton JOHN R. LIVERMORE* P. W. LIVERMORE EDWARD DE P. LIVINGSTON GOODHUE LIVINGSTON MISS EMMA H. LOCKWOOD MORRIS LOEB* GEORGE C. LONGLEY BERNARD LOTH JOSEPH LOTH* CHAS. H. LOUIS JOHN H. LOVE JAMES LOW* SETH LOW, LL.D.* WM. G. Low Percival Lowell* Dr. Frederic A. Lucas EDWARD LUCKEMEYER* ARTHUR F. LUKE PROF. RICHARD S. LULL DAVID LYDIG* E. H. R. LYMAN* JAMES A. MACDONALD CLARENCE H. MACKAY MALCOLM S. MACKAY MARY SUTTON MACY, M.D. V. EVERIT MACY Mrs. V. Everit Macy MRS. WM. H. MACY. IR. Mrs. John Magee JACOB MAHLER* ALEXANDER MAITLAND* J. MALFEYT EDWARD MALLINCKRODT, JR. GODFREY MANNHEIMER* PETER MARIE* Francis H. Markoe, M.D.* MRS. JOHN MARKOE HENRY G. MARQUAND* LOUIS MARSHALL

W. H. MARSHALL BRADLEY MARTIN* WILLIAM C. MARTIN* GEORGE GRANT MASON IGNAZ MATAUSCH* ALBERT MATHEWS* E. P. MATHEWSON Dr. WILLIAM DILLER MATTHEW GEORGE W. MAYNARD WALTER E. MAYNARD CHAS. W. McAlpin Mrs. D. Hunter McAlpin Mrs. George McAneny JOHN J. McCook* JOHN G. McCullough Mrs. John G. McCullough JOHN B. McDonald* GATES W. McGARRAH GLENN FORD McKINNEY GUY R. McLANE JAMES McLEAN Mrs. James McLean EMERSON McMillin MARION McMillin Mrs. Constance S. Mead George Mercer JOHN W. MERCER MANTON B. METCALF JOHN T. METCALFE, M.D.* DR. A. B. MEYER* JACOB MEYER* Moses Charles Migel CHARLES ADDISON MILLER* CHARLES DUNCAN MILLER Dr. Geo. N. MILLER A. G. MILLS OGDEN L. MILLS RUSSELL HASTINGS MILLWARD CHARLES E. MILMINE MRS. WILLIAM F. MILTON MRS. J. W. MINTURN* ROBERT B. MINTURN* A. M. Post Mitchell ROLAND G. MITCHELL* E. A. Moen* Mrs. Emily H. Moir*

^{*} Deceased.

CHARLES A. MOORE, JR. E. C. Moore* MRS. E. C. MOORE EDWARD C. MOORE, JR. JOHN G. MOORE* WILLIAM H. MOORE CHARLES MORAN* VICTOR MORAWETZ MISS F. T. MORGAN HENRY S. MORGAN Mrs. J. Pierpont Morgan I. P. Morgan J. S. Morgan, Jr. FORDHAM MORRIS* JAMES MORRIS* Dr. Lewis R. Morris NEWBOLD MORRIS DWIGHT W. MORROW MANDEVILLE MOWER* ALFRED H. MULLIKEN HENRY A. MURRAY J. F. FREIRE MURTA PERCY MUSGRAVE THOMAS B. MUSGRAVE* NATHANIEL CUSHING NASH* W. B. NEFTEL, M.D.* ABRAM G. NESBITT H. VICTOR NEWCOMB* ACOSTA NICHOLS Mrs. George Nichols JOHN TREADWELL NICHOLS MORTON C. NICHOLS W. D. Nichols* Mrs. Wm. G. Nichols WM. H. NICHOLS DELANCEY NICOLL WILLIAM NIVEN GEORGE NOTMAN Joseph J. Nunan THOMAS H. O'CONNOR* C. H. ODELL E. Oelbermann* Dr. P. J. OETTINGER IDA H. OGILVIE, PH.D. DUDLEY OLCOTT. 2D MRS. CATHARINE L. OLMSTED* H. O'NEILL* ALBERT OPERTI A. O. OSBORN* Mrs. A. O. Osborn* A. PERRY OSBORN Mrs. H. Fairfield Osborn H. FAIRFIELD OSBORN, JR. Mrs. WILLIAM CHURCH OSBORN RAYMOND C. OSBURN JOHN C. OSGOOD IAMES F. O'SHAUGHNESSY* MISS JULIETTE A. OWEN R. G. PACKARD, JR. BENJAMIN F. PANKEY EDWARD C. PARISH HENRY PARISH* TRENOR L. PARK* EDWARD LUDLOW PARKER DR. JAMES H. PARKER* T. B. PARKER Mrs. Herbert Parsons JOHN E. PARSONS* Mrs. John E. Parsons WILLIAM F. PATTERSON O. H. PAYNE* FRANK E. PEABODY George Foster Peabody WILLIAM I. PEAKE* ALFRED PELL* Mrs. Anne W. Penfield EDMUND PENFOLD Dr. Charles B. Penrose MRS. CHARLES ALBERT PERKINS NORTON PERKINS RUSSELL PERKINS SEYMOUR PERKINS W. H. PERKINS Mrs. Theodore Peters THOMAS M. PETERS W. R. Peters MISS FRANCES PHELPS CAPT. JOHN J. PHELPS PHELPS PHELPS MRS. WM. WALTER PHELPS HENRY PHIPPS HENRY C. PHIPPS

^{*} Deceased.

HENRY CLAY PIERCE ANNA J. PIERREPONT JOHN J. PIERREPONT JULIA J. PIERREPONT GIFFORD PINCHOT GIFFORD PINCHOT, 2D JAMES W. PINCHOT* MISS ROSAMOND PINCHOT S. C. PIRIE HENRY B. PLANT* IOHN PONDIR* GEORGE B. POST HENRY A. V. Post* CHAS. E. POTTS THOMAS POTTS* GEO. D. PRATT HAROLD I. PRATT MISS CORNELIA PRIME FREDERICK T. PROCTOR M. TAYLOR PYNE MRS. PERCY RIVINGTON PYNE Mrs. Samuel Ouincy PAUL I. RAINEY DR. WILLIAM S. RAINSFORD CHARLES T. RAMSDEN GEORGE C. RAND* A. A. RAVEN ISOLINE D. RAY NORMAN B. REAM* HENRY S. REDMOND ISAAC H. REED* J. W. REINHART* ROBERT G. REMSEN* E. W. RICE, JR. WILLIAM LATHROP RICH AUGUSTE RICHARD* GEORGE RICHARDS* Mrs. George H. Richardson CLARENCE B. RIKER JOHN J. RIKER Louis A. Ripley CHANDLER ROBBINS MILTON ROBBINS* WM. M. ROBERTSON HENRY J. ROBINSON J. K. Robinson*

* Deceased.

NELSON ROBINSON JOHN A. ROEBLING ALFRED ROELKER* JOHN ROGER COL. ARCHIBALD ROGERS HENRY H. ROGERS L. HARDING ROGERS, JR. ROBERT ROGERS PHILIP A. ROLLINS Franklin D. Roosevelt MRS. JAMES ROOSEVELT GEORGE D. ROSENGARTEN FREDERICK C. ROWLEY HENRY ROWLEY JACOB RUBINO* C. H. RUDDOCK ARCHIBALD D. RUSSELL Mrs. Horace Russell JOHN D. RYAN THOMAS F. RYAN ARTHUR RYLE PAUL J. SACHS Mrs. Paul J. Sachs F. L. St. John* J. SANFORD SALTUS THE ARCHDUKE LUDWIG SALVATOR* MISS E. LOUISE SANDS WM. R. SANDS* Dr. Leonard C. Sanford HERBERT L. SATTERLEE MRS. ARMAR D. SAUNDERSON EDMUND J. SCHEIDER F. Augustus Schermerhorn ERNEST SCHERNIKOW SAMUEL B. SCHIEFFELIN* SCHUYLER SCHIEFFELIN CHAS. A. SCHIEREN JACOB H. SCHIFF Mrs. Jacob H. Schiff ARNOLD SCHLAET WM. R. SCHMELZEL*

PAUL A. SCHOELLKOPF

CHAS. M. SCHOTT, JR. HERBERT F. SCHWARZ

ROBERT J. F. SCHWARZENBACH

ARCHIBALD T. SCOFIELD MISS GRACE SCOVILLE JAMES A. SCRYMSER WM. F. SEBERT* SIR ERNEST SHACKLETON QUINCY A. SHAW EDWARD SHEARSON ALBERT JAMES SHELDON EDWARD W. SHELDON GEORGE R. SHELDON JAS. O. SHELDON* ELLIOTT F. SHEPARD* FINLEY J. SHEPARD GARDINER SHERMAN* MRS. W. WATTS SHERMAN JOHN H. SHERWOOD* GEORGE SHIRAS, 3D GEORGE P. SHIRAS* I. H. Shoenberger* CHAS. H. SHULTZ HIRAM W. SIBLEY HERMAN SIMON* C. RITCHIE SIMPKINS MISS JEAN WALKER SIMPSON MORTIMER M. SINGER ALANSON SKINNER Francis Skinner JENS SKOUGAARD JOHN R. SLATTERY MRS. E. A. SLAVEN SAMUEL SLOAN* MRS. WILLIAM SLOANE Mrs. William Douglas Sloane CHARLES E. SLOCUM, M.D., LL.D.* ALBERT SMITH Byron L. Smith* Mrs. Charles Stewart Smith HENRY ATTERBURY SMITH HENRY MILFORD SMITH* HOWARD CASWELL SMITH Dr. Hugh M. Smith L. DINWIDDIE SMITH* R. A. C. SMITH S. NEWTON SMITH* DR. EMILIE SNETHLAGE VALENTINE P. SNYDER

NICOLI SOKOLNIKOFF S. N. SOLOMON THOMAS F. SOMERS HENRY F. SPAULDING* MISS CLARA B. SPENCE JAMES SPEYER PAUL CECIL SPOFFORD IOHN A. SPOOR MISS FRANCES E. SPRAGUE Adolfo Stahl GEORGE L. STEBBINS Dr. James H. Stebbins, Jr. JAMES R. STEERS ROBERT D. STERLING LOUIS STERN FRANCIS LYNDE STETSON EDW. R. STETTINIUS ALEX. H. STEVENS* BYAM K. STEVENS* Mrs. Byam K. Stevens C. AMORY STEVENS Mrs. Robert Stewart CHARLES CHAUNCEY STILLMAN Max Wm. Stöhr Anson Phelps Stokes* MISS OLIVIA E. P. STOKES MISS ANNIE STONE ALBERT H. STORER ADOLPH. D. STRAUS ISIDOR STRAUS* IAMES STREAT Mrs. Gustav Stromberg BENJAMIN STRONG, JR. THOMAS W. STRONG* FREDERICK STURGES FRANK K. STURGIS HERMAN STUTZER WILLIAM L. SWAN Miss P. C. Swords* HENRY M. TABER* FREDERICK TAYLOR IRVING K. TAYLOR WILLIAM H. TAYLOR JAMES TERRY* Dr. Allen M. Thomas EMERY J. THOMAS, M.D.

^{*} Deceased.

SAMUEL THOMAS* WM. S. THOMAS. M.D. FRED. F. THOMPSON* COLONEL ROBERT M. THOMPSON WILLIAM BOYCE THOMPSON MISS ANNE THOMSON SAMUEL THORNE* MISS EDITH W. TIEMANN CHARLES E. TILFORD* H. M. TILFORD ROBERT E. TOD A. N. Towne* HENRY R. TOWNE A. B. Townsend* Dr. Charles H. Townsend Effingham Townsend* IRA OTIS TRACY, M.D. SPENCER TRASK* GEORGE A. TREADWELL* WILLIAM TROTTER EDWARD TUCK Mrs. Mary A. Tuttle SEWELL TAPPAN TYNG EDWARD UHL* Frederick Uhlmann* CARL UPMANN FREDERICK T. VAN BEUREN A. VAN CORTLANDT Alfred G. Vanderbilt* C. VANDERBILT* F. W. VANDERBILT GEO. W. VANDERBILT* AMBROSE ELY VANDERPOEL BAREND VAN GERBIG Mrs. Warner M. Van Norden H. D. VAN NOSTRAND* ROBERT A. VAN WYCK Mrs. James M. Varnum Samuel M. Vauclain JAMES DE LANCEY VERPLANCK HERMAN C. VON POST* W. A. WADSWORTH WILLIAM PERKINS WADSWORTH D. EVERETT WAID Frederic C. Walcott ALEXANDER WALKER

Dr. Henry F. Walker* JAMES N. WALLACE RICHARD L. WALSH* HENRY WALTERS Mrs. Felix M. Warburg PAUL M. WARBURG Mrs. Paul M. Warburg CAROLINE CONSTANTIA WARD WILLIAM R. WARREN JOHN I. WATERBURY JAMES S. WATSON Mrs. J. Henry Watson I. GRISWOLD WEBB J. WATSON WEBB SILAS D. WEBB Mrs. William Seward Webb W. SEWARD WEBB BENJAMIN L. WEBSTER CHAS. B. WEBSTER* HAMILTON FISH WEBSTER Mrs. Sidney Webster MISS ALICE DELANO WEEKES Frederic Delano Weekes HENRY DEFOREST WEEKES Col. John Weir* BENTAMIN WELLES FREDERICK B. WENDT* Sol. Wertheim GEORGE PEABODY WETMORE WILLIAM P. WHARTON JAMES DUGALD WHITE JAMES GILBERT WHITE Mrs. Jos. M. White* LOOMIS L. WHITE* CHAS. E. WHITEHEAD* ALFRED R. WHITNEY* ALFRED RUTGERS WHITNEY, JR. Mrs. H. P. WHITNEY Mrs. Delos O. Wickham JAMES B. WILBUR EDWARD KIRK WILLARD ELMORE A. WILLETS HOWARD WILLETS JOHN T. WILLETS* ROBERT R. WILLETS* JOHN J. WILLIAMS

^{*} Deceased.

R. F. WILLIAMS
S. C. WILLIAMS
WILLIAM WILLIAMS
BENJAMIN A. WILLIS*
MRS. M. ORME WILSON
WALTER WINANS
L. STUART WING*
EDWARD WINSLOW*
GRENVILLE L. WINTHROP
WALTER C. WITHERBEE
HENRY R. WOLCOTT
JOHN WOLFE*
MRS. CHAS. BOUGHTON WOOD

EDWIN O. WOOD
WILLIAM M. WOOD
L. G. WOODHOUSE*
DR. ROBERT S. WOODWARD
F. W. WOOLWORTH
JOHN G. WORTH
HENRY H. WOTHERSPOON*
MISS FANNY ELLEN WRIGHT*
JOHN H. WYMAN*
MRS. JOHN J. WYSONG
MRS. CORNELIUS ZABRISKIE
WM. ZIEGLER*

SUSTAINING MEMBERS

By payment of \$25 annually

FRITZ ACHELIS Mrs. John D. Archbold H. D. BABCOCK Mrs. Robt. F. Ballantine DR. EDWIN BEER SAMUEL BIRD, JR. MRS. WALTER PHELPS BLISS MRS. BENT. BREWSTER WILLIAM BRUCE-BROWN Louis Bry R. R. COLGATE Mrs. J. Henry Dick Mrs. James Douglas MRS. H. B. DURYEA MRS. THOMAS A. EDISON A. W. ERICKSON Mrs. L. W. Faber WM. H. FISCHER JOHN W. FROTHINGHAM Mrs. M. Goldfrank HENRY GOLDMAN GEORGE COE GRAVES J. B. GREENHUT Susan D. Griffith EDWARD S. HARKNESS JOHN F. HARRIS HORACE HAVEMEYER A. Augustus Healy

BENJAMIN A. HEGEMAN, JR. MAX HERMAN WALTER C. HUBBARD CONRAD HUBERT MRS. EMILY N. HUYCK JULIUS KAYSER I. PRENTICE KELLOGG SAMUEL KRAUS THEODORE H. LAMPRECHT Mrs. L. H. LAPHAM PHILIP C. LINDGREN ALFRED E. MARLING Otto Maron JAMES MARWICK ROBERT MAXWELL EUGENE MEYER, JR. JOHN G. MILBURN MRS. ELISABETH C. T. MILLER Mrs. Pierpont Morgan ALFRED NATHAN ARTHUR NOTMAN HOWARD NOTMAN Mrs. George W. Perkins MRS. N. M. POND MRS. C. M. PRATT Mrs. Benjamin Prince OGDEN M. REID MISS EMELINE ROACH

^{*} Deceased.

MARIE L. RUSSELL
MORTIMER L. SCHIFF
D. SCHNAKENBERG
EWALD H. SCHNIEWIND
MRS. ISAAC N. SELIGMAN
ELIAS D. SMITH
LISPENARD STEWART
MRS. ROBERT STEWART
WILLIAM R. STEWART
FREDERICK STURGES
ALBERT TAG
C. H. TENNEY

J. Kennedy Tod
Oswald W. Uhl
F. D. Underwood
Mrs. Helen Hall Vail
Mrs. P. A. Valentine
Frederic S. Wells
Harold C. Whitman
Mrs. M. Orme Wilson
Ralph Wurts-Dundas
C. H. Zehnder
Frida Zinsser

ANNUAL MEMBERS

By payment of \$10 annually

Abbe, Robert Aldrich, Spencer Anderson, Mrs. J. Scott Abbott, James Aldridge, Darwin R. Anderson, P. Chauncey Abbott. Aldridge, Mrs. W. H. Andreini, J. M. Mrs. Theodore J. Alexander, Andrew. Mrs. Charles B. Abeel, George Mrs. Henry Hersey Abercrombie, David T. Alexander, Douglas Andrews. Alexander, Harry Abert, Benjamin Mrs. Emma B. Achelis. Alexander, Andrews, W. H. Miss Elizabeth A. Mrs. Henry A. Andrews, W. L. Achelis, Mrs. Fritz Alexander, John F. Annan, Miss Alice H. Achelis, John Alexander, J. S. Ansbacher, David A. Alexander, Mrs. William Ansbacher, Mrs. Louis Acker, Miss A. V. Alexandre, MissAnnaR. Appleton, Ackerman, Ernest R. Alexandre, Mrs. J. E. Adams, Beni. Charles Lanier Adams, F. B. Alexandre. Archbold, John F. Adams, John Dunbar Mrs. Nathalie Archer, Mrs. G. A. Adams, Samuel Alfonseca, Dr. José D. Arend, F. J. Adler, Julius Ochs Alker, Mrs. A. H. Arkush, Reuben Adler, Mortimer C. Alker, James W. Armour, Mrs. H. O. Adler, Siegmund Allen, Calvin H. Arnold, E. H. Adriance, Wm. A. Allen, James Lane Arnold, Mrs. Glover C. Allen, Leroy V. Agar, John G. Arnstein, Mrs. Leo Agnew, Mrs. C. R. Allen, Wm. Hall Aronson, David A. Aitken, John Altschul, C. Arthur, George D. Albright, J. J. Altschul, Frank Ashforth, Albert B. Amerman, Wm. L. Alcuin Preparatory Ashton, School Amory, Copley, Jr. Mrs. M. G. Justin Alden, Percy S. Amy, Ernest J. H. Asiel, E. Aldrich. Amy, L. H. Aspell, John, M.D. Mrs. James Herman Anderson, A. J. C. Ast, Abraham W.

Asten, Mrs. Thomas B. Barber, Thomas H. Atkins, G. W. E. Auchincloss, Mrs. C. C. Auchincloss, Mrs. E. S. Barker, Louis H. Auchincloss, Hugh Auchincloss, John W. Auerbach, Joseph S. Auerbach, Mrs. Jos. S. Barnes, E. W. Auerbach, S. H. Auger, C. L. Austen, Mrs. Vallé Averigg, B. Arthur Aver, James C., M.D. Ayres, Mrs. F. O.

Babcock, W. I. Bacon, Daniel Bacon, Geo. W. Bacon,

Marshal Chandler Barry, Llewellyn Bacon, Mrs. Martha W. Barstow, Frederic D. Baerwald, Paul Bailey, Mrs. A. T. Bailey, Dr. Pearce Baird, Charles Baird, John S. Baker, Alfred L. Baker, Hugh Potter Baker.

Baker, Stephen Baker, W. E. Baldwin, Frederick H. Battin, Mrs. A. Baldwin, Geo. J. Baldwin,

George V. N., Jr. Baldwin, Henry de Forest Baugh,

Baldwin, W. D. Ball, Alwyn, Jr. Ball, T. Arthur Ballard, Charles W. Ballard, Edward L. Ballin, Gustav N. Bangs, F. S. Bannard, Otto T. Barber, Herbert

Barclay,

Mrs. James Lent Beach, Edwin Barlow, Mrs. Francis C. Beadleston, Randolph Barnard, Miss E. J. Barnes, A. Victor Barnes, Henry B. Barnes, J. Sanford Barnes, T. Howard Barnes, Willis A. Barney, Ashbel H. Barney, Edgar S., Sc.D. Beekman, Charles K. Barnum, William M. Barr, James I. Barringer, D. M. Barrows, Ira

Barry, Charles D. Barstow, Geo. E. Bartlett, Philip G. Bartol, Henry G. Barton,

Barton, Mrs. F. O. Bassett, Mrs. John S. Bastedo, W. A., M.D. Mrs. James McF. Bates, James H. S. Bateson,

> Mrs. E. Farrar Battle, Geo. Gordon Bauchle,

> Thomas Henry, Jr. Bauer, Mrs. Louis

Miss Margaret L. Baumgarten, Paul Baumgarten, Paul J. Bausher, C. L. Bava, Felice Baxter, M., Jr. Baylies, Edmund L. Baylis, William Bayne, Mrs. Howard

Bayne,

Mrs. Lawrence P. Beadleston, Edith Beal, Mrs. Robert C. Beall, Jeremiah Beatty, A. Chester Bechstein, A. C. Beck, Martin Beckhard, Martin Beckwith, Edward P. Bedle, J. D. Beekman, Gerard Beer, Mrs. J. Behr, Herman Behrend, Otto F. Beinecke, B. Beller, A. Belmont, August, Jr. Bendernagel, James F. Bendix, Joseph H. Benedict, A. C. Benedict, Miss Clara J. Mrs. C. Vanderbilt Benedict, E. C. Benedict, H. H. Benedict, Lemuel C. Benet, Miss Lillian Benjamin, E. Benjamin,

George Powell Benjamin, Wm. M. Benkard, J. Philip Benson,

Mrs. Clausine M. Benson, Miss Mary Bent, Arthur Cleveland Benton, Andrew A. Benziger, Miss Lulu Bernheim, Mrs. Eli H. Bernheim, Geo. B. Bernheim, Henry J. Bernheim, Isaac J. Bernheim, Mrs. J. C. Bernheimer, Miss Rosie Berolzheimer, Emil

Berolzheimer, Philip Bertron, S. R. Berwind, Edward J. Berwind, Mrs. E. J. Bettens, Edward D. Bevin, Leander A. Bickerton, Joseph P., Jr. Boettger, Theodore Biddle, Mrs. Nicholas Biddle, William C. Bier, Mrs. Sylvan Bigelow, Dr. Wm. S. Biggs,

Bijur, Abraham Bill, Nathan D. Billings, C. K. G. Bing, Alexander M. Binswanger, Max Birkhahn, Robert C. Bishop, H. R. Bishop, Wm. F. Black, George P. Black, Mrs. George P. Borne, Mrs. John E. Black, Mrs. Robert C. Blagden, Mrs. Arthur C. Blagden, Dexter Blagden, Mrs. George Blagden,

Blair, C. Ledvard Blair, Mrs. C. Ledyard Bowman, John McE. Blake.

Mrs. Catharine K. Bradley, Bleecker, Mrs. Theo. B. Bleyer, Alfred Bliss, Brig.-Gen.

Tasker H., U. S. A. Brainard, Block, Henry Blodgett, William T. Blodgett,

Blood,

George Whitefield Bloodgood, Robert F. Bloomingdale, Hiram C. Breslauer, A. Bluen, Mrs. M. J. Blum, Albert

Blum, Mrs. H. L. Blumenthal, B. Blumenthal, Hugo Blumenthal, Sidney Blumgart, Louis Boardman, Miss R. C. Bogert, Miss Anna Bogue, Morton G. Bolton.

Bond, S. N. Hermann M., M.D. Bond, Mrs. Wm. E. Bondy, Richard C. Bondy, Wm. Bonner, G. T. Bonnett, Charles P. Booth, Enos S. Borden, Howard S. Borg, Sidney C. Borg, Mrs. Sidney C. Born, Edward Bouvier, M. C. Bowditch, Charles P. Bowen,

Bowen, Mrs. H. S. Mrs. Samuel P. Bowers, Henry S. Bowers, John M. Braden, Welcome W.

> Bradley, Mary T. Bradley, Wm. H.

Col. David L., U.S.A. Brownell, F. H. Brainard, Frank Braman, Chester A. William T., 3d Brawner, A. H. Breckinridge,

Brennan, Edmund M. Brewer, Horatio J. Brewster, William

Briesen, Arthur v. Briggs, James Ellis Brightman, F. C. M. Brill, Dr. A. A. Brill, Henry S. Bristol, John I. D. Bristow, William B. Brite, Mrs. James Britton, Dr. N. L. Brokaw, Clifford V. Reginald Pelham Bronson, Dr. E. B. Brookfield.

> Mrs. William Brookman, Mrs. H. D. Brooks,

> Mrs. Charles H. Brooks, Dr. Harlow Brooks, J. Arthur Broughton.

Mrs. Urban H. Broun, LeRoy, M.D. Brower, Wm. L. Brown, Charles F. Brown, Charles Hilton Brown, Charles S., Jr. Brown, Edwin H. Mrs. Clarence W. Brown, Ernest Clive Brown, Franklin O. Brown,

Mrs. Franklin O. Brown, J. Adams Brown, J. Alexander Brown, Lathron Daniel Richards Brown, Thatcher M. Brown, Vernon C. Brown, Wm. Adams Browne, Dr. Charles Browning, J. A. Browning, Mrs. J. Hull Bruggerhof, F. W. Bruns, Edwin G. Mrs. John C. Brunswick, Mrs. E. Brussel, Mrs. Dennis G. Bryce, William Bryson, T. B. Buckner, M. N.

Buckner, Thos. A. Bulkley, Edwin M. Bulkley, Mrs. Edwin M. Cammann, Miss I. M. Bulkley, Jonathan Bulkley, Mrs. Jonathan Campbell, Dr. C. G. Bulkley,

Bunker, William Burden, James A. Burden, Mrs. Jas. A., Jr. Cannon, H. W. Burden, Mrs. W. A. M. Cannon, Mrs. S. T. Burghard,

Burhorn, Edwin Burke, Mrs. J. K. Burke, Mrs. Martin Burleigh,

Burleigh, George Wm. Burnham, Wm. Burns, William J. Burr, Algernon T. Burr, Geo. H. Burr, Winthrop Burr, Wm. H. Burroughs, Chas. W. Bush, D. Fairfax Bushnell, Charles E. Busk, Fred T. Butler, Charles S. Butler, Dr. E. Santley Butler.

Butler, Miss Helen C. Butler, Maxwell Evarts Chaires, Miss Anna E. Claffin, George E. Butler, Miss Virginia Butler, Wm. Allen Butler, Mrs. Wm. Allen Chambers, Hilary R. Button, Mrs. W. H. Byrne, James Byrne, Mrs. James

Cæsar, H. A. Cahn, Mrs. Leopold Cahn, Mrs. S. Caldwell, Edward T. Calman, Henry L.

Cammann, Henry L. Cammann, H. H. Camp, Edward B. Campbell, J. W. C. L. Duncan, M.D. Campbell, Malcolm Canfield, Frederick A. Cheney, Geo. L. Canfield, George F. Capen, Mrs. Frances I. Chew, Beverly

Mrs. Edward M. Carden, Richard A. Cardozo, Ernest A. Carey, H. T. Carlebach, Emil Carlisle, G. Lister, Jr. Mrs. George W. Carlisle, Mrs. G.

Carlton, Newcomb Carnegie, Mrs. GeorgeL. Carpender, Wm. Carpenter, Chas. W. Carr, Augusta G. Carr, Herbert J. Carse, John B. Carter, Ernest T. Carter, Robert A.

Carty, John J. Case, Charles L. Case, J. Herbert Caspary, A. H. Ethan Flagg, M.D. Cassard, Wm. J.

Chaim, Morris L., M.D. Cillis, Hubert Chambers, Frank R. Chambers, Geo. J. Champ, William S.

Chandler, Percy M. Chandor,

Miss Valentine L. Clark, Clarence M. Chapin, G. E. Chapin,

Chapman, Clarence E. Chapman,

Mrs. John Jay Chappell, Walter F. Charles, Lillian M. Chatillon, George E. Chaves, José E. Cheney, Mrs. K. D., Jr. Cheney, O. H. Chesebrough, W. H. Child, Miss Ruth Auchincloss

Childs, S. W. Childs, Mrs. Starling W. Childs, Wm., Jr. Chilton, H. P. Lister, Jr. Chisholm, George E. Chisholm, Hugh J. Chisolm, B. Ogden Chisolm,

Mrs. B. Ogden Chisolm,

Mrs. George E. Choate, Mabel Choate, Wm. G. Christie, R. E. Chubb, Percy Chubb, S. H. Church, Charles B. Church, C. T. Church, Louis P. Claflin, John Clancy, John Evarts

Clapp, A. P. Clapp, George H. Champollion, André C. Clark, Ambrose R. (In Memoriam) Clark, A. Wayne

Clark, Bernard S. Clark, Charles Martin

Clark, D. Crawford Clark, Edward S. Miss Maria Bowen Clark, Miss E. Mabel Clark, Miss Emily Vernon Cole, Frederic A. Clark, George C. Clark, Henry A. Clark, John M. Clark, Mrs. John Peyton Clark, Julian B. Clark, J. William Clark, Louis C. Clark, Thos. F. Clark, W. A. Clark, William N. Clarke, E. A. S. Clarke, Thomas B. Clarke, Thomas Shields Colt, Harris D. Clarkson, Miss Annie Clarkson, Ashton C. Clausen, George U. Clayburgh, Albert Clemens, Dr. James B. Conheim, Hermann Clerici, John Cleveland.

Clement, M.D. Connell, Clinch, Edward S. Close, Walter H. Clowes, Frederick V. Clowry, Robert C. Cobb, Frank I. Cochran, G. D. Cochrane, A. DeWitt Coddington, Mrs.

Clarence Morgan Cook, Robert H. Coffin, Miss Alice S. Coffin, C. A. Coffin, Edmund Coffin, Francis A. Coffin, I. Sherwood Coffin, Wm. Edward Coffin, William S. Coggeshall, Edwin W. Cogswell, W. B. Cohen, Benno Cohen, De Witt Clinton Corson, H. C. Cohen, Julius Henry Cohen, Dr. Martin Cohen, Max Cohen, Wm. N.

Cohn, Mrs. J. M. Cole, Mrs. Rufus Colebrook, Charles B. Colfelt,

Colgate, Mrs. A. W. Colgate, Gilbert Colgate, Mrs. Gilbert Colgate, James C. Collier, Robert J. Collins, Charles Collins, C. L. Colon, George Edward Colt, Richard C. Conboy, Martin Condit, Wm. L. Cone, Frederick H. Conklin, Roland R. Conkling, Paul B.

Connett, E. V., Jr. Content. Walter Cook, Mrs. Alfred A. Cook, Charles S. Cook, Mrs. Chas. T. Cook.

Miss Lilian Gillette Cullman, Jos. F. Cooley, Mrs. Elmer E. Curiel, H. Coolidge, Mrs. F. S. Cooper,

Cooper, F. G. Corbin, Austin Cordley, Frank R. Corlies, Howard Corn, Mrs. Joseph J. Corning, Christopher R. Cutler, J. Warren Costello, Alfred Coster, Mrs. C. H. Coulter, Elmer Dean

Coutant, Dr. R. B.

Cowdin, Winthrop Cowl. Clarkson Crabbe, Miss Louise G. Crain, Miss Christobelle Crane, Charles R. Mrs. Rebecca McM. Crane, H. M. Crane,

Mrs. Jonathan H. Cravath, Mrs. Paul D. Cravath, Miss Vera A.H. Crawford, R. L. Crawford, Wm. Crehore, Frederic M. Crider, George A. Crile, George W., M.D. Crimmins, Mrs. Thomas

Crocker, William H. Crocker, W. T. Crockett, Mrs. Stuart Cromwell, Miss Gladys Cromwell, James W. Cromwell, Lincoln Herbert Stanley Cromwell, Seymour L. Crosby, Maunsell S. Crosby.

Nicholas Evertson Cross, George D. Cross, Richard J. Cross, W. R. Curie, Chas. Curtis, F. Kingsbury Curtis, G. Warrington Mrs. Charles W. Curtis, Ronald Eliot

> Curtis, W. J. Curtis, Wm. Edmond Curtiss, Roy Cushing, Howard G., Jr. Cutcheon, F. W. M. Cutter, Ralph L.

Daily, George M. Dakin, Mrs. Henry Drysdale Dallett, Frederic A. de Lagarde, Doelger, Charles P. Cécile Denis Doelger, Frank G. Dalziel, Mrs. F. Dominick, Bayard, Jr. Dana, Charles L., M.D. Delamar, Alice A. Dominick, H. B. De Lamar, J. R. Dana, Paul Dommerich, L. W. Danforth, Delano, Lyman Mrs. George H. Delano, Moreau Dommerich, O. L. De Lanoy, William C. Donohugh, Daniels, Lorenzo Danziger, Virginia de Laugier-Villars, Mrs. Agnes C. L. Countess Dorman, Benjamin Davenport, Mrs. Ira Dorr, John V. N. Delin, B. Davey, Wm. Nelson Davidge, Wm. H. Deming, L. C. Dorrance, Saml. R. Demuth, Leopold Dorsett, R. Clarence Davies, J. Clarence Doscher, Henry Dennis, John B. Davies, Julien T. Doubleday, F. N. Davis, Denny, Mrs. Lucy W. Rear-Admiral C. H. Denton, Dr. Myron P. Doughty, Edgar M. Douglas, Miss Elizabeth Davis, David T. DePuy, Mrs. Henry F. De Sola, Mrs. J. C. Douglas, Davis, Everly M. Frederic Huntington Davis, Dr. Geo. E. Despard, Walter D. Davis, George S. Deutsch, Alexander Douglas, Walter Douglas, Wm. Harris Davis, Gherardi DeVinne, T. B. de Witt, Miss Helen A. Douglass, Alfred Davis, John W. A. DeWolf, W. Ashley Douglass, Benjamin, Jr. Davis, Leonard M. Douglass, Mrs. Charles Davis, Morgan Devo, Robert E. Douglass, Mrs. G. A. Davis, Mrs. William C. Dick, J. Henry Dow, Mrs. Frederic G. Davison, Miss Alice M. Dickerman, Davison, Alvah Mrs. Wm. C. Dow, R. P. Davison, C. B. Dowd, Joseph Dickey, Charles D. Dowd, William B. Davison, Miss E. H. Dickey, Mrs. Charles D. Downes, Davison, E. Mora Day, Miss Sarah J. Diedel, Henry R. William A., M.D. Diefenthäler, Downey, John I. Dazian, Henry Charles E. Dows, David Dean, Miss Florence Dean, Geo. Hamilton Dieterich, Chas. F. Dows, Mrs. David Dill, Miss Mary A. Drake, Miss Mary E. de Bary, A. Dillon, Mrs. John M. Draper, Charles D. de Bruÿn, I. Dilworth, Jos. R. Draper. De Buys, A. Mrs. William K. Deeves, Richard Dimmick, J. Benjamin Draper, Mrs. Wm. P. Dittenhoefer, I. M. de Forest, H. W. Drayton, J. Coleman de Forest, Johnston Dix, John A. de Forest, Lockwood Drexel, Mrs. John R. Dix, Mrs. Morgan Dreyfuss, Ludwig de Forest, Robert W. Dobbyn, William A. Dodd, Miss Gertrude Drummond, de Forest. Isaac Wyman Mrs. Robert W. Dodds, Lida L. Degener, John F. Dodge, DuBois, Arthur Mrs. Arthur M. DuBois, Eugene Degener, John F., Jr. De Klyn, B. F. Dodge, Rev. D. Stuart DuBois, Delafield, Frederick P. Dodge, Francis P. Dr. Matthew B.

DuBois. Dudley, P. H. Duell, Holland S. Duer, Mrs. J. B. Duncan, Frederick S. Duncan, Mrs. John P. Duncan, Stuart Dunham, Mrs. Carroll Dunham, H. F. Dunlap, Mrs. R. Dunn, Gano Dunn, Henry E. Dunning, Dr. William B. Ellis, W. H.

du Pont, Henry F. Durkee, Eugene W. Du Val, Guy Duvall, William C. Dwight, A. S. Dwight, John E. Dwight,

Dwight, Mrs. M. E. Dworetzky, Morris Dyer, Leonard H.

Eaton, Geo. Dummer Eckart, Edmund Ecker, F. H. Eckstein, H. E. Eckstein, M. Maurice Eckstein, W. G. Eddy, Geo. Simpson Eder, James M. Edgar,

Edgar, Mrs. J. Clifton Erlanger, Milton S. Edgell, Mrs. George S. Ernst, Irving L. Edie, Richard, Jr. Edmonds, John W. Edson, Mrs. J. B. Eger, Theodore G. Egleston, Melville Ehret, George, Jr. Ehrich, Jules S. Ehrich, Samuel W.

Ehrich, Mrs. Wm. J. Mrs. Matthew B. Ehrmann, Mrs. E. Eilers, Karl Eilers, Miss Meta Eilshemius, Henry G. Eimer, A. O. Eimer, August Einstein, I. D. Eisman, Max Eldridge, Lewis A. Elgar, Benj. F., 2d Elkan, Benno Ellinger, Ernest Ellis, S. A. Ellis, Wm. D. Elmer, C. W. Emanuel,

Embury, Emerson, Mrs. Wm. Jonathan, M.D. Emmet, C. Temple Emmet, Miss Lydia F. Ferguson, Walton Emmet, Robert Temple Ferguson, William C. Endicott, William

> Enelow, H. G. Eno, Miss Mary

Erb. Newman Erbsloh, R. Erdmann, Martin Erdmann, William Erdwurm.

Frank, M.D. Mrs. Herman LeRoy Erlanger, Abraham Erstein, Benedict Esberg, Henry Ethical Culture School Fiske, Alex. P. Ettlinger, Louis Evans, Dr. Samuel M. Everett, Mrs. Leo Ewing, B. M. Ewing, Charles

Fabbri, Ernesto G. Fabricius, Dr. J. R. Fahnestock, Harris Fairchild, Charles S. Fairchild, Mrs. Chas. S. Fairchild, S. W. Falk, Mrs. G. Falk, Kaufman George Farish, John B. Farnam, Thomas W. Farnham,

Mrs. Horace P. Farnsworth, William Farrel, Mrs. Franklin Farrell, James C. Fatman, Morris Fatman, S. A. Fay, Dudley B. John Henderson, Jr. Fearing, George R. Feder, Mrs. Joel Miss Emma C. Ferguson, Alfred L. Ferguson,

> Mrs. Farguhar Ferris, Frank A. Crowninshield Festetics, Countess E. Feustman, L. P. Field, Wm. B. Osgood Pinchot Field,

> > Mrs. Wm. B. Osgood Finch, Edward B., M.D.

Firuski, Louis L. Fischer.

Hermann, M.D. Fischer, T. Tasso Fisher, L. G. Fisher, Mrs. P. L. Fisher, Miss Ruth B. Fisk, Pliny Fiske, John S. Fitch, Ezra H. Fitzgerald, Mrs. Louis Flagler, Harry Harkness

164 Flagler, John H. Flannery. Mrs. Joseph A. Frank, Joseph Fleck, Dr. Charles E. Fleischer, Nathan Fleitmann, Fred. T. Fleitmann, H. C. Fleming, Henry S. Fleming, Matthew C. Fleming, Stephen B. Flesh, William J. Fletcher, Henry Flexner, Mrs. Simon Flint, Chas. R. Floyd, William Floyd, William T. Floyd-Jones, Edward H. Frazier, W. W. Fohr, Franz Follett, Richard E. Follmer, Charles J. Folsom, H. Lloyd Foot, Miss Katharine Foot, Sandford D. Foran, George J. Ford, Franklin Fordyce, Dr. John A. Forni. Madame F. G. Fara Friedlander, Wm. S. Forsch, Mrs. F. Forsyth, Robert Foshay, P. Maxwell Foster, Edward W. Foster, Harold A.,

M.D.

Foster, Macomb G. Foster, Mortimer B. Foster, Scott Fowler, A. A. Fowler, Mrs. Thomas

Fox, Miss Alice Bleecker

Fox, Hugh F. Fox, Mortimer J. Fox, Thomas Francis

Fox, William Frank, Edgar E. Frank, Joseph S. Franke, Julius Frankel, D. J. Frankel, Herbert Frankenberg, Henry E. Garrett, Robert Frankenberg.

Frankenstein, Edwin Frankfield, A. Frankfort, M. Franklin, George S. Fraser, George C. Fraser, Miss J. K. Fraser, Miss S. Grace Freeland, Arthur G. Frelinghuysen,

Frederick Gibb, Dr. W. Travis French, Daniel C. French, Mrs. Daniel C. Frenkel, Emil Freund, Mrs. E. Frew, Walter E. Friedlander, Louis Friedlander, Victor Fries, Miss Emilie Fries, Harold H. Frissell, A. S. Frissell, Miss Leila S. Frothingham, Mrs.

Frye, Jed Fuld, Felix Fuld, Sol. Fuller, Mrs. Eugene Fowler, Mrs. R. L., Jr. Fulton, Robert Edison Godfrey, Mrs. E. D.

Powell Gaillard, Mrs. Wm. D. Goldman, Julius Gaines, Mrs.

Gallatin, Albert Gallatin, Mrs. Albert Gallatin, Goelet

Gambier, E. V. Gardin, John E. Gardiner, Robert A. Garrard,

Miss Margaret H.

Garrett, John W. Garrett, Laura B. Gartland, George E. Werner V. Garver, John A. Gaston, Wm. G. Gautier, Dudley G. Gawtry, H. E. Gayley, Florence Gayley, Mrs. Gardiner Geer, Robert C. Geer, Walter Gelshenen, William H. Gerrish, Frank Scott Gerry, Robert L.

Gibson. Miss Florence Wier Gilbert, Mrs. C. Gilbert, Clinton Gilbert, Miss Ellen G. Gilbreth, Frank B. Gillespie, Robert McM. Gillies, Edwin J. Gilroy, Thomas F., Jr. Gips, Walter Fuld Gladding, J. R. Glazier, Henry S. Gleason, Henry Randolph Glenn, John M. Goadby, W. H. Goddard, Annie C.

Mrs. Frederic N. Goldman, Albert Goldman, Samuel P. Furman V. Goldsmith, Frederick Goldsmith, Mrs. H. B. Goldsmith, James A.

Goddard.

Goldstone, Abraham L.

Goldwasser, I. Edwin Goldzier, Morris Goodfriend, Jacob Goodfriend, Meyer Goodhue, Chas. E. Goodman, S. A. Goodwin, Walter L. Gottgetreu, Wm. Gottheil, Leon Gottheil, Mrs. Paul Gotthold, Arthur F. Gould, Charles A. Gould, Edwin Gould, Horace S. Grace, Mrs. L. A. Graham, Miss M. D. Grasselli, C. A. Graves, Henry, Jr. Gray, Henry G. Graydon,

Greeff, Bernhard, Jr. Greeff, Ernest F. Green, Fred W. Greenberger, Albert Greene, Miss

Greene, G. S., Jr. Greene, John Arthur Greenebaum, Fred H. Greenhut, Benedict J. Greening, Alfred C. Greenwood,

Greer, Charles Greer, Rt. Rev.

David H. Greer, Mrs. David H. Greer, Louis M. Griffith, Edward Grinnell, E. Morgan Griscom, C. A. Griswold, Mrs. Chester Gross, Moritz Grossmann,

Grundner, M.

Gude, O. J. Guernsey,

Guggenheim, Harry F. Hammond, Guggenheim, Simon Guggenheim, William Guinness,

Guinzburg, A. M. Guinzburg, Mrs. Victor Hanna, Elizabeth Guiteras, Ramon Guiterman, Rudolph Gurnee, Mrs. Walter S. Hard, De Courcy L. Gushee, R. A. Guye, C. H.

Haas, Kalman Hage, Daniel S. Hague, Miss Marian Hague, William Mrs. Clendenen Hahlo, Arthur H. Haines, Charles D. Hale, Thomas Hall, Henry J. S. Hall, Henry Walker Hall. Mrs. John H. Augusta Borland Halls, William, Jr. Halsev.

Halsey, Robert H. Halsey, R. T. H. Hamann, Wm. A. Hamburger, L. Miss Eliza R. Hamburger, Samuel B. Hartshorn, Stewart

> Hamersley. Hamilton, Alexander Hamilton, Miss E. S.

Hamilton, Hamlen.

Dr. George Dempster Havemeyer, H. O. Hammerslough,

Hammill, C. W.

Hammond,

Mrs. John Hays Henry William Hammond, Ogden H.

Mrs. John Henry Hanauer, Jerome J. Hance, John A. Mrs. Benjamin Hand, Joseph C. Handy, Parker D. Hanna, L. C. Hansen, Ferdinand Hardenbergh, Mrs. T.E. Hardenbergh.

Mrs. W. P.

Hardon.

Mrs. Henry W. Hardtmayer, Dr. H. R. Hardy, Charles J. Hardy,

Dr. Sarah Belcher Hare, J. Montgomery Harkness, David W. Harmon, Mrs. Clifford Harmon,

Mrs. Frank D. Harriman, E. Roland Mrs. Frederick A. Harrington, Mary E. Harris, Abraham Harris, Alfred Harris, William H. Harrison, Archibald Hamerschlag, Royal P. Haskell, J. Amory Haskin, Dr. W. H. Louis Gordon Hasslacher, Jacob Hastings, Thomas Hastings, Mrs. Thomas Hately, John C. Mrs. W. Pierson Hathaway, Charles Havemeyer, F. C. Havemeyer, J. C.

Edward Havemeyer, John F. Mrs. Edward A. Hammerslough, Samuel Havemeyer, T. A.

Haven, Mrs. G. G.

166 Haven, J. Woodward Haviland, Paul B. Hawk, William S. Hawk, Mrs. William Samuel Herrmann, Charles E. Hawkes, Eva Hawkes. Mrs. McDougall Herty, Chas. H. Hawkins, Eugene D. Hawley, Mrs. Henry E. Herzig, Mrs. Joseph Hawley, Samuel B. Haynes, W. deF. Hayward, J. B. Hazard, Rowland G. Hazen, George H. Heck, George C. Heckscher, Mrs. G. Hedges, Job E. Heinsheimer, Alfred M.

Heide, Henry Heide, Henry, Jr. Heide, Herman L. Heimann, Julius Held, Max Heller, Abraham A. Heller, Samuel Heller, William H. Hellman, Edgar A. Helme, Mrs. Geo. A. Helmer, Mrs. G. J. Helmuth.

Hencken, Hancke Henderson, John B., Jr. Hendricks, Mrs. Edgar Hine, Francis L. Hendricks, Harmon W. Hine, Lyman N. Henry, Miss H. Maud Henry, James Henry, Philip W. Hepburn, A. B. Herbert, Victor Hering, Henry Hernsheim, Joseph Hernstadt, William L. Heroy, Mrs. James H. Hirschhorn, Fred Heroy, W. W.

Herreshoff,

J. B. Francis Herrick, Harold Herrick, Mrs. W. W. Herrmann, F. Herter, Albert Herz, Fred. W. Herzog, Max Hess, Dr. Alfred F. Hess, Selmar Hess, Simon Hetzler, Theo.

Hewitt, Mrs. C. R. Maurice Hewitt, Peter Cooper Hewlett, Walter Jones Hoisington, Heydt, Herman A. Heymann, Albert Heymann, Seymour E. Holden, Mrs. Edwin B. Hicks.

Mrs. Frederick C. Hollenback, Hicks, John M. W. Higbie, James S. Higgins, Arthur G. Highet, Frank B. Hilder, Moritz Hillard, Henry R. Hills, Dr. Alfred K. Hilyard, George D. John Lockman Hinchman, Walter Hinckley.

Hine, Thomas A. Hines, Walker D. Hirsch, Chas. S. Hirsch, Mrs. H. Hirsch, Morris J. Hirschberg, M. H. Hirschhorn.

Mrs. Charles Hirschland, F. H.

Hoagland,

Mrs. Joseph C. Hochschild, Berthold Hodenpyl, Anton G. Hodges, Geo. W. Hodson.

Mrs. Halstead Pell Hoe, Alfred G. Hoe, Geo. E. Hoe, Richard M. Hoe, Mrs. Robert Hoffman, Charles W. Hoffman, F. B. Hoffman.

Wm. Wickham Hewitt, Mrs. Charles B. Hoffmann, Bernhard Hogan, Mrs. Jefferson Hoggson, W. J.

Frederick R. Holbrook, Mrs. Edward Holland, Arthur L.

Miss Amelia B. Hollister.

Frank C., M.D. Hollister, George Clay Hollister, Granger A. Holt, Henry Holt, L. Emmett, M.D. Holt, R. S. Holter, Mrs. E. O. Holzmaister, L. V. Mrs. Samuel N. Holzman, Elkan Homan, B. H. Homans, Howard P. Homer, Francis T. Honig, Joseph Hooke, Harvey Lewis

> Mrs. Ransom S. Hopkins,

> Hooker, Mrs. Elon H.

Hooker.

Miss Augusta D. Hopkins, Russell Hoppin, G. Beekman

Hoppin,	Hutchison,	Jarvie, James N.
Mrs. W. W., Jr. Hopwood,	Miller Reese, Ph.D. Huyler, C. D.	Jarvis, Mrs. S. M. Jasper, J. H.
Mrs. Everard B.		Jay, Mrs. Augustus
Horr, A. R.	Huyler, Frank DeK.	Jekyll, Mrs. Arthur B.
Horr, L. Wm.	Hyatt, A. M.	Jenkins, Alfred W.
Hotchkiss, Henry D.	Hyde, A. Fillmore	Jennings, Miss A. B.
Houghton, Clement S.	Hyde, Arthur S.	Jennings, Mrs. Philip B.
House, Edward M.	Hyde,	Jennings, Robt. E.
House, Frederick B.		Jennings, Walter
Housman, Clarence J.	Hyde, Mrs. Clarence M.	
Howell, M. D.	Hyde, E. Francis	(In Memoriam)
Howells, Mrs. John	Hyde,	Jobe, Miss Mary L.
Howes, Mrs. Reuben Hoyt, Elizabeth S.	Hyde, W. Truslow	Johnson, Alfred J. Johnson, Mrs. Bradish
Hoyt, Francis S.	Tryde, W. Trustow	Johnson, Guy B.
Hoyt, Geo. S.	Ingalls, Fay	Johnson, Mrs. Harry T.
Hoyt, Gerald L.	Ingraham, Geo. L.	Johnson, Mrs. Pitney
Hoyt, Miss Gertrude L.	Ingraham, Mrs. George	Johnston, Edwin C.
Hubbard,	Inman, John H.	Johnston, J. Herbert
Ernest V., M.D.		Johnston,
Huber, Mrs. J. M.	Iselin, C. Oliver	Mrs. J. Herbert
Hudson, Percy K.	Iselin, Miss Georgine	Jones,
Huff, E. S. Huidekoper, Edgar	Iselin, John H. Iselin, Lewis	Mrs. Adam Leroy Jones, A. H.
Humphrey,		Jones, Mrs. Cadwalader
Rev. Wm. Brewster		Jones, H. Bolton
Humphreys, Frederic E.		Joseph,
Humphreys, Frederic H.		Mrs. John A., Jr.
Humphreys, Geo. H.	Jackson, Mrs. C. D.	Josephthal, Louis M.
Hunter, Mrs. Robert	Jackson,	Judson, Mrs. Albert L.
Huntington, F. J.		Judson, Henry I.
Huntington,	Jackson, Mrs. Frederic W.	Jungbluth, Karl
Mrs. Robt. P. Huntington, Mrs. R. P.		Kahn, Otto H.
Hüpfel, Adolph G.	Jackson, Mrs. Percy	Kahn, Dr. Robert
Hüpfel, J. Chr. G.	Jackson, Samuel	Johnstone
Hurd, Dr. Lee M.	Jacobus, John S.	Kahrs, J. Henry
Hurlbut, Miss	Jaffray, Robert	Kane, Mrs. De Lancey
Margaret C.	James, Ellerton	Kassing, Edwin S.
Hussey, William H.	James, Henry	Kathan, Reid A.
Husted, Miss	James, Robert C.	Kaufman, Mrs. S. R.
	James, Mrs. Walter B.	
Husted, Seymour L., Jr. Hutchins,		Kaufmann, H. M. Kaufmann, Julius
Mrs. R. G., Jr.		Kautz-Eulenburg,
Hutchinson, Cary T.		Miss P. R.

Kursheedt, Roland S. Kingsford, Daniel P. Kean. Mrs. Hamilton Fish Kingsford, Miss Kuser. Keane, Edwin J. Margaret S. Mrs. Anthony R. Keech, Mrs. Frank Kingsland, Kuser, John Dryden Mrs. Wm. M. Kuttroff, Adolf Browne Kingsley, W. M. Kuttroff, Fredk. Keeler, Mrs. Charles Bradley Kinney, Morris Kinney, Warren Lacombe, E. Henry Keen, Barton L. La Dow, Stanley V. Keith, Henry M. Kip, W. Ruloff Keith, Minor C. Kirchberger, M. Lagai, Dr. G. Keith, Mrs. Minor C. Kirkpatrick, Lagowitz, Miss H. L. Kelchner, William W. Mrs. Thomas Lamarche. Kissam, Mrs. Maude Mrs. Henry J. Keller, S. Kellers, Fred. T. Kissel, Mrs. G. E. Lambden, John F. Kissel, W. Thorn Kellogg, L. D. Lambelet, Henry Klein, Leo M. Lambert, Adrian V. S. Kellogg. Mrs. Morris W. Klenke, William H. Lambert, Samuel W. Kemmerer, M. S. Klipstein, E. C. Lamont, T. W. Kemp, Mrs. Edward Knapp, Edward J. L'Amoreaux, J. S. Kemp, Prof. James F. Landon, Francis G. Knapp, Mrs. H. K. Kempner, Elias Landon, Henry Hutton Knapp, Joseph P. Kennan, George Knoedler, Roland F. Lane, Edward V. Z. Kennedy, Dr. Harris Knowlton, Eben B. Lane, James Warren Kennedy, Mrs. John S. Koch, William T. Lane, Wolcott G. Kennerley, Helen M. Koenig, Otto Langeloth, Mrs. Jacob Kent, Edwin C. Kohler, Miss M. E. Langenberger-Jones, Keppel, David Mabel Kohlman, Chas. Kerr, E. Coe Kohn, Elsie B. Langmann, Mrs. G. Kerr, John B. Kohn, S. H. Lanier, Reginald B. Kerr, John Clapperton Kohns, Lee Lapham, Mrs. John J. Kerr, Walter Kohnstamm, Emil V. Lapham, Lewis H. Kerrison, Dr. Philip D. Koles, Henry M., M.D. Lapsley, Anna Welsh Keuffel, W. G. Konta, Alexander Lathers, Agnes Keyes, Dr. E. L. Koplik, Isador Lathrop, Alanson P. Keyser, Mrs. Samuel Kops, Mrs. Max Lauder, Geo., Jr. Kidder, Edward H. Kosmak, Geo. W., M.D. Lauer, Edgar J. Kilborne, Mrs. R. S. Kremer. Laughlin, James, Jr. Killeen, Edward V. Mrs. William N. Lauterbach, Edward Kilner, S. E. Kruse, Edward H. La Vie, Geo. A. Kimball, Alfred R. Law, Frank E. Kudlich, H. C. Kimbel, Anthony Kuhn, Arthur K. Lawrence, Emlen N. Kimbel, Henry Lawrence. Kuhn, August King, Mrs. Edward Kuhn, Edward Miss Margaret King, Ellen Kuhn, Julius Lawrence, Townsend King, Miss Isabella C. Kuhn, Mrs. Walt Lawrence, W. V. King, James Gore Kühne, Mrs. Lea, Charles M. Kingsbury, N. C. Frederick J. Leale, Charles A., M.D.

Leary, Mrs. George Lewis, Wm. J., M.D. Loring, D. A. Leavitt. Lewisohn, Miss Irene Loring. Mrs. Charles W. Lewisohn, Sam A. Daniel Alden, Jr. Lederman, M. Lewisohn, Mrs. Walter Lorsch, Henry Ledyard, Lewkowitz, Gustav Louderback, Arthur E. Mrs. Lewis Cass Lexow, Mrs. Allan Louis, Chas. H. Lee, Charles N. Lichtenstein, Melvin Love, E. G. Lee, Frederic S. Lichtenstein, Oscar R. Lovett, R. S. Lee, Mrs. Frederic S. Lichtenstein, Paul Low, Ethelbert I. Lee, Ivy L. Lichtenstein, Mrs. Paul Low, William Lee, Dr. Marguerite T. Lieb, J. W. Gilman, Jr. Leeds, Mrs. Warner M. Lieber, Dr. Hugo Lowell. Le Fevre, C. R. Lilienthal, Albert M. Miss Carlotta Russell Lefferts, Marshall C. Lilienthal, Lowenstein, Oscar Lefferts, Wm. H. Howard, M.D. Lowndes, M. E. Legg, George Lilienthal, Jos. L. Lowrey, Mrs. G. C. W. Lehmaier, James M. Lilly, Mrs. Henry Ludington, Mrs. Lehmaier. Limburg, Herbert R. Charles H. Mrs. Louis A. Lincoln, Lowell Ludington, Mary L. Lehman, Arthur Lindenmeyr, Fritz Ludlow, Mrs. Banyer Lehman, Irving Lindheim, Norvin R. Ludlow, Mrs. E. L. Lehman, Isidore H. Lindsey, Edward Ludlow, James B. Lehman, Mever H. Lipper, Arthur Ludlum, C. A. Leigh, R. Walter Lisman, Frederick J. Lueder, A. Leland, Mrs. Amory Littauer, Lucius N. Lueders, George LeMaistre, F. J. Littell, Mrs. Emlen Lufkin, E. C. Lemmon, Robert S. Livermore. Luke, Adam K. Lemp, Louis Mrs. John R. Luke, David L. Leonori, Charles L. Livingston, Miss A. P. Luke, John G. Le Roy, Mrs. E. A. Livingston. Lummis. LeRoy, Dr. Louis C. Mrs. Charles L. Benjamin Rush Lester, A. Edward Livingston, John G. Lunger, John B. Leupp, Wm. H. Lloyd, Francis G. Luguer, Lea Shippen Leventritt, David Lobenstine, W. C. Lusk, Miss Anna H. Levi, Albert A. Lockwood, Lüttgen, Walther Levi, Emil S. Dr. George Roe Lybrand, William M. Levine, Edmund J. Loeb, C. M. Lydig, Philip M. Levison, Benno Loeb, J. Lyman, Henry D. Levor, G. Loeb, Mrs. Morris Lyman, Theodore Levy, Edgar A. Loeser, Vincent Lynch, Mrs. John H. Levy, Ephraim B. Loewenstein. Lynes, Miss Grace E. Levy, Louis S. Miss Virginia S. Lyon, Ralph Lewis, Alphons Loewenthal, Mrs. Julius Lewis, Mrs. August Loewi, Hugo V. Maas, Gustavus Loewy, Benno Lewis, Mrs. Eugene Mabon, J. B. Lewis, Frederic Elliott Logan, Frank J. MacDougall, Geo. R. Lewis, Richard V. Long, Louis MacFadden, Carl K.

Mathesius, Fredk., Jr. McMahon, Macfadden, Robyn Matheson, Wm. J. Rev. Joseph H. MacIver, David Randall Mathews, Dr. Frank S. McManus, Edward F. McMillan, Francis W. Mack, Arthur J. May, George O. Mayer, Dr. Alfred G. McMillan, W. N. Mack, Fred. A. Mayer, M. R. McNall, Robert H. Mack, M. McNaugher, David W. Mackenzie, Mrs. Mayer, Nelson B. McNeir, George Hugh Ross Mayer, R. A. de Lima Mayer, Theresa McRoberts, Samuel Mackey, Oscar T. Mayo, Mrs. George H. Mead, Charles N. Macy, George H. Mager, F. Robert McAdoo, William Mead, Marvin H. McAfee, John Knox Means, Mahl, Wm. Main, Frank H. McAleenan, Joseph A. Philip Ainsworth Mainzer, Herbert R. McAllister, Meeker, Henry E. Mainzer, Robert H. Robert Edgar Meeks, Howard V. McAlpin, Dr. D. H. Mehl, Henry Mallory, Charles Manges, Dr. Morris McAlpin, George L. Meinhard, Morton H. Manierre, Charles E. McBride, Mrs. Herbert Melcher, John S. Mann, W. D. McBride, Thomas J. Mellen, Chase Mansfield, Howard McCagg, Louis B. Menken, S. Stanwood Merrick, Bertha V. Mapes, Eugene E. McCall, John C. Marbury, McCarthy, J. M. Merrihew, George W. Merrill, Edwin G. Miss Elisabeth McCrea, W. S. McCulloh, Charles S. Merrill, Mrs. Payson Marcus, Samuel McCurdy, Robert H. Metcalf, Stephen O. Markle, John Markoe, Dr. J. W. McCutchen, Chas. W. Metcalfe, Capt. Henry, U.S.A. Marks, Maurice McDonald, Wm. Marsh, J. A. McElheny, Victor K., Jr. Meyer, Edwin O. Marston, Edgar L. McGinley, J. R. Meyer, Marston, Edwin S. McGregor, Robert Mrs. Eugene, Jr. Martin, Bradley McIlhenny, E. A. Meyer, Geo. A. Martin, Robert W. McIntyre, John G. Meyer, Harry J. Martin, Walton, M.D. McKeever, J. Lawrence Meyer, Max Martin, W. M. McKelvey, Charles W. Meyer, Robert B. McKelvey, J. J. Mezes, S. E. Masbach, Robert J. McKenney, Henry P. Milbank, Albert G. Masius, Max L. Mason, C. N. McKim, Mrs. Haslett Milhau, Louis J. de Millard, William J. Mason, Miss Fanny P. McKim, John A. Miller, Mrs. Charles E. Mason, McKim, Le Roy Mrs. George Grant McLane, Miller, Clifford L. Miss Elizabeth Miller, C. R. Massey, Mrs. George Massey, McLane, Miss Sophie Miller, J. Doull Hoffman Miller, Simon Miss Harriet F. Masters, Miss Eliza B. McLane, Thomas S. Miller, William W. McLean, Miss Ethel L. Millett, Stephen C. Masters, Sarah W. Mills, Dr. Adelaide Mastin, Mrs. J. Edward McLean, Malcolm, M.D. Mills, Frederic C. Mather, Samuel

Mills, John T. Milne, Clyde Miner, Edward G. Mitchell, A. M. Mitchell, C. E. Mitchell,

Mrs. John Murray Moses, Mrs. E. Mitchell, Miss Addison Mosle, A. Henry Mitchell, Wesley C. Mitchell, Mrs. William Mitchell, Wm. Mitten, T. E. Moffatt.

Mrs. R. Burnham Mott, Mrs. J. L. Moffitt, Samuel Molleson, George A. Mommer, Ewald Monae-Lessèr, Dr. A. Monroe, Robert Grier Montant, Alphonse Montgomery, Carleton Munsey, Frank A. Montgomery,

Montross, N. E. Moore, Barrington Moore, Casimir de R. Moore.

Mrs. Casimir de R. Moore, D. Thomas Moore, Mrs. W. D. Moore, William A. Moorhead, Horace R. Moos, Louis H. Morgan, Miss Anne Morgan, E. D. Morgan, Paul B. Morgan,

Morgan,

Morgenthau, Henry Morris, Henry Lewis Morris, Ira Nelson Morris, Mrs. John A. Morris, Louis M. Morris, Mrs. L. R. Morris, Stuyvesant F. Morris.

Morrison, Edward A. Morton, Mrs. Levi P. Morton, Mrs. Paul Morton, Quincy L. Mosle, Max. A. Mosman, Philip A. Moss, Augustus L. Motley, Jas. M. Mott, Henry C. Mott, Mrs. John B. Mott, Miss Marian Muendel, Christina Mulford, Edwin H. Müller, Carl Muller-Schall, Fred. Munson, C. W. Charles S. Murphey, Mrs. Jenny Murphy, Franklin Murphy, G. M.-P. Murphy, Wm. C.

Murray, F. W., M.D. Murray, J. Archibald Murray, J. Irvin, Jr. Murtha, Thomas F. Muschenheim, Wm. C. Obrig, Adolph Myers, L. Myers, Theo. W. Myers, William S.

Nagle, James Franklin Ogden, David B. W. Forbes, Jr. Nash, William A. Nathan, Harmon H. Wm. Fellowes Naumburg, Aaron Necarsulmer, Henry Nesmith, James Nessler, H. D. Neuburger, David Neustadt, Mrs. S. New, Wm. Wesley

Newbold, Fredc. R. Theodore Wilson Newbury, Andrew J. Newcomb, James G. Newton, Mrs. Francis Nichols, John W. T. Nicholson, John E. Nickerson, Hoffman Nicoll, Benjamin Nicoll, Fancher Nicolson, John Niehaus. Regina Armstrong

Nies. Rev. James B., Ph.D. Nolker, Robert E. Norman, Mrs. Bradford Norrie.

Mrs. E. L. Breese Norris, Beverly Arden North, George B. Norton, Mrs. N. R. Norton, W. P. Notman, George Stafford Noyes, H. F. Nugent, Frank L. Nute, Mrs. John W.

> Oastler, Dr. F. R. Oberdorfer, George Obermayer, Charles J. Obermeyer, Jos. Ochs, Adolph S. Offerman, John O'Flynn,

Mrs. E. Howard Ogden, J. R. Ogle, Mrs. Ponsonby Olcott, Dudley Olcott, E. E. Olcott, Geo. M. Olin, S. H. Ollesheimer, Henry Ollive, Thos. S. Olney, Elam Ward Newberry, Truman H. Olyphant, Murray

Opdycke, Mrs. Emerson Opdycke,	Church of St. Mat-	Pennington, Aaron S. Perine, William D. N. Perkins, Mrs. Charles Albert
Mrs. Leonard E.	thew A. W.	Perkins, George W.
Oppenheim, J.	Parker, A. W.	Perkins, G. Lawrence
Oppenheim, Myron H.	Parker, Junius	Perkins, James H. Perkins, R. P.
Oppenheimer,	Parker, Robert A.	Perry, O. B.
	Parker, Winthrop	Perry, Mrs. William A.
Ornstein, Dr. Georg Orr, William C.	Parks, Elton	Peters,
Orvis, Edwin W.	Parodi, Dr. Teofilo	Edward McClure
Osborn, Mrs.	Parrish, James C.	Peters, Samuel T.
	Parsons, Chas. W.	Peterson,
Osborn,	Parsons, Edgerton	Frederick, M.D.
Miss Josephine A.		Peterson, Mrs. Wilson
Osterholt, Ehler	Parsons, Frank H.	Petrasch, Carl Schurz
Otis, Mrs. George L.	Parsons,	Peyton, William C.
Ottinger, Marx	Miss Gertrude	Peyton, Mrs. William C.
Oudin, Lucien	Parsons, Herbert	Pfeiffer, Curt G.
Overton, Frank	Parsons, Wm. Barclay	Pfender, W. S.
	Paskus, Benj. G.	Pfletschinger,
Paddock,	Paton, David	Mrs. L. A.
	Paton, Dr. Stewart	Phelps, Mrs. G. M.
Page, Edward D.	Paton, Wm. Agnew	Philipp, M. Bernard
Page, F. Palmer	Patterson, Benjamin	Philipp, Philip B.
Page, J. Seaver	Patterson, Frederick H.	Phillips,
Page, Wm. H.	Patterson, Henry S.,	Mrs. Alfred Noroton Phillips, John M.
Pagenstecher, A., Jr.	Patterson,	Phipps, Henry
Pagenstecher, G.	,	Pickhardt, Carl
Paine, A. G., Jr.	Patterson, Stuart H.	Piel, Gottfried
Paine, H. S.	Patterson, T. H. Hoge	
Painter, Dr. H. McM.	Paul, John J.	Pierrepont, Seth Low
Painter, Mrs. U. H.	Pavenstedt, E.	Pierson, Mrs. C. W.
Palmenberg, Emil T.	Peabody, Stephen	Pierson, D. H.
Palmer, Edgar	Pearson,	Pillot, P. Stuyvesant
Palmer, Howard	Mrs. Frederick	Pinkerton, Allan
Palmer, John	Peck, Charles E.	Piquet, Lily S.
Palmer, John Stanton	Peck, Charles H.	Pitman, Gen. John,
Palmer, Laura A.	Peck, L. O.	U.S.A.
Palmer, N. F.	Peck, Morton R., M.D.	* / -
Palmer, William J.	Pedersen, Dr. James	Place, Ira A.
Palmieri, F. Louis	Pegram,	Platt, Charles H.
Pappenheimer,		Platt, Mrs. Frank H.
	Pell, Mrs. Stephen	Platt, Lewis A.
Pardee, Ario	Pell, Walden	Platzek, M. Warley

Plaut, Joseph Plympton, Gilbert M. Polhemus, Miss R. A. Polk, Dr. Wm. M. Pollak, Bernard E. Pollock, George E. Pomeroy, D. E. Pomroy,

Poole, Mrs. Ernest Poor, Mrs. Horace F. Poor, Roger M. Poor, Ruel W. Pope, G. D. Pope, Mrs. James E. Pope, Sylvester Popper, A. W. Porter, Alexander J. Porter, Mrs. Clarence Porter, Gen. Horace Porter.

Mrs. Rachel Lenox Quincy, C. F. Porter, William L. Porter, Wm. H. Post, Abram S. Post, Carroll J., Jr. Post, Mrs. Charles A. Post, Sylvester Potter, Miss Blanche Potter, Frederick Potter, James Brown Potter,

Dr. Mary Goddard Raisler, Samuel Potter, Orlando B. Potter, R. Burnside Pottier, Auguste Ruffin Randolph, Coleman Potts, William B. Powers.

Pratt, Albert Houghton Rathborne, Richard C. Pratt, Dallas B. Pratt, Mrs. George D. Rauch, William Pratt, Mrs. Herbert Pratt, John T. Prentiss, Henrietta Prescott, Amos L.

Preston, Veryl

Price, David Priddy, Lawrence Prince, J. Dyneley Procter, William Proctor, Mrs. Chas. E. Reed, Wm. E. Proctor, Thomas R. Proctor, Wm. Ross Prudden, T. Mitchell Mrs. Henry K. Pulitzer, Mrs. Joseph Pulitzer, Ralph Pulsifer, Mrs. N. T. Putnam, Geo. P. Putnam, H. S. Putney, Miss Eva C. Pyle, D. H. McAlpin Pyle, James McAlpin

> Quigg, Lemuel E. Quinlan, Wm. J., Jr. Quinn, John Quinn, Martin J. Quintard, Dr. Edward

Pyne, Mrs. M. Taylor

Rafferty, Mrs. Ewing L. Rice, Philip B. Rahlson, K. J. Raht, Chas. Ramsay, D. S. Ramsperger, H. G. Randolph, Edmund D. Richardson, Ranger, Stanley G.

Cornelius Van Vorst Ransom, Wm. L. Rau, Henry M. Rawle, Henry Raymond, Irving E. Raynor, Forrest

> Read. Geo. R. Read, Mrs. William A. Riegel, Louis

Rebman, Francis J. Redmond. Miss Emily Redmond,

Mrs. Henry S. Rees, R. Llewelyn Regensburg,

Mrs. Jerome Reichenbach, L.

Reichenberger, Mrs. Victor M. Purdy, Wm. Macneven Reid, Mrs. Daniel Gray Putnam, Mrs. Albert E. Reid, Mrs. Ogden Mills Reid, Wallace Reiland, Rev. Karl Reincke, Hans Reis, Fred. L. Remick, W. H. Remsen, Charles Rendigs, Chas. W. Renult, William

> Renwick. Edward Brevoort Reynal, Mrs. E. S. Reynolds, Mrs. James Bronson

Reynolds, John D. Rabe, Rudolph F., M.D. Rhoades, Miss Nina Rich, M. P. Richard, E. A. Rainsford, Mrs. W. S. Richard, Miss Elvine Richard, Oscar L. Richards, Eben

Catherine L.

Mrs. C. Tiffany

Richardson.

Richardson, Mrs. Enos S. T. Richardson, Sinclair

Ricker, Mrs. Eleanor A. Riddle, Mrs. Theodate Pope

Ridgway, Mrs. Robert

Riem, Simon R. Riesenberg, Adolph Riggs, Edward G. Riggs, George C. Riglander, Mrs. M. M. Rohdenburg, G. L. Riker, Wm. J. Ring, Mrs. George S. Ripley, Henry B. H. Rippenbein, Morris Risley, Mrs. G. H. Rives, George L. Robb, Wm. J. Robbins, Mrs. Helen C. Roosevelt, G. Hall Robert, Samuel Roberts, G. Theo. Roberts, Miss Mary M. Roosevelt, W. Emlen Robertson, Albert Robertson, Miss J. Robertson, R. H. Robinson, Beverley R. Rosen, Mrs. Felix T. Robinson, Charles Edw. Rosenbaum, Harold A. Sage, Dean Robinson, Mrs. C. L. F. Rosenbaum, H. C. Robinson, Douglas Robinson, Mrs. Douglas Rosenbaum, Sol. G. Robinson,

Mrs. Drew King Rosenfeld, Edward L. Robinson, Edward Robinson, Monroe D. Robinson.

Rockefeller,

Rockwood, Miss K. C. Rockwood, Wm. H. Roddy, Harry Justin Rodewald, F. L. Roe, Gen. Chas. F. Roelker, Alfred, Jr. Rogers, Allen Merrill Rogers, Edmund P. Rogers, Edward L. Rogers, Francis Rogers, Mrs. Francis Rogers, Hubert E.

Rogers,

Rogers, John S. Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rokenbaugh, H. S. Rolle, Augustus J. Rolt-Wheeler,

Rev. Francis, Ph.D. Russell, Charles H. Roome, Mrs. C. M. Roome, William J. Roos, M.

Roosevelt, Mrs.

Root, Elihu Rose, Mrs. A. Sumner Sachs, Samuel Rose, Mrs. George Rosenbaum, Selig Rosenberg, Max

Rosenstamm, S. S. Rosenthal, Mrs. Oscar Salomon, William Rosenthal, Sylvan E. Mrs. T. Douglas Ross, Morgan R. Rossbach, Jacob Mrs. Wm. G. Rossin, Alfred S.

Rossin, Morris Rothbarth, A. Rothschild,

Roumage, C. C. Rounds,

Rouse, William L. Rowe, Wm. V. Rowland, Mrs. Chas. B. Rowland, Thos. Ruhl, Louis Ruhlender, Henry

Mrs. Jas. Gamble Rumrill, Mrs. Jas. A. Rogers, Mrs. John, Jr. Rumsey, Mrs. C. C.

Runk, George S. Runk, Mrs. George S. Runsheim, Joseph Runyon, Walter Clark Ruperti, Justus Ruppert, Mrs. Jacob Rusch, Adolphe, Jr. Rusch, Henry A. Ryan, John Barry Ryle, Miss Julia

Sabin, Charles H. Sachs, Arthur Hilborne L. Sachs, Bernard, M.D. Sachs, Harry Sachs, Julius Sachs, Walter E. Sackett, Miss G. T. Sage, Mrs. Henry W. St. John, Mrs. Jesse Saks, Isadore Salomon, Chas. Salomon.

> Harry R., Ph.D. Sampson, Alden Sampson, Charles E. Sanborn, Frederick H. Sanders.

Mrs. Franklyn B. Sandhagen, H. Sands, Mrs. B. Aymar Mrs. V. Sydney Sands, Mrs. Charles Ward

Sanger, Ralph Ralph Stowell, Jr. Sanger, Mrs. Ralph Saril, August Satterlee.

> Mrs. Herbert L. Satterlee, Miss Mabel Saul, Charles R. Sauter, A. J. Sauter, Fred., Jr.

Savin, William M.

Sayles, Robert W. Schaefer, Edward C. Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schafer, Samuel N. Schall, W. Schaller, Otto Schanck, George E. Schanck, Mrs. Geo. E. Scribner, Charles Schauffler, Mrs. A. F. Schefer, A. H. Schell, Miss Mary E. Scheuer, Arnold L. Schieffelin, Mrs. H. M. Scudder, Willard Schieffelin, Wm. Jay Schiff, Gustave H. Schirmer, Rudolph E. Schley, Evander B. Schlicke, C. P. Schling, Max Schmelzel, James H. Schmidt, William H. Schnakenberg, Schniewind,

Schniewind,

Heinrich, Ir. Sellew.

Scholle, A. H. Schoonmaker,

Miss Marv Schoonmaker, S. L. Schramm, W. Schreiter, Henry Schrenk, Otto von Schrenkeisen,

Schutz, Bernard Schuyler, Ackley C. Schuyler,

Schwartz, H. J. Schwarz, Henry F. Schwarz, Dr. Herman Schwarz, Paul

Schweitzer, Dr. Hugo Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Walter Scott, William Scoville, Herbert Scoville, Robert Scrymser, Mrs. J. A. Scudder, Edward M. Scudder, Hewlett, Jr. Scudder, Myron T. Scull, Chas. O. Seaman, Lloyd W. Seaman, Louis L., M.D. Seaver, Benj. F. See, A. B. Seeman, Carl

Seitz, Charles E. Selig, Arthur L. Seligman, Edwin R. A. Simon, Leo L. H. Ernest Seligman, George W. Seligman, Jefferson Mrs. Elma M. Seligman, Mrs. Julia

Seligsberg, Albert J.

Mrs. Timothy Gibson Semken.

Semler, Geo. Seton, Alfred Sexton, Lawrence E. Seymour, William E. Shailer, William G.

Shardlow, Miss Eliza Sharpe, Elizabeth M. Miss Georgina Shattuck, A. R. Shaw, Mrs. John C. Shaw, Mrs. Wm. N.

> Sheehy, W. H. Sheets, Dr. Elmer A.

Sheffield, Geo. St. John Schwerdtfeger, Otto M. Sheffield, Mrs. James R. Shepard, C. Sidney Shepard,

> Mrs. Finley J. Sherman, Gerald Shillaber, Wm. Shiman, Abraham Shipman, R. D. Shoemaker, Henry W. Shonk, Herbert B. Shonts, T. P. Shulof,

Herman Humboldt Sicher, Dudley D. Sidenberg, Geo. M. Sidenberg, Richard Siedenburg, R., Ir. Siegel, Jacob Siegel, William Silliman, Harper Simon, Alfred L. Simon, Franklin Simon, Horatio S. Simon, R. E. Simpson, David B. Simpson,

Mrs. Ernest L. Simpson, Frederick

Boulton Simpson, John Boulton Dr. George H. Simpson, John W. Sinclair, Mrs. John Sizer, Robt. R. Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Raymond M. Shannon, Mrs. William Skinner, William Cummings Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel

Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John Sloane, Wm. M.

Speranza, Gino C.

Slocum, H. Jermain, Jr. Sperry, Elmer A. Stewart, Mrs. John Wood Slocum, Myles Standish Sperry, Wm. M. Speyer, Mrs. James Smidt, Frank B. Stewart, Mrs. Percy H. Stewart, Spencer W. Smidt, Thos. Spiegelberg, Eugene E. Smillie, James C. Spingarn, Mrs. J. E. Stieglitz, Albert Smillie, Ralph Spitzner, Geo. W. Stiger, E. M. Spotts, Mrs. R. L. Stiger, William E. Smith, Abel I., Jr. Stillman, Miss B. G. Smith, Augustine J. Spring. Miss Anna Riker Stillman, J. A. Smith, Augustus Smith, Mrs. De Cost Stafford, Wm. Fredk. Stillman, Leland S. Smith, E. A. Cappelen Stallknecht, C. P. Stimson. Smith, E. Quincy Stallman, F. L. Daniel M., M.D. Smith, Miss Fanny A. Stanton, J. R. Stix, Sylvan L. Smith, Mrs. Fitch W. Starbuck, C. A. Stockmann, Marie F. C. Starr, Howard W. Stoeckel, Carl Smith, F. M. Smith, Henry G. Starr, Louis Morris Stokes, Harold Phelps Starr, M. Allen, Stone, Miss Annie Smith. Miss Josephine C. M.D., LL.D. Stone. Miss Elizabeth B. Smith, Lenox Stearns, Louis Smith, Pierre J. Stein, Mrs. Abram N. Stone, Geo. C. Smith, Theodore E. Stein, Enrico N. Stone, I. F. Stein, Leo Smith, Van W. Stone, S. H. Smith, W. Hinckle Stein, Leonard L. Storm, Raymond W. Storrs, Frank V. Smith, W. Schuyler Steinbrugge, E., Jr. Smithers, F. S. Steinhardt, Jos. H. Stowell, C. W. Steinthal, Martin Straight, Mrs. Willard Smyth, Francis Snare, Frederick Steinway, Fred. T. Straus, Herbert N. Straus, Mrs. H. Grant Snell, Thomas Steinway, Wm. R. Snow, Elbridge G. Stemme, Mrs. John Straus, Jesse Isidor Snow, Mrs. Frederick A. Sterling, Duncan Straus, Marcus Straus, Nathan Solley, Mrs. John B., Jr. Stern, Benjamin Stern, Edwin H. Straus, Percy S. Solomon, Mrs. Albert Edward Stern, Leopold Straus, Mrs. Roger W. Solomon, Arthur L. Stern, Nathan B. Strauss, Albert Strauss, Mrs. Albert Stern, Mrs. Stella Somers, L. H. Sondern, Frederic E. Sternberg, Fred Strauss, Charles Sondheimer, Julius Sternfeld, Theodore Strauss, Frederick Sorchan, Mrs. Victor Sterns, May Strauss, John Francis Souls, William H. Strauss, Martin Sterrett, J. E. Spadone, Elizabeth A. Stettenheim, I. M. Strauss, Samuel Spafford, Joseph H. Stettinius, Mrs. Edw. R. Strauss, Mrs. William Sparrow, Mrs. E. W. Stevenot, Chas. I. Strawn, Wm. H. Spear, James Stevens, Miss Mary O. Street, Mrs. C. F. Streeter, Thomas W. Spedden, Frederic O. Stevenson, C. C. Spencer, Mrs. Edwards Stewart, Alexander M. Strong, Mrs. Benjamin Spencer, J. Clinton Stewart, Cecil P. Strong, John R.

Stewart, John A.

Strong, R. A.

Stroock, Joseph	Tallman,	Thompson,
Stroock, Louis S.	Malcolm Herrick	Rev. Dr. Walter
Stroock, Moses J.	Talmage, Mrs.	Thomson, A. T.
Stroock, Mrs. S. M.	Edward T. H.	
Sturges, Arthur P.	Talmage, E. T. H.	Miss Evelyn M.
Sturges, Mrs. E. C.	Tanenbaum, Moses	Thomson, George W.
Sturges, Henry C.	Tate, Joseph	Thomson, Wm. Hanna
Sturmdorf,	Tatham, Charles	Thorley, Charles
Arnold, M.D.	Tatum, C. A.	Thorne, Mrs. Edwin
Stursberg, Julius A.	Taylor,	Thorne, Miss Eliza A.
Stursberg, W.	Edward Graham	Thorne, Mrs. J. W.
Suckley, Robert B.	Taylor, Emma Fellowes	Thorne, Robert
Sullivan, Mrs. James	Taylor, Mrs. Geo. H.	Thorne, Samuel, Jr.
Sulzberger, Cyrus L.	Taylor, Henry R.	Thorne, W. V. S.
Sumner, Graham	Taylor, Howard	Thorne, Mrs. W. V. S.
Sumner, Mrs. Graham	Taylor, Howard C.	Thornton,
Sussman, Dr. Otto	Taylor, Myron C.	Mrs. George M.
Sutphen, Duncan D.	Taylor, Quintard, M.D.	Tiedemann, Mrs.
Sutphen, John S.	Taylor, S. Frederic	Theodore
Sutro, Lionel	Taylor, W. A.	Tierney, Myles
Sutro, Mrs. Lionel	Taylor, William R. K.	Tiffany, Charles L.
Sutro, Richard	Tefft, Erastus T.	Tiffany, Louis C.
Sutro, Victor	Terry, Mrs. Charles	Tillotson, Mrs. H. B.
Suydam, Lambert	Appleton	Tim, Bernard L.
Swan, Mrs. C. F.	Terry, Roderick, Jr.	Timolat, J. G.
Swan, Charles F.	Thacher, Archibald G.	Timpson, James
Swan, James A.	Thacher, Thomas	Tinkham, Julian R.
Swann, Mrs. A. W.	Thaw, J. C.	Tipper, Harry
Swayne, Francis B.	Thaw, Stephen Dows	Titus, Erastus, Jr.
Swetland, H. M.	Thayer, B. B.	Toch, Mrs. Maximilian
Swetland, Mrs.	Thayer, H. B.	Tonnelé, John L.
Horace W.	Thayer, Rev. William	Tonnelé, Mrs. John N.
Symons, W. E.	Greenough, D.D.	Torrance, Norman F.
Syrett, Herbert	Theakston, F. H.	Totten, John R.
	Thedford, Harry W.	Towns, Mrs. Charles B.
Taber, David Shearman	Thibaut, Richard E.	Townsend, David C.
Taber, John Russell	Thomas, Mrs.	Townsend, Howard
Taber, Miss M.	Howard L.	Trainor, P. S.
Taft, Henry W.	Thomas,	Troescher, A. F.
Taggart, Rush	Mrs. J. Metcalfe	Trowbridge, E. Kellogg
Tailer, Edward N.	Thomas, Mrs. Lee	Trowbridge,
Taintor, Charles N.	Thomas,	Frederick K.
Taintor, Charles Wilson	Samuel Hinds	Trowbridge,
Talbert, Jos. T.	Thompson,	S. Breck P.
Talbot, Richmond	Mrs. J. Todhunter	•
Talcott,	Thompson, Lewis M.	Tucker, Mrs. Carll
Kev. J. Frederick	Thompson, Samuel A.	Tuckerman, Alfred

	Van Iderstine, Robert	
Mrs. Alfred	Van Ingen, Edward H.	Walcott, Mrs. F. C.
Tuckerman, Miss Emily		Waldo, Miss Julia L.
Tuckerman, Paul	Ottomar H.	Wales, Edward H.
		Walker, Charles C.
Turnbull, Arthur	Van Sinderen, Howard	
Turnbull, Mrs. Ramsay		Walker.
		Mrs. Gustavus A.
Turnbull, William	Van Vorst,	
Turner,	Frederick B.	Walker, Horatio
	Van Wagenen, Bleecker	Walker, John B., M.D.
Turnure, George E.	Van Winkle, Edgar B.	
Tuska, Benjamin	Veit, Richard C.	Mrs. Joseph, Jr.
Tuttle,	Veltin, Miss Louise	Walker, W. G.
Donald Seymour		Walker, William I.
Tweedie, Miss Annie	Catherine D.	Wallenstein, Milton H.
	Vesper, Karl H.	Wallerstein, Leo
Ullman, Sigmund	Vettel, Mrs. Rosa	Wallerstein, Dr. Max
Ullmann, E. S.	Vietor, Carl	Walsh, Myles
Ulmann, C. J.	Vietor, Ernst G.	Walter, Edw. J.
Ulmann, James	Vietor, Mrs. Geo. F.	Walter, W. I.
Ulmann, Ludwig	Vietor, Thos. F.	Walther, Elmore Curt
Underwood,	Villa, Alfonso P.	Wanninger, Chas.
	Villard, Mrs. Henry	Ward, Artemas
Untermyer, Alvin	Vineberg, Dr. Hiram N.	
Untermyer, Isaac	Voelker, John Ph.	Ward, Mrs. Frances M.
Chicerniyer, Isaac	Vogel, Felix A.	Ward, John Gilbert
Vail, Theo. N.	Vogel, Herman	Ward, Owen
Vaillant, Mrs. G. H.	Vogel, H. G.	Wardwell, Allen
Valentine, J. Manson	Vogel, Martin	Warner, C. Blaine
Valentine, J. Wanson Valentine,	Vogelstein, L.	Warner, Mrs. Henry S.
War A MD	Vondermuhll, George A.	
	von Gontard, Alex.	Mrs. Henry Wolcott
van Beuren, F. T., Jr.		•
van Beuren, Mrs. M. M.		Warner, Lucien C.
Van Brunt, Jeremiah R.		Warren, Mrs. J. Kearny
Vanderbilt,	Voss, F. G.	Warren,
	Vreeland, Frederick K.	
Vanderbilt, Reginald C.		Washburn, Thomas G.
Vanderbilt, Mrs. W. K.	Dr. Jules A.	Waterbury,
Vanderlip, Mrs. F. A.	*** ** *	Miss Florence
Vanderlip, Frank A.	Wadleigh,	Waterbury, Mrs. John I.
Vanderpoel, Mrs. J. A.		Waterman, Max
Van Dusen, Thos. D.	Wadsworth,	Waters, Horace
van Dyke, Tertius		Waters, Spencer
Van Emburgh, D. B.	Wagner, T. B.	Wätjen, Louis
Van Emburgh,	Wainwright, Wm. P.	Watkins, Eugene W.
	. Wakeman, Stephen H.	
Van Horne, John G.	Walbridge, G. H.	Watson, Miss Emily A.

Watson, Mrs. J. E. Weston, Dr. Edward Watson, John J., Jr. Westover, Myron F. Watson, Louis T. Wheeler. Wearne, Harry Dr. Herbert L. Weatherbee, Mrs. E. H. Wheeler, Webb, H. Walter John Davenport Willis, W. P. Webb, Mrs. Vanderbilt Wheeler, Miss L. Weber, Ferdinand Wheelock, Geo. L. Weeks, Andrew Gray Wheelwright, Weeks, Dr. John E. Joseph S., M.D. Wilmerding, Wehrhane, Chas. Whitaker, John E. Weidenfeld, C. White, Alexander M. Wilson, Weigle, Chas. H. White, A. Ludlow Weil, Arthur William White, Miss Caroline Wilson. Weil, Emil White, Miss H. Weil, Dr. Isaac White, John Jay, Jr. Weil, White, Mrs. Stanford Miss Josephine M. White, W. A. Weiller, Simon Whitehouse, J. Henry Whiting, Mrs. James R. Wilson, Weinberg, Charles Weinberger, Dr. B. W. Whitman, Wm., Jr. Weinberger, Whitmarsh, Theo. F. Mrs. Jacques Whitney, Caspar Weir, Chas. Gouverneur Whitney, Edward F. Weir, Mrs. Chas. Whitney, Mrs. Eli Gouverneur Whitney, H. P. Weiss, Mrs. Chas. Whitney, Mrs. Payne Weiss, Mrs. Samuel W. Wiborg, F. B. Weitling, Wm. W. Wickes, Edward A. Welinsky, Max Wilbour, Miss Wells, Mrs. John Theodora Wells, Judd Elwin Wilcox, Wells, Oliver J. Mrs. Clermont H. Witherbee, Welsh, S. Chas. Wilcox, T. Ferdinand Welwood, Wiley, J. S. John Caldwell Wiley, Louis Wentz, James G. Wilkens, H. A. J. Wentz, Theodore Wilkie, John L. Werner, Charles H. Wilkinson, Alfred Werner, Theodore Willcox, William G. Wertheim, Jacob Willets, Miss Maria Wesendonck, M. A. Willett, George F. Wessell, Arthur L. Williams, Alex. S. Westcott, Williams, Arthur Mrs. Robert E. Williams, Blair S.

Williams, Ellis D.

William Young Williams, Joseph

Westervelt,

Williams, Mrs. Percy H. Williams, Richard H. Williams. Mrs. Richard H. Williams, William H. Willson, Fredk. N. Willstatter, A. Wilmerding, Lucius Mrs. Lucius K. Rev. Andrew Chalmers Mrs. Augustine J. Wilson, Edmund B. Wilson, George T. Wilson, Mrs. Henry B. Wilson, John E., M.D. Miss Margaret B. Wilson, M. Orme Wilson, Orme, Jr. Wilson, R. Thornton Wilson, Walter H. Wimpfheimer, Chas. A. Wingate, Geo. W. Winter, Emil Winthrop, Bronson Wise, Edmond E. Wisner, Miss E. H. Wisner, Percy Mrs. Frank S. Wittenberg, Mrs. A. M. Wittmann, Joseph Woerishoffer. Mrs. Anna Woerz, F. W. Wolfe, S. Herbert Wolff, Mrs. Lewis S. Wolff, Wm. E. Wolfson, T. Wood, Mrs. John D. Wood, Willis D. Wood, Wm. C.

Woodbury, C. Palmer

Woodin, Mrs. C. R. Woolley, James V. S. Woolman, Edward W. Worcester, Wilfred J. Wray, A. H. Wray, Miss Julia Wright, Mrs. J. Hood Wurzburger, A. Wyckoff, Barkley

Barrett, W. H.

Wyckoff, Edward Guild Young, Wylie, Dr. R. H. Charles H., M.D. Zabriskie, George Yeisley, Rev. Dr. George C. Zanetti, Joseph A. Zimmermann, Charles

Young, A. Murray Zimmermann, John Young, Mrs. A. Murray Zinsser, August, Jr.

Zoller, Charles Young, Miss Annette

ASSOCIATE MEMBERS

(NON-RESIDENT)

By payment of \$3 annually

Aborn, John Russell Barron, Clarence W. Bartlett, A. C. Ackley. Miss Adeline E. Bartlett, Florence Barton, Geo. H. Adams, Newton Albrecht, Arthur E. Bass, Robert P. Albree, Fred W. Baxter, Harold F. Albright, Mrs. John J. Bayard, Thomas F. Allen, C. L. Beardslee, J. C. Allen, Normand Belknap, Ames, Oakes Anderson. Bell, C. Edward Louis Francis Benjamin, Julian A. Bennett, Winchester Andrews, E. A. Andrews, Col. James M. Benney, G. A. Benson, Edwin N., Jr. Brown, Samuel B. Appleton, Maj.-Gen. Francis Henry Bent, Wm. W. Arensberg, Charles F. C. Billings, Frank Bindley, Cornelia McK. Bryant, Henry G. Armour, M. Cochrane Arnold, Miss Mittie Bingham, Arthur E. Atlee, E. I. Bird, John B. Atwater, Chas. B. Blackmer, James L. Blakeley, George H. Babcock, Frederick R. Blakiston, Kenneth M. Burgess, Theodore P. Blanchard, John A. Babcock, William Baehr, Mrs. Meta Blaney, Dwight Bailey, Edward P. Bliss, Miss Elizabeth B. Burpee, David Baily, Henry P. Blossom, Mrs. DudleyS. Burr, J. H. Ten Eyck Ballantine, Percy Blumer, George Ballou, Louis -Boardman, Barney, D. Newton Bodine, Wm. W. Barr, James H.

Bogert, William B.

Bole, B. P. Bond, Hugh L., Jr. Bowditch, Mrs. Henry P. Bradford, Sidney Brainard, M. B. Brennan, Harry M. Brewer, Mrs. Joseph Brewster, Frank Henry Wyckoff Bridge, Norman Briggs, Dr. C. E. Brooks, Charles T. Brown, Mrs. Carter Brown, Laurence F. Browning, Victor Reed Bruun, Chas. A. Bryn, H. Buckingham, John Bulkley, Barry Bull, Manlius Burnham, T. W. Burnham, W. E. Burrell, Loomis Bushnell, Edward Mrs. William D. Butcher, Henry C.

Cabot, George E.

Cadwalader,

Williams B. Cahn, Benjamin R. Caldwell, James H. Canniff, William Henry Cutler, James G. Carmalt,

Carney, F. D. Carruthers, J. B. Carter, Dr. C. Shirley Carter, Geo. E. Carton, Alfred T. Cary, Miss Kate Case, Willard E. Chamberlain,

Chase, Frederick S. Cheever, James G. Cheney, Mary Cheney, Paul H. Child, John H. Child, Wm. A. Church, Morton L. Clapp, Charles C. Clark, Emory W. Clark, George H. Clark, Jefferson Coe, Miss Ella S. Cogswell,

Mrs. Wm. Browne Dunbar, F. L. Cole, Mrs. Ansel O. Cole,

Mrs. Robert Clinton Colgate.

Mrs. Mary F. L. Erickson, Colgate, Robert Comstock.

Conover, H. B. Cooke, George J. Cope, Francis R., Jr. Cousens, John A. Cox, J. D. Cramp, Theodore W. Crowell, Robert H. Cudahy, Joseph M. Cummings, Byron

Cummings,

Cushing, Harvey Cushman, Herbert E.

William H., M.D. Dann, W. M. Danziger, J. M. Davenport, Mrs. Elizabeth B.

Davis, Chas. H. Davis, Geo. Whitefield Day, Mrs. F. A. Dean, C. E. Delano, F. A. Chauncy W. Deming, Paul H. Denègre, Wm. P. Dennison, Henry S. DeWolf, Wallace L. Dietz, Carl Frederick Dietz, Mrs. C. N. Disston, William D. Dixon, Ephraim W. Dixon, J. Shipley Douglas, Albert Dows, Tracy Draper, Wallace S. Dravo, Edward T. Drury, Francis E. duPont, Alfred I.

Ely, Philip V. R.

Durant, Frederick C.

Mrs. A. Wentworth Harrison,

Mrs. Robt. H. Fabyan, F. W., Jr. Fabyan, Marshal Farnham, Wallace S. Farrel, Estelle Ffoulkes, S. Wynne. Field, E. B. Fisher,

Miss Elizabeth W. Hickox, W. B. Fleek, Henry S. Ford, Mrs. John B.

Fordyce, Geo. L. Mrs. Charles A. Foulke, Mrs. J. Roberts Freeman.

Miss Harriet E. Freer, Mrs. Watson M. Frost, A. B. Fuller, Clifford W.

Galle, Miss Louise Gallogly, E. E. Gardner, James P. Garrett, Mrs. Philip C. Gifford, Harold Gilbert, H. K. Gilman, Miss C. T. Glessner, John J. Glover, Chas. C. Godfrey, Mrs. W. H. K. Goodloe, Mrs. Hart Gordon, Mrs. Donald Greene, Arthur Duncan Grew, Joseph C. Gustine, John S., Jr.

Haass, Lillian Henkel Halbach, Howard L. Hamann, Dr. C. A. Hannum, William E. Harding, Emor H. Hare,

Dr. Hobart Amory Harriman, Mrs. J. Low Harris, Geo. B. Harris, Geo. W.

Mrs. Charles C., Jr. Harrison,

Thomas Skelton Harvey, Dr. Robert H. Hasbrouck, Mrs. H. C. Hazard, Mrs. John N. Hecker, Frank J. Henry, Howard H. Higgins, Harry E. Hill, Wm. Bancroft

Hinchman, Mrs. Charles S. Lodge, F. S. Hirst, Dr. John C. Holcomb, James W. Holden, Guerdon S.

Hooper, Miss I. R. Horsfall, R. Bruce

Hoyt, Edwin Hubbard, Lucius L. Hutchinson,

Hutchinson, Mahlon

Iddings,

George S., M.D. Ingersoll, Dr. J. M. Irish, Franklin C.

James, George Abbot Jenness, Chas. G. Jewett, E. H. Jones, Livingston E. Justice, Theodore

Keep, Chauncey Kellogg, Mrs. R. S. Kimball, Benjamin Kimball, Walter F. Krohn, Irwin M.

Lane, H. H. Laughlin,

Mrs. Geo. M., Jr. Neeb, H. A. Lawrence,

Lee, Mrs. George B. Lee, George C. Leiter, Joseph Lemly, Capt. Henry

Le Moyne, Francis J. Leverett, Geo. V. Little, Arthur D. Livingood, Chas. J. Livingston,

Lloyd, John Uri Logan, Frank G. Loring, Lindsley Lovejov, F. W. Lowe,

Mrs. Josephine D. Howland, C. H., D.D.S. Lowell, James A. Lyman, Henry F.

> Macnamara, Charles John Palmer Malcom, Mrs. Arthur Manierre, George Marlatt, Charles Lester Martin, Frank G. Martin, Wm. Barriss Mason, Dean Masson, John G. McGregor, Tracy W. McKay, Robt. J. McLachlin, Dan. Mercer, William R. Mershon, Wm. B. Michelson,

> > Mrs. Albert A. Milligan, Dr. Robert Mills, Enos Mitchell, Walter S. Monroe, William S. Morris, F. W., Jr. Morris, Miss Lydia T. Scott, Wm. G. Musgrave, M. E.

Neely, Miss C. B. Mrs. Annie W. Nettleton, Charles H. Newcomb, C. A., Jr. Newcomb, William W. Newman, Mrs. R. A.

Rowan, U.S.A. Oliver, Nelson E., M.D. Olmsted, John C. O'Neill, Edwin F.

> Pabst, Mrs. Frederick Painter, Kenyon V.

Parke, W. G. Parker, Mrs. Robert Pellew, Miss Marion J. Perkins, F. Curtis, Jr. Perry, Thomas S. Phillips,

Ebenezer Sanborn Platt, Mrs. Orville H. Porter, James F.

Raymond, Dr. Alfred Rebmann.

G. Ruhland, Jr. Redwood, Mrs. Francis Tazewell Remington, Seth P. Reynolds, John P. Rice, Prof. Wm. North Ricketson, Walton Roberts.

Thos. S., M.D. Rogers, Wm. B. Roloson, Walter L. Rothwell, J. E. Ruggles,

Mrs. T. Edwin Russell, B. F. W.

Sarmiento, Mrs. F. J. Shattuck,

Frederick C., M.D. Sheldon, Mrs. G. W. Sherman,

Miss Althea R. Sibley,

Mrs. Rufus Adams Simons, W. C. Slater, H. N. Slaven, Ralph E. Slocum, William H. Sprague, A. A., 2d Stevens, Henry G. Stuart, Henry Clifford Sturgis, S. Warren

Archibald R. Pardee, Lucius C., M.D. Swan, Mrs. J. Andrews

Sweeney, John E. Sweet, Henry N.

Tate, J. M., Jr. Thayer, John E. Thayer, Mrs. W. B. Ticknor,

Mrs. Howard M. Webb, Walter F. Todd, James Townshend, Henry H.

Uihlein, Edgar J.

Vaillant, G. W. Van Devanter, Willis Van Dyke, B. Franklin White, Dr. Charles J. Wright, Vibert, Charles W.

Wadsworth, Samuel Walker, Sir Edmund Walker, Miss Lydia M. Will, George F. Wallace, Herbert I. Warren, George C. Warren, Dr. J. Collins Willock, Harry H. Watson, Thomas A. Webster,

Harrison B., M.D. Woodward, Wehrle, Augustine T. Weld, Elizabeth F. Wheatland, Richard Wheeler, H. C. Wheeler, Samuel H. White, Walter W., M.D.

Whitney, David C. Whitney, Hammond M. Willey, Arthur Williams, David W. Willock, J. Scott Wood, Dr. Casey A. Wood, Mrs. Richard L. Lemuel Fox Woodwell, John Wright, A. B.

Wright, Mrs. Eva Edgar Miss Harriet H.



LIST OF ACCESSIONS, 1917

DEPARTMENT OF PUBLIC EDUCATION

By GIFT

Walter L. Beasley, New York City.

I Negative of an Emerald, I Negative of South African Ostrich.

Miss Gladys Bridges, New Rochelle, N. Y.

Robin, Yellow Warbler and Kingbird in flesh.

Miss Laura B. Broomall, Far Rockaway, N. Y.

Olive-backed Thrush, Maryland Yellowthroat, Purple Grackle, and Ovenbird in the flesh, Long Island.

Albert E. Butler, Denver, Colo.

Lumière plate, 52 negatives, and 66
lantern slides of natural history
subjects.

E. P. CLARK, New York City. 25 Mounted birds.

DEPARTMENT OF ORNITHOLOGY, Transfer. Hermit Thrush in the flesh.

RAYMOND L. DITMARS, Bronx Park, N. Y. C.

1,000 Feet of motion picture film showing Anthropoid Apes and Equines.

Alessandro Fabbri, New York City.
5,000 Feet of motion picture film representing microscopic life, marine views, embryology and hatching of chick, and formation of crystals

A. G. N. FOWLER, New York City.
I Young Screech Owl in the flesh, New York.

F. S. R. HALSTROM, Belton, Mont. 6 Photographs of Porcupine and Mountain Sheep.

Mrs. Hine, South Britain, Conn. Nests of Towhee and Red-eyed Vireo.

Mrs. C. R. Lamb, New York City. Boer Trekking-cart (model).

Mrs. William C. Lobenstine, New York City.

180 Specimens of minerals and rocks, 10 shells.

C. K. MacFadden, New York City. Set of 35 South American Photographs, Colombia.

Miss Alice B. Mackey, Cedarhurst, L. I. Black-billed Cuckoo in flesh.

N. Y. BOTANICAL GARDEN, Bronx, N.Y.C. 2 Gray Squirrels in the flesh.

Miss H. E. Ripley, New York City.
Pigeon in the flesh, New York City.

Louis C. De Rochemont, Worcester, Mass.

50 Feet of positive motion picture film.

DR. FRANK SKEEL, New York City. 81 Bird skins, New York City.

HARRY S. TRULL, New York City. Junco in flesh, New York City.

J. E. Wade, New York City. Starling in flesh, New York City.

T. C. WARREN, Arverne, L. I.
Fox Sparrow, Slate-colored Junco,
Golden-crowned Kinglet, Hermit
Thrush in the flesh.

By Purchase

245 Negatives made in Nicaragua by Clarence R. Halter and L. Alfred Mannhardt.

500 Feet of motion picture film of Minnesota bird life, made by Dr. Thomas S. Roberts, University of Minnesota.

4,500 Feet of positive motion picture film entitled "How Life Begins," made by George E. Stone, University of California.

THROUGH MUSEUM EXPEDITIONS

CROCKER LAND EXPEDITION.
3,500 Negatives, 12,000 feet negative motion picture film.

ASIATIC Zoölogical Expedition. 322 Negatives, 128 Paget color plates, 10,000 feet negative motion picture film.

DEPARTMENT OF GEOLOGY AND INVERTEBRATE PALÆONTOLOGY

By GIFT

BARNUM BROWN, New York City. 300 Specimens of Cretaceous invertebrates, Alberta and northern Montana.

Joseph Dunleavy, Boston, Mass. Specimen of *Paradoxides Harlani* from Braintree Slates, Mid-Cambrian.

J. J. Galloway, New York City. 50 Specimens of Bryozoans.

Georgia Marble Co., Tate, Georgia. 6 Samples of marble, Tate.

John D. Haseman, New York City. 18 Specimens of silicified wood, corals and conglomerate from Piauly, Brazil.

W. L. HILDBURGH, New York City.
Miscellaneous fossil invertebrates,
mostly from Hamilton group.

Albert Johnson, Wabasso, Minn. I Specimen petrified wood.

Mīss A. I. Jonas, Bridgeton, N. J. 7 Specimens of Triassic and Pre-Cambrian rock, Pennsylvania.

Horace Krncsik, New York City.
4 Gryphæa valves, spherical pebble,
Cerro Lotena, Nenquen Territory,
Argentina.

Mrs. H. W. Leitch, New York City. 20 Microscopic sections of corals, mounted.

Leo E. Miller, New York City.
3 Fragments of Dalmanites (Devonian), near La Paz, Bolivia.

N. C. Nelson, New York City.
3 Heteroceras specimens, Cimarron,
N. Mex.

H. J. Spinden, New York City.
Specimen of *Trigonia* sp., Plains of Barquisimeto, Venezuela.

By Purchase

The "G. K. Greene Collection," comprising about 400,000 specimens of fossils (Bryozoa, Crinoids, Brachiopods, Gastropods, Trilobites and corals) and Indian relics, mainly Falls of the Ohio.

The "W. J. McConathy Collection," comprising upwards of 7,000 specimens of fossil corals, Crinoids, Brachiopods, Bryozoa, Stromatoporoids, etc., Falls of the Ohio.

193 Species, 1,024 specimens of Tertiary (?) fossils, Santo Domingo.

153 Specimens of fossil insects, Florissant, Colo.

275 Specimens of amber containing insects, southern shore Baltic Sea.

Cystoid, Bryozoan and 4 Meristellas, Buffalo, N. Y.

Specimen of Eusarcus, Kokomo, Ind. Specimen of Pentacrinus briareus Miller, Lyme Regis, England.

Specimen of calcareous tufa, Yellowstone Park, Wyoming.

150 hand-size specimens of New York State rocks.

Lava of 1888 eruption, Bandai San, Japan; 2 pieces of petrified wood, Virginia.

70-pound mass of Telluric Iron, Ovifak, Disko Island, Greenland.

3 Specimens, 4,004 grams, of aërolite "Plainview," Texas; 1 fragment of aërolite, 140 grams, Scott City, Kansas; 1 slice of siderite, 294 grams, Cookville, Tenn.

Model of a portion of the Grand Canyon of the Colorado River, including the "Alligator" and "Dana Butte" features.

THROUGH MUSEUM EXPEDITION

I Siderite "Akpohon," 1,660 grams, east coast of Ellesmere Land. Collected by an Eskimo, transmitted by W. Elmer Ekblaw.

90 Rock specimens, Parker Snow Bay and vicinity, Greenland. Collected by E. O. Hovey.

DEPARTMENT OF MINERALOGY

By GIFT

FREDERICK I. ALLEN, New York City.
Specimen of Wernerite, Hardiston,
N. J.

R. H. Beck, New York City. Specimen of Chalcopyrite in chloritic slate, island near Cape Horn.

- H. C. Bellow, Quebec, Canada. Specimen Red Calcite, Molybdenite, Ontario, Canada.
- R. Broadbent, New York City.
 Specimens of Garnet, McDonald
 Range, South Australia.
- Barnum Brown, New York City.

 Miscellaneous specimens of Calcites
 illustrating mineral phases of the
 beds in Blackfoot Indian Reservation, Montana; 2 specimens of
 Limonite from Lower Eocene Bad
 Lands, near Powell, Wyo.
- Louis Browne, New York City.
 Specimen of Serpentine (Chrysotile),
 Warren County, N. Y.
- MATILDA W. BRUCE FUND. 70 Specimens of minerals.
- Louis Brunet, New York City.

 2 Specimens of Halite, Cardona,
 Spain.
- James Douglas, New York City.
 Specimen limestone replacement, with
 copper ore, containing fossils, from
 the Copper Queen Mine, Bisbee,
 Ariz.
- Henry Fair, Spokane, Wash.7 Specimens of Sphærosiderite on Diabase with Hyalite and Chalcedony, Spokane.
- HENRY FLEMING, New York City.

 12 Specimens of Rosin, Washoe,
 Mont.
- EDWARD J. FOYLES, New York City.
 Specimen of Magnetite in Serpentine,
 Blue Mine, Pompton, N. J.
- Samuel G. Gordon, Philadelphia, Pa.

 I Specimen Actinolite, Pa., Calcite
 variety Argentine, Pa., Calcite variety Argentine, Va.
- A. C. HAWKINS, Bartlesville, Oklahoma. Specimen of Dolomite, Osage County, Okla.
- CHARLES W. HOADLEY, Englewood, N. J. Specimen of Red Feldspar with Graphite, Cornwall, Conn.
- FREDERICK F. HUNT, New York City.

 2 Specimens of Fava (Zirconium Oxide) from Brazil.
- ESPER S. LARSEN, Washington, D. C.
 Specimen of Griffithite from Griffith
 Park, Los Angeles, Cal.; specimen
 Lorettoite from Loretto, Tenn.

- SIMERON LEDERER, New York City.

 Large specimen of Tin Ore (Cassiterite) with Tungsten Ore (Hubnerite), Cowboy Mine, Hell City, Black.

 Hills, S. Dak.
- MRS. S. L. NOLAN, New York City.
 Specimen of Pyrite from Jermyn, Pa.
- H. Papke, West Hoboken, N. J. Specimen of Prehnite (pseudomorphous), Paterson, N. J.
- Mrs. E. B. Peters, Brooklyn, N. Y. Vial of shore sand composed of Magnetite, Garnet and Quartz.
- HENRY M. RAU, New York City.
 Specimen Vanadium Pentoxide, fused and crystallized.
- J. H. ROTTKAMP, New York City.
 Specimen of Magnetite, Orange Co.,
 N. J.; specimen of Molybdenite,
 Tunk Pond, Me.
- Justus Rupert, New York City.

 Large specimen of Tungsten Ore
 (Wolframite), San Antonio, Bolivia.
- W. T. Schaller, Washington, D. C. Glauberite cavity, Dollington, Pa.
- GEORGE S. SCOTT, New York City.
 2 Specimens of Native Copper,
 Houghton, Mich.
- George O. Simmons, Brooklyn, N. Y. Specimen Galenite, Ani Ugo, Japan; specimen Manganite, Owani Fomori Keu, Japan.
- John G. Tair, New York City.
 6 Specimens of Peat from Colonial
 Park, N. Y. C.; bottle of Penol Coal
 Tar.
- George O. Wilde, New York City.
 Specimen of Black Tourmaline, Born
 Jesus da Carahy, Minas Geraes,
 Brazil; 6 specimens Aquamarine,
 Marambaya, Minas Geraes, Brazil;
 specimen Emerald found near Born
 Jesus das Meias, Bahia; specimens
 of Aquamarine, Emerald, Tourmaline and Associated Cyanite, Hematite, Lepidolite, Garnet and Quartz.

By Exchange

- M. L. GLENN, New York City.6 Specimens of Alunogen from Slates at Erie, Pa.
- H. PAPKE, West Hoboken, N. J. Calcite crystal, West Paterson, N. J.

Albert H. Petereit, New York City. Specimen Chrysoprase, Porterville, Lower California; Natrolite on Prehnite, Paterson, N. J.; Ortho-clase, Minerva, N. Y.; Variscite, Lucin, Utah.

George S. Scott, New York City. Specimen of Orthoclase, Mystic, Conn.

By PURCHASE

- I Large Apophyllite, Poonah, India.
- I Specimen Borax, Synthetic.
- I Specimen Calcite, Stalactite Core.
- I Specimen Calcite with Sphalerite, Joplin, Missouri.
- I Specimen Calcite with Galena, Eng-
- I Specimen Chabazite, West Paterson, N. J.
- I Specimen Cuprite, Nevada.
- I Specimen Chalcanthite, Synthetic.
- I Specimen Chrysoprase, Porterville, Cal.
- I Specimen Creedite, near Wagon Wheel Gap, Colo.
- 3 Specimens Fluorite crystals, single, Durham, England.
- I Specimen Halite, Cardona, Spain.
- I Specimen Halite, Stassfurt, Prussia.
- I Specimen Kaemmererite, near Murphys, Cal.
- 5 Specimens Magnesite, Hoboken, N. J.
- I Large specimen of Mountain Leather, Korea.
- I Specimen Natrolite and Thompsonite, West Paterson, N. J.
- 4 Specimens Opalized Shells, Cretaceous, South Australia.
- I Specimen Pollucite, Buckfield, Me.
- 2 Specimens Prehnite, West Paterson,
- I Specimen Pyromorphite and Cerussite, Scotland.
- I Specimen Pyrite, Pribram.
- 3 Specimens Stevensite, West Paterson, N. J.
- I Specimen Siderite, Cryolite, Greenland.
- 1 Specimen Tourmaline, Alaska.

I Specimen of Antimony, largest mass known, Kern County, Cal.

DEPARTMENT OF WOODS AND FORESTRY

By GIFT

Mrs. Horde, New York City. Spray of Magnolia grandiflora with flowers and leaves of record size for reproduction in wax.

WAYNE M. MUSGRAVE, New York City. Cone of Pinus coulteri, 4 cones of Pinus lambertiana, from near Mariposa Grove, California.

By Purchase

of Photographs of trees.

DEPARTMENT OF INVERTE-BRATE ZOÖLOGY

INVERTEBRATES

By GIFT

ACADEMY OF NATURAL SCIENCES OF

PHILADELPHIA, Philadelphia, Pa. 2 Metatypes of Pamphila yehl Skinner, Nashville, Tenn., 2 Pamphila aaroni, 2 Pamphila taxiles, 2 Pamphila deva, United States.

J. ALEXANDER, New York City. Parasitized larva of Sphecodina abboti.

MRS. E. MAGAWLEY BANON, New York City.

Sea Plume, Island of Santo Domingo.

H. G. Barber, Roselle Park, N. J. Various insects, New York and New Jersey.

WILLIAM BARNES, Decatur, Ill. 25 Lepidoptera, including 7 Paratypes.

LINDELL T. BATES, New York City. Oyster, Hoboken, N. J.

C. WILLIAM BEEBE, New York City.

4 Crustacea, Georgetown, British Guiana.

E. L. Bell, Flushing, L. I. About 500 Lepidoptera and Coleoptera, including larvæ and pupæ, New York, New Jersey and Florida.

I. BEQUAERT, New York City. Various invertebrates, including in-

- Sydney Bevin, Elmhurst, N. Y. 2 Lepidoptera from Cuba and Panama.
- HENRY BIRD, Rye, N. Y.
 Paratype of Papaipema eryngii Bird,
 Chicago, Ill.
- Louis Boury, New York City.

 Smith and Beck microscope, box of mounted specimens and miscellaneous microscopic objects.
- Howarth S. Boyle, New York City. About 30 insects, Colombia.
- ROGER L. BRIDGEMAN, Friant, Madera Co., Cal. 745 Insects, etc., California.
- BARNUM BROWN, New York City. 20 Spiders and insects, Cuba.
- Gordon D. Browne, New York City. About 400 insects (various orders), Carthagena, Porto Colombia and Santa Marta, Colombia.
- J. W. Brownlee, Yukon, Canada. Sphinx moth, Yukon, Canada.
- Отто Висиности, Elizabeth, N. J. 8 Noctuids, North America.
- GARY N. CALKINS, New York City.

 3 Microphotographs illustrating maturation divisions of Paramecium caudatum.
- B. Preston Clark, Boston, Mass.
 243 Lepidoptera, North and South America, Bahamas, Santo Domingo.
- T. D. A. Cockerell, Boulder, Colo. 40 Hymenoptera, 2 cotypes.
- L. V. Coleman, New Haven, Conn. 7 Hesperiidæ, Woods Hole, Mass.
- Cornell University, Ithaca, N. Y. 12 Moths, Ithaca.
- R. T. Cotton, Rio Piedras, Porto Rico. 2 Weevils, Rio Piedras.
- M. D. C. Crawford, Washington, D. C. 8 Parasites.
- Mrs. P. H. Davis, Rye, N. Y. 52 Lepidoptera, Java.
- WM. T. DAVIS, New Brighton, S. I. 20 Moths, Florida.
- R. P. Dow, Brooklyn, N. Y.

 Cicindela anita, 2 types; Cicindela
 marutha, 2 types; Cicindela ancisconensis var. dowiana, 2 cotypes; Trogosita virescens var. nyenta, 1 type.

- Carl J. Drake, Syracuse, N. Y. 67 Hymenoptera; 9 Heteroptera, including 7 paratypes.
- H. E. Ewing, Ames, Iowa.26 Cotypes, I paratype, I autotype of mites on microscopic slides.
- George H. Field, San Diego, Cal. Hesperid, Imperial County, Cal.
- G. CLYDE FISHER, New York City. 15 Sphinx larvæ and parasites, New Rochelle, N. Y.
- Spencer Franklin, New York City. Lantern fly, Abangarez, Gold Fields, Puntarenas, Costa Rica.
- CHARLES GRAMET, New York City. 2 Jars of chordates and mollusks.
- GEORGE C. GRIFFITHS, Bristol, England. Blown larva of Euschæmon rafflesiæ; colored sketch of larva of Euschæmon rafflesiæ; colored sketch of pupa of Euschæmon rafflesiæ, from Old World tropics.
- GAYLORD C. HALL, New York City. Sphinx moth, Cuba.
- CLARENCE R. HALTER and L. ALFRED MANNHARDT, New York City.
 - 2 Spiders, 1 scorpion, 1 insect, Nicaragua.
- CLARENCE R. HALTER, New York City. 34 Lepidoptera, tropical America.
- EDWARD D. HARRIS, New York City. 96 Specimens of exotic Cicindelinæ from the Fuchs Collection.
- DEPARTMENT OF HERPETOLOGY, Transfer. 3 Specimens of Apus, Mukden, Manchuria.
- E. SEYMOUR HERSEY, New York City. 1 Beetle, Cuba.
- Mrs. M. Hiddinta, New York City. 7 Pieces of Coral.
- John Hiscox, New York City.
 I Deformed Lobster claw.
- FREDERICK F. HUNT, New York City.
 9 Barnacles (Chelombia testudinaria),
 Boca Grande Pass, Florida.
- DEPARTMENT OF ICHTHYOLOGY, Transfer. 2 Crayfish, South Haven, Mich.
- C. R. Kellogg, Foochow, Fukien Province, China. 550 Insects, China.

H. P. A. KJERSKOG-AGERSBORG, Staple-

ton, S. I.

3 Jars of Littorina litorea and Purpura lapillus, 3 specimens of Polynices lewisi, and 3 specimens of Aurelia sp., Washington Channel, Puget Sound and various localities in Norway.

Mrs. John B. Knapp, New York City. Collection of insects, chiefly Lepidoptera, about 1,600 specimens and accessories.

Frederick Lemmer, Irvington, N. J. 6 Noctuidæ, New Jersey.

C. W. Leng, New York City. 181 Tiger Beetles, Keene Valley, Essex Co., N. Y., 19 Carabidæ, Chile.

Mrs. C. W. Lipsey, Blanton, Fla. I Whip-tail Scorpion, Blanton.

G. A. MacCallum, New York City. Various parasitic worms, Woods Hole, Mass., and N. Y. Zoölogical Park.

Walter C. Mathias, Portland, Ore. 87 Insects, various orders, Oregon.

Leo E. Miller, New York City. 302 Lepidoptera, Colombia.

W. DEW. MILLER, New York City. 27 Insects, Nicaragua.

Frederick Muir, Honolulu. 28 Homoptera.

HOWARD NOTMAN, Brooklyn, N. Y. 220 Insects and 143 vials of spiders and myriapods, Adirondack Mts., N. Y.

CHRIS E. OLSEN, New York City. 130 Coleoptera, Denmark.

DEPARTMENT OF ORNITHOLOGY, Transfer. 26 Coleoptera, near Mt. Chimborazo, Ecuador.

RAYMOND C. OSBURN, Columbus, Ohio. Collection of Bryozoa, various localities; specimen of Salpa vagina, Matinicus I., Maine.

R. Ottolengui, New York City. 5 Lepidoptera, North America.

L. S. Quackenbush, New York City. 234 Jars of invertebrates.

Chas. T. Ramsden, Guantanamo, Cuba. 51 Coleoptera, Guantanamo.

CHARLES H. ROGERS, New York City.

1 Clam shell, eaten by boring sponge,
Cliona sulphurea, Long Beach, N.Y.

L. C. Sanford, New Haven, Conn.

16 Specimens (eggs and larvæ) of

Hyloicus gordius Cramer, Westerly,
R. I.

CHARLES O. Schoof, Brooklyn, N. Y. 2 Annulates.

Ernest Shoemaker, Brooklyn, N. Y.
2 Beetles, I butterfly, Adirondack
Mts., N. Y., and Maine; 4 butterflies, Virginia.

THOMAS E. SNYDER, Washington, D. C. 2 Chrysobothris impressa, Miami Beach, Florida.

Henry Thurston, New York City. 198 Lepidoptera and I Cicada, American tropics; 300 insects, various orders, Florida.

V. TILLIET, New York City. 23 Beetles, France.

United States National Museum, Washington, D. C.

94 Lepidoptera (named), 310 specimens of Bees, representing 226 species.

WILLARD G. VAN NAME, New York City.
9 Pupæ of Macronoctua onusta, 5
larval workings and larvæ of noctuid moth, New Haven, Conn.; 41
vials of other invertebrates (largely ascidians), Florida.

R. H. VAN ZWALUWENBURG, Mayaguez, Porto Rico.

5 Slugs, Porto Rico.

Frank E. Watson, New York City. 400 Insects, chiefly Lepidoptera, vicinity of New York City.

HARRY B. Weiss, New Brunswick, N. J.
11 Papilio japonica, 1 Eucactophagus
weissi, 1 Acythopeus gilvonotatus,
New Jersey.

Lewis B. Woodruff, New York City. 22 Odonata.

W. S. Wright, San Diego, Cal. 968 Insects, California.

CHARLES WUNDER, New York City. About 300 insects (mostly exotic).

By Exchange

DURBAN MUSEUM, Natal, Africa. 143 Lepidoptera, 301 insects of other orders. Africa.

A. M. GAUDIN, New York City. 27 Coleoptera.

HARRY L. JOHNSON, South Meriden, Conn.

2 Coleoptera (Badister maculatus and Coccinella 14-guttata), England.

By Purchase

137 Beetles, Dunedin, Fla.

49 Insects, Salino Basin, near Tucson,

Specimen of Dorippe japonica von Siebold, 3 models of parasitic worms, 4 insect groups and sets, 4 insect models, Japan. (Through Professor Bashford Dean.)

Series of models illustrating development of echinoderm and model of Lithobius.

52 Lepidoptera from various localities.

26 Mounted spider webs.

28 Insects, 9 Crustacea and other invertebrates, Yunnan-fu, Yunnan, West China.

Collection of 52 marine invertebrates, Woods Hole, Mass., Eastport, Maine, and West Indies.

14 Japanese corals, Tosa, Shikoku, Tapan.

THROUGH MUSEUM EXPEDITIONS

Collection of invertebrates, arctic regions. Collected by Crocker Land Expedition.

2 Jars of Crustacea, Nicaragua; 2 Myriapods, Sabaneta, Dominica. Collected by Clarence R. Halter.

157 Vials of invertebrates, including annulates, myriapods, crustaceans and mollusks. Collected by F. E. Lutz.

Marine invertebrates and algæ, Woods Hole, Mass. Collected by Roy W. Miner.

MOLLUSKS

By GIFT

H. G. BARBEY, New York City.

4 Specimens of Planorbis multivolvis, from Huron Mt., Marquette Co., Mich.

BARNUM BROWN, New York City. 87 Specimens of Land Shells, Cuba; fragments of shells from well 2,500 feet deep, 40 miles west of New Orleans. (Terebra, Turitella, Cardium, Ostrea, etc.)

GEORGE CHAMBERLAIN, New York City. I Oyster (Ostrea virginica), Fairfield Beach, Conn.

E. D. CRABB, Fort Worth, Tex.

44 Specimens of Bulimulus dealbatus (B. alternatus), var. mooreanus and batriarcha. Camp Bowie, Fort Worth.

Alfred Gale, Troy, N. Y. I Shell Basket, Central America.

Mrs. M. HIDDINTA, New York City. 32 Specimens of miscellaneous shells.

Y. Hirase, Japan. Shell-rose, petals made of Anomia

Mrs. A. H. Janes, Brooklyn, N. Y. 14 Specimens of miscellaneous species of shells.

Miss Edith Kunz, New Brighton, S. I. 2 Specimens of Cantharus tincta, 3 Egg-sacs of Melongena corona, Florida.

HERBERT Lowe, Long Beach, Cal. 2 Capsules of Truncatella californica, from San Diego Bay, Cal.

McKee & Bliven Button Co., Muscatine. Iowa.

Perforated button shells (24 blanks, 24 buttons and 6 shells).

Mrs. E. B. Peters, Brooklyn, N. Y. 42 Specimens of Marine shells.

MAXWELL SMITH, Scarsdale, N. Y. 8 Specimens of Oreohelix haydeni betheli, Glenwood Springs, Colo.

Fred Tableman, Newark, N. J. 4 Specimens of Strombus urecus, from Zanzibar.

HENRY THURSTON, New York City.
2 Specimens of Crepidula fornicata, found on back of horseshoe crab, Fire Island.

W. H. Weeks, Brooklyn, N. Y. I Pecten irradians, from Northport, N. Y., I specimen Boreotrophon tenuisculptus, 2 C. variegatum, 2 Chrysodomus liratus, 6 Nucula cartranse, 3 Pandora filosa, 1 Tritoni-fusus jordani, 7 V. ointrecosa, 3 Yoldia scessurata, 3 Y. amydalea.

By Purchase

6 Argonauta hians, showing animal and shell; 6 Inioteuthis morsei, Misaki; I Jar containing the development of Loligo membranaceus, showing stages and embryo; 2 Argonauta hians beyrichi, with animal, Japan; 3 Argonauta oweni.

6 Specimens of Paludina melanoides, 8 specimens Tulotoma, 3 species, 26 specimens of Melamas, 8 specimens of Lymnæa suimhæi, China.

70 Specimens Japanese shell-work, useful, artistic, and toys.

I Voluta irvingi from West Australia;
I Voluta kingi from Tasmania;
I Voluta roadnightæ from Victoria,
Australia.

3 Shell Necklaces (aboriginal), Tasmania; 3 shell Baskets from the Bahama Islands.

By Exchange

Maxwell Smith, Scarsdale, N. Y.
About 150 specimens of Land shells
from North America, fully localized
and named, including Oreohelix,
Ashmunella, Polygyra, Planorbis.

W. H. WEEKS, Brooklyn, N. Y.
Large Voluta roadnighta, South Australia; series of Marine shells, numbering 402 specimens.

DEPARTMENT OF ICHTHYOLOGY AND HERPETOLOGY

FISHES

By GIFT

W. L. Brind, New York City. 11 Foreign aquarium fishes.

Barnum Brown, New York City.
30 Pœciliid fishes, Banos de Ciego
Montero, 30 kilometers west of
Cienfuegos, Cuba.

Russell J. Coles, Danville, Va. Set of Whip-ray teeth.

OTTO DEGENER, New York City.

I Boleosoma nigrum (Darter), Bergen Co., N. J.

H. HAUPT, JR., South Haven, Mich.

15 Small fishes, 10 Silver-sided Minnows (Notropis atherinoides),

South Haven, Mich.

R. G. HAZARD, Peace Dale, R. I. Lophius jaw, Pt. Judith, R. I.

ROY LATHAM, Orient, L. I. 43 Long Island fishes, Orient, L. I.

A. LORD, New York City.

I Spiny Dogfish (Squalus acanthias),
Hudson River.

WILLIAM MACK, New York City.
Five fancy Goldfish (Carassius auratus).

Leo E. Miller, New York City. 12 Fragments of Characin dentition, San Juan River, Colombia.

ROBERT C. MURPHY, Brooklyn, N. Y.
Young Chatodon ocellatus, Long
Beach, N. Y.

NEW YORK AQUARIUM, New York City.

1 New fish, to be called Eques granti,
Key West, Fla.

Henry Thurston, New York City.

Prionotus strigatus skeleton, Ocean
Beach, L. I.

Young Scad in alcohol, skeletons of Silver Hake and Sea Robin, Fire Island Beach, N. Y.

H. S. Trull, New York City.

Balanced aquarium containing one

Girardinus guppii.

UNITED STATES BUREAU OF FISHERIES, Washington, D. C. 25 Sculpins, Myoxocephalus, Maine.

By Purchase

- II Specimens of fish bearing nodules, from the Waverly of Junction City, Boone Co., Ky.
- 2 Catfish, 60 fresh-water fishes and 10 cyprinid fishes, Yunnan-fu, China.
- Several fishes from Japan, purchased by Dr. Dean.

THROUGH MUSEUM EXPEDITIONS

- I Bottle of Sleeper-shark oil. Collected by W. Elmer Ekblaw, Crocker Land Expedition.
- 5 Shark jaws and 50 small fishes, including one undescribed *Gobiesox*, Florida Keys. Collected by J. T. Nichols.
- 35 Fishes from Fu-kien Province, China, including 2 new species. Collected by Roy C. Andrews.

AMPHIBIANS AND REPTILES

By GIFT

Roswell Baerman, New York City. I Milk-snake, Cold Spring, N. Y.

C. WILLIAM BEEBE, Bronx, N. Y.

5 Marine toads, I lizard and 3 snakes, Kalacoon, British Guiana.

JEAN BEQUAERT, New York City. I Lizard and I snake, Ft. Beni, Bel-

gian Congo.

Frederick Blaschke, New York City.
1 Milk-snake, Cold Spring, N. Y.

BARNUM BROWN, New York City.
I Lizard, Havana, Cuba; I salaman-

der, I garter snake, Montana.

EDWARD BURNS, Nicaragua, C. A.

I Cœcilian, I salamander, 6 snakes, Nicaragua.

CHARLES L. CAMP, New York City. 64 Salamanders, Napa, Cal.

R. D. CAMP, Brownsville, Texas.

I Frog, 4 turtles, 53 lizards, I snake, Padre Island and Brownsville, Texas.

Sr. Diocleciano Chaves, Managua, Nicaragua, C. A.

3 Lizards, Nicaragua, C. A.

MORTON L. CHURCH, Marshall, N. C. 11 Toads, 8 frogs, 31 salamanders, 12 turtles, 2 lizards, 3 snakes, Marshall, N.C.

M. L. CRIMMINS, Fort Bliss, Texas.

I Lizard, Fort Bliss.

John Deming, Redding, Conn. I Milk-snake, Redding.

D. K. Donovan, New York City.

I Alligator head, Florida.

Mrs. Walter Douglas, New York City. I Lizard, Bisbee, Ariz.

WILLIAM A. ENGE, Santo Domingo, W. I.

I Rainbow boa, Santo Domingo.

Fritz Fagot, Nicaragua, C. A. 5 Snakes, Big Falls, Nicaragua.

G. CLYDE FISHER, New York City. 2 Dusky salamanders, Slabsides, near West Park, N. Y.

Jas. Knox Hagar, San' Jacinto, Cal. 3 Snakes, San Jacinto.

HERMAN HAUPT, JR., South Haven,

7 Toads, 2 frogs, 1 turtle, 2 snakes, South Haven.

A. B. Howell, Covina, California.

I Western ring-necked snake, Covina.

DEPARTMENT OF ICHTHYOLOGY, Transfer.

I Giant salamander, I sea snake, I burrowing snake, Japan.

DEPARTMENT OF INVERTEBRATE ZOÖLOGY, Transfer.

I Frog, Massachusetts; I frog, 2 burrowing snakes, West Indies.

R. D. O. Johnson, Phonix, Ariz.

I Toad, 5 turtles, 19 lizards and 3 snakes, Phœnix.

CHARLES LANG, New York City.

2 Water snakes, Ashokan Dam, N. Y.

Mrs. W. H. Long, New Haven, Conn. 1 Painted turtle, New Haven, Conn.

F. A. Lucas, New York City.

X-Ray picture of a diamond-back rattlesnake, secured from Southern United States.

G. A. McCallum, New York City.

I Lizard, Buitenzorg, Java. Norman McInnis, Nicaragua, C. A.

I Lizard and 4 snakes, Banbana River, Nicaragua.

LEO E. MILLER, New York City.

I Toad, 4 frogs, Colombia, and I lizard, Bolivia.

MUSEUM OF COMPARATIVE ZOÖLOGY, Cambridge, Mass.

I Sea snake, Panama.

WILLIAM MYERS, New York City. I Alligator, Jacksonville, Florida.

NEW YORK AQUARIUM, New York City. I Salamander, I turtle, 3 alligators and I alligator's head, United States.

New York Zoölogical Society, New York City.

15 Snakes, New York; 11 snakes, South Carolina; 3 turtles, 3 snakes, Florida; I snake, Connecticut; I turtle, I snake, Louisiana; 2 snakes, Arizona; 9 snakes, Texas; I snake, California; 4 lizards, 4 snakes, West Indies; 22 snakes, Central America; I crocodile, 3 lizards, 3 snakes, South America; 3 turtles, 11 lizards, 15 snakes, Australia; 10 turtles, 1 crocodile, 6 lizards, 28 snakes, Africa; 4 lizards, 6 snakes, doubtful localities.

John T. Nichols, New York City. I Turtle, Miami, Fla.

A. M. Nicholson, Orlando, Florida. 9 Blacksnake eggs, Orlando.

M. NISHIMURA, New York City. 15 Frogs, 5 salamanders, 3 turtles, 5 lizards and 8 snakes, Manchuria.

PHILIP H. POPE, Manchester, Maine. 11 Frogs, Eustis, Maine.

L. S. QUACKENBUSH, New York City. 7 Frogs, 16 salamander larvæ, 3 turtles and I alligator.

PAUL D. R. RÜTHLING, Los Angeles, Cal.

I Rattlesnake, I garter snake, Texas; 3 toads, 13 frogs, 13 salamanders, 2 turtles, 43 lizards and 37 snakes, Los Angeles, Cal.

KARL P. SCHMIDT, Stanley, Wisconsin. 3 Frogs and 1 snake, Stanley.

KARL SMITH, Nicaragua, C. A.

I Schlegel's viper, Eden Mine, Nicaragua.

Percy Viosca, Jr., New Orleans, La. 11 Frogs, Covington, La.

F. Weinberg, Los Angeles, Cal.

2 Toads, 5 turtles, 22 lizards and 8 snakes, California; 1 lizard, Arizona; 2 lizards, Tasmania.

By Exchange

ALBANY MUSEUM, Grahamstown, South Africa.

19 Frogs and toads, 27 lizards, 6 snakes, South Africa.

Commercial Museum, Philadelphia.

I Tailed and II tailless batrachians, 10 lizards, 11 snakes, Central America and Colombia.

LOUISIANA STATE MUSEUM, New Orleans. La.

2 Skins of the snowy heron, Cameron Parish, La.

OF COMPARATIVE ZOÖLOGY, Museum Cambridge, Mass.

2 Toads, Malaita Island, Solomon Islands; 2 lizards, Arkansas; 4 lizards, Utah; 1 lizard, Mexico, and I lizard, Africa.

By Purchase

C. S. Brimley, Raleigh, N. C.

I Salamander, I turtle, 2 snakes, North Carolina; I salamander, Missouri; I lizard, Panama.

R. D. CAMP, Brownsville, Texas. 4 Lizards, 1 snake, Brownsville. JOHN GRAHAM, Yunnan, China. 18 Toads, 30 frogs, 5 salamanders, 6 lizards, 7 snakes, China.

J. W. Johnson, Charco, Texas.

8 Lizards, Charco.

W. ODELL LEARN & Co., San Antonio, Texas.

40 Lizards, San Antonio.

THROUGH MUSEUM EXPEDITIONS

About 2,500 specimens from Nicaragua, collected by Clarence R. Halter and L. Alfred Mannhardt.

22 Toads, 13 frogs, 2 salamanders, 38 lizards, 58 snakes, China. Collected by Roy C. Andrews and Edmund Heller.

I Toad, 3 frogs, I salamander, 2 lizards, 2 snakes, Nicaragua. Collected by W. DeW. Miller and Wm. B. Richardson.

DEPARTMENT OF MAMMALOGY AND ORNITHOLOGY

MAMMALS

By GIFT

H. E. Anthony, New York City. 12 Bats in alcohol, Nicaragua.

A. H. BALDWIN, New York City. I Set of Eland horns, 2 sets of Hartebeest horns.

C. W. Beebe, Bronx, N. Y.

1 Deer, near Kalacoon, British Guiana. COURTENAY BRANDRETH, Brandreth, N.Y. Deer skin and skull.

Frank M. Chapman, New York City. 4 Skins of dogs, Santiago Coquimbo, Chile.

Russell J. Coles, Danville, Va.
Pygmy Sperm Whale material; jaw of Kogia, South Carolina.

Mrs. P. H. Downey, New York City. Mounted head of Tiger, India.

J. Dwight, New York City.

9 Small mammals, Lanesville, Greene Co., N. Y.

J. M. Ellsworth, Hoboken, N. J. Horns of Alaskan Moose (spread 66 inches).

Mrs. H. J. Faulhaber, Mt. Vernon, N. Y.

Black Squirrel in the flesh, Mt. Vernon.

Mrs. M. F. Fischer, New York City. Set of Walrus tusks.

Walter Granger, New York City. I Mouse, Cornwall, N. Y.

U. S. Grant, 4th, New York City. 10 Bats, 5 mice, Salem Center, N. Y.

J. Alpin Graydon, New York City. Newfoundland Dog in the flesh, England.

BERTRAM J. HALL, Hudson, N. Y. I Rabbit, Hudson, N. Y.

B. T. B. HYDE, New York City.

I Mounted Albino Mole, Brittany,
France.

Miss Jessica Lewis, New York City.

I Mounted thoroughbred Angora Cat.

MALCOLM MACKAY, Tenafly, N. J. Bear skull, Tenafly.

LEO E. MILLER, New York City.

2 Skins of Black Bear, Colombia; I skin of Puma, South America; I skin of Guanaco, Argentina; 4 skins and skulls of rodents, Indiana.

Eric Mjöberg, New York City. Skin of Green Phalanger, Malanda, North Queensland.

GEORGE F. MONTGOMERY, New York City. Thoroughbred French Bulldog.

New York Zoölogical Society, Bronx, N. Y. C.

Fringe-eared Beiser Antelope, 1 Sable Antelope and Beatrix Antelope skeleton, I Beiser Antelope skeleton, I Tahr skin and skeleton, 5 Kangaroos, skins and skeletons, 3 Kangaroo skeletons, 3 Porcupine skeletons, I Porcupine skin and skeleton, 2 Ocelot skins and skeletons, Zebra skin and skeleton, I Columbian Blacktail Deer skin and skeleton, 2 Malay and 1 Eld's Deer skeletons, 2 Anteaters, skins and skeletons, Spotted Cavy skin and skeleton, Gray Fox, 8 Phalangers (5 skeletons and 3 skins and skeletons), 2 Bandicoot skeletons and 1 skin, 3 Hyrax skeletons and 2 skins, 3 Monkey skeletons and I skin, 4 Tasmanian Devil skeletons and I skin, 2 Buffalo skeletons, Black Buck skeleton, I Ibex and I skeleton, Herpestes skeleton, 4 Squirrel skeletons and 2 skins, Chimpanzee skeleton, White-tail Gnu skeleton, Wombat skin and skeleton, Marten skeleton, Kangaroo Rat skeleton, 2 Water Rat skeletons, 2 South American Dog skeletons, Mouflon and Marsupial Rat skeletons, Echidna skin and skeleton, Sitatunga skeleton, Wild Ass skin and skeleton, 2 Woodchuck skins and skulls, Tapir and Mountain Goat skeletons, Guinea Pig and 2 skeletons, Fisher skin and skeleton, I Coati Mundi, I Baboon and I Raccoon skin and skeleton, Puma skin and skull, I Paca skeleton, Wild Cat skin and skeleton, 2 Meerkat skeletons, I Duiker, I Martin and I Wallaby skin and skeleton.

W. P. Norton, Goshen, N. Y. I Bear skin, 6 bear skulls, Alaska.

HENRY FAIRFIELD OSBORN, New York City.

Skin of Yellow Dun Horse, Garrison, N. Y.

DEPARTMENT OF PARKS, New York City.
Rhinoceros (skull and foot bones), 2
Buffalo skeletons, 2 Gray Fox skeletons, I Lemur skeleton, I Monkey skeleton, Baboon skin and skeleton, I Elk skeleton, Black Bear skull, I Ant Bear skeleton.

W. H. E. REINECKE, New York City.

1 Mounted Armadillo, Mexican border.

Ernest Thompson Seton, New York City.

3 Minks, skins and skulls, St. Charles, Ill.

J. M. Suarez, New York City. 1 Marmoset, Brazil.

Mrs. C. W. Van Duser, Gardiner, N. Y. Star-nosed Mole, Gardiner.

REMSEN T. WILLIAMS, Long Island City, N. Y.

I Small Monkey, Axim, Gold Coast, West Africa.

Frank M. Wood, New Bedford, Mass. Malformed teeth of Sperm Whale.

By Exchange

Museum of Comparative Zoölogy, Cambridge, Mass.

Bats, 18 specimens in alcohol, 24 skins with skulls.

Carlos S. Reeds, Mendoza, Argentina. 4 Rodents, 7 Armadillos, Mendoza.

By Purchase

- 5 Coyote pups (skins and skulls).
- 2 Mounted specimens of Tapirus indicus, 1 specimen of Manis dalmanni, in alcohol, Malay and Formosa.
- 3 Skins, skulls, pelvis and 2 paper casts of Pocket Gopher, Johnson County, Iowa; 3 mammals, Venezuela.
- 9 Lemurs, Madagascar.
- Portion of African Elephant containing wrought iron bullet.
- I Skeleton each of Hedgehog, Musk Deer and large Fox Bat.
- Mounted skeleton of Tasmanian Devil, Orang-utan skeleton, Chimpanzee skeleton, skeleton of a child, skeleton of Young Orangutan.
- 7 Squirrels, 3 Philander Opossums, Motag Hill, Nicaragua.
- Siamanga syndactylus skin; Chiromys madagascariensis skin, skull and thorax.
- Piked Whale skeleton, Provincetown, Mass.
- 6 Jack Rabbits, 6 Kangaroo Rats, 6 Muskrats, 6 Prairie Dogs, 6 Pack Rats, 14 Chipmunks, 12 Voles, 6 White-footed Mice, 18 small mammals, 1 Ferret, Montana.

Human skeleton.

- Mounted skeletons as follows: Myrmecobius fasciatus, Felis domestica, Perameles legotis, Didelphis virginiana, Hapale sp.; half a skeleton of Erinaceus europeus.
- 3 Skins with horns and hoofs of Goat-antelope, Japan.

THROUGH MUSEUM EXPEDITIONS

- 2,100 Specimens of Chinese mammals, China. Collected by Roy C. Andrews.
- 130 Bats, skins, skulls and alcoholics, 1 lot of fossil bones of small mammals, Cuba. Collected by H. E. Anthony.
- I Tamandua, 3 Dogs, 10 Cats, 1 Anteater, 2 Dasyproctas, 8 Deer, Matto Grosso, Brazil. Collected by George K. Cherrie.

- 81 Bats, 29 Mice, 15 Rats, 3 Squirrels, 2 Sloths, 1 Paca, 1 Coati, 6 Monkeys, 1 Cat, 1 Tayra, 7 Llamas, Bolivia and Brazil. Collected by R. H. Beck and G. K. Cherrie.
- 17 Small mammals, Nicaragua. Collected by W. deW. Miller.
- Young Rabbit, Mound Key, Florida. Collected by John T. Nichols.

BIRDS

By GIFT

- Anonymous.
 - Specimen of Horned Grebe in the flesh, Oyster Bay, N. Y.
- Anonymous.
 - Cathird in the flesh, Far Rockaway, N. Y.
- Anonymous.
- Starling in the flesh.
- Mrs. Otto Bartel, New York City. 3 Hummingbird skins, Venezuela.
- A. S. Bechstein, New Rochelle, N. Y. Mounted Silver Pheasant.
- Frederick Blaschke, New York City. 3 Rouen Ducks.
- B. S. Bowdish, Demarest, N. J.
 - 3 Warblers and I Parrot in the flesh; I Grackle in the flesh, Mexico; Evening Grosbeak in flesh.
- Joe Brandt, New York City. Mute Swan, mounted as flying.
- E. P. CLARK, New York City. 17 Mounted birds, Florida.
- MISS FLORENCE CRISTADORO, New York City.
 - Fox Sparrow in the flesh, New York City.
- MISS ADELAIDE CROWLEY, New York City.
 Hermit Thrush in the flesh.
- E. W. Deming, Topstone, Conn.
 Marsh Hawk in the flesh, Topstone.
- Jonathan Dwight, New York City. 3 Skins of Horned Larks; 7 mounted birds, Staten Island, N. Y.
- P. C. FISHER, New York City. Old-squaw Duck in the flesh, Oyster Bay, L. I.
- WILLIAM FLOYD, Mastic, L. I.
 2 Greater Yellow Legs in the flesh,

Mastic.

CHARLES A. GIANINI, Poland, N. Y. I Jay skin, Continental Divide, Wyoming.

MISS MARGARET S. GREEN, Far Rocka-

way, N. Y.

I Hermit Thrush and I Cedar Wax Wing in the flesh, Far Rockaway.

LUDLOW GRISCOM, New York City. Labrador Chickadee in the flesh, New Dorp, S. I.

CLARENCE R. HALTER and L. ALFRED MANNHARDT, New York City. 12 Birdskins from Nicaragua.

G. E. Hix, New York City. Bird in the flesh, New York City.

MISS HELEN L. KENNEDY, Maplewood, N. J.

I Chimney Swift in flesh, Schroon Lake, Adirondacks.

WILLIAM LAVARRE.

2 Jacamar skins and I Hummingbird skin; I Macaw and I Parakeet in the flesh, British Guiana.

F. A. Lucas, New York City. Duck's head in flesh, Plymouth, Mass.

E. A. McIlhenny, Avery Island, La.
2 Mallard Ducks, 3 live Mallards, Avery Island.

CHARLES J. MEEKS, Putnam Co., N. Y. Holboell's Grebe in the flesh, Cold Spring, N. Y.

W. DEW. MILLER, New York City. Downy Woodpecker in the flesh.

L. L. Mowbray, New York City. Parasitic Jaeger skin, Bermuda.

J. Neilson, New York City. Mounted Cormorant, Lake Ontario.

NEW YORK ZOÖLOGICAL SOCIETY, Bronx, N. Y. C.

I Black-footed Penguin, I Kea Parrot, 2 Cranes, 1 Scarlet Ibis, I Ani Cuckoo, 2 Plovers, I Parakeet, I Fruit Pigeon, I Starling, I Mega-pode, I Jay, I Blue Jay, 2 Secretary Birds, I Senegal Bustard, I Browncap Tanager, 2 Blackbirds, 1 Emu, 1 Songbird, 1 Partridge, 1 Hawk, 1 Lory, I Bulbul, 2 Condors, I Giant Fulmar, I Ostrich skeleton.

J. T. Nichols, New York City. I Hummingbird in the flesh.

DEPARTMENT OF PARKS, New York City. 7 Birds in the flesh, 2 Parakeets, Java Sparrow, Parrot, Starling, Swan, Goose, Macaw.

WM. B. RICHARDSON, Matagalpa, Nica-

517 Birdskins from Ecuador. lected by Wm. B. Richardson.

Francis B. Robinson, Newburgh, N. Y. Evening Grosbeak, Cornwall, N. Y.

Mrs. Roy M. Robinson, Pt. Pleasant, N. J.

I Yellow Warbler in the flesh.

WILLIAM ROCKEFELLER, Tarrytown, N.Y. Blue-headed Quail-dove in the flesh.

CHARLES H. ROGERS, New York City.

I Horned Grebe in the flesh, Long
Beach, N. Y.; I Turkey Vulture skeleton, Mercer Co., N. J.

L. C. Sanford, New Haven, Conn. Body of King Eider in flesh, 39 birdskins, California; 3 birdskins from British Columbia; 3 from Wyoming and Colorado; Goshawk in the flesh; 5 specimens of birds from Lower California.

Mrs. J. D. Savage and Mrs. L. S. Pad-Dock, Summit, N. J.

Panama Parrot in the flesh.

SCIAMA, DAVIS & COMPANY, New York

2 Blue-eared Pheasant skins, Canton, China.

P. T. SEALEY, South Bethlehem, Pa. 9 Birdskins, 4 bird skeletons, 37 birds' eggs, Chile.

F. D. Skeel, Thomaston, Conn. I Grosbeak skin and I Bobolink skin.

SELAH B. STRONG, Setauket, L. I. I Cooper's Hawk.

JUSTUS VON LENGERKE, New York City. 2 Goshawks and 12 other Hawks in the flesh, Stag Lake, N. J.

WILLIAM WIEDERHOLD, New York City. Sparrow in the flesh, New York City.

R. Zuloaga, Caracas, Venezuela. Nest of a Dendrocolaptid, the Guaiti, Venezuela.

By Exchange

COLORADO MUSEUM OF NATURAL HIS-TORY, Denver, Colo. 2 Skins of Snowy Egret, Buzzards

Islands, S. C.

F. S. HERSEY, New York City. Skin of Pteroglossus aracari (Toucan), Paramaribo, Dutch Guiana.

MUSEO NACIONAL DE HISTORIA NATU-RELLE, Buenos Aires, Argentina. 123 Birdskins.

Museu Paulista, São Paulo, Brazil. 290 Birdskins, Brazil.

J. T. Nichols, New York City. Summer Tanager, Mastic, L. I.

Carlos Reeds, Mendoza, Argentina. A number of birdskins.

L. C. Sanford, New York City. Skin of Caspian Tern, Nucces County, Texas; 16 birdskins.

By Purchase

Fossil egg of Struthiolithus chersonensis.

6 Mounted birds, Japan.

2 Skins of Golden Eagle.

2 Skins of Golden Eagle, skin of Goshawk.

294 Birdskins, Peru.

THROUGH MUSEUM EXPEDITIONS

658 Birdskins, 34 skeletons from China. Collected by Roy C. Andrews.

750 Birdskins from South America. Collected by George K. Cherrie.

1,168 Birdskins, 65 complete bird skeletons, 272 body skeletons of birds, 6 birds' nests, 5 sets of birds' eggs, 9 birds' eggs from Nicaragua. Collected by Leo E. Miller, Ludlow Griscom and Wm. B. Richardson.

DEPARTMENT OF VERTEBRATE PALÆONTOLOGY

By GIFT

Colorado Museum of Natural History, Denver, Colo.

Casts of 2 molar teeth of a Miocene Mastodon from Virginia Valley, Nevada.

ROBERT F. GILDER, Omaha, Nebraska. Fragmentary skull of fossil elk, Washington County, Neb.

J. H. MacGregor, New York City. Braincast of Gibraltar skull.

New York Zoölogical Society, New York City.

Chapman's Zebra (skeleton only); I Horse head in the flesh, N. Y. C. L. S. QUACKENBUSH, New York City. Collection of specimens of modern vertebrates (skulls, etc.).

FREDERICK B. SIMPSON, New York City. Skeleton of trotting horse "McKinney" in the flesh, Cuba, N. Y.

S. A. SMITH, Australia.

Cast of skull of Talgai fossil man.

E. L. TROXELL, Ann Arbor, Mich. Skull and jaws of Hyracodon, skull and jaws of Pæbrotherium andersonii, type specimen; South Dakota.

By Exchange

L. H. MILLER, Berkeley, Cal.
Collection of *Mylodon* bones from
Rancho-la-Brea, Cal.

By Purchase

Collection of models of dinosaurs. Skeleton of Tertiary Mastodon from Pliocene of South Dakota; collection of fossil mammals, chiefly Pliocene mastodons and rhinoceros, Springview, Neb.

DEPARTMENT OF ANTHROPOLOGY

By GIFT

Anonymous.

Collection of 10 bone- and metal-tipped poison arrows, Venezuela.

H. E. Anthony, New York City.

8 Fragments of a pot from cave at Daiquiri; parts of 3 crania, and I mandible; parts of long bones of 3 skeletons, from a cave near Morovis; fragments of phalanges, ribs, etc.; fragments of human bones from cave on Hacienda Toba, Porto Rico.

A. V. Armour, New York City. Carved piece of whale bone, Alaska.

Frank B. Barnes, Amagansett, N. Y. 3 Arrowheads, Long Island, N. Y.

M. H. Blakeslee, Buffalo, N. Y.
i Stone implement, found on bank of Mohawk River, N. Y.

Mrs. Theo. Boettger, Hackensack, N. J. Collection of 9 specimens of pottery from Central America.

Hubert J. Burrows, Vernon, N. J.
3 Potsherds, Iroquoian, and I hammerstone, Hamburg, Sussex Co.,
N. I.

M. CHAMBERLAIN, Prague, Okla.

Collection of archæological specimens, arrow points, pottery fragments, etc., Southwest.

Luis Febres Cordero, North Santander, Colombia.

2 Arrows, Sardinata Region, North Santander.

MISS FRANCES DEL MAR, New York City.

I Piece of tapa, Samoa.

Mrs. J. A. Finn, New York City. Chinese Costume.

Mrs. Mary F. Fischer, New York City. Collection of 4 Chinese garments and textiles from China.

George A. Fournier, New York City. Model of a canoe, Manawin, Quebec, Canada.

DEPARTMENT OF GEOLOGY AND INVERTE-BRATE PALÆONTOLOGY, Transfer. Stone Ball, Mar del Plata, Buenos

Aires, Argentina.

H. K. HAEBERLIN, Columbia University. Collection of 6 phonograph records of Indian songs, Puget Sound Salish.

Mrs. E. H. Harriman, New York City. Fur coat made up in parka fashion, brown skins, probably marten, Alaska.

R. G. HAZARD, Peace Dale, Rhode

7 Skulls in fragments, El Capitan, near Santa Barbara, Cal.

WILLIAM W. HEATON, New York City. Collection of arrowheads, found near Lake Geneva.

Mrs. William Tod Helmuth, New

York City.

tablet (for worship), China; Tibetan sacred belt, apron and headdress (made of human bone), Darjeeling.

WALTER L. HILDBURGH, New York City. Archæological collection (about 3,500 specimens), New York; a series of ethnological specimens from North American Indians.

A. M. Hocart, England.

Wooden tally used by bakers, Thiers,

HENRY HORNBOSTEL, New York City. Collection of photographs of Maya architecture.

MISS GENIE A. HUNT, St. Albans, Vt. Dakota redstone pipe bowl, Minnesota.

Mrs. Austin Huntington, New York City.

I Halibut hook.

MARSHALL C. LEFFERTS, New York City.

4 Effigies dressed in Japanese armor, 2 cases containing helmets and other accessories, I gun, 2 swords, I spear.

Mrs. J. E. Lopez, New York City. Collection of 25 baskets, fans, etc., Egypt, Abyssinia and Colombia.

F. A. Lucas, New York City.

Birchbark dish with quill work decoration, Eastport, Me.

W. G. MacCallum, New York City. I Parang, Borneo; I Navajo Buck-

skin shirt, Western United States. MRS. FLORENCE MAGEE, New York City. First note issued in Lhasa, Tibet.

DEPARTMENT OF MAMMALOGY, Transfer. Complete human skeleton from the Warren Collection.

EDGAR A. MEARNS, U. S. A.

I Woven fiber bag (Mexican), I pair of snowshoes (Ojibwa), Mexico and Manitoba.

LEO E. MILLER, New York City.

6 Stone implements, Indiana; 3 ears of corn, Colombia.

Mrs. Clarence Blair Mitchell, Far Hills, N. J.

Wooden pillow (Zulu), wooden spoon (South Africa), wooden images (South Africa), sword (Java).

GEORGE OLSEN, New York City. Miniature carved effigy, San Juan Valley, N. Mex.

T. MITCHELL PRUDDEN, New York City. Collection of archæological specimens, Colorado.

L. S. QUACKENBUSH, New York City. 4 Chipped points, Lower California;

Indian paddle, vicinity of Chicoutimi, Quebec.

F. J. REBMAN, New York City.

16 Stone implements, Fort Independence, Giles Place, Kingsbridge, N.Y. JAMES T. RYAN, New York City.

Carved cocoanut shell, Guatemala. M. F. SAVAGE, New York City.

I Tomahawk with copper blade, I oyster shell, found in Washington Street.

Société Internationale Forestière et MINIÈRE DU CONGO.

22 Stone implements from southwestern part of the Belgian Congo.

Frank G. Speck, Philadelphia, Pa. 3 Small baskets from the Jackson-

MISS KATE STEPHENS, New York City. 2 Pieces of tapa cloth, Samoa.

S. M. Strong, Atlanta, Georgia.

Mummified body of a man with rabbit-skin blanket and some bone fragments, cliff cave in Tularosa Mountains, New Mexico.

W. E. Sullivan, Boston, Mass. Human skull and mandible.

MISS MAUD THOMPSON, Glen Ridge,

2 Halibut hooks, Alaska; fragment of a child's skull with arrow protruding, Texas; 2 wooden spoons, I rattle, 2 knives, I piece carved wood, pieces of harness, I piece of beadwork.

Dr. T. Wingate Todd, Western Reserve University, Cleveland, Ohio.

Samples of human hair.

By Exchange

Franklin Smith, Salisbury, N. C. Skull and mandible, southeast Salisbury.

FRANK WOOD, New Bedford, Mass.

4 Baskets.

By Purchase

10 Images, 9 krises, 1 puppet, Java. Collection of textiles and pottery from Alvarado collection.

Wampum Belt (belt of Oka).

100 Baskets, model of a boat, model of a fish trap, basket hat, Chitimacha, Choctaw.

- 4 Barrels (162 specimens) of ancient pottery, 10 miles southeast of Adamana, Ariz.
- I Sealskin canoe.

Collection of 52 face casts, Cape Fullerton, Hudson Bay.

Collection of Japanese material.

- One egg from the Patagonian Ostrich, Patagonia; archæological collection (about 1,000 specimens), Europe and North America; Guanche collection of archæological and skeletal material, Canary Islands.
- I Square piece of pottery, I small carved face, Teotihucan, Mexico.
- I Stone figure, Guatemala.

- I Piece of Samoan tapa cloth, Samoa.
- I Skull (East Indies) with gold plugs in the incisors; 3 negro skulls; 6 human skulls, Europe.
- I Sacred Tibetan book, Pharijong.
- 11 Baskets, California.
- I Painted buffalo robe.
- 3 Restorations (Human cranium and mandible, La Chapelle aux Saints, Heidelberg, Gibraltar).

1 Hausa robe. Cameroon, West

Africa.

156 Pieces of pottery, Chiriqui, Pan-

- I Mummy (Indian woman), 40 miles from Custer battlefield.
- 6 Pieces of Battik from Java.

Canoe, said to be 180 years old, Ulster County, N. Y.

5 Catawba pots; ethnological specimens from the Micmac and other Eastern tribes.

Cedarbark skirt, Fort Madison Reservation.

Ethnological collection (30 specimens), Mackenzie River and vicin-

Decorated elk skin, Navajo Springs Agency.

Piece of tapa, Hawaii.

Blackfoot Beaver bundle (31 specimens).

6 Fœtal skulls, 8 human skulls.

Piece of tapa, Samoa or Tahiti.

5 Boxes of archæological specimens, Mandan, N. D.

THROUGH MUSEUM EXPEDITIONS

- Ethnological and archæological collections, northwestern Greenland, collected by George Comer; I bone drill, near North Star Bay, collected by H. J. Hunt; 10 fur coats, 4 wo-men's trunks, 1 baby's hood and coat; collection of Eskimo clothing, South Upernivik, collected by W. Elmer Ekblaw.
- 7 Boxes of ethnological specimens, Washington: Mountain I blanket, Tulalip Reservation. Collected by H. K. Haeberlin.
- 16 Boxes of archæological material, 8 boxes and I barrel of archæological specimens, Aztec Ruin, N. Mex. Collected by Earl H. Morris.

r Box of archæological specimens from Florida; 6 boxes of archæological specimens from the Southwest. Collected by N. C. Nelson.

I Box of archæological specimens from the Southwest. Collected by

Leslie Spier.

Embroidered robe from the Mandan. Collected by Gilbert L. Wilson.

2 Shipments of ethnological specimens from Central America. Collected by Herbert J. Spinden.

DEPARTMENT OF PUBLIC HEALTH

By GIFT

GEORGE E. Brown, New York City. 4 Loaves of war bread.

CORNELL UNIVERSITY MEDICAL, SCHOOL, New York City.

r Bacterial specimen.

CORN PRODUCTS REFINING Co., Edgewater, N. J.

Set of 22 different corn products.

H. S. CUMMINGS, Washington, D. C. Eggs of yellow fever mosquito, Havana.

WILFRED G. FRALICK, New York City. Picture of gangrenous foot.

Johns Hopkins Medical School, Baltimore, Md.

o Bacterial specimens.

Roy E. Jones, Storrs, Conn. Corn stalks and wheat.

YAMEI KIN, New York City. Chinese foods.

LEDERLE ANTITOXIN LABORATORY, Pearl River, N. Y.

3 Bacterial specimens.

E. H. MEYERS, Cincinnati, Ohio. 5 Bacterial specimens.

MICHIGAN AGRICULTURAL COLLEGE, East Lansing, Mich.

I Bacterial specimen.

NEW YORK AGRICULTURAL EXPERIMENT STATION, Geneva, N. Y.

6 Bacterial specimens.

NEW YORK CITY BOARD OF HEALTH. 3 Bacterial specimens.

Augustus Nulle, New York City. Wild rice, raw and cooked.

PILLSBURY FLOUR MILLS Co., Minneapolis, Minn.

12 Sample packages of flour, bran,

PLASTIC ART NOVELTY & SPECIALTY Co., New York City. Set of food models consisting of 74

one-hundred-calorie portions.

New SHEFFIELD SCIENTIFIC SCHOOL, Haven, Conn.

2 Bacterial specimens.

WILFRID SUDLER, Quebec, Canada. 7 Bacterial specimens.

R. W. Tower, New York City. Bacteriological chart.

UNITED STATES DEPARTMENT OF AGRI-CULTURE, Washington, D. C. 15 Bacterial specimens.

BENJAMIN WHITE, Otisville, N. Y. 2 Bacterial specimens.

By Exchange

Brooklyn Museum, Brooklyn, N. Y. 2 Reproductions of mushrooms.

By PURCHASE

Canteen, mess kit, blanket, poncho, half tent, haversack, belt.

12 Transparencies.

4 Groups of wax reproductions of edible fungi (mushrooms).

I Campaign hat, I pair of shoes.

ART

By GIFT

AMERICAN NUMISMATIC SOCIETY, New York City.

Bronze medal commemorating declaration of war on Germany by United States. Eli Harvey fecit.

Louis Agassiz Fuertes, Ithaca, N. Y. Four paintings of South American Birds.

RODMAN GILDER, New York City. Portrait of James E. Lithograph. DeKav.

J. M. HOFFMIRE, Newark, N. J., and C. W. MACMULLEN, New York City. Oil painting of Bison Herd, Pike's

Peak in background. Painted by Titian R. Peale.

ROBERT HAVELL LOCKWOOD, Yonkers, N. Y.

Oil painting of Black Vultures, after Painted by Robert Audubon. Havell. 24 colored plates of Insects.



INCORPORATION

AN ACT

TO INCORPORATE THE

AMERICAN MUSEUM OF NATURAL HISTORY

Passed April 6, 1869

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

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

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

- Sec. 3. Said Corporation may take and hold by gift, devise, bequest, purchase or lease, either absolutely or in trust, for any purpose comprised in the objects of the Corporation, any real or personal estate, necessary or proper for the purposes of its incorporation.†
- Sec. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities, prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes, and shall be and be classed as an educational corporation.*
 - SEC. 5. This Act shall take effect immediately.

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

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

Given under my hand and seal of Office at the City of

[L. s.] Albany this fourteenth day of April, in the year one thousand eight hundred and sixty-nine.

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

[†] Section 3. As amended by Chapter 303, Laws of 1808, of the State of New York, entitled "An Act to amend chapter one hundred and nineteen, laws of eighteen hundred and sixty-nine, entitled 'An Act to incorporate the American Museum of Natural History,' relative to its charter."

^{*}Sections 1 and 4. As amended by Chapter 162 of the Laws of 1000, entitled "An Act to amend chapter one hundred and nineteen of the laws of eighteen hundred and sixty-nine, entitled 'An Act to incorporate the American Museum of Natural History,' in relation to classifying said corporation and modifying its corporate purposes."

CONTRACT

WITH THE DEPARTMENT OF PUBLIC PARKS

FOR THE OCCUPATION OF THE NEW BUILDING

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

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

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

Whereas, it is desired as well by the said party of the first part, as by the said party of the second part, that, immediately

upon the completion and equipment of said building, the said party of the second part should be established therein, and should transfer thereto its museum, library and collections, and carry out the objects and purposes of the said party of the second part;

Now, therefore, it is agreed by and between the said parties

as follows, namely:

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

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

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

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

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

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

208 Contract

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

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

and in like manner as though these presents had never been made, without let or hindrance of the said party of the second part, anything here contained to the contrary notwithstanding.

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

In witness whereof, the party of the first part hath caused this agreement to be executed by their President and Secretary, pursuant to a resolution of the Board of Commissioners of said Department, adopted at a meeting held on the thirtieth day of January, in the year of our Lord one thousand eight hundred and seventy-eight; and the said party of the second part hath caused the same to be executed by their President, and their official seal affixed thereto, pursuant to a resolution of the Trustees of the American Museum of Natural History, adopted at a meeting held on the twelfth day of February, in the year of our Lord one thousand eight hundred and seventy-seven.

In presence of D. Porter Lord.

JAMES F. WENMAN,

President Department of Public Parks

of the City of New York.

WILLIAM IRWIN,

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

SEAL of the American Museum of Natural History

ROBERT L. STUART,

President American Museum of
Natural History.

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

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

SEAL.

W. C. BESSON, (73) Notary Public N. Y. Co.

STATE OF NEW YORK,
City and County of New York,

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

[SEAL.]

W. C. BESSON, (73) Notary Public N. Y. Co.

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

Witness my hand and official seal,

FREDERICK W. LOEW,

SEAL.]

Register.

Note.—July 25, 1892, by consent of the Trustees, section fourth was modified to enable the Trustees to open the Museum free to the public "throughout the year, excepting Mondays, but including Sunday afternoons and two evenings of each week."

June 29, 1893, by consent of the Trustees, section fourth was modified to enable the Trustees to open the Museum free of charge to the public "throughout the year for five days in each week, one of which shall be Sunday afternoon, and also two evenings of each week."

CONSTITUTION

OF THE

AMERICAN MUSEUM OF NATURAL HISTORY

IN THE CITY OF NEW YORK

REVISED AND AMENDED TO FEBRUARY 7, 1916

ARTICLE I

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

ARTICLE II

The several persons named in the charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, and in addition, the Mayor, the Comptroller, and the President of the Department of Public Parks, of the City of New York, for the time being, ex-officio, shall be the Trustees to manage the affairs, property and business of the Corporation.

The members of the Board of Trustees holding office at the time of the regular quarterly meeting of November, 1905, shall then, or at the first meeting of the Board thereafter, be divided by lot into five classes of five members each, to serve for the terms of one, two, three, four and five years respectively from the date of the annual meeting of February, 1906. The Board of Trustees at each annual meeting thereafter, or an adjournment thereof, shall by ballot, by a majority vote of the Trustees present at the meeting, elect five Trustees to supply the places of the class whose term expires at that meeting; said newly elected Trustees to hold office for five years or until their successors are elected. In case of a vacancy in the Board by death, resignation, disqualification or otherwise, the vacancy shall be filled by ballot, in like manner, by the Board of Trustees at any regular meeting or special meeting, for the unexpired term. No person shall be eligible for election as Trustee unless his name shall be presented by the Nominating

Committee at a regular or special meeting of the Board previous to the meeting at which his name shall be acted upon. Written notice of such election and the vacancy to be filled shall be sent to the Trustees at least one week prior to said meeting.

ARTICLE III

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

ARTICLE IV

Section 1. The officers of said Corporation shall be a President, a First Vice-President, a Second Vice-President, a Treasurer and a Secretary, who shall be elected from among the Trustees. These officers shall be elected by ballot, and the persons having a majority of the votes cast shall be deemed duly elected. They shall hold their offices for one year or until their successors shall be elected.

SEC. 2. The Board of Trustees shall appoint each year, in such manner as it may direct, the following Standing Committees: an Executive Committee, an Auditing Committee, a Finance Committee and a Nominating Committee. These Committees are all to be elected from the Trustees, and the members shall hold office for one year or until their successors shall be elected.

The Board of Trustees shall also have authority to appoint such other committees or officers as they may at any time deem desirable, and to delegate to them such powers as may be necessary. The Board of Trustees shall have power to appoint a Director who, acting under the authority and control of the President, shall be the chief administrative officer of the Museum; but shall not be a member of the Board. He shall hold office during the pleasure of the Board.

ARTICLE V

Section 1. The President shall have the general supervision, direction and control of the affairs of the Corporation, and shall preside at all the meetings of the Museum and of the Trustees. In his absence or inability to act, the First or Second Vice-President shall act in his place, or in the absence of these officers, a Trustee appointed by the Executive Committee.

SEC. 2. The Secretary shall be present, unless otherwise ordered by the Board, at all the meetings of the Museum and Trustees, of the Executive Committee and such other Committees as the Board may direct. He shall keep a careful record of the proceedings of such meetings, shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees and various committees, and shall perform such other duties as the Board may direct.

The Board of Trustees shall have power to appoint an Assistant Secretary, who, under its direction, shall perform the duties of the Secretary in his absence or inability to act. The Assistant Secretary shall be an administrative officer of the Museum and shall act under the direction of the President or the Secretary. He shall hold office during the pleasure of the Board.

SEC. 3. The Treasurer shall receive and disburse the funds of the Museum. He shall report in writing, at each regular meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report at the annual meeting of the receipts and disbursements of the past year, with such suggestions as to the financial management of the Museum as he may deem proper.

The Board of Trustees shall have power to appoint an Assistant Treasurer, who shall perform such duties as it may direct, and who shall hold office during its pleasure.

SEC. 4. The accounts of the Museum shall be kept at the General Office, in books belonging to it, which shall at all times be open to the inspection of the Trustees.

ARTICLE VI

The Executive Committee shall consist of nine Trustees, the President, the Secretary and the Treasurer *ex-officio* and six others, to be appointed each year in the manner provided in Article IV. They shall have the control and regulation of the collections, library and other property of the Museum; and shall have power generally to conduct the business of the Museum, subject to the approval of the Board. Five members of the Committee shall constitute a quorum for the transaction of business.

ARTICLE VII

The Auditing Committee shall consist of three Trustees. They shall have the books of the Museum duly audited, at least once in six months, by an authorized public accountant to be selected by them.

ARTICLE VIII

The Finance Committee shall consist of five Trustees, the Treasurer *ex-officio* and four others to be elected each year in the manner provided in Article IV. They shall have general charge of the moneys and securities of the Endowment and other permanent funds of the Museum, and such real estate as may become the property of the Corporation, with authority to invest, sell and reinvest the same, subject to the approval of the Board of Trustees.

Three members shall constitute a quorum.

ARTICLE IX

The Nominating Committee shall be composed of three Trustees, to whom shall be first submitted the names of any persons proposed as candidates for election to membership in

the Board of Trustees. The Committee shall report on such candidates from time to time, as it may deem to be for the interest of the Museum. A fortnight before the annual meeting they shall prepare and mail to each member of the Board of Trustees a list of the candidates for officers and Trustees to be balloted for at the said meeting.

ARTICLE X

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

ARTICLE XI

By-Laws may be made from time to time by the Trustees providing for the care and management of the property of the Corporation and for the government of its affairs, and may be amended at any meeting of the Trustees by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

ARTICLE XII

The incorporators of The American Museum of Natural History shall be designated as Founders of the Museum.

Any person contributing or devising \$50,000 in cash, securities or property to the funds of the Museum may be elected a Benefactor of the Museum.

Any person contributing \$25,000 in cash, securities or property to the funds of the Museum may be elected an Associate Founder of the Museum, who after being so elected shall have the right in perpetuity to appoint the successor in such associate foundership.

Any person contributing \$10,000 to the funds of the Museum may be elected an Associate Benefactor of the Museum, who after being so elected shall have the right in perpetuity to appoint the successor in such associate benefactorship.

Any person contributing \$1,000 to the funds of the Museum, at one time, may be elected a Patron of the Museum, who

after being so elected shall have the right in perpetuity to appoint the successor in such patronship.

Any person contributing \$500 to the funds of the Museum, at one time, may be elected a Fellow of the Museum, who after being so elected shall have the right to appoint one successor in such fellowship.

No appointment of a successor shall be valid unless the same shall be in writing, endorsed on the certificate, or by the last will and testament.

Any person contributing \$100 to the funds of the Museum, at one time, may be elected a Life Member of the Museum.

Any person may be elected to the above degrees who shall have given to the Museum books or specimens which shall have been accepted by the Executive Committee, or by the President, to the value of twice the amount in money requisite to his admission to the same degree.

Benefactors, Associate Founders, Associate Benefactors, Patrons, Fellows and Life Members shall be elected by the Board of Trustees or by the Executive Committee, and the President and Secretary shall issue diplomas accordingly under the seal of the Museum.

In recognition of scientific services rendered, the Trustees may also elect Honorary Fellows of the Museum in their discretion.

ARTICLE XIII

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

ARTICLE XIV

No alterations shall be made in this Constitution, unless at a regular meeting of the Trustees, or at a special meeting called for this purpose; nor by the votes of less than a majority of all the Trustees; nor without notice in writing of the proposed alterations, embodying the amendment proposed to be made, having been given at a previous regular meeting.

BY-LAWS

REVISED AND AMENDED TO FEBRUARY 7, 1916

Ι

If any Trustee shall accept a salary from this Corporation he shall thereby be disqualified for the time being from acting as a Trustee thereof; provided, that the Board of Trustees shall have power to suspend the operation of this law in any special case.

TT

Any vacancies occurring in the membership of the several committees during the interval between the regular meetings of the Board of Trustees may be filled at a regular meeting of the Executive Committee, until the next meeting of the Board.

III

The regular meetings of the Executive Committee shall be held on the third Wednesday of each month, but special meetings may be held at any other time on a two days' call issued by order of the President, or at the request of three of its members.

IV

All bequests or legacies, not especially designated, and all membership fees, excepting Sustaining, Annual and Associate Membership fees, shall hereafter be applied to the *Permanent Endowment Fund*, the interest only of which shall be applied to the use of the Museum as the Board shall direct.

V

SECTION I. No indebtedness (other than for current expenses) shall be incurred by any committee, officer or employee of the Museum, except as provided for in the Constitution.

- SEC. 2. No bills shall be paid unless approved by the Director or, in his absence, the Assistant Secretary, and countersigned by one of the following named Trustees: President, Chairman of the Executive Committee, or Treasurer.
- SEC. 3. The accounts of the Museum shall be under the care of a Bursar, who, on recommendation of the President and the Treasurer, shall be appointed by the Board of Trustees and be under its direction. He shall give such bonds for the faithful performance of his duties as the Board may direct, and shall hold office during the pleasure of the Board. The Bursar, acting under the direction of the President or Treasurer, shall be the official representative of the Treasurer at the Museum, and as such shall be the head of the Treasurer's office there.

VI

The Board of Trustees shall have power to appoint, on recommendation of the Director, a Superintendent of Building and such other officers as may be deemed necessary, who, acting under the instruction of the Director, shall have charge of the construction, maintenance, alterations and repairs of the buildings, and shall be responsible for their sanitary condition. They shall hold office during the pleasure of the Board.

VII

The Board of Trustees shall have power to appoint a Registrar, who, acting under the instruction of the Director or Assistant Secretary, shall inspect all incoming and outgoing shipments, and shall attend to the details of matters relating to customs.

VIII

Benefactors, giving \$50,000, are each entitled to I Subscriber's Ticket, 10 Complimentary Season Tickets and 10 Tickets for a single admission.

Associate Benefactors, giving \$10,000, are each entitled to I Subscriber's Ticket, 10 Complimentary Season Tickets and 10 Tickets for a single admission.

Patrons, giving \$1,000, are each entitled to I Subscriber's Ticket, 5 Complimentary Season Tickets and 10 Tickets for a single admission.

Fellows, giving \$500, are each entitled to I Subscriber's Ticket and IO Tickets for a single admission.

Life Members, giving \$100, are each entitled to I Subscriber's Ticket and 7 Tickets for a single admission.

Sustaining Members, paying \$25 yearly, are each entitled to I Subscriber's Ticket and 5 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to I Subscriber's Ticket and 4 Tickets for a single admission.

Associate Members, paying \$3.00 yearly, are each entitled to I Subscriber's Ticket, admitting to the Members' Room, and 2 Tickets for a single admission; also to current copies of the Museum Journal and the Annual Report.

Note.—A Subscriber's Ticket admits to the Members' Room, also to all Receptions and Special Exhibitions, and may be used by any member of the Subscriber's family.

family.

The Single Admission Tickets admit the bearers to the Members' Room, and are issued to Subscribers for distribution among friends and visitors.

FOR EQUIPMENT AND CASE CONSTRUCTION

LEGAL ENACTMENTS OF 1915

By the Board of Estimate

Resolved, That subject to concurrence herewith by the Board of Aldermen, the resolution adopted by the Board of Estimate and Apportionment on July 17, 1911, amended on February 21, 1912, and concurred in by the Board of Aldermen on July 31, 1911, and on March 12, 1912, respectively, to read as follows:

"Resolved, That, pursuant to the provisions of section 47 of the Greater New York Charter, as amended, the Board of Estimate and Apportionment hereby approves of the issue of corporate stock of The City of New York to an amount not exceeding two hundred thousand dollars (\$200,000), to provide means for the construction of a foundation for the southeast wing and court building, and for architect's fees for designing, planning, and supervising the work of constructing the entire southeast wing and court building of the American Museum of Natural History, under the jurisdiction of the Department of Parks, Boroughs of Manhattan and Richmond, and that when authority therefor shall have been obtained from the Board of Aldermen, the Comptroller be and is hereby authorized to issue said corporate stock of The City of New York in the manner provided by section 169 of the Greater New York Charter, the proceeds thereof to the amount of the par value of the stock to be applied to the purposes aforesaid."

-be and the same is further amended by adding after the words "Natural History" the words "to the extent of eighty-eight thousand one hundred and ninety-one dollars and twenty-three cents (\$88,191.23), and for the purchase of cases, bookstacks and other equipment for said Museum, to the extent of one hundred and eleven thousand, eight hundred and eight dollars and seventy-seven cents (\$111,808.77); provided, however, that no encumbrances or expenditures shall be made against the proceeds of corporate stock herein authorized, nor shall bids upon such contracts be advertised for until after approval by the Board of Estimate and Apportionment of the plans, specifications, estimates of cost and forms of such contracts which shall be submitted to said Board by the Commissioner of Parks, Boroughs of Manhattan and Richmond, nor shall any architect, engineer, expert or departmental employee be engaged or employed as a charge against such proceeds except after approval by said Board of such employment and of the fee or wage to be paid by preliminary and final contracts, voucher or budget schedule, which are to be similarly submitted, unless in the case of departmental employees, such employment is in accordance with schedules approved by said Board; the amendment herein, having the effect of rescinding \$111,808.77 in the corporate stock authorization for the fund C. D. P. 3-B; which sum is herein reauthorized for another purpose.

A true copy of resolution adopted by the Board of Estimate and Apportionment, December 10, 1915.

JAMES MANCHESTER,
Assistant Secretary.

APPROPRIATION AND EXPENDITURES THEREON TO DECEMBER 31, 1917

_ DECEMBER 3	RI. 1917		
RECEIPTS:			
By Direct Appropriation, C.D.P. 3e (by Transfer from C.D.P. 3b)			
Expenditures, 1916:			
Alcohol Storage Racks (Van Dorn			
Iron Works Co.)	\$2,450.00		
Storage Cases (Van Dorn Iron	1 710		
Works Co.)	14,222.90		
Pillar Shaper (Hendey Machine Co.)	400.00		
Vacuum Cleaner (American Radiator			
Co.)	344.00		
Co.)	135.00		
Materials	9,227.71		
Labor Items		\$32,315.55	
Expenditures, 1917:			
Boring Machine (Manning, Maxwell			
and Moore)	212.30		
Shunt Wound Motor (Western Elec-			
tric Co.)	272.70		
MaterialsLabor Items	6,401.52	16,379.77	48 60° 20
Dabot Items	9,493.25	10,3/9.//	48,695.32
Balance on hand December 31, 1917			\$63,113.45



FIFTH ANNUAL REPORT

OF THE

PENSION BOARD

OF

THE AMERICAN MUSEUM OF NATURAL HISTORY

FOR THE YEAR 1917

OFFICERS AND MEMBERS OF PENSION BOARD

1917

Chairman
FELIX M. WARBURG

Vice-Chairman Ralph W. Tower

Treasurer
HENRY P. DAVISON

Secretary
George N. Pindar

TRUSTEE MEMBERS

Adrian Iselin

PERCY R. PYNE

WALTER B. JAMES

FELIX M. WARBURG

EMPLOYEE MEMBERS

HARRY F. BEERS

RALPH W. TOWER

GEORGE N. PINDAR

Bursar Frederick H. Smyth

REDERICK H. SMYTH

Consulting Actuary
S. Herbert Wolfe

Counsel
Lewis L. Delafield

Medical Examiners
GEORGE M. MACKENZIE, M.D.
WALTER P. ANDERTON, M.D.

To the President and Trustees of The American Museum of Natural History and to the Subscribers to the Fund:

In accordance with the Rules and Regulations, I have the honor to present herewith the Fifth Annual Report of the activities of the Pension Board and of its financial operations for the fiscal year ending December 31, 1917.

FELIX M. WARBURG
Chairman

February 1, 1918

Since the organization of the Pension Plan, it has been the custom for the Director of the Museum to certify to the Pension Board as permanent the names of those employees whose services were to be retained. More recently, as it was found best to adopt a system of physical examination, a change of procedure in methods of certification was necessitated, inasmuch as occasionally certifications of permanent employment had to be cancelled, in the cases of employees who were found to be physically unsuited, from an insurance standpoint, to participate in the Pension Plan. Remedial changes have therefore been effected, so that now the Director indicates his willingness to certify temporary employees as permanent in their relation to the institution, providing they first pass the physical examination required by the Board. At the satisfactory completion of this physical examination, the employee is certified as permanent. This simplification obviates the necessity of cancelling any permanency certification once given.

The following is the status of the membership of the Fund as constituted December 31, 1917:

Number of Subscribers, January 1, 1917 New Subscribers during the year 1917	34
Reinstatements made during the year 1917	2
-	
	277
Resignations and Dismissals	
Retirements 2	
Deaths 4	21
- Control of the Cont	
Number of Subscribers, December 31, 1917	256

During the year we have had the misfortune to lose by death four members, as noted above, particular mention of whom will be found in another part of the report, as will also the names of those members who have retired from active service.

As in previous years, it is a pleasure to record that through the good offices of friends of the institution, employment has been found for members of certain deserving families of deceased subscribers, supervising medical attention provided for those who have been ill, and other forms of relief afforded.

Serious thought and discussion have been given to the desirability of obtaining an endowed bed under the control of this Board, in some hospital of the city, but after careful consideration it was felt best to solicit from friends of the Museum the privilege of nominating occupants to beds already endowed. so as to offer to employees a choice of hospitals. Our endeavor in this direction has already proved successful, and we desire to record here our sincere appreciation to those friends who have so kindly placed at the disposition of the Secretary endowed beds in two of the prominent hospitals of the city, for occupancy by employees in need of surgical attention and medical care. We take this opportunity to notify the employees that, should it become necessary for any of them to undergo hospital treatment, a notification to the Secretary to that effect will secure for them, barring prior claims, free attendance at Mount Sinai or the Presbyterian Hospital. Should preference be expressed for treatment in other hospitals, attempts will be made to conclude similar arrangements for beds in hospitals chosen by employees.

In early June, the President, with forethought and a keen appreciation of the benefit which would accrue to employees from participating in the Liberty Loans, appointed a committee consisting of the Chairman, Mr. Iselin, the Bursar, and the Secretary, to formulate a plan whereby the employees generally might be given the opportunity of subscribing and paying for bonds by some easy payment method. Through the generosity of certain Trustees, who advanced the necessary funds, such a course was made possible, and we desire to express our gratitude not only to those Trustees who formulated and made possible such an operative plan, but as well to the Bursar of the Fund, Mr. Smyth, who has given his time and painstaking efforts to secure subscriptions and to prepare and keep such books as are necessary in carrying on this work. That the plan was successful is best evidenced by the fact that 164 subscriptions, in the amount of \$13,150.00, were received to the first issue of bonds, and 95 subscriptions, amounting to \$9,100.00, were received to the second issue of bonds.

Although the report of the Pension Board is confined in the main to a statement of the current business of the Board, it

has been thought well to include a brief description of the activities of those of our associated officers and members who, through a deep sense of patriotic duty, have enlisted or otherwise volunteered their services to our country.

Early in the year, Dr. George M. Mackenzie, who had been acting for some time as medical examiner for the Pension Board, found it necessary temporarily to sever his relations with the Board, owing to the acceptance of his offer to serve as a medical examiner for the Naval Reserve Force. He is now located at the Brooklyn Navy Yard, and in his stead Dr. Walter P. Anderton, who has for a long time been attached to the Presbyterian Hospital, has been selected, and is giving to the Board most efficient and satisfactory service.

The patriotic activities of our Consulting Actuary, Mr. S. Herbert Wolfe, have been varied and considerable. Early in May, at the instigation of the United States Department of Labor, he visited Canada for the purpose of ascertaining the care given by that country to the dependents of enlisted men. The results of his work there have been incorporated in a report issued by the Department. After the satisfactory completion of this duty, Mr. Wolfe received an appointment as Captain in the Quartermaster's Department. He was detailed to Washington, where he assisted in drafting the present measure for soldiers' insurance and compensation in the United States, and while thus occupied directed the compilation of a report entitled "Governmental Provisions in the United States and Foreign Countries for Members of the Military Forces and Their Dependents." This report includes a review of the pension situation in the United States, a brief analysis of provisions peculiar to foreign countries and comparative charts of rates in the United States and twelve other countries, and is amplified by an exhaustive report of the Pension systems of the United States and of all the foreign countries except Canada. Having completed this task, Captain Wolfe was sent abroad, and is at present located in France. Through the intermedium of his office, however, Captain Wolfe is continuing his services as Consulting Actuary to the Pension Board.

A number of our members have been prompt in offering themselves for active service to our country. Some of these

have entered the Federal Service from the National Guard; some, including a number of graduates of the Plattsburg camps, have enrolled in various branches of the Army, and others have entered the Navy. Of all we can attest that they are fulfilling man's highest duty and privilege in giving their aid, their personalities, their influence, and their lives, if need be, in the cause of liberty, humanity and justice. Great indeed is our debt to those of our members who have responded to their country's call, and it is with a deep sense of appreciation that we enumerate those members at this time on our Roll of Honor:

HAROLD E. ANTHONY
FELIX A. BARBARITO
JAMES P. CHAPIN
CHARLES A. CONNOLLY
JOSEPH F. CONNOLLY
LAURENCE FERRI
JOHN J. FINN
ALBERT J. KELLY
DANIEL J. McGARTY
JOSEPH S. McGARTY
EDWIN C. MEYENBERG
LEO E. MILLER
BARRINGTON MOORE



Deceased Subscribers

It is with deep regret that we record the deaths of the following members during the year 1917:

LOUIS POPE GRATACAP

Louis Pope Gratacap was born November 1, 1851, in Brooklyn. He attended the public schools, and graduated from the College of the City of New York in 1860 with the degree of Bachelor of Arts, and from the Columbia School of Mines in 1876 with the degree of Bachelor of Philosophy. In 1880 he received the degree of Master of Arts from the College of the City of New York. He entered the service of the Museum in 1876, when the collections were housed in the old Arsenal in Central Park. In 1880 he was appointed Assistant Curator of Mineralogy, and in 1883 Assistant Curator of the Department of Geology. In 1900 he was made Curator of Mineralogy, also in charge of Conchology, becoming Curator of Conchology in 1901. In 1909 he received the appointment of Curator of the division of Mollusca in the Department of Invertebrate Zoölogy, and held this office, together with his curatorship of Mineralogy, until the time of his death. Mr. Gratacap, who was wonderfully versatile, was a fluent speaker and brilliant lecturer, and possessed rare personal charm. His numerous works of fiction bear witness to his remarkable powers of imagination and elegance of literary style. In his knowledge of gems, minerals and shells he was without a peer. Combined with this attainment he possessed the rare faculty

of arranging the specimens under his control so artistically and so revealingly of their beauties of color and splendors of light that layman and scientist alike were attracted and fascinated by the elegance and perfection of the display. His last few years he devoted to the classification and rearrangement of the specimens of Mollusca, having already completed that of the gems and minerals, and this work will stand through the years to come as an enduring monument to his scientific and artistic attainments. Generous of heart, steadfast and warm in friendship, his loss is irremediable. He died on December 19, 1917.

WILLIAM J. HAYES

William J. Hayes was born on November 12, 1868, in this city. He entered the service of the Museum nearly six years ago and was assigned the duties of night-watchman. He was conspicuous for faithfulness in the performance of his duties and the regularity of his attendance. Those who associated with him have a deep sense of personal loss, for in addition to his other attributes he had the faculty of maintaining firm and hearty friendships. He died on April 8, 1917.

Francis S. McGuire

Francis S. McGuire was born on July 5, 1837, in East Troy, New York. On October 24, 1861, he enlisted in the United States Navv. where he served with honor and distinction as gunner's mate on the Barque Fernandina, receiving his discharge February 23, 1865. As an evidence of his integrity and the respect in which he was held by his comrades, it may be stated that later he was commander for more than twelve years of William D. Kennedy Post, G.A.R. In 1898 Mr. Mc-Guire entered the employ of the Museum and was assigned to the engineering force, where he faithfully and conscientiously served as night engineer for nearly sixteen years. Age and declining health caused him to ask for his retirement by the Museum in 1014. Mr. McGuire was a most likeable man, of happy disposition, and true in friendship. Seldom complaining through years of continuous illness, he was released from his sufferings on December 15, 1917.

Augustus R. Strader

Augustus R. Strader was born May 28, 1848, in Asbury, New Jersey. For a number of years prior to his entering the service of the Museum in 1899, he was employed by contractors engaged in constructing cases and other equipment for this institution. Upon the organization of a Museum construction department, he was placed in charge of the carpentry force, where he not only supervised the work of repairs, but as a draughtsman prepared all the plans for new exhibition cases and for alterations required in the building. This position he held at the time of his death. Possessed of a most agreeable personality, genial and friendly to all, his sudden death was a great shock to his numerous associates, who will ever cherish memories of this sincere friend and enjoyable companion. He died on December 24, 1917.

RETIREMENTS

Name	Position	Date Effective	Period of Service
John T. Davis	Carpenter	March 1, 1917	15 yrs.
John Jordan	Attendant	April 1, 1917	15 yrs.

FINANCIAL STATEMENT

OF THE

Pension Fund

OF THE

American Museum of Natural History

1917

INVESTED FUNDS

	Par Value	Book Value
Endowment Fund		\$1,140 39 69,622 11
Total	\$76,000 00	\$70,762 50

PENSION FUND ACCOUNT

RECEIPTS

1917

- •		
Cash on Hand January I, 1917	\$5,102	66
CONTRIBUTIONS OF SUBSCRIBING EMPLOYEES:		
Deductions of 3% from Payrolls of		
City Maintenance Account \$4,409 30		
General Account		
Special Funds Account 41 74		
Corporate Stock Account 227 49		
Incidental Account 4 98		
Morris K. Jesup Fund Account . 2,767 81		
\$9,572 32		
Personal Contributions of Subscribing		
Employees		
Employees	10,194	т8
Contributions of Board of Trustees:	10,194	
To Equal Contributions of Subscribing Employees	10,167	20
RETURN OF CONTRIBUTIONS (PREVIOUSLY REFUNDED)		_
Interest on Investment Fund		-
Interest on Endowment Fund		_
Interest on Leave of Absence Payments		47
Interest on Contributions Returned		53
Interest on Repayment of Contributions and Interests		64
Interest on Credit Balances		
Bursar's Account		
DURSAR'S ACCOUNT	500	
	\$28,935	0.4
The state of the s		
Examined \{ ADRIAN ISELIN \} Auditing \\ and Approved \{ PERCY R. PYNE \} Committee		

PENSION FUND ACCOUNT

DISBURSEMENTS

1917

RETURN OF CONTRIBUTIONS		_
Service Pensions	,259 4	2
DEATH GRATUITIES PAID UNDER SECTION 18 777 00		
	5,434 6	6
Purchase of Securities:		
Investment Fund	3,995 8	8
Expenses	88 2	9
LOAN ACCOUNT	500 O	Ю
Cash on Hand December 31, 1917: Deposited with the United States Trust		
Company of New York \$7,156 79		
Deposited with Colonial Bank (Bursar's		
Account) 500 00		
7	7,656 7	9

\$28,935 04

E. & O. E. New York, December 31, 1917

H. P. DAVISON, Treasurer

PENSION FUND—SPECIAL FUNDS ACCOUNT

RECEIPTS

1917

-9-1		
Special Contributions No. 2:		
Cash on Hand January 1, 1917	. \$20 00	
Interest on Credit Balances	. 12 16	
TOPA		\$32 16
LIBERTY LOAN ACCOUNTS: Interest on Credit Balances	• • • • • • • • • • •	35 35
American Museum Liberty Loan No. 1: Subscribers' Payments:		
Personal \$3,865 5	0	
Deducted from Salaries 3,559 o		
	- \$7,424 50	
INTEREST ON UNPAID BALANCES:		
Personal Payment \$7 9	3	
Deducted from Salaries 131 0	5	
	138 98	
Loan Account	. 10,250 00	17,813 48
AMERICAN MUSEUM LIBERTY LOAN No. 2:		17,013 40
Subscribers' Payments:		
Personal	0	
Deducted from Salaries 1,186 5		
Deducted from Salaries ************************************	- - \$3,749 60)
INTEREST ON UNPAID BALANCES:		
Personal Payment \$1 6	54	
Deducted from Salaries 18 3	32	
	19 96	5
LOAN ACCOUNT	. 6,050 oc	
		9,819 56
		0
		\$27,700 55
Examined (ADRIAN ISELIN) Auditing	g	
and Approved (PERCY R. PYNE) Con	nmittee	

PENSION FUND—SPECIAL FUNDS ACCOUNT

DISBURSEMENTS

1917

-9-1		
AMERICAN MUSEUM LIBERTY LOAN NO. 1:		
Purchase of Bonds\$13,150 00		
Loan Account 4,519 50		
Interest on Loans		
	\$17,808 2	8
AMERICAN MUSEUM LIBERTY LOAN No. 2:		
Purchase of Bonds	9,100 0	Ю
Cash on Hand December 31, 1917:		
Deposited with the United States Trust Company of		
New York	792 2	27

\$27,700 55

E. & O. E. New York, December 31, 1917

H. P. DAVISON, Treasurer

THE AMERICAN MUSEUM OF NATURAL HISTORY

INCORPORATED IN 1869

"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"

BY

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

WILLIAM T. BLODGETT
WILLIAM T. BLODGETT
MORRIS K. JESUP
T. D. JACKSON STEWARD
J. PIERPONT MORGAN
ERMAN A. G. PHELPS DODGE
NES CHARLES A. DANA
VELT JOSEPH H. CHOATE
HENRY PARISH



MEMBERSHIP

There are more than forty-five hundred members of the Museum, residents of the United States and other countries, who support its educational and scientific work and enjoy its lectures, publications and other privileges. The number of Members in each class is as follows:

Associate Members		512	Patrons	113
Annual Members		2,966	Associate Benefactors	21
Sustaining Members		89	Associate Founders .	10
Life Members .		793	Benefactors	5
Honorary Fellows		10	Founder	1
Fellows		48		

Full information regarding membership will gladly be furnished by the Secretary.

MEMBERSHIP FEES

Associate Members			Life Members	\$100
(annually)		\$3	Fellows	500
Annual Members			Patrons	1,000
(annually)		10	Associate Benefactors	10,000
Sustaining Members			Associate Founders .	25,000
(annually)		25	Benefactors	50,000

MEMBERS OF THE MUSEUM ENJOY THE FOLLOWING PRIVILEGES:

An Annual Pass admitting to the Members' Room.

Complimentary tickets admitting to the Members' Room for distribution to their friends.

Services of an Instructor for guidance through the Museum.

Two course tickets to Spring Lectures.

Two course tickets to Autumn Lectures.

Current numbers of all Guide Leaflets on request.

Complimentary copies of Natural History.

ADDRESS

SECRETARY OF THE AMERICAN MUSEUM
OF NATURAL HISTORY
77th Street and Central Park West
New York

FORM OF GIFT OR BEQUEST

I do h	ereby	give	and	bequea	th to	"Tı	ie Ai	MER	RICAN
Museum	of N	JATUI	RAL	Histor	x'' o	fthe	City	of	New
York,									

ENDOWMENT FUND

The Endowment Fund was established in 1884. The Trustees especially desire to insure the permanent growth and welfare of the Museum through an increase of the General Endowment Fund.

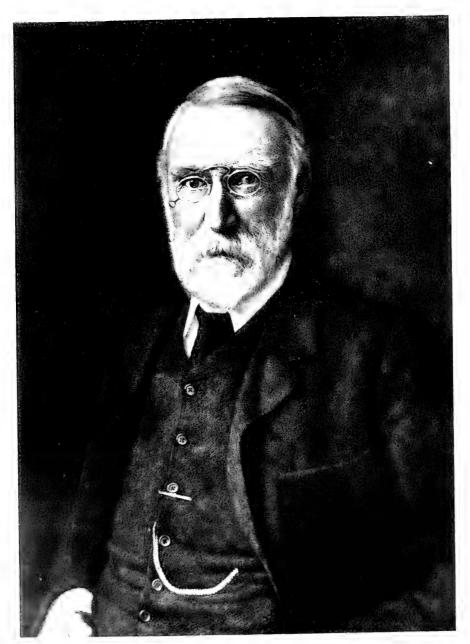
BUILDING FUND

The Building Fund was established in 1916. The Trustees desire to celebrate the Fifty-fifth Anniversary of the Founding of the Museum, namely, 1924, through the Completion of the Southern Half of the great building.

EXEMPT FROM TAXATION

Gifts and Bequests to The American Museum of Natural History are exempt from federal taxation, under the Federal Revenue Act of 1918.





Doctor James Douglas
of The Arcrican Museum of Natural History

FIFTIETH ANNUAL REPORT

OF THE

TRUSTEES

OF

THE AMERICAN MUSEUM OF NATURAL HISTORY

For the Year 1918



FOR THE FREE EDUCATION

OF THE PEOPLE

FOR EXPLORATION, RESEARCH

AND PUBLICATION

NEW YORK
Issued May 1, 1919



CONTENTS

Membership				•		•				3
Membership Fees	•		•	•	•	•		•	٠	3
Privileges of Members	٠	•	•	•	٠	•	•	•	•	3
FORM OF GIFT OR BEQUEST	•	•		•	•		٠	•	•	4
ENDOWMENT FUND					•		•	•	•	4
Building Fund		•				•	•	•	•	4
GIFTS EXEMPT FROM TAXATION				•	•	•	•	•	•	4
BOARD OF TRUSTEES			•	•	•	•	•	•	•	12
COMMITTEES OF THE BOARD OF TRUSTEES .		•	•	•	•	•	•	•	•	13
Administrative Officers of the Museum	•		•	•	•	•	•	•	•	14
Scientific Staff			•					•	•	15
Report of the President										17
Memorial to Theodore Roosevelt										18
Progress of Fifty Years			٠					•		18
The Museum's Contribution to Victory								٠		19
Museum Men in Service									٠	20
Women's War Relief Association										21
Draft Enrolment										21
Educational Work in the Army					٠					22
Public Health						•			٠	22
Reconstruction Hospital		•	•			•	•	٠		22
Growth of General Endowment										23
Need of General Endowment										23
Sage Bequest					٠				٠	24
Repeal of Tax on Education		•								24
The People Should Maintain the Museum .										26
Comparative Cost of Museum				٠						27
Future Maintenance Policy										27
Exploration, Research and Publication										28
China										28
American Archæology										29

8 Contents

								PAGE
Z	oölogy and Palæontology						٠	29
	Publications of the Congo Expedition							30
Memb	pership and Staff							30
Т	rustees							30
C	Choate Memorial Volume							31
S	Scientific Staff							31
Public	c Activities of the Staff							32
Hospi	itality to Societies							35
_	British Educational Mission							35
								36
	al Gifts and Acknowledgments							
Specia	at Gitts and Acknowledgments	•	٠	•			•	3/
GENERAL	Administration of the Museum							38
P	Popular Publications							38
F	Printing and Labeling							38
	Summary of Printing							_
Α								39
	Statistics of Numbers Reached by the Museu	m	and	Its	E			
	Educational System							40
F	Public Information Committee							41
								42
	Special Exhibits							43
	· · · · · · · · · · · · · · · · · · ·							44
	Heating and Lighting							45
7	Needs of the Museum							46
-								•
REPORTS	OF THE CURATORS							. 47
	ic Education in the Museum and in the School							47
	War Work of the Department							. 47
	Publication—"Free Education"							49
	Opinions of Foreign Educators							. 49
	Lending of Lantern Slides							. 49
	Nature Study Collections							. 51
	Lectures for School Children							. 52
	Cooperation with High Schools							. 53
	Docent Service to Schools							- 53
	Loan Collections for Public Libraries							. 54
	Educational Work with the Blind							. 54
	Photographic Work							. 5-
	Acknowledgments							. 55
	Staff							. 5.5
	logy, Geography and Past Life on the Earth .							. 50
								. 50
	Changes in Staff							. 50
	•							. 50
	Exhibition Hall				-	-		9

	Ca	n	ten	ts											9
														P.	AGE
Topo-geological Relief Mo	dels	•	•	•		•	•	•	•	•	•	•	•		
Seismograph	•	•	•	•	•		•	•	•	•	•	•	•	•	58
Corridor Hall				•	•			•	•	٠			•		58
Catalogue Work						•			•				•		58
Crocker Land Expedition									•						59
Research and Publication															59
Accessions															60
Field Work		•	•	•		•	•	•		•	٠	٠	•	•	60
Minerals and Gems															61
Mineral Collection .															61
War Minerals															61
The Tonnelier Figurine															62
Publications															62
Research															62
Accessions															62
							•	•	•	-	•	-			
Woods and Forestry				•	•				•			•	•		64
Exhibition										•					64
Existing Invertebrates .															65
Darwin Hall															65
General Invertebrate Coll															67
Insects and Spiders .															67
Field Work															68
Research and Publication															69
Accessions															71
			_				_								
Recent and Extinct Fishes; Ex														٠	72
Fishes					•	•		٠	•	•			•	•	72
Exhibition, Care of Collect							•				•	•	•	٠	72
Research and Publication					•	•	٠	٠	•	•	•	•	•	•	73
Reptiles and Batrachians .					•	•	•	٠	•	•	•	•	•	•	74
Accessions and Exchanges			•		•	•	•	•	٠	•	•	•	•	•	74
Research and Publication		•	•	•	•	•	•	•	•	٠	•	•	•	•	75
Exhibition	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	75
Mammals and Birds															76
Staff															76
Accessions															76
Field Expeditions															77
Study Collections															78
Installations															78
Research and Publication															79
Editorship															80
Extinct Vertebrates															81
							•	•	٠	•		•		•	81
			-	•	•	•	•	•	•	•	•	٠	•	-	_
Cretaceous Dinosaurs .		•	•	٠	•	•	•	•	•	•	•	٠	•		82

10 Contents

																	LAUL	
	Permian Reptile	s		•					٠		•	•			•		82	
	Hall of the Age																83	
	Cataloguing and	Rearrang	geme	ent	of	Stu	dу	Co	11ec	tion	ıs		•		•		83	
	Researches .									٠	٠						84	
Exis	ting and Extinct	Races of	M	en													84	
AJAIG	General Progres								•				•		•		84	
	Accessions .												•		•		85	
									•		•			•	•	۰	85	
	Development of															٠		
	Field Work .										•			•	•	•	87	
	Study Collection													-	•	•	88	
	Popular Lectures			·				•	•	٠	•	٠	•	•	٠		89	
									٠	٠	٠	٠	٠	•	٠	•	09	
Ana	tomy and Physio	logy .								•			•	•	•		90	
	Cooperation with	the War	De	epar	tm	ent				•					•		90	
Dubi	ic Health																	
	Hygiene of the I										•			•	٠	٠	91	
									٠	•	•	•	٠	٠	•	•	91	
	Scope of Food I Plans for the Fu		•						•	•	•	•	•	٠	•	•	91	
								٠	•	٠	٠	٠	٠	•	•	•	_	
	The Yellow Feve							٠	•	٠	٠	٠	٠	٠	٠	•	92	
	Museum of Livin							٠	•	٠	٠	٠	٠	٠	٠	•		
	Research on Bac						•		•	•	•	٠	٠	•	٠	٠	93	
'	Changes in Staff	and Out	side	Ac	tiv:	ities	3	٠	٠	•	•	•	•	٠	٠	٠	94	
The	Library																94	
	Accessions .																95	
	Publications .												,				97	
C	L SUMMARY																	
GENERA	L SUMMARY			•	•	•	•	•	•	•	٠	٠	•	•	•	•	98	
FINANC	es, Maintenai	nce, En	DOM	ME	IN1	Γ	٠	•	•	•	•	•	•	٠	•	•	101	
]	Endowment and l	Investm e r	it A	cco	unt	t											IOI	
(City Maintenance	Account	t		•								•			٠	102	
1	Trustees' General	Account	:														102	
]	Morris K. Jesup	Fund Acc	coun	t													102	
5	Special Funds A	ccount															102	
]	Minor Accounts																103	
]	Pension Fund A	ccount															103	
Sumi	nary of Classifica	tion of D	ishı	rse	mei	nts											104	
Finar	ncial Statement		•	•	•	•	•	•	•	•	•	•	•	•	•	•	107	
Member	SHIP																125	
	Lectures to Memb																125	
	Lectures to Child																126	
	Special Lectures																126	

	Contents												11	
														PAGE
Status of Membership		•			•	•	•	•	٠	•	٠	•	٠	. 127
New Members					-	•	•	•	•	•	•	٠	•	. 127
Deceased Trustee and Me	mb	ers		•	٠	•	•	٠	٠	•	•	٠	•	. 129
LIST OF TRUSTEES AND TERMS	S O1	F S	ERV	/ICI	3		•	•			•	•	•	. 131
LIST OF MEMBERS														. 133
Founders	٠													. 133
Benefactors														. 133
Associate Founders .														. 133
Associate Benefactors														. 134
Patrons														. 134
Fellows														. 137
Honorary Fellows														. 138
Life Members														. 139
Sustaining Members .														. 151
Annual Members														. 152
Associate Members .	•	•	٠	•	•	•		٠	•	•	٠	•	٠	. 176
Accessions														. 181
Public Education														. 181
Geology and Invertebrate														. 182
Mineralogy		•		_	٠.									. 183
Woods and Forestry .														. 185
Invertebrate Zoölogy .														, 186
Ichthyology and Herpetol														. 188
Mammalogy and Ornithol														. 191
Vertebrate Palæontology	,													. 194
														. 194
Public Health														. 197
Art														. 197
Act of Incorporation														. 199
rici of incompration	•	•	•	•	•	•	•	•	•	•	•	•	•	• • • • • • • • • • • • • • • • • • • •
CONTRACT WITH THE DEPARTM	4EI	IT (OF	PA	RK	S	•	•	•	•	٠	•	•	. 201
Constitution														. 207
By-Laws		٠				•		•		•				. 213
SIXTH ANNUAL REPORT OF TH	E]	PEN	ISIC	N	Во	ARI)							. 217
Financial Statement of th														. 229

BOARD OF TRUSTEES

FOR 1919

President

HENRY FAIRFIELD OSBORN

First Vice-President CLEVELAND H. DODGE

Second Vice-President J. P. MORGAN

Treasurer HENRY P. DAVISON Secretary ADRIAN ISELIN

EX-OFFICIO

JOHN F. HYLAN
MAYOR OF THE CITY OF NEW YORK

CHARLES L. CRAIG COMPTROLLER OF THE CITY OF NEW YORK

 $\begin{array}{c} \text{FRANCIS D. GALLATIN} \\ \text{PRESIDENT OF THE DEPARTMENT OF PARKS} \end{array}$

ELECTIVE

Class of 1919

HENRY FAIRFIELD OSBORN GEORGE F. BAKER

Class of 1920

PERCY R. PYNE J. P. MORGAN
ARTHUR CURTISS JAMES JOHN B. TREVOR
WALTER B. JAMES

Class of 1921

CHARLES LANIER R. FULTON CUTTING FREDERICK F. BREWSTER WILLIAM AVERELL HARRIMAN

Class of 1922

ADRIAN ISELIN OGDEN MILLS
THOMAS DEWITT CUYLER MADISON GRANT
HENRY P. DAVISON

Class of 1923

A. D. JUILLIARD ARCHER M. HUNTINGTON
CLEVELAND H. DODGE FELIX M. WARBURG
HENRY C. FRICK

COMMITTEES OF THE BOARD OF TRUSTEES

FOR 1919

Executive Committee

J. P. MORGAN, Chairman
HENRY FAIRFIELD OSBORN, Ex-officio
FREDERICK F. BREWSTER ADRIAN ISELIN
HENRY P. DAVISON ARTHUR CURTISS JAMES
CLEVELAND H. DODGE A. D. JUILLIARD
OGDEN MILLS

Auditing Committee

FELIX M. WARBURG, Chairman THOMAS DEWITT CUYLER WILLIAM AVERELL HARRIMAN

Finance Committee

HENRY P. DAVISON, Chairman
GEORGE F. BAKER R. FULTON CUTTING
HENRY C. FRICK

Nominating Committee

PERCY R. PYNE, Chairman
R. FULTON CUTTING MADISON GRANT

Committee on Building and Plans

PERCY R. PYNE, Chairman
HENRY FAIRFIELD OSBORN, Ex-officio
MADISON GRANT
FELIX M. WARBURG
WALTER B. JAMES
FRANCIS D. GALLATIN,
Commissioner of Parks

Committee on Pensions

FELIX M. WARBURG, Chairman ADRIAN ISELIN WALTER B. JAMES PERCY R. PYNE

Advisory Committee on Mural Painting, Decoration, Sculpture and Architecture

EDWIN H. BLASHFIELD DANIEL C. FRENCH BRECK TROWBRIDGE

ADMINISTRATIVE OFFICERS OF THE MUSEUM

FOR 1919

Director

FREDERIC A. LUCAS

Assistant Secretary
GEORGE H. SHERWOOD

Assistant Treasurer

UNITED STATES TRUST COMPANY OF NEW YORK

Bursar

FREDERICK H. SMYTH

Superintendent of Building

J. B. FOULKE

Chief of Construction

H. F. BEERS

Registrar

GEORGE N. PINDAR

Chief Engineer

H. J. LANGHAM

SCIENTIFIC STAFF

FOR 1919

DIRECTOR

FREDERIC A. LUCAS, Sc.D.

GEOLOGY AND INVERTEBRATE PALÆONTOLOGY

EDMUND OTIS HOVEY, Ph.D., Curator Chester A. Reeds, Ph.D., Associate Curator Invertebrate Palæontology

MINERALOGY

HERBERT P. WHITLOCK, C.E., Curator

WOODS AND FORESTRY

MARY CYNTHIA DICKERSON, B.S., Curator

INVERTEBRATE ZOÖLOGY

W. M. Wheeler, Ph.D., Honorary Curator Henry E. Crampton, Ph.D., Curator Roy W. Miner, A.B., Associate Curator Frank E. Lutz, Ph.D., Associate Curator A. J. Mutchler, Assistant Willard G. Van Name, Ph.D., Assistant Frank E. Watson, B.S., Assistant

ICHTHYOLOGY AND HERPETOLOGY

BASHFORD DEAN, Ph.D., Honorary Curator JOHN T. NICHOLS, A.B., Associate Curator Recent Fishes MARY CYNTHIA DICKERSON, B.S., Associate Curator Herpetology G. K. NOBLE, A.B., A.M., Assistant Curator Herpetology KARL P. SCHMIDT, A.B., Assistant Herpetology

MAMMALOGY AND ORNITHOLOGY

J. A. Allen, Ph.D., Curator
Frank M. Chapman, Sc.D., Curator Ornithology
Roy C. Andrews, A.M., Associate Curator Mammalogy
W. DeW. Miller, Associate Curator Ornithology
H. E. Anthony, B.S., Associate Curator Mammalogy
Herbert Lang, Assistant Curator Mammalogy
James P. Chapin, A.M., Assistant Ornithology
Leo E. Miller, Assistant Ornithology

SCIENTIFIC STAFF FOR 1919-Continued

VERTEBRATE PALÆONTOLOGY

HENRY FAIRFIELD OSBORN, LL.D., D.Sc., Honorary Curator W. D. Matthew, Ph.D., Curator Walter Granger, Associate Curator Fossil Mammals Barnum Brown, A.B., Associate Curator Fossil Reptiles William K. Gregory, Ph.D., Associate in Palæontology

ANTHROPOLOGY

CLARK WISSLER, Ph.D., Curator
PLINY E. GODDARD, Ph.D., Curator Ethnology
ROBERT H. LOWIE, Ph.D., Associate Curator
HERBERT J. SPINDEN, Ph.D., Assistant Curator
N. C. NELSON, M.L., Assistant Curator
CHARLES W. MEAD, Assistant Curator
LOUIS R. SULLIVAN, A.M., Assistant Curator
LESLIE SPIER, B.S., Assistant

ANATOMY AND PHYSIOLOGY

RALPH W. TOWER, PH.D., Curator CHARLES F. HERM, Assistant

PUBLIC HEALTH

CHARLES-EDWARD A. WINSLOW, D.P.H., Curator THOMAS G. HULL, Ph.D., Assistant

PUBLIC EDUCATION

GEORGE H. SHERWOOD, A.M., Curator G. CLYDE FISHER, PH.D., Associate Curator ANN E. THOMAS, PH.B., Assistant

BOOKS AND PUBLICATIONS

RALPH W. TOWER, PH.D., Curator IDA RICHARDSON HOOD, A.B., Assistant Librarian

RESEARCH ASSOCIATES

M. D. C. Crawford, Textiles, Anthropology W. Elmer Ekblaw, A.M., Geology Alessandro Faberi, Physiology George Bird Grinnell, Ph.D., Ethnology George F. Kunz, Ph.D., Mineralogy Charles W. Leng, B.S., Coleoptera J. Howard McGregor, Ph.D., Anthropology Barrington Moore, M.F., Forestry A. L. Treadwell, Ph.D., Annulata

FIFTIETH ANNUAL REPORT

To the Trustees and Members of The American Museum of Natural History, and to the Municipal Authorities of the City of New York:

It has become necessary to postpone the celebration of the Fiftieth Anniversary of the Founding of the Museum for five years, namely, until 1924. It is desirable to consider various ways and means whereby this celebration may mark the completion of the entire southern half of the Museum as planned between 1870 and 1875, and officially approved for the City by the Department of Parks on September 17, 1875. This will mark the period of half a century since the building was actually begun by the City.

It is desirable to include in these new plans special facilities for the teachers and pupils of the free public educational institutions of the City, as provided for in the Fourth Clause of the Contract with the Department of Parks, which was drawn in connection with the occupancy of the first building (completed in 1877) and which was signed February 12, 1878. The language of this clause is as follows:

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

It is also desirable to offer the City and the State of New York an opportunity to erect the Main Central Building of the eastern façade, facing Central Park, as a memorial to THEODORE ROOSEVELT, both as Memorial to Theodore Governor of the State of New York and as Roosevelt President of the United States. If the erection of such a Memorial by the City and State shall meet with popular approval, and shall have the support of the Governor of the State and of the Mayor of the City of New York, the Trustees may well surrender all plans for using this building for exhibition purposes, although it will adjoin the Asiatic Hall on the south and the African Hall on the west, the latter especially connected with Theodore Roosevelt's life as an explorer and naturalist.

Theodore Roosevelt's father in 1869 brought together the group of men who founded the Museum. Theodore Roosevelt himself spent hours of his boyhood in the Museum and in the closing years of his life led the Museum's expedition to South America and made important contributions not only to our collections but to our scientific publications. This Memorial would inspire the youth of America with Roosevelt's great example as a nature lover, naturalist, explorer and exponent of the great lessons which nature has to teach us.

A summary of the general progress of the Museum in the last fifty years shows that the great Museum building projected in 1870 is about one-fourth completed; that dur-Progress of ing this period the Trustees, Members and Fifty Years friends of the Museum have contributed gifts and collections valued at \$7,250,000, while the contributions to the Permanent Endowment Fund have been \$7,322,707. In the meantime, the taxpayers of the City of New York have contributed \$5,318,820 for building and \$4,241,492 for maintenance. The General or Unrestricted Endowment, which may be devoted to the general progress of the Museum, is now approximately \$1,300,000, while during the last year and a half additional bequests to the institution for general purposes amount to \$2,105,000, including Mrs. Russell Sage's bequest of \$1,600,000. It is fortunate that the full amount of these bequests will be realized through the recent action of Congress in repealing the iniquitous Federal Tax on educational bequests imposed by the laws of 1916 and 1917.

The financial, material and scientific accomplishments of fifty years may be summed up as follows:

Total expenditure for building by the City of		
New York	\$5,318,820	
Total expenditure for maintenance by the City of		
New York	4,241,492	
Total gifts to Endowment by Trustees, Members and		
friends of the Museum	7,322,707	
Total contributions and gifts to the collections, publi-		
cations and scientific work of the Museum	7,250,000	
Total number of exhibition halls at the present time	35	
Total exhibition area	271,886	sq. ft.
Total number of professional or Scientific Staff, 1918.	54	_
Total number of employees, 1918	340	
Total number of volumes of publications issued by the	٠.	
Museum (Bulletins, Memoirs, Monographs, Spe-		
cial Publications)	90	
Total number of American Museum Members, 1918	4,568	
Average number of visitors annually for the last ten	**-	
years	806,005	
Average number of school children reached annually	, 0	
for the last ten years	1,121,799	

The development of the Museum during the next five years in preparation for its Golden Jubilee will, we trust, include three great features, namely, extension of building, firm foundation of popular municipal maintenance, and increase of our general or unrestricted endowment fund to \$5,000,000, the amount needed to place the Museum on a financially sure foundation for the coming quarter of a century.

THE MUSEUM'S CONTRIBUTION TO VICTORY

Owing to the number and variety of specialists in its many departments, the Museum was able to render a very real and valuable service, not only to the United States but to the Allies in general. The various preparedness and food utilization and conservation exhibits drew crowds of people eager to see how they could safeguard and improve their health, and how to obtain the most nourishing and attractive food at the lowest cost. Special exhibits of insects and their work, and the publication of leaflets on insect pests and insects and gardens opened up another large field for service—nor was the public

slow to avail itself of new opportunities for learning how to extend the crops of its war gardens. The Mandan Corn movement started by the Museum in 1917 continued to gain in strength. The luncheon given by the President to demonstrate the food value of whale meat was nation-wide in its influence.

At the time of the signing of the Armistice, November 11, 1918, the Museum's Honor Roll numbered sixty-eight names, and included all branches of military and naval service, also the Red Cross and other activities. The record of these enrolled men, whether floor attendants, preparators, scientific staff members or trustees, is without exception one of which the Museum

is justly proud.

Conspicuous service was rendered the cause by our Treasurer, Mr. H. P. Davison, as Chairman of the Red Cross War Council; by Dr. Frank M. Chapman, as Director of the Bureau of Publications of the American Red Cross, and later as Red Cross Commissioner to South America; by Dr. Bashford Dean as Major in Ordnance; by Dr. Henry E. Crampton as Vice-Chairman of the Committee on Engineering and Education of the Advisory Commission of the Council of National Defense; by Dr. C.-E. A. Winslow as member of the American Red Cross Mission to Russia; by Major Barrington Moore in the Forestry Service in France; and by Messrs. Andrews, Anthony, Akeley, Brown, Chapin, Cherrie, Eastman, Fabbri, Hull, Miller, Spinden and Sullivan.

We are equally proud of the service of the men of the ranks. All honor to Sergeant Charles A. Connolly, the only member of the Museum family who paid the great price for victory. His grave, near Château-Thierry, is to be marked with a grove of fruit trees, to be planted by the Museum. Our heartiest welcome goes out to those who are returning, especially to Chris Schroth, who brings back the Croix de Guerre, to John O'Neill, Albert J. Kelly, Benjamin F. Connolly, Arthur W. Henn, Joseph S. McGarty and Laurence Ferri, all bearing honor wounds. Throughout the period of the war, the Trustees have paid to these employees the difference between the Federal

salary and the Museum salary, and now that the work has been done and well done, are glad to have them return to their former positions.

While only one of the women of the Museum, Miss Marjorie A. Mallory, was called for service over seas, those who have remained behind have made a substantial con-Women's tribution to the great cause. The American War Relief Museum War Relief Association, composed of Association employees of the Museum and members of their immediate families, has issued a summary of what has been accomplished since its organization in May, 1917. Among its activities is the work of three departments under the Red Cross, which have devoted themselves to the preparation of 920 bandages and 28.755 surgical dressings and the making of 688 hospital garments and 331 knitted articles. Garments knitted for other organizations than the Red Cross totaled 1,015. The total amount of money raised from Museum employees and other sources was \$2,666.81. The Association also collected more than two tons of clothing for Belgium and France.

Since September, 1917, Local Board, Division No. 129, of the Provost Marshal General of the War Department, has been quartered at the Museum, the Visitors' Room, the Academy Room and the West Assembly Room being placed freely at their disposal. The work of this Board has been especially commended for its thoroughness and efficiency by the Secretary of War. The Departments of Anthropology and Physiology coöperated with Dr. Jesse G. M. Bullowa, the examining physician of the Board, in the physical examination of the drafted men, with the result that the reports from this Board were more complete and thorough than from any other district.

The Department of Public Education continued its coöperation with the Y. M. C. A. in supplying lantern slides and lectures. During the year, 27 lecture sets, comprising nearly 1,700 slides, and also more than 3,000 miscellaneous slides, were prepared for the Y. M. C. A. for use in the encampments

at home and abroad. The department has also furnished guides for all soldiers and sailors who desired to be shown around the Museum. This service is being extended in connection with the recently established Hospitality Room. The Library, in coöperation with the American Library Association, sent copies of The American Museum Journal to all encampments in this country, and, through the Publicity Committee, invitations to visit the Museum, guides, and other literature have been distributed to the camps and recreation centers in the vicinity of New York City.

The Museum, through Associate Curator Roy W. Miner of the *Department of Invertebrate Zoölogy*, coöperated with Dr. Robert Underwood Johnson, President of the New York Committee of the Italian War Relief Fund of America, in the work of examination, selection, and preparation for shipment of a number of compound microscopes suitable for bacteriological work, to be forwarded to Italy for use in the field hospitals.

The Food Conservation Exhibit, prepared by the Department of Public Health, was shown in coöperation with the New York State and Federal Food Commissions at the Grand Central Terminal in April and May. The United States Department of Agriculture pronounced it the best food exhibit yet prepared, and it has been studied and copied by food educators from widely separated localities.

The Liberty Field Hospital Ward, designed and constructed under the direction of President Osborn, by Chief of Construction H. F. Beers, has been exhibited in the Museum, at the Grand Central Palace and at the Pacific Coast Land and Industrial Exposition at Oakland, California.

Plans for a Reconstruction Hospital, to be connected with the laboratories and exhibition halls of the Museum, for the accommodation of several hundred wounded men, were worked out by Mr. Carl E. Akeley, with the approval of the Surgeon General's Office. The sudden cessation of the war brought this project to a close.



LIBERTY FIELD HOSPITAL UNIT MODEL

Designed and constructed under the direction of President Henry Fairfield Osborn, by Chief of Construction Harry F. Beers



GROWTH OF GENERAL ENDOWMENT

The scientific work of the Museum has been well provided for through the munificent bequests of Mr. and Mrs. Morris

Need of General Endowment K. Jesup. By the terms of Mr. Jesup's will, his bequest was strictly for the benefit of scientific exploration, research, preparation, exhibition and publication. The educational work of the

Museum, the contact with the public and the relations with the public schools are all inspired by this purely scientific work, yet they cannot legitimately draw support from the Jesup Endowment. It is therefore to the *General Endowment* that we look for the means to extend this service to the people.

It is very gratifying to report that during the past three years several important gifts or bequests to the General Endowment have been received, as follows:

In	1916.	Margaret	Olivia	Sage,	a	special	endowment	for	
	Orni	thology							\$10,000
I	Estate	of Emil C	. Bondy	7					10,000
	1918,	Estate of .	Anson '	W. Hai	rđ,	for the	developmen	t of	
	the 1	Library							5,000

Bequests to the General Endowment, now in process of settlement or pending:

Estate of:

Charles E. Rhinelander (estimated)	\$20,000
Amos F. Eno	250,000
Helen C. Juilliard	50,000
David Lydig (contingent)	10,000
Emil Wolff (stock value)	5,000
Ludwig Dreyfus	10,000
Louisa Combe (estimated)	50,000
James Douglas	100,000
Margaret L. Baugh, for Anthropology	10,000
Mrs. Russell Sage (estimated)	1,600,000
_	

\$2,105,000

Even if the Museum should realize full value on all these bequests, the added income would be little more than sufficient to meet the present general running expenses, for the personal cash contributions of the Trustees annually almost equal the income on \$1,000,000, while the deficiency of the City Maintenance appropriation is more than the interest on a one-million-dollar endowment. Consequently, while these noble bequests swell the General Endowment to more than \$3,000,000, an additional \$2,000,000 is required to put the Museum on a secure financial footing for its general purposes.

The munificent bequest of Mrs. Russell Sage is by far the largest which the Museum has received for its general work.

It was accompanied by the following provision

Sage in Mrs. Sage's will:

"It is my desire that each religious, educational or charitable corporation which may receive a share of my residuary estate shall use the whole or a part of the legacy received by it for some purpose which will commemorate the name of my husband, but I simply express this as a desire and do not impose it as a condition of my gift."

This bequest furnishes a striking and convincing example of the disastrous effect of the law of September 8,

Repeal of Tax on Education and philanthropy, instead of exempting them from taxation as in all former legislation of the Government.

Under Mrs. Sage's will the Museum is to receive two shares of the residuary estate estimated as \$1,600,000, out of a total residuary estate of \$41,600,000. The Federal Estate Tax would amount to \$12,652,500, but the loss through forced liquidation to pay the tax is estimated as \$3,643,400. Thus the total reduction of the residuary estate would amount to \$16,295,900, or approximately 40%. Hence, instead of receiving the \$1,600,000 of the original bequest, the Museum would receive only \$960,000.

In 1917, through a General National Committee,* of which I had the honor to be Chairman, a vigorous effort was made to have this law repealed, with respect to the taxation of bequests or gifts to educational, philanthropic and religious insti-

^{*} See Annual Report of the President for 1917, pages 20-24.

tutions. An amendment introduced by Senator Henry L. Myers of Montana, providing for total exemption, was defeated, but an amendment introduced by Senator Henry F. Hollis, exempting gifts to an amount not in excess of 15 per cent. of the taxpayer's taxable income, was passed. Encouraged by this action, the National Committee, in cooperation with the Special Committee, of which Professor Samuel Mc-Cune Lindsay of Columbia University was Chairman, renewed their efforts to have this iniquitous legislation repealed. the request of the Committee, Mr. Lewis Cass Ledyard prepared a brief, reviewing State and Federal tax laws, and pointing out the disastrous effect of the existing law on the Sage Bequests. Copies of this brief were sent to all the members of the Senate Finance Committee and the Ways and Means Committee of the House. The New York Committee appointed Professor Lindsay its representative at Washington. The final result is most gratifying. The Revenue Bill, adopted by the Senate and House, reads:

Sec. 403. That for the purpose of the tax the value of the net estate shall be determined—

- (a) In the case of a resident, by deducting from the value of the gross estate—
 - (I) ***
 - (2) ***
- (3) The amount of all bequests, legacies, devises, or gifts, to or for the use of the United States, any State, Territory, any political subdivision thereof, or the District of Columbia, for exclusively public purposes, or to or for the use of any corporation organized and operated exclusively for religious, charitable, scientific, literary, or educational purposes, including the encouragement of art and the prevention of cruelty to children or animals, no part of the net earnings of which inures to the benefit of any private stockholder or individual, or to a trustee or trustees exclusively for such religious, charitable, scientific, literary, or educational purposes. This deduction shall be made in case of the estates of all decedents who have died since December 31, 1917;

This retroactive application of the law will enable the Museum to reap the full value of the Sage Bequest and the Douglas Bequest.

THE PEOPLE SHOULD MAINTAIN THE MUSEUM

The tablet in the Entrance Hall of this institution bears the following inscription:

THE MUSEUM BUILDING
ERECTED AND MAINTAINED
BY THE
PEOPLE OF NEW YORK

At the present time this tablet does not express the truth. For reasons of economy the Board of Estimate and Apportionment felt compelled to reduce the maintenance appropriation of the Museum for the year 1010 to \$200,000, which was \$40,000 less than the amount needed. This has obliged the Trustees and friends of the Museum, in order to keep the building open for part time operation, to make cash contributions totaling \$65,000, to meet the deficiency of \$40,000 in maintenance and to advance the scale of wages and salaries in the Museum to a point commensurate with the wages and salaries paid in other departments of the City. In our opinion it is in the best interests of the people of this City that they should make the sacrifice necessary to continue building and to provide annually the maintenance for this great educational institution. The Trustees have made a mistake, to our mind, in annually making up maintenance deficiencies from contributions of unrestricted funds. The institution should be maintained in the future in the spirit of the Contract of 1878 between the Museum and the City, namely, that the City pay for the operating expenses, while the Trustees pay for the collections and all the scientific work. In recent years the Trustees have drawn so largely upon their own funds for maintenance purposes that the growth of the scientific collections and exhibitions has been held back, with the result that the people of the City of New York are the ultimate sufferers.

Through a like policy, the New York Public Library and the Metropolitan Museum of Art are making similar inroads on the income from their endowment funds to meet current ex-

penses, instead of purchasing books, pictures and works of art; in the end this means the deprivation of the people.

The expenditures for the maintenance of the Museum by the people have increased far less rapidly than the expenditures of

Comparative Cost of Museum the City departments: while the *per capita* cost of the City government has *increased* more than 30 per cent. in the last twenty years, the *per capita* cost of maintenance of the Museum has *decreased*

8 per cent. Inasmuch as the work of the Museum for the education of the people is in no sense a luxury, it is reasonable to expect that maintenance costs shall increase proportionately with the costs of the City government. In general we may regard the reduction of the maintenance appropriation for the Museum as in reality a reduction of expenditures for education, and any city with the wealth of New York ought to provide liberally for education. At the present time the taxpayers of the City of New York are paying less than one-third of the annual cost of the American Museum and its work. If the taxpayers really understood the situation, they would support the City government in granting larger maintenance appropriations.

The people of the City would take more interest and pride in an institution to which they partly contributed and for which they made some sacrifice. Therefore, it should be a part of the future policy of the American Future Maintenance Museum to place the cost of maintenance entirely Policy upon the taxpayers of the City of New York and not to continue individual contributions or subscriptions for this purpose. It appears that to continue the administration of the Museum as a thoroughly democratic institution, designed for the welfare of all the people, and open free to the public at all times, the people should participate in its support from public funds, and that the maintenance of its school and other educational facilities should not be a matter of private gift. This is the spirit of the original Charter, of the original Contract and of all subsequent modifications and

additions to this Contract.

In order to avoid any future misunderstanding, it is desirable that the proper distribution of maintenance expenses should be determined on principles to be established by the Trustees in consultation with the Comptroller and the President of the Department of Parks, subject to ratification by the Board of Estimate and Apportionment. The President has had repeated conferences on this subject with the Comptroller and other representatives of the Board of Estimate and Apportionment, and is seeking to secure from the Mayor and the Board of Estimate and Apportionment their judgment and advice as to the future policy of the City in this very important matter of democratic administration. Conferences will also be held with President Somers and other members of the Board of Education. The reduction of the maintenance appropriation, together with the urgently needed increases in scientific and administrative salaries and the advance in the costs of all materials purchased by the Museum, increases varying all the way from 20 per cent. to 64 per cent., render necessary the consideration of the future scientific activity of the Museum.

EXPLORATION, RESEARCH AND PUBLICATION

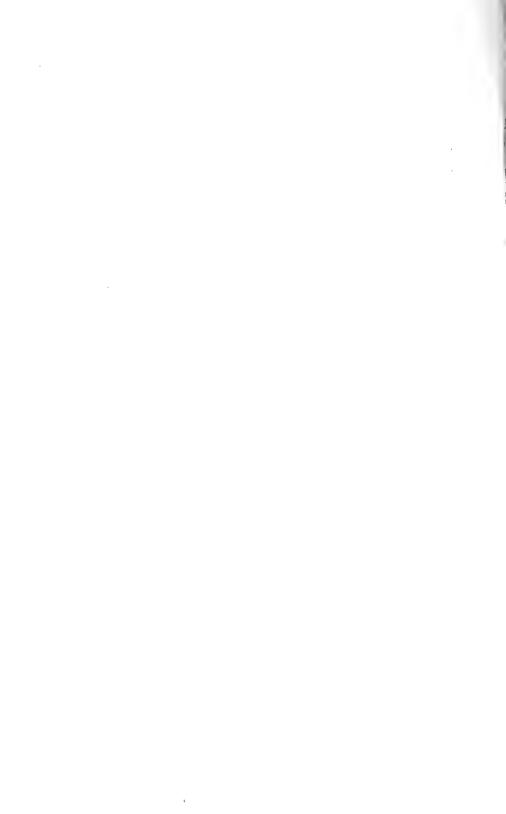
Although the field exploration of the Museum was in general suspended until after the war, it was found expedient to continue on a small scale certain explorations in China as well as in various parts of North and South America. The year, however, has been one of the most active in the entire history of the Museum in research and in publication, which was mainly supported through the generous provision of the Morris K. Jesup Fund.

Mr. Roy C. Andrews sailed for China on June 28 to take up the work of the Second Asiatic Zoölogical Expedition. Mr. Andrews will make studies and collections in the Gobi Desert, a region little known to the naturalist.

The Third Asiatic Zoölogical Expedition left San Francisco on July 27, under the leadership of Mr. Paul J. Rainey, accom-



DEPARTMENT OF MAMMALOGY AND ORNITHOLOGY
TIMBER WOLF GROUP



panied by Mr. Edmund Heller as naturalist; the entire expense of the expedition was borne by Mr. Rainey.

Mr. Earl H. Morris, assisted by Mr. B. T. B. Hyde, continued the excavation of the Indian ruins at Aztec, New Mexico.

American Archæology

These ruins are yielding valuable collections and historic data, which make this piece of research work one of the most important that the Museum has ever undertaken in anthropology. These explorations are made possible through the contributions of Mr. Archer M. Huntington.

Mr. Leslie Spier made archæological explorations in Arizona, visiting the Fort Apache Indian Reservation in the White Mountains, and the Rio Verde Valley. He also visited the Havasupai Indians for the purpose of making ethnological studies and collections.

Dr. Herbert J. Spinden returned in December from an expedition of eighteen months in Central America and the United States of Colombia. His work was entirely successful, especially along the lines of decorative art, in which connection he secured important archæological and ethnological collections.

During the summer, Mr. Roy W. Miner and other members of the Department of Invertebrate Zoölogy spent several weeks at Woods Hole, Massachusetts, making field studies for the Bryozoan Group for the Darwin Hall.

Mr. Walter Granger completed the exploration of the Huerfano Basin, Colorado, and secured a very interesting fauna, which links up the Lower Eocene and the Middle Eocene.

Three months were spent by Mr. Albert Thomson in exploration of the Snake Creek deposits in western Nebraska, where he obtained a considerable number of fossil mammals, including skulls of a very large rhinoceros and a rare and interesting rodent.

It is an auspicious coincidence that the first volume of the publications of the American Museum Congo Expedition appears at the time of the release of Belgium from the oppression so forth.

of war, and that the Museum is in a position to send to the Belgian Government a report on the achievements of the Congo

Expedition, which, it will be recalled, was instituted with the financial and political support of the Belgian Government in 1908. It is proposed to publish these reports under the general title, "Zoölogy of the Belgian Congo," and to issue a series of eight to ten volumes composed of articles contributed to current numbers of the American Museum Bulletin by members of the Museum staff and by other foremost naturalists and specialists of this country. When the various groups of animals are fully reported on, the reports will be gathered into volumes according to their taxonomic groups, that is, the papers on mammals will be published together, the papers on birds, and

MEMBERSHIP AND STAFF

At the Annual Meeting, held February 4, 1918, Mr. William Averell Harriman was elected a Trustee in the Class of 1921, to fill the vacancy due to the death of Seth Low.

Through the death of Dr. James Douglas on June 25, 1918, the Museum lost another of its most honored members.

The Trustees of the Museum, at their regular meeting on November 11, 1918, adopted the following minute and ordered it suitably engrossed:

Doctor James Douglas became a member of the Board of Trustees on November 8, 1909, and at once showed a very active and intelligent interest in the development of the Museum. His principal solicitude was for the development of our collection of minerals, the anthropology of the southwest, and the future educational influence of the Museum, especially in applied and economic mineralogy.

The Museum is deeply indebted to Doctor Douglas for his princely donation of the model of the Copper Queen Mine, which is the most perfect example of an educational exhibit of this character.

It was on the public educational side that his thoughts

dwelt most frequently. He believed that the Museum was doing invaluable educational work among the youth of the City. He expressed this thought to the President especially in connection with his contribution of \$100,000 to the Building Fund, which came in the form of a check the day after the appeal for funds was sent out by the Trustees. This gift greatly hastened the other contributions and is now held as the nucleus of our Building Fund of \$1,000,000.

Doctor Douglas finally manifested his devotion to the Museum and faith in its future by his bequest of \$100,000. His contributions, amounting to \$211,500, constitute him one of the most generous of our Benefactors.

He loved to visit the Museum and often gave to the President and the Curator of Geology the benefit of his unsurpassed experience in the field of pure and applied science. We shall greatly miss his genial and inspiring presence.

Pursuant to the action of the Board of Trustees, the President prepared a Memorial Volume reviewing the long service of the Honorable Joseph H. Choate to the Mu-Choate seum. This has been printed in quarto, compris-Memorial ing thirty-four pages. A copy was presented to Volume Mrs. Choate and duplicate copies have been sent to the Trustees. Copies have also been deposited in the New York Public Library, in the Metropolitan Museum of Art, in the Harvard Club of New York City, with the Association of the Bar, New York City, with the Century Association, New York City, in the Library of The American Museum of Natural History, in the Library of Congress at Washington, in the Boston Public Library, at Harvard University, Cambridge, Mass., and in the Salem Public Library, Salem. Mass.

The Scientific Staff for the year 1918 numbered 54. Of these, 15 members have been directly engaged in the Federal Service, while many of the others have indirectly contributed to the winning of the war by furnishing expert information.

On April 17, Mr. Herbert P. Whitlock was appointed Curator of Mineralogy.

Dr. Robert H. Lowie returned from the University of California, where he had been acting as Associate Professor of Anthropology during the academic year 1917–1918, in exchange with Dr. A. L. Kroeber, who became Associate Curator in the Department of Anthropology in the Museum, January I–July I, 1918.

Dr. Herman K. Haeberlin, appointed in July, 1917, as an Assistant in the Department of Anthropology, died in Cambridge, Massachusetts, on February 12, 1918. Dr. Haeberlin was a young man of great promise, particularly fitted for anthropological investigation.

On April 17, Mr. B. Talbot B. Hyde was appointed temporary assistant in the Department of Anthropology for nine months, beginning April 1.

PUBLIC ACTIVITIES OF THE STAFF

The participation of the men of the Staff in the affairs of the City, State and Nation bears eloquent testimony to the widening influence of the Museum. Recognition of this public service has been evidenced in many ways during the year.

The Geological Society of France awarded President Osborn the Gaudry Medal, which was established by the Society in 1910 in honor of the distinguished palæontologist Albert Gaudry. Previous awards of the medal have been made to the following geologists and palæontologists: Albert Gaudry, 1910; Marcellin Boule, 1911; Henri Douville, 1912; Edouard Suess, 1913; Emile Haug, 1914; Charles D. Walcott, 1917.

The President was honored by the Royal Society of London, in having conferred on him the Darwin Medal for Distinction in Research Work in Vertebrate Morphology and Palæontology.

At the session of the Royal Irish Academy on March 16, President Osborn was elected an Honorary Member of the Academy, in recognition of his distinguished services in the Department of Science.

The National Academy of Sciences at its April meeting

awarded to Dr. Frank M. Chapman, Curator of Ornithology, the first Daniel Giraud Elliot medal and honorarium. These are to be bestowed annually for preëminence in zoölogy or palæontology under the terms of the gift to the Academy, in 1916, of \$8,000, by Miss Margaret Henderson Elliot to establish a fund in memory of her father. The result of Dr. Chapman's valuable contribution to Zoölogy, "The Distribution of Bird Life in Colombia; a Contribution to a Biological Survey of South America," was published in 1917 as Volume XXXVI of the Bulletin of The American Museum of Natural History. Although Dr. Chapman described therein a very large number of species and subspecies of South American birds, it was for the scientific value of his deductions and the establishment of zonal and faunal boundaries over a wide geographical range that the decision was made in his favor.

New York University conferred the honorary degree of Doctor of Public Health on Dr. Winslow.

Mr. Roy C. Andrews was elected a Corresponding Member of the Zoölogical Society of London at its meeting on December 19, 1917.

The Angrand Foundation of France has awarded a prize of five thousand francs to Dr. Herbert J. Spinden, in recognition of his memoir on Maya Art, published by the Peabody Museum of Harvard University. This prize is awarded once in five years for original investigations in the anthropology of North and South America.

The Galton Society for the Study of the Origin and Evolution of Man was organized at the Museum on April 16. The first formal meeting was held at the home of Professor Osborn on the evening of April 17. Dr. W. K. Gregory was elected Secretary.

Dr. F. A. Lucas, Dr. E. O. Hovey, Mr. Roy W. Miner and Miss Ann E. Thomas represented the Museum at the meeting of the American Association of Museums in Springfield, Massachusetts, May 20–22.

Dr. Ralph W. Tower and Miss Mary C. Dickerson were the official representatives of the Museum at the meeting in celebration of the 175th anniversary of the birth of Abbé Réné Just Haüy, the great French crystallographer (1743–1822).

The meeting was held on February 28 at the Museum, in coöperation with the delegates from the New York Academy of Sciences, Section E of the American Association for the Advancement of Science, and the New York Mineralogical Club. A paper written by the late Louis P. Gratacap for the occasion was read.

Dr. Robert H. Lowie represented the Museum at the Fiftieth Anniversary of the University of California, during the week of March 23.

At the meeting of the Entomological Society of America, held in Baltimore in December, Dr. Frank E. Lutz was elected a member of the Executive Committee.

At the annual meeting of the American Anthropological Association, held in Baltimore in December, Dr. Clark Wissler was elected President of the Association and Dr. Pliny E. Goddard was reëlected Editor.

At the fourth meeting of the American Society of Ichthyologists and Herpetologists, held at the Brooklyn Museum, on November 15, Dr. Bashford Dean was elected a Vice-President and Mr. John T. Nichols Secretary.

Dr. Hovey represented the Museum at the annual meeting of the Geological Society of America, in St. Louis, December 27–29, 1917.

Dr. C.-E. A. Winslow was appointed consulting expert on industrial hygiene to the United States Public Health Service, and was in charge of a squad of men studying conditions affecting the health and efficiency of munition workers.

Dr. Winslow served as a member of two of the subcommittees of the Medical Advisory Board of the Council of National Defense, in connection with nursing and child hygiene.

In June and July, Dr. Winslow was in charge of the courses in bacteriology and hygiene at Vassar College Training Camp for Nurses. In August he gave an intensive course in industrial hygiene at the Massachusetts Institute of Technology. As Chairman of a committee appointed by the Committee on Higher Education and Special Training, he was in charge of the work of preparing the official syllabus for instruction in hygiene and sanitation to be offered to the enlisted men in the

Students' Army Training Corps at four hundred colleges in the fall of 1918.

A commission for the study and control of epidemic influenza was appointed by Governor Whitman, of which Dr. Winslow was appointed Secretary.

Among the Associate Editors of the *Journal of Physical Anthropology*, a new publication, are Dr. Clark Wissler and Dr. J. H. McGregor.

Dr. Pliny E. Goddard is one of the editors of *The International Journal of American Linguistics*, recently inaugurated.

Mr. Herbert P. Whitlock and Dr. George F. Kunz are among the Associate Editors of the American Mineralogist.

HOSPITALITY TO SOCIETIES

As for many years past, the Museum provided meeting rooms for educational and scientific societies, among them the New York Academy of Sciences, the American Association for the Advancement of Science, the American Scenic and Historic Preservation Society, the American Ornithologists' Union, and the Horticultural Society of New York. The Department of Education of the City of New York has held lectures in our auditorium on Tuesday and Saturday evenings as for many years.

The British Educational Mission to the United States, composed of distinguished representatives of the Universities of

British Educational Mission England, Scotland and Ireland, was entertained by the Trustees on October 10. The Mission came to this country to develop closer coöperation between British and American institutions

and to strengthen the bond of sympathy and understanding between the two nations. The party made a tour of inspection of the halls and gave special attention to the methods of cooperation with the public schools. The members of the Mission were: Dr. Arthur Everett Shipley, Vice-Chancellor, University of Cambridge; the Reverend Edward M. Walker, Fellow and Librarian of Queen's College, Oxford University; Sir Henry Miers, Vice-Chancellor, University of Manchester;

Sir Henry Jones, Professor of Moral Philosophy, University of Glasgow; Dr. John Joly, Professor of Geology and Mineralogy, Trinity College, Dublin; Lieutenant Robert Nichols, Oxford University; Captain H. A. Smith, Fellow of Magdalen College, Oxford University; Miss Caroline Spurgeon, Professor of English Literature, Bedford College, University of London; Miss Rose Sidgwick, Lecturer on Ancient History, University of Birmingham.

The Mission of French Scholars to the United States visited the Museum on November 12, accompanied by Dr. William H.

Carpenter, provost of Columbia University. The Mission was received by Professor Henry Fair-Mission of French field Osborn and members of the scientific staff, Scholars and an inspection of the educational methods employed by the Museum in handling its exhibits was made. The members of the Mission included: Dr. Theodore Reinach, of the Institut de France; Professor Emmanuel de Martonne, of the University of Paris; Professor Fernand Baldensperger of the University of Paris; Professor Charles Cazamian of the University of Paris; Dr. Etienne Burnet of the Pasteur Institute (Paris); Mr. Charles Koechlin, composer and critic of music; and Mr. Seymour de Ricoli, art critic and secretary of the Gazette des Beaux-Arts.

Among the societies and organizations that visited or held meetings at the Museum in 1918 were:

American Association for the Advancement of Science, Section E American Ethnological Society
American Nature Study Society
American Ornithologists' Union
American Red Cross
American Scenic and Historic Preservation Society
Angle School of Orthodontia, Eastern Association of Graduates
Aquarium Society
British Educational Mission to the United States
Catherine Abbé Club
Chautauqua Bird and Tree Club
City History Club
Columbia University, Classes
Department of Education, New York City, free public lecture
courses
Elsie Rutgers Club
DeWitt Clinton High School

Galton Society for the Study of the Origin and Evolution of Man Horticultural Society of New York

Inkowa Club

Joan of Arc Club

Keramic Society of Greater New York

Linnæan Society of New York

Massachusetts Normal Art Alumni Association, New York Chapter

Mission of French Scholars

New York Academy of Sciences New York Bird and Tree Club

New York Entomological Society New York Microscopical Society

New York Mineralogical Club

School Nature League Torrey Botanical Club

War Department—Local Board, Division No. 129, of the Provost Marshal General's Office

SPECIAL GIFTS AND ACKNOWLEDGMENTS

Acknowledgments of the many gifts received by the Museum during the year 1918 will be found on pages 181 to 197, but special mention may be made of the specimens received from the New York Zoölogical Society. Other gifts are: Books and an ethnological and archæological collection from Nicaragua, from Mr. Michael J. Clancy; an ethnological collection, chiefly from North America, from Dr. W. L. Hildburgh; a set of official photographs taken at the time of the visits of the British, French, Italian, Russian and Japanese War Commissions to New York, from Mr. Cass Gilbert; a feather robe from Sitka, Alaska, from Mrs. J. W. Haselhurst; a bronze bust of Dr. Daniel Giraud Elliot, by Chester A. Beach, from Miss Margaret Henderson Elliot; baskets from Alaska, gift of Mr. William Sulzer; skeleton in the flesh, of trotting horse, "Lee Axworthy," from H. K. Devereux; ethnological specimens from the Zuñi and Acoma, from Mrs. Elsie Clews Parsons; 388 negatives of John Burroughs and of Conservation of Wild Life, 254 lantern slides, mostly colored, of John Burroughs and of Conservation of Wild Life, and 1,830 feet of motion picture film of John Burroughs, from Albert Houghton Pratt.

We desire to make acknowledgment to Mr. Carll Tucker of the War Trade Board, and to Mr. Byron R. Newton, Collector of the Port, for expediting shipments for the Museum; also to Messrs. W. R. Grace and Company for courtesies extended in connection with Dr. Chapman's journey to South America.

GENERAL ADMINISTRATION OF THE MUSEUM

FREDERIC A. LUCAS, Director

It may be again said that, while war conditions have affected the work of the Museum, satisfactory progress has been made in the care and installation of the collections, in research and in publication, detailed accounts of which may be found in the reports of the various departments.

The sales of popular publications were better than for some time past, due partly to the fact that many of the returning soldiers have visited the Museum, as well as many "out-of-town" visitors. There were sold at the sergeants' desks 3,610 copies of the General Guide; 1,770 Handbooks; 2,478 Leaflets; and 1,095 reprints, the total of these sales being 8,953 copies. In addition, many publications have been sold through the Registrar's office and the Library, especially Handbooks, which are used to a considerable extent as text-books and works of reference.

A new edition of the *Guide*, the fifth in recent years, was brought out in January, a *Guide Leaflet* on "Insects and Disease" in June, and a *Handbook* on the "Fishes of the Vicinity of New York City" in December, while the close of the year finds several handbooks and leaflets nearly ready for the printer.

A most important step was taken by the Museum in undertaking to print its scientific papers, and with this end in view there have been installed a Whitlock Premier cylinder press with 33×45 inch bed, capable of 2,200 impressions per hour; a Monotype casting machine with lead, rule and display type attachments; and a D.D. composing machine.

Not including the various galleys of matter for the scientific papers, there have been printed during the year a *Handbook* of

CHARACTERISTIC MAMMALS OF NORTH AMERICA

BEASTS OF PREY: Order Feræ BEARS: Family Ursidæ



Brown Bears

Three groups of bears are found in North America, the Black, Grizzly and Brown, each represented by several species. The first two groups are peculiar to North America; the Brown bears are related to those of northern Europe and Asia and their ancestors probably came over at the same time as those of the bison and mountain sheep; the Polar Bear is a strictly Arctic animal and rarely reaches the continent.

Roughly speaking, Brown bears are found along the seacoast and the borders of big rivers; Grizzlies dwell among the hills, and the Black Bear group is partial to swamps and forests.

There have been generally recognized 14 species and subspecies of Black bears, 5 of Grizzlies, and 10 of Brown bears. Recently Dr C. Hart Merriam has allowed not less than 86 species and subspecies of Grizzlies and Brown bears.

LABEL FOR FAMILY GROUP

HALL OF NORTH AMERICAN MAMMALS



122 pages on the "Fishes of the Vicinity of New York City," a *Guide Leaflet* of 73 pages on "Insects and Disease," 18,000 lecture booklets, and 5,000 circulars for membership.

SUMMARY OF PRINTING-1918

20	
	Impressions
Letter-heads	32,300
Field and Reserve Collection Labels	22,015
Report, Requisition and Other Forms	120,071
Catalogue Cards, Tickets to Lectures, etc	357,752
Programs, Circulars, Invitations	113,850
Color Plates and Inserts for the Journal,	
20,500 Copies	185,000
Other Plates	20,400
Popular Publications and Circulars, 10,000 Copies .	35,000
Individual Labels 252	00,
Descriptive Labels 687	
939 (average of 5 each)	4,695
	891,083

The laws that govern museum attendance have not vet been discovered and formulated, and one can only say that, like bird migration, it is largely affected by the weather; Attendance cold or rain keeps the public in their homes; the fine weather of spring takes them into the parks or the nearby country; cool bright days when the walking is good but it is too chilly to sit by the wayside bring visitors to museums. But sudden losses in attendance may and do occur without apparent reason, even when the number and character of the exhibits are steadily improving. So it is encouraging to note that the attendance of 1018 has been good in spite of the uneasiness and uncertainty caused by the war, in spite of the bitter weather of the early part of the year, and in spite of the epidemic of influenza that swept over the country in the fall and winter.

Bagehot's dictum in regard to statistics is well known; but much depends on knowing the attendant circumstances. Thus, while there was an apparent loss of 158,849 visitors to the exhibition halls in 1918, when compared with 1917, this is due largely to the decreased attendance during the spring and fall flower shows, that of 1918 being 137,686 less than that of 1917.

The principal loss has apparently been in the younger and the less well-to-do groups of visitors, those who are directly affected by the increased cost of the very necessities of life and those who have made real sacrifices to purchase War Savings Stamps or to contribute to Red Cross work. Light is thrown on this by the conditions in the National Association of Audubon Societies, where junior membership has dropped not merely by thousands but by tens of thousands, due to competition in schools as to which should contribute most to war work.

That the loss is not among the well-to-do or out-of-town visitors is indicated by the sales of *Guides* and *Handbooks*, especially during the latter part of the year, when many soldiers were passing through the city, and the sales of *Guides* were largest.

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

	1914	1915	1916	1917	1918
Board of Education Lectures Lectures to School Children and Classes visiting the	52,761	41,970	34,421	32,790	21,624
Museum for Study Meetings of Scientific Societies and Other Meetings	65,785*	61,437	58,842	57,463	21,484
and Lectures	32,939	22,542	28,495	25,549	20,928
Attendance in Exhibition	151,485	125,949	121,758	115,802	64,036
Halls	657,458	794,139	725,917	786,151	627,302
Total Attendance for all Pur-	0.0	00	0 6		ć o
Lectures to Pupils in Local	808,943	920,088	847,675	901,953	691,338
Centers		32,800	37,400	38,525	19,575
lating Collections	,273,853	1,238,581	1,118,322	1,104,456	817,610
Grand Total 2	,082,796	2,191,469	2,003,397	2,044,934	1,528,523

Special exhibits are uncertain forms of attraction, nor does direct advertising do much to swell the numbers of visitors; newspaper articles do much more, as is shown by inquiries for certain things.

Early in the year, the Committee on Public Information was reorganized, and Mr. George N. Pindar was made Chairman. The other members of the Committee were the Director, the Assistant Secretary, and Miss Jessie M. Davies as Secretary.

^{*} Includes pupils, estimated at 15,000, attending lectures in the Local Centers.

In addition to performing his duties as Registrar, Mr. Pindar has conducted the affairs of the Committee with energy and

Public Information Committee marked efficiency. Seventy articles were prepared and distributed to the leading newspapers and magazines of the country and syndicated to a large number of other publications. In addition to this, a great deal of practical assistance has been given

to reporters and other special writers.

At intervals during the year a "Museum Letter" was sent to our men in the service. These letters contained a message from some one of the Museum staff, a list of our men in service, with addresses, and a budget of news.

Other war work of the Committee included the distribution of copies of *The American Museum Journal* and of the "Guide to the Nature Treasures of New York City" to all the encampments of the vicinity, and the distribution among the hotels and various canteens of the city of nearly 60,000 folders inviting men in the service to visit the Museum. Every center of the War Camp Community Service, the Y. M. C. A., Y. M. H. A., K. of C. and other recreation agencies and the returning transports have been provided with literature and announcements concerning the Museum and invitations to visit us. As a further courtesy to our soldiers and sailors, arrangements have been made to establish a Hospitality Room for the uniformed men visiting the Museum.

The routine work of the Registrar's office has included the recording of 611 accessions, 385 loans and 166 exchanges, also the making of 399 shipments, consisting of 499 boxes which were made ready for transportation; 3,176 shipments, consisting of 6,073 packages, were received and forwarded. The subscriptions to *The American Museum Journal* have also been cared for by this office. These subscriptions have been increased by 263, the number at the close of the year being 736.

The most important addition to the exhibits during the year was that showing the Reptile Life of Florida, the largest and finest habitat group yet produced by the Museum. Other groups are, the Nahant Tide Pool, Lemur, Blue Shark, and

Migratory Butterfly, so that a fair balance has been preserved in the various Zoölogical departments of the Museum. Important individual pieces are an Okapi, the great Magnolia, and an extensive series of teeth with special reference to the teeth of Mammals.

The rearrangement of the Primates Hall is practically complete, though many minor improvements remain to be effected, and important additions are in course of preparation, including a group of Howling Monkeys and one of African Pygmies. This last, representing a low type of man, is a balance for the Orang Group, which presents a "high" type of ape.

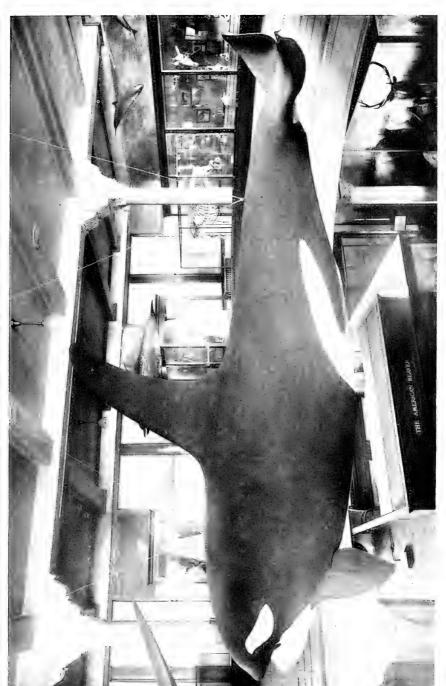
Owing to the high cost of structural iron, the city deemed it inadvisable to close the well in the third floor, which would have permitted the construction of a darkened corridor for groups, and these are now being installed in a special enclosure on the north side of the hall.

Good progress has been made in the Hall of North American Mammals, which is now in fair shape as to arrangement and labeling. An attempt to furnish the visitor with information as to the kinds and numbers of mammals found in North America has been made by providing a series of large Family labels on which the range of the family is shown and the number of species and subspecies given. Whether or not these matters are really of interest to visitors remains to be seen.

The completion of a habitat group of Timber Wolves, begun in the early summer, was prevented by Mr. Nichols being called for camouflage work, and later by extremely difficult problems in connection with the proper lighting of the group. The installation in the North American Hall is a case of putting new wine into old bottles; of putting habitat groups into a hall planned for daylight exhibits, of placing them in a Procrustean bed of limited length, breadth and depth, and of utilizing what was available rather than doing what one would like.

A full-sized reproduction of the Killer Whale has been prepared by Mr. Block from data provided by Mr. Andrews, and this is ready for hanging near the reproduction of the Sulphurbottom Whale.

Improvements in the exhibition collection of Mammals are becoming more and more difficult, owing to the great conges-



DEPARTMENT OF MAMMALOGY AND ORNITHOLOGY

THE KILLER WHALE

(Life-size model)



tion. It is not merely difficult to find a good place for specimens but very difficult to find any.

Among Special Exhibits made during the year were: one showing the Art Work of the New York High Schools and one by the Board of Water Supply, New York City, of maps, plans and models of the Catskill Aqueduct and the construction. This attracted much attention, and the large relief map of the region occupied by the Catskill reservoir and of the route of the Aqueduct has been deposited in the Museum.

An exhibit of the large series of ivory carvings secured by the Congo expedition has been placed temporarily in the Gem Hall, and the food exhibit in the Hall of Forestry.

Mr. Knight has added three panels to the series in the Quaternary Hall, including one of the Mastodon and Royal Bison; Mr. Taylor has completed the side panels for the North Pacific Hall; Miss Margaret Henderson Elliot has presented a bronze bust of her father, Dr. Daniel Giraud Elliot, and Mr. Stanley G. Middleton has presented a portrait of Professor A. S. Bickmore.

The Art Collection of the Museum, including under this head the various busts, portraits, paintings and drawings, is quite large and includes some important and interesting pieces, and when opportunity permits will be duly catalogued and described.

An exhibit of about 200 primitive costumes was arranged by Mr. M. D. C. Crawford in the Philippine Hall. These costumes were taken from our storage and exhibition collections.

At the Sixth National Textile Exhibit, at the Grand Central Palace, the Museum had on exhibition prehistoric Peruvian cloths and garments, and clothing of modern primitive peoples. The specimens selected for this purpose have been favorites with professional designers who visit the Museum's collections for inspiration. The influence which these collections have exerted on textile art was clearly shown by the exposition.

The intense, long-continued cold early in the year wrought havoc among the Habitat Groups, in which water is represented by celluloid, and five were seriously damaged, including the Frog, San Joaquin Valley, and Newark Marsh Groups. It was not possible to repair all of these without neglecting other equally important work, but three of them have been restored to their original condition.

The more evident work of the Department of Construction has been the completion of four fine concrete storage rooms across the gallery of the West Wing, of twelve desk cases, fifth floor, for minerals, and thirteen metal frame cases for exhibits, the casing of the Florida, Wolf and Lemur Groups, the making of 500 glazed drawers for insects and 1,600 storage trays. But these are simply the more evident things, and repairs and alterations are steadily going on everywhere. Few realize the

these are simply the more evident things, and repairs and alterations are steadily going on everywhere. Few realize the amount of time required for the mere care of the building and keeping it and the multitudinous cases in good order; fewer still appreciate the amount of work and material involved in the minor changes and improvements in the exhibits that are continually taking place.

By virtue of a special appropriation for the purpose, the wall and floor cases of the Department of Geology have been refinished, having been in continuous use for about fifty years, and the walls of the Woodland, Plains Indian, and Insect Halls painted.

Extensive and much needed alterations have been made on the window casings of the Philippine Hall, which, owing to poor workmanship, have never been satisfactory, and the upper windows in the Tertiary Hall have been made tight. These are simply some of the major repairs but give an idea of the many demands on the mechanic force, the roof of the building alone calling for practically the continuous services of one man, and repairs to floors and walls are steadily called for.

Owing to the seriously corroded condition of the smokestack of the heating and lighting plant and to the failure of the City to provide for its immediate repair, the Executive Committee authorized the President to order the work done, at a cost of \$3,350. It is expected that the City will ultimately reimburse the Trustees for this necessary expenditure.

On May 21, lightning struck the east tower of the Museum,

breaking off large pieces of the stone and causing considerable damage. The President has made application to the Park Department for the issue of Special Revenue Bonds of \$2,500 to make the necessary repairs.

The work of the Heating and Lighting Department has been as usual extremely efficient and economical, though with the price of coal as it has been and is, the actual cost of operating is naturally greater than in 1917. It may be noted that the price of coal has exactly doubled since 1914 and that wages have greatly increased.

The work of utilizing the new types of lamps to improve the lighting of the exhibition halls has proceeded as rapidly as possible without special appropriation for either material or additional assistance, and the close of the year finds the lighting of the North Pacific Hall vastly improved by the introduction of indirect lighting by means of high power nitrogen lamps.

The improvements effected in lamps and methods are shown by the fact that without any addition to engine room equipment and force it is now possible to illuminate the entire building at one time—something impossible previously. Much time and labor are involved in the lighting of the habitat groups, such as the Florida, Lemur and Wolf Groups, for each new group is a problem in itself, not the least of the difficulties being that of finding a readily accessible source of supply, caused by old methods of wiring and inconvenient location of switch boxes.

Of even more importance is the question of making suitable provision for the control of the lights for the present groups and for the installation of future groups. A special panel energized by a separate switch on the power house panel board is needed for this purpose, from which all wires for groups should lead so that there would be no physical connection between the lighting of the groups and that of the exhibition halls. This is a matter for which a special appropriation should be made in the near future as it necessarily entails a readjustment of existing conditions.

The Director is glad to report that two 70-foot flagpoles of Oregon pine have been placed in front of the Museum, so that

one of the needs of the Museum is provided for. It is important that the entire south front of the Museum grounds should be protected by an iron fence six feet high Needs of to prevent damage to the grass, trees and shrubs. the Museum This area is now unprotected and is used as a playground by children, who wear off the grass and break the trees and shrubs, with the result that this portion of the grounds is in an unsightly condition, instead of forming, as it should, an appropriate setting for the Museum building. Those who advocate unrestricted use of the parks for playgrounds forget that grown-ups are entitled to some consideration and that a piece of property costing over five million dollars and visited yearly by three quarters of a million persons from all parts of the country should be properly cared for.

The crying need is still for a new wing, in order to provide exhibition, storage and work rooms. The present space is taxed to the utmost, and the second floor of the central pavilion is in especially bad shape, containing, besides the exhibit of reptiles, a heterogeneous assemblage of birds and mammals, some of which are placed on top of the cases. It is not a question of finding suitable room, but of finding any room.

The need of a hall for special and temporary exhibitions is greater than ever, and the Museum loses many opportunities to coöperate with other institutions and societies simply for lack of space. The proposed Southwest Court Building would provide for this as well as for workrooms, studios, and storage for molds and casts now scattered in various places, some almost inaccessible.

REPORTS OF THE CURATORS

PUBLIC EDUCATION IN THE MUSEUM AND IN THE SCHOOLS*

George H. Sherwood, Curator

The educational work of the Museum has suffered from the exigencies of the year. The thoughts of staff, teachers and pupils have been concentrated on the great struggle, and it has been difficult to take up subjects not directly connected with it. In spite of these distractions, however, the important connections between the Museum and the public schools have been maintained. This is true of all branches of the work—circulating nature study collections, the lectures to school children, the education for the blind, the loan collections for the libraries and the circulation of slides in the schools.

The statistics for the year are less impressive than in previous years. This, however, is to be expected, as the extreme cold weather of the winter and the epidemic of influenza in the fall interfered with the normal activities of the children, while direct war work has required the attention of members of our staff.

Through its coöperation with the Y. M. C. A., the department has made a valuable contribution to war work. Last year, we undertook the preparation, by members of the scientific staff and other explorers, of a series of "Exploration Tales for Soldiers and Sailors." Each "Tale" consisted of about sixty slides accompanied with a manuscript dictated by the explorer himself. Two sets of each lecture were loaned to the Y. M. C. A. for use in the encampments at home and abroad as well as on the transports. The initial cost has been borne

^{*} Under the Department of Public Education (see also pages 181 and 182).

by the Museum. Duplicates of these lectures, or "picture-looks," their official title, have been made at a very low cost price for the Y. M. C. A. Seven of these "picturelooks" have been completed during the year, and twenty-seven sets, comprising more than 1,700 slides, were turned over to the Y. M. C. A. Of these, fourteen sets were prepared entirely at the Museum's expense, the remainder at cost.

In addition to these lecture sets, the department has made a considerable number of miscellaneous slides for the Y. M. C. A. besides presenting it with some three thousand slides from our general series. That we were able to do this work for less than normal cost is due largely to the generous volunteer service of members of the department staff, of the American Museum War Relief Association, and other friends. We wish to acknowledge the assistance of Mrs. L. Goodrich Smith both in coloring slides and in classifying material. Our thanks are also due to Misses Harriet L. McCoy, H. Ruth Kraft, Mabel R. Percy, Clara M. Beale, Jessie M. Davies, and Virginia B. McGivney for typing manuscripts; to Misses Almeda Johnson, Harriet L. McCoy, Helen M. Vreeland, Dorothy Van Vliet, Mrs. George H. Sherwood, Mrs. Ralph W. Tower and Mrs. Ruth Weber for binding and captioning the slides; and to Dr. G. Clyde Fisher, Mr. Julius M. Johnson, and Misses Virginia B. McGivney, Paula C. Lambert and Harriet L. Mc-Coy for the preparation of manuscripts.

The second feature of our war work has been the furnishing of free guide service for soldiers and sailors visiting the Museum. While this has been for the most part occasional, during the spring groups of sailors, under the patronage of Mrs. Henry R. Hoyt, came regularly on Saturday afternoon from the Twenty-third Street Y. M. C. A. In this guide service, we have been greatly assisted by Miss Annie Lucas, who has given generously of her time to this work. This branch of the work is becoming more and more important, and it is correlated with the service given by the Hospitality Room.

An important piece of work of the year was the publication of a booklet entitled "Free Education by The American Museum of Natural History." This is a historical account





DEPARTMENT OF PUBLIC EDUCATION

THE SLIDE LIBRARY
Public School () chers selecting slides for class room use

of the development of the extensive relations of the Museum with the educational system of the country, but particularly

with the public schools of New York City. The

Publication

"Free
Education"

with the public schools of New York City. The
booklet was prepared by the Curator, assisted by
members of the department staff, with an introduction by President Osborn. The publication
also gives a résumé of the educational work in 1917 and a list
of the schools, colleges and other institutions throughout the
country which utilized the Museum in 1917. These number
1,159 institutions. This publication has been sent to all the

That the Museum is a leader in the development of methods of coöperation with the public school systems is emphasized by the attention that this work received from three

schools in the city and to prominent educators of the United

States and abroad.

the City.

Opinions of Foreign
Educators

foreign educational missions. In October, the British Educational Mission, of which Sir Arthur Shipley, Vice-Chancellor of Cambridge University, is chairman, visited the Museum especially to study these subjects, and members of the Mission stated that we had far exceeded anything that was done in England. On a visit in November, the Mission of French Scholars, of which Lieutenant Colonel Theodore Reinach was the head, expressed similar astonishment at the progress we have made. The Japanese educators have also given much study to the methods employed here. This appreciation from such eminent educators makes even more regrettable the suspension of this service

The greatest growth in the work of the Department has been in the lending of slides to schools. This phase of coöperation was begun four years ago under a special grant Lending of \$2,000.00 from the Board of Education. The results have fully justified the support. The first year, only thirty-five schools borrowed slides and the number circulated was 11,929 slides. In 1918, 102 schools were using the slides and 72,287 were in circulation.

to the public schools because of the reduced appropriation by

Thus, in four years, the number of schools has trebled, while the circulation of slides has increased more than sixfold. More important, however, is the increase in number of times that an individual school borrowed slides. The record goes to P. S. No. 168 Manhattan, of which Miss Cecilia A. Francis is Principal, which has been supplied ninety-four times during the year. Other schools that have records of borrowing more than twenty-five times are:

New York Training School for Teachers	40	times
P. S. No. 171 Manhattan	47	66
P. S. No. 23 Bronx	29	66
P. S. No. 42 "	52	66
P. S. No. 50 "	31	66
P. S. No. 126 Brooklyn	46	66
P. S. No. 149 "	38	66
Bay Ridge High School, Brooklyn	2 6	66

The significance of these statistics is that this service is extended to the schools of all boroughs and that the teachers are systematically using these valuable aids to instruction.

Our experience of previous years has proved that the slides that are arranged in complete lectures are more useful to the teachers than the general selection from the Museum file. So great has been the demand for several subjects that it has been necessary to triplicate some of the sets. During the year, six new sets have been added to the loan series, making a total of twenty sets in all. No. 15, "Implements of Modern Warfare—The Aëroplane," No. 16, "Implements of Modern Warfare—The Submarine," No. 19, "Our National Heroes," and No. 20, "The State Reservation at Saratoga Springs," were prepared by the slide librarian, Miss Virginia B. McGivney. No. 17, "France: Paris," and No. 18, "The French Riviera," were prepared by Miss Paula C. Lambert, who generously contributed her services.

The complete series includes the following:

- 1. The War Zone of Western Europe in Time of Peace
- 2. The Panama Canal
- 3. Our Forests and Their Uses
- 4. The Birds of Our Parks

- 5. A Journey in South America
- 6. The Wonderful Work of Water
- 7. Care of the Teeth
- 8. Minor Industries of New York State
- 9. Farming in the Middle West, or Some Sources of Our Food Supply
- 10. Mexico
- II. Longfellow
- 12. Washington Irving's England
- 13. "The Meadow People"
- 14. Japan, the Island Empire
- 15. Implements of Modern Warfare-The Aëroplane
- 16. Implements of Modern Warfare-The Submarine
- 17. France: Paris
- 18. The French Riviera
- 10. Our National Heroes
- 20. The State Reservation at Saratoga Springs.

The following comparative statistics indicate the growth of the work:

	No. of Schools borrowing	No. of Loans	No. of Slides circulated
1915	35	146	11,929
1916	63	491	38,912
1917	84	935	63,111
1918	102	992	72,287

In addition to supplying the public schools, it has been found possible to render similar service to several other schools and institutions in or near the city.

The marked growth in the use of slides is in no small measure due to the intelligent appreciation of the needs of teachers and the efficient direction of the work by the slide librarian, Miss Virginia B. McGivney.

For nearly fifteen years, the Museum has been supplying traveling collections of Nature Study specimens to the schools, delivering them free of charge to any public school in Greater New York. So well established Nature Study is this form of assistance that teachers feel Collections slighted if these collections are not available for

their use at the beginning of the school term. This service has

been extended to the schools of all boroughs throughout the year, although we were unable to make transfers as frequently as in other years because our messengers were called for military service. Consequently, the statistics for the year are considerably below the average. The comparison with preceding years follows:

	1914	1915	1916	1917	1918
Number of Collections in Use Number of Schools in Greater New York Supplied Number of Pupils Studying Collections	675	671	704	712	629
	570	473	439	446	419
	1,273,853	1,238,581	1,118,322	1,075,076	790,346

As in the case of the nature study collections, the lectures for pupils, supplementing the class-room work in geography, his-

Lectures for School Children tory, and natural science, have been given for so many years that many teachers now regard them as an integral part of their instruction. A spring course of 23 lectures and a fall course of 8

lectures were given at the Museum, at which the total attendance was 10,343. The effect of the extreme cold weather of last winter and of the influenza epidemic in the fall of 1918 is very noticeable in the attendance records. Furthermore, the activities of the children in selling thrift stamps and in doing other war work and the great amount of war work done by the teachers outside of school hours have been contributing factors in the reduced attendance at the lectures. Courses were given in three local lecture centers, namely, Washington Irving High School, in cooperation with Miss Rosemary F. Mullen, Head of the Department of Biology; at P. S. No. 64 Manhattan, in cooperation with Louis Marks, Principal; and at P. S. No. 42 Bronx, in cooperation with Eugene B. Gartlan, Principal. In all, 17 lectures were given in these three centers with a total attendance of 15,075. In addition to these, Dr. Fisher and Miss Thomas gave five lectures, on special request, in other schools. The attendance at these special lectures was 4,500.

Following is a summary of the Lecture Courses given during 1918:

Lectures to School Children Given in the	No. of Lectures	Attendance
Museum A	31	10,343
Lectures to School Children Given Outside		
the Museum	22	19,575
Total Lectures to School Children	53	29,918
Lectures to Members of the Museum	8	4,805
Lectures to Children of Members	8	8,774

Many of the high schools make large use of the Public Health Charts in their classes in physiology and hygiene, of

the mounted birds and animals in their classes in Cooperation art, and of various collections of our loan series with High in their classes in physical geography and biology. Schools But twice a year, during Regents' Week in January and again in June, we cooperate with several of the high schools in a special way. The biology classes from these schools come to the Museum with their teachers for lectures and for laboratory work. The lecture is given in the Museum auditorium by one of the biology teachers, or more frequently by a member of the department staff. Systematically planned laboratory work is done in one or more of the following halls: Habitat Groups of North American Birds, Public Health, Habitat Groups of Amphibians and Reptiles, Darwin Hall,

The department has furnished guides to teachers and classes visiting the Museum, regardless of whether they were from private, parochial, or public schools, and regardless of whether they were from New York City or elsewhere. Teachers have been encouraged to concentrate their attention at any one visit upon the exhibits of a single hall, or at most, those of two halls.

Insect Hall, and North American Forestry.

Circulating loan collections of natural history specimens and of anthropological material have been in use during the year in seventeen branch public libraries of the City. In the preparation of these the Department of Public Education has had generous help from the Department of Anthropology both in material and information. The collections are lent for a month or two months, and are delivered and transferred by

the Museum messenger. According to statistics furnished by the librarians, these have been studied in 1918 by 1,774 adults and 25,490 children.

In further coöperation with the libraries, on January 16 Miss Thomas gave her lecture, "In the Land of Hiawatha," at the Hamilton Grange Library to two hundred children.

A series of ten talks was given in the Museum to the sight conservation classes from the public schools of Greater New York and of Jersey City and Newark, New

Educational Work with the Blind Jersey. These were given separately for each class that asked for them, and twelve classes availed themselves of the opportunity of a part

or all of them. The subjects treated embraced geography, elementary astronomy, men of the old stone age, industries, animals, and wild flowers. Every lesson was illustrated by means of a simple apparatus or specimens which every child had the opportunity of "seeing with his fingers." The classes are small, most of them less than a dozen pupils, so that individual teaching is practicable.

For use in these classes, there has recently been added to the equipment an apparatus called the "Uranisphere," which is especially adapted for teaching elementary astronomy and physical geography,—such phenomena as phases of the moon, eclipses of the sun and moon, change of seasons, causes of dry and rainy seasons, etc. The equipment and the running expenses of this work are provided for by the Jonathan Thorne Memorial Fund.

There has been more photographic work than could be done by the two Museum photographers, and during the latter half of the year one of these men was in the army engaged in photographic work in the Signal Corps.

During the year the following work was done by the Museum photographers:

Negatives made, 957; Prints made, 13,073; Lantern Slides made, 3,363; Enlargements made, 370. As shown by the accession list, our photographic files have been further increased during the year, by purchase: 345 negatives; by gift: 515 negatives and 299 lantern slides.

There are now in the reference file 48,286 negatives and 65,-583 photographic prints.

During the year, the motion picture library has been increased as follows: 1,830 feet illustrating the life and haunts of John Burroughs; 450 feet illustrating the building of the Liberty Hospital Model; 1,500 feet of negative and 5,000 feet of positive, illustrating natural history subjects, made by Roy C. Andrews; 1,000 feet showing whaling in Japan made by the Dorsey Expedition; and 3,000 feet showing Australian natives made by Mr. Marshall Rhodes.

During the year 1918, the department has had the coöperation of the following firms and individuals:

Mr. Alfred W. Abrams of the Division of Acknowledg-Visual Instruction, Department of Education, ments Albany, N. Y., in lending dies for cutting lantern slide mats: The New York State College of Forestry in lending negatives of Forestry subjects with permission to make lantern slides and duplicate negatives for our files; The New York Historical Society in permitting the use of books and plates in the preparation of illustrated lectures; New York State Conservation Commission in lending motion picture films of forestry for use in lectures to school children: Brown Brothers in lending photographs for lantern slides for use in lectures to school children: The New York Botanical Garden in lending lantern slides for use in our educational lectures, and Miss Paula C. Lambert for help in preparing lecture sets for our loan series.

As the Curator's time is largely taken up with other administrative duties, the detailed supervision of the work has fallen upon the Associate Curator, Doctor G. Clyde Fisher, while the contact with the libraries and the blind has been under the immediate direction of Miss

Ann E. Thomas. It is due to the "team work" of all members of the department staff that so much has been accomplished at relatively small expense.

GEOLOGY, GEOGRAPHY AND PAST LIFE ON THE EARTH*

EDMUND OTIS HOVEY, Curator

At the end of last year Dr. Chester A. Reeds, who had been Assistant Curator since the middle of 1912, was promoted to be Associate Curator of Invertebrate Palæontology. In May, Mr. P. B. Hill enlisted in the army and Mr. E. J. Foyles was inducted therein through the draft. These temporary vacancies were filled by the appointment of Messrs. A. Latzko and J. C. Creley.

In August Dr. Carlotta J. Maury began work upon the Pelecypoda of our collections. She has devoted years to the study of the fossil pelecypods of this country, Expert Europe, South Africa and South America, and Assistants is regarded as an expert in them, especially those of the more recent geological periods. In September Dr. Marjorie O'Connell, who is likewise an expert in invertebrate palæontology, particularly in the forms occurring in the older geological periods, renewed her connection with the department. Dr. Arthur Hollick, the palæontologist, has begun the revision of our collection of fossil plants and the selection and arrangement of an exhibition series. Such expert assistance is of the highest value to the Museum. Dr. Elvira Wood has been engaged upon enlarged models of trilobites.

When Dr. Reeds was advanced to the associate curatorship, he was given charge of the collections of invertebrate palæontology, and a subdivision of the exhibition hall was instituted, so that reorganization of the display material could be effected along the lines set forth in his suggested plan dated August 1, 1917. The

^{*} Under the Department of Geology and Invertebrate Palæontology (see also pages 182 and 183).

major portion of the western half of the hall was definitely set apart for the series of fossils and other material illustrating historical and stratigraphical geology, and the corresponding portion of the eastern side of the hall was assigned to the biological phase of palæontology. The alteration of the upright cases called for by the plan adopted was begun in May and is practically completed, so far as the reception of the historical and biological exhibits is concerned. These cases have been adapted for the installation of a scheme of internal lighting that promises highly satisfactory results.

The exhibition series of Pelecypoda as selected by Dr. Reeds is being checked up, labeled and arranged by Dr. Maury. This has called for an immense amount of time-consuming labor in the verification and changing of determinations, but the work has advanced so far that the specimens for more than three-fourths of the alcove devoted to this branch of palæontology are in place, and this section of the hall will be completed early in 1919. The reference data which Dr. Maury has prepared concerning each species have been typewritten on slips of paper which have been pasted on the backs of the exhibition tablets, and a typewritten exhibition label has been attached to each tablet.

Dr. O'Connell has made a good start in arranging the Cephalopoda for the exhibition biological series.

The exhibit of Bryozoa which was prepared last year by Dr. J. J. Galloway has been installed in its permanent position.

The core for a model of a section of the Grand Canyon, which was begun under the direction of Assistant Curator

Topo-geological Relief Models Reeds in March, 1917, was about four-fifths finished when Mr. Hill joined the army in May, 1918. This was completed by Mr. Latzko and placed in the hands of the Morgan Brothers Company of this city for the modeling of the surface

and the preparation of the painted background. During the fall Mr. Lester Morgan made a special visit to the Canyon for securing sketches and other data for his work, and it is reasonably expected that the finished model will be installed during January, 1919. This model will form a most attractive and

beautiful exhibit, and it is at the same time the most intricate and difficult member of the series planned for the hall. Mr. Latzko has likewise prepared the wooden core for the second member of the series, the Mt. Holyoke Range Region in Massachusetts, and has begun the core for the third member, which will represent the Watkins Glen Region of New York State. The horizontal scale of the Grand Canyon model is I:12000, or one foot to about two and one-fourth miles; that of the other two is I:15000, or nearly one foot to two and three-quarters miles. In all, the vertical scale is double the horizontal. A sketch model of the Yosemite Valley is in course of preparation by the Morgan Brothers Company and is to be delivered early in 1919.

During the early part of the year, Associate Curator Reeds, with the assistance of Mr. Hill, resumed the intensive study of the seismograph and its records. Interruptions, due to various causes, however, have impeded the work, and our wireless receiving outfit was removed when the United States entered the war, so that we have not been able to get accurate time with regularity. It is hoped, however, that the apparatus will soon be in proper use again.

The eight cases containing the general collection of meteorites have been removed from the fourth floor hall and installed in the north corridor of the ground floor beside the collection of Building Stones. There have also been placed in this corridor the collection illustrating the Geology of Manhattan Island and the large single geological specimens formerly in our main exhibition hall.

Miss Dunst, with the occasional assistance of Miss Marks, has prepared a card index of all the accessions to the departmental collection listed in the annual reports of the Museum from the beginning, and is still occupied with assembling into envelopes correspondingly numbered all the available letters and other data pertaining to the acquisition of each lot. Mr. J. B. Thornhill

has put catalogue numbers on some 3,000 geological specimens, written drawer labels, and made manuscript entries in the books for many of them. This year Miss Greene has prepared more than 15,000 cards for the palæontological catalogue under the direction of the Associate Curator, and has developed great proficiency in the work. About one-fourth of the cards needed for the replacement of the Whitfield book catalogue have now been prepared.

The Curator captioned and turned over to the Department of Public Education about 600 negatives resulting from his visit to the Arctic in 1915-1917. He prepared for the Department of Anthropology some geo-Crocker Land logical notes on the kitchen midden sites of the Expedition Smith Sound region and a preliminary description of the Ahk-po-hone iron meteorite which Mr. Ekblaw of the Crocker Land Expedition brought down from Ellesmere Land. Mr. Ekblaw, who is Research Associate in the department, has been working up, at the University of Illinois, his geological and geographical data obtained in the Cape York-Smith Sound region and in northern Grant Land. Early in December there appeared from the press of Harper and Brothers, Dr. D. B. MacMillan's 400-page book, "Four Years in the White North," giving a vivid account of the journeys, labors and experiences of the Crocker Land Expedition staff and of life in general in the Far Arctic.

The New York Academy of Sciences is publishing the base map of Porto Rico prepared by Dr. Reeds and Mr. A. Briesemeister in 1915. It is to be hoped that the Caribbean and West Indies map, prepared by the same authors in 1916, can be completed and published during the coming year. The illustrations in Dr. O'Connell's paper on the "Schrammen Collection of Silicispongiæ of Northwestern Germany," the text of which was prepared last year, were finished in November, and the article is in the hands of the editor of the Museum Bulletin. When Dr. O'Connell returned to the Museum in September, she undertook the study of some Jurassic ammonites which Mr.

Barnum Brown collected in Cuba last summer. The results are very valuable, and are to be published in the Museum Bulletin at an early date. The Curator has also published an account of Eskimo child life in the Museum Journal. Mr. Ekblaw has an article on "The Danish Arctic Station at Godhavn" in the November number of the Museum Journal, and has published other Crocker Land Expedition material in the Geographical Review of the American Geographical Society and elsewhere. Other reports awaiting opportunity for completion are the Curator's account of the work done in Martinique and St. Vincent in 1915, under the Angelo Heilprin Exploring Fund and certain observations made in Greenland with the Crocker Land Expedition in 1915–1917, also a popular scientific account of the seismograph and its use by the Associate Curator.

The most important accessions of the year have been a series of rocks and fossils illustrating the geology of New Mexico, collected by Professor C. T. Kirk of the University of New Mexico; two large cut and polished slabs of Michigan amygdaloid copper and copper conglomerate from the United States National Museum; a series of specimens of galena, sphalerite and marcasite from the Admiralty Zinc Company, Quapaw, Okla.; a series of two hundred Devonian fossils from Iowa collected by Carroll Lane Fenton; the Barnum Brown collection of ammonites and other Jurassic fossils from Cuba; and some 1,660 specimens representing 165 species of fossils from the Hunton beds of Oklahoma made by Associate Curator Reeds before he became connected with the Museum.

No field work was carried on by the department aside from a reconnaissance of the Watkins Glen region, New York; a somewhat careful photographic survey of the Mt. Holyoke Range region, Massachusetts, by the Curator for the benefit of the topographical models now under preparation, and collecting trips by Research Associate Ekblaw to the fossil plant locality of Mazon Creek, Illinois, and to the sand fulgurite locality of Whiteside County, Illinois.

MINERALS AND GEMS*

HERBERT P. WHITLOCK, Curator

With a view to increasing the attractiveness of the Morgan Collection of Minerals, several experiments were made in remounting small sections of the collection, and a plan for the reinstallation of the entire collection has been devised which it is believed will not only materially add to the effectiveness of what is undoubtedly the finest displayed series of minerals in America but will admit of an appreciable gain in available space for exhibition, thus allowing for the growth of the collection in all its elements.

A small exhibit illustrating the relation of minerals to the production of munitions of war has been installed in two cases of the A type in the Hall of Minerals. This series, the assembling of which was begun in Minerals June, aims to visualize the steps in the development of war munitions from the ore to the finished product and to emphasize the need of establishing an adequate domestic source of supply of the ores of the rarer metals. Through the courtesy of a number of prominent manufacturing firms producing war materials for the Government, it has been possible to supplement the display of ores with many examples of such finished products as special steel alloys, armor plate, graphite tools and appliances used in smelting and converting metals, detonators, cartridges and bullets, sections of gun barrels, etc. The exhibit has proved eminently successful in that it has apparently been instrumental in bringing before the public a phase of our war industry of considerable importance.

Through the courtesy of Mr. Charles Lanier there has been deposited as a loan in the Morgan Hall of Gems an exquisite example of modern art in carved chalcedony. This consists of a graceful statuette eight inches in height carved from an un-

^{*} Under the Department of Mineralogy (see also pages 183 to 185).

usually perfect block of translucent bluish chalcedony of natural color. The figurine, which is entitled "Pas de Danse," is the work of M. Tonnelier, the eminent French artist stone engraver, and was exhibited in the Paris Salon of 1912. It is one of the finest known examples of gem carving. It was a gift from the late J. Pierpont Morgan to his lifelong friend Mr. Lanier and typifies Mr. Morgan's well known taste and knowledge in acquiring objects which combine the highest qualities of art with the best standards of rarity.

A revision of *Guide Leaflet* No. 4 has been prepared, considerably extending the scope of the present Guide, which passed into its Second Edition in 1904 and of which the supply is nearly exhausted.

The material of the Bement Collection is especially rich in crystallized specimens, many of which have never been figured and among which there is unquestioned evidence of rare and new forms. It is proposed to undertake the description of this collection in the form of a Crystallographic Atlas to be issued in parts, each part devoted to a section of the Collection and to consist of plates with descriptive text. The equipment for this work, a Hutchinson Universal Goniometer, has been ordered from James Swift and Son of London. Pending the delivery of this instrument, which has been delayed by war conditions, the department, through the courtesy of Professor Moses of Columbia University, has been offered the use of a goniometer, in order that the study may not be unnecessarily delayed.

Among the mineral specimens that have been added to the collection displayed in the Morgan Hall of Minerals during the past year, are several which, by reason of their exceptional quality, their rarity and their current interest, are worthy of a short descriptive note.

A magnificent group of dioptase crystals from the Kirghese Steppes, Siberia, constitutes a notable addition to the fine suite of this copper silicate already on exhibition. Also from Siberia comes a handsome group of the rare mineral achtaragdite,

in ash gray crystals which are almost diagrammatic in the perfection of their development. Remarkably large and perfect examples of scheelite, from a new locality in Mohave County, Arizona, have been added to the collection. These are represented by a single crystal nearly two inches in diameter, and a group showing scheelite associated with black tourmaline which is both striking and attractive. Equally attractive by reason of its brilliant color contrast is the uranopilite on chalcopyrite from Montrose County, Colorado, in bunched incrustations of a fluorescent yellowish green. Among the newly discovered minerals represented in this year's accessions, are spencerite, a zinc phosphate from the Hudson Bay Mine at Salmo, British Columbia; crestmoreite, a new hydrous silicate from Crestmore, Riverside County, California, and temiskamite, a new (1914) nickel arsenide, represented by specimens from two Canadian localities. A striking example of mineral association is represented by a large moss-like stalactitic mass of psilomelane, enclosing crystals of native copper and dotted with malachite, from Warren, Arizona, the gift of Mr. L. D. The more local mineral occurrences to be found among the year's accessions include a large and very fine crystal of amazonite from Valhalla, Westchester County, the gift of Mr. James G. Manchester.

The Morgan Gem Collection has been enriched, through the gift of Mr. J. P. Morgan, by the addition of three magnificent cut opal pieces of rich color and fire from Humboldt County, Nevada, also two large facetted tourmaline gems, wine red in color, from Brazil, and a large tourmaline roughly shaped in the Chinese manner from San Diego County, California.

The use of minerals for carved ornaments is represented by a series of beautiful Chinese carvings in agmatolite which were exhibited at the Centennial Exposition in 1876. These include a large stand supporting figures of the Nine Worthies of China, two seated figures of Chinese Sages, and two tall flower vases ornamented with vine and foliage forms. They were presented by Messrs. Albert G. and Jerome J. Hanauer.

WOODS AND FORESTRY*

MARY C. DICKERSON, Curator

Owing to the service in France of the Associate Curator, Major Barrington Moore, as an officer of engineers, the work so optimistically planned for 1918 on small groups to illustrate forestry conditions and principles has not been carried out. Also, for lack of available funds, a decision regarding the east wall mural, sketches for which have been prepared by Mr. Hobart Nichols, has not been possible.

Some labels have been inserted where they were lacking, and the work on the construction of exhibition sprays of flowers, fruits, and leaves has progressed with great satisfaction. This work is in the hands of the artist, Mr. Milton D. Copulos. One particularly impressive spray of the large-leaved cucumber tree (Magnolia macrophylla) was constructed in the winter of 1917–18, from a living original of record size from Westchester County, New York, the gift of Mrs. Horde, of New York City. This spray is exhibited in a separate case at the entrance to the forestry hall and has attracted much attention. As a whole, it is 43 inches in width, the largest leaf measuring 21 inches, and the flower 9 inches.

Among other sprays worked on during the year the following were put on exhibition: black maple (Acer nigrum); red ash (Fraxinus Pennsylvanicum); black oak (Quercus velutina); and Arizona sycamore (Platanus Wrightii).

In connection with this work the coöperation of botanists and foresters was enlisted in supplying the fresh material for the reproductions. Through this professional courtesy in different parts of the country, 20 specimens in all were received, from which were selected the handsomest and most typical to serve as models. As a result it will be possible to add eight species to the collection. These include: blue ash (Fraxinus quadrangulata), from Indiana; western cherry laurel (Prunus ilicifolia), from California; California sycamore (Platanus

^{*} Under the Department of Woods and Forestry (see also pages 185 and 186).



DEPARTMENT OF WOODS AND FORESTRY Spray of Record Magnolia Reproduced in Wax



racemosa); Schneck's oak (Quercus Schneckii), from Indiana; Arizona sycamore (Platanus Wrightii), and Mexican walnut (Juglans rupestris), from Arizona; broad-leaved maple (Acer macrophyllum), from Oregon; Oregon ash (Fraxinus oregonia), from Oregon and California.

In addition to these sprays of deciduous trees, one valuable prepared conifer spray, of Douglas spruce (*Pseudotsuga taxifolia*), from Colorado, was purchased from Mr. A. E. Butler.

The reference collection has been enriched by gifts of West Indian and South American woods as follows: Porto Rico, 82 pieces, representing 40 varieties; Cuba, 23 pieces; and Colombia, 38 pieces. A series of 62 photographs illustrating Sitka spruce lumbering methods in the northwestern United States has been added to the educational files of the department.

EXISTING INVERTEBRATES*

HENRY EDWARD CRAMPTON, Curator

The activities of the department as a whole have been continued along normal lines, although the war has affected these activities in certain respects. Members of the staff have been engaged in national service during part of the year, but have now returned to their full work. Many collaborators, formerly engaged in the study of special collections, have been in service, and necessarily their reports have remained uncompleted, and publication has been postponed. Finally, fieldwork has been temporarily suspended, excepting in the instances noted below.

The Nahant Tide Pool Group was completed and installed in the early part of the year. This group, described in detail in last year's report, is a noteworthy exhibit in the series of habitat groups in the Darwin Hall.

During the year the Bryozoa Group has been carried partially to completion. It will represent the natural history of a bit of sea bottom, one and five-eighths inches in diameter, magnified twenty-five diameters. The minute animals and plants naturally associated with the Bryozoa will be shown

^{*} Under the Department of Invertebrate Zoölogy (see also pages 186 to 188).

magnified to scale. Seven species of the latter will be represented, while among the associated forms certain hydroids budding forth medusæ will exemplify alternation of generations. The complete life history of a typical colonial ascidian (Botryllus) will also be shown from the free-swimming larva to the stationary adult animal. This group presents many new problems of preparation and installation, and will be an effective contrast to the other window groups in the Darwin Hall. The final panel for the Mendelian exhibit has been practically completed and is now ready for installation. It represents one of the simplest cases of Mendelian color inheritance as shown in the Four o'Clocks (Mirabilis jalapa). The series of Protozoa models has been amplified by several striking items, notably models of the remarkable Radiolarians, Collozoum inerme, Trypanosphæra transformata and Lithocircus arborescens. A chart illustrating the phylogeny of invertebrates and their relation to the vertebrate stock has been prepared and temporarily installed in the Synoptic Hall of Mammals. When completed this chart will illustrate, by means of specimens and models, the chief types of the animal kingdom, as well as their phylogeny. In addition, a series of the flat worm and round worm models, purchased for the Museum in Japan by Major Bashford Dean, have been remounted and placed on exhibition. Two items have also been added to the series of nudibranch models. Throughout the year the work of enlarging and refitting the exhibition cases has continued, and five cases are now completed. During 1918, 9,728 pupils visited the Darwin hall in 361 classes from 172 different institutions. Each class was accompanied by its teacher and came for the purpose of studying definite exhibits. Of the institutions represented, 47 are from out of town, 104 are public schools, 46 private schools, and 15 parochial schools. Seven of the number are collegiate institutions.

The cataloguing and arrangement of our general collection of Brachyura, begun in 1917 by Dr. W. G. Van Name, were completed by him during the early months of this year, and since then a general rearrangement of the catalogued material and uncatalogued accessions of the invertebrate collections has

been undertaken and carried out in most of the larger groups. The new system facilitates the finding of any specimen, and

will allow space for considerable growth in the collections without the necessity of rearrange-General Invertebrate ment. The large collection of invertebrates made Collections by Mr. Barnum Brown in Cuba during the spring and early summer has been sorted and most of the Crustacea have been identified and catalogued. Important progress in the work on the Congo Expedition Collections has been made during the year. The Crustacea were more carefully examined and sorted, and such of them as were to be studied elsewhere were packed and shipped. Those identified by Miss Rathbun at the Museum and those returned to the Museum have been catalogued, and the land shells returned by Dr. Pilsbry since the completion of his report, have also been catalogued. These include the collection made in the Belgian Congo by Dr. Bequaert. Mr. Arthur Jacot spent several weeks during the year in identifying and arranging various collections of mollusks, hitherto unnamed. Since the death of Mr. L. P. Gratacap, the general shell collections have been incorporated with the section of General Invertebrates under Mr. Miner.

As in former years, a striking feature of the entomological work has been hearty and profitable cooperation with students outside of the Museum. In a way, an indication of the extent of one phase of this cooperation is Insects and the fact that approximately 15,000 specimens of Spiders insects are now out as loans to entomologists, to mutual advantage. As in former years, the New York Entomological Society has had charge of the Collection of Local Insects. and members of the society are in close touch with many of the activities of the department. The most important change in connection with the care of the collections has been the establishment of a system whereby the type specimens of species are kept in special pest-proof, fireproof cases apart from the general collection but still linked up with it by means of cross-reference labels. Counting types, cotypes and paratypes, we have more than 10,000 specimens of this absolutely

irreplaceable type material, and, by reason of the reputation the Museum is gaining among entomologists as a place where types are well cared for, we may expect a substantial increase in the number of type specimens entrusted to our keeping. It is not practicable to catalogue the individual specimens in a large entomological collection, except in the case of types or specimens which are especially important for some other Therefore, without going to an unjustifiable expense in bookkeeping, a curator of insects rarely knows, even approximately, how many specimens there are in the general collection. However, during the past year an approximate census of certain parts of our collections was made. According to this census, we have in the general collection about 100,000 mounted specimens of ants, bees, wasps, etc.; 60,000 flies; 220,-000 beetles; 50,000 Hemiptera; and 35,000 of the lower orders; making a total, as far as these are concerned, of nearly half a million specimens. However, this total does not include our large collection of butterflies and moths, the specimens on exhibition, the material in alcohol, or about 20,000 specimens which we have on deposit but which do not actually belong to the Museum. The grand total is certainly well over a million specimens of insects and spiders, probably representing at least forty or fifty thousand species. All these specimens are now as fully labeled as the data accompanying them when they were obtained will permit.

There has been no change in the regular entomological staff. Mr. H. G. Barber was employed for a month to work on the collection of Hemiptera. Dr. J. Bequaert has assisted with the collection of Congo wasps and ants.

In compliance with the policy adopted by the Museum in general, there have been no extensive field trips in the past year. During July and August, Mr. Miner spent six weeks at the Marine Biological Laboratory in Woods Hole, Mass. He was accompanied by Messrs. Herman Mueller, Chris E. Olsen and Show Shimotori of the modeling staff, and through the courtesy of Director Frank R. Lillie and Assistant Director Gilman A. Drew, succeeded in obtaining many studies of marine life for use in connection with the



DEPARTMENT OF INVERTEBRATE ZOÖLOGY

THE BUTTERFLY GROUP

The Monarch Butterfly—migrating



new Bryozoa Group. Much information was obtained on the life histories of the forms to be represented, which will form the basis, not only for exhibition work, but for future research. Many notes, water-color sketches and preliminary models were made directly from life. Dr. Lutz spent considerable time during the summer in northern New Jersey obtaining material for exhibition purposes. He had three main objects in view: (1) an exhibit of spider webs, (2) an exhibit of the burrows of bees, solitary wasps and other insects, and (3) an exhibit showing the number of species of insects to be found in a suburban back yard. Approximately five hundred species were found in a lot 75×200 ft. in a town within easy commuting distance of New York City.

The Curator has made substantial progress in the study of the land snails belonging to the genus Partula, collected in the

Research and Publication islands of Moorea and Raiatea. The Curator also has nearly completed two papers dealing with biological problems in the case of the American silk worm moth, *Philosamia cynthia*. Mr.

Miner has continued work on "The Synonymy and Bibliography of American Myriapods." Dr. Van Name's paper on the West Indian Ascidians, which was practically completed last year, has been held in reserve pending his comparison and examination of certain other collections. A paper by Professor G. A. MacCallum, entitled "A New Species of Trematode (Cladorchis gigas) Parasitic on Elephants," was published early in the year as a part of the results of the Congo expedition. A paper by W. G. and G. A. MacCallum, entitled "On the Anatomy of the Leech Ozobranchus branchiatus Menzies." was also published in the Museum Bulletin. An excellent paper by Professor C. Branch Wilson, entitled "Parasitic Copepods of the Congo Collection," is now in press, which describes several new species of this interesting group. paper on the Congo Mollusks by Professor H. A. Pilsbry is now ready for publication. Professor Pilsbry is also working on the Congo Cirripedes. The Crustacea of the Congo Collection will form the subject of several papers which will appear in the near future, the Brachyura being worked up by

Miss Mary G. Rathbun of the United States National Museum, the Anomura, Macrura and Stomatopoda by Dr. W. L. Schmitt, and the Amphipoda by Dr. C. R. Shoemaker of the same institution. The Congo Myriapods have been assigned to Professor Ralph V. Chamberlain of the Museum of Comparative Zoölogy, Cambridge, Mass., while Mr. Miner is working on the West Indian and local Myriapods. Considerable work has also been done on the collections made by the Crocker Land Expedition; the Echinoderms have been identified by Dr. Austin H. Clark, the Parasitic Crustacea by Professor C. B. Wilson, the Parasitic Worms by Professor H. B. Ward, the Bryozoa by Professor R. C. Osburn, the Cirripedes by Professor H. A. Pilsbry, the Amphipods by Dr. C. R. Shoemaker, the Mollusks by Dr. Frank C. Baker and the Ascidians by Dr. W. G. Van Name. The following entomological papers have been published in the Bulletin: Chris E. Olsen, "North American Cicadellidæ in the Collection of The American Museum of Natural History"; Chas. W. Leng and Andrew J. Mutchler, "Insects of Florida, V. The Water Beetles"; Wm. Barnes and J. McDunnough, "Life Histories of North American Species of the Genus Catocala"; E. P. Felt, "Notes and Descriptions of Itonididæ in the Collection of The American Museum of Natural History"; A. H. Sturtevant, "A Synopsis of the Nearctic Species of the Genus Drosophila (sensu lato)"; Nathan Banks, "The Termites of Panama and British Guiana"; T. D. A. Cockerell, "Bees from British Guiana"; and J. Bequaert, "A Revision of the Vespidæ of the Belgian Congo Based on the Collection of the American Museum Congo Expedition, with a List of Ethiopian Diplopterous Wasps." A Memoir, "Illustrations of the North American Species of the Genus Catocala by Wm. Beutenmüller, with Additional Plates and Text," by Wm. Barnes and J. McDunnough, contains twenty-two plates, seventeen of which consist of a large number of excellent colored figures of adults and larvæ. Several entomological papers by various authors are in press. In addition, Messrs, Wheeler, Leng and Watson have published various papers in other periodicals, and Dr. Lutz's "Field Book of Insects, with Special Reference to Those of Northeastern United States, Aiming to Answer Common Questions" has

been published by G. P. Putnam's Sons. Dr. Wheeler has practically completed his report on the ants collected by the Congo Expedition. Dr. Lutz has continued his studies on the higher bees of North America. Mr. Mutchler, in coöperation with Mr. Leng, has nearly finished a study of West Indian fireflies and their relatives. Mr. Leng will soon publish a most valuable check-list of North American beetles. Mr. Watson's principal research has been concerned with the life histories of butterflies. Mr. Bequaert has devoted most of his time to general work in connection with the preparation of reports on the Congo Expedition.

A few of the noteworthy accessions of the year may be mentioned. A collection of Mollusks, Brachiopods and Corals, comprising 464 specimens of about 100 species, Accessions was purchased from Mrs. Ida S. Oldroyd of Leland Stanford Junior University. These were collected by Mrs. Oldroyd on the Pacific Coast, mainly in the neighborhood of Puget Sound. A collection of 250 specimens of shells, embracing about 100 species, was received in exchange from Mr. W. H. Weeks. A small collection of excellent examples of land snails from France was presented by Sergeant E. D. Crabb of the United States Army. About 2,000 specimens of Crustacea, Mollusca, Chordata, Annulata, Echinodermata and Myriapoda, collected by Mr. Barnum Brown in Cuba, have been given to the department. A collection of the types of Congo Mollusks, embracing 103 new species and subspecies, was presented by Mr. Joseph Bequaert, by whom they were collected. These have been described by Professor H. A. Pilsbry and form the basis of a portion of his paper on the Congo Mollusks about to be published. In entomology the most important accession has been the gift by Rev. H. R. Caldwell of a large collection of Chinese insects. These are valuable not only by reason of the fact that they represent many species not hitherto possessed by this Museum, but also because they come from a less explored region which is of especial interest in connection with the larger problems of geographic distribution that are constantly kept in mind by this department.

RECENT AND EXTINCT FISHES EXISTING REPTILES AND BATRACHIANS*

BASHFORD DEAN, Honorary Curator MARY CYNTHIA DICKERSON, Associate Curator of Herpetology

FISHES

The most notable exhibit of fishes opened to public view during 1918 is a group representing a large blue shark (Prionace

Exhibition, Care of Collections, etc. glauca) accompanied by a brood of young. Two small comparative groups have been placed in the systematic cases showing tide-pool fishes of the northwest Pacific coast compared with those of the southeast Atlantic coast. The viviparous

surf-fish in the former compares more or less with brightly colored coral reef species in the latter, and in the same way the northern sculpin-like fish resembles the southern goby; an eel-like northern blenny is contrasted with a shorter bodied tropical one. In addition, comparative models of lamprey and hagfish heads have been placed on exhibition; models of sexual variation in Arctic sculpins, and the evolution of a ventral sucking disk through various fish families, have been prepared. Many new specimens have been prepared to fill in the series in the systematic cases. The department preparator, Mr. F. F. Horter, has meanwhile been able to improve greatly his technique for casting alcoholic fishes for exhibition and reproducing their fins in celluloid. Besides the routine work required to keep the study collections in condition for ready reference, thirty study skeletons of various types of fishes have been prepared by Mr. Kessler, and arranged for reference. skeletons are constantly being used in the identification of material referred to the department, and are of service in the Columbia University course which deals with fishes. It is hoped at an early date to increase the present collection of fish skeletons to two or three times its size, and that space will be

^{*}Under the Department of Ichthyology and Herpetology (see also pages 188 to 190).



DEPARTMENT OF ICHTHYOLOGY AND HERPETOLOGY
BLUE SHARK GROUP



found for its proper classification and arrangement. Due to war conditions, the department has not attempted to carry on any field work, the most important unworked material received being from museums in South America, through arrangements made by Dr. Eastman when in that country.

Progress on Dr. Dean's "Bibliography of Fishes" has been continuous, although not as rapid as had been planned, due to exigencies of the war. Mr. Arthur W. Henn, Research who was grouping and annotating the index and cards, entered the United States Army early in Publication April, leaving the work in the hands of Mrs. H. J. Volker, who had assisted him with it prior to that date; and she has since been occupied with translations, looking up and classifying references, preparing cards for the press, etc. On Dr. Eastman's return from South America he took up the references to fossil fishes until he was called to give his entire time to his duties at the War Trade Board. He was about to resume work on the Bibliography when word came to us of his tragic death in late September. Dr. E. W. Gudger spent six

weeks during the summer at the Museum compiling additional references for the Bibliography. Major Dean's duties in connection with his Ordnance work have left him time for only a

general supervision of the work.

The department has published "Fishes of the Vicinity of New York City," by J. T. Nichols, with an introduction by Wm. K. Gregory,—an illustrated *Handbook* of 118 pages, which, it is thought, will materially further the popular and scientific study of our local ichthyfauna. In addition, Mr. Nichols has published a short *Bulletin* article on fishes brought back by the American Museum's First Asiatic Zoölogical Expedition, and has in press others on marine Teleost fishes of the Crocker Land Expedition, and the revision of a marine genus (Vomer) based on specimens received from the Congo Expedition. Several new species are described in these articles. He has also published short articles and notes on fishes elsewhere, as follows: One on food fishes, in The American Museum Journal, later reprinted in the Pacific Fisherman, four in Copeia, five in the Brooklyn Aquarium Bulletin, and one in

Field and Stream, and has in hand the study of a fresh-water collection, mostly catfishes, from South America, loaned by the Museum at São Paulo, Brazil. A thirty-one page Bulletin issued in September is by Mr. Carl L. Hubbs of the Field Museum, Chicago, on "The Fishes of the Genus Atherinops, their Variation, Distribution, Relationships and History." This study was based partly on Lower California material borrowed from the American Museum, and partly on specimens from Mr. Hubbs' collection, a representative series of which has since been exchanged with this Museum.

REPTILES AND BATRACHIANS

The measure of accomplishment throughout the work of the department has been lowered during 1918 by the absence of assistants in various war capacities. This has affected especially the research on collections and bibliography; even local field work has been cut out altogether, and necessarily the work on exhibitions has been curtailed to some extent.

The additions to the catalogued collections for 1918 total 1,985 batrachians and 1,252 reptiles. Among these accessions, the most noteworthy are the following:

Accessions
and
Exchanges

First in importance, perhaps, is the Costa
Rican and Colombian Cope collection received
from the Philadelphia Commercial Museum in

exchange for preparation in wax technique of cotton plants for a commercial exhibit. This exchange was negotiated just at the close of 1917, the work of the American Museum's part of the exchange, however, not being carried out until the first half of 1918. This Cope collection consists of 714 specimens and includes 24 types. It is not only of unusual historical interest because of Cope's work on it, but will prove of great value in connection with the department's researches on Central and South American faunas.

Second in importance of newly accessioned material is the Hallinan Chile collection of 668 specimens. This was received in an exchange for a series of 29 plaster casts of reptiles and amphibians (mainly local) to be used in the foundation of a Natural History Museum at Paterson, New Jersey. Among

other important accessions is a gift of 91 specimens, chiefly from Manitoba, by Mr. Ernest Thompson Seton, and collections of 79 and 104 specimens from the Far East and Cuba respectively, collected by Mr. R. C. Andrews and Mr. Barnum Brown, of the American Museum.

Among collections leaving the Museum is a loan shipment of more than 100 specimens of milk snakes and king snakes (Lampropeltis) to Dr. A. G. Ruthven, of the Museum of Zoölogy of the University of Michigan, for use in a revision of the genus by Mr. Frank N. Blanchard, and a gift of about 85 specimens of North American frogs to Dr. Boulenger, of the British Museum, to aid in his revision of the Ranidæ.

Much routine work has been done on the catalogues of collections and in the organization of the department reference library of separates.

The paper on "Amphibians collected by the Nicaragua Expedition," by Mr. G. K. Noble, came from press in June. It concerns species from the banks of remote Central American rivers, many of these being rare in collections, two described as new.

The paper on the turtles, crocodiles and lizards of the Congo, by Mr. Karl P. Schmidt, has been in course of publication in the American Museum *Bulletin* and is now ready for indexing. It stands as the third paper of Volume I of the Congo reports, 240 pages, with 26 plates, 22 distribution maps, and many figures in the text. A paper on the snakes of the Congo, also in the hands of Mr. Schmidt, was well under way at the time he left for war service in March.

Progress has been made on the research long in hand on Lower California and the Southwest, but so great have been the demands of administrative, exhibition, and editorial work on the time of the Associate Curator that the work is not yet ready for publication.

The major piece of exhibition work of 1917, the Florida Group, carried well over into 1918, not being opened to the public until early summer. The group was described in considerable detail in the report of last year (pp. 77-79). Work has gone on in completing preparations for the Gopher Group, the plan of which has been

modified from a floor group to a panoramic group of considerable size. The wax reproductions of turtles of various sizes have been made; also, the snakes and frogs, and the plants of many species, low oaks, ferns, and flowering herbaceous plants, which make up this Florida association. These await final assembling—which is delayed because of lack of available exhibition space. Much has been accomplished also in the construction of the wax plant accessories for the Sphenodon Group, and valuable accessions of the insect food of this species have been received through the courtesy of New Zealand museums. Some progress has been made in preparation of casts and skulls for an exhibit to illustrate the poisonous reptiles of North America. The work is completed on the casts of the gila monster, Heloderma suspectum; on the two rattlesnakes, Crotalus atrox and C. adamanteus; the two ground rattlers, Sistrurus catenatus catenatus and S. miliarius; the moccasin, Agkistrodon biscivorus: and the coral snake, Micrurus fulvius; of skulls, showing the evolution of the hollow fang and correlated structures, a series of nine is prepared.

In addition to the work of herpetology, the editorship of The American Museum Journal has been carried.

MAMMALS AND BIRDS *

J. A. Allen, Curator

Owing to the absence of the greater part of the staff and of several laboratory assistants in war service, the activities of the department have been greatly restricted. Accessions to the collections have also fallen below those of any previous year in its history. The same decline has marked its publications.

There have been no accessions from field expeditions, from which source have come in recent years about nine-tenths of the additions. Also few specimens have been purchased. These include about 700 bird skins from Peru and desiderata required for exhibition. The accessions by donation consisted mainly of animals in the flesh from

^{*} Under the Department of Mammalogy and Ornithology (see also pages 191 to 193).

the New York City Department of Parks and the New York Zoölogical Society. Among the latter were many of much scientific value. About 80 hawks were received in the flesh from Justus von Lengerke.

An addition to the synoptic series of mammals has included a pair of elephant tusks secured by Mrs. Carl E. Akeley in the Mount Kenia region, Africa, and an extensive series of teeth, arranged with special reference to the teeth of mammals.

A collection of 709 bird skins, as mentioned above, was received from Peru early in the year, from Mr. H. Watkins, from whom, under a continuing agreement, the Museum expects to receive further instalments, including mammals as well as birds.

After the return of the expeditions in 1917, there was a considerable interval when the department had no expeditions in the field. Later it became evident, after some preliminary work by Associate Curator Andrews on the mammals collected by him in Yunnan in 1916–1917, that additional material from other parts of Asia was necessary before satisfactory results could be reached respecting many of the groups represented. In June of the present year, Mr. Andrews was given authority to organize a Second Asiatic Zoölogical Expedition for work in northern China, where he arrived safely some months later and has since been successfully carrying out his plans of research. In all probability the work of this expedition will be carried on through the greater part of 1919.

About a month later a Third Asiatic Zoölogical Expedition, under the auspices of the American Museum of Natural History, was organized with a plan of work in the Orient covering several years. This was rendered possible through the generosity of Mr. Paul J. Rainey, well known for his successful natural history expeditions to British East Africa in 1911, in the interest of the United States National Museum. The whole expense of the expedition will be met by Mr. Rainey, who will lead the expedition.

Much progress has been made in the rearrangement of the study collection of mammals, most of this collection being now

fairly accessible and in safe storage. The cleaning of all the osteological material from the Congo Expedition has been completed and the specimens are being catalogued. The skeletons prepared during the present year include several elephants, giraffes, giant elands, buffaloes, forest pigs, okapis, and white rhinoceroses, the series of the latter being nearly complete from the fœtal to the senile stage. More than 1,400 skulls and 250 skeletons have been cleaned during the present year. Much valuable osteological material still remains unavailable for use, some of it accumulated many years ago and held in storage till such time as it could be prepared. The tanning of skins of large mammals has been carried on successfully, comprising 255 from the Congo collection and 122 from the Asiatic collection.

The cataloguing of the bird collection has been forwarded as rapidly as possible, under the superintendence of Associate Curator Miller, who has had especially in hand the Nicaragua collection made by him in 1917. Many duplicates from the Colombian collections have been selected for exchange. The birds received in the flesh, from various sources, numbering in all some 200 specimens the present year, have been utilized by Mr. Miller for the study of the pterylosis and viscera.

The rearrangement of the exhibition collection of mammals, under the direction of Director Lucas, has made good progress during the year, as noted in the Director's report, pages 38 to 46.

A striking addition to the ornithological exhibit is a Hornbill Group, showing the peculiar nesting habits of these curious birds. An actual nesting site, in a section of a large mambao tree from the Belgian Congo, obtained by the American Museum Congo Expedition, illustrates their peculiar methods. They breed in holes in trees, and when the female begins to sit on the eggs the male plasters up the entrance to the nest and feeds the female through a small hole left for this purpose, she remaining a willing prisoner during the period of incubation.

Research work in mammals has been confined chiefly to the Congo collection, of which about one third has now been criti-



DEPARTMENT OF MAMMALOGY AND ORNITHOLOGY
HORNBILL GROUP
From Congo Expedition collections



cally studied. Reports on several groups have been prepared and await publication. A paper on the insectivora is in press,

Research and Publication to be followed by others on the Sciuridæ, Anomaluridæ, Idiuridæ and Viverridæ; work is in progress on the remaining groups of the Carnivora. The Curator has also in preparation a

paper on the classification and nomenclature of the smaller spotted cats of Tropical America, the text and part of the illustrations having been finished. Associate Curator Andrews devoted several months to research work on the mammals collected by him on his recent Asiatic Expedition, nearly completing an important revision of the Serows and Gorals when interrupted by the preparations for his Second Asiatic Zoölogical Expedition in June last, mentioned above. Associate Curator Miller has continued his studies of the birds of Nicaragua, with a view to early publication of a comprehensive report on the ornithology of that country. Mr. George K. Cherrie has practically completed his work on the birds of the Roosevelt South American Expedition, but its publication has been delayed by his absence from the country on important war service.

Assistant Curator Anthony's "The Indigenous Land Mammals of Porto Rico, Living and Extinct," mentioned in the report of last year as then in press, was considerably delayed in publication, having been issued early in October of the present year. It forms part II of Volume II of the New Series of the *Memoirs* and is a monograph of 107 pages, 13 plates and 55 text figures, presenting the results of the author's explorations in Porto Rico of an extinct mammal fauna, the existence of which was previously almost unsuspected.

Three papers, based on the material of this department, have been published during the year in the Bulletin: "The external Characters, skeletal Muscles, and peripheral Nerves of Kogia breviceps (Blainville)," by H. von W. Schulte and M. de Forest Smith (Vol. XXXVIII, pp. 7–72, text figs. 1–21); "Memoranda upon the Anatomy of the Respiratory Tract, Foregut, and Thoracic Viscera of a fætal Kogia breviceps," by John D. Kernan and H. von W. Schulte (idem, pp. 231–267, text figs. 1–16); "The Skull of Ziphius cavirostris," by John D. Kernan (idem, pp. 349–394, pll. xx–xxxii). A paper by Robert Cush-

man Murphy, based on the Brewster-Sanford Collection of Birds, entitled "A Study of the Atlantic Oceanites," has been published in the Bulletin (Vol. XXXVIII, pp. 117–146, pll. i-iii, text figs. 1–7). A second ornithological paper, by Dr. Jonathan Dwight, on "The geographical Distribution of Color and of other variable Characters in the Genus Junco: a new Aspect of specific and subspecific Values" (idem, pp. 269–309, pll. xi–xiii (colored), and 5 maps, is based in part on material in this department. A by-product of the First Asiatic Zoölogical Expedition of the American Museum of Natural History is the narrative account, "Camps and Trails in China" (D. Appleton and Company) by Roy Chapman Andrews and Yvette Borup Andrews, issued in July last, illustrated with numerous halftone plates from photographs.

Mr. Leo E. Miller's "In the Wilds of South America" (New York, Charles Scribner's Sons) is an attractive narrative of his six years of exploration in Colombia, Venezuela, British Guiana, Peru, Bolivia, Argentina, Paraguay and Brazil as a field assistant in the Department of Mammalogy and Ornithology. It is replete with intensely interesting information regarding many parts of South America never before visited by a naturalist. Besides his daily experiences as an explorer and collector in tropical jungles, on bleak paramos and in the pampas, the leading physiographic and biologic features of the regions traversed are intelligently presented, maps and nearly one hundred photographic illustrations adding to the realism of the text.

Near the close of 1917, the Curator of this department asked to be relieved of the editorial supervision of the *Bulletin* and Memoirs, in order that he might have more time for research. Dr. Frank E. Lutz, Associate Curator in the Department of Invertebrate Zoölogy, was designated as his successor and has had editorial charge of these publications during the present year.

EXTINCT VERTEBRATES*

HENRY FAIRFIELD OSBORN, Honorary Curator W. D. Matthew, Curator

In conformity with the general policy of the Museum, we have greatly reduced the amount of field work and have devoted our energies chiefly to the preparation of exhibits and to the entire rearrangement of our collections of fossil amphibians, reptiles and mammals, which now for the first time are in admirable order; also to research and publication.

Associate Curator Barnum Brown has completed the exploration of the Ciego Montero locality near Cienfuegos, Cuba, securing there a valuable collection of fossils chiefly of the Cuban Ground Sloth *Megalocnus*. On invitation of Dr. Thomas Barbour, of the Museum of Comparative Zoölogy, he also completed the exploration of a cave deposit near Soledad, first explored for fossils by that gentleman, and secured a large collection of fossil remains, mostly small rodents and insectivora. These collections add largely to the materials for study of the extinct animals of Cuba, and to the evidence as to former geographic relations of the West Indian islands.

Associate Curator Walter Granger completed the exploration of the Huerfano Basin of Eocene age near Pueblo, Colorado, commenced in 1916. He obtained a considerable collection of fragmentary but interesting specimens which record the transition from the Lower to the Middle Eocene epochs, and include a number of species new to science.

Mr. Albert Thomson continued explorations in the Snake Creek beds of Western Nebraska, securing a collection of fossil mammals of Pliocene age, including skulls of a large rhinoceros, a peccary and a rare rodent, besides much fragmentary material

A number of valuable specimens of dinosaurs from the Red Deer River in Alberta have been secured through purchase.

^{*} Under the Department of Vertebrate Palacontology (see also page 194).

The most important are a nearly complete skeleton of a carnivorous dinosaur, a partial skeleton of a new type of armored dinosaur and the skull of a horned dinosaur.

Cretaceous Dinosaurs

Preparation of these specimens is under way. A fine complete skeleton of the Crested Dinosaur Corythosaurus and a skeleton of a large carnivorous type have been prepared as panel-mounts, and a third carnivorous dinosaur skeleton has been partly prepared for exhibition.

A fine skeleton of a long-jawed mastodon, Megabelodon, of the Pliocene epoch, has been purchased from Mr. Edward L.

Troxell. It was discovered by him near Dallas,
South Dakota, in 1917, and constitutes one of the most important additions to our knowledge of the extinct Proboscidea.

The skeleton has been mounted and placed next to the Warren Mastodon in the Hall of the Age of Man. This is a fine illustration of the peculiar kinds of Mastodons which inhabited this country in the Tertiary period. Their remains though not rare are mostly fragmentary, and this is the first skeleton of a Tertiary mastodon in any museum in this country and the second in the world. (The other is in the Paris Museum.) This animal equaled the great American Mastodon in bulk but had shorter legs and a very long lower jaw. The trunk was probably supported beneath by the front of the jaw instead of hanging free as in the short-jawed mastodons and elephants.

A skeleton of the Fin-back reptile Dimetrodon, from the Permian of Texas, has been obtained by purchase and a series of supplementary skeletons, of the same genus, but less complete, has been presented by the collector, Mr. Charles H. Sternberg. A valuable skeleton of a Pareiasaurian reptile from the Karroo formation of South Africa has been obtained through the good offices of Dr. Robert Broom. Mounting of three skeletons of Moschops, commenced three years ago but interrupted for a time, has been resumed. This animal is a large reptile from the Karroo formation of South Africa, the group of skeletons being a part of the Broom collection acquired by the Museum





MAMMOTH AND REINDEER ON THE RIVER SOMME, FRANCE, DURING THE REINDEER PERIOD, OLD STONE AGE



MASTODON, IMPERIAL BISON AND HORSE ON THE RIVER MISSISSIPPI DURING THE SAME GEOLOGICAL PERIOD

DEPARTMENT OF VERTEBRATE PALÆONTOLOGY

Painted under the direction of Honorary Curator Henry Fairfield Osborn for the Hall of the Age of Man by Charles R. Knight GIFT OF MR. J. P. MORGAN in 1913. Dr. Gregory, who has been making an especial study of the anatomy of the limbs in early reptiles, has undertaken to supervise the mounts. In this connection Mr. Charles Lang has devised a new apparatus for temporarily setting up and adjusting to any desired pose the trunk and limbs of fossil skeletons to be mounted. This enables us to adjust all parts of the skeleton exactly to the pose selected, and to make any desired changes rapidly and easily. The permanent mountings are then fitted to the skeleton as approved in its temporary mount.

An attempt has been made to complete the work on the Hall of the Age of Man, with the coöperation of Honorary Curator Osborn, Associate William K. Gregory, Miss Christina D. Matthew and Associate Curator Walter Granger, in palæontology, and Professor J. Howard McGregor, in anthropology. Three murals, painted by Mr. Charles R. Knight, under the direction of Professor Osborn, have been donated to the collection by Mr. J. P. Morgan, namely, the

Mississippi River Mastodon Scene, Woolly Rhinoceros Steppe Scene, Pampean Scene.

Studies are being made for three human group paintings, the Neanderthal, the Crô-Magnon and the Neolithic. Professor McGregor has prepared the Neanderthal head and body models, as part of his valuable series of restorations.

Further progress has been made upon the catalogue of types and figured specimens, the section on fossil mammals being now well advanced towards publication, and upon the rearrangement and relabeling of the collection of fossil mammals. The rapid accumulation of new collections, progress in their preparation, and study and research in palæontology and geology involve a good deal of such work to keep the col-

lections even approximately up to date.

The most important research published during the year is Professor Osborn's memoir upon the later Tertiary Equidæ, in which all the known American types are redescribed and fully illustrated, many new species described from the large collections in this Museum, and the whole critically revised as to their geological and zoölogical relationships. He has also continued his researches upon the evolution of the Proboscidea, the skeleton of the great Amphibious Dinosaur Camarasaurus, and upon a series of Moropus skeletons. The monographs of the Sauropoda and Titanotheriidæ have been further advanced toward completion.

Dr. Matthew has published further studies upon the Snake Creek fossil mammal fauna, and the revision of the Lower Eocene Insectivora, Rodents and Edentates, and has continued studies upon the extinct Camelidæ, the fossil mammals of Cuba, and, in conjunction with Mr. Granger, upon the Eocene and Paleocene faunas.

Dr. Gregory has continued researches upon the evolution of the Primates, upon the lachrymal bone and upon the comparative myology of the limbs of vertebrates. He has in press a memoir dealing with the American Eocene lemuroid primates.

Mr. Brown has continued his studies upon Cretaceous dinosaurs and prepared field notes upon the geology of certain portions of Cuba, which will be supplemented by palæontological studies of the invertebrate material collected, undertaken by Miss O'Connell in the Geological Department. The vertebrate collections will be described in a memoir by Dr. La Torre and Dr. Matthew.

EXISTING AND EXTINCT RACES OF MEN*

CLARK WISSLER, Curator

The most notable progress in the development of collections was made in the somatic division. Many complete skeletons representing Asiatic and African peoples were secured, together with a large series of crania. Our laboratory series, from which type units are drawn for the construction of new exhibits, was also greatly strengthened. Opportunity was afforded for the photographing

^{*} Under the Department of Anthropology (see also pages 194 to 197).

of typical American Indians, and, what is perhaps of greater interest, the securing of authentic photographs of American citizens of European descent, together with data as to their parentage, life history, etc. Yet, the most unique acquisition is the cast and photographic study of an African Bushman. This native was a fine specimen of his race, brought to this country by Barnum and Bailey's Show for exhibition in connection with their annual tour of the nation. By the courtesy of the management we were permitted to cast and photograph this most excellent type of a fast-vanishing race. A full life cast suitable for exhibition was taken, with pigmentation studies for its proper coloration. The work was in charge of Mr. Sigurd Neandross and the figure is about ready for installation. We also have on hand a representative series of the very few objects making up the objective side of Bushman culture and have reproduced on the walls of the African Hall some typical Bushman rock paintings. The latter have great interest because of their resemblance to paleolithic cave art. All together this will make an important addition to our African exhibit.

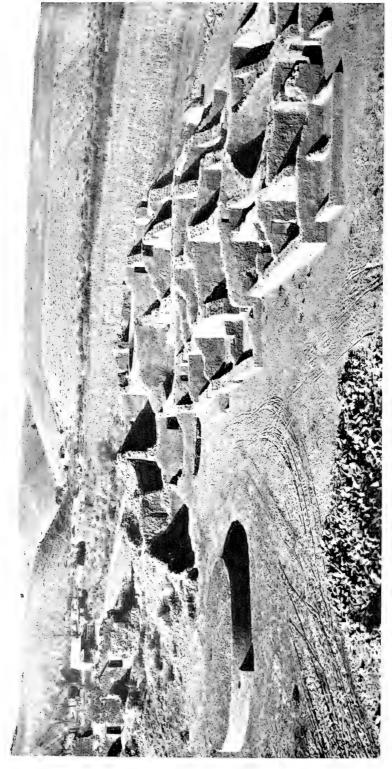
Mr. Carroll Richard Stegall, an American residing in Africa, presented a series of chipped stone implements brought to light in diamond mining operations on the edge of an extinct lake in the Congo. These implements are analogous to certain paleolithic forms already described from the same general region, but make a noteworthy addition to the Museum's collection. We now possess a good working series of stone implements from Middle and South Africa, which will be of the greatest usefulness in future investigations as to the nature and origin of the still elusive pre-iron culture of the Negro races.

It was our good fortune to have with us during the first half of the year Professor A. L. Kroeber of the University of California. An exchange of services was arranged between the Museum and the University of California, by which Associate Curator Robert H. Lowie took a position in the University and Professor A. L. Kroeber filled

the vacancy thus created here. Dr. Lowie gave regular university class instruction in anthropology at the University of California, while Professor Kroeber took up the reinstallation of our Philippine Island Hall, the preparation of labels for the same, and the writing of a visitors' handbook. As the groundwork for this, he made a thorough study of the Philippine problem, resulting in some new points of view regarding the origins of old Philippine culture. In cooperation with Assistant Curator L. R. Sullivan, he made a special study of the somatic types constituting the native Philippine population. This investigation resulted in a striking exhibit of Filipino types by the use of casts, busts and diagrams, now on view in the Philippine Hall. Professor Kroeber's reinstallation of the exhibits for the several cultural groups of these islands was completed last July. The details of this work were delegated to Mr. William A. Sabine. We hear from the University of California that in his lectures and class instruction Dr. Lowie rendered a real service to that institution, and in view of the fact that Professor Kroeber completed a very important and much-needed unit of work in this institution, I beg to report that this, our first experiment in curatorial exchange, has been an unqualified success, and to suggest that similar arrangements be entered into with other institutions.

In hall development, the most momentous accomplishment was the completion of the side panels for the illustrative mural series depicting the culture of the Indian tribes Development in Southern Alaska and on the Coast of British of Halls Columbia. There are sixteen panels, the following captions for which clearly indicate the scope and significance of the subjects treated: Securing Whales for Food, Nootka; Salmon Fishing, Kwakiutl; Gathering Bark for Food, Bella Coola; Preparing Fish Oil, Tsimshian; Building a Canoe, Haida; Weaving a Blanket, Tlingit; Welcoming the Salmon, Salish; Preparing Clams, Salish; Manual Arts, Tlingit; An Impersonation, Tlingit; Dancing to Cure the Sick, Tlingit; House Building Ceremony, Haida; Dog-eating Ceremony, Tsimshian; Welcoming Visitors, Bella Coola; Potlatch Ceremony, Kwakiutl; a Betrothal, Nootka. Before taking up





DEPARTMENT OF ANTHROPOLOGY

ENCAVATED AREA OF THE RUIN AT AZTEC, NEW MEXICO, 1917

This research is made possible through contributions of Mr. Archer M. Huntington

this work, the artist, Mr. Will S. Taylor, visited the Indians of the region under the guidance of former Associate Curator Harlan I. Smith, with whom jointly was developed the general scheme of treatment. In working out the subsequent details for the separate panels, Lieut. G. T. Emmons gave valuable information and criticism. Under the direction of Curator P. E. Goddard, the totem poles and other objects in the hall have been adjusted so as to give the mural panels an artistic setting. These very important secondary features of the North Pacific Indian exhibit add greatly to the habitat function of the installation, and will go far to make this, the Jesup North Pacific Hall, a presentation in every way worthy of its position as a special memorial to those two greatest patrons of the advancement of anthropology in the New World—Mr. and Mrs. Morris K. Jesup.

Expeditions for the year were confined to projects already under way and only such of these as it seemed unwise to interrupt. Particularly in view of the uncertain future Field Work for the Pueblo ruin at Aztec, New Mexico, excavations were pushed forward on a more extensive scale than heretofore. To date, fully half the great structure has been uncovered, the walls repaired and protected and the collections resulting therefrom classified and studied. Among the specimens are many new and unexpected objects whose presence throws light on the prehistoric movements of populations in the Southwest. One of the minor problems in this survey, which has been provided for by Mr. Archer M. Huntington, was the chronological position and prehistory of Zuñi. This year, Mr. Leslie Spier examined ruins in the White Mountain district of Arizona. The results here were unexpectedly important in that they furnished the missing link in the chronological scheme worked out for other parts of the Zuñi region. The final publication upon this area is now in press and will give a comprehensive outline of the culture of which modern Zuñi is a part. Studies among the modern Zuñi were also conducted by Dr. Elsie Clews Parsons, assisted by Professor A. L. Kroeber. A collection of rare ceremonial objects was obtained and presented to the Museum by Dr. Parsons.

Mr. B. T. B. Hyde spent part of the summer at Aztec assisting Mr. Earl H. Morris in the excavation of that ruin, and in addition gathered supplementary data for future publications dealing with early explorations among the cliff-dwellings of Utah and in the Chaco Canyon, New Mexico. This work is now so far advanced that its early completion may be anticipated.

Dr. Herbert J. Spinden conducted extensive archæological and ethnological explorations in Central America and Colombia. making five collections from as many special areas. ethnological operations were mostly in Guatemala and Nicaragua, while the archæological explorations were in the main confined to western Salvador, Honduras, the Miskito Coast, and the interior of Colombia. Collections were made, the most important being a fine series of pottery vessels from Salvador representing the Maya period. Among the ethnological collections mention may be made of a series of textiles from the Indians of Guatemala showing a native brown cotton and a purple dve extracted from the purpura shellfish, as well as other textiles illustrating designing by tie-dyeing, brocading, embroidery, etc. These will greatly enrich the Museum's extensive collections in the field of aboriginal textile art. Another important accomplishment was the mapping of three hundred miles of the Miskito Coast to show the tribal distributions and locations of present Indian villages.

The somatic collections of the department were completely overhauled and reorganized during the year by Assistant Curator L. R. Sullivan; the details of the work were in charge of Mr. B. E. Hoover. To economize space, the crania have been separated from the long bones and placed in individual containers, systematically shelved and grouped. A parallel arrangement of the skeletons proper will permit ready reassembling if occasion requires. The completion of four concrete storage rooms gave relief to the congested condition among the ethnological collections in charge of Mr. W. A. Sabine. Further, an opportunity was thus afforded to arrange more systematically our Philippine and Asiatic reference collections, which gives added efficiency to

that part of our equipment. Similar reorganization is under way for our archæological collections. Assistant Curator N. C. Nelson has thoroughly overhauled the paleolithic and neolithic study series and also the early stone culture of Egypt and Africa. With the assistance of Mr. B. T. B. Hyde all the early and unclassified collections from the pueblo and cliff ruins of Southwestern United States have received similar treatment. For the latter, catalogue information has been brought up to date.

One of the essential functions of our organization is the making of contact between the person who has need of scien-

Popular Lectures and Publications tific help, on the one hand, and the scientist who knows the data on the other. Among the most important efforts in this direction are Research Associate M. D. C. Crawford's lectures and class talks to textile workers and designers, to acquaint

them with the subject matter of primitive art and the modes of approach by which an appreciative insight into the subject may be gained. The large attendance and enthusiastic reactions of these audiences and classes have been gratifying to all concerned. In addition, the facilities of the Museum have been placed at the disposal of classes and students from the various art schools of the city, some of which now hold regular sessions in the laboratories of the department.

The series of January lectures in anthropology, designed for special students of anthropology and related subjects, was given by Professor A. L. Kroeber. The subject was a study of primitive social philosophy as exemplified in four types of aboriginal culture: The Yurok, Legalists; The Wintun, Indifferents; The Luiseño, Mystics; The Mohave, Dreamers. It was clearly demonstrated in these lectures that these primitive cultures retained their individuality because they contained a determining cultural nucleus which is not some mystical thing but a fairly definite system of philosophy, a persistent and wellnigh all-determining attitude towards life.

The development of popular publications has also made some progress. Two *Handbooks* are ready for publication, one on the "Peoples of the Philippines" and the other on "The Siberi-

ans." The early appearance of these will greatly facilitate the study of these sections in our exhibition series.

Twelve scientific papers were published during the year in the *Anthropological Papers*, by members of the department staff.

ANATOMY AND PHYSIOLOGY *

RALPH W. Tower, Curator

Perhaps the most important work accomplished by the department was the assistance which it was possible to give to the War Department Local Board 129 of the Office of the Provost Marshal. In the middle of Coöperation with the War the year this Board undertook to make more Department thorough examinations and more detailed records of the draftees than heretofore. It was early recognized by the medical examiner, Dr. Jesse G. M. Bullowa, that a uranalysis of each individual would be of value to the medical examiners. This not only proved to be true, but the results were of vital importance to many of the examinees since a large number of unsuspected cases of nephritis, diabetes and other diseased conditions were discovered; such were advised to seek immediate medical treatment. All of the uranalyses were made by Mr. Charles F. Herm, who also, at the request of the Department of Anthropology, made the anthropometric computations, which were most detailed, comprising twenty-eight different measurements upon each individual. In connection with this work Mr. Herm devised a unique and practical caliper which recorded from one position both the bigonial width and bigonial length of the face.

In the early part of the year opportunity was found to pursue further the investigations on the development of the red blood corpuscles in birds and amphibians. Many interesting observations have been made and a program for more detailed study has been outlined.

The department has already begun to prepare a comparative collection of brains and spinal cords for the purpose of statistical and topographical study as well as for museum demon-

^{*} Under the Department of Anatomy and Physiology.





DEPARTMENT OF PUBLIC HEALTH
POTENTIAL FOODS OF OUR COASTS

A part of the conservation Food Exhibit

stration. It is proposed to establish series not only of complete specimens by the dry and wet methods, but of those prepared in sections suitable for both macroscopic and microscopic study. Several scientists of the city have expressed their willingness to collaborate in this work, which guarantees the success of the undertaking.

The department has prepared and placed on exhibition a series illustrating the adaptation of the fore limb for flight. There has also been prepared and made ready for installation a series demonstrating the adaptation of limbs for swimming. There have been prepared also 741 skulls and 95 skeletons.

PUBLIC HEALTH *

CHARLES-EDWARD AMORY WINSLOW, Curator

With the development of the world war it became evident that the dual necessity of conserving food for the stricken

Hygiene of the Diet and Food Conservation populations of Europe and maintaining at a maximum our own national vitality made the problems of food hygiene and food conservation of paramount importance. It was felt that the resources of our Department of Health could be of greatest value in the national crisis if they

were directed intensively into this channel; and post-war conditions seem to render the need for continued educational work along this line equally imperative.

The Food Exhibit which a year ago filled six museum cases has therefore been developed and extended until it now occupies eleven cases. The exhibit as now organized pre-

Scope of sents in graphic form the needs of the human body for energy and for building stones, and shows how these needs can most economically be

met. Special emphasis is laid on the need for mineral salts and for the mysterious food elements called vitamines, and models illustrate the contribution made by the commoner foods to the daily need of energy, protein, iron and lime. In order to make the lessons of food hygiene as practical as possible,

^{*} Under the Department of Public Health (see also page 197).

adequate daily dietaries are exhibited for an individual, based on a moderate and on a restricted income, with specimens and models illustrating a complete weekly food supply for a family of five persons, so adjusted as to meet all essential physiological needs at a minimum cost. Special cases are devoted to the methods of conserving wheat, meats, fats and sugar, required or recommended by the United States Food Administration.

The Food Exhibit was shown for a period of six weeks in May and June, 1918, in the gallery of the Grand Central Terminal, and for a week in June as part of the Food Show in the Grand Central Palace. It was brought back to the Museum in the summer and is now installed, through the courtesy of the Department of Woods and Forestry, in the center aisle of the Forestry Hall on the ground floor of the Museum.

It is gratifying to note that this,—undoubtedly the most complete exhibit of food hygiene prepared in this country,—has served as a model for exhibits in many parts of the United States and has therefore exerted an educational influence far beyond the circle of those who have actually visited the Museum.

It is planned to develop the Food Exhibit to a considerably greater extent during the coming year and to supplement its basic hygienic and nutritional data with material illustrating the broader problems of the world's food supply from the standpoint of production and distribution. It is hoped too that it may be possible to prepare printed material in the form of one or more guide leaflets which will present in simple form the chief lessons of food hygiene and food conservation, since we have received a constant and urgent demand for literature of this kind.

Outside of the Food Exhibit the principal addition to our exhibition material has been the installation of a model of the yellow fever mosquito, Aëdes calopus. This beautiful model, which was prepared by Mr. B. E. Dahlgren, is 50 times natural size and completes the Museum's series of giant models of the important insect-carriers of disease: the malaria mosquito (in

the Darwin Hall) and the fly, the flea, the louse and the yellow fever mosquito (in the Hall of Public Health). A profusely illustrated leaflet of 73 pages on Insects and Disease by C.-E. A. Winslow and F. E. Lutz has been issued during the year as a guide to this field of zoölogy and public health.

The Museum of Living Bacteria has proved of special service during the year in connection with a number of sanitary

Museum of Living Bacteria and industrial problems created by the war. Research workers in the cantonments and other army medical laboratories have made frequent calls for cultures to be used in connection with

studies of wound diseases and respiratory infections, and the manufacture of glycerin by biological methods has been successfully accomplished by the use of a culture of yeast obtained for our collection from Germany some years before the war. The value of our collection of living bacterial types is strikingly illustrated by this latter occurrence; for, so far as we are aware, this particular organism could not a year ago have been found in America outside of the laboratories of the American Museum.

The total number of strains of microbes now under cultivation is 655. During the year ending December 1, 1918, 3,075 cultures were sent without charge to laboratories of health departments and universities, making a total of 22,055 cultures distributed since the opening of the laboratory in 1911. Sixtysix new institutions have received our cultures during the year, making 701 institutions in all which have benefited by this service.

Changes in staff due to war conditions have interfered materially with the research work of the department. It has been

Research on Bacterial Classification possible, however, to make substantial progress in the revision of the classification of one important group of bacteria, the staphylococci of the skin, which play an important part in the milder wound diseases, and Curator Winslow has continued to

serve as Chairman of the Committee on Classification of the Society of American Bacteriologists.

Changes in Staff and

Outside

Activities

Dr. T. G. Hull and Mr. William Rothberg both entered the military service during the year, and for the last six months

the bacteriological collection has been in charge of Miss E. I. Parsons (Vassar, 1917) and Miss Rebecca Berland. The development of the Food Exhibit has been carried forward with marked enthusiasm and ability by Miss Mary Greig,

whose services are made available to us by a coöperative arrangement with Teachers College.

Among other outside war activities Curator Winslow had charge, for a period of six weeks during the summer, of the instruction in bacteriology and public health at the Red Cross Training Camp for Nurses at Vassar College; and as Consultant in Industrial Hygiene to the U. S. Public Health Service he has conducted extensive investigations in regard to the safeguarding of the health of munition workers.

Curator Winslow has published during the year the second of a series of two elementary textbooks on Healthy Living, which are in large part illustrated by material from the Public Health exhibits of the Museum, and which it is hoped may serve to extend the influence of Museum educational methods into the wide field of elementary education.

THE LIBRARY*

RALPH W. Tower, Curator

The Library has felt to a degree the unusual circumstances imposed by war conditions. Very little printed matter has been received from European countries, and the International Exchange Service appears to have been suspended for the time being. Each member of the staff has been engaged in one way or another in war or relief work which has demanded a certain amount of time and exacted a great amount of energy. Much commendation must be attributed to these assistants, who, while being faithful to their vocation, have toiled long and assiduously and made each day count for two, thus being a potent factor in molding the world's history.

The Library was extremely fortunate in securing the services

^{*} Under the Department of Books and Publications.

of Mr. K. P. Wang, who has classified, catalogued and arranged the collection of Chinese books which were procured on the East Asiatic Expedition. Mr. Wang, who has had long experience at similar work in the Library of Congress, was able to introduce a thoroughly tried and practical system, which now makes these Chinese books, containing some unique titles, thoroughly available to any scholar who may wish to consult them.

To make the natural history papers and monographs contained in our ever increasing Russian series accessible to the scientist has been one of the important and difficult problems. Miss Alla Kretchman, a Russian scholar, has undertaken this work, and it is hoped that eventually an English résumé of all the Russian papers may be included in each volume of the various publications.

During the year two assistants have been lost to the department. It is with extreme regret that we are obliged to chronicle the death on October 29 of Mr. George Chamberlain, who had been connected with the Library in various capacities for eight years. Mr. Chamberlain was a faithful workman and a gentleman. For the last three years he had charge of the Museum's publications. On October 1, Miss Amy Hepburn resigned to accept a position in the library of Columbia University.

Recognizing the request of the President to curtail obligations in every possible way, only one appointment, that of Miss Helen Gunz, has been made to fill the vacancies caused by the loss of the two experienced assistants mentioned.

The Library has been able to accumulate the nucleus of a section on Folk Lore by the purchase of something more than one thousand titles. In making the selection of these books, Dr. W. L. Hildburgh, through his intimate knowledge of the subject, has greatly assisted in procuring the excellent collection that we now possess.

Other important additions to the Library are:

A valuable collection of works, largely in the Spanish language, dealing with the history and archæology of Peru, Bolivia, Central America and Mexico, comprising the library of the late Adolf F. Bandelier. In the neighborhood of four hundred volumes are included in the lot.

A 1785 edition of Cook's Voyages, entitled A Voyage to the Pacific Ocean, Undertaken by the Command of His Majesty for Making Discoveries in the Northern Hemisphere. Volumes I and II were written by Captain James Cook, Volume III by Captain James King. An atlas accompanies the edition. This is the gift of Dr. T. Mitchell Prudden.

A first edition (1837), in six volumes, of a *History of the Indian Tribes of North America* with Biographical Sketches and Anecdotes of the Principal Chiefs, by Thomas L. M'Kenney and James Hall. This unusual work is embellished by 120 large colored portraits from the Indian Gallery in the Department of War at Washington.

Through Dr. Herbert J. Spinden has come a notable collection of about twenty volumes concerning the language of the natives of the Miskito Coast.

The Grammar of Ornament, by Owen Jones, published in London in 1868, covers all stages of decorative designing, from the work of savage tribes to the most ornate productions of European peoples. It is fully illustrated with 112 colored plates.

The Philippine Islands, 1493–1898, by Emma H. Blair and James A. Robertson, being explorations by Early Navigators with Descriptions of the Islands and their Peoples as related in Books and Manuscripts, showing the conditions of those Islands from their earliest relations with European Nations to the close of the nineteenth century and translated from originals. This work is in fifty-five volumes, published in Cleveland, 1903–1909.

The Travels of Peter Williamson Among the Nations and Tribes of Savage Indians in America, written by himself, which gives an account of their principles, religious, civil and military, published in Edinburgh, 1768.

British Fresh-Water Fishes, by Rev. W. Houghton; this work is illustrated with a colored figure of each species drawn from nature by A. F. Lydon, London, 1879.

The Lepidoptera of the British Isles, in eleven volumes, by Charles G. Barrett, London, 1893-1907.

L'Abeille—Journal d'Entomologie, Rédigé par S. de Marseul, Volumes I–XXVI, Paris, 1864–1889.

The Osborn Library has issued during the year Volume VI of Fossil Vertebrates in the American Museum of Natural History. This volume is composed of the collected papers from the department which have appeared in the Bulletin of the American Museum during the years 1915–1917. The distribution of exchange publications has been greatly curtailed and likewise incoming exchanges have been greatly decreased, both unavoidable under the present circumstances.

The publications of The American Museum of Natural History for the current year are composed of the Annual Report,

the Bulletin, the Memoirs, the Anthropological Papers, the American Museum Journal, the Handbook and the Guide Leaflet.

The Annual Report gives each year a summary of the administrative, scientific and educational activities of the institution; it is particularly pertinent to all who are interested in the welfare and progress of The American Museum of Natural History.

The Bulletin is a strictly scientific publication, giving in a number of separate articles the results of the research in the various departments other than Anthropology. These are of interest mainly to the professional student. During 1918 the Bulletin contained nine articles on Invertebrate Zoölogy, four on Ichthyology and Herpetology, five on Mammalogy and Ornithology and three on Vertebrate Palæontology.

The *Memoirs* are composed of scientific monographs, exhaustive in their nature and extensively illustrated. During 1918 three *Memoirs* have been issued—one on the fossil horses of North America, another on the living and extinct land mammals of Porto Rico and a third being illustrations in color of the North American *Catocala*, a genus of moths.

The Anthropological Papers are devoted exclusively to the results of field work and other researches conducted by the anthropological staff. In the year 1918 twelve parts have appeared, dealing with various phases of the life of the Blackfoot, Apache, Crow, Yukaghir, Eskimo and Philippine tribes.

The American Museum Journal completed its eighteenth volume, which was particularly rich in interesting and popular articles relating to natural history, anthropology and travel. This periodical has proved to be one of the most entertaining and instructive in the field of popular biology.

A Handbook entitled "Fishes of the Vicinity of New York City" and two Guide Leaflets—one being the third edition of the "General Guide to the Exhibition Halls" and the other "Insects and Disease"—have been published. There has also been issued a brochure on "Free Education by The American Museum of Natural History in Public Schools and Colleges," which gives the history and status of Museum instruction and its extension to the schools of Greater New York and vicinity.

GENERAL SUMMARY

In reviewing the first fifty years' work of the Museum, we observe that it has broken away from many old museum traditions and customs and has been constantly striking out along new lines in every branch of its activity. In exploration, while making North America our chief concern, we have reached out into South America, Africa, Asia, and, in certain branches, into Europe itself. The natural history of our new colonial wards, the Philippines and Porto Rico, are matters of intimate concern. In South America, through a series of expeditions we are exploring every part of the continent and have established most cordial personal as well as scientific relations.

This is in keeping with the world-wide extension of American interests and influence and is part of the inevitable participation of America in the world's affairs. Neither the American Museum, nor our Government, nor our people can remain isolated or bound by the confines of our own continent. Thus, while more than ever an *American* Museum, our institution has become a *world* Museum. In increasing degree it is bringing all parts of the world within the view of the millions of people within our City walls who can never travel and never explore and whose only means of finding the inspiration of travel is through looking into the mirror which we are endeavoring to hold up to nature in all of its wonderful aspects.

We trust that this great purpose of the Museum will bring to it as large an increase of popular support on the part of the citizens and taxpayers as it has already received of personal support through the munificence of Morris K. Jesup, Mrs. Russell Sage, J. Pierpont Morgan and others in our distinguished list of Founders and Benefactors.

Respectfully submitted,

HENRY FAIRFIELD OSBORN,

President.



FINANCES, MAINTENANCE, ENDOWMENT

The character of the work of the Museum is so special and at the same time so varied that the proper recording of all expenditures is a somewhat complicated process. Simplicity of statement is aimed at in the Report of the Treasurer. The changes in the accounting system, devised by the Bursar, Mr. Frederick H. Smyth, last year, especially the method of receipt by check indorsement, have resulted in a considerable saving in clerical work. At the same time the demands on the Bursar's staff, because of Liberty Loan and Red Cross contributions, have been greater than ever.

The financial transactions of the Museum are recorded under five major headings, namely,

Endowment and Investment Account City Maintenance Account General Account Morris K. Jesup Fund Account Special Funds Account

and four minor headings, namely,

Crocker Land Expedition Fund Account Corporate Stock Account Incidental Account Museum Building Fund Account.

A summary of the classifications of the disbursements of these respective funds will be found on pages 108 to 123.

The Endowment and Investment Account pertains entirely to the receipts and disbursements of the capital of the Per-

Endowment and Investment Account manent Endowment. The principal additions to the Endowment during the year consisted of membership fees, amounting to \$6,900, applied to the General Endowment Fund, and the bequest of Anson W. Hard, amounting to \$5,000, which is a special endowment for the Library and which has been designated by

the Trustees as the Anson W. Hard Library Fund. All available cash of the Permanent Endowment for the year has been invested by the Finance Committee in Liberty Bonds. The total Endowment on December 31, 1918, amounted to securities valued at \$7,996,975 and uninvested cash of \$1,077.51.

The City Maintenance Account contains only the transactions of the receipts and disbursements of the moneys received from the City for operating expenses. For 1918, the receipts from the City were \$216,900 for salaries and expenses and \$8,100 for special repairs, making a total of \$225,000. The actual operating expenses legally chargeable to the City amounted to a total of \$313,348.43 and the Trustees therefore were obliged to contribute from their own funds \$88,348.43 for maintenance purposes.

The Trustees' unrestricted funds are received and disbursed

Trustees' through the General Account. The principal

General items of income are as follows:

Income from the General Endowment	\$56,957.64
Membership fees	30,508.00
Sales and Exchanges	5,425.08
Personal contributions of Trustees	29,350.00

According to the terms of Mr. Jesup's will, the income of the Morris K. Jesup Fund can be applied only to research, exploration and the enrichment of the collections.

Morris K. Jesup Fund Account

The income from this fund in 1918 was \$278,-036.09 and the transactions pertaining to it are recorded in the Morris K. Jesup Fund Account.

The Special Funds Account, as the name implies, is composed of a number of distinct special funds which are entirely independent of each other and which can be applied only to the specific purposes for which they are given. In 1918 the net receipts for these special purposes amounted to \$24,600.80.

The Crocker Land Expedition Fund Account was a temporary account, established in connection with the Crocker Land Expedition to the Arctic. The return of Minor this expedition in 1917 and the termination of Accounts its affairs have made this a rather inactive account during the year. In the Corporate Stock Account are recorded the receipts and expenditures connected with the equipment work met through appropriations of corporate stock by the City. These transactions are entirely independent of the appropriations for maintenance. In 1918 the receipts amounted to \$14,757.90. The Museum Building Fund Account contains the funds that have been contributed to the Museum for new building, amounting to \$108,174.46. Inasmuch as, owing to the high cost of building, actual building operations have been postponed, this money has been placed at interest and the Finance Committee has invested \$107,350 in Liberty Loan Bonds. In connection with the meetings of scientific societies and in a few other cases the Museum is called upon to handle small sums which are not directly Museum finances. Such items are recorded in a special account designated as the Incidental Account.

The Treasurer of the Museum is also the Treasurer of the Pension Fund of the Museum. The full transactions of the receipts and disbursements of the Pension Fund will be found in the Report of the Pension Board which is published as an Appendix to the Annual Report.

Respectfully submitted,

H. P. Davison,

Treasurer.

SUMMARY OF CLASSIFICATION THE AMERICAN MUSEUM OF NATURAL HISTOR!

	Jesup Fund		JESUP FUND GENERAL ACCOUNT		CITY MAINTENANCE ACCOUNT.		
	Salaries	Other Items	Salaries	Other Items	Salaries	Other Iter	
Scientific	\$152,126.78	\$88,259.64	\$30,887.68	\$18,388.40	\$20,639.69	\$15.6	
Administration	918.03	527.16	16,917.91	33,157.31	122,453.07	15,112.69	
Heating and Lighting			516.63	1,730.62	13,943.51	17,419.5	
Repairs and Construction of Heating and Lighting				2,042.34	2,020.36	4,089.0	
Repairs and Construction			1,951.96	4,525.77	23,005.91	6,300.5	
General Expenses		2,533.98	27,381.71	5,397.89		- 4	
	\$153,044.81	\$91,320.78	\$77,655.89	\$65,242.33	\$182,062.54	\$42,937.4	
Totals by Account	*\$244,36	35.59	\$142,8	398.22	\$225,0	00.00	

^{*} In addition to this amount, in 1918, the following contribution was made by the Jesup Fund Account......\$16,784.02 for the Crocker Land Expedition in reimbursement of disbursements of previous years.

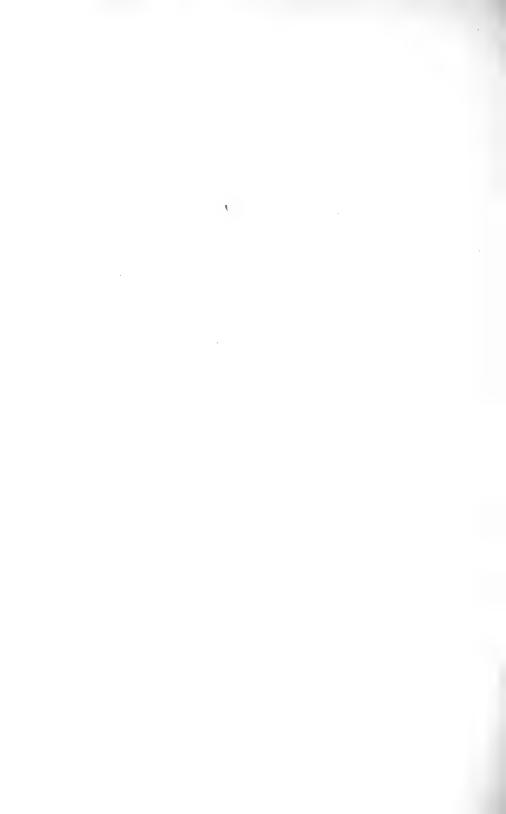
T DISBURSEMENTS OF

OR THE YEAR ENDING DECEMBER 31, 1918

Spec Fur Acco	NDS	Exp	CER LAND EDITION ACCOUNT	Corporate Stock Account	GRANI	TOTALS	Totals 1918	Totals 1917
alaries	Other Items	Salaries	Other Items	Salaries	Salaries	Other Items		
621.41	\$15,431.65	\$154.50	\$2,467.52		\$207,430.06	\$124,562.86	\$331,992.92	\$428,562.53
					140,289.01	48,797.09	189,086.10	164,589.65
					14,460.14	19,150.21	33,610.35	27,349.59
					2,020.36	6,131.36	8,151.72	5,922.64
248.87				\$14,757.90	39,964.64	10,826.35	50,790.99	49,771.66
					27,381.71	7,931.87	35,313.58	19,735.38
370.28	\$15,431.65	\$154.50	\$2,467.52	\$14,757.90	\$431,545.92	\$217,399.74	\$648,945.66	\$695,931.45
\$19,3	01.93	\$2,0	622.02	\$14,757.90	\$648,	945.66		

FRED H. SMYTH, Bursar.

ebruary 3, 1919



FINANCIAL STATEMENT

1918

PERMANENT ENDOWMENT

Bonds	\$6.670.202	07	
General Endowment Fund*	1,270,767	83	
Special Endowment Funds: Matilda W. Bruce Fund Jonathan Thorne Memorial Fund Margaret Olivia Sage Fund Anson W. Hard Library Fund	11,000 26,884 11,000 5,000	10 00 00	\$7,996,975 oo
Uninvested Cash:			7/199-19/5
General Endowment Fund		• • •	1,074 62 2 89 \$7,998,052 51
MUSEUM BUILDING	FUND		
MUSEUM BUILDING Bonds	\$107,350 824		\$108,174 46
Bonds	\$107,350 824		\$108,174_46

The income of the Permanent Endowment is the chief source of income of the General Account and of the Morris K. Jesup Fund Account.

ENDOWMENT AND INVESTMENT ACCOUNT

RECEIPTS

1918

GENERAL ENDOWMENT FUND:		
Balance	\$2,337 75	
Fellows	1,000 00	
Life Members	5,900 00	
tee, Chicago, Rock Island & Pacific Ry.	33 17	
Morris K. Jesup Fund:		\$9,270 92
Balance		6,303 70
MARGARET OLIVIA SAGE FUND:		
Balance	• • • • • • • • • • • • • • • • • • • •	2 89
Anson W. Hard Library Fund:		
Bequest of Anson W. Hard		5,000 00
Interest on Credit Balances:		
Earnings to December 31, 1918		120 21
	_	\$20,697 72
$ \begin{array}{c} \textbf{Examined} \\ \textbf{and Approved} \end{array} \begin{cases} $	Auditi	ng ommittee

ENDOWMENT AND INVESTMENT ACCOUNT

DISBURSEMENTS

1918

\$8,196 30
6,303 70
5,000 00
120 21
1,077 51

\$20,697 72

H. P. DAVISON, Treasurer

E. & O. E. New York, December 31, 1918

CITY MAINTENANCE ACCOUNT

RECEIPTS 1918

Capital Fund:		
Cash on hand January 1, 1918	• • • • • • • • • • • • • • • • • • • •	\$15,000 00
Department of Parks:		
Appropriation for 1918:		
Salaries and Expenses	\$216,900 00	
Special Repairs	8,100 00	
_		

all departments	225,000	00
Interest on Credit Balances: Earnings to December 31, 1918	247	30
Loans	22,200	00
	\$262,447	30
$ \begin{array}{c} \text{Examined} \\ \text{ and Approved} \end{array} \left\{ \begin{array}{c} \text{Felix M. Warburg} \\ \text{Thomas DeWitt Cuyler} \\ \text{William Averell Harriman} \end{array} \right\} \begin{array}{c} \textit{Audit} \\ \textit{C} \end{array} $	ing ommittee	

CITY MAINTENANCE ACCOUNT*

DISBURSEMENTS

1918

		_		
Geology and Invertebrate Palæontology	\$1,787	38		
Mineralogy	803	37		
Mammalogy and Ornithology	3,497	об		
Vertebrate Palæontology	1,027	40		
Anthropology	1,612	80		
Ichthyology	816	59		
Herpetology	221	39		
Invertebrate Zoölogy	2,977	07		
Public Health	708	73		
Woods and Forestry	38	50		
Library	5,541	55		
Public Education	3,950	80		
Division of Printing	1,561	39		
Heating and Lighting	36,694	75		
Repairs and Installation	29,628	34		
Special Repairs	8,100	00		
General Supplies and Expenses	13,397	94		
Administration	112,634	94		
Total net disbursements for the maintenance all departments	of		\$225,000	00
Interest on Credit Balances:				
Transferred to Interest on Credit Balance	s, Gene	ral		
Account			247.	30
Loans			22,200	00
Capital Fund:				
Cash on hand December 31, 1918			15,000	00
			\$262,447	30

H. P. DAVISON, Treasurer

E. & O. E. New York, December 31, 1918

^{*}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 1918, amounting to \$88,348.43, has been met from the Trustees' General Account.

GENERAL ACCOUNT

RECEIPTS 1918

Trustees' Unrestricted Funds:	
Cash on hand January 1, 1918	\$13,511 82
Income from General Endowment \$56,957 64 Interest on Credit Balances 786 13	
Interest on Credit Balances	
Sustaining Members	
Associate Members	
Sales and Exchanges	
Sale of Publications	
Contributions of Trustees for General Purposes:	
George F. Baker \$2,500 oo Walter B. James \$250 oo	
Frederick F. Brewster. 1,100 oo A. D. Juilliard 2,500 oo	
R. Fulton Cutting 500 00 Charles Lanier 500 00 Thomas DeWitt Cuyler 500 00 Ogden Mills 2,500 00	
H. P. Davison 2,500 00 J. P. Morgan 2,500 00	
Cleveland H. Dodge 2,500 00 Henry Fairheld Osborn 500 00	
James Douglas 1,000 00 Percy R. Pyne 1,000 00 Henry C. Frick 2,500 00 John B. Trevor 500 00 Adrian Iselin 1,000 00 Felix M. Warburg 2,500 00	
Adrian Iselin 1,000 00 Felix M. Warburg 2,500 00	
Arthur Curtiss James . 2,500 00 29,350 00	
29,000 00	123,026 85
Loans: City Maintenance Account \$22,200 00 Morris K. Jesup Fund Account 32,500 00 Bursar's Account 15,000 00 Crocker Land Expedition Fund Account: Payment of Loans, 1917 \$18,000 00 Loans Receivable 15,000 00	
33,000 00	700 700 00
Contributions of Trustees for General Purposes for 1919:	102,700 00
Henry C. Frick \$2,500 00 W. A. Harriman 1,000 00 A. D. Juilliard 2,500 00	
Proceeds of Notes held by United States Trust Company of New York	6,000 00
The second secon	
	\$395,238 67
Examined Selix M. Warburg Auditing and Approved William Averell Harriman Committee	

GENERAL ACCOUNT *

DISBURSEMENTS

1918

Geology and Invertebrate Palæontology	\$3,122 51	
Mineralogy	582 99	
Mammalogy and Ornithology	2,729 58	
Vertebrate Palæontology	3,922 37	
Anthropology	3,842 84	
Ichthyology	2,570 78	
Herpetology	2,461 46	
Invertebrate Zoölogy	3,952 83	
Public Health	58 46	
Woods and Forestry	16 43	
Library	3,081 77	
Public Education	6,103 46	
Preparation and Exhibition	, , ,	
Publications	130 77	
Division of Printing	17,042 50	
Uesting and Lighting	11,571 99	
Heating and Lighting	2,229 15	
Repairs and Installation	9,072 73	
General Supplies and Expenses	24,773 62	
Administration	20,993 72	
Pension Fund	10,681 95	
Military Service Salaries	12,237 69	
Interest on Bank Loans	1,467 78	
Pension Fund Account	250 84	
Total net disbursements for the development of all depar-	tments	\$142,898 22
Loans:		
City Maintenance Account	\$22,200 00	
Morris K. Jesup Fund Account	32,500 00	
Bursar's Account	15,000 00	
Crocker Land Expedition Fund Account	33,000 00	
-		102,700 00
Cash on hand December 31, 1918: Proceeds of Notes held by United States Trust Company	y of New	
York to meet overdrafts		†149,640 45

\$395,238 67

E&OE

H. P. DAVISON, Treasurer

E. & U. E.	n. r. DAVISON, 17	reasurer
New York, December 31,	1918	
	unds are applied to the general purposes of the Muse	eum, including
The liabilities against this balance Reserve to meet five notes he United States Trust Comp Orders and contracts outs	eld by the sany of New York	
Subscriptions of Trustees	for 1919, received in 1918 6,000 00	157,307 00
Gross deficit	A	\$7,666 55
	the 1919 account for equipment of	5,000 00
Net deficit, December 31,	1918	\$2,666 55

MORRIS K. JESUP FUND ACCOUNT

RECEIPTS 1918

Tructees'	Restricted	Funds .
Trustees	Restricted	runus.

\$17,594 07
279,747 24

Total net receipts for the development of all		
departments	\$297,341	31

Loans:

MORRIS K. JESUP FUND ACCOUNT*

DISBURSEMENTS

1918

1916				
Geology and Invertebrate Palæontology	\$12,809	51		
Mineralogy	2,212	60		
Mammalogy	16,669	32		
Vertebrate Palæontology	39,190	87		
Vertebrate Palæontology Research and Pub-				
lication Fund	4,913	30		
President Osborn's Science Fund	5,000	00		
Anthropology	35,847	03		
Ichthyology	4,683	83		
Dr. Dean's Research and Publication Fund .	1,200	00		
Herpetology	1,909	32		
Invertebrate Zoölogy	13,650	98		
Anatomy and Physiology	3,346	78		
Public Health	5,065	96		
Woods and Forestry	4,448	86		
Library	14,325	38		
Public Education	6,789	23		
Preparation and Exhibition	35,325	74		
Publications	32,642	78		
Division of Printing	1,085	56		
General Supplies and Expenses	714	56		
Interest on Bank Loans	2,533	98		
		—		
Total net disbursements for the developme	ent of all			
departments			\$244,365	59
Crocker Land Expedition Fund Account:				
Unexpended Income of 1918			-60.	
Onexpended income of 1918	• • • • • • • •	• • •	16,784	03
Loans:				
General Account			32,500	00
Cash on hand December 31, 1918			†36,191	69
			\$329,841	31
				-

E. & O. E.

H. P. DAVISON, Treasurer

NEW YORK, December 31, 1918

^{*} 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.

of scientific work.

† The Treasurer's books show a balance on hand December 31, 1918, of \$36,191.69, of which \$24,811.56 has been carried forward to 1919 to meet pledges and obligations contracted in 1918. Therefore, the net cash balance as of December 31, 1918, is \$11,380.13.

RECEIPTS

1918

GEOLOGY AND INVERTEBRATE PALÆONTOLOGY Angelo Heilprin Exploring Fund: Mr. and Mrs. Paul J. Sachs Geological Fund: Balance	\$500		
Balance	1,000		\$1,500 00
Martin			, ,,,
MINERALOGY:			
Matilda W. Bruce Fund: Balance	\$2	об	
Interest	660		
			662 o 6
Mammalogy and Ornithology:			
Crandall Oölogical Fund:			
Balance	\$1,160	00	
Whale Model Fund:			
Balance	1,000	00	
South American Exploration Fund:			
Balance	1,033	30	
Peru Bird Fund:			
Balance	310	72	
Asiatic Zoölogical Expedition Fund: Sidney W. Colgate	125	~	
Margaret Olivia Sage Fund:	125	w	
Balance \$659 36			
Interest			
	1,087	24	
-			4,716 26
VERTEBRATE PALÆONTOLOGY:			
Pleistocene Faunal Life Scenes Fund:			
J. P. Morgan			8,000 00
Anthropology:			
East Asiatic Fund:			
Balance	\$2,335	49	
Anthropology of the Southwest Fund:			
Balance			
Archer W. Truntington 10,000 00	10,542	51	
New Zealand Group Fund:	,54	J-	
Balance	43	71	
San Salvador Archæological Fund:	-1		
George B. Hopkins	500	00	13,421 71
		_	13,421 /1
Carried forward			\$28,300 03

DISBURSEMENTS

DISBURSEMENTS		
1918		
Mineralogy:		
Matilda W. Bruce Fund:		
Purchase of Minerals		\$509 45
MAMMALOGY AND ORNITHOLOGY:		
South American Exploration Fund:		
Expenses of Field Work Peru Bird Fund:	\$750 25	
Special Services on South American Birds Asiatic Zoölogical Expedition Fund:	265 38	
Transferred to Mammalogy and Ornithology, Morris K. Jesup Fund Account, for		
expenses of field assistant in China	125 00	
		1,140 63
VERTEBRATE PALÆONTOLOGY: Pleistocene Faunal Life Scenes Fund: For Murals in the Hall of the Age of Man Transferred to Vertebrate Palæontology, Morris K. Jesup Fund Account, for advances made for Murals in the Hall of the Age of Man		
the Age of Man	3,000 00	7,000 00
Anthropology:		.,
Anthropology of the Southwest Fund: Expenses of Field Work East Asiatic Fund:	\$5,542 51	
Purchase of Specimens	547 00	
Purchase	500 00	6.580 51
		0.500 51

Carried forward\$15,239 59

RECEIPTS

1918

Brought forward		\$28,300 03
ICHTHYOLOGY: Dodge Ichthyology Fund:		
BalanceFish Bibliography Fund:		17
Balance	0	
	- 1,939	2,653 44
Public Health: Public Health Fund:		116 50
Balance	• • • • • • • •	146 57
Public Education:		
Jonathan Thorne Memorial Fund: Balance	20	
Public Education Fund:	- \$1,610	13
Balance \$120 c Mrs. James McLean 25 c	00	
Children's Room Fund:		00
Balance		69
Department of Education of the City of New York	. 2,078	72
Balance	. 100	4,049 54
Preparation and Exhibition:		
Sea Elephant Preparation Fund: Balance		1,000 00
PUBLICATIONS:	F 1	
Jesup North Pacific Expedition Publication Balance		1,121 65
Total net receipts for the development of spe departments	cific	\$37,271 23
Interest on Credit Balances:		
Earnings to December 31, 1918		391 22
		\$37,662 45
Examined and Approved FELIX M. WARBURG THOMAS DEWITT CUYLER WILLIAM AVERELL HARRIMAN	>	ting Committee

DISBURSEMENTS 1018

Brought forward\$15,239 59

ICHTHYOLOGY:

Fish Bibliography Fund:
Special Services 600 00

PUBLIC HEALTH:

Public Education:

Jonathan Thorne Memorial Fund:
Services of instructors, transportation of
the blind and expenses of special lectures \$1,271 54
School Fund:

Loaning Slides to Public Schools 2,044 23

3,315 77

Total net disbursements for development of specific

departments \$19,301 93

Interest on Credit Balances:

Cash on hand December 31, 1918 17,969 30

\$37,662 45

H. P. DAVISON, Treasurer

E. & O. E.

New York, December 31, 1918

Examined

CROCKER LAND EXPEDITION F	FUND AC	COUNT
Receipts		
Cash on hand January 1, 1918		\$986 78
Morris K. Jesup Fund Account: Contribution from the unexpended income of 1918	\$16,784 03	
SALE OF MATERIALS, SUPPLIES AND EQUIPMENT	2,543 75	
SALE OF SPECIMENS	76 65	
Incidental Expenses: Refund of Amount previously advanced	196 66	19,601 09
Loans:		19,001 09
General Account		33,000 00
Interest on Credit Balances: Earnings to December 31, 1918		34 15
	•	\$53,622 02
$ \begin{array}{c} \textbf{Examined} \\ \textbf{and Approved} \end{array} \begin{cases} $	Auditi	ng ommittee
CORPORATE STOCK AC	CCOUNT	
RECEIPTS		
DEPARTMENT OF PARKS	\$14,757 90	
INTEREST ON CREDIT BALANCES:		
Earnings to December 31, 1918	3 31	\$14761.21

FELIX M. WARBURG THOMAS DEWITT CUYLER

and Approved William Averell Harriman

\$14,761 21

Committee

Auditing

CROCKER LAND EXPEDITION FUND ACCOUNT

DISBURSEMENTS

1918

Deficit of 1917 Account		\$33,000 00
Materials, Supplies and Equipment	\$430 00	1007
Incidental Expenses	37 52	
Salaries	154 50	
Transportation	2,000 00	
		2,622 02

LOANS:

General Account 18,000 00

\$53,622 02

E. & O. E.

NEW YORK, December 31, 1918 H. P. DAVISON, Treasurer

CORPORATE STOCK ACCOUNT

DISBURSEMENTS

1918

Payrolls of Mechanics, etc	\$14,757 90	
Interest on Credit Balances: Transferred to Interest on Credit Bal-		
ances, General Account	3 31	\$14,761 21
F & O F		φ14,/01 21

E. & O. E.

NEW YORK, December 31, 1918 H. P. DAVISON, Treasurer

INCIDENTAL ACCOUNT

RECEIPTS

1918

1918	
Cash on hand January 1, 1918	\$396 99
Receipts from Individuals and Societies \$7,349 18	3
Interest on Credit Balances:	
Earnings to December 31, 1918 24 09	
	7,373 27
	\$7,770 26
$ \begin{array}{c} \text{Examined} \\ \text{and Approved} \end{array} \left\{ \begin{array}{c} \text{Felix M. Warburg} \\ \text{Thomas DeWitt Cuyler} \\ \text{William Averell Harriman} \end{array} \right\} Audi $	iting Committee

MUSEUM BUILDING FUND ACCOUNT

RECEIPTS

1918

Cash on hand January 1, 1918	\$106,050 83 2,123 63
	\$108,174 46
Examined FELIX M. WARBURG Audit THOMAS DEWITT CUYLER WILLIAM AVERBIL HARRIMAN	ing ommittee

INCIDENTAL ACCOUNT

DISBURSEMENTS

1918

1910		
DISBURSEMENTS FOR INDIVIDUALS AND SOCIETIES	\$7,172 78	
Interest on Credit Balances: Transferred to Interest on Credit Balances, General Account	24 09	
a		\$7,196 87
Cash on hand December 31, 1918		573 39
	-	\$7,770 26
E. & O. E.		
New York, December 31, 1918 H	. P. DAVISON	I, Treasurer

MUSEUM BUILDING FUND ACCOUNT

DISBURSEMENTS

1918

INVESTMENT FUND: Purchase of Bonds CASH ON HAND December 31, 191	,
	\$108,174 46
E. & O. E. New York, December 31, 1918	H. P. DAVISON, Treasurer



MEMBERSHIP

Our report of last year stated that, in spite of the demands upon every citizen, our membership was greater than ever before; and, although the same conditions have continued, our membership list is larger this year than last. This we think is an indication that the American Museum of Natural History is recognized as an institution rendering acceptable public service. We feel also that every member receives a good return for the membership fee. Each member receives The American Museum Journal, a magazine which each year contains articles of more varied interest written by leaders in science and exploration. This magazine also keeps Members informed of Museum activities and presents the results of the latest explorations and researches dealing with natural science.

In addition to the subscription to *The American Museum Journal*, special courses of lectures are arranged for members and their friends, also courses for the children of members. In 1918 eighty special lectures were given to which members were welcome, in addition to which were those arranged for the children of the public schools, to which membership tickets would give admission.

In the spring course of lectures to members the following lectures were given: "Rocky Mountain and Mesa Verde National Parks," by F. P. Clatworthy; "Our Newest Possessions in the West Indies," by Roy W. Miner; "The Grand Canyon of Arizona," by C. D. Williamson; and "Early Spring Wild Flowers," by G. Clyde Fisher.

The autumn course included the following: "Through Colorado, the Yellowstone and Glacier National Parks," by Branson M. DeCou; "The United States Bird Reservations, Their Extent and Usefulness," by T. Gilbert Pearson; "Bird Music," by Charles Crawford Gorst; and "The Food Supply of Our Allies," by Graham Lusk.

The spring course of lectures to the Children of Members. the eleventh series, included the following: "'Bruno'—A True

Bear Story of the North Woods," by W. Lyman Underwood; "Eskimo 'Kiddies,'" by Donald B. Lectures to Children of MacMillan; "Our Dog Friends," by Ernest Members Harold Baynes; and "Strange Creatures of the

Sea," by Raymond L. Ditmars.

The autumn course, the twelfth series, included the following: "Keen Joy of Days in the Open," by Chauncey J. Hawkins; "Big Wild Game Animals at Home in Winter," by Norman McClintock; "Birds in Their Relation to Field, Forest and Garden," by G. Clyde Fisher; and "Eskimo Family Life, Hunting and Travel," by Edmund Otis Hovey.

In addition to the regular courses of lectures for Members, several special lectures have been given during the year which Members were invited to attend.

Special In January a series of four lectures by Dr. Lectures A. L. Kroeber, on "Four Types of Aboriginal Culture," were given under the auspices of the Department of Anthropology.

On January 17, three lectures, under the general subject, "Foreign Monuments, Their Erection, Protection, Destruction and Restoration," were given at the Museum in coöperation with The American Scenic and Historic Preservation Society. as follows: "Care of Allied Soldiers' Graves," by Colonel Henry W. Sackett; "Protection and Destruction of Historic Monuments," by Edward Hagaman Hall, and "Ancient Monuments of China and Tibet," by Roy Chapman Andrews.

On February 21, a special lecture for Members and a special exhibition of lantern slides taken in natural colors by the Paget Process by Yvette Borup Andrews on the Museum's Asiatic Zoölogical Expedition in Japan, Burma and China, were given by Roy Chapman Andrews, leader of the expedition.

On December 16, under the auspices of The American Museum of Natural History, the New York Academy of Sciences, the American Scenic and Historic Preservation Society and the Institute of Arts and Sciences, a lecture was given by

Professor S. A. Mitchell on "The Result of the Eclipse of 1918."

The number of new Members enrolled during 1918 was 589, of which 87 were Life Members. The loss through death and resignation was 292. There was a net gain of Status of Membership was 4,568, divided into classes as follows:

1	1/0 /		
		Fellows	
Benefactors	5	Honorary Fellows	10
Associate Founders	10	Life Members	793
		Sustaining Members	
		Annual Members	2,966
Associate Membe	rs (non-I	Resident) 512	

NEW MEMBERS

The following was elected a Benefactor:

J. P. Morgan

The following was elected an Associate Benefactor: †Mrs. Frank W. Kitching

The following were elected Patrons:

Mrs. Charles B. Alexander Dr. Walter L. Hildburgh John E. Thayer

The following were elected Fellows:

E. L. Doheny Stanley G. Middleton

GEORGE BARTON FRENCH LEWIS A. PLATT

Mrs. George Barton French Mortimer L. Schiff

JAMES SHEWAN

The following were elected Life Members through contribution of One Hundred Dollars:

EDWARD G. ACHESON H. BENIS

C. F. Ahlstrom Robert Worth Bingham
D. Newton Barney Charles Watson Boise

[†] Succeeded to Associate Benefactorship of Frank W. Kitching.

REGINALD BROOKS ALBERT C. BURRAGE M. L. Byers FULLER E. CALLAWAY HAMILTON CARHARTT Robert A. Chambers Mrs. George E. Chisholm CAPTAIN EDWARD B. CLOSE R. T. CRANE, JR. JOHN T. DAVIS JOHN B. DENNIS C. M. GARRISON Murry Guggenheim Anson W. Hard, Jr. H. B. HARRIS GENERAL WARREN M. HEALEY PHOEBE A. HEARST A. Barton Hepburn N. B. Hersloff GEO. W. HOADLEY Mrs. Henry R. Hoyt R. L. IRELAND EDWARD K. LINCOLN LINDA V. MALLINSON W. A. Marshall EVERETT MASTEN

Effingham B. Morris HENRY A. MURRAY, JR. FRANK I. MYERS HERMAN ARMOUR NICHOLS MISS JOSEPHINE ADAMS OSBORN MARIE LOUISE PECKHAM THEODORE PETERS MRS. MORTON F. PLANT ALEXANDER HAMILTON RICE HORATIO S. RUBENS IACOB RUPPERT C. H. Sanford Mrs. Ralph Sanger HENRY D. SHARPE ALTHEA R. SHERMAN E. A. CAPPELEN SMITH WILLIAM C. SQUIER, 3D Mrs. Benjamin Strong, Jr. Frederick Sturges, Ir. A. F. Troescher W. K. VANDERBILT, JR. C. W. Watson MISS ALICE LEE WELCHER MISS AMY OGDEN WELCHER MISS EMMA PARKE AVERY Welcher

The following were made Life Members through Honorary Election:

W. W. Atterbury
Henry Balfe
Brigadier General David L.
Brainard
Henry G. Bryant
Michael J. Clancy
E. W. Clark

Mrs. August R. Meyer

CHARLES V. MILLER

HENRY DODGE COOPER
GRENVILLE T. EMMET
C. W. GORDON
GEORGE M. GRAY
LEVI H. GREENWOOD
LIEUT. HARRY F. GUGGENHEIM, U. S. N.

HENRY HORNBLOWER
ROBERT HENDRE KELBY
M. J. LOOK
PAUL B. MORGAN
JAMES C. PARRISH
SAMUEL T. PETERS
ALBERT HOUGHTON PRATT
DR. T. MITCHELL PRUDDEN

M. F. SAVAGE
LOUIS A. SHAW
CHARLES A. STONE
W. B. THOMAS
PAUL TUCKERMAN
EDWIN S. WEBSTER
FRANK G. WEBSTER
R. H. WILLIAMS

The following have become Sustaining Members:

WM. R. BEGG
R. D. BENSON
PAUL J. BONWIT
WALTER B. CONGDON
MRS. WM. FOX
LE ROY FROST
CHAS. J. GRAHAM
W. A. GRAMER

Jesse H. Jones
Harry L. Marsh
E. L. Mayer
Geo. A. McKinlock
Mary E. Merrill
Gardiner H. Miller
Samuel Sachs
Mrs. G. H. Thomas
C. J. Ulmann

DECEASED TRUSTEE AND MEMBERS

Trustee

Dr. James Douglas

Benefactor

Dr. James Douglas

Associate Benefactor Mrs. Russell Sage

Patrons

JAMES GORDON BENNETT

Dr. James Douglas

Mrs. Russell Sage

Fellows

F. R. HALSEY

RICHARD MORTIMER

Life Members

CARROLL BALDWIN CORTLANDT DE PEYSTER FIELD

TREADWELL CLEVELAND MRS. C. H. ISHAM

Mrs. William Combe Mrs. Constance S. Mead

Dr. James Douglas Frank E. Peabody

A complete list of Members is appended.

Respectfully submitted,

Adrian Iselin,

Secretary.

$LIST\ OF\ TRUSTEES\ AND\ TERMS\\ OF\ SERVICE$

1869–1918

The Mayor of the City of New York	
The President of the Department of Parks	
The Comptroller of the City of New York	. 1908-
Auchincloss, Hugh	
Baker, George F	.1914-
Bickmore, Albert S	
Bishop, H. R	. 1882–1891
Blatchford, Richard M	.1869-1872
Blodgett, William T	. 1869-1875
Bowdoin, George S	. 1903-1913
Brewster, Frederick F	.1913-
Choate, Joseph H	. 1869-1917
Colgate, Robert	. 1869-1885
Constable, James M	
Cutting, R. Fulton	. 1914-
Cuyler, Cornelius C	. 1904–1909
Cuyler, Thomas DeWitt	.1910-
Dana, Chas. A	
Davison, Henry P	. 1916–
Dodge, A. G. Phelps	. 1869-1872
Dodge, Cleveland H	. 1904-
Dodge, W. E., Jr	
Douglas, James	. 1909-1918
Drexel, Joseph W	. 1872-1888
Elliot, Daniel Giraud	. 1915–1915
Field, Benjamin H	. 1869-1893
Frick, Henry C	. 1914–
Gerry, Elbridge T	
Grant, Madison	. 1911–
Green, Andrew H	. 1869–1903
Grinnell, Moses H	. 1869-1872
Haines, William A	. 1869-1880
Hard, Anson W	. 1894-1917
Harriman, Oliver	. 1878-1895
Harriman, William Averell	. 1918–
Havemeyer, H. O	. 1898-1907
Havemeyer, Theodore A	.1891-1897

Haven, George G	
Hewitt, Abram S	1874–1903
Huntington, Archer M1909–1912,	
Hyde, Frederick E	
Hyde, James H	
Iselin, Adrian	1869-1905
Iselin, Adrian	1905-
James, Arthur Curtiss	
James, D. Willis	
James, Walter B	
Jesup, Morris K	
Juilliard, A. D	
Kissel, Gustav E	1894-1911
Landon, Charles G	1882-1893
Lanier, Charles	. 1874–
Low, Seth	1905–1916
Mills, D. O	1882-1910
Mills, Ogden	1910-
Morgan, J. Pierpont	1869–1913
Morgan, J. P	1908-
Morton, Levi P	1889-1890
Osborn, Henry Fairfield	1901-
Ottendorfer, Oswald	1886-1900
Parish, Henry	. 1869–1872
Potter, Howard	. 1869–1880
Pyne, Percy R	
Pyne, Percy R	
Robb, J. Hampden	1886-1911
Rockefeller, William	. 1895–1913
Rogers, Archibald	.1891-1910
Roosevelt, Theodore	1869-1878
Roosevelt, Theodore	. 1886–1891
Sherman, Benjamin B	. 1869–1874
Stebbins, Henry G	1869-1874
Stevens, Frederic W	. 1873–1882
Steward, D. Jackson	1869-1898
Stuart, Robert L	. 1869–1882
Trevor, John B	. 1872–1888
Trevor, John B	. 1908-
Vanderbilt, Cornelius	
Warburg, Felix M	
Wickersham, George W	. 1910-1917
Whitney, William C	. 1891-1904
Wolfe, John David	

LIST OF MEMBERS

December 31, 1918

FOUNDERS

This class of members is composed of the incorporators of the Museum

WILLIAM T. BLODGETT*
JOSEPH H. CHOATE*
ROBERT COLGATE*
CHARLES A. DANA*
A. G. PHELPS DODGE
BENJAMIN H. FIELD*
WILLIAM A. HAINES*
ADRIAN ISELIN*

Morris K. Jesup*
J. Pierpont Morgan*
Henry Parish*
Howard Potter*
Theodore Roosevelt*
Benjamin B. Sherman*
D. Jackson Steward*
Robert L. Stuart*

JOHN DAVID WOLFE*

BENEFACTORS

By contribution of \$50,000, or through honorary election

James M. Constable*
Cleveland H. Dodge
James Douglas*
Archer M. Huntington
Arthur Curtiss James
Morris K. Jesup*
Mrs. Morris K. Jesup*

J. PIERPONT MORGAN*
J. P. MORGAN
HENRY FAIRFIELD OSBORN
PERCY R. PYNE, SR.*

DARIUS OGDEN MILLS*

PERCY R. PYNE, SR.*
MRS. ROBERT L. STUART*
CORNELIUS VANDERBILT*

WM. H. VANDERBILT*

ASSOCIATE FOUNDERS

By contribution of \$25,000, or through honorary election

GEORGE S. BOWDOIN*
JAMES M. CONSTABLE*
CLEVELAND H. DODGE
WILLIAM E. DODGE, 2D*
HENRY O. HAVEMEYER*
ARCHER M. HUNTINGTON
ARTHUR CURTISS JAMES
A. D. JUILLIARD
CHARLES LANIER
OGDEN MILLS

J. P. Morgan
Oswald Ottendorfer*
Percy R. Pyne, 1st*
William Rockefeller
Miss Phebe Anna Thorne*
Charles E. Tilford*
Mrs. John B. Trevor
Cornelius Vanderbilt, 1st*
Felix M. Warburg
William C. Whitney*

^{*} Deceased.

ASSOCIATE BENEFACTORS

By contribution of \$10,000, or through honorary election

Hugh Auchincloss* EMIL C. BONDY* George S. Bowdoin* FREDERICK F. BREWSTER JOSEPH H. CHOATE* ROBERT COLGATE* THOMAS DEWITT CUYLER BENJAMIN P. DAVIS* CLEVELAND H. DODGE WILLIAM E. DODGE, 2D* MRS. WILLIAM E. DODGE* MRS. JOSIAH M. FISKE* JAMES B. FORD HENRY C. FRICK ANSON W. HARD* ARCHER M. HUNTINGTON HENRY IDEN* ADRIAN ISELIN* ADRIAN ISELIN

ARTHUR CURTISS JAMES D. WILLIS JAMES* A. D. JUILLIARD FRANK W. KITCHING* Mrs. Frank W. Kitching CHARLES LANIER JOSEPH F. LOUBAT ODGEN MILLS J. P. Morgan HENRY FAIRFIELD OSBORN PERCY R. PYNE WILLIAM ROCKEFELLER Mrs. Russell Sage* WM. R. SANDS* JACOB H. SCHIFF ROBERT L. STUART* CAPT. JOHN B. TREVOR, U.S.A. MRS. JOHN B. TREVOR FELIX M. WARBURG

PATRONS

By contribution of \$1,000, or through honorary election

EDWARD D. ADAMS MRS. CHARLES B. ALEXANDER John Anderson* JAMES ANGUS* HICKS ARNOLD* RICHARD ARNOLD* WILLIAM H. ASPINWALL* JOHN JACOB ASTOR* WILLIAM WALDORF ASTOR HUGH AUCHINCLOSS* BENJAMIN AYMAR* Samuel D. Babcock* GEORGE F. BAKER MRS. GUY ELLIS BAKER A. H. BARNEY* D. N. BARNEY* JAMES GORDON BENNETT* Albert S. Bickmore*

MRS. ALBERT S. BICKMORE FREDERICK BILLINGS* HEBER R. BISHOP* George Bliss* George T. Bliss* MISS SUSAN DWIGHT BLISS MRS. WILLIAM H. BLISS WILLIAM T. BLODGETT* ROBERT BONNER* HENRY BOOTH M. C. D. BORDEN* J. A. Bostwick* George S. Bowdoin* GEORGE DEXTER BRADFORD* FREDERICK F. BREWSTER ALEX. H. BROWN, M. P. JAMES BROWN* MISS MATILDA W. BRUCE*

^{*} Deceased.

HERMON C. BUMPUS JOHN L. CADWALADER* Mrs. Carnegie Andrew Carnegie DR. WALTER CHANNING Joseph H. Choate* JOHN J. CLANCY* EDWARD CLARK* JONAS G. CLARK* JAMES B. COLGATE* ROBERT COLGATE* Frederick A. Constable* MRS. FREDERICK A. CONSTABLE JAMES M. CONSTABLE* George C. Cooper* Peter Cooper* AUSTIN CORBIN* ALEXANDER I. COTHEAL* ZENAS CRANE* JOHN D. CRIMMINS* JOHN J. CROOKE ROBERT FULTON CUTTING CORNELIUS C. CUYLER* THOMAS DEWITT CUYLER HENRY P. DAVISON DR. BASHFORD DEAN MRS. BASHFORD DEAN W. M. Dongan de Peyster L. P. DI CESNOLA* A. G. PHELPS DODGE CLEVELAND H. DODGE WILLIAM E. DODGE, 1st* WILLIAM E. DODGE, 2d* Mrs. William E. Dodge* JAMES DOUGLAS* ANDREW E. DOUGLASS* JOSEPH W. DREXEL* Mrs. Isaac M. Dyckman* D. G. Elliot* MRS. M. SCHUYLER ELLIOT JAMES R. ELY* LIEUT. G. T. EMMONS, U.S.N. BENJAMIN H. FIELD* CYRUS W. FIELD* CYRUS W. FIELD, JR.*

JAMES B. FORD

* Deceased.

PROF. AUGUSTE FOREL HENRY C. FRICK MRS. FREDERICKA GADE* WILLIAM T. GARNER* ELBRIDGE T. GERRY ROBERT W. GOELET LUDWIG MAX GOLDBERGER* JOEL GOLDENBERG* GEORGE J. GOULD JOHN A. C. GRAY* John A. Grossbeck* WILLIAM A. HAINES* ANSON W. HARD* Dr. James M. B. Hard E. H. HARRIMAN* Mrs. E. H. HARRIMAN OLIVER HARRIMAN* HENRY O. HAVEMEYER* THEODORE A. HAVEMEYER* GEORGE G. HAVEN* GEORGE G. HAVEN GEORGE A. HEARN* MRS. WM. TOD HELMUTH ABRAM S. HEWITT* MRS. ABRAM S. HEWITT* W. L. HILDBURGH MISS S. M. HITCHCOCK* VERY REV. E. A. HOFFMAN, Mrs. Eugene A. Hoffman*

D.D., LL.D.* SAMUEL V. HOFFMAN GEO. B. HOPKINS GEN. T. H. HUBBARD* ARCHER M. HUNTINGTON MRS. ARCHER M. HUNTINGTON C. P. HUNTINGTON* MRS.HENRYEDWARDSHUNTINGTON B. H. HUTTON* B. T. BABBITT HYDE DR. FREDERICK E. HYDE FREDERICK E. HYDE, JR. JAMES H. HYDE ADRIAN ISELIN* ADRIAN ISELIN ARTHUR CURTISS JAMES D. WILLIS JAMES*

DR. WALTER B. JAMES CHARLES M. JESUP Morris K. Jesup* MRS. MORRIS K. JESUP* H. J. Jewett* J. TAYLOR JOHNSTON* MRS. ISABELLE FIELD JUDSON A. D. JUILLIARD James R. Keene* L. D. KELLOGG GUSTAV E. KISSEL* CHAS. G. LANDON* CHARLES LANIER LORD LEITH OF FYVIE JAMES LENOX* ADOLPH LEWISOHN Major C. A. M. Liebrechts SOLOMON LOEB* JOSEPH F. LOUBAT SETH LOW, LL.D.* Princess VILMA LWOFF-PARLAGHY JOHN B. MARCOU* PHILIPPE B. MARCOU Edward Matthews Francis O. Matthiessen* GEORGE B. McCLELLAN DR. EDGAR A. MEARNS, U.S.A.* HERMAN A. METZ Darius Ogden Mills* OGDEN MILLS MASON MITCHELL J. PIERPONT MORGAN* J. P. Morgan HENRY FAIRFIELD OSBORN WM. CHURCH OSBORN W. H. OSBORN* Mrs. Wm. H. Osborn* OSWALD OTTENDORFER* JOHN E. PARSONS* GEORGE FOSTER PEABODY Dr. WM. Pepper* I. N. PHELPS* S. WHITNEY PHENIX* HENRY CLAY PIERCE HENRY W. Poor* JOHN H. PRENTICE

Percy R. Pyne* PERCY R. PYNE PAUL J. RAINEY CLARK LOMBARD RING J. Hampden Robb* COLEMAN T. ROBINSON* John D. Rockefeller JOHN D. ROCKEFELLER, JR. WM. ROCKEFELLER Col. Archibald Rogers MRS. MARY E. ROGERS* THEODORE ROOSEVELT* THEODORE ROOSEVELT EDWARD S. Russ* PAUL J. SACHS MRS. PAUL J. SACHS Mrs. Russell Sage* WM. SCHAUS F. Augustus Schermerhorn WILLIAM C. SCHERMERHORN* JACOB H. SCHIFF MRS. HARRIET L. SCHUYLER* HENRY SELIGMAN Jesse Seligman* CHARLES H. SENFF* CHARLES S. SHEPARD EDWARD M. SHEPARD* Benjamin B. Sherman* WM. D. SLOANE* CHARLES E. SLOCUM, M.D., LL.D.* CHARLES SMETS JAMES BAKER SMITH* CATHERINE L. SPENCER* FREDERIC W. STEVENS D. Jackson Steward* A. T. Stewart* JAMES STOKES* J. G. PHELPS STOKES MRS. WILLARD STRAIGHT ALEXANDER STUART* ROBERT L. STUART* Mrs. Robert L. Stuart* APPLETON STURGIS* DR. ELIZABETH M. STURGIS Frank K. Sturgis

Mrs. Frank K. Sturgis

^{*} Deceased.

HENRY C. SWORDS SAMUEL SWORDS* JOHN T. TERRY REV. RODERICK TERRY, D.D. JOHN E. THAYER Mrs. F. F. Thompson EDWIN THORNE JOEL WOLFE THORNE JONATHAN THORNE* JONATHAN THORNE MISS PHEBE ANNA THORNE* SAMUEL THORNE* VICTOR CORSE THORNE JOHN B. TREVOR* CAPT. JOHN B. TREVOR, U. S. A. Mrs. John B. Trevor

Mrs. John B. Trevor C. VANDERBILT* GEO. W. VANDERBILT* W. K. VANDERBILT HAROLD GARRISON VILLARD HENRY VILLARD* RODMAN WANAMAKER FELIX M. WARBURG EDWIN H. WEATHERBEE* Prof. William M. Wheeler WILLIAM C. WHITNEY* GEORGE W. WICKERSHAM RICHARD T. WILSON* MRS. ROBERT WINTHROP MISS C. L. WOLFE* JOHN D. WOLFE*

FELLOWS

By contribution of \$500, or through honorary election

JOHN ALSTYNE* SAMUEL P. AVERY* CHARLES T. BARNEY* THOMAS BARRON* THE DUKE OF BEDFORD CHARLES L. BERNHEIMER CORTLANDT FIELD BISHOP DAVID WOLFE BISHOP* George Bliss* TEMPLE BOWDOIN* ROBERT S. BREWSTER STEWART BROWN* WM. LANMAN BULL* JOHN L. CADWALADER* JAMES C. CARTER* CHARLES W. CASS* George W. Cass* Prof. Chas. F. Chandler B. PRESTON CLARK Mrs. Geo. W. Collord* HANSON K. CORNING* MRS. RICHARD P. DANA* ALFRED B. DARLING* CHARLES DEERING WILLIAM DEMUTH*

* Deceased.

WM. EARL DODGE, 4TH E. L. DOHENY ABRAM DUBOIS* CYRUS W. FIELD, JR.* Josiah M. Fiske* H. M. FLAGLER* HENRY FORD George Barton French Mrs. George Barton French ROBERT GORDON GEORGE G. GRAY* CHARLES W. GRISWOLD* John A. Grossbeck* JAMES B. HAGGIN* LOUIS T. HAGGIN F. R. Halsey* MISS LAURA P. HALSTED* WM. H. HARBECK* MRS. HENRY O. HAVEMEYER SAMUEL HAWK* VERY REV. E. A. HOFFMAN, D.D., LL.D.* H. B. HOLLINS

PAUL GRISWOLD HOWES

MEREDITH HOWLAND*

SAMUEL N. HOYT* D. B. Ivison* CHARLES M. JESUP AYMAR JOHNSON JAMES H. JONES GOUVERNEUR KEMBLE* ROBERT LENOX KENNEDY* WHEATON B. KUNHARDT COL. ANTHONY R. KUSER PROF. WILLIAM LIBBEY A. A. Low* HENRY G. MARQUAND* EMERSON McMILLIN STANLEY G. MIDDLETON MISS CAROLINE L. MORGAN Samuel F. B. Morse* RICHARD MORTIMER LEVI P. MORTON FRANCIS CHILD NICHOLAS, M. D. LLOYD PHŒNIX PHILLIPS PHŒNIX LEWIS A. PLATT HENRY W. Poor* HOWARD POTTER* O. B. POTTER* DR. WILLIAM RADLOFF MARSHALL O. ROBERTS* John D. Rockefeller C. V. S. ROOSEVELT* MRS. HERBERT L. SATTERLEE F. Augustus Schermerhorn H. M. Schieffelin*

MORTIMER L. SCHIFF GRANT B. SCHLEY MRS. HARRIET L. SCHUYLER* PHILIP SCHUYLER* CHARLES H. SENFF* ELLIOTT F. SHEPARD* JAS. SHEWAN JOHN SLOANE* JOHN SNEDEN* D. C. STAPLETON CHARLES STEELE CHARLES D. STICKNEY* MISS CAROLINE PHELPS STOKES* MISS OLIVIA E. PHELPS STOKES MRS. FRANK K. STURGIS RUTHERFURD STUYVESANT* JOHN T. TERRY* MRS. EZRA RIPLEY THAYER Lewis S. Thompson JAMES THOMSON* TIFFANY & Co. Lucius Tuckerman* H. McK. Twombly* LEONIDAS A. VAN PRAAG* GEN. EGBERT L. VIELE, U.S.A.* THOS. A. VYSE, JR.* Frederic C. Walcott SAMUEL WILLETS* MRS. ROBERT WINTHROP R. A. WITTHAUS, M.D.* MISS CAROLA WOERISHOFFER*

HONORARY FELLOWS

Through election in recognition of distinguished scientific service to the Museum

ROALD AMUNDSEN
DR. BASHFORD DEAN
LIEUT. GEORGE T. EMMONS,

U.S.N.

GEO. BIRD GRINNELL BARON LUDOVIC MONCHEUR

* Deceased.

REAR-ADMIRAL ROBERT E. PEARY, U.S.N.

Hon. Theodore Roosevelt Dr. Leonard C. Sanford Sir Ernest Henry Shackleton Vilhjálmur Stefánsson

LIFE MEMBERS

By contribution of \$100, or through honorary election

EDWARD G. ACHESON ERNEST KEMPTON ADAMS* MRS. MAUD W. ADAMS C. R. AGNEW G. B. AGNEW C. F. Ahlstrom CARL E. AKELEY JOHN E. ALEXANDRE* ADMIRAL E. ALEXEIEFF REV. ARTHUR HUNTINGTON ALLEN RICHARD H. ALLEN* F. D. ALLER BERNARD G. AMEND* F. LOTHROP AMES LARZ ANDERSON Mrs. Blanche L. Andrews* CONSTANT A. ANDREWS Francis R. Appleton MRS. MARTIN ARCHER-SHEE ALLISON V. ARMOUR S. T. Armstrong, M.D. Mrs. William Armstrong BENJAMIN WALWORTH ARNOLD B. G. ARNOLD* EDWARD W. C. ARNOLD JOHN JACOB ASTOR* VINCENT ASTOR J. T. ATTERBURY* W. W. ATTERBURY MRS. EDGAR S. AUCHINCLOSS, JR. MRS. EMMA B. AUCHINCLOSS HUGH D. AUCHINCLOSS* SAM, SLOAN AUCHINCLOSS MISS FLORENCE AUDUBON MISS MARIA R. AUDUBON MISS M. ELIZA AUDUBON* SAMUEL P. AVERY* SAMUEL P. AVERY MRS. JAMES C. AYER* MISS E. AYMAR* JULES S. BACHE

JAMES A. BAILEY* JAS. MUHLENBERG BAILEY* MISS CHARLOTTE S. BAKER GEO. F. BAKER, JR. H. MARTYN BAKER EDWIN SWIFT BALCH ALBERT H. BALDWIN CARROLL BALDWIN Joseph C. Baldwin* S. PRENTISS BALDWIN HENRY BALFE HENRY McC. BANGS DAVID BANKS* HENRY I. BARBEY* THOMAS BARBOUR MRS. P. HACKLEY BARHYDT* THOMAS BARING FORDYCE BARKER, M.D.* MISS CORA F. BARNES* JAMES BARNES JOHN S. BARNES* D. NEWTON BARNEY JOHN HENDLEY BARNHART, M.D. JAMES H. BARR GEORGE D. BARRON J. O. Bartholomew* ROBERT A. BARTLETT BERNARD M. BARUCH W. H. BEADLESTON* C. WILLIAM BEEBE GEORGE E. BELCHER, M.D.* Bertrand F. Bell* MRS. CHRISTOPHER M. BELL* C. M. Bell, M.D.* DENNISTOUN M. BELL GORDON KNOX BELL LOUIS V. BELL WM. F. BELLER AUGUST BELMONT MISS BEATRICE BEND H. Benis

^{*} Deceased.

THOMAS G. BENNETT THEODORE BERDELL* C. M. Bergstresser CHARLES L. BERNHEIMER Mrs. Charles L. Bernheimer JOHN E. BERWIND SAMUEL R. BETTS WILLIAM G. BIBB LYNFORD BIDDLE W. LYMAN BIDDLE Mrs. Albert Bierstadt* John Bigelow* MISS ELIZABETH BILLINGS FREDERICK BILLINGS* ROBERT WORTH BINGHAM R. CLIFFORD BLACK Mrs. Emmons Blaine J. INSLEY BLAIR T. W. BLAKE GEO. BLEISTEIN MISS CATHERINE A. BLISS* Cornelius N. Bliss* Cornelius N. Bliss, Jr. ROBERT WOODS BLISS Samuel J. Bloomingdale GEORGE BLUMENTHAL HENRY W. BOETTGER ROBERT BOETTGER Edward C. Bohde CHARLES WATSON BOISE A. K. Bolan* George C. Boldt* W. B. BOURN Frederick G. Bourne Louis J. Boury Mrs. Temple Bowdoin* George W. Brackenridge MRS. WM. H. BRADFORD, SR. JOHN R. BRADLEY ANTHONY N. BRADY* James C. Brady HENRI M. BRAEM* BRIG.-GEN. DAVID L. BRAINARD, U.S.A.

COURTENAY BRANDRETH BENJAMIN BREWSTER* FREDERICK F. BREWSTER George S. Brewster WILLIAM BREWSTER MRS. SAMUEL W. BRIDGHAM CHARLES LYMAN BRINSMADE Chas. P. Britton* WM. RUTGER BRITTON WILLIAM GOULD BROKAW REGINALD BROOKS ADDISON BROWN* Amos P. Brown* DICKSON Q. BROWN Frank G. Brown* Geo. McKesson Brown George H. Brown* James M. Brown* STANLEY DOTY BROWN WM. REYNOLDS BROWN J. Hull Browning* MISS MATILDA W. BRUCE* DAVID LONEY BRUCE-BROWN* HENRY G. BRYANT WILLIAMSON BUCKMAN George Bullock ALBERT C. BURRAGE REAR ADMIRAL GUY H. BURRAGE, U.S.N.

R. L. Burton Joseph Bushnell THOMAS C. BUSHNELL* B. H. BUXTON M. L. Byers John L. Cadwalader* REV. HARRY R. CALDWELL FULLER E. CALLAWAY W. R. CALLENDER MRS. ALEX. CAMERON FREDERIC ALMY CAMMANN MISS KATHARINE L. CAMMANN* RICHARD CANFIELD* Hamilton Carhartt GEORGE B. CASE Mrs. George B. Case EDWARD PEARCE CASEY CHAS. M. CAULDWELL, M.D. ISAAC P. CHAMBERS*

^{*} Deceased.

ROBERT A. CHAMBERS C. W. CHAPIN JAMES P. CHAPIN S. B. CHAPIN MRS. GEO. H. CHATILLON HENRY CHAUNCEY* EVERSLEY CHILDS J. E. CHILDS* MRS. GEORGE E. CHISHOLM Hugh J. Chisholm* E. DWIGHT CHURCH* FREDERIC E. CHURCH* James A. Church LESTER B. CHURCHILL MICHAEL J. CLANCY B. PRESTON CLARK E. W. CLARK F. AMBROSE CLARK ROBERT STERLING CLARK AUGUSTUS L. CLARKSON* BANYER CLARKSON GEORGE C. CLAUSEN* MRS. GEORGE C. CLAUSEN* CHAS. D. CLEVELAND TREADWELL CLEVELAND* HENRY CLEWS CAPT. EDWARD B. CLOSE WM. P. CLYDE ALEXANDER SMITH COCHRAN ADAM W. S. COCHRANE W. R. COE CHARLES L. COLBY* W. W. COLE* BIRD S. COLER Russell J. Coles EDWARD COLGATE* RICHARD M. COLGATE S. BAYARD COLGATE SIDNEY M. COLGATE MRS. SIDNEY M. COLGATE WILLIAM COLGATE Alfred M. Collins MISS ELLEN COLLINS* SAMUEL D. COLLINS GEORGE W. COLLORD* SAMUEL POMEROY COLT

CHESTER L. COLTON Mrs. William Combe* Fred. H. Comstock WASHINGTON E. CONNOR MISS MARIE LOUISE CONSTABLE CHARLES H. CONTOIT* E. C. Converse MRS. E. C. CONVERSE WM. L. CONYNGHAM* HAROLD J. COOK HENRY H. COOK* C. Forster Cooper EDWARD COOPER* HENRY DODGE COOPER HUGH L. COOPER THEODORE COOPER R. R. CORNELL John J. Corning* DANIEL W. CORY Mrs. Sally Morris Cory* ALEX. I. COTHEAL* MISS ELLEN H. COTHEAL* CAPTAIN W. H. COTTINGHAM* JOHN LYMAN COX DAVIES COX, M.D.* S. D. COYKENDALL* WILLIAM R. CRAIG R. T. CRANE, JR. ZENAS CRANE* GEORGE A. CROCKER, JR. MRS. WILLIAM H. CROCKER Frederic Cromwell* James Cruikshank* WALTER GRAY CRUMP, JR. W. BAYARD CUTTING* MRS. W. BAYARD CUTTING MISS ELEANOR DE GRAFF CUYLER CHAS. M. DA COSTA* ALFRED G. DALE A. Dalrymple* MARCUS DALY Mrs. David T. Dana BENJAMIN P. DAVIS* EDMUND W. DAVIS* Mrs. Gherardi Davis

JOHN T. DAVIS

^{*} Deceased.

James Douglas*
John Waldo Douglas

Andrew E. Douglass*

MRS. HENRY DRAPER* HENRY C. DRAYTON

MISS ETHEL DU BOIS
MISS KATHARINE DU BOIS

WILLIAM A. DU BOIS EDWARD L. DUFOURCQ

R. G. Dun*

A. RADCLYFFE DUGMORE

WM. BUTLER DUNCAN*

Dr. Carroll Dunham Dr. Edward K. Dunham

Dr. Theodore Dunham Geo. Elsworth Dunscombe

GEN. COLEMAN DU PONT

THOMAS T. ECKERT, JR.

WILLIAM FRANKLIN LUXTON

MRS. DAVID S. EGLESTON

COL. BASIL HICKS DUTCHER, U.S.A.

James H. Dunham* Lewis L. Dunham

ALFRED I. DU PONT

WILLIAM DUTCHER CLARENCE H. EAGLE

GEO. EASTMAN

EDWARDS

GEORGE EHRET

Louis J. Ehret

CARL EICKEMEYER

OTTO M. EIDLITZ

Samuel Elliott*

James W. Ellsworth

LINCOLN ELLSWORTH

CHARLES EDDISON CHARLES J. EDER

WM. T. DAVIS CHAS. STEWART DAVISON HENRY J. DAVISON* HENRY P. DAVISON LEE GARNETT DAY EDGAR DEAL THOMPSON DEAN* ANDRE DE COPPET EDWARD J. DE COPPET GEORGE B. DE FOREST A. V. DE GOICOURIA ALFRED DEJONGE S. DE JONGE ALBERT DELAFIELD LEWIS L. DELAFIELD HENRI DECKERT DE LA MEILLAIE EUGENE DELANO MOREAU DELANO WARREN DELANO Dr. Carlos de la Torre J. H. DE MOTT* WILLIAM DEMUTH* JOHN B. DENNIS CHAUNCEY M. DEPEW, JR. GEN. J. WATTS DE PEYSTER* CHARLES DE RHAM HENRY A. C. DE RUBIO F. W. DEVOE THEODORE DE WITT WILLIAM G. DE WITT ANTHONY DEY W. B. DICKERMAN MRS. C. N. DIETZ J. W. DIMICK* MRS. HENRY F. DIMOCK Mrs. W. B. DINSMORE RAYMOND L. DITMARS CLEVELAND H. DODGE MRS. CLEVELAND H. DODGE MARCELLUS HARTLEY DODGE NORMAN W. DODGE* Peter Doelger* HENRY L. DOHERTY

CLEVELAND H. DODGE

MRS. CLEVELAND H. DODGE

MARCELLUS HARTLEY DODGE

NORMAN W. DODGE*

PETER DOELGER*

HENRY L. DOHERTY

PETER DONALD*

CAPT. T. E. DONNE

E. J. DONNELL*

* Deceased.

AMBROSE K. ELY*

GRENVILLE T. EMMET

AMOS F. ENO*

WM. P. ENO

A. F. ESTABROOK

DR. EVAN M. EVANS

ALLEN W. EVARTS

ALESSANDRO FABBRI

EBERHARD FABER MRS. ERNEST A. FAIRCHILD PERCIVAL FARQUHAR EDWARD J. FARRELL DANIEL B. FEARING REV. DR. HENRY FERGUSON* CORTLANDT DE PEYSTER FIELD* MARSHALL FIELD D. K. ESTE FISHER, JR. JOHN FITCH* WM. L. FLANAGAN* MAX C. FLEISCHMANN DR. AUSTIN FLINT, JR. Prof. A. E. Foote* BRUCE FORD JAMES B. FORD J. HOWARD FORD* JAMES FRASER* MRS. FRANK PIERCE FRAZIER C. LINCOLN FREE FRANCIS P. FREEMAN* CHARLES L. FREER MRS. JOHN FRENCH SETH BARTON FRENCH* CHILDS FRICK VARICK FRISSELL LOUIS AGASSIZ FUERTES DALLETT FUGUET HOWARD FUGUET ARTHUR D. GABAY ALFRED WARREN GALE GEORGE GARR* WILLIAM LOUIS GARRELS C. M. GARRISON FRANCIS P. GARVAN E. H. GARY I. E. GATES* WILLIAM H. GEBHARD* THEODORE K. GIBBS* FRANK LEGRAND GILLISS DR. GEORGE H. GIRTY PARKE GODWIN* S. A. GOLDSCHMIDT P. J. GOODHART Dr. Frederic G. Goodridge JAMES J. GOODWIN

Mrs. James J. Goodwin C. W. GORDON STEPHEN T. GORDON* MRS. W. R. GRACE GEORGE SCOTT GRAHAM MADISON GRANT NORMAN GRANT GEORGE M. GRAY HORACE GRAY* JOHN CLINTON GRAY* ANDREW H. GREEN* E. H. R. GREEN MORRIS M. GREEN JOHN GREENOUGH LEVI H. GREENWOOD MISS D. GREER* FRANKLIN U. GREGORY T. A. GRIFFIN* F. GRAY GRISWOLD JOHN N. A. GRISWOLD* JAMES B. M. GROSVENOR* DANIEL GUGGENHEIM LIEUT. HARRY F. GUGGENHEIM, U.S.N.

MURRY GUGGENHEIM S. R. GUGGENHEIM BERNARD G. GUNTHER FRANKLIN L. GUNTHER WILLIAM D. GUTHRIE ALEX. HADDEN, M.D.* JOHN A. HADDEN* ALFRED HAFNER CARL HAGENBECK* MRS. JAMES B. HAGGIN MISS E. S. HAINES JOHN P. HAINES RICHARD T. HAINES* W. A. HAINES* MRS. W. A. HAINES* GAYLORD C. HALL MISS LAURA P. HALSTED* WILLIAM M. HALSTED* WILLIAM GASTON HAMILTON* CHARLES E. HANAMAN* H. M. HANNA, JR. ANSON W. HARD, JR.

^{*} Deceased.

W. P. HARDENBERGH J. HORACE HARDING Mrs. Charles W. Harkness* CHAS. W. HARKNESS* Mrs. Edward S. Harkness HARRY S. HARKNESS MRS. STEPHEN V. HARKNESS MRS. W. L. HARKNESS Mrs. Fletcher Harper CHARLES J. HARRAH E. H. HARRIMAN* ALAN C. HARRIS EDWARD D. HARRIS H. B. HARRIS N. W. Harris* Francis B. Harrison GEORGE L. HARRISON, JR. BENJAMIN HART* DR. LOUIS HAUPT FREDERICK C. HAVEMEYER* WILLIAM F. HAVEMEYER* JACOB HAYS* GEN. WARREN M. HEALEY PHŒBE A. HEARST A. BARTON HEPBURN Mrs. E. Herrman* N. B. Hersloff GEORGE G. HEYE CHARLES C. HIBBARD* James J. Higginson* MRS. JAMES J. HIGGINSON HUGH HILL FREDERIC DELANO HITCH* MRS. FREDERIC DELANO HITCH Francis R. Hitchcock GEO. W. HOADLEY GARRET A. HOBART MRS. RICHARD MARCH HOE VERY REV. E. A. HOFFMAN, D.D., LL.D.*

GEO. B. HOPKINS
DR. WILLIAM T. HORNADAY
HENRY HORNBLOWER
THEO. D. HOWELL*
MRS. FLORENCE HOWLAND*
GEORGE T. HOWLAND, M.D.*

Alfred M. Hoyt* ALFRED W. HOYT* MRS. HENRY R. HOYT JOHN SHERMAN HOYT MARK HOYT* MISS ROSINA S. HOYT THEODORE R. HOYT JOHN HUBBARD GEN. THOMAS H. HUBBARD* DR. ALEX. C. HUMPHREYS RICHARD S. HUNGERFORD WILSON G. HUNT* ARCHER M. HUNTINGTON C. P. Huntington* H. E. Huntington Miss Helen Hurd Frank D. Hurtt* Karl Hutter* Clarence M. Hyde* Dr. Frederick E. Hyde James H. Hyde HENRY IDEN* George Iles R. IRELAND John V. Irwin Mrs. C. H. Isham* Сная. В. Ізнам W. B. Isham* PAUL A. ISLER D. B. Ivison* John B. Jackson Theo. F. Jackson* V. H. Jackson, M.D., D.D.S. A. Jacobi, M.D. Miss Laura Jacobi S. K. Jacobs M. R. Jacobus ARTHUR CURTISS JAMES Mrs. Arthur Curtiss James Mrs. D. Willis James* MRS. HENRY JAMES NORMAN JAMES DR. WALTER B. JAMES MICHAEL JENKINS* O. G. Jennings

Mrs. Oliver G. Jennings

^{*} Deceased.

MRS. JAMES R. JESUP WM. KENNON JEWETT R. D. O. JOHNSON MRS. ADRIAN HOFFMAN JOLINE MISS C. O. JONES* MRS. EDWARD H. JONES Mrs. A D. Juilliard* Frederic A. Juilliard CHAS. H. KALBFLEISCH* MRS. JOHN INNES KANE EPH. A KARELSEN MRS. E. KEEP-SCHLEY* ROBERT HENDRE KELBY ALEXANDER SANFORD KELLOGG Prof. C. R. Kellogg HENRY C. KELSEY WALTER SCHUYLER KEMEYS GEORGE KEMP* EDWARD DUDLEY KENNA FREDERIC H. KENNARD JOHN S. KENNEDY* RUDOLPH KEPPLER LEWIS SAYRE KERR, JR. SAMUEL KISSAM KERR WM. M. KERR George A. Kessler NATHANIEL T. KIDDER GEORGE GORDON KING JAMES GORE KING, JR. JOHN KING* JOHN ALSOP KING* IRVING B. KINGSFORD A. C. KINGSLAND* WM. M. KINGSLAND* D. P. KINGSLEY STANTON D. KIRKHAM WILLIAM ADAMS KISSAM ALFRED J. KLEIN ARNOLD KNAPP PERCIVAL KNAUTH* THEODOR WHITMAN KNAUTH GEORGE T. KNIGHT* JAMES KNIGHT, M.D.* H. R. KUNHARDT, JR. GEORGE F. KUNZ ALPHONSE H. KURSHEEDT

EDWIN KUTTROFF MRS. ADOLF LADENBURG MRS. DANIEL S. LAMONT* HENRY LANG HERBERT LANG WOODBURY G. LANGDON Dr. F. Lange JACOB LANGELOTH* Joseph Larocque* DR. J. V. LAUDERDALE JOHN BURLING LAWRENCE MRS. SAMUEL LAWRENCE* James M. Lawton* MRS. JAMES M. LAWTON MRS. FREDERIC S. LEE S. M. LEHMAN CHARLES W. LENG Stephen R. Lesher* ALFRED F. LICHTENSTEIN EDWARD K. LINCOLN EDWARD H. LITCHFIELD Mrs. Frank Campbell Littleton JOHN R. LIVERMORE* P. W. LIVERMORE EDWARD DE P. LIVINGSTON GOODHUE LIVINGSTON MISS EMMA H. LOCKWOOD MORRIS LOER* GEORGE C. LONGLEY* M. J. LOOK BERNARD LOTH JOSEPH LOTH* CHAS. H. LOUIS JOHN H. LOVE James Low* SETH LOW, LL. D.* WM. G. Low PERCIVAL LOWELL* Dr. Frederic A. Lucas EDWARD LUCKEMEYER* ARTHUR F. LUKE* Prof. Richard S. Lull DAVID LYDIG* E. H. R. LYMAN* JAMES A. MACDONALD CLARENCE H. MACKAY

^{*} Deceased.

MALCOLM S. MACKAY MARY SUTTON MACY, M.D. V. EVERIT MACY MRS. V. EVERIT MACY MRS. WM. H. MACY, JR. MRS. JOHN MAGEE JACOB MAHLER* ALEXANDER MAITLAND* J. MALFEYT EDWARD MALLINCKRODT, JR. LINDA V. MALLINSON GODFREY MANNHEIMER* PETER MARIE* FRANCIS H. MARKOE, M.D.* MRS. JOHN MARKOE HENRY G. MARQUAND* LOUIS MARSHALL W. A. MARSHALL W. H. MARSHALL BRADLEY MARTIN* WILLIAM C. MARTIN* GEORGE GRANT MASON EVERETT MASTEN IGNAZ MATAUSCH* ALBERT MATHEWS* E. P. MATHEWSON DR. WILLIAM DILLER MATTHEW GEORGE W. MAYNARD WALTER E. MAYNARD CHAS. W. MCALPIN MRS. D. HUNTER MCALPIN MRS. GEORGE MCANENY JOHN J. McCook* JOHN G. McCullough* MRS. JOHN G. McCullough JOHN B. McDonald* GATES W. MCGARRAH GLENN FORD MCKINNEY GUY R. MCLANE JAMES MCLEAN MRS. JAMES MCLEAN EMERSON McMILLIN MARION McMILLIN MRS. CONSTANCE S. MEAD* GEORGE MERCER JOHN W. MERCER * Deceased.

MANTON B. METCALF JOHN T. METCALFE, M.D.* Dr. A. B. MEYER* MRS. AUGUST R. MEYER JACOB MEYER* MOSES CHARLES MIGEL CHARLES ADDISON MILLER* CHARLES DUNCAN MILLER CHARLES V. MILLER DR. GEO. N. MILLER A. G. MILLS OGDEN L. MILLS RUSSELL HASTINGS MILLWARD CHARLES E. MILMINE MRS. WILLIAM F. MILTON MRS. J. W. MINTURN* Robert B. Minturn* A. M. POST MITCHELL ROLAND G. MITCHELL* E. A. MOEN* MRS. EMILY H. MOIR* CHARLES A. MOORE, JR. E. C. MOORE* MRS. E. C. MOORE EDWARD C. MOORE, JR. JOHN G. MOORE* WILLIAM H. MOORE CHARLES MORAN* VICTOR MORAWETZ HENRY S. MORGAN MRS. J. PIERPONT MORGAN J. P. MORGAN J. S. MORGAN, JR. PAUL B. MORGAN EFFINGHAM B. MORRIS FORDHAM MORRIS* JAMES MORRIS* DR. LEWIS R. MORRIS NEWBOLD MORRIS DWIGHT W. MORROW MANDEVILLE MOWER* ALFRED H. MULLIKEN HENRY A. MURRAY HENRY A. MURRAY, JR. J. F. FREIRE MURTA PERCY MUSGRAVE

THOMAS B. MUSGRAVE* FRANK J. MYERS NATHANIEL CUSHING NASH* W. B. NEFTEL, M.D.* ABRAM G. NESBITT H. VICTOR NEWCOMB* ACOSTA NICHOLS Mrs. George Nichols HERMAN ARMOUR NICHOLS JOHN TREADWELL NICHOLS MORTON C. NICHOLS W. D. NICHOLS* Mrs. Wm. G. Nichols WM. H. NICHOLS DELANCEY NICOLL WILLIAM NIVEN GEORGE NOTMAN JOSEPH J. NUNAN THOMAS H. O'CONNOR* C. H. ODELL E. OELBERMANN* Dr. P. J. OETTINGER IDA H. OGILVIE, PH.D. DUDLEY OLCOTT, 2D MRS. CATHARINE L. OLMSTED* H. O'NEILL* ALBERT OPERTI A. O. OSBORN* Mrs. A. O. Osborn* LIEUT.-COL. A. PERRY OSBORN Mrs. H. Fairfield Osborn CAPT. H. FAIRFIELD OSBORN, JR. MISS JOSEPHINE ADAMS OSBORN MRS. WILLIAM CHURCH OSBORN RAYMOND C. OSBURN JOHN C. OSGOOD JAMES F. O'SHAUGHNESSY* MISS JULIETTE A. OWEN R. G. PACKARD, JR. BENJAMIN F. PANKEY EDWARD C. PARISH HENRY PARISH* TRENOR L. PARK* EDWARD LUDLOW PARKER DR. JAMES H. PARKER* T. B. PARKER

JAMES C. PARRISH MRS. HERBERT PARSONS JOHN E. PARSONS* MRS. JOHN E. PARSONS WILLIAM F. PATTERSON O. H. PAYNE* FRANK E. PEABODY* GEORGE FOSTER PEABODY WILLIAM I. PEAKE* MARIE LOUISE PECKHAM ALFRED PELL* MRS. ANNE W. PENFIELD EDMUND PENFOLD MRS. PAUL G. PENNOYER DR. CHARLES B. PENROSE MRS. CHARLES ALBERT PERKINS NORTON PERKINS RUSSELL PERKINS SEYMOUR PERKINS W. H. PERKINS SAMUEL T. PETERS THEODORE PETERS MRS. THEODORE PETERS THOMAS M. PETERS W. R. Peters MISS FRANCES PHELPS CAPT. JOHN J. PHELPS PHELPS PHELPS MRS. WM. WALTER PHELPS HENRY PHIPPS HENRY C. PHIPPS HENRY CLAY PIERCE Anna J. Pierrepont JOHN J. PIERREPONT JULIA J. PIERREPONT GIFFORD PINCHOT GIFFORD PINCHOT, 2D JAMES W. PINCHOT* MISS ROSAMOND PINCHOT S. C. Pirie HENRY B. PLANT* MRS. MORTON F. PLANT JOHN PONDIR* George B. Post HENRY A. V. POST*

CHAS. E. POTTS

^{*} Deceased.

THOMAS POTTS* ALBERT HOUGHTON PRATT GEO. D. PRATT HAROLD I. PRATT MISS CORNELIA PRIME FREDERICK T. PROCTOR DR. T. MITCHELL PRUDDEN M. TAYLOR PYNE MRS. PERCY RIVINGTON PYNE MRS. SAMUEL QUINCY PAUL J. RAINEY DR. WILLIAM S. RAINSFORD CHARLES T. RAMSDEN GEORGE C. RAND* A. A. RAVEN ISOLINE D. RAY NORMAN B. REAM* HENRY S. REDMOND ISAAC H. REED* J. W. REINHART* ROBERT G. REMSEN* ALEXANDER HAMILTON RICE E. W. RICE, JR. WILLIAM LATHROP RICH AUGUSTE RICHARD* George Richards* Mrs. George H. Richardson CLARENCE B. RIKER JOHN J. RIKER LOUIS A. RIPLEY CHANDLER ROBBINS MILTON ROBBINS* WM. M. ROBERTSON HENRY J. ROBINSON J. K. Robinson* Nelson Robinson JOHN A. ROEBLING ALFRED ROELKER* JOHN ROGER Col. Archibald Rogers HENRY H. ROGERS L. HARDING ROGERS, JR. ROBERT ROGERS PHILIP A. ROLLINS Franklin D. Roosevelt Mrs. James Roosevelt

GEORGE D. ROSENGARTEN FREDERICK C. ROWLEY HENRY ROWLEY HORATIO S. RUBENS JACOB RUBINO* C. H. RUDDOCK JACOB RUPPERT ARCHIBALD D. RUSSELL Mrs. Horace Russell JOHN D. RYAN THOMAS F. RYAN ARTHUR RYLE PAUL J. SACHS Mrs. Paul J. Sachs F. L. St. John* J. Sanford Saltus THE ARCHDUKE LUDWIG SALVATOR* MISS E. LOUISE SANDS WM. R. SANDS* C. H. SANFORD Dr. Leonard C. Sanford Mrs. Ralph Sanger HERBERT L. SATTERLEE Mrs. Armar D. Saunderson M. F. SAVAGE F. Augustus Schermerhorn Ernest Schernikow SAMUEL B. SCHIEFFELIN* SCHUYLER SCHIEFFELIN Chas. A. Schieren JACOB H. SCHIFF MRS. JACOB H. SCHIFF ARNOLD SCHLAET WM. R. SCHMELZEL* PAUL A. SCHOELLKOPF CHAS. M. SCHOTT, JR. HERBERT F. SCHWARZ ROBERT J. F. SCHWARZENBACH ARCHIBALD T. SCOFIELD MISS GRACE SCOVILLE James A. Scrymser WM. F. SEBERT* SIR ERNEST SHACKLETON HENRY D. SHARPE

Louis A. Shaw

^{*} Deceased.

QUINCY A. SHAW EDWARD SHEARSON ALBERT JAMES SHELDON EDWARD W. SHELDON GEORGE R. SHELDON JAS. O. SHELDON* ELLIOTT F. SHEPARD* FINLEY J. SHEPARD MISS ALTHEA R. SHERMAN GARDINER SHERMAN* MRS. W. WATTS SHERMAN JOHN H. SHERWOOD* GEORGE SHIRAS, 3D GEORGE P. SHIRAS* I. H. Shoenberger* CHAS. H. SHULTZ HIRAM W. SIBLEY HERMAN SIMON* C. RITCHIE SIMPKINS MISS JEAN WALKER SIMPSON MORTIMER M. SINGER ALANSON SKINNER FRANCIS SKINNER JENS SKOUGAARD JOHN R. SLATTERY MRS. E. A. SLAVEN SAMUEL SLOAN* MRS. WILLIAM SLOANE Mrs. William Douglas Sloane CHARLES E. SLOCUM, M.D., LL.D.* ALBERT SMITH BYRON L. SMITH* Mrs. Charles Stewart Smith E. A. CAPPELEN SMITH HENRY ATTERBURY SMITH HENRY MILFORD SMITH* HOWARD CASWELL SMITH DR. HUGH M. SMITH L. DINWIDDIE SMITH* R. A. C. SMITH S. NEWTON SMITH* DR. EMILIE SNETHLAGE VALENTINE P. SNYDER NICOLI SOKOLNIKOFF S. N. SOLOMON THOMAS F. SOMERS

HENRY F. SPAULDING* MISS CLARA B. SPENCE JAMES SPEYER PAUL CECIL SPOFFORD JOHN A. SPOOR MISS FRANCES E. SPRAGUE WILLIAM C. SQUIER, 3D ADOLFO STAHL George L. Stebbins Dr. James H. Stebbins, Jr. JAMES R. STEERS ROBERT D. STERLING LOUIS STERN Francis Lynde Stetson EDW. R. STETTINIUS ALEX. H. STEVENS* BYAM K. STEVENS* MRS. BYAM K. STEVENS C. AMORY STEVENS Mrs. Robert Stewart CHARLES CHAUNCEY STILLMAN Max Wm. Stöhr ANSON PHELPS STOKES* MISS OLIVIA E. P. STOKES MISS ANNIE STONE CHARLES A. STONE EDMUND J. STONE ALBERT H. STORER ADOLPH. D. STRAUS ISIDOR STRAUS* JAMES STREAT Mrs. Gustav Stromberg BENJAMIN STRONG, JR. MRS. BENJAMIN STRONG, JR. THOMAS W. STRONG* FREDERICK STURGES* FREDERICK STURGES, JR. FRANK K. STURGIS HERMAN STUTZER WILLIAM L. SWAN Miss P. C. Swords* HENRY M. TABER* FREDERICK TAYLOR IRVING K. TAYLOR WILLIAM H. TAYLOR JAMES TERRY*

^{*} Deceased.

DR. ALLEN M. THOMAS EMERY J. THOMAS, M.D. SAMUEL THOMAS* W. B. THOMAS WM. S. THOMAS, M.D. FRED. F. THOMPSON* COLONEL ROBERT M. THOMPSON WILLIAM BOYCE THOMPSON MISS ANNE THOMSON SAMUEL THORNE* MISS EDITH W. TIEMANN CHARLES E. TILFORD* H. M. TILFORD ROBERT E. TOD A. N. Towne* HENRY R. TOWNE A. B. Townsend* Dr. Charles H. Townsend Effingham Townsend* IRA OTIS TRACY, M.D. SPENCER TRASK* GEORGE A. TREADWELL* A. F. TROESCHER WILLIAM TROTTER EDWARD TUCK PAUL TUCKERMAN MRS. MARY A. TUTTLE SEWELL TAPPAN TYNG EDWARD UHL* Frederick Uhlmann* CARL UPMANN FREDERICK T. VAN BEUREN A. VAN CORTLANDT ALFRED G. VANDERBILT* C. VANDERBILT* F. W. VANDERBILT GEO. W. VANDERBILT* W. K. VANDERBILT, JR. AMBROSE ELY VANDERPOEL BAREND VAN GERBIG MRS. WARNER M. VAN NORDEN H. D. VAN NOSTRAND* ROBERT A. VAN WYCK MRS. JAMES M. VARNUM SAMUEL M. VAUCLAIN JAMES DE LANCEY VERPLANCK

HERMAN C. VON POST* W. A. Wadsworth WILLIAM PERKINS WADSWORTH D. EVERETT WAID Frederic C. Walcott ALEXANDER WALKER DR. HENRY F. WALKER* JAMES N. WALLACE RICHARD L. WALSH* HENRY WALTERS MRS. FELIX M. WARBURG PAUL M. WARBURG MRS. PAUL M. WARBURG CAROLINE CONSTANTIA WARD WILLIAM R. WARREN JOHN I. WATERBURY C. W. WATSON JAMES S. WATSON MRS. J. HENRY WATSON J. GRISWOLD WEBB J. Watson Webb SILAS D. WEBB MRS. WILLIAM SEWARD WEBB W. Seward Webb BENJAMIN L. WEBSTER CHAS. B. WEBSTER* EDWIN S. WEBSTER FRANK G. WEBSTER HAMILTON FISH WEBSTER MRS. SIDNEY WEBSTER MISS ALICE DELANO WEEKES FREDERIC DELANO WEEKES HENRY DEFOREST WEEKES COL. JOHN WEIR* MISS ALICE LEE WELCHER MISS AMY OGDEN WELCHER MISS EMMA PARKE AVERY WELCHER BENJAMIN WELLES FREDERICK B. WENDT* SOL. WERTHEIM GEORGE PEABODY WETMORE WILLIAM P. WHARTON JAMES DUGALD WHITE JAMES GILBERT WHITE

Mrs. Jos. M. White*

ES DE LANCEY VERP

* Deceased.

LOOMIS L. WHITE* CHAS. E. WHITEHEAD* ALFRED R. WHITNEY* ALFRED RUTGERS WHITNEY, JR. MRS. H. P. WHITNEY MRS. DELOS O. WICKHAM JAMES B. WILBUR EDWARD KIRK WILLARD ELMORE A. WILLETS HOWARD WILLETS JOHN T. WILLETS* ROBERT R. WILLETS* JOHN J. WILLIAMS R. F. WILLIAMS RICHARD H. WILLIAMS S. C. WILLIAMS* WILLIAM WILLIAMS BENJAMIN A. WILLIS* MRS. M. ORME WILSON WALTER WINANS

L. STUART WING* EDWARD WINSLOW* GRENVILLE L. WINTHROP WALTER C. WITHERBEE HENRY R. WOLCOTT JOHN WOLFE* MRS. CHAS. BOUGHTON WOOD EDWIN O. WOOD WILLIAM M. WOOD L. G. WOODHOUSE* Dr. Robert S. Woodward F. W. WOOLWORTH JOHN G. WORTH HENRY H. WOTHERSPOON* MISS FANNY ELLEN WRIGHT* JOHN H. WYMAN* Mrs. John J. Wysong Mrs. Cornelius Zabriskie WM. ZIEGLER*

SUSTAINING MEMBERS

By payment of \$25 annually

FRITZ ACHELIS MRS. ROBT. F. BALLANTINE DR. EDWIN BEER WM. R. BEGG R. D. BENSON SAMUEL BIRD, JR. MRS. WALTER PHELPS BLISS PAUL J. BONWIT Mrs. Benj. Brewster WILLIAM BRUCE-BROWN LOUIS BRY R. R. COLGATE WALTER B. CONGDON MRS. J. HENRY DICK MRS. JAMES DOUGLAS Mrs. H. B. DURYEA MRS. CHARLES W. DUSTIN Mrs. Thomas A. Edison A. W. ERICKSON WM. H. FISCHER Mrs. Wm. Fox

* Deceased.

LE ROY FROST MRS. B. GOLDFRANK HENRY GOLDMAN CHAS. J. GRAHAM W. A. GRAMER GEORGE COE GRAVES Susan D. Griffith EDWARD S. HARKNESS JOHN F. HARRIS HORACE HAVEMEYER A. AUGUSTUS HEALY BENJAMIN A. HEGEMAN, JR. MAX HERMAN WALTER C. HUBBARD CONRAD HUBERT MRS. EMILY N. HUYCK JESSE H. JONES JULIUS KAYSER J. PRENTICE KELLOGG SAMUEL KRAUS THEODORE H. LAMPRECHT

MRS. L. H. LAPHAM PHILIP C. LINDGREN ALFRED E. MARLING OTTO MARON HARRY L. MARSH ROBERT MAXWELL E. L. MAYER GEO. A. McKinlock MRS. S. S. MERRILL EUGENE MEYER, JR. JOHN G. MILBURN MRS. ELISABETH C. T. MILLER GARDINER H. MILLER Mrs. Pierpont Morgan ALFRED NATHAN ARTHUR NOTMAN HOWARD NOTMAN MRS. GEORGE W. PERKINS Mrs. N. M. Pond MRS. C. M. PRATT MRS. BENJAMIN PRINCE OGDEN M. REID MISS EMELINE ROACH MARIE L. RUSSELL

SAMUEL SACHS D. SCHNAKENBERG EWALD H. SCHNIEWIND Mrs. Isaac N. Seligman ELIAS D. SMITH LISPENARD STEWART Mrs. Robert Stewart WILLIAM R. STEWART ALBERT TAG C. H. TENNEY G. H. THOMAS J. Kennedy Tod OSWALD W. UHL C. J. Ulmann F. D. UNDERWOOD MRS. HELEN HALL VAIL Mrs. P. A. VALENTINE FREDERIC S. WELLS HAROLD C. WHITMAN MRS. M. ORME WILSON RALPH WURTS-DUNDAS C. H. ZEHNDER FRIDA ZINSSER

ANNUAL MEMBERS

By payment of \$10 annually

Abbe, Robert	Adler, Major Julius Ochs	Alexander,
Abbott, James	Adler, Mortimer C.	Mrs. Henry A.
Abbott,	Adler, Siegmund	Alexander, John F.
Mrs. Theodore J.	Adriance, Wm. A.	Alexander, J. S.
Abeel, John H.	Agar, John G.	Alexander, Mrs. William
Abell, E. F.	Aitken, John	Alexandre, Mrs. J. E.
Abercrombie, David T.	Alcuin Preparatory	Alexandre,
Abert, Benjamin	School	Mrs. Nathalie
Achelis,	Alden, Percy S.	Alfonseca, Dr. José D.
Miss Elizabeth A.	Aldrich,	Alker, Mrs. A. H.
Achelis, Mrs. Fritz	Mrs. James Herman	Alker, James W.
Achelis, John	Aldrich, Spencer	Allen, Calvin H.
Acker, Miss A. V.	Aldrich,	Allen, James Lane
Ackerman, Ernest R.	Mrs. Winthrop W.	Allen, Leroy V.
Adams, Benj.	Aldridge, Darwin R.	Allen, Miss Mary
Adams, F. B.	Aldridge, Mrs. W. H.	Allen, Wm. Hall
Adams, John Dunbar	Alexander, Douglas	Allerton,
Adams, Samuel	Alexander, Harry	Mrs. Samuel W.

Altschul, C. Auerbach, S. H. Barnes, Henry B. Altschul, Frank Auger, C. L. Barnes, J. Sanford Amerman, Wm. L. Austen, Mrs. Vallé Barnes, T. Howard Amory, Copley, Jr. Ayerigg, B. Arthur Barney, Ashbel H. Amy, Ernest J. H. Ayer, James C., M.D. Barney, Amy, L. H. Edgar S., Sc. D. Andersen, Fridtjov Babcock, W. I. Barnum, William M. Anderson, A. J. C. Bacon, Daniel Barr, James I. Anderson, P. Chauncey Bacon, Geo. W. Barringer, D. M. Andreini, J. M. Bacon, Barrows, Ira Andrew, Marshal Chandler Barry, Charles D. Mrs. Henry Hersey Bacon, Mrs. Martha W. Barry, Llewellyn Andrews, Baer, Mrs. Rose O. Barstow, Frederic D. Mrs. Emma B. Baerwald, Paul Bartlett, Philip G. Andrews, Richard M. Bailey, Mrs. A. T. Bartol, Henry G. Andrews, W. H. Bailey, Dr. Pearce Barton, Andrews, W. L. Baird, Charles Mrs. C. Vanderbilt Ansbacher, David A. Baird, John S. Barton, Mrs. F. O. Ansbacher, Mrs. Louis Baisley, Bassett, Mrs. John S. Appleton, Mrs. Chas. Townsend Bastedo, W. A., M.D. Charles Lanier Baker, Alfred L. Bates, James H. S. Archbold, John F. Baker, Bateson, Archer, Mrs. G. A. Mrs. James McF. Mrs. E. Farrar Arend, F. J. Baker, Stephen Battin, Mrs. A. Arkush, Reuben Baker, W. E. Battle, Geo. Gordon Armour, Mrs. H. O. Baldwin, Frederick H. Bauchle, Arnold, E. H. Baldwin, Geo. J. Thomas Henry, Jr. Arnold, Mrs. Glover C. Baldwin, Bauer, Mrs. Louis Arnstein, Mrs. Leo George V. N., Jr. Baumgarten, Paul Aron, Harold G. Baldwin, Henry Baumgarten, Paul J. Aronson, David A. de Forest Bausher, C. L. Arthur, George D. Balinky, A. Bava, Felice Ashforth, Albert B. Ball, Alwyn, Jr. Baxter, M., Jr. Asiel, E. Ball, T. Arthur Bayard, Louis P. Aspell, John, M.D. Ballard, Charles W. Baylies, Edmund L. Ast, Abraham W. Ballard, Edward L. Baylis, William Asten, Mrs. Thomas B. Ballin, Gustav N. Bayne, Mrs. Howard Atkins, G. W. E. Bangs, F. S. Bayne, Atwater, Bannard, Otto T. Mrs. Lawrence P. Mrs. William C. Barber, Herbert Beach, Edwin Auchincloss, C. C. Barber, Thomas H. Beadleston, Edith Auchincloss, Mrs. C. C. Barclay, Beadleston, Randolph Auchincloss, Mrs. E. S. Mrs. James Lent Beal, Mrs. Robert C. Auchincloss, Hugh Barlow, Mrs. Francis C. Beall, Jeremiah Auchincloss, John W. Barnard, Miss E. J. Beatty, A. Chester Auerbach, Joseph S. Barnes, A. Victor Bechstein, A. C. Auerbach, Mrs. Jos. S.

Barnes, E. W.

Beck, Martin

Beckhard, Martin Beckwith, Edward P. Beekman, Charles K. Beekman, Gerard Beer, Mrs. J. Behr, Herman

Behre,

Behrend, Otto F. Beinecke, B. Bell, J. L. Beller, A. Bend, Mrs. G. H. Bender, George Bendix, Joseph H. Benedict, A. C. Benedict, Miss Clara J. Benedict, E. C. Benedict, H. H. Benedict, Lemuel C. Benet, Miss Lillian Benjamin, E. Benjamin,

Benjamin, Wm. M. Benkard, J. Philip Benson,

Mrs. Clausine M. Bleyer, Alfred Benson, Miss Mary Bent, Arthur Cleveland Benton, Andrew A. Benziger, Miss Lulu Bernheim, Mrs. Eli H. Bernheim, Geo. B. Bernheim, Henry J. Bernheim, Isaac J. Bernheim, Mrs. J. C. Bernheimer, Miss Rosie Bluen, Mrs. M. J. Bernstein, Theodore Berolzheimer, Emil Berolzheimer, Philip Bertron, S. R. Berwind, Edward J. Berwind, Mrs. E. J. Bettens, Edward D.

Bevin, Leander A.

Biddle, Mrs. Nicholas Biddle, William C. Bier, Mrs. Sylvan Bigelow, Dr. Wm. S. Biggs,

Bijur, Abraham Mrs. A. Frederick Bill, Nathan D. Billings, C. K. G. Billquist, C. Edward Bing, Alexander M. Binger, Robert E. Binswanger, Max Birkhahn, Robert C. Bishop, H. R. Bishop, Wm. F.

Black, George P. Black, Mrs. Robert C. Blagden, Dexter Blagden, Mrs. F. M. Blagden, Mrs. George

Blagden,

George Powell Blair, C. Ledyard Blair, Mrs. C. Ledyard Blair, J. P. Bleecker, Mrs. Theo. B.

> Bliss, Brig.-Gen. Tasker H., U.S.A. Brainard, Frank Block, Henry

Blodgett, William T. Blodgett,

William T., 3d Bloodgood, Robert F. Bloomingdale, Hiram C. Brennan, Edmund M. Bloomingdale, Irving I. Brent, Henry Kelly Blum, Albert Blum, Mrs. H. L.

Blumenthal, B. Blumenthal, Gustav Blumenthal, Hugo Blumenthal, Sidney

Blumgart, Louis Boardman, Miss R. C. Bickerton, Joseph P., Jr. Bodanzky, Arthur

Boettger, Theodore Bogert, Miss Anna Bogue, Morton G. Bolton, Reginald Pelham Bond, S. N.

Hermann M., M.D. Bond, Mrs. Wm. E. Bondy, Richard C. Bondy, Wm. Bonner, G. T. Bonnett, Charles P. Bonties, H. P. Booth, Enos S. Borden, Howard S.

> Borg, Sidney C. Borg, Mrs. Sidney C. Born, Edward

Borne, Mrs. John E. Bouvier, M. C.

Bowditch, Charles P. Bowen,

Mrs. Clarence W. Bowen, Mrs. H. S. Mrs. Samuel P. Bowers, Henry S. Bowman, John McE. Braden, Welcome W.

Bradley.

Daniel Richards Bradley, Mary T. Bradley, Wm. H. Braman, Chester A. Brawner, A. H. Breckinridge,

Mrs. John C. Breitenbach, M. J. Brewer, Horatio J. Brewster, William Briesen, Arthur v. Briggs, James Ellis Brightman, F. C. M. Brill, Dr. A. A. Brill, Henry S. Bristol, John I. D. Bristow, William B.

Brite, Mrs. James

Britton, Dr. N. L. Burden, Mrs. W. A. M. Cannon, Mrs. S. T. Brodmerkel, Chas., Jr. Burghard. Capen, Mrs. Frances I. Brokaw, Clifford V. Mrs. Edward M. Carden, Richard A. Bronson, Dr. E. B. Burgi, Oscar Cardozo, Ernest A. Brookman, Mrs. H. D. Burhorn, Edwin Carlebach, Emil Brooks, Dr. Harlow Burke, Mrs. J. K. Carlisle, G. Lister, Jr. Brooks, J. Arthur Burke, Mrs. Martin Carlisle, Mrs. G. Broughton, Burleigh, Lister, Jr. Mrs. Urban H. Mrs. George W. Carlson, Frank Broun, LeRoy, M.D. Burleigh, George Wm. Carlton, Newcomb Brower, Wm. L. Burnett, E. R. Carnegie, Mrs. George L. Brown, Charles F. Burns, William J. Carpender, Wm. Brown, Charles Hilton Burr, Algernon T. Carpenter, Chas. W. Brown, Charles S., Jr. Burr, Geo. H. Carr, Augusta G. Brown, Edwin H. Burr, Winthrop Carr, Herbert J. Brown, Ernest Clive Burr, Wm. H. Carse, John B. Brown, Franklin Q. Burroughs, Chas. W. Carter, Ernest T. Brown. Bush, D. Fairfax Carter, Robert A. Mrs. Franklin Q. Bushnell, Charles E. Carty, John J. Brown, J. Alexander Busk, Fred T. Case, Charles L. Brown, Lathrop Butler, Charles S. Case, J. Herbert Brown, Thatcher M. Butler, Dr. E. Santley Caspary, A. H. Brown, Vernon C. Butler, Cassard, Wm. J. Brown, Walter Maj. Ethan Flagg Castle, Chas. C. Brown, Wm. Adams Butler, Miss Helen C. Cauty, Frank H. Browne, Dr. Charles Butler, Maxwell Evarts Chaim, Morris L., M.D. Browning, J. A. Butler, Miss Virginia Chaires, Miss Anna E. Browning, Mrs. J. Hull Butler, Wm. Allen Chamberlaine. Bruggerhof, F. W. Butler, Mrs. Wm. Allen Mrs. C. F. Bruns, Edwin G. Button, Mrs. W. H. Chambers, Frank R. Brunswick, Mrs. E. Byrne, James Chambers, Geo. J. Bryce, William Byrne, Mrs. James Chambers, Hilary R. Bryson, T. B. Champ, William S. Buckley, B. Lord Cæsar, H. A. Champollion, André C. Buckner, M. N. Cahn, Mrs. Leopold (In Memoriam) Buckner, Thos. A. Cahn, Mrs. S. Chandler, George W. Bulkley, Edwin M. Caldwell, Edward T. Chandler, Percy M. Bulkley, Mrs. Edwin M. Calman, Henry L. Chandor, Bulkley, Erastus W. Cammann, Henry L. Miss Valentine L. Bulkley, Jonathan Cammann, H. H. Channon, Harry Bulkley, Mrs. Jonathan Cammann, Miss I. M. Chapin, G. E. Bulkley, Camp, Edward B. Chapin,

Campbell, J. W. C.

Cannon, H. W.

Mrs. Anson W. Canfield, George F.

Bunker, William

Burden, James A.

Burchard.

L. Duncan, M.D. Campbell, Dr. C. G. Miss Maria Bowen Chapman, Clarence E. Canfield, Frederick A. Chapman,

Mrs. John Jay Charles, Lillian M.

Chatillan Gaarga E	Clark, George C.	Cole, Frederic A.
Charles, José E.	Clark, Henry A.	Cole, Rufus
Chaves, José E.	Clark, John M.	Cole, Mrs. Rufus
Cheney, Geo. L.		
man and a second	Clark, Mrs. John Peyton	
Cheney, O. H.	Clark, J. William	Colfelt,
Chew, Beverly	Clark, Louis C.	Mrs. Rebecca McM.
Child, Miss Ruth	Clark, Thos. F.	Colgate, Mrs. A. W.
	Clark, W. A.	Colgate, Gilbert
Childs, S. W.	Clarke, E. A. S.	Colgate, Mrs. Gilbert
Childs, Mrs. Starling W.		Colgate, James C.
Childs, Wm., Jr.	Clarke, Thomas B.	Collier, Mrs. R. J.
Chilton, H. P.	Clarke, Thomas Shields	Collins, Charles
Chisholm, George E.	Clarkson, Miss Annie	Collins, C. L.
Chisholm,	Clarkson, Ashton C.	Colon, George Edward
Mrs. George E.	Clausen, George U.	Colt, Harris D.
Chisholm, Hugh J.	Clayburgh, Albert	Colt, Richard C.
Chisholm, Mrs. Hugh J.		Conboy, Martin
Chisolm, B. Ogden	Clerici, John	Condit, Wm. L.
Chisolm,	Cleveland,	Cone, Mrs. Ceasar
Mrs. B. Ogden		Cone, Frederick H.
Choate, Mrs. Caroline S.		Conger, George P.
Choate, Mabel	Close, Walter H.	Conheim, Hermann
Choate, Wm. G.	Clowes, Frederick V.	Conklin, Roland R.
Christie, R. E.	Clowry, Robert C.	Connell,
Chubb, Percy	Coakley, Cornelius G.,	Herbert Stanley
Chubb, S. H.		Connett, E. V., Jr.
Church, Charles B.	Cobb, Frank I.	Connett, Mrs. Lyndon
Church, C. T.		
Church, Louis P.	Cochran, G. D.	Constable, Mrs. William
	Coddington, Mrs.	Content, Walter
Cladia Casas F		Cook, Mrs. Alfred A.
Claffin, George E.	Coffin, Miss Alice S.	Cook, Mrs. Chas. T.
Claffin, John	Coffin, C. A.	Cook,
Clancy, John Evarts	Coffin, Edmund	Miss Lilian Gillette
Clapp, A. P.	Coffin, Francis A.	Cook, Robert H.
Clapp, George H.	Coffin, I. Sherwood	Cooley, Mrs. Elmer E.
Clark, Ambrose R.	Coffin, William S.	Coolidge, Mrs. F. S.
Clark, A. Wayne	Coggeshall, Edwin W.	Cooper, Mrs. Charles W.
Clark, Bernard S.	Cogswell, W. B.	Cooper, F. G.
Clark, Charles Martin	Cohen, Benno	Corbin, Austin
Clark, Mrs. Charles M.	Cohen, DeWitt Clinton	Cordley, Frank R.
Clark, Clarence M.	Cohen, Julius Henry	Corlies, Howard
Clark, D. Crawford	Cohen, Dr. Martin	Cornell, Miss Emily L.
Clark, Edward S.	Cohen, Max	Corning, Christopher R.
Clark, Miss E. Mabel	Cohen, William W.	Corning, Mrs. John J.
Clark,	Cohen, Wm. N.	Corscaden, Dr. James A.
Miss Emily Vernon	Cohn, Mrs. J. M.	Corson, H. C.
Clark Eschonish II		
Clark, Frederick H.	Cohn, Martin L.	Costello, Alfred

Coster, Mrs. C. H. Dakin. Degener, John F. Coutant, Dr. R. B. Mrs. Henry Drysdale Degener, John F., Jr. Cowdin, Winthrop Dallett, Frederic A. Delafield, Frederick P. Cowl, Clarkson Dalziel, Mrs. F. Delamar, Alice A. Cowl, Mrs. Clarkson Dana, Charles L., M.D. De Lamar, J. R. Crabbe, Miss Louise G. Dana, Paul Delano, Lyman Crain, Miss Christobelle Danforth, Delano, Moreau Crane, Charles R. Mrs. George H. de Laugier-Villars, Crane, H. M. Daniels, Lorenzo Countess Crane, Danziger, Virginia De Lee, Mrs. S. T. Mrs. Jonathan H. Dashew, Jacob Delin, B. Cravath, Mrs. Paul D. Davenport, Mrs. Ira Dellenbaugh, Davey, Wm. Nelson Crawford, R. L. Mrs. F. S., Jr. Crawford, Wm. Davidge, Wm. H. Deming, Mrs. Horace E. Davies, J. Clarence Crehore, Frederic M. Deming, L. C. Crider, George A. Davies, Julien T. Demuth, Leopold Crile, George W., M.D. Davis, Denny, Mrs. Lucy W. Rear-Admiral C. H. Denton, Dr. Myron P. Crimmins, Mrs. Thomas Crocker, William H. Davis, David T. Deppé, W. P. Crocker, W. T. Davis, Everly M. DePuy, Mrs. Henry F. Crockett, Mrs. Stuart Davis, Dr. Geo. E. De Sola, Mrs. J. C. Cromwell, Miss Gladys Davis, George S. Despard, Walter D. Cromwell, James W. Davis, Gherardi Deutsch, Alexander Cromwell, Lincoln Davis, John W. A. Deutsch, Lee Cromwell, Seymour L. Davis, Leonard M. DeVinne, T. B. Crosby, Maunsell S. DeWolf, W. Ashley Davis, Morgan Cross, George D. Davis, Waters S. Dey, Richard Varick Cross, Richard J. Davis, Mrs. William C. Devo, Robert E. Cross, Mrs. R. J. Davison, Miss Alice M. Dick, J. Henry Cross, W. R. Davison, Alvah Dickerman, Crowley, Timothy F. Davison, C. B. Mrs. Wm. C. Dickey, Charles D. Cullman, Jos. F. Davison, Miss E. H. Curie, Chas. Davison, E. Mora Dickey, Curiel, H. Day, Miss Sarah J. Mrs. Charles D. Curtis, F. Kingsbury Dazian, Henry Diedel, Henry R. Curtis, G. Warrington Dean, Miss Florence Diefenthäler, Charles E. Curtis, Ronald Eliot Dean, Geo. Hamilton Dieterrich, Chas. F. Curtis, W. J. Dill, Miss Mary A. de Bary, A. Curtis, Wm. Edmond de Bruÿn, I. Dillon, Mrs. John M. Curtiss, Roy Dilworth, Jos. R. De Buys, A. Cushing, Howard G., Jr. Deeves, Richard Dimmick, J. Benjamin Cushman, Burritt A. de Forest, H. W. Dittenhoefer, I. M. Cutcheon, F. W. M. de Forest, Johnston Dittrich, Hermann Cutler, J. Warren de Forest, Lockwood Dix, John A. Cutter, Ralph L. de Forest, Robert W. Dix, Mrs. Morgan de Forest, Dobbyn, William A.

Mrs. Robert W.

Dodd, Miss Gertrude

Daily, George M.

Dodds, Lida L.	DuBois,	Edson, Mrs. J. B.
Dodge,	Mrs. Matthew B.	Edwards, James M.
Mrs. Arthur M.	Dudley, P. H.	Eger, Theodore G.
Dodge, Rev. D. Stuart	Duell, Major Holland S.	Egleston, Melville
Dodge, Francis P.	Duer, Mrs. J. B.	Ehret, George, Jr.
Doelger, Charles P.	Dull, Mrs. A. P. L.	Ehret, Mrs. Louis J.
Doelger, Frank G.	Duncan, Frederick S.	Ehrich, Samuel W.
Dominick, Bayard, Jr.	Duncan, Mrs. John P.	Ehrich, Mrs. Wm. J.
Dominick, H. B.	Duncan, Stuart	Ehrmann, Mrs. E.
Dommerich, L. W.	Duncan, Wm. A.	Eilers, Karl
Dommerich, O. L.	Dunham, Mrs. Carroll	Eilers, Miss Meta
Donohugh,	Dunham, H. F.	Eilshemius, Henry G.
Mrs. Agnes C. L.		Eimer, A. O.
Dorman, Benjamin	Dunn, Gano	Eimer, August
	Dunn, Henry E.	Eimer, Walter R.
Dorr, John V. N.	_	
Dorrance, Saml. R.	Dunning,	Einstein, I. D.
Doscher, Henry	Dr. William B.	
Doubleday, F. N.	du Pont, Henry F.	Eldridge, Lewis A.
Doughty, Edgar M.	Durkee, Eugene W.	Elkan, Benno
-	Durkee, Richard P. H.	Elkus, Mrs. Abram I.
Douglas, Walter	Du Val, Guy	Ellinger, Ernest
Douglas, Wm. Harris	Duvall, William C.	Elliott, Howard
Douglass, Alfred	Dwight, A. S.	Ellis, S. A.
Douglass, Benjamin, Jr.	Dwight, John E.	Ellis, Wm. D.
Douglass, Mrs. G. A.	Dwight,	Ellsworth, John S.
Dow, Mrs. Frederic G.	Jonathan, M.D.	Elmer, C. W.
Dow, R. P.	Dwight, Mrs. M. E.	Emanuel,
Dowd, Joseph	Dworetzky, Morris	John Henderson, Jr.
Dowd, William B.	Dyer, Leonard H.	Embury,
Downes,		Miss Emma C.
William A., M.D.	Earle, Ellis P.	Emerson, Mrs. Wm.
Downey, John I.	Eaton,	Emmet, C. Temple
Dows, David	Mrs. Frederick H.	Emmet, Miss Lydia F.
Dows, Mrs. David	Eaton, Geo. Dummer	Emmet, Robert Temple
Drake, Miss Mary E.	Eckart, Edmund	Endicott, William
Draper, Charles D.	Ecker, F. H.	Crowninshield
Draper,	Eckstein, M. Maurice	Enelow, H. G.
	Eckstein, W. G.	Erb, Newman
Draper, Mrs. Wm. P.	Eddy, Geo. Simpson	Erbsloh, R.
Drayton, J. Coleman	Eddy, Wm. H.	Erdmann, Albert J.
Drexel, Mrs. John R.	Eder, James M.	Erdmann, Martin
Drummond,	Lidely bullion Ivi.	Eldinami, istarum
	Edgar	Erdmann William
	Edgar,	Erdmann, William
Isaac Wyman	Mrs. Herman LeRoy	Erdwurm,
Isaac Wyman DuBois, Arthur	Mrs. Herman LeRoy Edgar, Mrs. J. Clifton	Erdwurm, Frank, M.D.
Isaac Wyman DuBois, Arthur DuBois, Eugene	Mrs. Herman LeRoy Edgar, Mrs. J. Clifton Edgell, Mrs. George S.	Erdwurm, Frank, M.D. Erlanger, Abraham
Isaac Wyman DuBois, Arthur DuBois, Eugene DuBois,	Mrs. Herman LeRoy Edgar, Mrs. J. Clifton	Erdwurm, Frank, M.D.

		*39
Erstein, Benedict	Fish, Wm. L.	Fowler, Mrs. R. L., Jr.
Esberg, Henry	Fisher, L. G.	Fowler, Mrs. Thomas
Estey, Mrs. A. R.	Fisher, Miss Ruth B.	Powell
Ethical Culture School	Fisk, Pliny	Fox, Miss Alice
Ettlinger, Louis	Fiske, Alex. P.	Bleecker
Evans, Dr. Samuel M.	Fitch, Ezra H.	Fox, Hugh F.
Ewing, B. M.	Fitzgerald, Mrs. Louis	Fox, Mortimer J.
Ewing, Charles	Fitzpatrick, Frank J. E.	
Exton, H. E.	Flagler,	Fox, William
•		Frank, Edgar E.
Fabbri, Ernesto G.	Flagler, John H.	Frank, Joseph
Fabricius, Dr. J. R.	Flannery,	Frank, Joseph S.
Fahnestock, Harris	Mrs. Joseph A.	
Fairbank, Wallace	Fleischer, Nathan	Frankel, D. J.
Fairchild, Charles S.	Fleitmann, Fred. T.	Frankel, Herbert
Fairchild, Mrs. Chas. S.		Frankenberg, Henry E.
Fairchild, S. W.	Fleming, Henry S.	Frankenberg,
Falk, Mrs. G.	Fleming, Matthew C.	Werner V.
Falk, Kaufman George	Fleming, Stephen B.	Frankenstein, Edwin
Farish, John B.	Flesh, William J.	Frankfeld, B.
Farnam, Thomas W.	Fletcher, Henry	Frankfield, A.
Farnsworth, William	Flexner, Mrs. Simon	Frankfort, M.
Farrel, Mrs. Franklin	Flint, Chas. R.	Franklin, George S.
Farrell, James C.	Floyd, William	Fraser, George C.
Fatman, Morris	Floyd, William T.	Fraser, Miss J. K.
Fatman, S. A.	Floyd-Jones,	Fraser, Miss S. Grace
Fay, Charles J.		Frazier, W. W.
Fay, Dudley B.	Fohr, Franz	Fredrick, Mrs. Leopold
Fearing, George R.	Follett, Richard E.	Freeland, Arthur G.
Feder, Mrs. Joel	Folsom, H. Lloyd	Frelinghuysen,
Ferguson, Alfred L.	Foot, Miss Katharine	Frederick
Ferguson, Miss Eleanor		French, Daniel C.
Ferguson,	Foran, George J.	French, Mrs. Daniel C.
	Ford, Franklin	
Ferguson, Walton	Fordyce, Dr. John A.	Frenkel, Emil
Ferguson, William C.	Forni,	Frese, Fred
Festetics, Countess E.	Madame F. G. Fara	Frew, Walter E.
Feustman, L. P.	Forsch, Mrs. F.	
Field, Wm. B. Osgood	Forsyth, Robert	Friedlander, Victor
Field, Win. D. Osgood		Friedlander, Wm. S.
Mrs. Wm. B. Osgood	Foster Edward W	Fries, Miss Emilie
	Foster, Harold A.,	Fries, Harold H.
Finch, Edward B., M.D.		Frissell, A. S.
	Foster, Macomb G.	Frissell, Miss Leila S.
Firuski, Louis L.		Frothingham,
Fischer,	Foster, Mortimer B.	Major John W.
Hermann, M.D.		Frothingham, Mrs.
Fischer, T. Tasso	Fowler, A. A.	Randolph

Frye, Jed
Fuld, Felix
Fuld, Sol.
Fulle, John H.
Fuller, Mrs. Eugene
Fulton, Robert Edison

Gade, Wm. H. F. Gaillard, Mrs. Wm. D. Gaines, Mrs.

Furman V.
Galban, Eugenio
Gallatin, Albert
Gallatin, Mrs. Albert
Gallatin, Goelet
Gallaway, Mrs. R. M.
Gambier, E. V.
Gardin, John E.
Gardiner, Robert A.
Garrard,

Miss Margaret H. Goldsmith, Garrett, John W. Garrett, Laura B. Garrett, Robert Gartland, George E. Garver, John A. Gaston, Wm. G. Gates, Mrs. J. W. Gautier, Dudley G. Gawtry, H. E. Gayley, Florence Gayley, Mrs. Gardiner Gaylord, Irving C. Geer, Robert C. Geer, Walter Gelshenen, William H. Gerrish, Frank Scott Gerry, Robert L. Gertzon, Sven, D.D.S. Gibb, Dr. W. Travis Gibson,

Miss Florence Wier Gray, Arthur R.

Gilbert, Mrs. C. Gray, Henry G.

Gilbert, Clinton Gray, Mrs. H. Winth

Gilbert, Miss Ellen G. Graydon,

Gilbreth, Frank B. Mrs. Clender

Gillespie, Robert McM. Greeff, Bernhard, Jr.

Gillet, Lorenzo M.
Gillies, Edwin J.
Gilroy, Thomas F., Jr.
Gips, Walter Fuld
Gladding, J. R.
Glazier, Henry S.
Gleason, Henry
Glenn, John M.
Goadby, W. H.
Goddard.

Mrs. Frederic N.
Goddard, Mrs. Morrill
Godfrey, Mrs. E. D.
Goffe, Dr. J. Riddle
Goldman, Albert
Goldman, Julius
Goldman, Samuel P.
Goldsmith, Frederick
Goldsmith, Mrs. H. B.
Goldsmith, James A.
Goldsmith,

Mrs. Maurice Goldstone, Abraham L. Goldwasser, I. Edwin Goldzier, Morris Goodfriend, Jacob Goodfriend, Meyer Goodhue, Chas. E. Goodwin, Walter L. Gottgetreu, Wm. Gottheil, Leon Gottheil, Mrs. Paul Gotthold, Arthur F. Gould, Charles A. Gould, Edwin Gould, Horace S. Grace, Mrs. L. A. Graham, Miss M. D. Grasselli, C. A. Gratz, Anderson Graves, Henry, Jr. Gray, Henry G.

Gray, Mrs. H. Winthrop Hahlo, Arthur H. Graydon, Haines, Charles I.

Mrs. Clendenen Hale, Thomas

Greeff, Ernest F. Green, Fred W. Greenberger, Albert Greene, Miss

Augusta Borland Greene, G. S., Jr. Greenebaum, Fred H. Greenhut, Benedict J. Greening, Alfred C. Greenwood,

Miss Eliza R. Greer, Charles Greer, Rt. Rev.

David H.
Greer, Mrs. David H.
Greer, Louis M.
Griffin, W. V.
Grinnell, E. Morgan
Griswold, Mrs. Chester
Gross, Moritz
Grossmann,

Mrs. Edward A. Gude, O. J. Guernsey,

Henry William Guggenheim, Simon Guggenheim, Mrs. Simon

Guggenheim, William Guinness,

Mrs. Benjamin Guinzburg, A. M. Guinzburg, Mrs. Victor Guiteras, Ramon Guiterman, Percy L. Guiterman, Rudolph Gurnee, Mrs. Walter S. Gushee, R. A.

Haas, Kalman
Hage, Daniel S.
Hague, Miss Marian
Hahlo, Arthur H.
Haines, Charles D.
Hale, Thomas
Hall, Henry B.

Guye, C. H.

Hall, Henry J. S.	Hare, J. Montgomery	Heck, George C.
Hall, Henry Walker	Harkness, David W.	Heckscher, Mrs. August
Hall, Mrs. John H.	Harmon, Mrs. Clifford	Heckscher, Mrs. G.
Halls, William, Jr.	Harmon,	Maurice
_		Hedges, Job E.
Halsey,		
	Harriman, E. Roland	Heide, Henry
Halsey, Robert H.	Harrington, Mary E.	Heide, Henry, Jr.
Halsey, R. T. H.	Harris, Abraham	Heide, Herman L.
Hamann, Wm. A.	Harris, Alfred	Heilner, Julius
Hamburger, L.	Harris, Chas. C.	Heimann, Julius
Hamburger, Samuel B.	Harris, Geo. A.	Heinsheimer, Alfred M.
Hamerschlag, Royal P.	Harris, Richard	Held, Max
Hamersley,	Harris, Mrs. Victor	Heller, Abraham A.
	Harris, William H.	Heller, Samuel
Hamilton, Alexander	Harrison, Archibald	Heller, William H.
Hamilton, Miss E. S.	Harrison, L.	Hellman, Edgar A.
Hamilton,	Hartshorn, Stewart	Helme, Mrs. Geo. A.
Mrs. W. Pierson	Haskell, J. Amory	Helmuth,
Hamlen,	Haskin, Dr. W. H.	John Lockman
Dr. George Dempster		Hencken, Hancke
	<u>-</u>	
Hammerslough,	Hastings, Thomas	Henderson, John B., Jr.
	Hastings, Mrs. Thomas	Hendricks, Mrs. Edgar
Hammerslough, Samuel		Hendricks, Harmon W.
Hammill, C. W.	Mrs. Harold Ames	Henry, Miss H. Maud
Hammond,	Hathaway, Charles	Henry, James
Mrs. John Hays	Havemeyer, F. C.	Henry, Nelson H.
Hammond,	Havemeyer, H. O.	Henry, Philip W.
	Havemeyer, J. C.	Herbert, Victor
		Hering, Henry
Hammond, Ogden H.	Havemeyer, John F.	
Hanauer, Jerome J.	Havemeyer, T. A.	Hernsheim, Joseph
Hance, John A.	Haven, Mrs. G. G.	Hernstadt, William L.
Hand, Joseph C.	Haven, J. Woodward	Heroy, Mrs. James H.
Handy, Parker D.	Haviland, Paul B.	Heroy, W. W.
Hanna, L. C.	Hawk, William S.	Herreshoff,
Hansen, Ferdinand	Hawk,	J. B. Francis
Harbeck, Mrs. J. R.	Mrs. William Samuel	Herrick, Harold
Hard, De Courcy L.	Hawkes, Eva	Herrick, Mrs. W. W.
Hardenbergh, Mrs. T.E.		Herrman, Mrs. Henry S.
Hardenbergh,		Herrmann, Charles E.
	Hawkins, Eugene D.	Herrmann, F.
Harding, Eugene C.	Hawley, Mrs. Henry E.	Herter, Albert
Hardon,	Hawley, Samuel B.	Herty, Chas. H.
	Hay, Clarence L.	Herz, Fred. W.
Hardtmayer, Dr. H. R.		Herzig, Mrs. Joseph
	Havnes, W. der.	
Hardy Charles J	Haynes, W. deF.	
Hardy, Charles J.	Hayward, J. B.	Herzog, Max
Hardy,		

Hess, Simon Hoffman, F. B. Hetzler, Theo. Hewitt, Mrs. Charles B. Hoffmann, Bernhard Hewitt, Mrs. C. R. Hoggson, W. J. Hewitt, Peter Cooper Hewlett, Walter Jones Heydt, Herman A. Heymann, Albert Holland, Arthur L. Heymann, Seymour E. Hicks, John M. W. Hollenback, Higbie, James S. Higgins, Arthur G. Higgins, R. H. Hollister. Highet, Frank B. Hilder, Moritz Hillard, Henry R. Hills, Dr. Alfred K. Hilyard, George D. Holt, R. S. Hinchman, Walter Hinckley, Mrs. Samuel N. Holzman, Elkan Homan, B. H. Hine, Francis L. Hine, Lyman N. Hine, Thomas A. Hines, Walker D. Hird, Samuel Hooker, Hirsch, Chas. S. Hirsch, Mrs. H. Hoole, C. H. Hirsch, Morris J. Hopkins, Hirschberg, M. H. Miss Augusta D. Hirschhorn, Mrs. Charles Hopkinson, Ernest Hirschhorn, Fred Hirschland, F. H. Hoppin, Hoadley, Frank E. Hoagland. Hopwood.

Mrs. Joseph C. Hochschild, Berthold Hodenpyl, Anton G. Hodges, Geo. W. Hodson, Hoe, Alfred G.

Hoe, Geo. E. Hoe, Richard M. Hoe, Mrs. Robert Hoffman, Charles W. Hoffman, Harry L. Hogan, Mrs. Jefferson Holbrook, Mrs. Edward Hoyt, Gerald L. Holden, Dean Hawley Holden, Mrs. Edwin B.

Miss Amelia B. Hollis, Dr. Austin W.

Hollister, George Clay Hollister, Granger A. Holt, L. Emmett, M.D.

Holter, Mrs. E. O. Holzmaister, L. V.

Homans, Howard P. Homer, Francis T. Hooker, Mrs. Elon H.

Hopkins, Emma B. Hoppin, G. Beekman

Mrs. W. W., Jr.

Horr, A. R. Horr, L. Wm. Hotchkiss, Henry D. Houghton, Clement S.

Mrs. Halstead Pell House, Edward M. House, Frederick B. Housman, Clarence J. Howard, Fredk. T. Howell, M. D. Howell, Thomas A.

Howells, Mrs. John Howes, Mrs. Reuben Hoyt, Elizabeth S. Hoyt, Francis S. Hoyt, Geo. S. Hoyt, Miss Gertrude L. Hoyt,

Miss Virginia Scott Hubbard.

Ernest V., M.D. Hubbard, Louis B. Huber, Mrs. J. M. Frank C., M.D. Huidekoper, Edgar Humphrey, Martha K. Humphrey.

> Rev. Wm. Brewster Humphreys, Frederic E. Humphreys, Frederic H. Humphreys, Geo. H. Hunter, George Leland Hunter, Stephen C. Huntington, F. J. Huntington,

Mrs. Robt. P. Huntington, Mrs. R. P. Mrs. Ransom S. Hüpfel, Adolph G. Hüpfel, Chris. G. Hüpfel, J. Chr. G.

Hurd, Dr. Lee M. Hurlbut, Miss

Margaret C. Hussey, William H. Husted, Miss

M. Katharine Husted, Seymour L., Jr. Mrs. Everard B. Hutchins, A. S. Hutchins.

> Mrs. R. G., Jr. Hutchinson, Cary T. Hutchison,

Miller Reese, Ph.D. Huyler, C. D. Huyler, David Huyler, Frank DeK. Hyatt, A. M. Hyde, A. Fillmore

Hyde, Arthur S. Hyde, Mrs. Augustus I.	Jeancon, J. A. Jekyll, Mrs. Arthur B. Jenkins, Alfred W.	Kathan, Reid A. Kaufman, Fred Kaufmann, B.
Hyde, Mrs. Clarence M.	Jennings, Miss A. B.	Kaufmann, H. M. Kaufmann, Julius
Hyde, E. Francis Hyde,	Percy Hall Jennings, Mrs. Philip B.	•
	Jennings, Robt. E. Jennings, Walter	Keech, Mrs. Frank Browne
	Jephson, George S. Jermain, Miss M. C.	Keeler, Mrs. Charles Bradley
Ingalls, Fay Ingersoll, Robt. H.	Jewett, George L.	Keen, Barton L.
Ingraham, Geo. L. Ingraham, Mrs. George	Jobe, Miss Mary L.	Keith, Henry M. Keith, Minor C.
Inman, John H. Innis, Wm. R. Isolin, C. Olivar	Johnson, Alfred J. Johnson, Mrs. Bradish	Keith, Mrs. Minor C. Kelchner, William W.
Iselin, C. Oliver Iselin, Miss Georgine	Johnson, Guy B. Johnson, Mrs. Owen	Keller, S. Kellers, Fred. T.
Iselin, Lewis Iselin, Mrs. William E.	Johnson, Thos. W. Johnston, J. Herbert	Kelley, Augustus W. Kellogg, L. D.
Iselin, Wm. E. Isenstein, Otto Isham, William B.	Johnston, Mrs. J. Herbert	Kellogg, Mrs. Morris W. Kemmerer, M. S.
Isham, Mrs. Wm. B.	Jones, Mrs. Adam Leroy Jones, A. H.	Kemp, Mrs. Edward Kemp, Prof. James F.
Jackson, Mrs. C. D. Jackson,	Jones, Mrs. Cadwalader Jones, De Witt Clinton	~ '
•	Jones, H. Bolton Jordan, Richard, M.D.	Kennedy, Dr. Harris Kennedy, Mrs. John S.
Frederic W. Jackson, Jas. W.		Kennerley, Helen M. Kennerly, M. M.
Jackson, Mrs. Percy Jackson, Samuel	Joseph, Mrs. John A., Jr.	Kent, Edwin C.
Jacobus, John S. Jaffray, Robert	Josephthal, Louis M. Judson, Mrs. Albert L.	Kern, William M. Kerr, E. Coe
James, Ellerton James, Henry	Judson, Henry I. Jungbluth, Karl	Kerr, John B. Kerr, John Clapperton
James, Robert C. James, Mrs. Walter B.	Kahle, Mrs. Julie	Kerr, Walter Kerrison, Dr. Philip D.
Janeway, Henry H., M.D.	Kahn, Arthur J. Kahn, Otto H.	Keuffel, W. G. Keyes, Dr. E. L.
Jansen, Ed. Jaretzki, Mrs. Alfred	Kahn, Dr. Robert Johnstone	Keyser, Mrs. Samuel Kidder, Edward H.
Jarvie, James N. Jarvis, Mrs. S. M.	Kahrs, J. Henry Kane, Mrs. De Lancey	Kilborne, Mrs. R. S. Killeen, Edward V.
Jasper, J. H. Jay, Mrs. Augustus	Karsch, Oswald J. Kassing, Edwin S.	Kilner, S. E. Kimball, Alfred R.

Kimbel, Anthony	Kops, Mrs. Max	Lapham, Lewis H.
Kimbel, Henry	Kosmak, Geo. W., M.D.	
King, Mrs. Edward	Kovacs, Dr. Richard	Larkin, Mrs. James S.
King, Ellen	Kremer,	la Rosa, Carlos, Jr.
King, Miss Isabella C.		Lasker, Miss Etta
King, James Gore	Kruse, Edward H.	Lathers, Agnes
Kingsbury, N. C.	Kudlich, H. C.	Lathrop, Alanson P.
Kingsford, Daniel P.	Kuhirt, Geo. A.	Lauder, Mrs. Geo., Jr.
Kingsford, Miss	Kuhn, Arthur K.	Lauer, Edgar J.
	Kuhn, August	Laughlin, James, Jr.
Kingsland,	Kuhn, Edward	Law, Frank E.
Mrs. Wm. M.		Lawrence, Mrs.
Kingsley, W. M.	Kuhn, Mrs. Walt	Arthur W
Kinney, Morris	Kühne, Mrs.	Lawrence, Emlen N.
Kinney, Warren	Frederick J.	
Kip, Mrs. Garrett B.	Kursheedt, Roland S.	Miss Margaret
Kip, W. Ruloff	Kuser,	Lawrence, Townsend
Kirchberger, M.	,	Lawrence, W. V.
Kirkpatrick,	Kuser, John Dryden	Lawton, William W.
	Kuttroff, Adolf	Lea, Charles M.
Kissam, Mrs. Maude	Kuttroff, Fredk.	Leach, Henry Goddard
Kissel, Mrs. G. E.	reduction, reduction.	Leale, Charles A., M.D.
Kissel, W. Thorn	Lacombe, E. Henry	Leary, Mrs. George
Klee, Sigmund	La Dow, Stanley V.	Leavitt,
Klein, Leo M.	Lagai, Dr. G.	Mrs. Charles W
Klenke, William H.	Lage, Frederico	Ledyard,
Klipstein, E. C.	Lagowitz, Miss H. L.	Mrs. Lewis Cass
Knapp, Edward J.	Lamarche,	Lee, Mrs. Arthur
Knapp, Mrs. H. K.	-	Lee, Charles N.
Knapp, Joseph P.	Lambden, John F.	Lee, Frederic S.
Knowlton Eben R	Lambelet, Mrs. H.	Lee, Mrs. Frederic S.
Knowlton, Eben B.	Lambert, Adrian V. S.	Lee, Ivy L.
Koch, Mrs. R. S.	Lambert, Samuel W.	Lee, J. W., Jr.,
Koch, Wilhelm	Lamont, T. W.	Lee, Dr. Marguerite T
Koch, William T.	Landon, Francis G.	Leeds, Mrs. Warner M.
Koenig, Otto	Landon, Henry Hutton	Le Fevre, C. R.
Kohler, Miss M. E.	Lane, Edward V. Z.	Lefferts, Marshall C.
Kohlman, Chas.	Lane, James Warren	Lefferts, Wm. H.
Kohlman, Mrs. M. L.	Lane, Wolcott G.	Legg, George
Kohn, S. H.	Lange, Gustav, Jr.	Lehmaier, James M.
Kohn, Mrs. Walter T.	Langeloth, Mrs. Jacob	Lehmaier,
Kohns, Lee	Langenberger-Jones,	Mrs. Louis A
Kohnstamm, Emil V.		Lehman, Arthur
Koles, Henry M., M.D.		Lehman, Irving
Konta, Alexander	Langton, John	Lehman, Isidore H.
Koplik, Isador	Lanier, Reginald B.	Lehman, Meyer H.
Kops, Daniel	Lapham, Mrs. John J.	Leigh, R. Walter

Leland, Mrs. Amory LeMaistre, F. J. Lemmon, Robert S. Lemp, Louis Leon, Henry Leonori, Charles L. Le Roy, Mrs. E. A. LeRoy, Dr. Louis C. Leslie, J. C. Lester, A. Edward Lester, Maxwell Leupp, Wm. H. Leventritt, David Levi, Albert A. Levi, Emil S. Levi, Louis Levine, Edmund J. Levison, Benno Levor, G. Levy, Edgar A. Levy, Ephraim B. Levy, Louis S. Lewis, Alphons Lewis, Mrs. August Lewis, Mrs. Eugene Lewis, Frederic Elliott Lewis, Montgomery H. Lewis, Richard V. Lewis, Robert Parker Lewis, Wm. J., M.D. Lewisohn, Miss Irene Lewisohn, Sam A. Lewisohn, Mrs. Walter Lewkowitz, Gustav Lexow, Mrs. Allan Lichtenstein, Melvin Lichtenstein, Oscar R. Lichtenstein, Paul Lichtenstein, Mrs. Paul Lieb, J. W. Lieber, Dr. Hugo Lilienthal, Albert M. Lilienthal, Jos. L. Lilly, Mrs. Henry Limburg, Herbert R. Lindenmeyr, Fritz Lindheim, Norvin R.

Lindsay, C. Seton Lindsey, Edward Lipper, Arthur Lippincott, Charles S. Lisman, Frederick J. Littauer, Lucius N. Littell, Mrs. Emlen Livermore, Mrs. John R. Lummis. Livingston, Miss A. P. Livingston. Lloyd, Francis G. Lockwood, Loeb, C. M. Loeb, J. Loeb, Mrs. Morris Loewenstein, Loewenthal, Mrs. Julius Loewi, Hugo V. Loewy, Benno Logan, Frank J. Long, Louis Loring, D. A. Loring, Daniel Alden, Jr. Macfadden, Robyn Lorsch, Henry Louderback, Arthur E. Louis, Chas. H. Love, E. G. Lovett, R. S. Low, Ethelbert I. Low, Mrs. Seth Low, William Lowe, Houston

Lowell. Miss Carlotta Russell Mainzer, Herbert R. Lowenstein, Oscar Lowndes, M. E. Lowrey, Mrs. G. C. W. Ludington, Mrs. Ludington, Mary L. Ludlow, Mrs. Banyer

Ludlow, Mrs. E. L.

Ludlow, James B. Ludlum, C. A. Lueder, A. Lueders, George Lufkin, E. C. Luke, Adam K. Luke, David L. Luke, John G.

Benjamin Rush Lunger, John B. Mrs. Charles L. Luquer, Lea Shippen Lusk, Miss Anna H. Lüttgen, Walther Dr. George Roe Lybrand, William M. Lyman, Henry D. Lyman, Theodore Lynch, Mrs. John H. Lyon, Ralph Miss Virginia S. Lyons, Howard J.

Maas, Gustavus Maas, Milton A. Mabon, J. B. MacDougall, Geo. R. MacFadden, Carl K. MacIver, David Randall

Mack, Arthur J. Mack, Fred. A. Mack, M. Mackenzie, Mrs. **Hugh Ross** Mackey, Oscar T. Gilman, Jr. MacManus, Edward A. Mager, F. Robert Main, Frank H. Mainzer, Robert H. Mallett, Percy S. Mallory, Charles Manges, Dr. Morris

Charles H. Manierre, Charles E. Mann, W. D. Mansfield, Howard Mantle, J. G. C.

Mapes, Eugene E.	McAllister,	McRoberts, Samuel
Marburg, William	,	McWilliams, Howard
Marbury,	McAlpin, Dr. D. H.	Mead, Charles N.
	McAlpin, George L.	Mead, Herbert, Jr.
Marcosson, Isaac F.		Means, Philip Ainsworth
Marcus, Samuel	McBride, Thomas J.	Meeker, Henry E.
Marcuse, Alexander J.	McCagg, Louis B.	Meeks, Howard V.
Markle, John	McCall, John C.	Mehl, Henry
Markle, Mrs. John	McCarthy, J. M.	Mein, Wm. Wallace
Markoe, Dr. J. W.	McCourt, James	Meinhard, Morton H.
Marks, Maurice	McCrea, W. S.	Melcher, John S.
Marston, Edgar L.	McCulloh, Charles S.	Mellen, Chase
Marston, Edwin S.	McCurdy, Robert H.	Menken, S. Stanwood
,	McCutchen, Chas. W.	Merrick, Bertha V.
Martin, Bradley Martin, Robert W.	McDonald, Wm.	Merrihew, George W.
	McElheny, Victor K., Jr.	Merrill, Edwin G.
Martin, Walton, M.D. Martin, W. M.	McEwen, James R. R.	Merrill, Mrs. Payson
,	McGee, Wm. H.	Merritt, Dr. Arthur
Marvin,	McGinley, J. R.	Hastings
Marwick, James	McGregor, Robert	Metcalf, Stephen O.
Masbach, Robert J.	McIlhenny, E. A.	Meyer, Mrs. Eugene, Jr.
Masius, Max L.	McIntyre, John G.	Meyer, Felix
Mason, Miss Fanny P.	McKeever, J. Lawrence	Meyer, Geo. A.
Mason,	McKelvey, Charles W.	Meyer, Harry J.
Mrs. George Grant		Meyer, Max
Massey, Mrs. George	McKenney, Henry P.	Meyer, Robert B.
Massey,	McKernon, Dr. Jas. F.	Mezes, S. E.
	McKim, Mrs. Haslett	Milbank, Albert G.
Masters, Miss Eliza B.	McKim, John A.	Milhau, Louis J. de
Masters, Sarah W.	McKim, Le Roy	Millard, William J.
Mastin, Mrs. J. Edward	McLane,	Miller, Mrs. Charles E.
Mather, Samuel		Miller, Clifford L.
Mathesius, Fredk., Jr.	McLane, Miss Sophie	Miller, C. R.
Matheson, Mrs. W. J.		Miller, J. Doull
Matheson, Wm. J.	McLane, Thomas S.	Miller, Simon
Mathews, Dr. Frank S.	McLean, Miss Ethel L.	
Mathewson, Charles E.	McLean,	Millett, Stephen C.
May, George O.		Mills, Dr. Adelaide
Mayor, Dr. Alfred G.	McMahon,	Mills, Frederic C.
Mayer, M. R.	Rev. Joseph H.	
Mayer, Nelson B.	McManus, Edward F.	Milne, George D.
Mayer, R. A. de Lima	McMillan, Francis W.	Miner, Edward G.
Mayer, Theresa	McMillan, W. N.	Mitchell, Miss Addison
Mayo, Mrs. George H.	McNair, William	Mitchell, A. M.
McAdoo, William	McNall, Robert H.	Mitchell, C. E.
McAleenan Joseph A	McNaugher, David W.	
McAleenan, Joseph A.	McNeir, George	Mrs. John Murray

Mitchell, Wesley C. Mitchell, Mrs. William Mitchell, Wm. Mitten, T. E. Moffatt,

Moffitt, Samuel Moller, William G. Molleson, George A. Mommoer, Ewald Monae-Lessèr, Dr. A. Monae-Lesser, Mozart Monroe, Robert Grier Montague, C. D. Montgomery, Carleton Montgomery, Charles S. Müller, Carl Montross, N. E. Moore,

Major Barrington Mullins, W. H. Moore, Casimir de R. Moore.

Mrs. Casimir de R. Munson, C. W. Moore, Russell W. Moore, Mrs. W. D. Moore, William A. Moorhead, Horace R. Moos, Louis H. Moot, Adelbert Morgan, Miss Anne Morgan, E. D. Morgan, W. Forbes, Jr. Morgan, Wm. Fellowes Morgenthau, Henry Morgenthau,

Mrs. Henry Morris, Ira Nelson Morris, Mrs. John A. Morris, Louis M. Morris, Mrs. L. R. Morris, Stuyvesant F. Morris.

Morrison, A. Cressy Morrison, Edward A. Morton, Mrs. Paul Morton, Quincy L. Mosenthal, Philip J.

Moses, Mrs. E. Moses, Mrs. Henry L. Moses, Moss Ferris Mosle, A. Henry Mosle, Max. A. Mrs. R. Burnham Mosman, Philip A.

Moss, Augustus L. Motley, Jas. M. Mott, Henry C. Mott, Mrs. J. L. Mott, Mrs. John B. Mott, Miss Marian Mowry, Eugene C. Muendel, Christina Mulford, Edwin H. Müller, Mrs. Carl

Muller-Schall, Fred. Mundy, Floyd W. Munsey, Frank A.

Murphey, Mrs. Jenny

Murphy, Franklin Murphy, G. M.-P. Murphy, Wm. C. Murray, F. W., M.D. Murray, J. Archibald Murray, J. Irvin, Jr. Murtha, Thomas F.

Myers, L. Myers, Theo. W. Myers, William S.

Nagle, James Franklin Nash, William A. Nathan, Harmon H. Naumburg, Aaron Necarsulmer, Henry Nesmith, James Theodore Wilson Nessler, H. D. Neuburger, David Neustadt, Mrs. S. New, Wm. Wesley Newberry, Truman H. Newbold, Fredc. R.

Newburger,

Mrs. Lester M. Newbury, Andrew J. Newcomb,

Mrs. James E. Newcomb, James G. Newhall, Henry B., Jr. Newton, Mrs. Francis Nichols, John W. T. Nicholson, John E. Nickerson, Hoffman Nicoll, Benjamin Nies,

Rev. James B., Ph.D. Nolker, Robert E. Noonan, W. T. Norman, Mrs. Bradford Norrie.

Mrs. E. L. Breese Norris, Beverly Arden North, George B. Norton, Mrs. N. R. Norton, W. P. Stafford Notman, George Noyes, H. F. Nugent, Frank L.

Nute, Mrs. John W.

Oastler, Dr. F. R. Oberdorfer, George Obermayer, Charles J. Obermeyer, Jos. Obrig, Mrs. Adolph Ochs, Adolph S. Offerman, John Ogden, David B. Ogden, J. R. Ogle, Mrs. Ponsonby Olcott, Dudley Olcott, E. E. Olin, S. H. Ollesheimer, Henry

Ollive, Thos. S. Olney, Elam Ward Olyphant, Robert O'Neill, Edwin F.

Opdycke, Mrs. Emerson

Opdycke, Mrs. Leonard E. Oppenheim, J. Oppenheimer, Dr. Henry S. O'Reilly, John B. Orr, William C. Orvis, Edwin W. Osborn, Mrs.	Parker, A. W. Parker, Junius Parker, Robert A. Parker, Winthrop Parks, Elton Parodi, Dr. Teofilo Parsons, Chas. W. Parsons, Edgerton Parsons, Edwin	Perry, Mrs. William A. Peters, Edward McClure Peterson, Frederick, M.D. Peterson, Mrs. Wilson Petrasch, Carl Schurz Peyton, William C. Peyton, Mrs. William C.
	Parsons, Frank H.	Pfeiffer, Curt G.
Osterholt, Ehler Otis, Mrs. George L.	Parsons, Miss Gertrude	Pfender, W. S. Phelps, Mrs. G. M.
Ottinger, Marx	Parsons, Herbert	Philipp, M. Bernard
Oudin, Lucien	Parsons, Wm. Barclay	Philipp, Philip B.
Overton, Frank	Paskus, Benj. G.	Phillips,
D 11 1	Paton, David	Mrs. Alfred Noroton
Paddock,	Paton, Dr. Stewart	Phillips, John M.
	Patterson, Benjamin	Philpot,
Page, Edward D.	Patterson, Frederick H.	Mrs. Romaine A.
Page, F. Palmer Page, J. Seaver	Patterson, Henry S.,	Phipps, Henry Pickhardt, Carl
Page, J. Seaver Page, Wm. H.	Patterson,	Piel, Gottfried
Pagenstecher, A.		Pierrepont, Seth Low
Pagenstecher, A., Jr.	Patterson, Stuart H.	Pierson, Mrs. C. W.
Pagenstecher, G.	Patterson, T. H. Hoge	Pierson, D. H.
Paine, A. G., Jr.	Paul, John J.	Pierson, J. Fred
Paine, H. S.	Pavenstedt, E.	Pinchot, Mrs. Gifford
Painter, Dr. H. McM.	Peabody, Helen A.	Pinkerton, Allan
Palmenberg, Emil T.	Peabody, Stephen	Piquet, Lily S.
Palmer, Edgar	Pearson, Mrs. Frederick	Pitman, Gen. John,
Palmer, Howard	Peck, Charles E.	U.S.A.
Palmer, John	Peck, Charles H.	Pitney, John O. H.
Palmer, John Stanton	Peck, L. O.	Place, Ira A.
Palmer, Laura A.	Peck, Morton R., M.D.	•
Palmer, N. F.	Pedersen, Dr. James	Platt, Mrs. Frank H.
Palmer, William J.	Pegram,	Platt, Henry B.
Palmieri, F. Louis		Platzek, M. Warley
Pappenheimer,	Pell, Mrs. Stephen	Plaut, Edward
Alvin M., M.D.		Plaut, Joseph
Pardee, Ario Paris, Jan W.	Pennington, Aaron S. Perine, William D. N.	Polhomus Miss R A
Pariser, Robert		Polhemus, Miss R. A. Polk, Mrs. William M.
Parish, Mrs. Henry	,	Pollak, Bernard E.
Parish School	Perkins, George W.	Pollock, George E.
	Perkins, G. Lawrence	Pomeroy, D. E.
Church of St. Mat-		Pomroy,
thew	Perry, O. B.	Mrs. Henry K.

Reed, Henry B. Pond, Miss Florence L. Proctor, Thomas R. Poole, Mrs. Ernest Proctor, Wm. Ross Reed, Wm. E. Pulitzer, Mrs. Joseph Rees, Mrs. R. Llewelyn Poor, Elwyn W. Poor, Mrs. Horace F. Pulitzer, Ralph Regensburg. Pulsifer, N. T. Poor, Roger M. Mrs. Jerome Poor, Ruel W. Pulsifer, Mrs. N. T. Reichenbach, L. Pope, G. D. Purdy, Wm. Macneven Reichenberger, Mrs. Pope, Mrs. James E. Putnam, Mrs. Albert E. Victor M. Pope, Sylvester Putnam, H. S. Reid, Mrs. Daniel Grav Putney, Miss Eva C. Popper, A. W. Reid, Mrs. Ogden Mills Popper, Wm. C. Reid, Wallace Pyle, D. H. McAlpin Porter, Alexander J. Pyle, James McAlpin Reiland, Rev. Karl Porter, Gen. Horace Pyne, Mrs. M. Taylor Reincke, Hans Reis, Fred. L. Porter, Mrs. Rachel Lenox Quigg, Lemuel E. Remick, W. H. Porter, William L. Quincy, C. F. Remsen, Charles Porter, Wm. H. Quinlan, Wm. J., Jr. Rennult, William Quinn, John Post, Abram S. Renwick. Quinn, Martin J. **Edward Brevoort** Post, Carroll J., Jr. Post, Mrs. Charles A. Quintard, Dr. Edward Revnal, Mrs. E. S. Post, Miss Sarah M. Reynolds, John D. Rabe, Rudolph F., M.D. Rhoades, Miss Nina Post, Sylvester Potter, Miss Blanche Rafferty, Mrs. Ewing L. Rice, Philip B. Rahlson, K. J. Potter, Mrs. Edward Rich, M. P. Raht, Chas. Richard, E. A. Potter, Frederick Potter, James Brown Rainsford, Mrs. W. S. Richard, Miss Elvine Potter. Raisler, Samuel Richard, Oscar L. Dr. Mary Goddard Ramsay, D. S. Richards, Eben Potter, Orlando B. Ramsperger, H. G. Richardson, Potter, R. Burnside Randolph, Coleman Mrs. C. Tiffany Pottier, Auguste Ruffin Randolph, Edmund D. Richardson, Potts, William B. Ranger, Stanley G. Mrs. Enos S. T. Richardson, Sinclair Powers, Ransom, Wm. L. Cornelius Van Vorst Rathborne, Richard C. Richter, Max Pratt, Dallas B. Ricker, Mrs. Eleanor A. Rau, Henry M. Pratt, Mrs. George D. Rauch, William Riddle, Mrs. Theodate Pope

Pratt, Mrs. Herbert Rawle, Henry Pratt, John T. Rawson, Mrs. Annie D. Ridgway, Mrs. Robert Pratt, Samuel Raymond, H. E. Prendergast, James M. Raymond, Irving E. Prentiss, Henrietta Raynor, Forrest Prescott, Amos L. Read, Geo. R. Preston, Veryl Read, Mrs. William A. Price, David Rebman, Francis J. Priddy, Lawrence Redmond, Miss Emily Procter, William Redmond,

Proctor, Mrs. Chas. E.

Rippenbein, Morris Mrs. Henry S. Robb, Wm. J.

Riegel, Louis

Riem, Simon R.

Riggs, George C. Riglander, Mrs. M. M.

Riker, Wm. J. Ripley, Henry B. H.

Riesenberg, Adolph

Robbins, Mrs. Helen C.	Roosevelt, W. Emlen	Sachs, Harry
Robert, Samuel	Root, Elihu	Sachs, Julius
Roberts, G. Theo.	Rose, Mrs. A. Sumner	Sachs, Walter E.
Roberts, Miss Mary M.		Sackett, Miss G. T.
Robertson, Albert	Rose, Mrs. Oscar	Sage, Dean
Robertson, Miss J.	Rosen, Mrs. Felix T.	Sage, Mrs. Henry W.
Robertson, R. H.	Rosenbaum, Harold A.	St. John, Mrs. Jesse
Robinson, Beverley R.	Rosenbaum, Selig	Saks, Isadore
Robinson, Charles Edw.		Salant, Aaron B.
Robinson, Mrs. C. L. F.	Pagarbara May	Salomon,
Robinson, Mrs. C. E. F. Robinson, Mrs. Douglas		Harry R., Ph. D.
		Salomon, William
Robinson,	Rosenstamm, S. S.	
	Rosenthal, Sylvan E.	Sampson, Alden
Robinson, Edward	Ross, H. C.	Sampson, Charles E.
Robinson, Monroe D.	Rossbach, Jacob	Sanborn, Frederick H.
Robinson,	Rossbach, Mrs. L.	Sandhagen, H.
	Rossin, Alfred S.	Sands, Mrs. B. Aymar
Rockefeller,	Rossin, Morris	Sands, Mrs. Charles
	Rothbarth, A.	Ward
Rockwood, Miss K. C.	Rothschild,	Saril, August
Roddy, Harry Justin	Mrs. V. Sydney	
Rodewald, F. L.	Rothschild, Walter N.	Mrs. Herbert L.
Roe, Gen. Chas. F.	Roumage, C. C.	Satterlee, Miss Mabel
Roelker, Alfred, Jr.	Rounds,	Saul, Charles R.
Rogers, Allen Merrill	Ralph Stowell, Jr.	
Rogers, Edmund P.	Rousmaniere, John E.	Sauter, Fred., Jr.
Rogers, Edward L.	Rowe, Wm. V.	Savin, William M.
Rogers, Francis	Rowland, Mrs. Chas. B.	Sayles, Robert W.
Rogers, Mrs. Francis	Rowland, Thos.	Sayles, Mrs. Robert W.
Rogers, Hubert E.	Ruhl, Louis	Schaefer, Edward C.
Rogers,		,
Mrs. Jas. Gamble	Ruhlender, Henry	Schaefer, Geo. G.
	Ruhlender, Henry Rumrill, Mrs. Jas. A.	Schaefer, Geo. G. Schaefer, Henry
Rogers, John S.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C.	Schaefer, Geo. G.
Rogers, John S. Rogers, Dr. Oscar H.	e Rumrill, Mrs. Jas. A.	Schaefer, Geo. G. Schaefer, Henry
-	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W.
Rogers, Dr. Oscar H.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S.	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W.
Rogers, Dr. Oscar H. Rogers, Saul E.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W.
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D.	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rohdenburg, G. L.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto Schanck, George E.
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rohdenburg, G. L. Rokenbaugh, H. S.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark Ruppert, Mrs. Jacob	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto Schanck, George E. Schanck, Mrs. Geo. E.
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rohdenburg, G. L. Rokenbaugh, H. S. Rolle, Augustus J.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark Ruppert, Mrs. Jacob Rusch, Adolphe, Jr.	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto Schanck, George E. Schanck, Mrs. Geo. E. Schauffler, Mrs. A. F.
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rohdenburg, G. L. Rokenbaugh, H. S. Rolle, Augustus J. Roller, Emil	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark Ruppert, Mrs. Jacob Rusch, Adolphe, Jr. Rusch, Henry A.	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto Schanck, George E. Schanck, Mrs. Geo. E. Schauffler, Mrs. A. F. Schefer, A. H.
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rohdenburg, G. L. Rokenbaugh, H. S. Rolle, Augustus J. Roller, Emil Ronalds, Miss Thora Roome, Mrs. C. M.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark Ruppert, Mrs. Jacob Rusch, Adolphe, Jr. Rusch, Henry A. Russell, Charles H.	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto Schanck, George E. Schanck, Mrs. Geo. E. Schauffler, Mrs. A. F. Schefer, A. H. Schell, Miss Mary E.
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rohdenburg, G. L. Rokenbaugh, H. S. Rolle, Augustus J. Roller, Emil Ronalds, Miss Thora	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark Ruppert, Mrs. Jacob Rusch, Adolphe, Jr. Rusch, Henry A. Russell, Charles H. Ryan, John Barry	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto Schanck, George E. Schanck, Mrs. Geo. E. Schauffler, Mrs. A. F. Schefer, A. H. Schell, Miss Mary E. Scheuer, Arnold L.
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rohdenburg, G. L. Rokenbaugh, H. S. Rolle, Augustus J. Roller, Emil Ronalds, Miss Thora Roome, Mrs. C. M. Roome, William J.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark Ruppert, Mrs. Jacob Rusch, Adolphe, Jr. Rusch, Henry A. Russell, Charles H. Ryan, John Barry	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto Schanck, George E. Schanck, Mrs. Geo. E. Schauffler, Mrs. A. F. Schefer, A. H. Schell, Miss Mary E. Scheuer, Arnold L. Schieffelin, Mrs. H. M.
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rohdenburg, G. L. Rokenbaugh, H. S. Rolle, Augustus J. Roller, Emil Ronalds, Miss Thora Roome, Mrs. C. M. Roome, William J. Roos, M.	e Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark Ruppert, Mrs. Jacob Rusch, Adolphe, Jr. Rusch, Henry A. Russell, Charles H. Ryan, John Barry Ryle, Miss Julia	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto Schanck, George E. Schanck, Mrs. Geo. E. Schauffler, Mrs. A. F. Schefer, A. H. Schell, Miss Mary E. Scheuer, Arnold L. Schieffelin, Mrs. H. M. Schieffelin, Wm. Jay
Rogers, Dr. Oscar H. Rogers, Saul E. Rogers, William B. Rohdenburg, G. L. Rokenbaugh, H. S. Rolle, Augustus J. Roller, Emil Ronalds, Miss Thora Roome, Mrs. C. M. Roome, William J. Roos, M. Roosevelt, G. Hall Roosevelt, Mrs.	Rumrill, Mrs. Jas. A. Rumsey, Mrs. C. C. Runk, Mrs. George S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark Ruppert, Mrs. Jacob Rusch, Adolphe, Jr. Rusch, Henry A. Russell, Charles H. Ryan, John Barry Ryle, Miss Julia Sabin, Charles H.	Schaefer, Geo. G. Schaefer, Henry Schaefer, J. Louis Schaefer, R. J. Schall, W. Schaller, Otto Schanck, George E. Schanck, Mrs. Geo. E. Schauffler, Mrs. A. F. Schefer, A. H. Schell, Miss Mary E. Scheuer, Arnold L. Schieffelin, Mrs. H. M. Schieffelin, Wm. Jay Schiff, Gustave H.

Schlicke, C. P.	Scudder, Hewlett, Jr.	Shonk, Herbert B.
Schling, Max	Scudder, Myron T.	
		Shonts, T. P.
Schmelzel, James H.	Scudder, Willard	Shulof,
Schmidt, Mrs.	Scull, Chas. O:	Herman Humboldt
Charles Frederick		Sicher, Dudley D.
Schmidt, Hans	Seaman, Lloyd W.	Sidenberg, Geo. M.
Schmidt, William H.	Seaman, Louis L., M.D.	Sidenberg, Richard
Schnakenberg,	Seaver, Benj. F.	Siedenburg, R., Jr.
	-	
	See, A. B.	Siegel, Jacob
Schniewind,	Seeman, Carl	Siegel, William
Mrs. Elma M	. Seitz, Charles E.	Silberstein, Sol. D.
Schniewind,		
	Selig, Arthur L.	Silliman, Harper
Heinrich, Jr	Seligman, Edwin R. A.	Simon, Alfred L.
Scholle, A. H.	Seligman, George W.	Simon, Franklin
Schram, Louis B.	Seligman, Jefferson	Simon, Horatio S.
Schramm, W.	Seligman, Mrs. Julia	Simon, Leo L.
Schreiter, Henry	Seligsberg, Albert J.	Simon, R. E.
Schrenk, Otto von	Sellew,	Simpson, A. T.
Schrenkeisen,		
_ '	Mrs. Timothy Gibson	
Raymond M	Semken,	Simpson,
Schuster, R.	Dr. George H.	Mrs. Ernest L.
Schutz, Bernard	Semler, Geo.	Simpson, Frederick
		• '
Schuyler, Ackley C.	Seton, Alfred	Boulton
Schuyler,	Sexton, Lawrence E.	Simpson, John Boulton
Miss Georgina	Shailer, William G.	Simpson, John W.
Schwab, Miss	Shannon, Mrs. William	= -
		Sinclair, Mrs. John
Henrietta M	Cummings	Sisters of the Good
Schwartz, H. J.	Shardlow, Miss Eliza	Shepherd
Schwarz, Arthur A.	Sharpe, Elizabeth M.	Sizer, Robert R.
Schwarz, Henry F.	ondipo, minutocon in.	
	Chattarda A D	
	Shattuck, A. R.	Skeel, Frank D., M.D.
Schwarz, Dr. Herman	Shattuck, A. R. Shaw, Mrs. John C.	
Schwarz, Dr. Herman	Shaw, Mrs. John C.	Skeel, Frank D., M.D. Skeel, Roswell, Jr.
Schwarz, Dr. Herman Schwarz, Paul	Shaw, Mrs. John C. Shaw, Mrs. Wm. N.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P.
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M Schwob, Adolphe	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B.
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T.
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme Scott, Walter	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney Shepard,	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme Scott, Walter Scott, William	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney Shepard, Mrs. Finley J.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John Sloane, Wm. M.
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme Scott, Walter	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney Shepard, Mrs. Finley J. Sherman, Gerald	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme Scott, Walter Scott, William	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney Shepard, Mrs. Finley J. Sherman, Gerald	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John Sloane, Wm. M. Slocum, H. Jermain, Jr.
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme Scott, Walter Scott, William Scoville, Herbert Scoville, Robert	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney Shepard, Mrs. Finley J. Sherman, Gerald Shibley, Fred. W.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John Sloane, Wm. M. Slocum, H. Jermain, Jr. Slocum, J. J.
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme Scott, Walter Scott, William Scoville, Herbert Scoville, Robert Scoville School	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney Shepard, Mrs. Finley J. Sherman, Gerald Shibley, Fred. W. Shillaber, Wm.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John Sloane, Wm. M. Slocum, H. Jermain, Jr. Slocum, J. J. Slocum, Myles Standish
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme Scott, Walter Scott, William Scoville, Herbert Scoville, Robert Scoville School Scribner, Charles	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney Shepard, Mrs. Finley J. Sherman, Gerald Shibley, Fred. W. Shillaber, Wm. Shiman, Abraham	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John Sloane, Wm. M. Slocum, H. Jermain, Jr. Slocum, J. J. Slocum, Myles Standish Smidt, Frank B.
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme Scott, Walter Scott, William Scoville, Herbert Scoville, Robert Scoville School	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney Shepard, Mrs. Finley J. Sherman, Gerald Shibley, Fred. W. Shillaber, Wm.	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John Sloane, Wm. M. Slocum, H. Jermain, Jr. Slocum, J. J. Slocum, Myles Standish
Schwarz, Dr. Herman Schwarz, Paul Schweitzer, Dr. Hugo Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Francis M. Scott, Mrs. L. Graeme Scott, Walter Scott, William Scoville, Herbert Scoville, Robert Scoville School Scribner, Charles	Shaw, Mrs. John C. Shaw, Mrs. Wm. N. Sheehan, Mrs. William F. Sheehy, W. H. Sheets, Dr. Elmer A. Sheffield, Geo. St. John Sheffield, Mrs. James R. Shepard, C. Sidney Shepard, Mrs. Finley J. Sherman, Gerald Shibley, Fred. W. Shillaber, Wm. Shiman, Abraham	Skeel, Frank D., M.D. Skeel, Roswell, Jr. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sloan, Benson Bennett Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John Sloane, Wm. M. Slocum, H. Jermain, Jr. Slocum, J. J. Slocum, Myles Standish Smidt, Frank B.

Speranza, Gino C.

Sperling, Emil M.

Sperry, Elmer A.

Sperry, Wm. M.

Sperry, Eugene E.

Smillie, Ralph Speyer, Mrs. James Stiger, E. M. Smith, Abel I., Jr. Spingarn, Mrs. J. E. Stiger, William E. Spitzner, Geo. W. Stillman, Miss B. G. Smith, Arthur Spotts, Mrs. R. L. Stillman, J. A. Smith, Augustine J. Spring, Stillman, Leland S. Smith, Augustus Miss Anna Riker Stimson, Smith, Mrs. De Cost Smith, E. Quincy Stafford, Wm. Fredk. Daniel M., M.D. Smith, Miss Fanny A. Stallknecht, C. P. Stix, Sylvan L. Stockmann, Marie F. C. Smith, Mrs. Fitch W. Stallman, F. L. Stoeckel, Carl Smith, F. M. Stanton, J. R. Starbuck, C. A. Stokes, Harold Phelps Smith, Henry G. Smith. Starr, Howard W. Stone, Miss Annie Miss Josephine C. Starr, Louis Morris Stone, Smith, Lenox Starr, M. Allen, Miss Elizabeth B. Smith, Pierre J. M.D., LL.D. Stone, Geo. C. Smith, Mrs. Pierre J. Stearns, Louis Stone, I. F. Smith, Sidney Steffanson, Mrs. Storm, Raymond W. Smith, Van W. Hakan B. Storrs, Frank V. Stowell, C. W. Smith, W. Hinckle Stein, Mrs. Abram N. Smithers, F. S. Stein, Enrico N. Straight, Mrs. Willard Smyth, Francis Stein, Leonard L. Straus, Herbert N. Snare, Frederick Steinthal, Martin Straus, Mrs. H. Grant Snell, Thomas Steinway, Fred. T. Straus, Jesse Isidor Steinway, Wm. R. Snow, Elbridge G. Straus, Marcus Snow, Mrs. Frederick A. Stemme, Mrs. John Straus, Nathan Solley, Mrs. John B., Jr. Sterling, Duncan Straus, Percy S. Solomon, Mrs. Albert Stern, Benjamin Straus, Mrs. Roger W. Edward Stern, Edwin H. Strauss, Albert Solomon, Arthur L. Stern, Leopold Strauss, Mrs. Albert Sondern, Frederic E. Strauss, Charles Stern, Mrs. Stella Sondheim, Phineas Sternberg, Fred Strauss, Frederick Sondheimer, Julius Sternfeld, Theodore Strauss, John Francis Sorchan, Mrs. Victor Sterrett, J. E. Strauss, Martin Souls, William H. Stettenheim, I. M. Strauss, Samuel Spadone, Elizabeth A. Stettinius, Mrs. Edw. R. Strauss, Mrs. William Spafford, Joseph H. Stevenot, Chas. J. Strawn, Wm. H. Stevens, Miss Mary O. Street, Mrs. C. F. Sparks, Edw. W. Sparrow, Mrs. E. W. Stevens, W. N. Streeter, Thomas W. Spear, James Stevenson, C. C. Strong, Mrs. Benjamin Spedden, Frederic O. Stewart, Alexander M. Strong, James R. Stewart, Cecil P. Strong, John R. Spencer, Mrs. Edwards Spencer, J. Clinton Stewart, John A. Strong, R. A.

Stewart,

Stewart, Mrs. Percy H.

Stewart, Spencer W.

Stieglitz, Albert

Stroock, Joseph

Stroock, Moses J.

Stroock, Mrs. S. M.

Sturges, Arthur P.

Mrs. John Wood Stroock, Louis S.

Sturges, Mrs. E. C.	Tatum, C. A.	Thorne, Mrs. W. V. S.
Sturges, Henry C.	Taylor,	Thornton,
Sturmdorf,	Edward Graham	Mrs. George M.
Arnold, M.D.	Taylor, Emma Fellowes	Tiedemann, Mrs.
Stursberg, Julius A.	Taylor, Mrs. Geo. H.	Theodore
Stursberg, W.	Taylor, Henry R.	Tierney, Myles
Suckley, Robert B.	Taylor, Howard	Tiffany, Charles L.
Sullivan, Mrs. James	Taylor, Howard C.	Tiffany, Louis C.
Sulzberger, Cyrus L.	Taylor, Myron C.	Tilford, Mrs. Henry M.
Sumner, Graham	Taylor, W. A.	Tillotson, Mrs. H. B.
Sumner, Mrs. Graham	Taylor, William R. K.	Tim, Bernard L.
Sussman, Dr. Otto	Tefft, Erastus T.	Timolat, J. G.
Sutphen, Duncan D.	Terry, Roderick, Jr.	Timpson, James
Sutphen, John S.	Thacher,	Tinkham, Julian R.
Sutro, Lionel	Major Archibald G.	
Sutro, Mrs. Lionel	Thacher, Thomas	Titus, Erastus, Jr.
Sutro, Richard	Thaw, J. C.	Titus, Mrs. Norman E.
Sutro, Victor	Thaw, Stephen Dows	Toch, Mrs. Maximilian
Suydam, Lambert	Thayer, B. B.	Tonnelé, Mrs. John N.
Swan, Mrs. C. F.	Thayer, H. B.	Torrance, Norman F.
Swan, Charles F.	Thayer, Rev. William	Totten, John R.
Swan, James A.		Townley, Miss H.
Swann, Mrs. A. W.	Theakston, F. H.	Towns, Mrs. Charles B.
Swayne, Francis B.	Thedford, Harry W.	Townsend, David C.
Swetland, H. M.	Thibaut, Richard E.	Townsend, E. M.
Swetland, Mrs.	Thieme, Theo. F.	Townsend, Howard
•	Thomas, Mrs.	Trainor, P. S.
Symons, W. E.		Trefry, Edwin J.
	Thomas,	Trowbridge, E. Kellogg
Taber, David Shearman		Trowbridge,
Taber, John Russell	Thomas, Mrs. Lee	Frederick K.
Taber, Miss M.	Thompson,	Trowbridge, S. Breck P.
Taft, Henry W.	Mrs. J. Todhunter	Tucker, Carll
Taggart, Rush	Thompson, Lewis M.	Tucker, Mrs. Carll
Tailer, Edward N.	Thompson, Samuel A.	Tuckerman, Alfred
Taintor, Charles N.	Thompson,	Tuckerman,
Taintor, Charles Wilson	Rev. Dr. Walter	
Talbert, Jos. T.	Thomson, A. T.	Tuckerman, Miss Emily
Talbot, Richmond	Thomson,	Tuckerman, Paul
Talcott,	Miss Evelyn M.	Turnbull, Arthur
Rev. J. Frederick	Thorley, Charles	Turnbull, Mrs. Ramsay
Talmage, Mrs.	Thorne, Mrs. Edwin	Turn bull, William
Edward T. H.	Thorne, Miss Eliza A.	Turner, Mrs. J. Spencer
Talmage, E. T. H.	Thorne, Mrs. J. W.	Turnure, George E.
Tanenbaum, Moses	Thorne, Robert	Tuska, Benjamin
Tate, Joseph	Thorne, Samuel, Jr.	Tuttle,
Tatham, Charles	Thorne, W. V. S.	Donald Seymour

Tweedie, Miss Annie	Veit, Richard C.	Walker,
Tyler, Mrs.	Veltin, Miss Louise	Mrs. Joseph, Jr.
	Vernon, Mrs.	Walker, W. G.
Tysen, Edward P.	Catherine D.	Walker, William I.
·	Vesper, Karl H.	Wallenstein, Milton H.
Ullman, Sigmund	Vettel, Mrs. Rosa	Wallerstein, Leo
Ullmann, E. S.	Vietor, Carl	Wallerstein, Dr. Max
Ulmann, James	Vietor, Ernst G.	Walsh, Myles
Ulmann, Ludwig	Vietor, Mrs. Geo. F.	Walter, Edw. J.
Underwood,	Vietor, Thos. F.	Walter, W. I.
William Lyman	Villa, Alfonso P.	Wanninger, Chas.
Untermyer, Alvin	Villard, Mrs. Henry	Ward, Artemas
Untermyer, Isaac	Vineberg, Dr. Hiram N.	Ward, Mrs. Artemas
	Voelker, John Ph.	Ward, Mrs. Frances M.
Vail, Theo. N.	Vogel, Felix A.	Ward, John Gilbert
Vaillant, Mrs. G. H.	Vogel, Herman	Ward, Owen
Valentine, J. Manson	Vogel, H. G.	Wardwell, Allen
Valentine,	Vogel, Martin	Warner, C. Blaine
Wm. A., M.D.	Vogelstein, L.	Warner, Mrs. Henry S.
van Beuren, F. T., Jr.	Vondermuhll, George A.	Warner,
van Beuren, Mrs. M. M.	von Gontard, Alex.	Mrs. Henry Wolcott
Van Brunt, Jeremiah R.	von Oefele, Dr. Felix	Warner, Lucien C.
Vanderbilt,	von Zedlitz,	Warren, Mrs. J. Kearny
Miss Cathleen	Mrs. Anna M.	Warren,
Vanderbilt, Reginald C.	Voss, F. G.	Mrs. John Hobart
Vanderbilt, Mrs. W. K.	Vreeland, Frederick K.	Washburn, Thomas G.
Vanderlip, Mrs. F. A.	Vuilleumier,	Waterbury,
Vanderlip, Frank A.	Dr. Jules A.	Miss Florence
Vanderpoel, Mrs. J. A.		Waterbury, Mrs. John I.
Van Dusen, Thos. D.	Wadleigh,	Waterman, Max
van Dyke, Tertius	Francis Rawle	Waters, Horace
Van Emburgh,	Wadsworth,	Waters, Spencer
Mrs. D. B.	James W., Jr.	Wätjen, Louis
Van Iderstine, Robert	Wagner, T. B.	Watson, A. W.
Van Ingen, Edward H.	Wainwright, Wm. P.	Watson, Miss Emily A.
Van Norden,	Wakeman, Stephen H.	Watson, Mrs. J. E.
Ottomar H.	Walbridge, G. H.	Watson, John J., Jr.
van Oosterzee, Mrs. L.	Walbridge, H. D.	Watson, Louis T.
Luykx	Walcott, Mrs. F. C.	Wearne, Harry
van Raalte, Mrs. E.	Waldo, Miss Julia L.	Weatherbee, Mrs. E. H.
Van Sinderen, Howard	Wales, Edward H.	Weathers, Niel A.
Vanston, W. J. K.	Walker, Charles C.	Webb, H. Walter
Van Vorst,	Walker, E. Robbins	Webb, Louis
Frederick B.	Walker,	Webb, Mrs. Vanderbilt
Van Wagenen, Bleecker	Mrs. Gustavus A.	Weber, Ferdinand
Van Winkle, Edgar B.	Walker, Horatio	Webster, Jennie E. B.
T7 TT7 1 TOL '1' T7 TO		
VanWyck, Philip V. R.	Walker, John B., M.D.	

Weeks, Dr. John E.	White, Alexander M.	Wilson,
Wehrhane, Chas.	White, A. Ludlow	Rev. Andrew Chalmers
Weidenfeld, C.	White, Miss Caroline	Wilson,
Weigle, Chas. H.	White, Miss H.	Mrs. Augustine J.
Weil, Arthur William	White, John Jay, Jr.	Wilson, Edmund B.
Weil, Emil	White, Mrs. Stanford	Wilson, George T.
Weil, Dr. Isaac	White, W. A.	Wilson, Mrs. Henry B.
Weil,	Whitehouse, J. Henry	Wilson, John E., M.D.
	Whiting, Mrs. James R.	
Weiller, Simon	Whitman, Bret H., Jr.	Miss Margaret B.
Weinberg, Charles	Whitman, Wm., Jr.	Wilson, M. Orme
Weinberger,	Whitmarsh, Theo. F.	Wilson, Orme, Jr.
	Whitney, Edward F.	Wilson, R. Thornton
Weir, Mrs. Chas.	Whitney, Mrs. Eli	Wilson, Walter H.
	Whitney, Mrs.	Wimpfheimer, Chas. A.
Weiss, Mrs. Chas.		Wingate, Geo. W.
Weiss, Mrs. Samuel W.	Whitney, H. P.	Winter, Emil
Weitling, Wm. W.	Whitney, Mrs. Payne	Winthrop, Bronson
Weld, Mrs. Francis M.	Wiborg, F. B.	Wise, Edmond E.
Welinsky, Max	Wiemann, Albert B.	Wisner, Miss E. H.
Wells, Mrs. John	Wiener, Mrs. H. J.	Wisner, Percy
Wells, Judd Elwin	Wilbour, Miss	Witherbee,
Wells, Oliver J.	Theodora	Mrs. Frank S.
Welsh, S. Chas.	Wilcox, T. Ferdinand	Wittenberg, Mrs. A. M.
Welwood,	Wiley, J. S.	Wittmann, Joseph
John Caldwell		Woerishoffer,
		Mrs. Anna
Wentz, Theodore	Wilkens, H. A. J.	
Werner, Theodore	Wilkie, John L.	Woerz, F. W.
Wertheim, Jacob	Wilkinson, Alfred	Wolfe,
Wertheim, Mrs. Maurice		Col. S. Herbert
Wesendonck, M. A.	Willets, Miss Maria	Wolff, Mrs. Lewis S.
Wessell, Arthur L.	Willett, George F.	Wolff, Wm. E.
Westcott,	Williams, Alex. S.	Wolfson, T.
•	Williams, Arthur	Wood, Mrs. John D.
Westervelt,	Williams, Blair S.	Wood, Willis D.
	Williams, Ellis D.	Wood, Wm. C.
Weston, Dr. Edward	Williams, Joseph	Woodbury, C. Palmer
Westover, Myron F.	Williams, Mrs. Percy H.	
Wheeler,	Williams,	Woolley, James V. S.
Dr. Herbert L.	Mrs. Richard H.	Woolley, Scudder J.,
Wheeler,	Williams, William H.	M.D.
John Davenport	Willis, W. P.	Woolman, Edward W.
Wheeler, Miss L.	Willson, Fredk. N.	Worcester, Wilfred J.
Wheelock, Geo. L.	Willstatter, A.	Wray, A. H.
Wheelwright,	Wilmerding, Lucius	Wray, Miss Julia
Joseph S., M.D.		Wright, Mrs. J. Hood
Whitaker, John E.		Wyckoff, Barkley
Trinualei, John 12.	Mis. Lucius IX.	ii jekon, Darkiey

Wyckoff, Edward Guild Young, A. Murray Wylie, Dr. R. H.

Young, Miss Annette

Yeisley,

Rev. Dr. George C. Zabriskie, George

Zanetti, Joseph A. Young, Mrs. A. Murray Zimmermann, Charles Zimmermann, John Zinsser, August Zoller, Charles

ASSOCIATE MEMBERS

(NON-RESIDENT)

By payment of \$3 annually

Aborn, John Russell Ackley, Adams, Wm. A. Albree, Fred W. Albright, Mrs. John J. Allen, C. L.

Allen, Normand Ames, Oakes Anderson,

Andrews, E. A. Andrews, Col. James M. Bell, C. Edward Appleton, Maj.-Gen.

Francis Henry Arensberg, Charles F. C. Bennett, Russell M. Armour, M. Cochrane Arnold, Miss Mittie Atlee, E. I. Atwater, Chas. B. Austell, Alfred

Babcock, Albert Babcock, Frederick R. Babcock, William Baehr, Mrs. Meta Bailey, Edward P. Bailey, L. H. Baily, Henry P. Ballantine, Percy Ballou, Louis Bancroft, Rev. James Barker, Louis H. Barr, James H. Barrett, W. H. Barron, Clarence W.

Bartlett, A. C. Bartlett, Florence Miss Adeline E. Barton, Geo. H. Bass, Robert P. Baxter, Harold F. Bayard, Thomas F. Beaham, Mrs. Gordon T. Brégy, Louis H.

> Bear, Mrs. Chas. Beardslee, J. C.

Louis Francis Belknap,

Benjamin,

Bennett, Winchester Benney, G. A. Benson, Edwin N., Jr. Benson, R. Dale, Jr. Beyea, D. H.

Billings, Frank Bindley, Cornelia McK. Bulkley, Barry Binney, William Bird, John B.

Blackmer, James L. Blakeley, George H. Blakiston, Kenneth M. Blanchard, John A.

Blaney, Dwight Bliss, Miss Elizabeth B. Blossom, Mrs. Dudley S. Burrell, Loomis Blumer, George Boardman, E. A.

Boardman,

Mrs. William D. Butzel, Leo M.

Bogert, William B. Bole, B. P.

Bond, Hugh L., Jr. Bowman, Glenn F. Bradford, Sidney Brainard, M. B.

Brennan, Harry M. Ulysses Brewer, Mrs. Joseph Brewster, Frank

Bridge, Norman Henry Wyckoff Briggs, Dr. C. E. Brooks, Charles T. Brooks, W. B.

Lieut.-Col. Julian A. Brown, Mrs. Carter Brown, Laurence F. Brown, Samuel B.

Browning, Victor Reed Brummé, C. L. Bruun, Chas. A. Bryn, H.

Buckingham, John Bull, Manlius Bull, Thomas M. Burgess, Mrs. T. P. Burnam, John M.

Burnham, T. W. Burnham, W. E. Burpee, David Burr, J. H. Ten Eyek

Burton, Alfred E. Bushnell, Edward Butcher, Henry C. Cabot, George E. Cadwalader, Williams B. Comstock. Cady, Wm. B. Cahn, Benjamin R. Caldwell, James H. Campbell, Dr. Don. M. Campbell, Canniff, William Henry Cope, Francis R., Jr. Carmalt, William H., M.D. Cox, J. D. Carney, F. D. Carruthers, J. B. Carson, Robert D. Carstens, J. H., M.D. Carter, Dr. C. Shirley Carter, Geo. E. Carton, Alfred T. Cary, Miss Kate Case, Willard E. Chamberlain. Chauncy W. Chapin, Wm. M. Chapman, B. G.

Charlton, Thomas J. Chase, Frederick S. Cheever, James G. Cheney, Mary Cheney, Paul H. Child, John H. Child, Wm. A. Chrystie, Percival Church, Austin Church, Morton L. Clapp, Charles C. Clark, Emory W. Clark, George H. Clark, Jefferson Coe, Miss Ella S. Cogswell, Mrs. Wm. Browne

Colby, Frederick L. Cole, Mrs. Ansel O. Cole,

Mrs. Robert Clinton Dixon, J. Shipley Colgate,

Colgate, Robert

Comstock, Walter J. Conover, H. B. Cook, Melville T. Cooke, George J. Henry Walton Coolidge, John T., Jr. Cousens, John A.

Craig, Dr. Newton Cramp, Theodore W. Crowell, Robert H. Cudahy, Joseph M. Cummings, Byron Cummings.

Mrs. Charles A. Cushing, Harvey Cushman, Herbert E. Cutler, James G.

Dancy, Frank Battle, Sr. Dann, W. M. Danziger, J. M. Dart, William C. Davenport, Mrs. Elizabeth B. Davis, Chas. H.

Davis, Foster B. Davis, Geo. Whitefield Davis, Winfield S. Day, Mrs. F. A. Dean, C. E. Delano, F. A. Deming, Paul H.

Denègre, Wm. P. Dennison, Henry S. DeWolf, Wallace L. Dietz, Carl Frederick Dietz, Mrs. C. N.

Dillard, James Hardy Disston, William D. Dixon, Ephraim W.

Douglas, Albert Mrs. Mary F. L. Douthitt, F. H.

Dows, Tracy Draper, Wallace S. Mrs. Robt. H. Dravo, Edward T. Drury, Francis E. Ducharme, F. T. Dunbar, F. L. duPont, Alfred I. Durant, Frederick C.

> Eakle, Arthur S. Elder, Dr. Omar F. Ely, Philip V. R. Ely, William Emerson, Dean Erickson,

Mrs. A. Wentworth

Fabyan, F. W., Jr. Fabyan, Marshal Farnham, Wallace S. Farrel, Estelle Ferriss, Franklin Ffoulkes, S. Wynne Field, E. B. Fisher, Miss Elizabeth W. Fitzgerald, Chas. G. Fitzsimmons, P. W. A. Fleek, Henry S. Ford, Mrs. John B. Fordyce, Geo. L. Foulke, Mrs. J. Roberts Francis, J. M. Freeman, Miss Harriet E.

Freer, Mrs. Watson M. Frost, A. B. Futcher, Dr. Thomas B.

Galle, Miss Louise Gallogly, E. E. Gardner, James P. Garrett, Mrs. Philip C. Gifford, Harold Gill, M. Gillet Gilman, Miss C. T. Glessner, John J. Glover, Chas. C. Godfrey, Mrs. W. H. K. Goodenow, Rufus K. Goodrum, J. J., Jr. Gordon, Mrs. Donald Green, Erik H. Greene, Arthur Duncan Hutchinson. Grew, Joseph C. Grinnan, Dr. St. Geo. T. Hutchinson, Mahlon Guernsey, Dr. Joseph C. Gustine, John S., Jr.

Guy, Wm. E.

Haass, Ernest W., M.D. Haass, Lillian Henkel Irish, Franklin C. Halbach, Howard L. Hamann, Dr. C. A. Hanmer, Chas. C. Hannum, William E. Hardee, N. A. Harding, Emor H. Hare, Dr. Hobart Amory Joslyn, Laura Alice Harriman, Mrs. J. Low Justice, Theodore Harris, Geo. W. Harris, Dr. H. F.

Harrison, Mrs. Charles C., Jr. Keiser, Robert H. Harrison,

Harvey, Dr. Robert H. Hasbrouck, Mrs. H. C. Hecker, Frank J. Hemingway, Lloyd Henry, Howard H. Herman, Raphael Hickox, W. B. Higgins, Harry E. Hill, Wm. Bancroft Hinchman.

Hirst, Dr. John C. Holcomb, James W. Holden, Guerdon S. Hooper, Miss I. R. Hopkins, Dr. Edward K. Hopkins, R. Brooke Horr, Mrs. Esther A. Horsfall, R. Bruce Howard, B. C.

Howland, C. H., D.D.S. Livingston, Hoyt, Edwin Hubbard, Lucius L. Huff, E. S.

Iddings,

Ingersoll, Major J. M., Lyman, Henry F. M. R. C., U. S. A.

James, George Abbot Jenness, Chas. G. Jewett, E. H. Jones, Henry K. Jones, Livingston E.

Kahn, Morton C. Keep, Chauncey Kellogg, Mrs. R. S. Thomas Skelton Kiersted, Henry Stevens McLachlin, Dan. Kimball, Benjamin Kimball, Walter F.

Krohn, Irwin M.

Kuhn, Robert

Lane, H. H. Laughlin,

Mrs. Geo. M., Jr. Lawrence.

Mrs. Charles S. Ledyard, Henry Lee, Mrs. George B. Lee, George C. Leiter, Joseph Lemly, Capt. Henry

Le Moyne, Francis J. Lionberger, I. H. Little, Arthur D. Livingood, Chas. J.

Major Archibald R. Llovd, John Uri Locke, Robinson Lodge, Edwin, M.D. John Palmer Lodge, F. S. Logan, Frank G. Loring, Lindsley Lovejoy, F. W. George S., M.D. Lyman, Mrs. Chas.

> Macauley, Alvan Macnamara, Charles Macrum, William Malcolm, Mrs. Arthur Marlatt, Charles Lester Martin, Frank G. Martin, Wm. Barriss Mason, Dean Masson, John G. Matthews, W. N. McFarland, G. W. McGowan, Mrs. C. P. McGregor, Tracy W. McKay, Robt. J. McNair, Edward E. Memminger, C. G. Mercer, William R. Mershon, Wm. B. Metcalf, John Brockway Meyer, J. Henry Michelson.

Mrs. Albert A. Miller, Paul H. Mrs. Annie W. Milligan, Dr. Robert Millis, John Mills, Enos Mitchell, Walter S. Monroe, William S. Moore, Chas. C. Rowan, U.S.A. Morgan, F. Corlies

Morgan, S. Rowland Morris, F. W., Jr. Morris, Miss Lydia T. Morrow, Dr. Howard

Murtagh, Col. John A.,	Raymond, Dr. Alfred	Sperry, George B.
M. C., U. S. A.	Raymond, H. W.	Sprague, A. A., 2d
Musgrave, M. E.	Rebmann,	Stanley, Mrs. D. S.
	G. Ruhland, Jr.	Starr, Charles S.
Neeb, H. A.	Redwood,	Stevens, Henry G.
Neely, Miss C. B.	Mrs. Francis Tazewell	
Neill, Chas. P.	Remington, Seth P.	Stow, Vanderlynn
Nettleton, Charles H.	Reynolds, John P.	Stuart, Henry Clifford
Newcomb, C. A., Jr.	Rhodes, James M.	Studley, J. Edward
Newcomb, William W.	Rice, Prof. Wm. North	Sturges, Rush
Newman, Mrs. R. A.	Ricketson, Walton	Sturgis, S. Warren
Northrop, Edwin C.	Ripley, Joseph	Swan, Mrs. J. Andrews
Nyeboe, M. Ib	Roberts,	Sweeney, John E.
Nyebbe, M. 1b		Sweet, Henry N.
O'Donoshua Prof		
O'Donoghue, Prof.	Robertson, Mrs. Lucy H.	Symnote, Thos. W.
	Robins, William	Tate, J. M., Jr.
Oliver, Nelson E., M.D.		Taylor, Hollinshead N.
Olmsted, John C.	Rogers, Wm. B.	Taylor, Knox
73 1 1 2 1 1 1 1 1	Roloson, Walter L.	Thayer, Mrs. W. B.
Pabst, Mrs. Frederick	Rosendale, Simon W.	
Packard, C. S. W.	Rothwell, J. E.	Thomas, Samuel Hinds
Page, Hugh Nelson	Ruggles, Mrs. T. Edwin	Todd, James
Painter, Kenyon V.	Russell, B. F. W.	Torrance, Francis J.
Palmer, W. B.		Townsend, J. Barton
Pardee, Geo. C.	Sarmiento, Mrs. F. J.	Townshend, Henry H.
Pardee, Lucius C., M.D.	Scott, MajGen.	Trotter, Wm. Henry
Parke, W. G.	H. L., U.S.A.	Uihlein, Edgar J.
Parker, George A.	Scott, Wm. G.	omioni, zagaz vi
Parker, Mrs. Robert	Scudder, C. W.	Vaillant, G. W.
Parrish, M. L.	Shattuck,	Valentine, Colonel
Paterson, Edmund T.	Frederick C., M.D.	Henry Lee
Paxon, Col. Frederic J.	Sheldon, Mrs. G. W.	Van Devanter, Willis
Pellew, Miss Marion J.	Sheppard, William	Van Dyke, B. Franklin
Perkins, F. Curtis, Jr.	Biddle	van Santvoord, Seymour
Perry, Thomas S.	Shippen, Dr. Lloyd P.	Verbeck, Gen. Wm.
Peter, Julius C.	Shriver, Joseph Nicholas	Vibert, Charles W.
Phillips,	Sibley,	
Ebenezer Sanborn	Mrs. Rufus Adams	Wadsworth, Samuel
Phister, A. V.	Simons, W. C.	Walker, Sir Edmund
Pierce, Miss S. K.	Slater, H. N.	Walker, Harrington E.
Pirie, John T.	Slaven, Ralph E.	Walker, Hiram H.
Platt, Mrs. Orville H.	Sloan, Earle	Walker, Miss Lydia M.
Porter, James F.	Slocum, William H.	Walker, Thaddeus
Price, Alonzo	Smith, David S. H.	Wall, Ashbel T.
Purdy, F. A.	Smith, Dudley W.	Wallace, Herbert I.
- u.u.j, 1 · · · · ·	Smith, Mrs. D. W.	Walton, W. J.
Rathbone, Gerald L.	Somers, L. H.	Warren, George C.
Liberto, Gerard D.	Comercial and the	

Warren, Dr. J. Collins White, Walter W., M.D. Wood, Baldwin Watson, Thomas A. Whitney, David C. Wood, Dr. Casey A. Webb, Walter F. Whitney, Hammond M. Wood, Mrs. Richard L. Woodbury, Lieut.-Col. Webster, Whittell, George Harrison B., M.D. Will, George F. Frank Thomas, U.S.A. Weed, Rt. Rev. Edwin G. Willey, Arthur Woods, Chas. M. Wehrle, Augustine T. Williams, David W. Woodward, Weld, Elizabeth F. Williams, Henry P. Lemuel Fox Welsh, Robert F. Willock, Harry H. Woodwell, John Wheatland, Richard Willock, J. Scott Wright, A. B. Wheeler, Charles Wilson, Rev. Robert, Wright, Wheeler, H. C. D.D. Mrs. Eva Edgar Wright, Wheeler, Samuel H. Wilson, Robert, Jr., M.D. White, Dr. Charles J. Miss Harriet H. White, Dr. Joseph A. Windle, Ernest White, Ralston Winter, Dwight Yarnall, Charlton

ACCESSIONS, 1918

DEPARTMENT OF PUBLIC EDUCATION

By GIFT

CARL E. AKELEY, New York City.
2 Negatives of Virginia Deer, 8×10.

FREDERICK BLASCHKE, New York City.

1 Screech Owl skin, from Cold Spring, N. Y.

I Cedar Waxwing in the flesh.

MISS GLADYS BRIDGES, New Rochelle, N. Y.

I Robin in the flesh.

Mrs. Elizabeth G. Britton, New York City.

I Plain lantern slide, I Transparency 5×7, and I Photograph, 5×7, of Hermit Thrush, from Woodstock, Vt.; 4 Plain lantern slides of anthropological subjects.

Miss Laura B. Broomall, Far Rockaway, N. Y.

I Catbird, I Olive-backed Thrush, I Gray-cheeked Thrush, 2 Hermit Thrushes, I House Sparrow, I Robin, 2 Juncos, I Field Sparrow, I Yellow-bellied Sapsucker; in the flesh, from the vicinity of New York.

ALBERT E. BUTLER, Denver, Colo.

2 Negatives of Western Tumbleweed and I of Cat-tails, from vicinity of Denver.

Mrs. H. C. Carter, New York City. 53 Negatives, 4×5, of Hawaiian sub-

jects.

400 Lantern slides of Hawaiian and other subjects.

M. D. C. CRAWFORD, New York City.

1 Photograph of Loon's Nest.

Mrs. Mary Alice Dean, New York City.

2 Mounted Pheasants.

S. Keith Evans, New York City.

1 Mounted Pileated Woodpecker.

ARTHUR H. FISHER, Philadelphia, Pa. 35 Negatives, 5×7, and 2 negatives, 4×5, of Wild Animals in captivity.

CASS GILBERT, New York City.

Set of official photographs taken in connection with the British, French, Italian, Russian, and Japanese War Commissions.

Ernest Ingersoll, New York City.

I Saw-whet Owl in the flesh, from
New Brunswick, Canada.

Dr. J. D. Johnson, New York City. 5 Negatives of John Burroughs, 5×7, from Roxbury, N. Y.

JULIUS KIRSCHNER, New York City. White-throated Sparrow in the flesh.

CHARLES KOHLMAN, New York City. 33 Specimens of Minerals and Rocks, from Grand Canyon of Arizona.

Miss Paula C. Lambert, New York City.

7 Photographs of Chilean subjects.

LIEUT. AND MRS. LEO E. MILLER, DAL-LAS, TEXAS.

7 Negatives of Wild Flowers, from Texas.

Mrs. Edwin McClure Peters, Brooklyn, N. Y.

Various samples of Lava, Pumicestone, Beach Sand, Cork and Paper Tree, from the Azores.

Albert H. Pratt, New York City.

388 Negatives of John Burroughs and of Conservation of Wild Life.

254 Lantern slides of John Burroughs and of Conservation of Wild Life.

1830 Feet of motion picture film of John Burroughs.

Morris M. Rathbun, Los Angeles, Cal. Photograph of Swordfish, weighing 314 pounds, caught at Santa Catalina Island.

WILLIAM SMITH, New York City.
2 Birds' Nests from Tenafly, N. J.

D. C. Stull, Provincetown, Mass.5 Photo postal cards of Blackfish.

Mrs. Joseph Todhunter Thompson, New York City.

I Pekinese Dog.

Mrs. William Uhlmann, New York City.

I Mounted Peacock.

University Society, New York City. 8 Enlargements of Habitat Bird Groups.

MISS ADELE VIOL, New York City.
I Freak Chick.

T. C. WARREN, Arverne, L. I. 4 Small Birds.

IRVING VAN ZANDT, JR., New Rochelle, N. Y.

Yellow-billed Cuckoo in the flesh, from New Rochelle, N. Y.

By Purchase

1500 Feet negative motion picture film and 5000 feet positive motion picture film of Natural History subjects.

Electrotypes and color plates used in California magazine published in San Francisco in 1915.

450 Feet motion picture film, "Building the Liberty Hospital."

245 Negatives taken on Nicaraguan Herpetology Expedition.

About 1000 feet motion picture film, "Whaling in Japan."

3 Reels motion pictures of Australian Natives.

DEPARTMENT OF GEOLOGY AND INVERTEBRATE PALÆONTOLOGY

By GIFT

Admiralty Zinc Co., Quapaw, Okla.

12 Specimens of lead and zinc ores, collected by E. O. Hovey at the company's mines at Touthat, Okla.

ARMANDO L. ANGELO, Yonkers, N. Y. (Through Department of Anthropology.)

Fossil echinoderm and pelecypods from Porto Rico.

BARNUM BROWN, New York City.
31 Specimens of fossils from Cuba.

Specimen of coral with Pareiasaurus skeleton, from Cape Colony, South Africa.

Copper Queen Consolidated Mining Co., Bisbee, Ariz.

175 Specimens illustrating metallurgical treatment of ores. (November, 1914.)

MRS. ROBERT DEXTER, Dayton, Ohio. Siphonia koenigi Mantell, from Restonvale, Kent, England.

James W. Eardeley, Fort Huachuca, Ariz.

7 Specimens of Scheelite, 5 other ore specimens, from Fort Huachuca, Ariz.

A. P. Gussman, New York City.

7 Specimens of volcanic scoriæ, from the beach, Deception Island, South Shetlands.

Dr. Roland M. Harper, College Point, N. Y.

Fossil Beetle imbedded in peat, near Maspeth, Queens Co., N. Y.

E. O. Hovey, New York City.

2 Specimens granite from East Barre, Vt.

ISAAC E. JAMES, Pittston, Pa.

I Specimen anthracite coal showing "blistered" surface.

James F. Kemp, New York City. 23 grams "Gladstone," Australia, iron meteorite.

CHARLES KOHLMAN, New York City. Stalactite and siliceous concretion, from Grand Canyon, Ariz.

DEPARTMENT OF MINERALOGY (Transfer).

46 Stalactites, from Bermuda, Virginia, Arkansas, Iowa and Pennsylvania.

- L. D. RICKETTS, New York City.
 Specimen of Azurite from Bisbee,
 Ariz.
- Miss H. Ernestine Ripley, New York City.
 - 2 Specimens of variegated clay, from Gay Head, Martha's Vineyard.
- ROBERT F. TOMPKINS, New York City.

 3 Specimens of copper ore from Caribou River, Pictou Co., Nova Scotia.
- Dr. P. DE VECCHI, New York City. Obsidian from Shasta Co., Cal.

By Exchange

- DARLING K. GREGER, Columbia, Mo. 200+ Chouteau limestone fossils.
- U. S. NATIONAL MUSEUM, Washington, D. C.
 - Specimen amygdaloid copper, specimen copper conglomerate.
- University of New Mexico, Albuquerque, New Mexico.
 - 107 Specimens of rocks, minerals and fossils, collected and assembled by Professor C. T. Kirk.

By PURCHASE

- 55 Crinoids and 270 blastoids from Indiana.
- 23 Specimens of fossil goniatites and orthoceratites, from western New York.
- Medford, Oreg., iron meteorite, entire mass, 1247 gm.
- Relief map, Catskill Aqueduct Region, unpainted.
- I Specimen of Platyceras?
- 1665 Specimens of Silurian-Devonian invertebrates from the Hunton formation, Arbuckle Mts., Okla.
- 8 Fossil insects from Florissant, Colo. 26 Models of pelecypods.
- Model of Ceraurus.

PART EXCHANGE, PART PURCHASE

- CARROLL LANE FENTON, Charles City, Iowa.
 - 200 Specimens of fossils, from Hackberry, Iowa.

THROUGH MUSEUM EXPEDITIONS

- 277 Specimens of Coal Measure plants from Mazon Creek, Ill. Collected by W. Elmer Ekblaw.
- Small series of fulgurites from sand beds in Whiteside Co., Ill. Collected by W. Elmer Ekblaw.
- Three blocks peat, Juniper Swamp, near Maspeth, N. Y. Collected by E. O. Hovey and P. B. Hill.

DEPARTMENT OF MINERALOGY

By GIFT

- Frederick L. Allen, New York City.
 - I Specimen of Willemite, from Franklin Furnace, N. J.
- E. Mogawly Banon, M.E., Chicago, Ill.
 - I Specimen of Crystalline Magnesite, from near the town of Valley, State of Washington.
- BARNUM BROWN, New York City. Specimen of Cubanite, from Cuba.
- CECIL A. Brown, U.S.S. Montana.

 Specimen of Catlinite, 2 pipes carved from Catlinite.
- JOHN H. DEANE, New York City. Specimen of Cerussite on Galena.
- J. H. Elby, M.E., Spokane, Washing-
 - I Specimen Brucite, Stevens Co., Washington.
 - 3 Specimens Magnesite, Chewelah, Washington.
 - 2 Specimens Strengite on Cacoxenite, Lancaster Co., Pa.

DEPARTMENT OF GEOLOGY (Transfer).

- 425 Specimens of miscellaneous minerals recently received in the Department of Geology with a purchase of Meteorites.
- 61 Specimens of miscellaneous min-
- Albert G. and Jerome J. Hanauer, New York City.
 - 78 Specimens of Copper, Calcite, Silver and other associated minerals, from Lake Superior.
 - 5 Carved Agmatolite pieces, from China.

Alfred C. Hawkins, New York City.
I Polished specimen of Mexican
Onyx.

W. L. HILDBURGH, New York City.

11 Small specimens of Copper and 3
of Silver, from Lake Superior.

A. O. Ihlsing, New York City.

3 Specimens of Manganese Ore, from Batesville, Ark.

O. J. LEE, New York City.

12 Specimens of Thulite (pink Zoisite) with Feldspar, Mitchell Co., N. C.

James G. Manchester, New York City. I Specimen of Microcline (Amazonstone) from Valhalla, N. Y.

J. P. Morgan, New York City.

3 Specimens of Opal from Humboldt Co., Nev.

2 Specimens of Tourmaline from Brazil.

I Specimen of Tourmaline from San Diego County, Cal.

F. D. PAGLIUCHI, E.M., New York City.

1 Specimen of Garnierite.

H. PAPKE, West Hoboken, N. J.

5 Specimens of Babingtonite, from West Paterson, N. J.

Dr. L. D. RICKETTS, New York City.

I Specimen, about 6"×13"×20", of moss-like development of Limonite and Manganese Oxide entangling crystals of native Copper bearing tufts of Malachite, from Junction Mine, Warren, Ariz.

GEORGE S. SCOTT, New York City.

I Specimen of Albite from Pelham Bay Park and I of Quartz from Bronx.

MISS MARION SMITH, for her father, Nelson Smith.

I Pair of Moss Agate Cuff Links and 5 specimens of polished Agates.

CAPTAIN ROBERT F. TOMPKINS, New York City.

7 Specimens of Copper Glance Ore, from Nova Scotia.

U. S. Assay Office, New York City.

4 Sets of copies of Platinum nuggets, from Nishi, Tajelskoi, Russia.

Dr. Paolo De Vecchi, New York City. 62 Specimens of Minerals.

By Exchange

H. PAPKE, West Hoboken, N. J.

2 Specimens of Calcite and 1 of Gmelinite, from Great Notch, N. J.

I Specimen of Calcite and I of Gypsum, from West Paterson, N. J.

By Purchase

1 Anglesite, Salt Lake Co., Utah.

I Argentite, Batapolis Mine, Chihuahua, Mexico.

1 Beryl (Aquamarine), Bahia District, Brazil.

I Bismuthinite and Molybdenite, New South Wales.

I Chabazite and Heulandite, Paterson, N. J.

3 Chalcopyrite, Niigata, Japan.

3 Chrysocolla, Warren, Ariz.

I Copper (native), Calumet, Mich.

I Cristobalite, Tuscan Springs, Cal.

3 Datolite, Westfield, Mass.

1 Embolite, Broken Hill, Australia.

I Fluorite encrusted with Barite, Prov. of Quebec, Canada.

I Iron (native), Cassel, Germany.

I Malachite and Aurichalcite, Bisbee, Ariz.

I Malachite, Bisbee, Ariz.

I Marcasite in Calcite, Konsberg, Norway.

3 Orpiment, Manhattan, Nev.

1 Pectolite, West Paterson, N. J.

3 Pyrite, Niigata, Japan.

I Pyromorphite, Broken Hill, New South Wales.

2 Realgar, Manhattan, Nev.

2 Scheelite, Mohave Co., Ariz.

I Silver, Batapolis Mine, Chihuahua, Mexico.

1 Smithsonite, Joplin, Mo.

I Smithsonite, Kelly, N. Mex.

1 Sphalerite, Niigata, Japan.

- 1 Stevensite, Springfield, N. J.
- I Tremolite, Bogson, Hungary.
- 2 Tungstite, Oruro, Bolivia.
- 1 Yttrotantalite, Ytterby, Sweden.
- I Zeyringite, Flatschach, Styria.

MATILDA W. BRUCE FUND

- I Achtaragdite, Siberia.
- I Albite, Lungnetz, Switzerland.
- 1 Apophyllite, Chester Co., Pa.
- I Aragonite, Mexico.
- 1 Argentite in Quartz, Tonopah, Nev.
- I Argentite and Proustite, Tonopah, Nev.
- 1 Axinite, Franklin, N. J.
- 7 Babingtonite, West Paterson, N. J.
- 2 Beryl, Pala, San Diego Co., Cal.
- I Calcite, Cumberland, England.
- I Cerargyrite in Kaolin, Broken Hill, Australia.
- I Crestmoreite, Riverside Co., Cal.
- I Dioptase, Altyn Tube, Kirghese Steppes, Siberia.
- I Fluorite, Phœnixville, Pa.
- I Fluorite, Cornwall, England.
- I Iodyrite, Broken Hill Mine, Australia.
- 2 Lapis Lazuli, Chile.
- I Miersite, Broken Hill, New South Wales.
- I Opal, Australia.
- 2 Proustite, Tonopah, Nev.
- I Pyrite and Chalcopyrite, Colorado.
- I Quartz, Ouray Co., Col.
- 2 Rubellite, Mt. Mica, Maine.
- 2 Scheelite with Tungstite, Sonora, Mexico.
- I Silver, Cobalt, Ontario, Canada.
- 1 Spencerite, British Columbia.
- I Sphalerite, Joplin, Mo.
- I Sulphur, Sicily, Italy.
- I Temiskamite, Cobalt, Ontario, Can.
- I Temiskamite, Elk Co., Ontario, Can.
- I Tourmaline, Oxford Co., Maine.

- I Tourmaline, Fort Washington Ave. and 171st St., N. Y. C.
- I Uranopilite, Montrose Co., Colo.
- 2 Variscite, Canada.
- I Vanadinite, near Maricopa, Ariz.

DEPARTMENT OF WOODS AND FORESTRY

By GIFT

- CHARLES C. DEAM, Bluffton, Ind. Spray of Schneck's oak, from Bluffton, Ind.
- J. E. Gribble, Medford, Oreg. Sprays of Oregon ash and Broadleaved maple, from Medford, Oreg.
- J. R. HALL, Santa Barbara, Cal.
 - California sycamore, Western cherry, Sprays of laurel, Broad-leaved maple, Oregon ash, from Santa Barbara, Cal.
- A. C. Hawkins, Washington, D. C.
 Collection of Cuban woods (23 specimens).
- WILLIAM J. HAYES, Colombia, S. A. 38 Specimens of native Colombian wood.
- WILLIAM E. LAWRENCE, Corvallis, Oreg. Sprays of Broad-leaved maple, Oregon ash, from Corvallis, Oreg.
- N. F. Macduff, Grant's Pass, Oreg. Sprays of Oregon ash and Broadleaved maple, from Grant's Pass, Oreg.
- Prof. David M. Mottier, Bloomington, Ind.
 - 2 Sprays of Blue ash, from Bloomington, Ind.
- THORNTON P. MUNGER, Portland, Oreg. Sprays of Oregon ash and Broadleaved maple, from Portland, Oreg.
- J. C. Nase, Clifton, Ariz.
- Sprays of Arizona sycamore and Mexican walnut, from Clifton, Ariz.
- JAMES H. OWENS, Yonkers, N. Y.
 - Piece of wood, Nannyberry, cut August 5, 1893, a queer twisted growth about three feet long, from Nodine Hill, Yonkers, N. Y.

EDWARD C. Scott, Oswego, N. Y.
Collection of Porto Rican woods, 82
pieces about 2×3 inches, polished on
one side; about 40 varieties.

H. Basil Wales, Chiricahua, Ariz. Sprays of Arizona sycamore and Mexican walnut, from Chiricahua, Ariz.

By Purchase

62 Forestry photographs, from Seattle, Wash.

One spray of Douglas spruce, from Estes Park, Colo.

DEPARTMENT OF INVERTE-BRATE ZOÖLOGY

By GIFT

CHARLES P. ALEXANDER, Lawrence, Kan. 75 Tipulidæ (Diptera), Larvæ, Pupæ and Mature Insects.

Roy C. Andrews, New York City. 34 Insects, from China.

Edward Veras Arangua, Cambridge, Mass.

II Hymenoptera, I Orthopteron, 21 Arachnids, 4 Centipedes, from Chile.

Dr. A. N. Arinoff, Pine Bush, N. Y. 3 Lepidoptera.

Dr. WILLIAM BARNES, Decatur, Ill.
7 Lepidoptera (including I Paratype and 2 Metatypes).

C. WILLIAM BEEBE, New York City.
8 Hymenoptera (including 6 types and
1 cotype), from British Guiana.

E. L. Bell, Flushing, N. Y.88 Lepidoptera, 19 Beetles, 159 Coleoptera, Hymenoptera, etc.

JOHN BELL, Los Angeles, Cal. Alcoholic specimens of Myriapods, Insects, Crustacea, etc., from Los Angeles, Cal.

Dr. J. Bequaert, New York City. 550 North American Insects. 120 Mollusca, including 103 type specimens, from Belgian Congo, Africa.

Francis Berliner, New York City.

I Roach and I Beetle, from Cristobal,
near Ft. Sherman, Panama.

HENRY BIRD, Rye, N. Y.
I Metatype of Bird, from California.

W. S. BLATCHLEY, Indianapolis, Ind. 6 Insects from Florida.

C. H. Blood, New York City.
I Aberrant Hesperid, from Riverdale,
N. Y.

Walter Brandler, Los Angeles, Cal. 200 Mollusca, 100 Isopods, 100 Insects, from Los Angeles, Cal.

BARNUM BROWN, New York City. 706 Insects and Spiders from Cuba.

Rev. Harry R. Caldwell, Suffern, N. Y. About 8000 Insects from China.

George K. Cherrie, New York City.
6 Beetles, from Matto Grosso, Brazil.

B. Preston Clark, Boston, Mass. About 720 Hymenoptera from South America; 3 Land Shells from Mindanao, Philippines; 52 Lepidoptera from Costa Rica and 792 from the Philippines; 250 Insects from near Winnipeg; and 70 from Venezuela.

Howard H. Cleaves, New Brighton, S. I. Numerous Bird lice.

Prof. T. D. A. Cockerell, Boulder, Colo.
I Parlatoria pseudaspidiotus and numerous Plant lice from Colorado.

WILLIAM P. COMSTOCK, New York City.

I Sesia, from Newark, N. J.

6 Specimens of food plants of Lepidoptera, from California.

2 Hemiptera and 10 Odonata, from New Jersey.

SGT. EDWARD D. CRABB, A. E. F., France. 23 Land snails, from France.

WILLIAM T. DAVIS, New Brighton, S. I. 3 Microlepidoptera and 2 pupæ, from Cold Spring (L. I.), N. Y.

8 Beetles, from Arizona.

I Megathymus, 2 Noctuids.

Walter Dewsnap, New York City. 67 Lepidoptera and 1 Beetle.

E. L. DICKERSON, Nutley, N. J.

A collection of Insects affecting the

Hibiscus, with numerous specimens
of the plant showing the insect injuries, from New Jersey.

R. P. Dow, Brooklyn, N. Y.

Numerous Thrips, from Alpine, N. J. 23 Coleoptera, from Fresno Co., Cal. 61 Insects and 1 Myriapod, from Catskill Mts., N. Y., and Claremont, N. H.

48 Lepidoptera and I Parasitic Worm.

Walter Granger, New York City.
About 300 Insects from Gardner, Colo.

A. Gussman, New York City.
II Small marine shells.

John F. Habbe, Indianapolis, Ind. 5 Mollusca.

G. C. HALL, New York City. 9 Lepidoptera.

Albert G. and Jerome J. Hanauer, New York City.

Corals, shells, sponges, etc.

EDWARD D. HARRIS, New York City.

25 Beetles and cocoon, from various places; about 960 Hymenoptera, from Southern Pines, N. C.; 70 Coleoptera, from Africa, 9 from Southern Pines, N. C., 6 from Nebraska, and 202 from various other places.

Morgan Hebard, Philadelphia, Pa. 69 Orthoptera.

Dr. E. O. Hovey, New York City.

6 Alcoholic specimens of Crustacea and Myriapoda and 2 Beetles, from Mammoth Cave, Ky.

B. T. B. HYDE, New York City.

2 Water-color drawings of caterpillars, cocoons and moths.

N. Mex.

DEPARTMENT OF ICHTHYOLOGY (Transfer).

Alcoholic specimens of parasitic copepods and flukes, from Atlantic Coast.

Frank M. Jones, Wilmington, Del. 44 Lepidoptera from Southern and

44 Lepidoptera from Southern and Western United States.

A. B. Klots, New York City.

1 Papilio and 1 Callicore—aberrations.

Miss L. Leggett, New York City.
I Glass sponge.

CHARLES W. LENG, New York City. 71 Beetles, from South America.

R. A. LEUSSLER, Omaha, Neb.

125 Lepidoptera, including I cotype, and 18 Hesperiidæ, from Colorado and Nebraska.

C. Lewis, New York City.
I Specimen of Hair Worm.

ALBERT E. LURCH, New York City. 120 Insects, chiefly Lepidoptera, from Connecticut, New Hampshire, and Massachusetts.

Dr. F. E. Lutz, New York City. Worms from cyst in crop of a chicken.

C. K. MACFADDEN, New York City.

3 Longhorn Beetles, from Honda, Colombia.

Dr. William M. Mann, Washington, D. C.

166 Beetles, from Capland, Haiti, and Brazil.

550 Insects, from the Bahamas.

Walter C. Mathias, Portland, Oreg. 137 Insects, chiefly Lepidoptera, from Washington and Oregon.

W. DEW. MILLER, New York City.2 Hippoboscids from Red-tailed Hawk.

H. B. Monges, New York City.

I Beetle from Cuba.

Museum of Comparative Zoölogy, Cambridge, Mass.

14 Coleoptera from Solomon Islands.

HOWARD NOTMAN, Brooklyn, N. Y.

4 Coleoptera and 220 Hymenoptera from Essex Co., N. Y.

22 Satyrus, Keene Valley, N. Y. Dr. R. Ottolengui, New York City.

5 Plusias, from North America.

42 Lepidoptera, from South America. Charles L. Pollard, Bethel, Me.

10 Lepidoptera, from California. H. E. Rauch, Mt. Vernon, N. Y. Pink Katydid.

CHARLES H. ROGERS, New York City.
Claw of large Lobster and piece of
wood with Barnacles attached, both
from Long Beach, N. Y.

ALEXANDER SAUNDERS, Yonkers, N. Y. I Cecropian Moth.

F. J. W. Schmidt, Stanley, Wis. 296 Insects, from Stanley, Wis.

Ernest Shoemaker, Brooklyn, N. Y.
2 Coleoptera from Slide Mt., N. Y.;
544 Insects, mostly Hymenoptera,
from various places.

ROBERT K. STRAUS, Mt. Kisco, N. Y. I Walking Stick.

A. H. STURTEVANT, Columbia University, N. Y. C.

51 Diptera, including 1 type specimen; 1 Coleopteron.

H. Thurston, Brooklyn, N. Y. About 500 Insects of various orders.

F. E. Watson, New York City.

87 Insects from Mosholu, N. Y.; 40 Lepidoptera and 4 Pupæ.

F. E. Watson and E. L. Bell, Flushing, N. Y.

38 Insects of various orders, from Greenwood Lake Glens, N. J.

HARRY B. Weiss, New Brunswick, N. J. Mole cricket and photographs (12 specimens); 9 Homoptera, 15 Pediculus corporis, 54 Hymenoptera; 8 Specimens of Rhaboscelis tenuis and 10 specimens of their work; 9 Specimens of Zeugophora scutellaris, 6 specimens of their larvæ and 10 of their work; 28 Specimens of Beetles, also about 30 specimens of plants and seeds showing the damage caused by the insect, from New Jersey; a collection of insects affecting the Hibiscus, with specimens of the plant showing the insect injuries, from New Jersey.

Dr. H. E. Wheeler, Conway, Ark.
3 Specimens of Arkansia wheeleri,
W & O, from Old River of Quachita,

near Arkadelphia, Ark.

WILLIAM S. WRIGHT, San Diego, Cal. 500 Lepidoptera, from California.

By Exchange

Dr. Jos. H. Pazos, Cuba. 30 Beetles.

Mrs. LILLIAN DYER THOMPSON, Cambridge, Mass.

30 Microscopic slides of mollusk radulæ, also 19 shells from which the mounted material was taken. W. H. WEEKS, Brooklyn, N. Y. 254 Marine and fresh-water shells.

By Purchase

102 Beetles.

14 Lepidoptera from Tropical America. 2000 Beetles.

Collection of Pacific Mollusks, Brachiopods, and Corals, comprising about 100 species, 464 specimens, mostly from Puget Sound.

227 Lepidoptera, 442 Coleoptera, 657 Hymenoptera, from Gull Lake, Canada.

THROUGH MUSEUM EXPEDITIONS

Crustacea, Mollusca, Chordata, Annulata, Echinodermata, Myriapoda, about 2000 specimens, from Cuba. Collected by Barnum Brown.

Corals and sponges from Bahamas. Collected by Dr. E. O. Hovey.

Numerous Insects, Spiders, Spider Webs, etc., from Ramsey, N. J. Collected by Dr. Frank E. Lutz.

Invertebrates, from Woods Hole, Mass. Collected by R. W. Miner.

DEPARTMENT OF ICHTHYOLOGY AND HERPETOLOGY

FISHES

By GIFT

THEODOOR DE BOOY, Yonkers, N. Y. 6 Catfish and 6 Characins.

W. Brind, New York City. Aquarium fishes.

MORTIMER H. COOPER, Bridge Hampton, L. I.

I Orange Filefish and I Sea Raven, from Bridge Hampton.

Dr. Herman Haupt, Jr., South Haven, Mich.

12 Lake Herrings, I Perch, I Minnow; 10 fishes (White-fish, Perch, etc.), from Lake Michigan.

Dr. E. O. Hovey, New York City.
2 Blindfish, from Mammoth Cave, Ky.

DEPARTMENT OF INVERTEBRATE ZOÖLOGY (Transfer).

12 Specimens of Pacilia vivipara from Porto Rico; 4 Specimens of Gambusia affinis; 3 Specimens of Heterandria zonata from Florida; 1 Specimen of Pygosteus from Siberia; 10 Young Eels and 3 Sticklebacks.

ROY LATHAM, Orient, L. I.

Specimens of Long Island fishes (16); I Chloroscombrus chrysurus, I Black Rudder-fish, head of Squirrel Hake, from Orient, L. I.

Andrew B. Mooney, New York City. Cowfish, from Bellaire, Florida.

Museu Nacional, Rio de Janeiro. Blind Catfish, from Iguape, Brazil.

L. J. and F. NAGELE, New York City. 1 "Daylight."

Hugo C. Nelles, New York City. 45 Aquarium fishes.

OCEAN LEATHER Co., New York City.
Sample hide of Hammerhead and
Ground Sharks and hide of Pavement Shark; jaws of Cub Shark,
from Cape Lookout, North Carolina.

FREDRICK SCHWARZ, Bronx, N. Y.

I Orange Filefish, from Brooklyn Navy Yard.

ERNEST THOMPSON SETON, Cos Cob, Conn.

13 Fishes from Winnipeg.

Miss Helen L. Squier, New York City.

Jaws and piece of backbone of
Ground-shark.

Miss Ada Thomson, New York City. 6 Fossil fishes from Scotland.

H. S. TRULL, New York City.

1 Aquarium net.

Dr. P. De Vecchi, New York City.
I Fossil fish and I fossil fish-scale.

By Exchange

CARNEGIE MUSEUM, Pittsburgh, Pa. 80 Species (254 specimens) of South American fishes.

Prof. T. L. Hankinson, Charleston, Ill. A collection of Minnows of 20-odd species (144 specimens). CARL L. HUBBS, Field Museum, Chicago, Ill.

12 Species, about 40 specimens, of fishes from California.

Museu Nacional, Rio de Janeiro. 25 Fishes from Rio de Janeiro.

UNITED STATES NATIONAL MUSEUM, Washington, D. C.

Specimen of Pleurogrammus monopterygius, from Alaska.

By PURCHASE

Clear-nosed Skate.

Sea Sunfish (Mola mola), from off Gravesend Bay.

THROUGH MUSEUM EXPEDITION

Arctic Fishes, from Greenland. Crocker Land Expedition.

REPTILES AND BATRACHIANS

By GIFT

DEPARTMENT OF ANTHROPOLOGY (Transfer).

I Alligator, skin mounted.

New York AQUARIUM, New York City.
I Crocodile, from Florida; I Turtle,
from Staten Island, N. Y.

Roswell Baerman, New York City. 8 Snakes, from Cold Spring, N. Y.

FREDERICK BLASCHKE, New York City. I Snake, from Cold Spring, N. Y.

BARNUM BROWN, New York City. 5 Frogs, 2 toads, 83 lizards, 13 snakes,

I turtle, from Cuba.

CARSON CITY SCHOOL, Carson City, Nev.

13 Frogs, I toad, 5 lizards, I snake, from Carson City, Nev.

Morton L. Church, Marshall, S. C. I Lizard, from South Carolina.

GEORGE ENGELHARDT, Brooklyn, N. Y.
I Salamander, from Big Indian Valley, Catskill Mts., N. Y.

Mrs. L. J. Francke, Glen Head, L. I. I Snake, from Glen Head.

ARTHUR G. GILLAM, Flushing, L. I. I Snake, from Canaveral, Fla.

Dr. Herman Haupt, Jr., South Haven, Mich.

4 Toads, 7 snakes, 2 turtles, from South Haven, Mich.

Dr. E. O. Hovey, New York City.

I Salamander, I lizard, 4 snakes, from Mammoth Cave, Ky.

Mrs. Austin Huntington, New York City.

I Snake skin.

B. T. B. Hyde, Aztec, N. Mex. I Lizard, 6 snakes, from Aztec, N. Mex.

DEPARTMENT OF INVERTEBRATE ZOÖLOGY (Transfer).

2 Frogs, I lizard, from Gainesville, Fla.; I toad, from Wisconsin; 3 lizards, from Los Angeles, Cal.

R. D. O. Johnson, Phænix, Ariz. 2 Lizards, I snake, from Phænix, Ariz.

WILLIAM KEARNS, New York City.

I Toad, from New York City.

MORNINGSIDE COLLEGE (Dept. Biology), Sioux City, Iowa.

3 Frogs, from Sioux City, Iowa.

Major J. M. Moss, Camp Kearny, Cal. I Snake, from Camp Kearny, Cal.

J. T. Nichols, New York City.

32 Snakes, I turtle, from Mastic, L. I.

G. K. Noble, New York City. 3 Lizards, from Filamore, Utah.

Herbert J. Pack, Salt Lake City, Utah. 4 Salamanders, 41 frogs, 105 toads, from Utah.

DEPARTMENT OF PARKS, New York City. I Snake.

John J. Paul, Watertown, Fla. 7 Turtles, from Florida.

OSCAR F. QUARTERMAN, Canaveral, Fla. 5 Turtles, from Florida.

WILLIAM H. ROGERS, Las Vegas, Nev. 9 Frogs, 5 lizards, 2 snakes, from Las Vegas, Nev.

F. J. W. Schmidt, Stanley, Wis. 1 Frog, from Stanley, Wis.

Ernest Thompson Seton, Greenwich, Conn.

4 Salamanders, 55 frogs; 8 toads; 8 snakes; 2 turtles, from Manitoba, Canada.

15 Frogs, from Connecticut.

KARL B. SMITH, Philadelphia, Pa. 3 Snakes, from Eden Mine, Nicaragua.

R. Speight, Canterbury Museum, Christchurch, New Zealand.

9 Wetas, food of Sphenodon, from Peel Forest, Canterbury, N. Z.

Dr. Herbert J. Spinden, New York City, (Transfer from Dept. of Anthropology).

2 Snakes, from Salvador, Central America.

T. C. Stephens, Sioux City, Iowa.

I Frog, from Milford, Iowa.
I Toad, from Sioux City, Iowa.

GEORGE W. STOKES, New York City.
I Lizard, from Colombia, S. A.

New York Zoölogical Society, New York City.

I Snake, from Georgia; 3 snakes, from Florida; 2 snakes, from Texas; I snake, from Panama; 3 frogs, I lizard, I snake, from South America; I lizard and 4 snakes, from Australia.

By Exchange

COMMERCIAL MUSEUM, Philadelphia, Pa. 11 Salamanders, 1 cæcilian, 159 frogs, 169 lizards, 374 snakes: Cope Collection from Central America and Colombia.

THOMAS HALLINAN, Paterson, N. J. 169 Frogs, 57 toads, 79 tadpoles, 334 lizards, 29 snakes; from Chile.

By PURCHASE

27 Frogs, 2 snakes, 2 turtles, from Eureka, Fla.

35 Lizards, 20 snakes, from San Antonio, Texas.

1 Lizard, from Chipley, Fla.

THROUGH MUSEUM EXPEDITION

46 Frogs and toads, 17 lizards, 16 snakes; from Fukien and Yunnan Provinces, China. Collected by R. C. Andrews and E. Heller. (Transfer from Dept. of Mammalogy.)

DEPARTMENT OF MAMMALOGY AND ORNITHOLOGY

MAMMALS

By GIFT

New York Aquarium.

Young Manatee, from Amazon, in flesh.

BARNUM AND BAILEY, Bridgeport, Conn. Giant Kangaroo, skeleton.

FREDERICK BLASCHKE, New York City.

Deer (skin, skull and leg bones),
from Cold-Spring-on-the-Hudson,
N. Y.

Frank L. Harris, Ashaway, R. I. Skeleton of a Mole, from Ashaway.

F. Burton Harrison, Manila, Philippine Islands.

Skin and skull of a Tamarao; I set of horns of a Tamarao.

Frederic Kennard, Newton Centre, Mass.

Fœtus of Tapir.

Miss Jane Levens, New York City.

2 Acouri (native name) embryos,
from Potaro River, British Guiana.

FRANK E. LUTZ, New York City. Squirrel skull, from British Guiana.

DEPARTMENT OF PARKS, New York City.
Tiger, skin and skeleton; Russian
Bear, skull; Deer, skull; Raccoon;
Aoudad; Indian Antelope; 2 Red
Foxes; Red Deer; 3 Opossums;
Elk; 9 Monkeys; Lion and Lion
cub; Leopard.

George T. Powell, Ghent, N. Y. 3 Field Mice, in flesh.

Mrs. H. O. Punshon, Denver, Colo. Black and tan Dog.

WILLIAM C. RIVES.

1 Mole.

ERNEST THOMPSON SETON, Greenwich, Conn.

7 Mice; skull of a Skunk; Pine Marten, in flesh; 3 Bats in alcohol; 2 Mink skeletons.

D. C. Stull, Provincetown, Mass. Samples of Ambergris.

MISS THEODORA WILBOUR, New York City.

Pekinese Dog, mounted.

NEW YORK ZOÖLOGICAL SOCIETY.

Altai Wapiti, skeleton; Baboon, skeleton; Agouti, skeleton; Lemur, skin and skeleton; Indian Rhinoceros, skin and skeleton; large Black Squirrel, skeleton; from India: Kinkajou, skeleton; Cuban Rat, skin and skeleton; Albino Woodchuck, skin and skeleton; Mangabey Monkey, skin and skeleton; Woolly Monkey, skeleton; Sitatunga, skeleton; Double-humped Camel, skeleton; Thamengeld's Deer, skin and skeleton; Coatimundi, skin and skeleton; 2 Badgers, skins and skeletons; Paradoxure, skin and skeleton; White-tailed Gnu, skin and skeleton; Wallabies, I skin and 2 skeletons; Herpestes, I skin and 2 skeletons; Opossum, skeleton; 4 Phalangers, skins and skeletons (1 Flying and I Spotted); Kangaroos, 5 skins and 6 skeletons (1 Tree and I Giant); Columbian Deer.

By Exchange

Colorado Museum of Natural History, Denver.

II Rabbits, I Skunk, 5 Weasels, 5 Squirrels, 13 Chipmunks, 6 Mice, 3 Wood Rats, 2 Gophers, 2 Kangaroo Rats and skulls, 2 Mountain Goats; 2 Antelopes; 3 Blacktail Deer, I skin and 3 skulls; from British Columbia and California.

OAKLAND MUSEUM, Oakland, Cal.

Sea Otter, skeleton; Coon, skin and skull; from California.

CARLOS S. REEDS.

I Rabbit, skin and skull, from Argentina.

Ernest Thompson Seton, Greenwich, Conn.

Pine Marten in flesh.

By PURCHASE

Tusks of African Elephant, from Mt. Kenia, Africa.

- 8 Skins and 5 skulls: 3 Herpestes, 2 Pigs, I Badger, I Deer, I Cat; from China.
- 2 Muskrats, in flesh, from Unionport, Bronx.
- 3 Mounted Wolves. Gibbon.
- Skin of Wild Cat (Felis catus), from Dobrudushka, Rumania.

Imperfect skeleton of Lynx vulgaris. Series illustrating structure, location, growth, replacement, and modifications of teeth; skeletons of Chamois, Tarsier, and Marmoset; mounted skeletons of Black Bear, from Maine; Chamois; Proboscis Monkey, from Borneo; Languer Monkey, from India; Monkey, skull, from Java; 2 feet of Pig.

THROUGH MUSEUM EXPEDITIONS

- I Bottle of alcoholics (Bats), from Cuba. Collected by Barnum Brown.
- 25 Blue Foxes; 9 Arctic Hares, skulls; 4 adult Polar Bears, 3 cubs with skull, 3 adult skulls; 8 Walrus skulls, 7 tusks, I skin of head; I Narwhal skeleton, 5 tusks; I White Seal with skull and leg bones, 3 dried; 4 White Wolves, 5 Wolf skulls, I set White Wolf leg bones; 5 Musk-oxen; 30 Lemmings. Crocker Land Expedition.

BIRDS

By GIFT

- Dr. W. H. Bergtold, Denver, Colo. Egg of Great Sulphur-crested Cockatoo.
- FREDERICK BLASCHKE, New York City. Rouen Duck in the flesh.
- C. M. Breder, Newark, N. J. Long-billed Marsh Wren, skin, Newark, N. J.
- W. L. Brind, New York City. 3 Saffron Finches, in flesh.
- Miss C. F. Carter, New York City. Skylark in flesh, from New York City.

- HENRY CHAPIN, New Brighton, Staten Island, N. Y.
 - Flicker, in flesh, from New Brighton.
- MRS. W. S. CURRIE, New York City.
 Lady Gould Finch skin, from Sound
 Beach, Conn.
- Paul Engel, New York City.

 Hawk, in skin, from Halcott Mt.,
 N. Y.
- Donald Farley, New York City. Downy Woodpecker, in flesh.
- Donald Farley and Barrett Klots. Herring Gull, from Long Beach, L. I.
- WILLIAM FLOYD, Mastic, L. I. 2 Mergansers.
- Mrs. A. K. Fraser, New York City. House Sparrow, in flesh, New York City.
- H. D. GOODALE, Amherst, Mass. 6 Ducks and 5 Chickens.
- Mrs. M. S. Green, Far Rockaway, N. Y. Hermit Thrush, in flesh.
- A. Gussman, New York City. Skin of Penguin.
- Mrs. Leo Hart, New York City. Mounted White Owl.
- Ernest Ingersoll, New York City. Skin of a Gray-cheeked Thrush, from Hopedale, Labrador.
- Mrs. Andrew Irwin, Washington, Conn. Freak hen's egg.
- R. D. O. Johnson, Phœnix, Ariz. Barn Owl received alive, from Phœnix, Ariz.
- Justus Von Lengerke, New York City.
 6 Goshawks, 4 Marsh Hawks, 1
 Golden Eagle, 2 Crows, 4 Sparrow
 Hawks, 3 Red-shouldered Hawks, 7
 Cooper's Hawks, 1 Pileated Woodpecker, 1 Pigeon Hawk, 45 Sharpshinned Hawks; all in the flesh,
 from New Jersey.
- Brother Apolinar Maria, Bogota, Colombia.
 - 59 Bird skins from Bogota.
- A. E. McIlheny, Avery Is., La. 20 Little Blue Herons, from Avery Is.

W. DEW. MILLER, New York City.

I House Sparrow in flesh, three eggs of Screech Owl, I Wood Thrush in flesh; I Barred Owl, I Hermit Thrush, I Hairy Woodpecker; from vicinity of New York City.

PATRICK MONAHAN, New York City. I Pigeon, New York City.

T. H. Morgan, Columbia University. Sebright Bantam.

J. T. Nichols, New York City. Black Duck, Mastic, L. I.

WILLIAM P. OTIS, Bloomingburg, N. Y. Great Horned Owl, in flesh, Bloomingburg, N. Y.

DEPARTMENT OF PARKS, New York City.

3 Black Swans, I Chinese Goose and
3 common Geese, I Bald Eagle, 2
Golden Eagles, I Screech Owl, 3
Weaver Birds, 2 Mute Swans, 10
Parrots, 2 Guinea Hens, I European
Blackbird, 4 Cockatoos, I Kingfisher,
I Toucan, I Owl, 3 Parakeets, 2
Macaws, I Ring Dove, I Brown
Thrasher, I Silver Pheasant, I Starling, I Song Thrush, 4 Canaries, I
Coot.

Mrs. Eleanor Penney, Brooklyn, N. Y. I Brazilian Parrot.

A. PINKUS AND EDWARD CHALIFF, New York City.

I Saw-whet Owl, New York City.

PRYOR PRAY, New York City.

I Purple Grackle and I Crow, near New York City.

WILLIAM ROCKEFELLER, Tarrytown, N. Y.

I Australian Maned Goose, in flesh.

C. H. Rogers, New York City.

2 Holboell's Grebes, in flesh, and I Sanderling, both from Long Beach, L. I.

Louis Ruhe, New York City. 2 Parrots, in flesh.

Dr. L. C. Sanford, New Haven, Conn.
Sterna and shoulder girdles of Trumpeter Swans, from Okanagan, British Columbia. G. SEBILLE, New York City.

2 Honey Creepers, I Mockingbird, and I Hawk; all in flesh.

Mr. Stafford.

I Screech Owl, in flesh, from Blauvelt, Rockland Co., N. Y.

JAY A. WEBER, Palisades Park, N. J. I Flicker, in flesh, and 2 skins of Cormorant.

New York Zoölogical Society.

I Oriole, I American Widgeon, I Quail, 2 Parakeets, 4 Finches, 3 Ducks, I Hawfinch, I Ostrich, I Magpie Lark, I Flamingo, I Brant, 2 Geese, I Great White Heron, I Quail Dove, I Grackle, 5 Pigeons, I Spotted Eagle Owl, 4 Hawks, 1 Dove, I Mute Swan, I Titmouse, I Turkey Vulture, 3 Parrots, 2 Tanagers, I Frogmouth, 3 Herons, I Great Blue Heron, 2 Honey Creepers, I Timaliid, I Quail-finch, I Manchurian Crane, 2 Jays, 3 Weaver Birds, 2 Lories, 1 Trupial, 1 Gull, 3 Plovers, 3 Toucans, 2 Crow-shrikes, 2 Babblers, I Bower bird, I Thickknee, I Cotinga, 2 Starlings, 4 White Ibises in alcohol, I Pitta, I Teal, I Cassowary, I Hornbill, I Goshawk, I Brush Turkey, I Bateleur Eagle, I Rose-breasted Grosbeak, I Seriema, 1 Euphonia.

JOSEPH ZUCKERMAN, New York City.

I Hermit Thrush, from New York
City.

By Exchange

Ernest Thompson Seton, Greenwich, Conn.

I Great Gray Owl.

JAY A. Weber, Palisades Park, N. J. I Double-crested Cormorant.

By Purchase

Skin of Peregrine Falcon. 709 Bird skins, from Peru.

DEPARTMENT OF VERTEBRATE PALÆONTOLOGY

By GIFT

D. M. Bell, Norfolk, Va.
Tooth of Mastodon, from Hampton
Roads, Va.

W. F. Cory, Newark, N. J.
Tooth of Mammoth, from Alaska.

Warren Delano, New York City.
Vertebral column of Arabian colt,
from Barrytown, N. Y. Skull and
vertebral column of colt six months
old, from Barrytown.

H. K. Devereux, Lexington, Ky. Skeleton, in the flesh, of trotting horse, "Lee Axworthy," from Lexington, Ky.

CHARLES H. STERNBERG, Lawrence, Kansas.

Collection of reptiles, from the Permian of Texas.

Снехтек Sтоск, Berkeley, Cal. Fossil specimen (cast) from Idaho.

THOMAS F. WHITE Co., New York City. Head of ass, in the flesh, from New York City.

New York Zoölogical Park. Mountain zebra.

By Purchase

Skeleton of Parciasaurus, from Permian of South Africa.

Skull of Lysorophus from Permian of Texas. Collection of fossils (dinosaurs) from Cretaceous of Alberta, found near Red Deer River, Alberta. Collection of reptiles (mostly pelycosaurs) from the Permian of Texas.

THROUGH MUSEUM EXPEDITIONS

Pleistocene fossils from cave at Soledad, 10 m. east of Cienfuegos, Cuba, and from Baños de Ciego Montero, 18 miles N. W. of Cienfuegos, Cuba. Collected by Barnum Brown and C. Falkenbach.

To Eocene of Colorado:
Collection of fossils from Huerfano
formation, Huerfano Basin, Col. (2
lots). Collected by Walter Granger
and G. Olsen.

To Tertiary of Nebraska:
Collection of fossils from Snake
Creek Beds, south of Agate, Neb.
Collected by Albert Thomson.

DEPARTMENT OF ANTHROPOLOGY

By GIFT

R. C. Andrews, New York City (Transfer).

Costume of Cantonese laborer.

Mrs. Lucien Antoine, New York City. Altar piece of wood in shape of cross, covered with stones and shells. Made by Indians near Chicago.

Mrs. Mary Austin, New York City. Head band of flicker feathers, from Shoshoni Indians of the Panamint Mts., Cal.

W. EDGAR BAKER, JR., Mastic, L. I.

1 Pair long-legged moccasins of
Plains Indians, from Custer Battlefield

George Gray Barnard, New York City. Club from Marquesas.

Mrs. Pauline Benedikt, New York City.

Collection of guns, bows and arrows, swords, daggers, pistols, etc., from North America.

R. Brace, New York City.

Ornaments made of small shells and rope from Africa.

Mrs. Lillian Burdon, Grand Rapids, Mich.

Alaskan specimens (1 basket and 1 bag).

Albro R. Carman, M.D., New York City.

Collection of arrow and spear points, stone implements, etc., found in cave near Ft. Ann, N. Y., in 1857-58.

Mrs. H. C. Carter, New York City. Ethnological specimens from America and Hawaii.

Michael J. Clancy, Bluefields, Nicara-

Ethnological and archæological collection and some books, from Nicaragua (Miskito Coast).

HARRISON ELLIOTT, New York City.

3 Hammerstones, from Ryder's Pond, Gravesend, Brooklyn, N. Y.

LIEUT. G. T. EMMONS, Princeton, N. J. I Sea Otter spear from Unalaska, 4 sword guards (iron) from Japan.

Col. J. P. Finley, Governors Island, New York Harbor. Charm, from Philippine Islands.

Mrs. Emily J. DE Forest, Cold Spring Harbor, L. I.

6 Pottery vessels from Peru and Mexico.

DEPARTMENT OF GEOLOGY AND INVERTE-BRATE PALÆONTOLOGY. (Transfer.) Collection of rock specimens and 40 microscopic slides.

MRS. A. C. HAMLIN, New York City.

I Mat made of cocoanut fiber and maiden hair fern, I fan made of cocoanut fiber and maiden hair fern, and II other fans, from Samoa, Marshall Islands, Hawaiian Islands and Old Mexico.

Mrs. J. W. Haselhurst, New York City.

Feather robe, Sitka, Alaska.

ALFRED C. HAWKINS, Plainfield, N. J. Collection of arrowheads, etc., from Eastern United States and Texas.

HAROLD HERRICK, New York City.

1 Copper axe, from Monroe Co.,
Mich.

GEORGE G. HEYE, New York City.
77 Phonograph records made by Dr.
Washington Matthews of Navajo
Yebi-chai Ceremony. (Hyde Expedition.)

DR. W. L. HILDBURGH, New York City.

1 Lamaistic tablet, from China.

Ethnological collection, chiefly from
North America.

Andrew G. Infante, New York City. 5 Archæological specimens, Colombia.

Johnson, Codwin & Co., New York City. Samples of silk ribbons with designs suggested by various birds. (Designs by Emil Speck.)

A. L. Kroeber, San Francisco, Cal. Human hair.

MRS. FREDERIC S. LEE, New York City.
Beaded bandoleer. Made by "The
White Calf that Jumped from the
Hill into the Water"—a Crow
Indian.

MISS M. E. LESTER, White Plains, N. Y. Beaded saddle trimmed with wool fringe and beaded saddle blanket trimmed with wool fringe.

DEPARTMENT OF MAMMALOGY. (Transfer.)

Human skull and mandible (Mongol).

Dr. Felix von Oefele, New York City. 2 Babylonian tablets.

Dr. Elsie Clews Parsons, New York City.

Ethnological collection from Zuñi and Acoma, New Mexico.

JACOB ROSENZWEIG, New York City.

10 Broken rough blades, from Flemington Junction, N. J. Collection of archæological specimens from the vicinity of New York.

Mrs. A. C. Russell, New York City.

1 Mescalero basket and 2 Jicarilla baskets.

MRS. ANNIE SARGEANT, Jersey City, N. J.
War bonnet and complete outfit of
Chief White Eagle, Wind River
Reservation, Wyoming, who died in
France while in service, October,
1918. (17 specimens.)

Moses Frederick Savage (Tiffany Co.), New York City.

I Silver mug, bought from Indians of Southern California.

REMINGTON SCHUYLER, New Rochelle, N. Y.

Arrow points (21 specimens).

WILLIAM SIEGEL, New York City.
6 Indian weapons from South America.

KARL B. SMITH, Philadelphia, Pa. Small stone celt from Edwin Mine, Nicaragua.

Dr. Frank G. Speck, Philadelphia, Pa. 1 Spoon from the Jackson-Whites.

MISS HELEN L. SQUIER, New York City.
I Californian and 3 Indian ethnological specimens.

CARROLL RICHARD STEGALL, Rossville, Ga. 23 Paleolithic implements from Luebo, Kasai District, Belgian Congo, Africa.

WILLIAM SULZER, New York City.
Alaskan baskets (9 large and 3 small).

GENZO TANAKO, New York City.

Japanese gentleman's tobacco bag and pipe.

HAROLD TORMESEN, Brooklyn, N. Y.
I Pair moccasins with fur and beads.

E. J. VALEUR, New York City.

Archæological collection: I stone with carving of human face, I rubbing stone, I stone ball with spiral carving, 3 celts, 3 broken celts, I pottery object, II pottery heads, and a number of pottery fragments; all from Moncion, Santo Domingo.

Mrs. Samuel Richards Weed, New York City.

Miscellaneous collection from North and South America and the Philippines.

LIEUT. HAROLD B. WHARFIELD, Marshfield, Wis.

Skeletal and archæological material from a cave nine miles above Ft. Apache, Ft. Apache Indian Reservation, Ariz.

By Exchange

British Museum. (Sir Hercules Read), London.

Archæological specimens from Europe.

By Purchase

16 Celts, 4 stone figures, 6 pottery figures, from Porto Rico.

Archæological collection from Salvador. 20 Groups of Archæological specimens from foreign countries.

Wooden image, from Easter Island.

- I Complete mounted skeleton of male Korean.
- 9 Pieces of clothing of the modern Indians of Cuzco, Peru.
- 7 Jade tablets with inscriptions in gold, from Pekin, China.

Stone ax, from New York City.

- I Copper knife, from Crow Wing Co., Minn.
- 8 Skulls, Spanish and Negro.
- 6 Skulls, East Indian.
- I Boat stone, found near Stelton, N. J. Archæological collection from Vene-

Archæological collection from Venezuela.

Collection of stone axes and drum from Colombia, S. A., and a basket from the Northwest Coast.

Modern pottery.

One complete skeleton, mounted, of a Negro man.

Specially mounted human skeleton.

Australian skull.

- 2 Birchbark baskets (Timigami), 4 clay figurines (Catawba), 4 pots (Catawba); from Northern Ontario and S. Carolina.
- I Complete mounted Korean skeleton (male).

THROUGH MUSEUM EXPEDITIONS

Archæological material from New Mexico. Collected by Earl H. Morris.

Archæological and ethnological specimens from Supai, Arizona. Collected by Leslie Spier.

Ethnological collection from the Sumu Indians, Nicaragua, and from Izalco, Salvador. Collected by Dr. Herbert J. Spinden.

2 Paintings of Dakota Sun Dance made by Short Bull, Pine Ridge, S.D. Collected by Dr. J. R. Walker.

- I Bull boat frame and I basket, I pipe, I bale (bone, tusk and pipe stone) from North Dakota. Collected by Gilbert L. Wilson.
- Archæological collection from Flint Ridge, Ohio. Collected by Dr. Clark Wissler.

DEPARTMENT OF PUBLIC HEALTH

By GIFT

- Arlington Chemical Co., Yonkers, N. Y.
 - 2 Bacterial specimens.
- T. Biehn, Chicago, Ill.
 - 33 Bacterial specimens.
- Dr. H. T. CHICKERING, Rockefeller Institute, New York City.
 - I Bacterial specimen.
- Dr. A. C. Evans, Washington, D. C. 3 Bacterial specimens.
- Dr. Thomas T. Gaunt, New York City. Fly-trap and blue prints for its construction.
- E. G. Hastings, Madison, Wis.
 - I Bacterial specimen.
- LEDERLE LABORATORIES, New York City. 15 Bacterial specimens.
- Dr. Edwin LeFevre, Washington, D. C. 4 Bacterial specimens.
- RALPH R. MELLON, Rochester, N. Y. Bacterial specimen.
- Mt. Sinai Hospital, New York City. 2 Bacterial specimens.
- H. K. Mulford Co., Glenolden, Pa. 16 Bacterial specimens.
- PARKE DAVIS Co., Detroit, Mich. 50 Bacterial specimens.
- Professor E. M. Pickens, Ithaca, N. Y. 7 Bacterial specimens.
- Dr. Ida W. Pritchett, Rockefeller Institute, New York City.
 - A Bacterial specimens.

- COLONEL F. F. RUSSELL, Washington, D. C.
 - 2 Bacterial specimens.
- Severo Salecado, New York City. Dried kelp.
- Professor J. C. Torrey, Cornell University Medical School, New York City.
 - 2 Bacterial specimens.
- Dr. S. A. Waksman, New Jersey Agricultural Experiment Station, New Brunswick, N. J.
 - 15 Bacterial cultures.
- Professor C.-E. A. Winslow, Yale University Medical School, New Haven, Conn.
 - I Bacterial specimen.
- YALE ARMY LABORATORY, Yale University, New Haven, Conn.
 - 3 Bacterial cultures.

By PURCHASE

Enlarged model of Yellow Fever Mosquito.

ART

By GIFT

- MISS MARGARET HENDERSON ELLIOT, New York City.
 - Bronze Bust of Daniel Giraud Elliot by Chester A. Beach.
- STANLEY G. MIDDLETON, New York City. Oil portrait of Albert S. Bickmore.

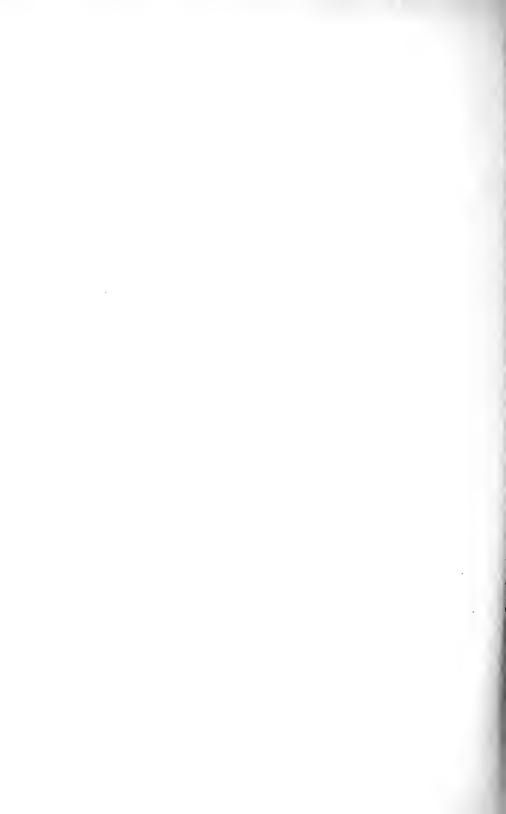
By Purchase

Oil Painting, "In a Coral Garden in 10 feet of Water," Mara, Tahiti. Canvas 23"×31". By Zarh H. Pritchard.

MISCELLANEOUS

New York Historical Society.

Mummied Cat. From Abbott Collection.



INCORPORATION

AN ACT

TO INCORPORATE THE

AMERICAN MUSEUM OF NATURAL HISTORY

Passed April 6, 1869

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

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

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

- SEC. 3. Said Corporation may take and hold by gift, devise, bequest, purchase or lease, either absolutely or in trust, for any purpose comprised in the objects of the Corporation, any real or personal estate, necessary or proper for the purposes of its incorporation.†
- SEC. 4. Said Corporation shall possess the general powers, and be subject to the restrictions and liabilities, prescribed in the Third Title of the Eighteenth Chapter of the First Part of the Revised Statutes, and shall be and be classed as an educational corporation.*

Sec. 5. This Act shall take effect immediately.

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

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

Given under my hand and seal of Office at the City of

[L. s.]

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

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

[†] Section 3. As amended by Chapter 303, Laws of 1898, of the State of New York, entitled "An Act to amend chapter one hundred and nineteen, laws of eighteen hundred and sixty-nine, entitled 'An Act to incorporate the American Museum of Natural History,' relative to its charter."

[&]quot;Sections 1 and 4. As amended by Chapter 162 of the Laws of 1909, entitled "An Act to amend chapter one hundred and nineteen of the laws of eighteen hundred and sixty-nine, entitled 'An Act to incorporate the American Museum of Natural History,' in relation to classifying said corporation and modifying its corporate purposes."

CONTRACT

WITH THE DEPARTMENT OF PUBLIC PARKS

FOR THE OCCUPATION OF THE NEW BUILDING

THIS AGREEMENT, made and concluded on the twenty-second day of December, in the year one thousand eight hundred and seventy-seven, between the DEPARTMENT OF PUBLIC PARKS OF THE CITY OF NEW YORK, the party of the first part, and the AMERICAN MUSEUM OF NATURAL HISTORY, party of the second part, witnesseth:

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

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

Whereas, it is desired as well by the said party of the first part, as by the said party of the second part, that, immediately

upon the completion and equipment of said building, the said party of the second part should be established therein, and should transfer thereto its museum, library and collections, and carry out the objects and purposes of the said party of the second part;

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

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

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

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

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

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

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

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

Eighthly.—That said party of the second part may, at any time, after the expiration of three, and before the expiration of six, months from the date of the service of a notice in writing to said party of the first part, its successor or successors, or to the Mayor of the City of New York, of its intention so to do, quit and surrender the said premises and remove all its property therefrom; and upon and after such notice, the said party of the second part shall and will, at the expiration of the said six months, quietly and peaceably yield up and surrender unto the said party of the first part and its successors all and singular the aforesaid demised premises. And it is expressly understood and agreed by and between the parties hereto that if the said party of the second part shall omit to do, perform, fulfill or keep any or either of the covenants, articles, clauses and agreements, matters and things herein contained, which on its part are to be done, performed, fulfilled or kept, according to the true intent and meaning of these presents, then and from thenceforth this grant and demise shall be utterly null and void. And in such case it shall and may be lawful for said Department to serve or cause to be served on the said party of the second part a notice in writing declaring that the said grant hereinbefore made has become utterly null and void and thereupon the said party of the first part, its successor or successors (ninety days' time being first given to the said party of the second part to remove its property therefrom), may reënter, and shall again have, repossess and enjoy the premises aforementioned, the same as in their first and former estate, and in like manner as though these presents had never been made, without let or hindrance of the said party of the second part, anything here contained to the contrary notwithstanding.

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

In witness whereof, the party of the first part hath caused this agreement to be executed by their President and Secretary. pursuant to a resolution of the Board of Commissioners of said Department, adopted at a meeting held on the thirtieth day of January, in the year of our Lord one thousand eight hundred and seventy-eight; and the said party of the second part hath caused the same to be executed by their President, and their official seal affixed thereto, pursuant to a resolution of the Trustees of the American Museum of Natural History, adopted at a meeting held on the twelfth day of February, in the year of our Lord one thousand eight hundred and seventy-seven.

In presence of

D. PORTER LORD.

JAMES F. WENMAN,

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

WILLIAM IRWIN.

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

ROBERT L. STUART,

President American Museum of Natural History.

SEAL of the American Museum of Natural History

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

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

[SEAL.]

W. C. BESSON, (73) Notary Public N. Y. Co.

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

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

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

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

Witness my hand and official seal,

FREDERICK W. LOEW,

[SEAL.]

Register.

Note.—July 25, 1892, by consent of the Trustees, section fourth was modified to enable the Trustees to open the Museum free to the public "throughout the year, excepting Mondays, but including Sunday afternoons and two evenings of each week."

June 20, 1893, by consent of the Trustees, section fourth was modified to enable the Trustees to open the Museum free of charge to the public "throughout the year for five days in each week, one of which shall be Sunday afternoon, and also two evenings of each week."

CONSTITUTION

OF THE

AMERICAN MUSEUM OF NATURAL HISTORY

IN THE CITY OF NEW YORK

REVISED AND AMENDED TO FEBRUARY 7, 1916

ARTICLE I

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

ARTICLE II

The several persons named in the charter, and such others as they may add to their number, which shall not exceed twenty-five in all at one time, and in addition, the Mayor, the Comptroller, and the President of the Department of Public Parks, of the City of New York, for the time being, ex-officio, shall be the Trustees to manage the affairs, property and business of the Corporation.

The members of the Board of Trustees holding office at the time of the regular quarterly meeting of November, 1905, shall then, or at the first meeting of the Board thereafter, be divided by lot into five classes of five members each, to serve for the terms of one, two, three, four and five years respectively from the date of the annual meeting of February, 1906. The Board of Trustees at each annual meeting thereafter, or an adjournment thereof, shall by ballot, by a majority vote of the Trustees present at the meeting, elect five Trustees to supply the places of the class whose term expires at that meeting; said newly elected Trustees to hold office for five years or until their successors are elected. In case of a vacancy in the Board by death, resignation, disqualification or otherwise, the vacancy shall be filled by ballot, in like manner, by the Board of Trustees at any regular meeting or special meeting, for the unexpired term. No person shall be eligible for election as Trustee unless his name shall be presented by the Nominating Committee at a regular or special meeting of the Board previous to the meeting at which his name shall be acted upon. Written notice of such election and the vacancy to be filled shall be sent to the Trustees at least one week prior to said meeting.

ARTICLE III

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

ARTICLE IV

Section 1. The officers of said Corporation shall be a President, a First Vice-President, a Second Vice-President, a Treasurer and a Secretary, who shall be elected from among the Trustees. These officers shall be elected by ballot, and the persons having a majority of the votes cast shall be deemed duly elected. They shall hold their offices for one year or until their successors shall be elected.

SEC. 2. The Board of Trustees shall appoint each year, in such manner as it may direct, the following Standing Committees: an Executive Committee, an Auditing Committee, a Finance Committee and a Nominating Committee. These Committees are all to be elected from the Trustees, and the members shall hold office for one year or until their successors shall be elected.

The Board of Trustees shall also have authority to appoint such other committees or officers as they may at any time deem desirable, and to delegate to them such powers as may be necessary. The Board of Trustees shall have power to appoint a Director who, acting under the authority and control of the President, shall be the chief administrative officer of the Museum; but shall not be a member of the Board. He shall hold office during the pleasure of the Board.

ARTICLE V

Section 1. The President shall have the general supervision, direction and control of the affairs of the Corporation, and shall preside at all the meetings of the Museum and of the Trustees. In his absence or inability to act, the First or Second Vice-President shall act in his place, or in the absence of these officers, a Trustee appointed by the Executive Committee.

SEC. 2. The Secretary shall be present, unless otherwise ordered by the Board, at all the meetings of the Museum and Trustees, of the Executive Committee and such other Committees as the Board may direct. He shall keep a careful record of the proceedings of such meetings, shall preserve the seal, archives and correspondence of the Museum, shall issue notices for all meetings of the Trustees and various committees, and shall perform such other duties as the Board may direct.

The Board of Trustees shall have power to appoint an Assistant Secretary, who, under its direction, shall perform the duties of the Secretary in his absence or inability to act. The Assistant Secretary shall be an administrative officer of the Museum and shall act under the direction of the President or the Secretary. He shall hold office during the pleasure of the Board.

SEC. 3. The Treasurer shall receive and disburse the funds of the Museum. He shall report in writing, at each regular meeting of the Trustees, the balance of money on hand, and the outstanding obligations of the Museum, as far as practicable; and shall make a full report at the annual meeting of the receipts and disbursements of the past year, with such suggestions as to the financial management of the Museum as he may deem proper.

The Board of Trustees shall have power to appoint an Assistant Treasurer, who shall perform such duties as it may direct, and who shall hold office during its pleasure.

SEC. 4. The accounts of the Museum shall be kept at the General Office, in books belonging to it, which shall at all times be open to the inspection of the Trustees.

ARTICLE VI

The Executive Committee shall consist of nine Trustees, the President, the Secretary and the Treasurer *ex-officio* and six others, to be appointed each year in the manner provided in Article IV. They shall have the control and regulation of the collections, library and other property of the Museum; and shall have power generally to conduct the business of the Museum, subject to the approval of the Board. Five members of the Committee shall constitute a quorum for the transaction of business.

ARTICLE VII

The Auditing Committee shall consist of three Trustees. They shall have the books of the Museum duly audited, at least once in six months, by an authorized public accountant to be selected by them.

ARTICLE VIII

The Finance Committee shall consist of five Trustees, the Treasurer *ex-officio* and four others to be elected each year in the manner provided in Article IV. They shall have general charge of the moneys and securities of the Endowment and other permanent funds of the Museum, and such real estate as may become the property of the Corporation, with authority to invest, sell and reinvest the same, subject to the approval of the Board of Trustees.

Three members shall constitute a quorum.

ARTICLE IX

The Nominating Committee shall be composed of three Trustees, to whom shall be first submitted the names of any persons proposed as candidates for election to membership in the Board of Trustees. The Committee shall report on such candidates from time to time, as it may deem to be for the interest of the Museum. A fortnight before the annual meeting they shall prepare and mail to each member of the Board of Trustees a list of the candidates for officers and Trustees to be balloted for at the said meeting.

ARTICLE X

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

ARTICLE XI

By-Laws may be made from time to time by the Trustees providing for the care and management of the property of the Corporation and for the government of its affairs, and may be amended at any meeting of the Trustees by a vote of a majority of those present, after a month's notice in writing of such proposed amendment.

ARTICLE XII

The incorporators of The American Museum of Natural History shall be designated as Founders of the Museum.

Any person contributing or devising \$50,000 in cash, securities or property to the funds of the Museum may be elected a Benefactor of the Museum.

Any person contributing \$25,000 in cash, securities or property to the funds of the Museum may be elected an Associate Founder of the Museum, who after being so elected shall have the right in perpetuity to appoint the successor in such associate foundership.

Any person contributing \$10,000 to the funds of the Museum may be elected an Associate Benefactor of the Museum, who after being so elected shall have the right in perpetuity to appoint the successor in such associate benefactorship.

Any person contributing \$1,000 to the funds of the Museum, at one time, may be elected a Patron of the Museum, who

after being so elected shall have the right in perpetuity to appoint the successor in such patronship.

Any person contributing \$500 to the funds of the Museum, at one time, may be elected a Fellow of the Museum, who after being so elected shall have the right to appoint one successor in such fellowship.

No appointment of a successor shall be valid unless the same shall be in writing, endorsed on the certificate, or by the last will and testament.

Any person contributing \$100 to the funds of the Museum, at one time, may be elected a Life Member of the Museum.

Any person may be elected to the above degrees who shall have given to the Museum books or specimens which shall have been accepted by the Executive Committee, or by the President, to the value of twice the amount in money requisite to his admission to the same degree.

Benefactors, Associate Founders, Associate Benefactors, Patrons, Fellows and Life Members shall be elected by the Board of Trustees or by the Executive Committee, and the President and Secretary shall issue diplomas accordingly under the seal of the Museum.

In recognition of scientific services rendered, the Trustees may also elect Honorary Fellows of the Museum in their discretion.

ARTICLE XIII

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

ARTICLE XIV

No alterations shall be made in this Constitution, unless at a regular meeting of the Trustees, or at a special meeting called for this purpose; nor by the votes of less than a majority of all the Trustees; nor without notice in writing of the proposed alterations, embodying the amendment proposed to be made, having been given at a previous regular meeting.

BY-LAWS

REVISED AND AMENDED TO FEBRUARY 7, 1916

Ι

If any Trustee shall accept a salary from this Corporation he shall thereby be disqualified for the time being from acting as a Trustee thereof; provided, that the Board of Trustees shall have power to suspend the operation of this law in any special case.

II

Any vacancies occurring in the membership of the several committees during the interval between the regular meetings of the Board of Trustees may be filled at a regular meeting of the Executive Committee, until the next meeting of the Board.

III

The regular meetings of the Executive Committee shall be held on the third Wednesday of each month, but special meetings may be held at any other time on a two days' call issued by order of the President, or at the request of three of its members.

IV

All bequests or legacies, not especially designated, and all membership fees, excepting Sustaining, Annual and Associate Membership fees, shall hereafter be applied to the *Permanent Endowment Fund*, the interest only of which shall be applied to the use of the Museum as the Board shall direct.

V

Section 1. No indebtedness (other than for current expenses) shall be incurred by any committee, officer or employee of the Museum, except as provided for in the Constitution.

SEC. 2. No bills shall be paid unless approved by the Director or, in his absence, the Assistant Secretary, and countersigned by one of the following named Trustees: President, Chairman of the Executive Committee, or Treasurer.

SEC. 3. The accounts of the Museum shall be under the care of a Bursar, who, on recommendation of the President and the Treasurer, shall be appointed by the Board of Trustees and be under its direction. He shall give such bonds for the faithful performance of his duties as the Board may direct, and shall hold office during the pleasure of the Board. The Bursar, acting under the direction of the President or Treasurer, shall be the official representative of the Treasurer at the Museum, and as such shall be the head of the Treasurer's office there.

VI

The Board of Trustees shall have power to appoint, on recommendation of the Director, a Superintendent of Building and such other officers as may be deemed necessary, who, acting under the instruction of the Director, shall have charge of the construction, maintenance, alterations and repairs of the buildings, and shall be responsible for their sanitary condition. They shall hold office during the pleasure of the Board.

VII

The Board of Trustees shall have power to appoint a Registrar, who, acting under the instruction of the Director or Assistant Secretary, shall inspect all incoming and outgoing shipments, and shall attend to the details of matters relating to customs.

VIII

Benefactors, giving \$50,000, are each entitled to I Subscriber's Ticket, 10 Complimentary Season Tickets and 10 Tickets for a single admission.

Associate Benefactors, giving \$10,000, are each entitled to I Subscriber's Ticket, 10 Complimentary Season Tickets and 10 Tickets for a single admission.

Patrons, giving \$1,000, are each entitled to I Subscriber's Ticket, 5 Complimentary Season Tickets and 10 Tickets for a single admission.

Fellows, giving \$500, are each entitled to I Subscriber's Ticket and IO Tickets for a single admission.

Life Members, giving \$100, are each entitled to I Subscriber's Ticket and 7 Tickets for a single admission.

Sustaining Members, paying \$25 yearly, are each entitled to I Subscriber's Ticket and 5 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to I Subscriber's Ticket and 4 Tickets for a single admission.

Associate Members, paying \$3.00 yearly, are each entitled to I Subscriber's Ticket, admitting to the Members' Room, and 2 Tickets for a single admission; also to current copies of the Museum Journal and the Annual Report.

Note.—A Subscriber's Ticket admits to the Members' Room, also to all Receptions and Special Exhibitions, and may be used by any member of the Subscriber's family.

The Single Admission Tickets admit the bearers to the Members' Room, and are issued to Subscribers for distribution among friends and visitors.



SIXTH ANNUAL REPORT

OF THE

PENSION BOARD

OF

THE AMERICAN MUSEUM OF NATURAL HISTORY

For the Year 1918

OFFICERS AND MEMBERS OF THE PENSION BOARD

1918

Chairman
FELIX M. WARBURG

Vice-Chairman Ralph W. Tower

Treasurer
Henry P. Davison

Secretary George N. Pindar

TRUSTEE MEMBERS

Adrian Iselin Walter B. James PERCY R. PYNE FELIX M. WARBURG

EMPLOYEE MEMBERS

HARRY F. BEERS

RALPH W. TOWER

GEORGE N. PINDAR

Bursar Frederick H. Smyth

Counsel
Lewis L. Delafield

Consulting Actuary
S. Herbert Wolfe

Medical Examiners
GEORGE M. MACKENZIE, M.D.
WALTER P. ANDERTON, M.D.

To the President and Trustees of The American Museum of Natural History and to the Subscribers to the Fund:

In accordance with the Rules and Regulations, I have the honor to transmit to you herewith the Sixth Annual Report of the activities of the Pension Board and of its financial operations for the fiscal year ending December 31, 1918.

FELIX M. WARBURG,
Chairman.

February 1, 1919

With the entrance of the United States into the war, came new and extraordinary liabilities for the Pension Fund. As a result it has been found advisable during the year 1918 to guard against an extension of the membership with the consequent liabilities which such extension entails. For this reason, the Pension Fund has fewer subscribers at the end of 1918 than at the beginning of the year. The diminished membership, however, indicates no decrease in the prosperity of the Fund, which promises expansion at the usual rate with the return of pre-war conditions.

The report of membership for 1918 is as follows:

Number of Subscribers, January 1, 1918	18
Resignations and Dismissals 22	274
Retirements 0 Deaths 3	25
Number of Subscribers, December 31, 1918	249

Consistent with the good record which they established for themselves at the time of the first Liberty Loans, in 1917, the employees of the Museum have subscribed generously to the succeeding loans; 217 employees subscribed to the Third Loan (April–May), totalling \$20,150; 175 employees subscribed to the Fourth Loan (October), in an amount of \$20,900. As in the case of the previous loans, the generosity of one of the members of the Pension Board made it possible for the employees to take out their bonds on a serial payment basis. It is due to this liberal provision that the employees were enabled to contribute so largely to the Liberty Loans.

In accordance with its past policy, the Pension Board has given aid, during 1918, to such deserving employees as were in need of medical attention or hospital treatment and were themselves unable to make the necessary provision. These em-

ployees have in such cases been carefully examined and advised by Dr. Anderton, and have been given help in obtaining the needed medical or hospital treatment. Wherever possible, a choice of hospitals has been given. Seven employees have received such aid during the past year, the majority obtaining relief as a result.

The matter of securing endowed beds for the use of Museum employees was taken up again in 1918 by the Board, but it was not found possible to conclude a satisfactory arrangement.

In order to keep the Pension Fund intact, the Trustees of the Museum, at a meeting held early in 1918, agreed to reimburse the Fund for such amounts as it might be necessary to pay on account of casualties occurring among the subscribing members in the national service, to a total amount not exceeding \$5,000. As estimate showed that \$5,000 was the approximate maximum liability of the Fund on account of war losses, the provision was a guaranty of the integrity of the Pension Fund. It served also as a further evidence of the liberality and interest of the Trustees in affairs touching the welfare of Pension members and their families.

The Pension Board, having in mind the health of subscribing members of the Fund and of other employees, have suggested to the Trustees of the corporation the desirability of retaining a physician, whose duty it should be to make free periodical examinations of employees, with a view to the prevention and correction of ailments. While such an arrangement would involve considerable expense, it is anticipated that the benefits to and the increased efficiency of the employees would be an adequate return on the investment.

As a result of the greatly increased living expenses and the high wage levels prevailing in industrial occupations, some of the subscribing employees in 1918 requested leave of absence for the period of the war, with a view to earning more money. While the Museum authorities would have welcomed the opportunity of assisting these employees in any legitimate way, they felt that to permit such leave of absence would be unjust, as the members, although absent from their work in the Museum, would none the less remain liabilities against the Fund,

and with undoubtedly increased risk. This would amount to a discrimination against the greater number of subscribers. It was therefore found necessary to reject such applications for leave of absence, and to notify the members of the Fund that only military or naval service, compliance with the rulings of the Draft Board, illness, or such other reasons as the authorities should find just and proper, would constitute valid basis for leave of absence.

ACKNOWLEDGMENTS

For the use of their endowed beds in the Presbyterian Hospital, the Pension Fund is grateful to Mr. Horace F. Hutchinson and Mr. Richard B. Kelly.

For coöperation in securing free treatment at the Presbyterian Hospital for an employee in need, the Board is indebted to Mr. L. E. Belmont.

Col. S. H. Wolfe has generously extended to the Pension Board the privilege of sending employees to the number of five in one year to use his endowed bed in Mt. Sinai Hospital.

The Pension Board is grateful to Dr. Walter P. Anderton for his unremitting care and patience in the examination of members and applicants, and for his kind coöperation in securing the necessary treatment and facilities for employees in need of such assistance.

To Counsel Lewis L. Delafield the Pension Board owes thanks for advice and suggestions graciously offered during the past year.

The members of the Pension Fund are proud of their Honor Roll, to which a number of names have been added since the last Report. We have reason to be deeply thankful that, while a number of men have been wounded, only one loss of life has occurred among our men in service.

HONOR ROLL

GEORGE M. MACKENZIE HAROLD E. ANTHONY DANIEL J. McGARTY FELIX A. BARBARITO JAMES P. CHAPIN JOSEPH S. McGARTY FRANK M. CHAPMAN BRUNO MENZER CHARLES A. CONNOLLY* EDWIN C. MEYENBERG LEO E. MILLER JOSEPH F. CONNOLLY HENRY E. CRAMPTON BARRINGTON MOORE LAURENCE A. FERRI JOHN F. O'NEILL John J. Finn JAMES A. PROVENZALE EDWARD J. FOYLES THOMAS E. QUINN HENRY H. RAMSHAW CHARLES H. HARRIMAN CHARLES H. ROGERS JOHN HARTE ROBERT J. SEIBERT JAMES J. HEALY PRENTICE B. HILL OSCAR M. SHINE CARL C. SORENSEN THOMAS G. HULL HENRY L. HUNDERTPFUND LOUIS R. SULLIVAN FRANK S. VITOLO ALBERT J. KELLY C-E. A. WINSLOW KAY C. LENSKIOLD

S. HERBERT WOLFE

^{*} Charles A. Connolly was reported by the War Department as killed in action on July 28, 1918, at Chateau-Thierry.



Deceased Subscribers

It is with deep regret that we record the deaths of the following members during the year 1918:

GEORGE CHAMBERLAIN

George Chamberlain was born on January 21, 1879, in Cambridge, England. Entering the service of the Museum in 1909 as an attendant, his capabilities were early recognized, and he was soon transferred to the Library, in which department he labored faithfully and with competence up to the time of his last illness. Possessed of an unusually happy disposition, never failing courtesy and genial presence, his untimely death caused a deep sense of personal loss to his associates in the institution. He died on October 29, 1918, after a long and painful illness during which he displayed remarkable fortitude and cheerfulness.

CHARLES A. CONNOLLY

Charles A. Connolly was born on February 9, 1893, in New York City. In 1911, he came to the Museum and was assigned to the Custodians' Force. In 1914, he joined the famous 69th Regiment and served with his company, as sergeant, for nine months in 1917 on the Mexican border. Mustered into the Federal Service in 1918, he was among the first to be sent abroad. On July 28, during the famous drive at Chateau-Thierry, he made the supreme sacrifice for his country and for the liberty and integrity of the nations of the earth. A fitting monument to his memory will long endure in the form of a grove of fruit-trees bearing his name, which this institution

has caused to be planted where he fell. His former associates in the Museum are reminded of their loss by the golden star on the Museum's service flag. As a soldier, his courage, tactfulness and care for those under him have been heartily attested by his comrades. As a loving and considerate son, a genial companion, an efficient and conscientious worker, and above all as a thoroughly patriotic American young man, he will always be affectionately remembered.

DANIEL DOHERTY

Daniel Doherty was born on June 15, 1856, in Ireland. For about eighteen years he served this institution efficiently and faithfully. Intensely patriotic and loyal to the country of his adoption, he was equally ardent and firm in his friendships. Always welcome among groups of workers in the Museum, his unexpected death came as a distinct shock. Pleasant memories of this agreeable and trustworthy employee will always remain in the hearts of those with whom he associated. He died on June 27, 1918.

RETIREMENTS

Name	Former Position	Date Effective	Period of Service
John T. Davis	. Carpenter	March 1, 1917	15 yrs.
John F. Jordan	. Attendant	April 1, 1917	15 yrs.



FINANCIAL STATEMENT

OF THE

PENSION FUND

OF THE

AMERICAN MUSEUM OF NATURAL HISTORY

1918

INVESTED FUNDS

	Par Value	Book Value
Endowment Fund	1 , 0 0,	\$1,140 39 88,648 36
Total	\$98,000 00	\$89,788 75

STATEMENT OF INVESTED FUNDS

Par Value	Securities	Due	Rate of Int.	Interest Payable	Ann. Int.	Date Acquired	Book Value
2,000 00	Union Pacific Railroad Company, 1st Lien & Refunding Mortgage Bonds	2008	4%	MarSept.	\$200 00	4% MarSept. \$200 00 Feb. 26, 1914	\$4,687 50
2,000 00	Chicago & Northwestern Railway Company, General Mortgage Bonds	1987	4%	4% May-Nov.	200 00	200 00 July 7, 1914	4,725 00
2,000 00	Pennsylvania Railroad Company, General Mortgage Bonds	1965	41/2%	1965 4½% June-Dec.	225 00	225 00 June 4, 1915	4,887 50
2,000 00	Baltimore & Ohio Railroad Co., Refunding & General Mortgage Bonds	1995	5%	5% June-Dec.	250 00	250 00 Dec. 29, 1915	5,050 00
2,000 00	Chicago, Milwaukee, St. Paul Railway Company, General & Refunding Mortgage Bonds	2014	41/2%	2014 4½% AprOct.	225 00	225 00 May 5, 1916	4,668 75
5,000 00	Atchison, Topeka & Santa Fe Railway Company, General Mortgage Bonds	1995	4%	4% AprOct.	200 00	200 00 May 29, 1916	4,687 50
5,000 00	Norfolk & Western Railway, First Consol. Mort-	,					
2,000 00	gage Bonds	9661	4%	4% AprOct.	200 00	200 00 May 29, 1916	4,681 25
	provement Bonds	2013	41/2%	2013 4½% AprOct.	225 00	225 00 May 29, 1916	4,706 25
5,000 00	Southern Facine Kalifoad Co., First Ketunding Mortgage Bonds	1955	4%	1955 4% JanJuly	200 00	200 00 May 29, 1916	4,533 75
2,000 00	Northern Pacific Railway Co., Refunding & Improvement Mortgage Bonds	2047	41/2%	2047 4½% JanJuly	225 00	225 00 July 17, 1916	4,825 00
5,000 00	Illinois Central Railroad Co., Refunding Mortgage Bonds	1955	4%	4% May-Nov.	200 00	200 00 Oct. 18, 1916	4,518 75

4,717 50	4,656 25	4,808 75	4,608 75	821 25	831 25	1,592 50		1,582 50	4,456 25		3,250 00		1,602 50	4,890 00	\$80,788 75	
Dec. 30, 1916	200 00 Apr. 12, 1917	July 16, 1917	Oct. 19, 1917	40 00 Mar. 12, 1918	Mar. 12, 1918	80 00 Mar. 12, 1918		80 00 Mar. 12, 1918	212 50 May 10, 1918		160 00 Aug. 19, 1918		80 00 Aug. 20, 1918	212 50 Nov. 30, 1918		
200 00	200 00	240 00	225 00	40 00	40 00	80 00		8	212 50	•	160 00	d	00 00 00 00		\$4,120 00	
4% MarSept.	4% JanJuly	May-Nov.	June-Dec.	4% AprOct.	AprOct.	MarSept.	•	4% JanJuly	4½% JanJuly		AprOct.		MarSept.	MarSept.		
	4%	4%	41/2%	4%	4%	4%		4%			4%		4%	41/4%		
1958	1940	1941	1965	7005	1996			1955	1961		1995	Ç	1958	1928		
Chicago, Burlington & Quincy R. R. Company, General Mortgage Bonds	Louisville & Nashville R. K. Co., Unihed Mortgage Bonds	Baltimore & Ohio R. R. Co. (Pittsburgh, L. Erie & W. Va.), Refunding Mortgage Bonds	Pennsylvania R. R. Co., General Mortgage Bonds.	Atchison, Topeka & Santa Fe Ry. Co., General	Norfolk & Western Ry. Co., Consolidated Bonds.	Union Pacific R. R. Co., 1st Lien Refunding Mort-	0	gage Bonds	Great Northern Ry. Co., 1st Refunding Mortgage Bonds	Atchison, Topeka & Santa Fe Ry. C		Chicago, Burlington & Quincy Ry. Co., General	Mortgage Bonds	United States of America Linita Liberty Loan Bonds		
5,000 00	2,000 00	00 000'9	5,000 00	I,000 00	1,000 00	2,000 00	2,000 00		2,000 00	4,000 00		2,000 00		5,000 00	\$08,000 00	

PENSION FUND ACCOUNT

RECEIPTS

1918

Cash on Hand January 1, 1918 Contributions of Subscribing Employee				• • •	\$7,656	<i>7</i> 9
Deductions of 3% from Payrolls of						
City Maintenance Account	\$4,503	21				
General Account	1,568					
Special Funds Account	60	_				
Corporate Stock Account	_					
Incidental Account		63				
Morris K. Jesup Fund Account		-				
		_	\$9,934	12		
Personal Contributions of Subscribin	ø		T2120T			
Employees	~		765	66		
			7-5		\$10,699	78
CONTRIBUTIONS OF BOARD OF TRUSTEES:					1,-,,	, -
To Equal Contributions of Subscribi	na Em	nlos	reec		TO 702	22
Special Contributions of Trustees for I				• • •	10,702	O ₃
Death Gratuities					250	۷.
Interest on Investment Fund						
Interest on Endowment Fund						
Interest on Credit Balances					_	
Bursar's Account						
DUKSAK S ACCOUNT	• • • • • •	• • •		• • •	500	w

\$33,539 80

Examined Adrian Iselin Auditing Percy R. Pyne Committee

PENSION FUND ACCOUNT

DISBURSEMENTS

1918

RETURN OF CONTRIBUTIONS \$1,497 28 INTEREST ON CONTRIBUTIONS 69 45	\$1,566	73
Service Pensions	φ1,500	/3
DEATH GRATUITIES PAID UNDER SECTION 13 1,058 23		
	1,574	23
Purchase of Securities:		
Investment Fund	19,064	62
Expenses	46	43
LOAN ACCOUNT	500	00
Cash on Hand December 31, 1918:		
Deposited with the United States Trust		
Company of New York		
Deposited with Colonial Bank (Bursar's		
Account) 500 00		
	10,787	79

\$33,539 80

E. & O. E. New York, December 31, 1918

H. P. DAVISON, Treasurer

RECEIPTS

1918

Special Contributions No. 2:		
Cash on Hand January 1, 1918	\$20 00	
Anonymous \$3 84		
Adrian Iselin		
40 00	51 84	
Interest on Credit Balances	12 16	
	12 10	\$84 00
LIBERTY LOAN ACCOUNTS:		φ04 00
Interest on Credit Balances		81 23
AMERICAN MUSEUM LIBERTY LOAN NO. 1:		01 23
Cash on Hand January 1, 1918	\$5.20	
Subscribers' Payments:	ψ3 20	
Personal \$699 16		
Deducted from Salaries 4,633 89		
11-00 -9	5,333 05	
INTEREST ON UNPAID BALANCES:	5,005 -5	
Personal Payments \$8 14		
Deducted from Salaries 101 00		
	109 14	
A		5,447 39
AMERICAN MUSEUM LIBERTY LOAN No. 2:		
Cash on Hand January 1, 1918 Subscribers' Payments:	\$719 56	
Personal \$1,116 40		
Deducted from Salaries 3,288 00		
	4,404 40	
INTEREST ON UNPAID BALANCES:		
Personal Payments \$5 61		
Deducted from Salaries 110 87		
	116 48	
AMERICAN MUSEUM LIBERTY LOAN No. 3:		5,240 44
Subscribers' Payments:		
Personal		
Deducted from Salaries 5,407 25		
-	\$15,392 06	
Carried forward	\$15,392 06 \$	\$10,853 06

DISBURSEMENTS

1918

Special Contributions No. 2:				
Payments for Relief			\$84	00
AMERICAN MUSEUM LIBERTY LOAN NO. 1:		• • •	Ψ04	00
Purchase of Bonds:				
	Φ			
Loan Account	10,010			
Interest on Loans	127	75		
		_	\$5,473	30
AMERICAN MUSEUM LIBERTY LOAN No. 2:				
Purchase of Bonds:				
Loan Account	\$5,104	00		
Interest on Loans	136			
Interest on Board	130	/-	E 240	71
A M T T NT.			5,240	/1
AMERICAN MUSEUM LIBERTY LOAN No. 3:				
Purchase of Bonds	, , -			
Loan Account	7,759	56		
Interest on Loans	219	65		
			28,129	21
		/		
•				
· · · · · · · · · · · · · · · · · · ·				
Carried forward			38,927	22

RECEIPTS (continued)

1918

Brought forward Interest on Unpaid Balances:		\$15,392	o 6	\$10,853	o 6
Personal Payments	\$15 68				
Deducted from Salaries	180 48				
_		205	16		
LOAN ACCOUNT		12,700	00		
,				28,297	22
American Museum Liberty Loan No. 4:					
Subscribers' Payments:					
Personal	\$8,866 47	,			
Deducted from Salaries	2,049 38				
-		\$10,915	85		
INTEREST ON UNPAID BALANCES:					
Personal Payments	\$3 70	1			
Deducted from Salaries	65 32	:			
-		69	02		
LOAN ACCOUNT		12,300	00		
			_	23,284	87
			_		

\$62,435 15

 $\begin{array}{c} \text{Examined} \\ \text{and Approved} \end{array} \left. \left\{ \begin{array}{c} \text{Adrian Iselin} \\ \text{Percy R. Pyne} \end{array} \right\} \begin{array}{c} \textit{Auditing} \\ \textit{Committee} \end{array} \right.$

DISBURSEMENTS

1918

Brought forward		!	\$38,927	22
AMERICAN MUSEUM LIBERTY LOAN No. 4:				
Purchase of Bonds	\$20,900	00		
Loan Account	2,075	62		
Interest on Loans	71	97		
			23,047	59
CASH ON HAND DECEMBER 31, 1918, DEPOSITED WITH	THE			
United States Trust Company of New York	:	• • •	460	34

\$62,435 15

E. & O. E. New York, December 31, 1918

H. P. DAVISON, Treasurer









QH 71 A6A1 1917-18 American Museum of Natural History, New York Report

Biological & Medical Serials

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY

