CITY OF NEW YORK

AMERICAN MUSEUM OF NATURAL HISTORY

"For the purpose of establishing and maintaining in said city a Museum and Library of Natural History; of encouraging and developing the study of Natural Science; of advancing the general knowledge of kindred subjects, and to that end of furnishing popular instruction."

AN ACT TO INCORPORATE THE AMERICAN MUSEUM OF NATURAL HISTORY, APRIL 6, 1869

FIFTY-FOURTH ANNUAL REPORT FOR THE YEAR 1922

MUSEUMS THAT ARE ESPECIALLY COOPERATING WITH THE AMERICAN MUSEUM

American Association of Museums Australian Museum, Sydney, Australia Bernice D. Bishop Museum. Honolulu, Hawaii Boy Scout Museum, Palisades Interstate Bark British Museum (Natural History), London, England Buffalo Society of Natural Sciences, Buffalo, A. P. California Academy of Sciences, San Francisco, California Canterbury Museum, Christchurch, New Zealand Carnegie Museum, Pittsburgh, Pennsplbania Charleston Museum, Charleston, S. C. Cleveland Museum of Natural History, Cleveland, Ohio Colorado Museum of Natural History, Denver, Colorado Davenport Academy of Sciences, Davenport, Iowa Durban Museum, Natal, South Africa Field Museum of Natural History, Chicago, Illinois Florida State Museum, Gainesville, Florida Instituto Oswaldo Cruz, Minas Geraes, Brazil Museo Nacional de Historia Natural, Buenos Aires, Argentina Museu Nacional, Rio de Janeiro, Brazil Museum of Comparative Zoology, Cambridge, Massachusetts Museum of Mines, Sydney, Australia Museum of Natural History and Ethnology, Dresden, Germany Museum of Zoology, Ann Arbor, Michigan Rational Museum, Copenhagen, Denmark National Museum of Natural History, Mexico City, Mexico National Research Council Remark Museum Association, Newark, New Jersey Princeton Unibersity Museum, Princeton, Ret Jersey Public Museum, Milwaukee, Wisconsin Saint Paul Institute, Saint Paul, Minnesota Senckenberg Museum, Frankfort, Germany State Historical and Natural History Society of Colorado, Denver Toledo Museum of Art, Toledo, Ohio United States National Museum, Washington, D. C. University Geological Museum, Padua, Italy University Museum, Cambridge, England University Museum, Oxford, England University Museum of Palaeo-Biology, Vienna, Austria University of California, Berkeley, California University of Colorado, Colorado Springs, Colorado University of Mexico, Mexico City University of Munich, Munich, Germany Victoria Memorial Museum, Ottawa, Ontario Mashington State Historical Society, Tacoma Bale University Museum, Rew Haben, Connecticut

THE AMERICAN MUSEUM OF NATURAL HISTORY

The Corporation consists of a self-perpetuating Board of twenty-five Trustees, elected for terms of five years. Also, exofficio, The Mayor of the City of New York, The Comptroller of the City of New York, and the President of the Department of Parks.

HISTORY

1869-1872 Presidency of John David Wolfe.

1869 (April 6) Museum incorporated.

1869 (May 4) Constitution adopted as originally drafted by Joseph H. Choate.

1870 First home secured, the Arsenal, Central Park.

1872-1881 Presidency of Robert L. Stuart.

1874 (June 2) Cornerstone of present building laid by President Ulysses S. Grant.

1878 (January 30) Contract between Trustees and Department of Parks, as drawn up by Messrs. Andrew H. Green and Joseph H. Choate, adopted by the Park Commissioners.

1881-1908 Presidency of Morris K. Jesup.

1893 Museum opened to the public on Sundays.

1908- Presidency of Henry Fairfield Osborn.

1908 Constitution amended making

The Mayor of the City of New York,
The Comptroller of the City of New York,
The President of the Department of Public Parks,
ex-officio members of the Board of Trustees.

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

THE PRESIDENTS

John David Wolfe 1869-1872 Robert L. Stuart 1872-1881 Morris Ketchum Jesup 1881-1908 Henry Fairfield Osborn 1908-

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."

FOUNDERS OF 1869

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*

BENEFACTORS

By contribution of \$50,000 or upwards to the funds of the Museum, or by gift of books or specimens valued at \$100,000 or more

GEORGE F. BAKER
JAMES M. CONSTABLE*
CLEVELAND H. DODGE
JAMES DOUGLAS*
AMOS F. ENO*
EDWARD S. HARKNESS
ARCHER M. HUNTINGTON
ARTHUR CURTISS JAMES
MORRIS K. JESUP*
MRS. MORRIS K. JESUP*
A. D. JUILLIARD*
DARIUS OGDEN MILLS*

OGDEN MILLS
J. P. MORGAN
J. PIERPONT MORGAN*
HENRY FAIRFIELD OSBORN
GEO. D. PRATT
PERCY R. PYNE*
JOHN D. ROCKEFELLER, JR.
MRS. RUSSELL SAGE*
MRS. ROBERT L. STUART*
CORNELIUS VANDERBILT*
WM. H. VANDERBILT*
FELIX M. WARBURG
HARRY PAYNE WHITNEY

^{*}Deceased

ASSOCIATE FOUNDERS

By contribution of \$25,000 to the funds of the Museum, or by gift of books or specimens valued at \$50,000 or more

GEORGE S. BOWDOIN*
JAMES M. CONSTABLE*
CLEVELAND H. DODGE
WILLIAM E. DODGE, 2D*
CHILDS FRICK
HENRY O. HAVEMEYER*
ARCHER M. HUNTINGTON
ADRIAN ISELIN
ARTHUR CURTISS JAMES
A. D. JUILLIARD*
CHARLES LANIER

OGDEN MILLS
J. P. MORGAN
OSWALD OTTENDORFER*
PERCY R. PYNE
WILLIAM ROCKEFELLER*
MISS PHEBE ANNA THORNE*
CHARLES E. TILFORD*
MRS. JOHN B. TREVOR*
CORNELIUS VANDERBILT, 1ST*
FELIX M. WARBURG
HARRY PAYNE WHITNEY

WILLIAM C. WHITNEY*

ASSOCIATE BENEFACTORS

By contribution of \$10,000 to the funds of the Museum, or by gift of books or specimens valued at \$20,000 or more

HUGH AUCHINCLOSS* GEORGE F. BAKER EMIL C. BONDY*
GEORGE S. BOWDOIN* FREDERICK F. BREWSTER Joseph H. Сноате* ROBERT COLGATE* THOMAS DEWITT CUYLER* BENJAMIN P. DAVIS* HENRY P. DAVISON* CLEVELAND H. DODGE William E. Dodge, 2d* MRS. WILLIAM E. DODGE* Mrs. Josiah M. Fiske* JAMES B. FORD CHILDS FRICK HENRY C. FRICK* MRS. 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 OGDEN MILLS J. P. Morgan HENRY FAIRFIELD OSBORN PERCY R. PYNE JOHN D. ROCKEFELLER, JR. WILLIAM ROCKEFELLER* Mrs. Russell Sage* Wm. R. Sands* JACOB H. SCHIFF* ROBERT L. STUART*
JOHN B. TREVOR Mrs. John B. Trevor* FELIX M. WARBURG HARRY PAYNE WHITNEY

HONORARY FELLOWS

Through election in recognition of distinguished scientific service to the Museum

ROALD AMUNDSEN
HERBERT L. BRIDGMAN
GEORGE K. CHERRIE
PROF. T. D. A. COCKERELL
MADAME MARIE SKLODOWSKA CURIE
DR. BASHFORD DEAN
LIEUT. GEORGE T. EMMONS, U.S.N.
GEO, BIRD GRINNELL

BARON LUDOVIC MONCHEUR REAR-ADMIRAL ROBERT E. PEARY, U.S.N.*

THEODORE ROOSEVELT*
DR. LEONARD C. SANFORD
SIR ERNEST HENRY SHACKLETON*
VILHJÁLMUR STEFÁNSSON
PROF. WILLIAM M. WHEELER

^{*}Deceased

HONORARY LIFE MEMBERS

Through Honorary Election

CARL E. AKELEY Admiral E. Alexeieff ROBERT A. BARTLETT REAR ADMIRAL GUY H. BURRAGE, U. S. N. JAMES P. CHAPIN HAROLD J. COOK Dr. Carlos de la Torre PHILIP DE RONDE CAPT. A. RADCLYFFE DUGMORE CHARLES J. EDER Dr. John A. Fordyce Colonel J. C. Faunthorpe MADISON GRANT NORMAN GRANT Dr. E. W. GUDGER A. K. HAAGNER DR. WILLIAM T. HORNADAY

ROBERT HENDRE KELBY Professor C. R. Kellogg CHARLES R. KNIGHT HERBERT LANG Dr. Frederic A. Lucas Professor Richard S. Lull Dr. George M. Mackenzie William Niven HONORABLE JOSEPH J. NUNAN Professor Raymond C. Osburn Honorable Benjamin F. Pankey PAUL J. RAINEY Dr. WILLIAM S. RAINSFORD Dr. Hugh M. Smith NICOLI SOKOLNIKOFF ARTHUR S. VERNAY GENERAL S. HERBERT WOLFE John G. Worth

CORRESPONDING MEMBERS*

Through Honorary Election on Recommendation of the Scientific Staff

Dr. J. G. Andersson,
Geological Adviser to the
Chinese Republic, Peking,
China

Cnina
Dr. F. A. BATHER,
Deputy Keeper of Geology, British Museum (Natural History), London, England

DR. ROBERT BROOM,
Douglas, South Africa
DR. Lucius C. Bulkiley.

Dr. Lucius C. Bulkley, Medical Missionary, Presbyterian Board of Foreign Missions, Petchaburi, Siam

Dr. L. Capitan, Ecole d'Anthropologie, Paris,

France
DR. CHARLES CHILTON,
Professor of Biology, Canterbury College, Christchurch,
New Zealand

Dr. Roberto Dabbene, Museo Nacional, Buenos Aires, Argentina

Dr. Carlos de la Torre, Rector, University of Havana, Cuba

DR. EMMANUEL DE MARGERIE, University of Strasbourg, France

Dr. Victor Goldschmidt, Professor of Mineralogy, University of Heidelberg, Germany

Mr. F. H. HAINES, Brookside, Winfrith, Dorset, England

*Elected February 5, 1923.

Dr. Archibald G. Huntsman,
Professor of Biology, University of Toronto, Ontario,
Canada

Dr. Alfred La Croix,
Professor of Mineralogy,
Muséum d'Histoire Naturelle,
Paris, France

Dr. Adolpho Lutz, Instituto Oswaldo Cruz, Rio de Janeiro, Brazil.

MISS BERTHA LUTZ, Rio de Janeiro, Brazil HERMANO APOLINAR MARIA, Instituto de La Salle, Bogotá, Colombia

HERMANO NICEFORO MARIA, Instituto de La Salle, Bogotá, Colombia

Dr. G. ELLIOT SMITH,
Professor of Anatomy,
University College, London,
England

Dr. Baldwin Spencer, National Museum of Victoria, Melbourne, Australia

Dr. Shigeho Tanaka, Professor of Zoology, Imperial University of Tokio, Japan

Dr. Friedrich von Huene, Professor of Geology, University of Tübingen, Germany

DR. KARL WEINGAND,
Bad Mergentheim, Württemberg, Germany

GIFTS AND BEQUESTS EXEMPT FROM TAXATION

Gifts, to the extent of fifteen per cent. of total income, and Bequests of any extent to The American Museum of Natural History are exempt from federal taxation, under the Federal Revenue Act of 1918.

FORM OF GIFT OR BEQUEST

	I	(de)	h	e	r	el	53	ľ	g	γi	v	e	•	aı	n	đ	i	b	e	q i	ı	e a	it	h	i	to	,	"	T	Н	E		A	M	E	R	Ι	C.	A.	N		N	ſτ	JS	SE	U	M	ſ
OF	•]	N	A	Т	U	R	A	L]	Η	Ι	S	Г	Ol	R	Y,	,	O	f	: ;	t į	he	?	C	i	ts	,	o;	f	Λ	Ιe	'u	y	¥	o	r	k,	, .												
	_						_		_	_	_		_	_		_	_	_	_		_																													
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	• •	•	•	•	• •	•	•	•	•	•	•	•	•	•	•	•	•	•	• •	,
	•		•	• •		•	•	•	•	•	•		•	•	•	•	•	•	•		•								•				•																• (

TRUSTEES' ENDOWMENT FUND

The Endowment Fund was established in 1884. It now amounts to \$10,635,178.63. The Trustees especially desire to insure the permanent growth and welfare of the Museum through an increase of the General Endowment Fund. The additional sum of \$2,000,000 is needed at present.

TRUSTEES' BUILDING FUND

The Trustees' Building Fund was established in 1916. It now amounts to \$108,166.42. The Trustees desire to celebrate the Sixty-fifth Anniversary of the Founding of the Museum, namely, 1934, through the Completion of the Southern Half of the great building, partly by the City, partly by gift, which will cost approximately \$9,500,000.

For information apply to

HENRY FAIRFIELD OSBORN, President,

to

PERCY R. PYNE, Secretary,

or to

GEORGE F. BAKER, JR., Treasurer.

MEMBERSHIP

There are more than sixty-five hundred MEMBERS of the AMERICAN MUSEUM, residents of the United States and other countries, who support its educational and scientific work and enjoy its lectures, publications and other privileges, as follows:

Associate Members 1,628 Annual Members 3,610 Sustaining Members 126 Life Members 928 Honorary Life Members 33	Fellows 53 Honorary Fellows 12 Patrons 123 Associate Benefactors 20 Associate Founders 9 Benefactors 8
MEMBERS	HIP FEES
Associate Members (non- resident)* (annually) \$3 Annual Members " 10 Sustaining Members " 25 Life Members 100	Fellows \$500 Patrons 1,000 Associate Benefactors 10,000 Associate Founders 25,000 Benefactors 50,000

^{*}Residing fifty miles or more from New York City.

PRIVILEGES OF MEMBERS

An Annual Pass admitting to the Members' Room.

Complimentary tickets admitting to the Members' Room for distribution to friends.

Services of an Instructor for guidance through the Museum, by application in the Members' Room.

Two course tickets to Spring Lectures and to Autumn Lectures.

Current numbers of all Guide Leaflets on request.

Complimentary copies of Natural History, the bimonthly magazine of exploration, adventure and scientific progress.

A full list of the Museum's Membership to December 31, 1922, is given at the end of this Report.

ADDRESS

SECRETARY OF THE AMERICAN MUSEUM
OF NATURAL HISTORY
77th Street and Central Park West
New York

BOARD OF TRUSTEES

FOR 1923

President

HENRY FAIRFIELD OSBORN

First Vice-President

Second Vice-President

CLEVELAND H. DODGE

J. P. MORGAN

Treasurer

Secretary

GEORGE F. BAKER, JR.

PERCY R. PYNE

Ex-Officio

JOHN F. HYLAN

MAYOR OF THE CITY OF NEW YORK

CHARLES L. CRAIG

COMPTROLLER OF THE CITY OF NEW YORK

FRANCIS D. GALLATIN

PRESIDENT OF THE DEPARTMENT OF PARKS

ELECTIVE

Class of 1923

CLEVELAND H. DODGE ARCHER M. HUNTINGTON

FELIX M. WARBURG A. PERRY OSBORN

GEORGE F. BAKER, JR.

Class of 1924

HENRY FAIRFIELD OSBORN WALTER DOUGLAS GEORGE F. BAKER

THEODORE ROOSEVELT

GEORGE D. PRATT

Class of 1925

PERCY R. PYNE

J. P. MORGAN

ARTHUR CURTISS JAMES

IOHN B. TREVOR

WALTER B. JAMES

Class of 1926

FREDERICK F. BREWSTER LEONARD C. SANFORD

WILLIAM AVERELL HARRIMAN CHILDS FRICK

CLEVELAND EARL DODGE

Class of 1927

ADRIAN ISELIN MADISON GRANT OGDEN MILLS

FREDERICK TRUBEE DAVISON

COMMITTEES OF THE TRUSTEES

FOR 1923

EXECUTIVE COMMITTEE

J. P. MORGAN, Chairman HENRY FAIRFIELD OSBORN, ex-officio

GEORGE F. BAKER, JR.

WILLIAM AVERELL HARRIMAN

CLEVELAND H. DODGE WALTER DOUGLAS

PERCY R. PYNE CHILDS FRICK

OGDEN MILLS

FINANCE COMMITTEE

GEORGE F. BAKER, JR., Chairman

GEORGE F. BAKER FELIX M. WARBURG A. PERRY OSBORN

WALTER DOUGLAS

AUDITING COMMITTEE

GEORGE D. PRATT, Chairman

FREDERICK TRUBEE DAVISON CLEVELAND EARL DODGE

NOMINATING COMMITTEE

PERCY R. PYNE, Chairman

WALTER B. JAMES

MADISON GRANT

COMMITTEE ON BUILDING AND PLANS

PERCY R. PYNE, Chairman

HENRY FAIRFIELD OSBORN, ex-officio

MADISON GRANT

WALTER B. JAMES

FELIX M. WARBURG

FRANCIS D. GALLATIN

Commissioner of Parks

COMMITTEE ON PENSIONS

FELIX M. WARBURG. Chairman

ADRIAN ISELIN

WALTER B. JAMES

A. PERRY OSBORN

viii

COMMITTEES OF THE TRUSTEES—Continued

COMMITTEE ON WELFARE

WALTER B. JAMES

A. PERRY OSBORN, Chairman GEORGE N. PINDAR

FELIX M. WARBURG, ex-officio

ADVISORY COMMITTEE ON INVESTMENTS

ARTHUR M. ANDERSON

N FRANCIS D. BARTOW CHARLES E. MITCHELL

ADVISORY COMMITTEE ON MURAL PAINTING, DECORATION, SCULPTURE AND ARCHITECTURE

EDWIN H. BLASHFIELD

DANIEL C. FRENCH BRECK TROWBRIDGE

ADVISORY COMMITTEE ON ASTRONOMY

WILLIAM WALLACE CAMPBELL, Chairman
GEORGE ELLERY HALE HENRY NORRIS RUSSELL

G. CLYDE FISHER, Associate Curator in Charge

COUNSEL

LEWIS L. DELAFIELD

ADMINISTRATIVE OFFICERS FOR 1923

DirectorFREDERIC A. LUCAS

Assistant Treasurer
UNITED STATES TRUST COMPANY OF NEW YORK

Executive Secretary
GEORGE H. SHERWOOD

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

ADMINISTRATIVE COMMITTEES

FOR 1923

Operation, Construction, Transportation

George H. Sherwood, Chairman

GEORGE N. PINDAR

H. F. BEERS

H. J. LANGHAM

J. B. FOULKE

Books, Printing, Distribution, Sales

RALPH W. Tower, Chairman Frank E. Lutz

GEORGE H. SHERWOOD

FREDERIC A. LUCAS

Public Information

George N. Pindar, Chairman

GEORGE H. SHERWOOD

ROBERT C. MURPHY

Committee on Pensions

RALPH W. Tower, Ph.D.

GEORGE N. PINDAR

H. F. BEERS

COMMITTEES OF THE SCIENTIFIC STAFF FOR 1923

Publication

FRANK E. LUTZ, PH.D., Chairman

WILLIAM D. MATTHEW, Ph.D. CLARK WISSLER, Ph.D.

Frank M. Chapman, Sc.D. Ralph W. Tower, Ph.D.

Frederic A. Lucas, Sc.D., Director, ex-officio

Whitney South Sea Expedition

L. C. SANFORD, Chairman

FRANK M. CHAPMAN, Sc.D.

ROBERT C. MURPHY, D.Sc.

FREDERIC A. LUCAS, Sc.D., Director, ex-officio

Natural History

HERBERT F. SCHWARZ, Editor

FREDERIC A. LUCAS, Director

ROBERT C. MURPHY, Assistant to the Director

FRANK M. CHAPMAN, Curator-in-Chief, Division II WILLIAM D. MATTHEW, Curator-in-

Chief, Division I

Preparation

(All departments except Vertebrate Palæontology)

JAMES L. CLARK, Assistant to the Director, in Charge

CARL E. AKELEY, Associate Curator and Adviser

Special Advisers

Messrs. Chapman (Birds); Anthony (North American Mammals); Andrews (Asiatic Mammals); Lang (African Mammals); Dean (Fishes); Noble (Reptiles and Amphibians); Gregory (Comparative Anatomy); Chubb (Osteology); Hovey (Geology); Miner (Invertebrates); Wissler (Anthropology); Lutz (Entomology); Winslow (Public Health); Sherwood (Public Education).

SCIENTIFIC STAFF FOR 1923

FREDERIC A. LUCAS, Sc.D., Director
ROBERT C. MURPHY, D.Sc., Assistant to the Director
(In Scientific Correspondence, Exhibition and Labeling)
JAMES L. CLARK, Assistant to the Director
(In Full Charge of Preparation)

I. DIVISION OF MINERALOGY AND GEOLOGY

WILLIAM DILLER MATTHEW, F.R.S., Curator-in-Chief

Geology and Invertebrate Palæontology

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

Mineralogy

HERBERT P. WHITLOCK, C.E., Curator GEORGE F. KUNZ, Ph.D., Research Associate, Gems

Vertebrate Palæontology

HENRY FAIRFIELD OSBORN, 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 Charles C. Mook, Ph.D., Associate Curator William K. Gregory, Ph.D., Associate in Palæontology Childs Frick, B.S., Research Associate in Palæontology

II. DIVISION OF ZOOLOGY AND ZOOGEOGRAPHY

FRANK MICHLER CHAPMAN, N.A.S., Curator-in-Chief

Lower Invertebrates

ROY W. MINER, A.B., Curator WILLARD G. VAN NAME, Ph.D., Assistant Curator Frank J. Myers, Research Associate, Rotifera HORACE W. STUNKARD, Ph.D., Research Associate, Parasitology A. L. TREADWELL, Ph.D., Research Associate, Annulata

Entomology

FRANK E. LUTZ, Ph.D., Curator
A. J. MUTCHLER, Assistant Curator in Coleoptera
FRANK E. WATSON, B.S., Assistant in Lepidoptera
WILLIAM M. WHEELER, Ph.D., Research Associate, Social Insects
CHARLES W. LENG, B.S., Research Associate, Coleoptera
HERBERT F. SCHWARZ, A.M., Research Associate, Hymenoptera

Ichthyology

BASHFORD DEAN, Ph.D., Honorary Curator John T. Nichols, A.B., Associate Curator of Recent Fishes E. W. Gudger, Ph.D., Associate in Ichthyology

Herpetology

G. KINGSLEY NOBLE, Ph.D., Associate Curator, in Charge ARTHUR I. ORTENBURGER, M.S., Assistant Curator

Ornithology

FRANK M. CHAPMAN, Sc.D., Curator

W. DEW. MILLER, Associate Curator

ROBERT CUSHMAN MURPHY, D.Sc., Associate Curator of Marine Birds JAMES P. CHAPIN, A.M., Assistant Curator, African Birds Ludlow Griscom, M.A., Assistant Curator Jonathan Dwight, M.D., Research Associate in North American Orni-

thology
ELSIE M. B. REICHENBERGER, Research Assistant

Mammalogy

Roy C. Andrews, A.M., Associate Curator of Mammals of the Eastern Hemisphere

H. E. Anthony, A.M., Associate Curator of Mammals of the Western Hemisphere.

HERBERT LANG, Assistant Curator, African Mammals

CARL E. AKELEY, Associate in Mammalogy

Comparative Anatomy

WILLIAM K. GREGORY, Ph.D., Curator

S. H. CHUBB, Assistant Curator

J. HOWARD McGregor, Ph.D., Research Associate in Human Anatomy

III. DIVISION OF ANTHROPOLOGY

CLARK WISSLER, Ph.D., Curator-in-Chief

Anthropology

CLARK WISSLER, Ph.D., Curator
PLINY E. GODDARD, Ph.D., Curator of Ethnology
N. C. Nelson, M.L., Associate Curator of Archæology
CHARLES W. MEAD, Assistant Curator of Peruvian Archæology
LOUIS R. SULLIVAN, Ph.D., Assistant Curator, Physical Anthropology
CLARENCE L. HAY, A.M., Research Associate in Mexican and Central
American Archæology
MEG. HELMAN, D.D.S. Research Associate in Physical Anthropology

MILO HELLMAN, D.D.S., Research Associate in Physical Anthropology

Comparative Physiology

RALPH W. Tower, Ph.D., Curator

Comparative Anatomy

WILLIAM K. GREGORY, Ph.D., Curator J. Howard McGregor, Ph.D., Research Associate in Human Anatomy

IV. DIVISION OF EDUCATION AND PUBLICATION

GEORGE H. SHERWOOD, A.M., Curator-in-Chief

Library and Publications

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

Public Education

GEÓRGE H. SHERWOOD, A.M., Curator G. CLYDE FISHER, Ph.D., Associate Curator RUTH CROSBY NOBLE, B.A., Assistant Curator GRACE FISHER RAMSEY, Assistant Curator

Public Health

CHARLES-EDWARD AMORY WINSLOW, D.P.H., Honorary Curator MARY GREIG, Assistant

FIFTY-FOURTH ANNUAL REPORT

OF THE

TRUSTEES

OF

THE AMERICAN MUSEUM OF NATURAL HISTORY

FOR THE YEAR 1922



FOR THE FREE EDUCATION OF THE PEOPLE FOR EXPLORATION, RESEARCH, EXHIBITION AND PUBLICATION

THE CITY OF NEW YORK

ISSUED MAY 1, 1923

CONTENTS

								PAGE
THE AMERICAN MUSEUM OF NATURAL HISTORY	•	•		•	•	•	•	i
Corporation								i
History	•							i
The Presidents								i
Corporate Purposes							•	ii
Founders of 1869							•	ii
Benefactors	•						•	ii
Associate Founders					•			iii
Associate Benefactors	•		•				•	iii
Honorary Fellows	•				•-		•	iii
Honorary Life Members	•		•				•	iv
Corresponding Members	•		•				•	iv
GIFTS AND BEQUESTS EXEMPT FROM TAXATION .	•	•					•	v
Form of Gift or Bequest · · · · · · · ·	•	•				•	•	v
TRUSTEES' ENDOWMENT FUND	•	•	•	•	•	•	•	٧
Trustees' Building Fund · · · · · · · ·	•	•	•		•	•	•	v
Membership · · · · · · · · · · · ·	•							vi
Membership Fees	•		•	•		•	•	vi
Privileges of Members	•		•					vi
BOARD OF TRUSTEES		•	•	•	•	•	•	vii
COMMITTEES OF THE TRUSTEES			•					viii
Administrative Officers · · · · · · · ·	•			•	•	•		ix
Administrative Committees	•		•	•	•	•		x
COMMITTEES OF THE SCIENTIFIC STAFF	•	•	•	٠	•	٠		×
SCIENTIFIC STAFF								хi

										PAGE
REPORT OF THE PRESI	DENT · ·	٠.								. 1
The American Museu	ım and Citize	nship								. 1
Expeditions and Disc										. 4
To China and M	Congolia .									. 4
To the Siwalik										. 5
The Faunthorpe										. 5
Geology of the U	_									. 5
The Fossils of C							Vebr	aska		. 5
Europe	•		•							. 6
Lower Invertebr									ork	. 6
Fish and Reptile										. 6
Expedition to the	-									. 6
Birds of the W		-								. 7
Azores and Cape						·				. 7
Whitney South									Ĭ	. 7
Mammals of the	-		: :	•		•			•	. 7
South America			: :	•		•			·	. 8
Australia .		• •		•		•		• •	•	. 8
Gift of Aztec R		•		-		-	•	•	•	. 8
	National Mor						of :	.ha I	Tnita	
States of	of America,	A Pro	clama	tion					•	. 9
Anthropology of	North Ameri	ca.							•	. 10
British Columbia	and Alaska									. 10
Archæology of E	urope			•						. 10
Vanishing Wild Life	of the Worl	d.								. 11
Arrangement in Sequ	ence of Fort	y-two	Exhil	oition	Hall	s.				. 13
Cooperation with Of Foundations										c . 14
Scientific Research 1921-1922	Grants of th			Ins	titutio		r F	iscal	Yea •	r . 15
American Museum I	Expenditures	for 19	22 .							. 15
Completion of the Bo	ilding within	the I	Decad	le .						. 16
Intermuseum Promer	ade and New	Centr	al Pa	rk P	laygro	ound				. 18
New Special Endown	ent of \$2,000	,000 1	Veede	d.						. 19
Memorials to Trustee	es Davison an	d Cuy	ler a	ınd (Curato	r All	en .			. 20
Allen Hall and Men	orial Tablet									. 22
Changes in Trustees	Staff and I	I embe	rship							. 23
Activities of the St										. 24
Hospitality to Societ	ies					•				. 27
Special Gifts and A	cknowledgmer	its .								. 28
REPORTS OF THE DIREC	TOD AND C	TD A TC	DC.							. 32
Report of the Direct								. •	-	. 32
Attendance .		• •		•			•	•		. 32
Statistics of Nu		· ·	· · ·	Ми			· T+=	F.v+	ensic	
	System .		шс	u		mild		امت	-1131O	. 33
Publicity	•					•		· •	•	. 33
Sales of Publica			٠.	•	• •	•	•.	• •	•	. 33
	tions									

		PAGE
	Printing Plant	33
	Miscellaneous Printing in 1922	34
	Exhibits; Preparation	
	Special Exhibitions	36
	Labeling	37
	Accessions	37
	Care of Building	_ 38
	Needs of Museum	
Put	olic Education in the Museum and in the Schools	39
	School Service Building	39
	General Summary	
	Circulating Nature Collections	41
	Circulation of Lantern Slides	42
	Lectures for School Children	43
	Work with the Blind	45
	Loans to Public Libraries	45
	Docent Service	46
	Photographic Work	
	Motion Picture Library	
	Contact with Outside Organizations	47
	Personnel	
	Acknowledgments	49
Puh	olic Health	
	ology, Geography and Past Life of the Earth	
	Exhibition Halls	
	Paleogeographic Maps	
	Topogeological Models	
	Seismograph	
	Field Work	
	Publications and Research	
	Loans	
	Cataloguing and Labeling	
	Accessions	
\ r :	nerals and Gems	
WL11	The Mineral Collection.	
	Publications	
	Accessions	
Lxt	inct Vertebrates	
	Changes in Staff	
	Field Work	
	Preparation and Exhibition	
	Casts, Sales, Exchanges	
	Illustration	65

															P	AGE
Research and Public	ation			•												65
Lower Invertebrates																67
Changes in Staff																67
Exhibition																67
General Invertebrat	es .															68
Mollusks												• .				69
Field Work																69
Research and Public																70
Cooperation with Ot	her In	ıstit	utio	ns												72
Accessions																72
Insects and Spiders .																74
Wild Bees of Colora																74
Insects and Flowers																74
Exhibition																75
Publication																75
Recent and Extinct Fish																76
Exhibition																76
New Material .																76
Study Collections																76
Bibliography of Fis	hes .															7 7
Other Publication																78
Existing Reptiles and	Amphi	ibia	ns			•										79
Changes in Staff .														.4		79
Field Work in the	Loca	1 R	egic	n												7 9
Expedition to San	to Do	min	go											• .		80
Additions to the C	ollecti	on													•	81
Care of Collection																82
Exhibition																82
New Technique an																84
Research and Publ	lication	ı .											•			85
Birds																87
Whitney South Se	a Exp	edi	tion											•		87
Cape Verde Island	ls Exp	edi	tion										•			88
Expedition to Ecu	ador				,										•	88
Expedition to Mt.	Itatia	ya,	Bra	zil									•	•	•	90
Expedition to Peru	ι													•	•	90
Visits to Other M	useum	s.							•		•		•	•	•	90
Additions to the C	ollecti	ons					•	•		•			•	•	• •	91
Care of the Colle	ctions												•	•	٠.	91
Research								•						•	•	91
Publications							٠.							•	•	93
Presentation of Pa	pers .					•								•	•	
Loans				•		•		•				•		•	. •	
Office Routine .				•		•						•		•	•	93
Exhibition						•						•		•	•	
Staff Meetings .												•			•	94

	PAGE
Mammals	95
Accessions	95
Field Work	95
Study Collections	97
Exhibition	98
Research and Publications	98
Publications	98
Other Activities of Staff Members	99
Summary	99
Existing and Extinct Races of Men	101
Exhibition	101
Accessions	102
The Second Bernheimer Expedition	103
Archaeological Research in Southwestern United States	104
The Jesup North Pacific Expedition	105
Comparative Anatomy	107
Field Work	107
Exhibition	
Educational and Research Work	108
Accessions, Cataloguing, Office Work	111
Cooperation with Other Institutions	111
The Library	112
GENERAL SUMMARY	116
FINANCES, MAINTENANCE, ENDOWMENT	117
Summary of Classification of Disbursements	120
Financial Statement	122
Membership · · · · · · · · · · · · · · · · · · ·	137
_	
	138
Special Lectures	
Status of Membership	139
	139
Deceased Trustees and Members	141
Trustees and Terms of Service	142
LIST OF MEMBERS · · · · · · · · · · · · · · · · · · ·	144
B	
A 1. 70 A	
	144
	145
	145
77.11	148
reliows	149

																				PAGE
Honorar	y Life	M	em	be	s										,					150
Life M	embers																			151
Sustaini	ng Me	mbe	rs													•				161
Annual	Membe	ers																		162
Associat	e Men	nber	rs	•											•	•			•	189
Accession	s ·									•					•					201
Public I	Educati	on														•				201
Geology	and I	nvei	rte	bra	te :	Pala	eor	itol	Эgy		٠.									203
Minerald	gy																			205
Vertebra	te Pal	aeo	nto	log	у															206
Lower 1	nverte	brat	es																	207
Entomo	logy																			210
Ichthyol	logy																			211
Herpeto	logy																			212
Ornitho	logy															•				214
Mammal	logy																			216
Anthrop	ology																			218
Compara	ative A	Ana	ton	пy																222
Public	Health	1																		222
Miscella	neous																			222
Art .																				222
Woods	and F	`ore:	str	y					•											222
Act of In	CORPO	RA7	LIO	N	(C	ha	rte	r o	f 1	869	9)					•			•	223
CONTRACT	WITH	TI	ΗE	D	EP	ART	ME	NT	OF	P	ARI	ĸs				•				225
Constitut	TON												•					•		231
By-Laws																	•		•	237
LEGISLATIO	м .																•		٠	240
TENTH A	NNUA	t. K	SE1	POE	T (OF '	тні	e F	EN	SIO	N	Bo	ARD						٠.	247
Financia															٠	_		_		257



Henry Pomeroy Davison 1867-1922 Trustee and Treasurer 1916-1922

THE AMERICAN MUSEUM AND CITIZENSHIP

President Henry Fairfield Osborn

***Speak to the earth and it shall teach Thee. Book of Job. 400 B. C.

***Wherefore, if it is your wont to admire my wisdom—and I would that it were worthy of your good opinion and of my own surname of Sapiens—it really consists in the fact that I follow Nature, the best of guides, as I would a god, and am loyal to her commands. It is not likely, if she has written the rest of the play well, that she has been careless about the last act like some idle poet. But after all some "last" was inevitable, just as to the berries of a tree and the fruits of the earth there comes in the fulness of time a period of decay and fall. A wise man will not make a grievance of this. To rebel against Nature—is not that to fight like the giants with the gods?

—Cicro On Old Ang 56 B.C. Shuckburgh's translation, ph. 20-20.

-Cicero, On Old Age, 56 B.C., Shuckburgh's translation, pp. 29-30.

*** Study Nature not Books.

-Agassiz's Penikese laboratory motto, 1872.

"To read Nature more, not to read books less," this was the meaning of the motto placed by Louis Agassiz, the greatest nature teacher we have known in America, on the walls of his seaside laboratory on Penikese Island. About two thousand years before this, Cicero wrote, "My wisdom . . . really consists in the fact that I follow Nature, the best of guides, . . . and am loyal to her commands." Another four centuries earlier in human history, we find similar counsel in the language of Job, "Speak to the earth and it shall teach thee." In the counsel of these three very wise men—Agassiz, Cicero and the unknown author of the Book of Job-we see why the American Museum has an important and very direct influence on American citizenship. The best training for citizenship, in the highly artificial environment which surrounds the mind and spirit of the boy and girl in our times, is to show Nature in all her beauty and attractiveness, in all her moral lessons and inspirations, as well as in her stern moods of command. Whereas teachers and books may differ in their counsels, Nature is the visible expression of the divine order of things, and her facts are immutable.

The best of books, written by the best scientific teachers, soon become out of date, but a fact of Nature simply and clearly displayed to the child mind will be the same for thousands of years-

in truth for as long as the Museum endures. This is the reason that in the Library of the American Museum, the largest of its kind in America, there are more than a hundred thousand books and pamphlets, while in the Exhibition Halls and in the Study Collections of the Museum there are now over 5,000,000 specimens and every specimen is a permanent fact. In a Library the young reader may find books which will either make or unmake him as a citizen. The French and the Russian anarchies were bred in books and in oratory in defiance of every law of Nature. In the Exhibition Halls of the American Museum we are scrupulously careful not to present theories or hypotheses, but to present facts with only a sufficient amount of opinion to make them intelligible to the visitor. In the Hall of the Age of Man, for example, are brought together reproductions—as nearly as can be-facsimiles of the actual facts which have been discovered bearing on the pre-history of man in various parts of the world. These facts are put together conscientiously by experts who have been trained to clearly distinguish between fact and opinion, between truth and hypothesis or theory. The exhibits in this hall have been criticized only by those who speak without knowledge. They all tend to demonstrate the slow upward ascent and struggle of man from the lower to the higher stages, physically, morally, intellectually, and spiritually. Reverently and carefuly examined, they point man upward towards a higher and better future and away from the purely animal stage of life. This is as striking an illustration of the wisdom of Agassiz, Cicero and the author of the Book of Job as can be cited, yet it has been widely misrepresented in this country-often by well-meaning persons, whom we would again refer to the words of the Almighty in Job 38:2-"Who is this that darkeneth counsel by words without knowledge?"

Close daily observation of the thousands of boys and girls who pass every year through the Exhibition Halls of The American Museum of Natural History would convince any critic that they become more reverent, more truthful, and more interested in the simple and natural laws of their being and better citizens of the future through each visit. This conviction as to the all-round educational influence of the Exhibition Halls of the American Museum, on adults and on teachers as well as on pupils, led the Legislature of the State of New York in 1909 to reaffirm by a

slight modification of our Charter that The American Museum of Natural History is an educational institution. It also led the Board of Estimate and Apportionment, at a time when the City has no funds to waste, to make appropriations unprecedented in magnitude for the expansion of the Museum building and for the erection of the new School Service Building, which is designed to serve as an interpreter between the Museum and the School. The City is not advised to take part in any purely scientific work, or in explorations, expeditions and publications these do not come within the scope of its functions; the liberal and rapidly increasing Endowment Fund of the Museum and the increasing gifts of Members take care of this. The City is vitally concerned in the training of its young citizens and by repeated and by unanimous vote and through unprecedented appropriations it has declared that the American Museum is doing an important and enduring work in such training and that this work shall be encouraged and extended.

To bring the wonders and beauties and truths of Nature from every land and every sea, to exert their broadening and uplifting influence, this is our chief public mission.

One of the first discoveries of the Third Asiatic Expedition, the gigantic hornless rhinoceros Baluchitherium, presents us with a concrete example of how long it takes to bring a wonderful new fact of nature from the other side of the globe and put it within the reach and understanding of the school mind in the City of New York. This specimen was discovered northeast of the Altai Mountains in August, 1922; it took several days to work it out of the earth; it was transported across the desert of Mongolia and reached Peking on October 20; it reached the American Museum on December 27-a red-letter day in the Department of Vertebrate Palæontology which received it. scientific work and preparation began immediately and has continued unremittingly in the hands of two, three and sometimes four preparators, until its completion, when it will be ready to be reproduced a thousand-fold by photography and distributed in this country, and in fact all over the world. Five months after its arrival it will be placed in a large case near the center of Memorial Hall with a map showing its long journey and a label giving its history, with a complete restoration showing how it appeared in life. This is not quite so rapid as Jules Verne's tour of the world in eighty days, but the record is a good one when one considers the very difficult scientific problems involved, the years of experience and training necessary to rightly interpret this animal, and the absolutely faultless restoration of this skull.

Baluchitherium is an illustration of what is constantly going on in every one of the fifteen scientific departments into which the Museum is now divided. Members and friends, who have been so generously trusting in our promises to produce great results if they would provide the sinews of war, will be delighted to see the following summary of a single year's work in the field, which comprised thirty-six expeditions.

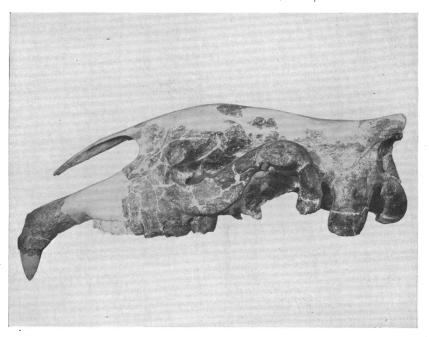
Expeditions and Discoveries of the Year 1922

The Third Asiatic Expedition is in its second year, having started in the spring of 1921, under the leadership of Roy C.

Andrews. On April 21, 1922, the expedition left To China Kalgan for Mongolia, to continue work in zoology, and geology, palæontology and geography as far as Mongolia Urga, westward to the eastern extension of the Altai and Tian Shan Mountains and south to the frontier of Chinese Turkestan. This region includes the most arid section of the Gobi Desert, and rolling meadow-lands and foot-hills at the base of high mountains, some of which are covered with perpetual snow. About 260 miles northwest of Kalgan, on the way to Urga, fossil remains comparable to fossils found in Wyoming were discovered. This discovery is epoch-making, because it throws light upon the migration of animal life from Europe to America via Asia. While the fossil hunters were studying these beds. Leader Andrews and the zoological branch pushed on to Urga and completed arrangements for the journey of several hundred miles west of Urga into the region which was to occupy them for the summer. A cable from Leader Andrews, dated Peking, September 25, reads as follows: "Men cars safe. Three thousand miles. Mongolia expedition discovers vast fossil fields, rich Cretaceous, Tertiary deposits. Skull Baluchitherium. Complete skeletons small dinosaurs. Skulls rhinoceros. Twenty thousand feet film. Two thousand mammals. Mapped large area. Extremely important geological discoveries." (Supported by the Jesup Fund, special gifts and contributions, the American Asiatic Association and Asia.)



American Museum of Natural History and Asia Magazine



DEPARTMENT OF VERTEBRATE PALAEONTOLOGY
Third Asiatic Expedition

(Above) First stage in the transportation of the skull of Baluchitherium. Walter Granger and his Chinese driver carrying the block containing a part of the skull just after it was removed from its fossil bed in Mongolia

(Below) Skull of Baluchitherium grangeri, 4 ft. 5 in. in length, as restored at the Museum. The plaster restoration (white) was partly modeled from the other side of the skull

Barnum Brown has conducted work in the Siwalik Hills of India, in spite of intense heat and great difficulties.

To the Siwalik Hills of India

historic fossil-bearing formation, he has made a splendid collection of fossils, including mastodon and elephant skulls, rendering our collection in this respect the third in importance in the world. This is a remarkable achievement. (Supported by

contributions of Mrs. H. C. Frick.)

The President has accepted the generous offer of Colonel 1. C. Faunthorpe (an A.D.C. to King George and a resident commissioner at Lucknow) and Mr. Arthur S. Vernay, to collect for the Museum a representative The Faunthorpe series of the big game animals of India. The Indian Museum has provided a taxidermist, John Jonas, Expedition of Livingston, Montana, to accompany the expedi-

tion and is to pay the cost of transporting the material to New (Supported by contributions of Colonel Faunthorpe and York. Mr. Vernay and the Jesup Fund.)

Geological studies were carried on by Dr. Hovey in Colorado, California, Oregon and Canada; in New York State Geology of California, Oregon and Canada; in New York State United States by Dr. Reeds, and in the Lake Champlain region and Canada by Mr. Foyles.

W. D. Matthew and Childs Frick conducted a reconnaissance trip during the summer through northwestern Nebraska south-

The Fossils of Colorado, California and Nebraska

ward to Pawnee Buttes, observing chiefly the stratigraphy of these formations and securing a New Mexico, few specimens of rare fossil animals. A valuable collection of fossil mammals was secured by Albert Thomson near Agate, Nebraska; Messrs.

Olsen and Miller collected fossils in the Bridger formation of Wyoming; Messrs. Mook and Kaisen worked in the Cretaceous of New Mexico from which was obtained a new type of Horned Dinosaur, discovered by Charles H. Sternberg and purchased through the J. P. Morgan Fund. Valuable exchanges were arranged with the Colorado Museum of Natural History, and through the visit of Charles Lang to the Museum of the University of California, material to complete a mounted skeleton of the Giant Ground Sloth Mylodon from the La Brea deposits was secured. (Jesup Fund and contributions of Childs Frick.)

We are hunting in Württemberg for the ancestors of the dinosaurs which will fill the fourth floor of the new Asiatic Wing.

Dr. F. von Huene is excavating for fossils at Trossingen in southern Württemberg. Our understanding with the Tübingen Museum is that they will share the collection with our Museum, selecting for us especially a fine exhibition series. (Jesup Fund and Pliocene Fund.)

Roy W. Miner, in cooperation with Frank J. Myers, continued his field studies in southern New Jersey, in connection with the new Rotifer Group; this will show the of New Jersey, half inch square, magnified to an area five feet Colorado, square. (Jesup Fund.) F. E. Lutz spent the summer near Boulder. Colorado field work which he has been doing in connection with the wild bees of Colorado and carrying on investigations as Chairman of the National Research Council's Committee on the Biological Relations between Flowers and Insects. species, two new to science, were added to the list of about 800 different kinds of wild bees in Colorado. (Jesup Fund; also in coöperation with Cornell University, the University of Colorado and the National Research Council.) Through the generous coöperation of B. Preston Clark, Frank E. Watson collected about 11,000 specimens of insects, lower invertebrates, fishes and reptiles in Haiti. He also enriched our exhibition and study series of insects by field work near New York City.

John T. Nichols visited the British Museum, London, to confer with the new officers who are taking charge of the work in ichthyology at that Museum.

Dr. Noble spent three months in Santo Domingo collecting reptiles and amphibians and studying their life histories. He secured several thousand specimens, including nine new species. He observed the life histories of many species and procured the specimens and material for habitat groups of the largest tree frog in the world and the largest lizard in the Americas. Free transportation of the equipment was given by the Clyde Steamship Company. (Angelo Heilprin Exploring Fund and Jesup Fund.)

Messrs. Chapman, Cherrie and O'Connell made a successful reconnaissance on the coast and in the mountains of Ecuador.

The collections contain several species new to sci-Birds of ence and about a dozen which heretofore have not the World been recorded from Ecuador. About 600 specimens were collected and arrangements were made with native collectors to secure other birds from little-known parts of eastern Ecuador. (Jesup Fund, Margaret Olivia Sage Fund and South American Exploration Fund.) The biological survey of Amazonian waters was continued by Harry Watkins in Peru, while Ernest Holt collected birds in the mountains of eastern Brazil. (Jesup Fund.)

Our collection of birds profited through field work conducted in the Azores and the Cape Verde Islands by José G. Correia.

Azores and Cape Verde Islands

The material collected comprises several hundred specimens, and is particularly rich in marine birds, including petrels, boobies, tropic birds, and some of the rare insular species of land birds. tributions of Dr. L. C. Sanford and Mr. Harry Payne Whitney.)

The Whitney South Sea Expedition, under the leadership of Mr. R. H. Beck, continues to produce excellent results in col-

Whitney South Sea Expedition

lecting the birds of Polynesia. In the two years that the expedition has been in the field, 3,851 birds, with extensive field notes, and 562 photographs have been made; nearly all these specimens

are new to the Museum collections, and many are new to science. A collection of reptiles has also been made. (Contributions from Mr. Harry Payne Whitney.)

Exchanges were arranged with the Senckenberg Museum of Frankfort by Mrs. Elsie M. B. Reichenberger, who also carried on researches in Munich.

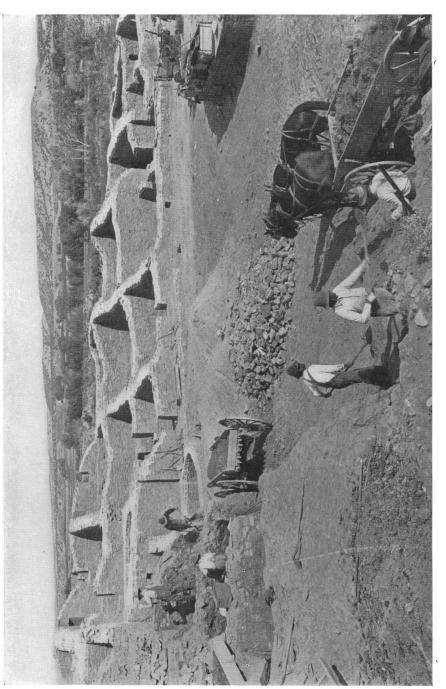
Mr. Carl E. Akeley, who left New York in July, 1921, on his fourth expedition to Africa, to secure gorillas from the Kivu country, to be mounted in a habitat group for the Mammals of African Hall, returned on March 13, 1922, having the World been successful in securing five specimens of the gorilla, the largest weighing 360 pounds. (Contributions of Mr. Ogden Mills, Jesup Fund and Mr. Carl E. Akeley.) James L. Clark, with Kenyon V. Painter, is visiting the Tanganyika country of Africa to procure material for a rhinoceros group, and R. T. Burge, of Los Angeles, is also expecting to collect for the Museum on his present trip to Africa and India.

G. H. H. Tate and Herbert E. Wickenheiser have collected mammals in Ecuador (Jesup Fund), and Herbert Lang is studying the fauna of British Guiana. Mr. Lang is going up the Mazaruni River as far inland as Mount Roraima and will make comparisons between the African and the South American forests and savannahs.

Extensive exchanges with various museums in Australia are enriching our collections through the relations established by

William K. Gregory during his recent visit to Australia. Among the material secured through these exchanges and purchases are a collection of skulls of Australian aborigines, a cast of the skeleton of the marsupial elephant Diprotodon, and a rare nectar-eating phalanger Tarsipes. The field collecting has been continued by H. C. Raven, who, with the cordial coöperation of government officials and museum and university men, has secured a representative collection of Australian Mammals—kangaroos, wallabies, native bear, etc. Mr. Raven is also collecting mammals and marine birds in Tasmania. (Jesup Fund.)

The Museum's representative, Earl H. Morris, has been working on the Anthropology of the Southwest since 1909—especially in Aztec, New Mexico, through the special contributions of Mr. Archer M. Huntington to the fund Gift of Aztec Ruin known as the Anthropology of the Southwest Fund. to the United States This work has followed explorations of the Pueblo Bonito through the gift of Mr. Frederick E. Hyde and Mr. B. T. B. Hyde, the results of which were published in 1920 in the volume on the Pueblo Bonito, and furnishes important data for comparative study of these cultures. This work has vielded results of great interest, and the ruins have proved in many ways the most perfect record of the past history of this region. It was decided early in the work not to destroy these ruins but to preserve them: consequently the excavation was carried on with the utmost care and the preservation proceeded step by step with the digging. As a result we were able to present this monument of Aztec to the United States, in the name of Mr. Huntington. After a long series of negotiations all legal



DEPARTMENT OF ANTHROPOLOGY

RUINS AT AZTEC, NEW MEXICO

Presented to the United States Government by Mr. Archer M. Huntington, through The American Museum of Natural History, and established a national monument by proclamation of President Harding, January 24, 1923

difficulties were removed and President Harding sent out the following Proclamation, dated January 24, 1923:

AZTEC RUIN NATIONAL MONUMENT (NEW MEXICO)

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA A PROCLAMATION

WHEREAS, there is near the town of Aztec, New Mexico, a ruin of great antiquity and historical interest; and

WHEREAS, the ground on which said ruin stands has been donated to the United States for the establishment of a national monument with a view to the preservation of said ruin for the enlightenment and culture of the Nation:

Now Therefore, I, Warren G. Harding, President of the United States of America, by virtue of the power in me vested by section two of the act of Congress entitled, "An Act for the Preservation of American Antiquities," approved June 8, 1906 (34 Stat., 225) do proclaim that there is hereby reserved and set apart as a national monument to be known as the Aztec Ruin National Monument all that piece or parcel of land in the County of San Juan, State of New Mexico, shown upon the diagram hereto annexed and made a part hereof, and more particularly described as follows: Beginning at a point 347 feet north from the south line of section 4 and 20 feet east from the west side of the southeast quarter of the southwest quarter of section 4, township 30 north, range 11 west, N. M. P. M. and running thence north 0° 53' east 179.1 feet; thence north 64° 46' east 385 feet; thence south 81° 23' east 52.3 feet; thence south 42° 45' east 436.4 feet; thence south 67° 01' west 501.4 feet; thence north 0° 53' east 176.5 feet; thence west 240 feet to place of beginning, containing 4.6 acres, all in the southeast quarter of the southwest quarter of section 4, township 30 north, range 11 west.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy or remove any of the features or objects included within the boundaries of this monument and not to locate or settle upon any of the lands thereof.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management and control of this monument, as provided in the act of Congress entitled, "An Act to establish a National Park Service, and for other purposes," approved August 25, 1916 (39 Stat., 535) as amended June 2, 1920 (41 Stat., 732).

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

Done at the City of Washington this twenty-fourth day of January, in the year of our Lord one thousand nine hundred and twenty-three, and of the Independence of the United States of America the one hundred and forty-seventh.

[SEAL]

WARREN G. HARDING

By the President: CHARLES E. HUGHES,

Secretary of State.

[No. 1650.]

Doctor Wissler examined some archæological sites in New York State, along the Hudson, where evidences of prehistoric occupation were discovered and some curious stone works un-Anthropology covered. Arrangements have been made for more of North extensive excavations. (Courtesy of Mr. E. E. Olcott of the Hudson River Day Line. Earl H. Morris, accompanied by Charles L. Bernheimer, explored part of southern Utah and located a number of heretofore unknown prehistoric ruins; these will be thoroughly examined in the near future. They also made a general reconnaissance of the Navajo Mountain region of New Mexico. (Contribution of Mr. Charles L. Bernheimer and Jesup Fund.)

Doctor Goddard, accompanied by Lieutenant G. T. Emmons and Dr. C. F. Newcombe, of Victoria, B. C., visited the Indians of southern Alaska to collect totem poles and wood carvings, to complete the Jesup Hall, and first-hand information looking toward the preparation of the Handbook covering the tribes of that region. A number of interesting specimens were secured. (General Fund.)

Mr. Nelson spent several months in western Europe, studying prehistoric collections in the museums and in private hands, and collected material of the Palæolithic period. He also visited a number of new archæological sites in England, France and Belgium, making some excavations. (General Fund.) Through previous journeys of Mr. Nelson, three journeys by President Osborn and one by Doctor McGregor, beginning in 1913, the Museum has secured splendid collections representing the archæology and prehistory of man in Europe, which will be displayed in the Hall of the Age of Man and the Hall of the Prehistory of Man.

These expeditions, scattered all over the world, represent 194,475 miles of travel during the single year 1922; they represent a combined expenditure of \$148,369.67; they represent devotion and self-sacrifice in the interests of the Museum on the part of the explorers and collectors which are beyond all praise. The heat, the cold, the hunger, the privations, the fatigue pertaining to life and limb, incurred by these young men, are not dwelt upon in their reports; we learn of them only through confidential letters to their families and friends.

The Trustees have done their best this year to express their appreciation by a number of promotions in rank and in salary, but we need the much larger Endowment Fund of \$2,000,000 for this purpose, and even then we could never adequately repay or reward these devoted men.

VANISHING WILD LIFE OF THE WORLD

The reason that certain of our expeditions are being pressed so hard at the present time—especially in Australia and southern Asia, in Mongolia and in Polynesia—is that the natural life and beauty of the world are vanishing with almost incredible rapidity, both among the native races of men and of mammals on land and sea. Unless we secure the records of these native races now, we shall never secure them, because they will have vanished completely. Unless we secure these mammals now, our future exhibition halls of Asia, of Australia and of certain parts of Africa will be incomplete. The President, assisted by Associate Curator Anthony, has conducted a special investigation during the last two years on this subject and has published two articles entitled "Close of the Age of Mammals" and "Can We Save the Mammals?"**

"The four continents, Europe, North America, Asia, and finally Africa. have eliminated their wild animals through similar causes—the food supply, fur supply, industry, and art, agriculture, deforestation, and, as a final blow but in a minor degree, sport. The number of game animals still surviving in the mountains of Asia is relatively great, but in many areas game is on the danger line. Nothing in the history of creation has paralleled the ravages of the fur and hide trade, which, with the bone fertilizer trade, now threatens the entire vertebrate kingdom. The legitimate use of furs for protection in cold weather has long since passed. Furs are now a fashion, just as feathers were thirty years ago. The trade has passed almost entirely into the hands of people of Oriental and Asiatic origin. Millions of dollars are spent annually in advertising. Furs are worn in midsummer purely for ornament and personal adornment,

^{*}Journal of Mammalogy, Vol. 3, No. 4, November, 1922. **Natural History, Vol. XXII, September-October, 1922.

or to make a display of wealth and luxury. The final cause of the Close of Age of Mammals can be arrested only through the creation of sound sentiment and education of the children and of women, in the same manner in which the National Association of Audubon Societies has arrested the destruction of birds. But such a movement will be extremely difficult, because the fur trade all over the world offers opportunities for money making, with very little effort and with no risk of life. Roy Chapman Andrews tells us that while he was in northern Mongolia word came through that marmot skins were coming into the market; the Mongols dropped all other work and began destroying marmots. . . . The discounted total of all skins sold for the three years reaches the surprisingly large figure of 107,689,927 skins. Moreover, these figures indicate the slaughter of only the animals which reached the market as skins. To properly show the slaughter that is taking place, one must allow for animals which were killed and not sent to the market because their skins were unprime, and also for a considerable percentage of wounded animals which escaped the trapper, but which, nevertheless, were killed through his agency."

The writers conclude:

"Therefore, we believe that if some more drastic methods of checking this really appalling slaughter are not soon inaugurated, the fur industry will have been the means of quite definitely closing the Age of Mammals in so far as it applies to a number of species."

In our effort to save the mammals, we are working hand in hand with the New York Zoölogical Society, the Boone and Crockett Club, the American Game Protective Association, the American Bison Society, the National Association of Audubon Societies, the United States Biological Survey, the National Park Service of the United States Department of the Interior, the American Society of Mammalogists, and with officers of the British, of the Indian, of the Australian, and of the British Colonial and Insular governments, to retard the inevitable Close of the Age of Mammals.

The fur trade is making terrible inroads in Australia; this explains the urgency of our expedition, initiated by Doctor Gregory and conducted by Mr. Raven, which is securing superb collections. In Mongolia and in China the introduction of cheap firearms and the high price of furs are eliminating mammals, large and small, at an alarming rate. In India and its bordering states, the Faunthorpe Indian Expedition is at work none too soon to secure specimens of the last of certain types of historic mammals, the Indian Lion, for example, which is on the verge of extinction, and the large Indian Rhinoceros, which is becoming extremely rare. The cordial cooperation of the officials of the Government and the Indian Princes with this expedition promises great results which will be reported on fully in the Fifty-fifth Annual Report.

ARRANGEMENT IN SEQUENCE OF FORTY-TWO EXHIBITION HALLS

The present and future arrangement of each hall is planned by the Curators, in consultation with the Director and members of the Staff. Through recent action of the Board of Trustees, Director Lucas was relieved of many of the original duties of his office that he might devote his entire time and attention to the arrangement of the forty-two exhibition halls, which are either complete or in process of construction. This in itself is a very large undertaking, requiring all the taste, skill and experience through which our Director has earned his most enviable reputation and standing at the head of his profession. Only a few of our exhibition halls have reached the educational, scientific and artistic arrangement that is being planned for them. Some, like the Mexican Hall, are imperfect for the want of labels; others, like the Bird Hall, are confusing, because of the association of the bird and fish collections; others, like the Jesup North Pacific Hall and the new Morgan Memorial Hall of Minerals and Gems, are approaching our ideal of what an exhibition hall should be.

The ideal that we are striving for is to make each hall self-explanatory and attractive so that it shall draw people to it as Nature does; also that it shall take its place in the Series of Halls, arranged in consecutive educational order as members of larger groups. As an example of this arrangement, we may cite the Museum plan so far as it has at present been developed:

SERIES I-Life History of the Earth

1. Age of Invertebrates, Primary

 Age of Fishes (projected)
 Age of Amphibians and Reptiles, Secondary

4. First Age of Dinosaurs

projected)
5. Final Age of Dinosaurs
ns and Reptiles,
6. Age of Mammals, Tertiary
7. Age of Man, Quaternary
8. Age of the Horse, Corridor

SERIES II-Present Life of the Earth

- Woods and Forestry, Jesup Hall
 Evolution of Life, Darwin Hall
- 3. Shell Hall, Mollusca of the World
- 4. Oceanic Life and Environment
- 5. Insect Life and Adaptation
- 6. Living Fishes of the World7. Amphibians and Reptiles
- 8. Synoptic Birds of the World 9. Bird Groups of Eastern Hemisphere
- 10. Birds of New York and Vicinity 11. Habitat Bird Groups of North
- America 12. Mammals and Their Classification
- 13. Allen Hall of North American
- Mammals 14. Arctic and Antarctic Life
- 15. Asiatic Hall, Mammals, Birds and Reptiles

16. African Hall (projected)

SERIES III-Prehistory and Present Races of Man

- 1. Hall of the Age of Man
- 2. Races of Mankind
- 3. Primitive Industry and Art. Archæology
- 4. Indians of the Eastern Wood-
- 5. Indians of the Plains of North America
- 6. Indians of the Southwest
- 7. Prehistoric Mexico and Central America
- 8. Prehistoric Peru
- 9. Indians of the North Pacific
- 10. Races and Cultures of Polynesia
- 11. Races and Cultures of the **Philippines**
- 12. Races and Cultures of Africa 13. Races and Cultures of Australia

Series IV-Education and Environment of Man

- 1. Health and Food of Man
- 2. Nature and Man (projected)

SERIES V-Past History of the Earth

- 1. Morgan Hall of Minerals and 2. Astronomic Hall (projected) Gems
 - 3. Geology and Geography (projected)

Coöperation With Other Museums, Universities, Libraries AND SCIENTIFIC FOUNDATIONS

For the third year this Report contains a list of the thirty-three public and the twenty-four endowed institutions of Greater New York with which the Museum is cooperating. This year we are adding a list of forty-five museums of America and other countries with which we are coöperating-a list which will be made fuller next year. We are also including a list of thirty-five Honorary Life Members in America and twenty-two Corresponding Members in other countries, who in various ways are aiding our work in the extension and popularization of Nature. Next year we shall add a complete list of the libraries of the world with which we are exchanging publications, or to which we are sending our own publications without asking exchange, in order that they may exert a greater influence.

We are also endeavoring to establish friendly and coöperative relations with the great institutions, endowments and foundations for educational purposes which have been established in the United The total endowment fund for the public benefit, as recently summed up in President Pritchett's report on the Carnegie Foundation, amounts to \$548,000,000. It would certainly be very unwise for the American Museum to duplicate any of the work which is being so ably accomplished by the Carnegie Institution of Washington. To inform the Members and readers on this important point, we are taking the liberty of printing the allotments for the year 1922 from President Merriam's Report of 1922:

Scientific Research Grants of the Carnegie Institution for Fiscal Year 1921-1922:

	Executive
	Committee
,	Allotments
	1922
Botanical Research	
Embryology	. 44,640.00
Ecological Research	33,700.00
Heredity and Genetics	. 125.205.00
Geophysical Laboratory (interior of the earth)	. 146,794.00
Historical Researches	
Exploration and Research in Marine Zoölogy	
Meridian Astrometry	
Archæology, Chiefly Mexican and Central American.	
Dietetics, Nutrition, Public Health	
Astronomic Observatory, Mt. Wilson, California	237,568.00
Terrestrial Magnetism	174,109.00
Minor Research Grants	
Publications and Printing	. 121,331.03
Administration of the Washington Central Building	60,000.00
Insurance Fund	
Pension Fund	. 40,000.00
Total \$	1 417 324 52

These figures may be considered side by side with some of the generalized statements of the

AMERICAN MUSEUM EXPENDITURES FOR 1922:

1. Expeditions and Acquisition of Collections (Geology, Palæontology, Zoölogy, Anthropology,	
and Archæology)	\$169,585.60
2. Research and Preparation of Educational Exhibits	291,969.59
3. Printing Books and Publications including the	•
Library Administration	101,972.39
4. Public Education and Public Health (Instruction	
for Pupils and Students)	29,558.62
5. General Expenses	
Welfare of Employees (Pension and Insurance)	
and Membership	42,970.14
6. Administration	
Operation and Service344,227.89	
New Construction & Equipment 74,832.83	419,060.72
	\$1,055,117.06

These figures show that the American Museum and the Carnegie Institution are not overlapping or duplicating each other's work of scientific research. In Mexican and Central American Archæology the Carnegie Institution is entering a field in which our work

is for the time suspended, awaiting renewal when the Mexican and Central American Hall can be constructed.

For five years the question of educational extension, through the unparalleled system of the American Museum, of the marvelous work which is being done in astronomy by the Carnegie Institution at a cost during the year 1922 of \$237,568, has been before the Trustees of the Carnegie Corporation. Some project of this kind has met the most earnest and well considered approval of three of the great astronomers of the United States, namely, Director Hale of the Mount Wilson Observatory, Director Campbell of the Lick Observatory and Professor Russell of Princeton University. The plan of the Astronomic Hall is shown on the folded page. The Lecture Amphitheater Section is to have a seating capacity of between 3,800 and 4,000 and should be provided with auditory amplifiers. The estimated cost of these buildings, which will constitute Sections 16 and 17, is \$3,000,000. Our present lecture hall has not only been outgrown but it presents a barrier to the future educational arrangement of the completed Museum on every floor, as well as to the space required for the study collections of mammals and birds on the top floor. The Trustees have decided to complete the preliminary plans and estimates for these two sections. It is hoped in the meantime that the Carnegie Corporation will hold this important matter before it for continued consideration and study.

COMPLETION OF THE BUILDING WITHIN THE DECADE

The plan of the Museum which we expect to complete within the next decade will embrace seventeen sections, according to plans which were outlined by the President twelve years ago and which have since been continuously restudied, modified and examined by architects and experts, and considered by the Scientific and Administrative Staffs until we feel sure that we have an ideal building program. The City of New York has thus far appropriated a grand total of \$7,615,796.48 for building and equipping the first eleven sections. According to present estimates, the total cost of building and equipping the six remaining building sections is \$9,500,000, distributed as follows:

Section	13-ROOSEVELT HALL, Central Park West, proposed	60 500 000
Section	gift of the State of New York	
Section	by special gift	675,000

Section 17—Astronomic Hall, submitted to Carnegie	
Corporation	1.500.000
Section 14—South American Hall, to be built by the City	675,000
Section 16—New Lecture Amphitheater, capacity 3,800, submitted to Carnegie Corporation	-
submitted to Carnegie Corporation	1,500,000
Section 15-Mexican and Central American Hall, pro-	
posed gift	1,150,000
Total estimated cost of building	
Total cost of equipment	1,500,000
Grand total cost	\$9.500.000
Grand total cost	φ2,500,000

This building program will no more than keep pace with the development of New York during the next decade; nor is it more rapid than it was in the past, for during President Jesup's administration of twenty-five years, ten building sections were erected by the City; nor is it unlikely that we shall secure gifts and appropriations by the City which are necessary to carry out this building program. For educational and civic aims similar to ours, the City of Rochester, New York, during the past decade has raised the generous sum of \$17,800,000 for the construction and endowment of its free public educational and civic institutions. There are men and women in America who have the means to carry out this great patriotic purpose and who are looking to see how their gifts may be most wisely and effectively spent.

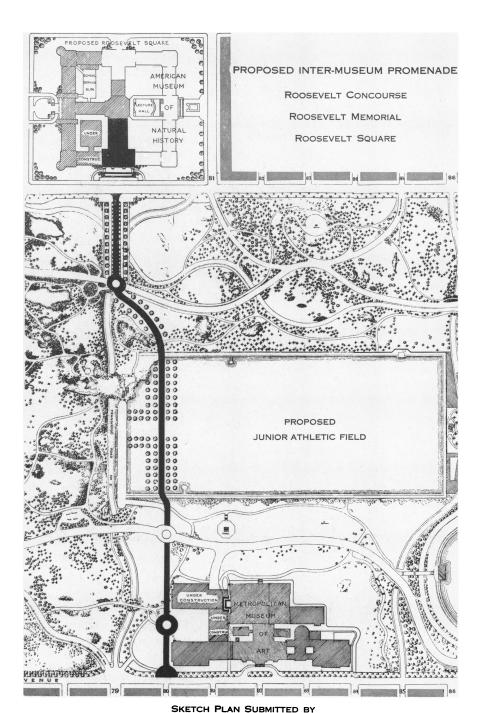
We prophesy that this ten-year building, scientific and educational program will be carried through because it is based on our own experience, on consultation with the best minds in this country and abroad, but especially on the realization that direct Nature Education is the best means of building up individual and national character and of raising the mental and moral level of our foreign-born population. In America, the classical land of democracy, and especially in this typically democratic City of New York, the non-American voting element, especially from the center and south of Europe and western Asia, has the average intelligence of an eleven-year-old boy, according to the Army Report. We cannot take away the vote from this adult boy, but we can increase his intelligence to the safety point. Our safety lies, as Thomas Jefferson remarked, in the diffusion of light and learning. These people may learn in the Museum that

Man is a part of Nature, Nature is the act of God. Through obedience to Nature Man obeys the will of God. The ground of this prophecy is that the American Museum is building on performance and on results rather than on promises. It is our actual school work that has won the confidence and support of the City Government in its five Boroughs. It is our sound, straightforward financial methods which have won the confidence of the Comptroller and the Department of Finance. It is our sound public educational policy which has brought in this year, from friends outside of the Board of Trustees, gifts to Endowment and Exploration totaling \$1,464,848.00. It is our broad, comprehensive, coöperative, and international scientific policy which has gained for us the cordial coöperation of such remote governments as those of Australia, India, China, including Mongolia, as well as of the South American republics.

Intermuseum Promenade and New Central Park Playground

Absolutely essential to the future educational influence of the Museum is the close and safe connection with the densely populated east side of the City of New York which will be afforded by the construction of the Intermuseum Promenade between Eightieth Street east and Seventy-ninth Street west, past the south façade of the Metropolitan Museum of Art to the entrance of the proposed Roosevelt Memorial Hall, the axis of which is Seventy-ninth Street west. This Plan is in the twelfth year of its development, as it was first conceived in 1911 and presented in the bird's-eye view executed by Charles Delmont in 1916. The Museum has expended a large sum in the development of this Plan-in drawings, projections and finally by aeroplane photography. By consent of Park Commissioner Gallatin, a colored diagram entitled "Proposed Intermuseum Promenade, Roosevelt Concourse, Roosevelt Memorial, Roosevelt Square" was presented to the Committee of the Whole of the Board of Estimate and Apportionment on April 3, 1922, and by motion of President Miller. approved by Comptroller Craig, the Mayor appointed the following Special Committee of the Board of Estimate:

The Comptroller,
President of the Board of Aldermen,
President of the Borough of Manhattan,
Commissioner of Water Supply, Gas and Electricity,
Commissioner of Parks, Borough of Manhattan,



THE AMERICAN MUSEUM OF NATURAL HISTORY
TO THE BOARD OF ESTIMATE AND APPORTIONMENT
APRIL 3, 1922

which was unanimously confirmed by the Board of Estimate on April 7, 1922. At a subsequent meeting on July 19, 1922, an appropriation of \$600,000 was voted for a War Memorial, including the development of the lower reservoir space and the Intermuseum Promenade, according to the following citation from the minutes of the Board of Estimate:

RESOLVED, By the Board of Estimate and Apportionment, that pursuant to the provisions of section 189 of the Greater New York Charter, the Comptroller is hereby authorized to issue tax notes of the City of New York in an amount not exceeding six hundred thousand dollars (\$600,000), which shall be included in annual tax levies, in the manner provided by said section 189 of the Charter, the proceeds of which, to the amount of the par value thereof, to be used for the erection on the site of the lower reservoir and adjoining park area in Central Park, Borough of Manhattan, of a permanent war memorial, of which amount the sum of three hundred thousand dollars (\$300,000) is to be used for the construction of a memorial arch, the balance of the authorization not to be available until plans have been submitted to and approved by the Board of Estimate and Apportionment, under the jurisdiction of the Department of Plant and Structures.

To restore thirty-one acres of Park space for playground purposes and to build a line of approach from the east and west safe at all hours of the day and night between the two great Museums,—this was the spirit in which the American Museum Trustees prepared and presented the Intermuseum Promenade plan and in which it was approved by the Board of Estimate and Apportionment. Subsequent development of the Intermuseum Promenade and the Roosevelt Concourse will appear in the Fifty-fifth Annual Report.

NEW SPECIAL ENDOWMENT OF \$2,000,000 NEEDED

Having completed our new General Endowment Fund of \$2,000,000, we now express the need of Special Endowment of the same amount.

If it is asked, what is the most pressing need of The American Museum of Natural History in the year 1923, the immediate answer may be given that it is to finance and develop the exhibitions for the proposed African Hall. The Museum has already expended about \$75,000 upon the development of the African Hall. Mr. Carl E. Akeley is now in the prime of accomplishment and ready and eager to enter this work on a large scale, which he estimates will require an expenditure of \$1,000,000. The wiser plan, it seems to us, is to secure the gift of a million dollars in

special endowment, the interest of which, namely, \$50,000 a year, will enable us to complete the African Hall during the next decade and leave a million dollars of new special endowment for the development of the new building, Section 12, which will contain the African Hall on the first and second floors, the Australian Hall on the third floor, and the Early History of the Earth on the fourth floor. Our superb collections from Africa have been brought together through successive expeditions by Dr. William S. Rainsford (1912-1913); Mr. Richard Tjäder (1906); Mr. Herbert Lang and Mr. James P. Chapin (1909-1915); and Mr. Carl E. Akeley (1909; 1921), at a total cost of approximately \$167,000. In the meantime, comparatively little progress has been made in their preparation, the only complete mounts, according to the Akeley method, being the Elephant Group, the White Rhinoceros Group, and the Okapi. There remain materials for a Black Rhinoceros Group, a Lion Group, a Hippopotamus Group, a Gorilla Group (in progress), and many others according to Mr. Akeley's plan.

A new special endowment of \$500,000 is also needed to resume the work in Public Health and Education which was interrupted during the stringency of war time, also explorations and research in Mexican and Central American Archæology, which were partially suspended three years ago and have in the meantime been carried on in a quiet way through the appointment of Mr. Clarence L. Hay as Research Associate. This most important and interesting division of the Prehistory of Man must be revived and sustained on a generous scale through special endowment and through coöperation with the work that is being done by the Carnegie Institution.

Memorials to Trustees Davison and Cuyler and Curator Allen

The Trustees regret to record the death of their colleagues, Mr. Henry P. Davison and Mr. Thomas DeWitt Cuyler in the year 1922.

At a special meeting of the Trustees held on May 17, the following Resolution was unanimously adopted:

Resolved, That the Trustees desire to record their deep sense of loss through the death on May 6, 1922, of

HENRY POMEROY DAVISON



THOMAS DEWITT CUYLER 1854-1922 Trustee 1910-1922

Mr. Davison was elected to the Board on February 7, 1916, and served as Treasurer and as Chairman of the Finance Committee until his decease. With the numerous demands upon his time and energy by world affairs in finance and in the welfare of humanity, Mr. Davison maintained a continuous interest in the Museum's activities and through his wise counsel and clear grasp of public problems rendered the Museum an incalculable service. At his suggestion, soon after taking office, the Board appointed an Advisory Committee on Investments, composed of financial experts of the highest character, who have given close attention to the Museum's invested funds and have steadily improved the stability of the Museum's holdings. Thus, indirectly Mr. Davison has made a permanent contribution to the security of the Museum's basic finances.

His presence on our Board will be missed, not alone for his practical service but because of his genial and lovable nature.

Resolved, That the minutes of this meeting be suitably engrossed and a copy sent to the members of Mr. Davison's family.

At a regular meeting of the Board of Trustees of The American Museum of Natural History, held on November 13, 1922, President Henry Fairfield Osborn announced the death on November 2, 1922, of Mr. Thomas DeWitt Cuyler.

The Board adopted the following resolution:

Resolved, That the Trustees of The American Museum of Natural History desire to record their deep sense of loss through the death on November 2, 1922, of their colleague, Thomas DeWitt Cuyler. Mr. Cuyler served continuously as a Trustee from the time of his election to the Board on February 14, 1910. He was a member of the Finance Committee from 1910 to 1913 and served with Messrs. Choate and Morgan on the Committee on Revision of the Constitution and By-Laws, Rules and Regulations in 1910. He was also appointed in 1913 Chairman of the Morgan Memorial Committee, which finally resulted in the institution of the Morgan Memorial Hall.

While the pressing and great demand of industrial and

public problems upon Mr. Cuyler's time prevented him from giving much of his personal attention to Museum Administration, he had a keen interest in its welfare and was ever ready with wise counsel and advice when needed. His greatest service to the Museum was his efficient, broad-minded and unselfish administration as executor of Mrs. Jesup's will, which secured to the Museum the full amount of the splendid bequests of Mr. and Mrs. Jesup—gifts which so munificently provide for the development of the scientific activities of the Museum.

In speaking of Mr. Cuyler as a man and as a Trustee, President Osborn said that an outstanding feature of Mr. Cuyler's career had been the expeditious and efficient manner in which he performed all his duties; that he was a man whose motto was "Do it now"; that he was possessed of great enthusiasm, deep patriotism and exceptional ability to lead other men; that he died in harness and that those who knew him most intimately felt that he had given his life to his country in carrying out his ideals; that like Mr. Henry P. Davison, Mr. Cuyler had left a valuable legacy to his fellow Trustees in his great example.

On the morning of May 18, during the meetings of the American Society of Mammalogists, a bronze tablet in memory of

Allen Hall and Memorial Tablet Doctor Joel Asaph Allen was unveiled on the second floor of the Museum, at the entrance to the Hall of North American Mammals. President Osborn presented the tablet on behalf of the Trustees, and announced that henceforth the Hall

of Mammals would be known as Allen Hall. Director F. A. Lucas then unveiled the tablet.

Dr. Frank M. Chapman, on behalf of the Scientific Staff of the Museum, of the Division of Zoology and Zoögeography, representing the activities with which Doctor Allen was most closely associated, and of American science in general, thanked the President and the Trustees for this tribute to his departed associate and friend. The closing address was delivered by Dr. E. W. Nelson, Chief of the Bureau of Biological Survey, Washington, who gave a sketch of Doctor Allen's life and work.

CHANGES IN TRUSTEES, STAFF AND MEMBERSHIP

At the Annual Meeting of the Board of Trustees held on February 6, 1922, there were elected to the Class of 1926 the Trustees whose terms expired at that meeting, namely, Mr. Charles Lanier, Mr. Frederick F. Brewster, Mr. William Averell Harriman, Mr. Childs Frick, and Dr. Leonard C. Sanford.

The resignation of Mr. Charles Lanier was accepted with regret at the Board Meeting of May 1, 1922. Mr. Lanier had been a Trustee for forty-eight years and the Treasurer for twenty-five years.

Mr. George F. Baker, Jr., was elected Treasurer on May 17, at a special meeting of the Board.

The following appointments and promotions were made:

Dr. Robert Cushman Murphy was made Assistant to the Director in Scientific Correspondence, Exhibition and Labeling, and Mr. James L. Clark was made Assistant to the Director in Full Charge of Preparation.

The Scientific Staff was regrouped into four major Divisions, namely:

- I. Division of Mineralogy, Geology, Palaeontology and Paleogeography, with William Diller Matthew, F.R.S., as Curator-in-Chief.
- II. Division of Zoology and Zoogeography, Frank M. Chapman, N.A.S., Curator-in-Chief.
- III. Division of Anthropology, Clark Wissler, Ph.D., Curator-in-Chief.
- IV. Division of Education, Books, Publication and Printing, George H. Sherwood, A.M., Curator-in-Chief.
- Roy W. Miner, A.B., was promoted from Associate Curator, in Charge, to Curator, of the Department of Lower Invertebrates.
- A. J. Mutchler was promoted from Assistant in Coleoptera to Assistant Curator in Coleoptera, in the Department of Entomology.
- G. Kingsley Noble, Ph.D., was promoted from Assistant Curator, in Charge, to Associate Curator, in Charge, in the Department of Herpetology.

Jonathan Dwight, M.D., was appointed Research Associate in North American Ornithology.

Mrs. Elsie M. B. Reichenberger was appointed Research Assistant in the Department of Ornithology.

Mrs. Grace Fisher Ramsey was promoted from Assistant to Assistant Curator in the Department of Public Education.

Charles-Edward Amory Winslow, D.P.H., was promoted from Curator to Honorary Curator in the Department of Public Health.

Miss Mary Greig was appointed Assistant in the Department of Public Health.

A. I. Ortenburger, M.S., was appointed Assistant Curator of Herpetology in place of Karl P. Schmidt, resigned.

Horace W. Stunkard, Ph.D., was appointed Research Associate of Parasitology in the Department of Lower Invertebrates.

ACTIVITIES OF THE STAFF

Curator Edmund Otis Hovey served as Secretary of the Geological Society of America and attended its annual meeting at Ann Arbor in December, arranging for the major portion of the program. With this meeting he rounded out sixteen years of service as Secretary of the Society and retired from the office. During this long period, the American Museum was the home of the executive office of the Society and was benefited by the close association with the principal geologists of the country arising therefrom. The Society on its part has been appreciative of the hospitality accorded to it by the Museum.

In April, Doctor Hovey represented the Museum at the unveiling of the monument erected to the memory of Rear Admiral Peary, in Arlington Cemetery. In May he was a delegate from the Museum to the Seventeenth Annual Meeting of the American Association of Museums in Buffalo. He is a Director of the Association, as well as a Director of the Explorers' Club of New York. He also attended the Sixth Joint Meeting of the American Association of Geographers and the American Geographical Society in April.

Curator Frank M. Chapman was reëlected a member of the Board of Directors, for a term of five years, of the National Association of Audubon Societies. He was appointed by President Osborn as the official representative of the Museum on the Institute for Research in Tropical America.

Curator Clark Wissler was invited to visit a number of west-

ern universities, under the auspices of the National Research Council, in the interests of anthropology. He accordingly lectured at several universities on the nature and scope of anthropology, and conferences were held on its place in the university curriculum. This series of lectures will appear in book form.

Curator Frank E. Lutz continued as Chairman of the National Research Council's Committee on the Biological Relations Between Flowers and Insects.

Curator William K. Gregory served as Secretary and Treasurer of the Galton Society for the Study of the Origin and Evolution of Man, and as Secretary of the Journal Club; he has also served as an editor of the Journal of Dental Research.

Curator G. Clyde Fisher was a delegate from the Museum at the Seventeenth Annual Meeting of the American Association of Museums, in Buffalo, in May. Doctor Fisher represented the Museum at the Seventh Annual Conference for Camp Directors at Camp Becket, near Pittsfield, Massachusetts, in May.

Curator Roy Waldo Miner is a member of a Committee formed early in 1922, through the initiation of the National Research Council, to consider the possibility of damage by the shipworm in New York Harbor.

Associate Curator Chester A. Reeds served as Secretary of the Section of Geology and Mineralogy of the New York Academy of Sciences.

In October, Associate Curator John T. Nichols represented the Museum at the Seventh Annual Meeting of the American Society of Ichthyologists and Herpetologists in Chicago, and was reëlected Secretary of the Society.

At the Ninth National Game Conference of the American Game Protective and Propagation Association, held in New York in December, the Museum was represented by Associate Curator H. E. Anthony, who presented a paper based on an article prepared by President Osborn and himself for Natural History, the title of the paper being "Some Aspects of the Close of the Age of Mammals." The title of the article was "Can We Save the Mammals?" Mr. Anthony and Assistant Curator Herbert Lang attended the Annual Meeting of the American Society of Mammalogists, held at the Museum May 16 to 18. Mr. Anthony was a joint speaker with President Osborn on the "Close of the Age

of Mammals." At this meeting he was appointed a member of the Central Committee for the J. A. Allen Memorial Fund.

Associate Curator W. DeW. Miller was elected a Foreign Member of the British Ornithologists' Union in March.

At the meeting on May 26 of the Sociedad Ornitológica del Plata in Buenos Aires, Associate Curator Robert Cushman Murphy was elected a Corresponding Member. The distinction of Honorary Membership or of Corresponding Membership in this Society has been conferred upon few individuals. Only one other American, Doctor Ridgway of the National Museum, shares with Dr. Frank M. Chapman the rank of Honorary Membership. Doctor Murphy is the fourth American to be made a Corresponding Member, Mr. George K. Cherrie being one of the other three upon whom has been bestowed this coveted distinction. The American Museum staff, therefore, furnishes three of the six Americans thus honored by the leading ornithological society of South America.

Associate Curator G. Kingsley Noble was elected a member of the American Society of Zoologists.

Associate E. W. Gudger attended, during Christmas week, the meetings of the American Association for the Advancement of Science and of the American Society of Zoologists in Cambridge, presenting three papers on various aspects of his work on Doctor Dean's Bibliography of Fishes.

Assistant Curator James P. Chapin was elected a member of the British Ornithologists' Union early in the year. He delivered lectures before various institutions in the United States and Canada.

Dr. W. J. Holland of the Carnegie Museum, Pittsburgh, represented the American Museum at the twenty-sixth annual celebration of Founder's Day of the Carnegie Institute, April 27.

Professor Elon Howard Eaton, Geneva, N. Y., represented the Museum at the one hundredth anniversary of the founding of Hobart College.

Professor Marshall H. Saville, of the Museum of the American Indian, represented the American Museum at the Twentieth International Congress of Americanists at Rio de Janeiro in August.

Professor H. F. Cleland of Williams College, and Dr. Joseph Bequaert represented the Museum at the Thirteenth Session of the International Geologic Congress in Brussels, in August. Doctor Bequaert also represented the Museum at the International Commission of Eugenics held in Brussels in October.

HOSPITALITY TO SOCIETIES

The Museum extends the privileges of its auditorium and assembly rooms to fifty-five educational and scientific organizations. Among the societies that have held meetings, exhibits or lectures at the Museum during the past year are the following:

Alliance Française de New-York

American Ethnological Society

American Relief Administration

American Scenic and Historic Preservation Society

American Society for the Prevention of Cruelty to Animals

American Society of Mammalogists

Appalachian Mountain Club, New York Chapter

Aquarium Society

Associate Alumnæ of Hunter College

Biological Field Club (of De Witt Clinton High School Annex)

Board of Education, City of New York (Public Lecture Service)

Boy Scouts of America

Boys' Club Federation

Bronx County Society for the Prevention of Cruelty to

John Burroughs Memorial Association

Camera Club of New York

Chelsea Musical Club (of Public School 33)

City History Club of New York

Colorado Cliff-Dwellings Association, New York Chapter

Columbia University (Classes)

Department of Health of the City of New York

Fédération de l'Alliance Française

Galton Society for the Study of the Origin and Evolution of Man

Garden Club of America

Geological Society of America

Horticultural Society of New York

Inkowa Club of New York City

Keramic Society of Greater New York

Linnaean Society of New York National Association of Audubon Societies National Plant, Flower and Fruit Guild New York Academy of Medicine New York Academy of Sciences. New York Association of Biology Teachers New York Bird and Tree Club New York City Federation of Women's Clubs New York Entomological Society New York Microscopical Society New York Mineralogical Club New York Tuberculosis Association, Inc. New York Women's League for Animals Pasteur Laboratories of America Physical Education Society of New York and Vicinity Rockefeller Institute for Medical Research School Garden Association of New York School Nature League Scoutmasters' School Society of the Fifth Division, New York Camp State of New York Department of Health Torrey Botanical Club United States Department of Agriculture Visual Instruction Association of America Visual Instruction Association of New York Women's Municipal League of the City of New York Woodcraft League of America

SPECIAL GIFTS AND ACKNOWLEDGMENTS

Acknowledgement is made in detail on pages 201 to 222, of the many gifts from friends of the Museum in 1922, but we wish here to mention some that are of especial interest and value: From J. Sanford Barnes, a Parrot (Nestor productus), from New Zealand; from B. Preston Clark, about 11,000 invertebrates, chiefly insects, from Haiti, collected by Mr. F. E. Watson; Dr. Russell J. Coles, skeleton of Whale (Mesoplodon mirum), from near Morehead City, N. C.; B. J. Comiskey, cashmere shawls, probably from India; Mrs. S. W. Eccles, 13 mounted fishes, from Florida waters; Mrs. E. H. Harriman, bronze statuette of Bear, by Charles R. Knight; Professor

Alfred C. Kinsey, 60 holotypes, 254 paratypes and cotypes of gall insects, 164 paratypes and cotype galls, representing 66 new species, 114 bees and various specimens of galls and termites. 13 holotypes, 34 cotypes of gall insects, 29 cotypes of galls and 80 specimens of galls and gall insects, 7 species of insect galls; Dr. George F. Kunz (in memory of Mrs. Kunz), 10 specimens of gems; Mengo L. Morgenthau, 2 Barite and 2 Hematite, from Cumberland, England, and 1 Copper specimen from Lake Superior, Michigan; Mrs. Howard M. Morse, ethnological collection from Java, Africa, New Guinea, Fiji, Solomon Islands. and North America; New York Zoological Society and the New York City Department of Parks, a large number of photographs, mammals, birds, reptiles, amphibians and fishes; Mrs. Henry Fairfield Osborn, 1 Tade, antique Chinese girdle pendant carved with grain motive, from China, 1 Lapis Lazuli string of 59 large beads, 1 Lapis Lazuli string of 128 beads with pendant, 1 Lapis Lazuli polished circular slab, 1 Lapis Lazuli matrix fragment, 1 Lapis Lazuli oval carved box, from Siberia; Honorable George D. Pratt, 10 reels motion pictures, "St. Gotthard Alps," "Borneo," "Suwanee River," "Alaskan Mountain Sheep," "Forest Guardian," and "White-tailed Deer"; Mrs. George T. Slade (in memory of James J. Hill, through Dr. George F. Kunz), Yellow Sapphire, 61.89 carats from Ceylon; Irving K. Taylor, 11 Crocodiles (10 skulls and 1 skin), Crocodilus niloticus, from Nile River, Egypt, 163 bird skins and 1 skeleton, from Africa, 5 bats; Estate of Walter Winans, by bequest, heads of game mammals.

Many courtesies have been extended during the year to members of the Museum's expeditions by government officials, coworkers in science, and citizens in various parts of the world. This assistance is of great importance to us, and the Trustees wish to express their appreciation. Among those who coöperated, we would mention especially the following:

Sir Auckland Geddes, British Ambassador at Washington, gave assistance in connection with the Third Asiatic Expedition. Mr. J. Langford Smith, H.B.M., Consul at Ichang, extended courtesies to Mr. Granger of the same expedition. The Pacific Mail Steamship Company arranged details of transportation from Shanghai to Peking. Mr. Howard Cole of the Standard Oil Company of New York aided the expedition by supplying gasolene and lubricants for the cars. The United States Rubber

Export Company presented the tires and inner tubes necessary for the motor transportation on the expedition to Mongolia, through Vice-President James B. Ford.

Mr. Barnum Brown's work in the Siwalik Hills was aided by Dr. C. E. Pilgrim and other officers of the Geological Survey of India.

Dr. G. Kingsley Noble and Mrs. Ruth Crosby Noble of the Museum staff, while on the Expedition to Santo Domingo, were accorded every possible assistance by Major General Commandant, Marine Corps Headquarters, Washington, who extended coöperation through the officers of the Marines; thanks are especially due to Captain Hunter, Inspector of the Provinces of Barahona and Azua, and to Captain Inman, the Commanding Officer of the Guardia at Barahona. The Commandant of the Policia Nacional Dominicana, Santo Domingo City, extended the fullest coöperation to the expedition while it was in the field. Mr. Frank D. Smith and Mr. James Grant of the International Banking Corporation, Barahona, also rendered every possible assistance. Mr. Juan Herrera, of Duverge, very kindly placed a house at the disposal of the expedition.

Through the coöperation of Dr. Herman B. Parker, of Guayaquil, with the expedition to Ecuador for birds, a reconnaissance was made in the Chongon Hills to the northwest. A second expedition was made by launch with Mr. W. H. Tweedy, down the Gulf of Guayaquil to Santa Clara Island. The third expedition made its base at Quito, where it was hospitably received by Mr. Ludovic Söderstrom, the veteran naturalist of that city. The expedition was aided also by Señor Jijon of Quito, who supplied mules, horses, and arrieros. Mr. Otto von Linde, of the Guayaquil Agencies, also kindly coöperated with our expedition.

Mr. William C. Adams of the Massachusetts Game Commission offered Mr. Griscom every possible facility in visiting the Heath Hen Reservation on Martha's Vineyard in March. An expedition to the coastal prairies of southern Texas by Mr. Griscom in search of the Whooping Crane, now on the verge of extinction, was made possible largely by the courtesy and hospitality of Mr. Richard M. Kleberg, who permitted him to visit the great Loureles Ranch and entertained him at the ranch house. Mr. Caesar Kleberg of the Norias Ranch also hospitably received him, and placed an automobile at his disposal for covering the

distances in finding various rare varieties of game. Valuable letters of introduction were received from Mr. T. Gilbert Pearson, President of the National Association of Audubon Societies.

The expedition to Ecuador for mammals was greatly assisted through the generous transportation rate given by the Panama Railroad Steamship Line to Mr. Wickenheiser and his equipment, when he was on his way to join Mr. Tate in August.

Dr. Louis R. Sullivan, while engaged in anthropological field-work in Tucson, received many courtesies from President Cloyd H. Marvin of the University of Arizona and members of the faculty. With their coöperation it was possible to make extended studies of the correlations between anthropometric observations and mental equipment among the children of different races in the schools. We wish also to make acknowledgment for the coöperation of Mr. C. E. Rose, Superintendent of Schools, in Tucson.

Mr. A. Sparrow, Superintendent of Crater Lake National Park, rendered much assistance to Doctor Hovey in July.

Through Mr. F. C. Walcott, Mr. Nichols was enabled to make studies of the habits and coloring of the Tuna at Block Island in August.

The generous spirit of coöperation shown by sister institutions in Australia, acknowledged in detail in last year's *Annual Report*, has contributed in no small measure to the success of the expedition in that continent.

REPORTS OF THE DIRECTOR AND CURATORS

REPORT OF THE DIRECTOR

FREDERIC A. LUCAS

The two great events of the year have been the commencement, after many years' delay, of work on the Southeast Wing and Hall of Ocean Life and the completion and opening of Morgan Hall of Gems and Minerals, events reported at length elsewhere.

Important results of Expeditions are also considered in the Report of the President and in the reports of Curators, and it need only be said that they have been successful beyond even our fondest hopes. It may be said here that Mr. Akeley, in securing the gorillas for the much desired group, completely demolished the myth of the savage gorilla and established the correctness of his own views that this animal is entirely peaceful in its habits.

Again the attendance has passed the million mark, and again without undue effort. The figures were increased by the large number of pupils attracted by the movies in December, but this is counterbalanced by the unusually small number of visitors at the November Flower Show. Also credit is due the remarkably fine weather during the first part of the year. The effect of weather upon attendance is illustrated by the fact that while on January 22 there was a record attendance of 15,365, a week later a fall of snow cut down the figures to 3,536, although it was fine overhead. So a severe winter, or one with much snow, will inevitably reduce the number of visitors materially.

Temporary exhibits, unless of exceptional interest, have little influence on attendance. As showing the limited effect of even an important exhibit, if it does not appeal to the general public, it may be noted that there were 5,500 more visitors in October, 1922, than there were in October, 1921, during the exhibition connected with the Eugenics Congress.

STATISTICS	\mathbf{OF}	NUMBERS	REACHED	BY	THE	MUSEUM	AND	ITS
		EXTENSION	I EDUCATIO	ONAL	SYST	EM		

	1918	1919	1920	1921	1922
Board of Education Lectures Lectures to School Children and Classes visiting the	21,624	1,191	17,632	27,362	16,711
Museum for Study Meetings of Scientific Societies and Other Meetings	21,484	35,221	57,627	51,133	118,651
and Lectures	20,928	21,475	25,491	34,206	17,610
Total	64,036	57,887	100,750	112,701	152,972
Attendance in Exhibition Halls	627,302	810,575	937,265	1,061,696	1,156,884
Total attendance for all Purposes Lectures to Pupils in Local	691,338	868,462	1,038,015	1,174,397	1,309,856
Centers	19,575	25,575	33,761	30,750	58,647
Numbers reached by Circulating Collections	817,610	955,438	1,312,487	1,247,515	1,648,608
Grand Total	1,528,523	1,849,475	2,384,263	2,452,662	3,017,111

Matters of general interest, especially new installations or important events, have been kept well before the public, largely through the work of Mr. Pindar, who has prepared and distributed an average of four bulletins a month, and in addition has supplied information and hundreds of photographs for use in magazine and newspaper articles throughout the world. Besides this, members of the staff are continually called upon, and their cheerful response has much to do with the pleasant relation existing between the Press and the Museum. It is doubtful if the public at large realizes the amount of time expended in furnishing information, not merely to members of the Press but to visitors and in response to letters and telephone calls.

Exclusive of the little pamphlet, "An Hour in the Museum," 1,343 copies of which were sold, the sales to visitors were as follows: General Guide, 4,154; Handbooks, 1,552; Leaflets, 5,180; reprints, 388: a total of 11,274 copies. This is 1,784 less than in 1921, a loss due largely to the fact that the Guide and some of the other publications were out of print for some time. As an offset, the sales through the Library were greater than in previous years, 1,372 Handbooks being sold in this way, mostly to institutions where they are used as textbooks.

The addition of a Miehle press and other equipment, with a view to printing Natural History during the coming year, will, it is hoped, make it possible hereafter to keep the publications more continuously on sale than they have been in the past. The following were printed during the year:

	Pages	Edition	Total Pages
General Guide	136	5,000	680,000
Animals of the Past		5,000	1,035,000
Ancient Civilizations of Mexico and		•	
Central America	242	3,124	756,008
Peruvian Art		1,950	46,800
Plants of Wax		1,650	26,400
Basketry Designs of the Mission		•	•
Indians		2,065	41.300
Indian Beadwork		3,000	93,000
The Collection of Minerals		2,500	80,000
			2,758,508

This amount of printing is due partly to increase in the size of the edition of publications for which there seems a demand, for experience shows that it is not profitable to print fewer than 2,000 copies of any leaflet.

Miscellaneous Printing in 1922	mpressions
Letterheads and other stationery	
Field and Reserve Collection Labels	36,300
Report, Requisition and other forms	51 <i>,2</i> 85
Catalog Cards, Tickets to Lectures, etc	220,619
Programs, Circulars, Invitations	157,465
Color Plates	113,000
Circulars and Miscellaneous Small Publications, in- cluding Reprints of Eugenics Congress, Abstracts and Programs	
Individual Labels 670	00,000
Descriptive Labels 1,076	
1,746 (average of five each)	8,730
Total	1,118,049

Through the courtesy of the United States Bureau of Fisheries, it has been possible to entirely reconstruct the group of Fur Seals,

the poorer specimens having been withdrawn, and ten new animals, including an old bull, added, all of which have been most admirably mounted by Mr.

Blaschke. Other important additions were groups of Pumas, Baboons, and Muskrats, besides a number of single specimens needed for replacement or to fill gaps in the systematic series of various departments. Among these are a number of high-bred domesticated dogs, mounted by Mr. Escherich, for while, owing to the crowded condition of the exhibition halls, no systematic attempt has been made to secure examples of the various breeds of domesticated animals, yet from time to time the Museum has received particularly fine examples of dogs that their owners were so unfortunate as to lose.

The importance of securing such specimens when they are available is shown by the fact that the once popular Pug has practically passed out of existence and the Museum has no example of it. Perhaps some one who reads this may present a specimen.

The Anglers' Exhibit of unusually large or fine examples of game fishes, taken with rod and reel, commenced last year by a gift from Mrs. Jacob Wertheim, received an important addition of thirteen specimens from Mrs. S. W. Eccles. While such a collection has long been contemplated as forming a part of the attractions of the Hall of Fishes, no effort was made to secure specimens until space was actually in sight where they could be properly displayed and cared for. Now that work has begun on the New Wing, it is hoped that gifts may be received. At present the collection is displayed on the third floor landing.

The work of preparation has been fairly well distributed among the various departments, with the exception of the Department of Ichthyology, which has been crowded out by necessary work of making busts and copies of life masks for the Bishop and Tervueren Museums. The result of this is that not one shark of the dozen molded by Mr. Bell over two years ago has been cast, a result greatly to be deplored.

Also there is an ever increasing amount of repair work and work connected with changes in exhibits, so that a large part of the work of preparation does not appear on the surface. As a part of very extensive repair work, caused by accidents in previous years, the last of the habitat groups (the San Joaquin Valley Group) damaged by the cold winter of 1919, was again placed on exhibition. Celluloid is a convenient medium for representing water, especially when it is necessary to insert plants and swimming animals of various sorts, but so far it has proved somewhat unreliable, being particularly apt to go to pieces in cold weather. The San Joaquin Valley Group, noted above, has been especially unfortunate, the "water" having been broken three times in ten years, and for this reason the celluloid has been replaced, as in several other cases, with glass.

In "planting," so to speak, the swimming birds, the method was followed that was devised for the Newark Marsh Group, of cutting the birds in two and wiring the halves through a single small hole drilled in the glass, a method much simpler and stronger than that of cutting the glass or celluloid.

Still other work whose results will not be apparent until the coming year is that on three Insect Groups, the large Iguana Group, and various specimens for the systematic series. As is usually the case with new projects, the Insect Groups have presented new problems, the more that they have to fit a Procrustean bed of space.

Thirteen special exhibitions were held during the year, the most important being that of photographs of Mammals which occupied the larger part of the Hall of Forestry. There were Special Exhibitions and including the best of our photographs, and including the best of our photographs of animal life. This exhibit was brought together and assembled under the direction of Mr. Herbert Lang.

Related to this was the exhibition of the New York Camera Club showing the various methods employed in taking, developing and enlarging photographs.

Miss Isabelle Cooper made an interesting display of water color studies from life of animals observed at the Tropical Research Station of the New York Zoological Society at Kartabo, and Miss Anna Heyward Taylor showed a fine series of textiles bearing designs derived from careful observation of the plant life of the same locality.

The schools were represented by the annual poster display under the auspices of the American Society for the Prevention of Cruelty to Animals and the New York Women's League for Animals.

Aside from the usual fine exhibitions of the New York Horticultural Society, not included in the thirteen "special exhibits," the Garden Club of America made an exhibit of fine detailed models of plans for gardens of various descriptions.

The use of the Hall of Forestry for temporary exhibitions is a makeshift, largely made possible by the fact that there is no Curator to enter a protest; such use is to be deplored, not merely because some visitors are sure to be disappointed, but because a hall definitely assigned to a certain exhibit should be kept for that purpose and any diversion to other uses is pretty certain to cause deterioration in that particular exhibit. Observation shows that the Hall of Forestry has many attractions for visitors, and instead of using it for temporary exhibitions, the collections should be as planned, rendered more attractive and instructive. The

present condition of the hall is an illustration of the fact that a general extension of a museum is pretty sure to cause a falling off in some places.

About 1,200 labels, many of them quite lengthy, have been placed with the exhibits, the most apparent progress being in the Hall of Minerals and in the African Hall. The Hall of North American Woods has been provided with plans showing the location of the various groups of trees, and with indexes of the more common species, to aid the visitor to find the particular tree he desires to see; similar indexes are being prepared for the gems and minerals.

An experiment in labeling was tried, at the suggestion of Doctor Beardsley Ruml, in the shape of a somewhat lengthy label giving information about some subject or object of special interest, intended for visitors to take away. These were printed in the style of handbills and placed where they would readily be seen. The three that have so far been tried are Brontosaurus—10,000 copies taken in five months; Enemies of Wharf Piles—5,000 copies in five months; and A City of Birds (the Flamingo Group)—3,000 copies in five months. These seem to have been taken for the sake of the information given, as scarcely any copies were found in or near the Museum.

As the Registrar suggests, it is surprising that the number of accessions during the year was 835, 612 of which came as gifts.

Accessions Here it is interesting to note the changed and changing attitude of the public. Whereas fifty years ago the first thought of many was, what will a museum pay for a specimen, a large number now give. While this is especially noticeable in regard to the United States National Museum, toward which the former attitude was "the old flag and an appropriation," yet it applies to museums in general.

In connection with accessions, the Registrar reports that his division handled during the past year 3,525 incoming and outgoing shipments, totaling 10,444 pieces, the average weight of daily shipments exceeding 4,000 pounds; this is in addition to small parcels sent by mail. This may be looked upon as one of the indications of the growth of what may be termed the business of the Museum, a growth that is not fully appreciated save by those actually engaged in its execution.

An item that few, if any, would think of is the considerable

amount of time lost in *declining* objects or collections, offered frequently for purchase but occasionally even as gifts, and not infrequently including suggestions as to where the objects might possibly be disposed of. There has never been time to list the total valuation of collections offered for sale in the course of a single year, but as they range all the way from \$100,000 downward, \$2,000,000 would be a low estimate, and probably \$5,000,000 would be nearer the mark. In fact, many correspondents seem to think that the Museum's endowment fund is a sort of Fortunatus's purse, capable of being drawn upon indefinitely.

One of the striking features of museum maintenance is the ever increasing demand for electric lighting: a few years ago it was noted that the improvement in electric lamps Care of had been so great that it was possible to illuminate Building the entire building with the generator that could previously light it only partially. Since then the call for inside lighting, not merely for groups but for individual cases, has been so great that the City granted an appropriation for a larger generator and for the installation of a special switchboard to deal with the lighting of groups and individual cases. This demand for light has exceeded not only the power of the generator but of the small force of electricians to make the many changes and new installations, and the difficulties of complying with the requests received are appreciated only by those directly concerned.

The Director greatly regrets that the high cost of construction prevents flooring over the well in the third floor, central section, as until this is done the Hall of Primates can not be completed and arranged, nor will there be any place available for the display of the many fine photographs presented at the close of the exhibition of mammal photographs. There are also many problems of ventilation and lighting in connection with the installation of exhibits in the new wing, whose solution would be greatly helped, if not solved, by the installation of the groups in this hall.

The need for cases, a hall, and other due provision for temporary exhibits is more evident than ever, and it is to be hoped that this need may be met ere long by the construction of the School Service Building.

PUBLIC EDUCATION IN THE MUSEUM AND IN THE SCHOOLS*

GEORGE H. SHERWOOD, Curator

On April 21, 1922, the Board of Estimate and Apportionment unanimously appropriated \$570,000 for the construction and equipment of the School Service Building, in the School southwest court. By this action the City authorities Service have expressed their appreciation of the service Building the Museum is rendering to the public schools and their belief in the Museum's future usefulness. Provision for the School Service Building is the outstanding event of the year. The completion of it, which we hope will be not more than eighteen months hence, will open a new epoch in the Museum's relation to the schools. For years the Department of Public Education has had inadequate quarters and has been housed chiefly in corridors. Especially is it deficient in proper facilities for taking care of classes visiting the Museum for study and for accommodating groups of teachers, artists and industrial workers who wish to use the collections. The School Service Building will remedy these defects and make possible the development of more effective instructional methods.

The School Service Building is to be a five-story structure, 160 feet long by 90 feet wide on the first floor and 56 feet wide on the upper floor. In the basement will be housed the supply of circulating nature study collections and the other material which is available for loans to schools and libraries. Coat rooms for boys and girls will also be located here.

The first floor is to be the largest exhibition hall in the Museum and will contain the permanent Food and Public Health Exhibits. It is primarily for temporary exhibitions of current interest. Competitive exhibits of the pupils and various school exhibits such as poster contests, school flower shows, etc., will frequently be held here. This hall is to be dedicated to the late Dr. William H. Maxwell, Superintendent of the city's schools for twenty-two years, and will be known as Maxwell Memorial Hall. At the

^{*}Under the Department of Public Education (see also pages 201 to 203).

west end of the hall, a bronze statue of Dr. Maxwell is to be placed by the Maxwell Memorial Committee.

The second floor will be devoted entirely to the care of visiting classes and teachers. It will contain a main lecture hall seating about 500, which, by a sliding partition, can be quickly divided into two halls. There will be several small class rooms and rooms for the instruction of the blind. Provision will also be made for artists and workers in design who use the Museum's specimens for these practical purposes.

The third floor is for the general administration of the school work, and for the activities pertaining to the Museum's work in the schools. Here will be found the curatorial offices, the slide circulating department with teachers' study room, a complete display of samples of collections available for loan, a school library with teachers' study adjoining, a model school nature room and several class rooms.

The fourth floor is for the production of school material and visual education aids. Here will be our files of negatives and photographs, photographic dark rooms, preparation rooms, studios and laboratories. The motion picture library will be located on the attic floor.

With a building thus equipped, the opportunities for service to the schools and for advancing the teaching of nature study will be multiplied, and the staff of the department is keenly alive to the responsibilities that will be imposed upon it.

The School Service Building quite overshadows the other features of the year, but even without it, 1922 should be written

General Summary

down as the greatest and most effective year in the history of the department. In all our varied school activities, substantial progress has been made.

In the slide department the growth was extraordinary. In all, 6,219 loans totalling 330,298 slides were made to 331 public and private schools and organizations. This is an increase of 57% over the 1921 record, a banner year in itself, and nearly 400% over 1918. From incomplete statistics, it appears that these slides have been viewed by more than 2,582,585 pupils.

The addition of another automobile to our messenger service has increased the use of our circulating nature study collections so that the number of pupils reached was 1,648,608—another record established in 1922.

Our methods of instruction are not static. Several experiments in the lecture field have been tried with success. Special courses of motion pictures have been included in our series. The lectures for the year have been more numerous and more varied, and the total attendance of children was about 150,000, an increase of more than 50% over 1921.

The instruction for the blind, too, shows consistent growth The 152 talks were attended by 2,586 blind children, an increase of about 33%.

The total number reached by Museum extension through the Department of Public Education was 4,440,716.

The character of the nature study collections loaned to the schools has not materially changed during the year. Many of

Circulating Nature Collections

the worn specimens, especially the birds, however, have been replaced with freshly mounted ones, and a considerable number of specimens for special exhibits and for nature rooms have been added.

Early in the year, at the suggestion of Dr. James P. Haney, Director of Art in the High Schools, 10 sets of photographs consisting of 20 prints, each showing examples of textile and other designs, were prepared for the use of art classes. These have been loaned to schools designated by Dr. Haney.

The factor which contributed most to the extension of the usefulness of the nature study collections was the addition to our school delivery equipment of another automobile. This has insured more prompt delivery and more frequent transfer of the collections, with the result that a greater number of children see and profit by this material. Our messenger force now consists of three messengers and three automobiles which are continuously engaged in delivering the nature study collections and the slides.

The total number of schools supplied was 475, distributed by Boroughs as follows:

Manhattan	188
Bronx	
Brooklyn	142
Queens	
Richmond	23

The total number of pupils studying the collections was 1,648,608,

which is greater than in any previous year. The following table gives the comparative statistics for the past five years:

No. collections in use	1918 629	1919 668	1920 887	1921 869	1922 824
No. of schools in Greater New York supplied	419	385	448	477	475
No. of pupils studying collections	790,346	860,992	1,176,055	1,247,515	1,648,608

As already indicated, the growth of our slide service is almost phenomenal. It is so rapid that it is taxing to the limit the Museum's present facilities. The statistics for the year make it clear that more schools are using more slides more frequently than ever before. The total number of slides circulated was 330,298, an increase of 57% over the 1921 record. The number of loans is a better index of usefulness. The total number of loans for the year was

For the first time we have sufficient information from the teachers to make a fairly accurate estimate of the number of pupils who have seen the slides. Full reports were received from 41% of the loans, showing that these slides were shown to 1,058,860 pupils. Using these reports as a basis, we estimate that 2,582,585 children were reached by our slides alone.

6.219, which also was a 57% increase.

The principal development in our method of circulation was in making up slide groups from our general series. This proved to be a real boon to the teachers. During the summer of 1922, the slide librarian assembled many of the slides in the general collec-. tion into special groups, to facilitate their use in the class room and economize the time of teachers in selecting visual instruction material, as well as to lessen the work required in the recording and filing of slides in the Department. The topics of the groups follow the courses of study in the various subjects for the different grades. No manuscript accompanies these groups, but a list giving the titles. Each slide is captioned and the arrangement is suggestive of a talk by the teacher. Eighty-seven different slide groups were prepared, ready for distribution in September, and they met with such enthusiastic response from the public school teachers that the applications received far exceeded the number of slide groups available. Thirty-seven of the groups have been duplicated, and many other groups, which could not

be duplicated because of lack of funds, have now been reserved so far in advance that few free dates are left before June, 1923. These slide groups, with the duplicates, now number 124 and contain a total of 5,384 slides. Since September 25, 1922, they have been circulated in 1,331 loans, making a total of 56,948 slides lent in this way. The slide groups serve as a substitute for the prepared lecture sets, which continue to be the most popular method with the teachers.

Astounding as the growth of the slide circulation appears from the statistics, it is, nevertheless, a normal and consistent development. It is due, in part, to the installation of new projection apparatus in the schools and a growing appreciation by the teachers of the educational value of slides, but it is more particularly the result of the keen perception of teachers' needs on the part of Mrs. Grace Fisher Ramsey, the Slide Librarian, of the faithful and painstaking work of Mrs. Ramsey and her assistants and of the efficiency of our messenger service under Mr. Herman A. Sievers.

The following summary of the comparative statistics for the past three years is an interesting indication of the growth of the visual instruction idea:

	1920	1921	1922
Total Number of Borrowers	235	295	431
Total Number of Loans		3,963	6,219
Total Number of Slides Lent	138,133	209,451	330,298
Number of Public Schools Borrowing	154	182	226
Number of Loans to Public Schools	1,933	3,187	5,386
Number of Slides Lent to Public Schools	116,342	175,272	294,358

This is the only branch of the Museum's work with the schools that receives direct financial support from the Board of Education. The Board's appropriation for 1922 was \$3,000, which is less than a third of the actual cost of the work. It is to be regretted that the Board did not increase its appropriation.

The series of lectures designed to supplement class-room work in geography, history, and science has been extensive and varied.

Lectures for School Children In all, 217 lectures, under the immediate supervision of the Associate Curator, Dr. G. Clyde Fisher, were delivered at the Museum and in the schools, at which the total attendance was 143,734, approxi-

mately a 50% increase over 1921.

These included a spring and an autumn course at the Museum; a spring and an autumn course at the local lecture centers (Washington Irving High School, Public School 62, Manhattan, and Public School 42, Bronx); a course at the New York Training School for Teachers; lectures for high school students during Regents' Weeks; a series of motion picture films during the Christmas holidays; miscellaneous lectures at the Museum and in the schools, and two series at the Museum by Mr. Van Evrie Kilpatrick, Director of the School Garden Association.

In our lecture work two experiments were tried. At the suggestion of some of the teachers, we arranged in our fall course at the Museum for 8 exhibitions consisting entirely of motion pictures illustrating great poems or classics in literature. These included "Hiawatha," "Rip Van Winkle," "The Blue Bird," "Evangeline," "Silas Marner," "The Lady of the Lake," "The Courtship of Miles Standish," and "The Last of the Mohicans." They met with instant approval of both teachers and pupils. In several instances it was necessary to repeat the films to accommodate all the pupils. The large attendance at the motion pictures was reflected in a larger attendance than usual at the other lectures. The films for the most part were rented through the commercial distributors, and while they were not all that could be desired, the experiment proved very much worth while.

The second experiment was the inauguration of a series of motion picture exhibitions during the Christmas holidays. Their purpose was twofold: first, to give the children wholesome entertainment to keep them off the streets, and, second, to get them into the habit of visiting the Museum. The teachers welcomed the plan and announced the series in the schools. Attendance was wholly voluntary. The first day it was necessary to run the film three times in succession to admit all the children—2.915 were present; and 3,083 were admitted the second day. Although the auditorium was repeatedly crowded to overflowing, there was no disorder. On the contrary, the children were more quiet and gave better attention than when they were accompanied by their teachers. The experiment was a success and demonstrated that large crowds of children can be handled at the Museum without being under school discipline. In eight days, 10,799 children came to see a single film, "Nanook of the North."

Thanks to the Jonathan Thorne Memorial Fund, it has been possible to continue the practical instruction for blind children which has been carried on for several years. The Work with lessons mean a great deal to these children. Actual the Blind specimens are used, and in many instances it is the child's first glimpse of nature. The subjects cover natural history, astronomy, geography and travel, and are correlated with the school-room instruction. The work has been thoroughly systematized and now forms a part of the regular school curriculum of these classes. This contact with the schools is under the immediate supervision of Mrs. Ruth Crosby Noble, who has been ably assisted in the talks by Dr. Fisher and Mrs. Ramsey. During Mrs. Noble's absence in Santo Domingo, Mrs. Ann Thomas Malloy took charge of the work and gave several of the talks.

During the year a total of 152 talks were given, at which the attendance was 2,586 children. This represents an increase of 27 talks and 778 pupils over last year's record. As usual a list of 10 subjects was submitted to the teachers, both in the spring and fall. The teachers bring their classes to the Museum for this instruction by appointment. Ninety appointments were originally scheduled and 20 schools were represented in this attendance.

In addition to the talks for the blind, our coöperation included the lending of large relief globes. These globes have been made at the Museum and have been supplied to 24 schools. The Department has also furnished nature material to the New York Institute for the Blind.

The most recent extension in this line of service has been the work with the Community House for the Blind at 240 East 105th Street. An extensive collection of birds, nests, mammals and shells was lent for use in their Nature Room, and two talks were given by Mrs. Noble for the children of the Nature Club and their friends. Teachers from other cities and students from the Columbia University Summer School visited the Museum to study our methods.

The small nature collections which are loaned to the libraries help to extend the usefulness of the Museum in the community.

Loans to Public Libraries These collections are placed in the children's reading rooms and help to stimulate interest in good books. They often induce the children to visit the Museum for further information. The cooperation

with the libraries is in charge of Mrs. Ruth Crosby Noble. During the year 1922, 69 loans have been made to 21 libraries in the city, and reports show that 57,294 persons viewed these exhibits. There are now 26 of these collections, three new ones, "Butterflies of New York," "Primitive Musical Instruments," and "Insects of New York," having been added during the year.

Upon request, the Department furnishes guides to conduct teachers and classes through the Museum and to explain the ex-This service is extended to all schools, hibits. Docent whether public, private or parochial, located in New Service York City or outside. Not only the elementary and secondary schools but also a number of colleges and universities have called upon the Department for guides. During the past ten years, a delegation of students from the Columbia University Summer School has visited the Museum every season, and has been conducted through the halls under guidance of members of the Department, aided by members of the scientific staff of other departments. During the current school year, beginning last October, a class from Rutgers College, under Professor Charles S. Crow, has been making bi-weekly trips to the Museum, the visits having been planned until the last of next May, and including practically all the halls of the Museum. In this work we have been helped by members of the staff in other departments. It is felt that this is a valuable part of our educational work, and that it fully justifies the large amount of time required in carrying it out.

The photographic work of the Department of Public Education has continued to grow during 1922. The staff has been taxed to the utmost in supplying prints and enlargements

Photographic for students and for illustrations in text-books, magazines and newspapers, also in the preparation of lantern slides for use in schools and colleges throughout the world, as well as those for the Museum files. At times the amount of work has been more than could be done by the two Museum photographers, and it has been necessary to send orders to outside firms.

The production from the studio includes 1,171 negatives, 14,009 prints, 10 transparencies, 857 enlargements and 5,204 lantern slides. These figures, however, give no conception of the actual work involved, which is of a highly specialized character. The



THE MOUNTAIN GOAT GROUP
"GETTING ACQUAINTED"

118,651 school children visited the Museum for lectures and exhibition hall instruction in 1922

area of distribution of this material includes thirty-one states and nine foreign countries.

The reference library of photographs now comprises 75,339 negatives and 88,729 prints.

One of the great projects which the Department is developing is the building up of a film library of natural history subjects.

It is our aim that this library shall become the international depository for the very best nature films, with a view to preserving valuable records for study and research. The School Service Building will contain two modern storage vaults for the preservation of this valuable material. Already the Museum has a duplicate negative of the first Paul J. Rainey African Water Hole films, the African films of Carl E. Akeley, the Asiatic films by Roy C. Andrews, the James Barnes African films, and several others are deposited here. The Museum extends an invitation to all explorers to deposit their negatives in the Museum film library.

In addition to its reference library of films, the Museum is accumulating a circulating film library for use in its school work. During the year this branch has been considerably enlarged, the circulation of films among the schools undertaken, and special motion picture exhibitions inaugurated at the Museum.

It is largely through the interest and generosity of Mr. George D. Pratt that the many additions to our library were made. Three reels of natural history pictures made by Mr. Pratt were presented to the Museum—Deer of the Adirondacks, Mountain Sheep, and Alaskan Sheep—and a reel entitled "The Forest Guardian." Mr. Pratt has also presented us with four reels of Borneo, one of the St. Gotthard Alps and one of the Suwanee River. Through his initiative, a copy of the motion picture, "Nanook of the North," was given to the Museum by Revillon Frères and Pathé Exchange.

The Department has continued its active cooperation with the Board of Education's Bureau of Lectures and Visual Aids to Instruction, of which Dr. Ernest L. Crandall is Contact with Outside Organizations

Contact with Dr. Crandall in the matter of furnishing slides to the schools, but our motion picture films have been freely loaned to the Bureau. The Museum auditorium has been placed at the disposal of The Visual Instruction Association of New York, of which Dr. Crandall is President.

Through this close contact, duplication of effort is avoided, and energies are concentrated where they will do the greatest good to the schools.

Our coöperation with the School Nature League has been maintained throughout the year. A noteworthy piece of work in this connection is the direction of the editing of a book on Nature by the late Mrs. Alice R. Northrop, which work is being done by Oliver P. Medsger, Head of the Department of Biology, Lincoln High School, Jersey City, N. J.

The Museum has furnished a meeting place for a course in training for Boy Scout leadership. Mr. B. T. B. Hyde has given much time to work with Boy Scouts, both in the field and in the Museum, in various branches of Nature and in developing the outdoor camp museum idea. Dr. Fisher examines the Boy Scouts of Manhattan for the Bird Study Merit Badge.

At the Annual Camp Directors' Conference held in May, under the auspices of the Woodcraft League of America, at Camp Beckett, Massachusetts, Dr. Fisher conducted work on trees, flowers, and birds; he also conducted Nature Study at Camp Wigwam, a summer camp for boys, near Harrison, Maine, and represented the Museum at the annual meeting of the American Nature Study Society in Boston.

Dr. Fisher served on the Curriculum Committee and on the Biology Committee of the Visual Instruction Association of New York, and on the Biology Committee of the Bureau of Lectures and Visual Aids to Instruction of the Board of Education.

On July 21, Mrs. Noble spoke before the class for Sight Conservation Teachers at the Columbia University Summer School on the subject of the Museum's work with the blind and sight conservation classes of New York City and vicinity.

During the spring, Mrs. Ramsey served on a committee that revised the Nature Study coups for the Woodcraft League of America.

From April 1 to December 19, Mrs. Ann Thomas Malloy, formerly Assistant in the Department, was again a member of the staff, and during Mrs. Noble's three months' absence in Santo Domingo, took charge of the work for the Blind and in the Libraries.

The Department suffered a grievous loss through the sudden death on September 16 of Mrs. Katherine S. Smith, our Slide

Colorist. Mrs. Smith had been connected with the Museum since 1910, and through her artistic ability and painstaking study had attained such proficiency in this difficult and technical subject that she ranked first among the colorists of the country. Quite aside from her value as a colorist, Mrs. Smith was deeply interested in the growth and development of the Department, and through her high ideals and enthusiasm was a continual inspiration.

During the year the Department has been presented with a large number of gifts. While the Accession List formally acknowledges these contributions, which have been of much as-Acknowlsistance in our work, we wish to express our great edgments appreciation to the following: Mr. George D. Pratt for the generous gift of ten reels of motion pictures; Revillon Frères and Pathé Exchange for the remarkable film "Nanook of the North"; Dr. Frank M. Chapman for 622 negatives of natural history subjects; The Corticelli Silk Mills, Kirkman & Son, and Near East Relief for sets of lantern slides to be used in our work with the public schools. We are also indebted to the New York State Conservation Commission, the United States Navy Recruiting Bureau, the Roosevelt Memorial Association, and the New York City Board of Water Supply, for the loan of motion picture film for use in our lectures to school children.

PUBLIC HEALTH*

CHARLES-EDWARD AMORY WINSLOW, Honorary Curator

In April, 1922, the work of the Department of Public Health along bacteriological lines was discontinued, owing to lack of funds, and the Museum of Living Bacteria was transferred to the Army Medical Museum in Washington, where the collection will be maintained and distributed in the charge of the Society of American Bacteriologists. At the same time, Curator Winslow was appointed Honorary Curator of the Department.

This collection of bacteria, which comprised over 800 cultures of pathogenic and non-pathogenic organisms, is the most comprehensive one in existence, with the possible exception of the Kral Collection in Vienna. Lister Institute in London started a museum of bacteria in 1918. The American Museum collection was started by Curator Winslow in 1911. During its maintenance at the Museum, 34,911 subcultures were sent out to public health and university laboratories and to schools, more than 800 institutions all over the world having been served in this way.

The other work of the Department is being carried forward by Miss Mary Greig, Assistant. In 1922 this consisted chiefly of routine work in setting up in the Forestry Hall the exhibit on Food Needs and Food Economics. The exhibit was put into new cases much better suited to the material shown but necessitating rearrangement. New models are being planned and the cards are being rewritten. The exhibit is in three sections, one given to the pure science of nutrition, one to practical matters of dietetics in terms of meals and servings, marketing and restaurant portions, and the third dealing with food production statistics.

The circulating food exhibits maintained in cooperation with the Department of Public Education continue in use in the schools. We were asked to widen their distribution and have loaned them to the New York Nutrition Council, the Harlem Nursing Association, and others, for educational work.

As in former years, we received calls for help from persons

^{*}Under the Department of Public Health (see also page 222).

who are themselves putting up exhibits. In November we lent part of our permanent exhibit to the Annual Health Exhibition held in the Grand Central Palace under the auspices of the New York City Department of Health and the American Public Health Association.

GEOLOGY, GEOGRAPHY AND PAST LIFE OF THE EARTH*

EDMUND OTIS HOVEY, Curator

The installation of the model of Porto Rico and the Virgin Islands, which was noted in last year's report, was completed early in the year. In making this model, the experi-Exhibition ment was tried of introducing a sheet of plate glass Halls to represent the surface of the ocean. The effect is good and the illusion of the great ocean deeps to the north and south of the island chain is well brought out. The geology of Porto Rico model follows the results of the investigations made in connection with the natural history survey of Porto Rico by the New York Academy of Sciences. The topography of the island is based upon a map compiled by Associate Curator Reeds for the Academy Survey. The model of San Francisco Bay and vicinity has been added to the series in place and has received much favorable comment from scientific as well as other visitors. The view is taken from the Pacific Ocean looking through the Golden Gate toward Oakland and Berkeley, Mt. Diablo, the Great Valley and the Sierra Nevada lying in the background. The San Andreas fault, the scene of so many earthquakes, is indicated in the foreground.

The beautiful specimens of malachite and azurite from the Copper Queen Consolidated Mining Company's mines at Bisbee, Arizona, which have long been displayed in three floor A-cases near the model of the mine, have been rearranged in a specially constructed neighboring wall case. The new case permits a more logical and effective grouping of these celebrated specimens and the introduction of special lighting devices which add to the attractiveness of this exhibit of the Carbonate Ores of Copper. Specimens illustrating the geology of the Copper Queen mining district at Bisbee are being arranged in an adjacent desk case.

Much progress has been made in the preparation and placing of permanent individual labels on the specimens on exhibition, eight

^{*}Under the Department of Geology and Invertebrate Palæontology (see also pages 203 and 205.

thousand having been completed. An exhibit showing the development of certain pelecypods in geological time has been prepared by Mr. Foyles, under the direction of Associate Curator Reeds, and has been installed in the biologic series. Many specimens have been intercalated in the biologic and stratigraphic series.

During the latter part of the year, by arrangement with Columbia University, an exhibit was nearly completed by Mr. Foyles, from Museum material, which illustrates the Grabau-Galloway system of classification of tetraseptate corals.

Under the direction of Dr. Reeds, the locations of the known outcrops of rocks of certain ages on the series of eight paleogeo-

Paleogeographic Maps graphic models have been outlined and painted in brown. The present shoreline of the continent has been put in in black. These models illustrate the important stages in the growth of the North Ameri-

can continent.

The case containing the exhibit from the copper mines of the northern peninsula of Michigan has been removed to the ground floor, where it has been placed in the corridor leading to the engine room.

The exhibits of gypsum and salt, the Broken Hill, Australia, ores, copper ores from various sources, the Manhattan Island rocks and the polished slabs of spheroidal granites and other rocks have likewise been installed in the corridor hall.

The model of the Yosemite Valley is in the hands of Morgan Brothers, modelers, and is to be delivered early in 1923. The

Topogeological Models core of the model of Crater Lake, Oregon, was finished early in the year and was placed on exhibition with a temporary label indicating its nature.

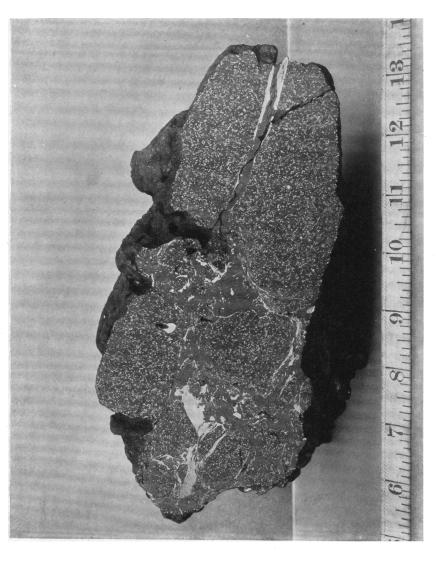
It has been of interest as showing the manner of constructing the models. The core of the New York City model has been completed, and those of the Colorado Springs-Pikes Peak region and the Van Horn, Texas, region are far advanced. There remain to be constructed only the cores of a portion of the Yellowstone Park, the Paw Paw, Virginia, region, and Niagara Falls and vicinity. The value of the series from an exhibition standpoint is shown by the number of visitors attracted to the hall by those already completed, and its importance from the educational side is indicated by the use made of the models by enthusiastic students.

The seismograph of the New York Academy of Sciences, which is under the care of this department, Dr. Reeds being "Observer in Charge," produced fine records of two great earthquakes, one on January 29, off the California-Oregon coast, the other on November 10 and 11, which centered in Chile. Bulletins were issued and placed on exhibition concerning each of these quakes and were published with reproductions of the seismograms in Natural History. Assistance was given to Mr. Burt Green, Animated Cartoonist of the Pathé Weekly, in the preparation of sketches for reproduction in film form of the Chilean earthquake and tidal waves. A copy of the film was presented to the Museum.

In June and July, the Curator spent about six weeks in the field visiting the Pikes Peak region in Colorado, the San Francisco Bay region in California and the Crater Lake region, to Field secure photographic and other data for our geologi-Work cal relief models of those regions. Dr. Hovey also visited Dr. C. D. Walcott's famous locality for Cambrian fossils at Burgess Pass, British Columbia, and collected some specimens from the old camp site. Associate Curator Reeds spent the month of September at certain Pleistocene localities near New York City. making collections of old gravels, sands and banded post-glacial clays showing annual deposits of "varves," and studies for a Museum exhibit on "Climates Past and Present." Mr. E. J. Foyles spent the month of August on the Ordovician rocks extending from Benson Landing to Grand Isle, Lake Champlain, and collected fossils, photographs and notes for the Museum.

The Curator published in Natural History an illustrated article entitled "A Tree Fern of Middle Devonian Time," descriptive of a specimen obtained from the Gilboa Dam site of the Publications New York City water supply work. He also prepared and published in Novitates a scientific description of an "Aërolite from Rose City, Michigan," and a popular article on the same subject for Natural History. Dr. Hovey assisted in the preparation and titling of an educational film on the formation of caverns, particularly Luray Cave, Virginia.

Associate Curator Reeds completed the preparation and attended to the publication of a joint paper with Professor Henry Fairfield



DEPARTMENT OF GEOLOGY
SECTION OF ROSE CITY, MICHIGAN, AËROLITE
COURTESY Of Mr. P. W. A. Fitzsimmons

Osborn on "Old and New Standards of Pleistocene Division in Relation to the Prehistory of Man in Europe," which was published in the Bulletin of the Geological Society of America and has aroused much discussion among the geologists and anthropologists of this country and Europe. The authors gave a résumé of their work before the New York Academy of Sciences, and Professor Osborn presented a joint paper by the same authors on "Recent Discoveries in the Antiquity of Man" at the April meeting of the National Academy of Sciences. Dr. Reeds also prepared a joint paper on "Recent Discoveries Relating to the Prehistory of Man" for the Scientific American. In the issue of Natural History for September-October, there appeared an article by Dr. Reeds descriptive of "The Geology of New York City and Vicinity." He read a paper before the New York Academy of Sciences on "Seismographs and Earthquake Records," and prepared an abstract of a paper on "Post-Glacial Banded Clays near New York City" for the annual meeting of the Geological Society of America. Doctor Reeds spent about four weeks in studying the foraminifera of Porto Rico in preparation for a report upon material collected in the island by himself and Mr. P. B. Hill.

Early in the year, Mr. Foyles gave a paper before the New York Academy of Sciences on "The Fort Cassin Rocks of Vermont." He also prepared for the State Geologist of Vermont, "A Preliminary Report on the Ordovician Strata of Vermont," based upon his field work of the summer.

In response to the urgent appeal of the new Cleveland Museum of Natural History, a collection of 1,952 specimens, comprising 761 species representative of Historical Geology, was selected from exhibition material temporarily in storage. It was fully catalogued and labeled, and was lent to that institution for three years. Besides this loan to the Cleveland Museum, we responded favorably to ten requests, from specialists engaged in research, for loans of type specimens of fossils. We also lent a series of rock specimens to a local school, a series of peat and coal specimens to the Department of Education, and presented to the Geophysical Laboratory in Washington specimens of volcanic dust collected by Dr. Hovey during the Mt. Pelé eruption of 1902 and obsidian secured by him on the island of Lipari in 1897, for purposes of research.

All the accessions, both in invertebrate palæontology and in inorganic geology, have been numbered. The cataloguing of the exhibition collection of meteorites has been completed; 10,000 specimens in the invertebrate series have been numbered, and 8,000 record cards intercalated in the catalogue. The seismograph records up to date are filed, and many new labels have been added to the exhibition series of fossil invertebrates.

Among the 101 accessions received during the year, particular mention may be made of the following: Ores, rocks and minerals from Sydney, Australia, the gift of Dr. E. C. Andrews, of Sydney; samples of post-glacial banded clay, gift of Dr. E. Antevs, New York City; asbestos ore from the Province of Quebec, gift of the Johns-Manville Co., New York City; iron meteorite (Glasgow), by purchase; and meteorite (Bur Hacaba), entire bolide, 1,057 grams, and a smaller piece showing external crust, 84 grams, by purchase.

Dr. Hovey continued to serve as Secretary of the Geological Society of America and attended its annual meeting at Ann Arbor

Scientific Societies and in December, arranging for the major portion of the program. He retired at the close of the meeting, having held the office for sixteen years.

Conventions In April, Dr. Hovey represented the Museum at the unveiling of the monument erected to the memory of Rear-Admiral Robert E. Peary in Arlington Cemetery. In May, he was one of the Museum's delegates to the annual meeting of the American Association of Museums held in Buffalo.

Dr. Reeds served as Secretary of the Section of Geology and Mineralogy of the New York Academy of Sciences.

We look back upon a busy year and one that has been full of accomplishment, though we have not been able to adhere closely to the schedule set forth for 1922.

1.

MINERALS AND GEMS*

HERBERT P. WHITLOCK, Curator

The Collection of Minerals has been reinstalled upon new lines of display, which increase materially the effectiveness with which this notable collection is presented to the eye of the public. In the general scheme of display the specimens have been emphasized by a consistent adherence to the principle of subordinating their surroundings. The cases, backgrounds and mounts have been tinted to harmonize with and merge into the color of the walls and ceiling, thus throwing into prominence the specimen itself. That such an innovation in museum display methods accomplished the result sought seems amply proved, especially in the instance of the vertical wall panels, where the specimens are individualized with striking effect.

There are twenty-eight of these vertical panels, which extend along the east, south and west walls of the hall, and have been planned with three distinct purposes in view: The creation of an effective and decorative motive of wall display; the assembling of the most highly attractive pieces of the Collection into a relatively small and easily viewed series, calculated to interest the casual or uninstructed visitor; and the disposal of the large specimens, which could not be conveniently displayed in the flat cases of the main installation, in reasonably close proximity to their appropriate positions in the latter arrangement.

The second of these functions is the one which has been especially developed and emphasized, the wall panels constituting, as it were, an introductory collection from which the visitor may glean the essential significance of the entire mineral installation. In laying out these panels, a notable departure from the almost universal use of shelving for large specimens in vertical arrangement has been inaugurated by the introduction of individual bracket supports, which, by breaking any continuous horizontal line of arrangement, destroy any tendency to monotony in the installation.

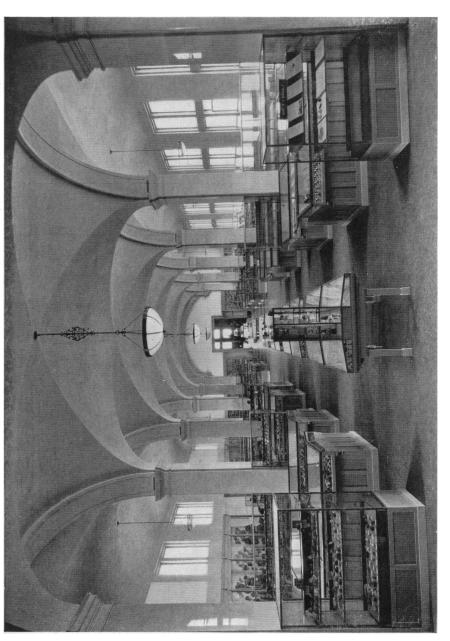
In the installation of the general mineral collection, much space

^{*}Under the Department of Mineralogy (see also pages 205 and 206).

has been gained, and the general appearance of the exhibit has been greatly improved by the introduction of twenty-four high freestanding cases to replace the corresponding low flat cases on either side of the twelve piers which support the vaulted ceiling. Throughout this installation, "vehisote" mounts in standard unit sizes have been substituted for the cotton-lined cardboard trays which formerly displayed the mineral specimens. The neutral light brown color of these not only harmonizes well with the general color of the Hall, but proves a highly effective setting for the display of specimens of almost every color.

In abandoning the former Hall of Gems and placing the Collection of Gem Stones in the Morgan Memorial Hall, two distinct objects were accomplished. The gem stone collec-Gem Stone tion gained the advantage of far better natural Collection lighting and a close juxtaposition to the mineral collection with which it is of necessity affiliated as a natural adjunct. The present series of gem cases are arranged in double units along the axis of the hall, in this way profiting by light from both north and south windows. The vertical section of each unit is used in general to display the raw gem material of the mineral illustrated, and the flat section is reserved for the cut, engraved or carved stones. A notable feature of this installation is the use of a new type of gem mount for displaying cut stones. Each gem is supported on a structure of thin glass rods, which is practically invisible except at close range and displays the specimen against its background of putty-colored silk poplin without the interference of the shadow which would be always present were the gem in contact with the background. In this way the color by transmitted light is shown to best advantage and without the appearance of opaque support so characteristic of any type of wire mount. These mounts, of which there are seven types, accommodating stones ranging from ½ to 500 carats, have, since the opening of the Morgan Memorial Hall in May, become known as "The American Museum Gem Mount."

The work of supplying printed labels for the specimens of the wall panels has progressed to the extent of the placing of printed labels on two thirds of the series, copy for the remainder being in the hands of the printer. Copy for group labels for the 28 panels of this series is also completed and is being printed. This latter series of labels has



DEPARTMENT OF MINERALOGY

Presented to the City of New York by George Fisher Baker In memory of his friend John Pierpont Morgan Morgan Memorial Hall of Minerals and Gems

been composed in such a way as not only to explain in each instance the contents of a particular panel but to emphasize a statement of some principle of mineral formation. Each panel grouping of specimens thus illustrates, as it were, a text which, taken by itself, conveys an important truth, while the whole series, considered together, furnishes a key to the entire contents of the hall.

The labels for the gem cases, two thirds of which have been written, are somewhat longer and more detailed to meet the need of the average visitor for information about objects regarding which his interest has already been aroused.

The Curator published during the year "A List of New Crystal Forms of Minerals," in the Bulletin of the Museum, also an article in The American Mineralogist on "The Gem Mounts of the American Museum of Natural History," and one in Natural History on "The Morgan Memorial Hall of Minerals and Gems." There has also been issued the Second Edition of Guide Leaflet No. 49, "The Collection of Minerals," with new matter in both text and illustrations.

Several new species have been added to the Mineral Collection, notable among which are: Curite, soddite and kasolite, three new uranium, radioactive minerals from the Belgian Congo; a fine specimen of massive troilite from Del Norte County, California, is notable as representing the only terrestrial occurrence of this ferrous sulphide, hitherto found only in meteoric irons. These were purchased through the Bruce Fund. Among other species hitherto unrepresented in the mineral collection may be mentioned three specimens of meyerhofferite, a rare hydrated calcium borate from Death Valley, California; higginsite, a copper calcium arsenate from the Bisbee District, Arizona, and vashegyite, a hydrated aluminum phosphate, occurring interbanded with massive opal from a new locality in Nye County, Nevada.

Realizing the increasing difficulty in obtaining good mineral specimens from the older European localities, the Department acquired during the year two small locality collections. Through the Bruce Fund was obtained the Nemeczeck Collection, consisting of 1,025 specimens, mostly from the famous group of mines at Pribram, Czechoslovakia. A fine series of rare occurrences of

very high grade, representing European localities no longer productive, was also obtained through the Bruce Fund.

A representative series of minerals of Belgium, containing many type crystals of calcite from the now classic studies of G. Césaro, was added to the study resources of the Department.

The Gem Collection has been enriched, through the gift of Mrs. Henry Fairfield Osborn, by a magnificent suite of carved lapis lazuli, consisting of two strings of beads, a carved oval box of Russian workmanship, and matrix specimens. Dr. George F. Kunz, Research Associate in Gems, has presented as a memorial to Mrs. Kunz a series of ten notable gem specimens, several of which are type specimens, having been figured in "Gems of North America." A beautiful yellow sapphire, weighing 61.89 carats, was presented by Mrs. George T. Slade, in memory of her father, the late James J. Hill. This gift was received through Dr. Kunz.

EXTINCT VERTEBRATES*

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

Through the death in November, 1921, of Erwin Christman, the Department sustained a grievous loss. It is impossible to secure in his place anyone trained in the peculiar requirements of this work, and it has been considered best to engage two or three promising beginners from among whom a competent successor may be developed. Associate Curators Walter Granger and Barnum Brown have continued during the year wholly in the field, and Dr. C. C. Mook was appointed provisionally from June first to take the position of Associate Curator.

Associate Curator Granger, in charge of palæontology for the Third Asiatic Expedition, spent the winter of 1921-1922 in Szechuan, China, where he secured a large collection of Field Work fossil mammals, including skulls of the extinct proboscidean Stegodon, of a gigantic tapir, a rhinoceros, a gaur and other wild cattle, antelopes and deer, a tiger, a langhur monkey and numerous bamboo rats, besides more fragmentary specimens of various other animals. Most, if not all, of these animals are of extinct species and some of extinct genera; the fauna is considered as Upper Pliocene in age and deserves especially careful exploitation, as it is the fauna of a forested or hilly region with moderately warm climate, presenting what would appear to be the most favorable environment for the Pliocene ancestors of man. Such have not yet been discovered in this fauna but future work may yet reveal them.

During the summer Mr. Granger took charge of the palæontology on the Third Asiatic expedition in Mongolia, elsewhere reported upon. The palæontological results of this expedition were extraordinarily important, as it opened up a new field for fossil vertebrates comparable in extent and variety with the fossil fields of Argentina or even of our own western plains, and of peculiar interest, as there are strong reasons to believe that the

^{*}Under the Department of Vertebrate Palæontology (see also pages 206 and 207).

hitherto unknown field of Central Asia was the centre of evolution and dispersal of many, if not most, of the dominant races of animals, including our own race. Five or six distinct fossil faunæ of Cretaceous and Tertiary age were discovered, large collections secured and extensive prospects noted for future exploration. The most important specimens obtained were complete skeletons of small Cretaceous dinosaurs and a skull of the gigantic Baluchitherium, a relative of the rhinoceroses that equaled an elephant in size. The necessity is obvious of following up this magnificent discovery by concentrating all available support upon it during the coming year, both in field work and preparation and research.

Associate Curator Brown was engaged during the year upon field work in the Siwalik Tertiary formations of India, where he secured a splendid collection from this classic field, including skulls of mastodons, hippopotami, rhinoceroses, three-toed horses, giraffoids, antelopes, deer, camels, pigs and others, the collection as a whole ranking next to those of the London and Calcutta museums. This expedition was carried upon a special fund provided through the generosity of Mrs. Henry Clay Frick.

Head Preparator Albert Thomson spent five months in western Nebraska, chiefly in the Snake Creek fossil quarries, and secured a large collection from the lower Sheep Creek zone of that locality and a smaller one from the upper Snake Creek zone. The material is mostly fragmentary but includes a number of complete skulls of three-toed horses, camels and others, and represents a large variety of mammals, including many new species and probably some new genera.

Preparator George Olsen with Mr. Paul C. Miller of Chicago University made a short expedition to the Bridger basin of Wyoming and secured a small but valuable collection, chiefly of fossil mammals from the Middle Eocene Bridger formations, including a partial skeleton of the rare *Tillotherium*, skeletons of creodonts and other interesting specimens, supplementing the collections obtained from the Bridger Eocene by Mr. Granger in 1903-1906. This work was carried upon a special fund provided by Mr. Childs Frick. Mr. Frick also continued during the year the further exploration of the Pliocene horizons near Eden, California, by Mr. Rock, and the preparation of the large additional collections secured. During the summer, Mr. Frick and Dr. Matthew, with

Mr. H. J. Cook, made a reconnoissance trip across the Tertiary section between Hat Creek, Nebraska, and Pawnee Buttes, Colorado, examining the relations of the formations exposed. An interesting Miocene pocket near Pawnee Buttes, where tapir and bear remains new to this horizon were found by this reconnoissance, was further explored under Mr. Frick's direction, in view of the exceptional interest of these specimens.

Mr. E. C. Swabey of Rochester, Indiana, kept watch during the year for discoveries of Pleistocene mammals in Central Indiana, and secured for the Museum two good mastodon jaws and other material.

The Museum purchased from Mr. Charles H. Sternberg a fine skull and a considerable part of the skeleton of a large horned dinosaur, probably a new genus, from New Mexico, and agreed to purchase two other specimens from the same formation. Associate Curator Mook and Mr. Peter Kaisen visited the San Juan fossil field in September to examine these and other specimens found by Mr. Sternberg and report upon them and upon the desirability of further explorations in this field.

Two pterodactyl skeletons from the Jurassic lithographic limestone of Bavaria were obtained by purchase. One is of the shorttailed, the other of the long-tailed group of these animals.

The Palæoscincus specimen, consisting of the head and fore part of the body with the armor in position, was completed and

Preparation and Exhibition placed on exhibition. It has proved to be an exceptionally effective and instructive exhibit, showing the appearance in life of a great armored Dinosaur.

The Pliohippus group of two specimens (mare and colt) of the earliest stage of one-toed horses, has now been completed. Preparation of the skeleton of Monoclonius (One-horned Dinosaur), designed for an open mount, is completed, and some further progress has been made on the Triceratops (Three-horned Dinosaur) mount. A cast of the skeleton of Diprotodon, the gigantic marsupial mammal of Australia, was purchased from the Adelaide Museum and has been mounted and placed on exhibition. The mounting involved a very careful and critical study of the articulation and mechanics of this skeleton as a guide to mounting it in a correct and characteristic pose. The skeleton as mounted differs considerably from the pose given to it by the Adelaide and

British Museum authorities, and the restoration made by Mrs. Fulda gives a different appearance to the animal.

The collection of Chinese Pliocene mammals obtained by Mr. Granger during the winter of 1921-1922 has been nearly all cleaned up and prepared for study and exhibition. For a large part of this work the cost was defrayed by Mr. Childs Frick. Most of the Snake Creek collection obtained in 1921 was also cleaned up and prepared for study and exhibition. Cataloguing of these two collections has been completed, save for a part of the Snake Creek Ungulata.

A fine skeleton of an early Miocene camel, Oxydactylus campestris, the type specimen, was purchased from Mr. Harold J. Cook and will be mounted for exhibition in the Camel Alcove.

Mr. Knight completed during the year three new mural panels for the south wall of the Hall of the Age of Man. The panels represent different elements of the great Rancho-la-Brea fauna found near Los Angeles.

In completion of the exchanges arranged by Dr. Gregory with Australian museums, a number of new casts of Tyrannosaurus skulls and jaws were prepared. The making and coloring of these large casts is difficult and tedious work but warranted by their great popularity and value, both as an impressive and instructive exhibit, and as an advertisement of the fossil treasures in the American Museum. Four sets are to be sent to Australia, one to Princeton University, and others are held in reserve.

Casts were also made of a number of types or unique fossil specimens submitted to us for identification or study.

An important exchange effectuated with the Colorado Museum of Natural History at Denver, will secure for us skeletons of two much desired fossil mammals, *Trigonias*, the earliest of the true rhinoceroses, and the giant pig *Entelodon*; both from the *Titanotherium* beds of northeastern Colorado, in return for a skeleton of the great Clawed Ungulate *Moropus*. As a preliminary to this exchange, the Museum purchased the rights of Mr. Harold Cook in this specimen.

Exchange collections of fossil mammals and casts were also sent to the British Museum and to the Universities of Cambridge, Oxford, Vienna, Padua, and exchanges were received from the Universities of Cambridge and Munich.

Aside from photographic work, the time of the illustration force on the department staff has been chiefly taken up with preparation of labels, coloring of casts and other necessary routine work, so that only a small number of drawings for publication could be made. Mrs. Fulda made 265 negatives during the year, and also a number of sketch restorations, Palæoscincus, the Diprotodon, two types of pterodactyls, and two of Cretaceous dinosaurs.

Professor Osborn continued during the year his researches upon the Evolution and Phylogeny of the Proboscidea and published a

Research and Publication preliminary notice describing the new genus Miomastodon and recognizing in Trilophodon edensis of California a relative of the South American Andean mastodon. He also described as Hespero-

pithecus, the first Anthropoid Primate found in America, an upper molar tooth from the Lower Pliocene Hipparion affine zone at Snake Creek, Nebraska.

Mr. Childs Frick continued researches upon the Pliocene vertebrate faunas of Eden, California, which he has developed from rather unpromising beginnings to a remarkable variety of fauna and amount of material, including many new or little known mammals of a geological horizon very poorly represented previously in our mammalian faunas. He has likewise made a very extensive and thorough research upon the American fossil species of Equus, bringing together practically all the material of any value in American museums and making a thorough comparative study with the living species of the genus.

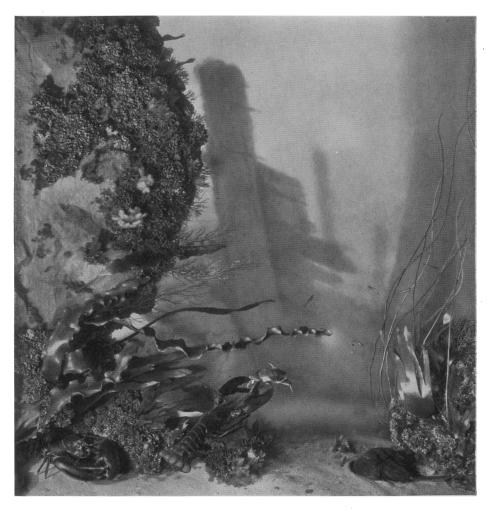
Dr. Matthew continued researches chiefly upon the Snake Creek fauna and also published jointly with Mr. Barnum Brown an article describing a new genus of carnivorous dinosaurs from the Upper Cretaceous and discussing the affinities of the group.

A Bulletin article by Dr. J. G. Andersson of the Geological Survey of China, summarizes the recent palæontological work of the Chinese Geological Survey, and a preliminary notice by Mr. Walter Granger and Professor C. P. Berkey announces the discovery of Cretaceous and older Tertiary strata in Mongolia.

An abstract has been published in *Novitates* of Dr. Matsumoto's second paper upon the Egyptian Proboscideans, and the complete paper is being revised and arranged for publication in the *Bulletin*.

Other researches now in press are by Professor T. D. A.

Cockerell, describing the supposed fossil plumage of the Eocene bird *Diatryma*, and Miss Helga Pearson's study of the peccaries of the Oligocene in the American Museum collections.



DEPARTMENT OF LOWER INVERTEBRATES
THE GAY HEAD SOUND BOTTOM GROUP
Showing crustacean life in Vineyard Sound

LOWER INVERTEBRATES*

ROY WALDO MINER, Curator

At the beginning of the year, Mr. Roy W. Miner was promoted from Associate Curator in Charge to Curator of the Department, to succeed Honorary Curator Henry E. Crampton, who had retired to devote himself wholly to his work at Barnard College. The only other changes in the staff have been the appointment of Dr. Horace W. Stunkard of New York University as Research Associate in Parasitology, and the employment of Mr. Malcolm McG. Jamieson as departmental artist on part time, during the latter part of the year.

During the year, the Gay Head Sound Bottom Group was completed and installed for exhibition. This group illustrates an incident in the struggle for existence among the Crustacea in their natural surroundings on the sandy bottom of Vineyard Sound, Massachusetts. Much beautiful and delicate work in modeling in glass, celluloid, wax and other materials, to illustrate the marine algæ and invertebrate life, has been accomplished by our skillful preparators.

The Cold Spring Harbor Group has been repaired and reinstalled for exhibition.

A ctenophore model and four interesting rotifer models, all of exquisite workmanship, have been prepared by Mr. Herman Mueller during the year and have been placed on exhibition in the Synoptic Series.

The work on the Rotifer Group, with the cooperation of Research Associate Frank J. Myers, has been advanced to a considerable degree. This group will represent a half inch of pond bottom magnified to five feet in diameter, designed as a companion-piece to the Bryozoa Group.

A large chart representing the family tree of the animal kingdom is being prepared for the Darwin Hall. This exhibit, by means of numerous models, will show the probable relationship of the chief

^{*}Under the Department of Lower Invertebrates (see also pages 207 to 210).

animal groups, and will form an introduction to the synoptic exhibits, as well as an important item in the series illustrating evolutionary principles.

Illustrated index labels for the Bryozoa Group and for the Cold Spring Harbor Group have been nearly completed, and the exhibition series of shells in the Mollusk Hall has been rearranged.

A special exhibit, illustrating the ravages of marine borers, such as the ship-worm and gribble, on wharf piles and other wooden submarine structures, has been placed on temporary display in the West Corridor. This exhibit was donated largely by members of the Committee of Marine Piling Investigations of the National Research Council, in coöperation with which Curator Miner has been working, as a member of the New York Committee.

Mr. Miner has devoted considerable time to the preparation of preliminary plans for the invertebrate exhibits in the new Oceanic Hall, and especially the construction of the West Indian Coral Reef Group which is intended to be one of the features of the Hall.

The educational work in the Darwin Hall has continued most satisfactorily. During 1922, 18,513 students visited the Hall, in 511 classes from 247 institutions. Of these, 15,469 were from public institutions. A striking illustration of the value of special and timely exhibits was shown in the placing of our glass model (taken from the exhibition series in this hall), representing the protozoan *Symura*, in Memorial Hall early in the year, when the New York water supply had been infected through this harmless but disagreeably tasting organism. During the period of this exhibit, the Sunday attendance leaped from about 5,000 to approximately 15,000 persons.

Through the industrious and efficient work of Assistant Curator Van Name, the collections of Macrura, an accumulation of many

General Invertebrates years, were identified, and the classification and nomenclature of this material, as well as of the catalogued ascidians, were brought up to date. The echinoderms secured by the American Museum

Porto Rico Expeditions, by Curator Miner and others, were identified by Dr. Van Name and placed in the series.

The collections catalogued during the year include 4,276 specimens in 1,862 lots, representing 1,323 species, of which 748 were new to our collections; they are contained within 144 new genera.

Mollusks 69

This is a good measure of the actual increase of the general invertebrate collections during a single year.

The progress in the Division of Mollusks has been noteworthy, in both the exhibition and study series: 3,545 new cards have been added to the catalogue, bringing the total number of catalogued lots to 30,248. Only one fourth of the bivalve invertebrates, and the land shells, remain to be catalogued.

Early in the year, Dr. C. Montague Cooke, Jr., made a second visit to the Museum to identify the recently acquired Coan Collection of Achatinellids, as well as those which have recently come to light in the Steward Collections. This work has brought our entire Achatinellid collections up to date, and as a result we have discovered a number of rare forms among them.

During November and December, the Department has had the advantage of the expert services of Mrs. Ida S. Oldroyd of Stanford University, an international authority on Mollusca. Mrs. Oldroyd went over all our catalogued marine shells and thoroughly revised their nomenclature, bringing the collection up to date. She states that our Museum has the finest display of exhibition shells in existence; that we have the largest known specimens of many of the commoner shells; that our collection of Olives is surpassed only by that in the Philadelphia Academy of Sciences; that our Cypræidæ are equal to the best in the country; that our Volutes contain most of the rare species and are rich in having an unusually fine series of all the more common species; and that we have a nearly complete series of Pectens. The Strombidæ are nearly complete and the Cones possess many fine examples. One species, Conus prometheus, is represented by the largest recorded specimen. In the case of Mitridæ, we have a number of very rare species and several specimens of each.

With the consent of the Director, the plans for most of the field work for 1922 were postponed until the coming year in order that Curator Miner might devote himself to the important tasks of pushing the work on the exhibition halls, scientific collections and publication.

A certain amount of field work, however, was undertaken during July in southern New Jersey, in coöperation with Research Associate Frank J. Myers, to gather fresh data and material in connection with the Rotifer Group and the rotifer collections, as

well as to make a study of the technique of preparing field material for museum purposes. Through the courtesy of Mr. Myers, his admirably equipped laboratory at Ventnor, New Jersey, was made the headquarters of the work, and with his aid a number of ponds in southern New Jersey were investigated with good results. As indicated elsewhere, Mr. Myers has presented to this Museum preparations of rotifers, protozoans and entomostraca, as part of the fruits of his work.

Progress here has also been admirable. The following items were completed or in progress during the past year:

Doctor Van Name has made a report on the Research distribution of ascidians for Professor Hartmeyer of the Berlin Museum, which will be published in connection with Professor Hartmeyer's forthcoming monograph. During the latter part of the year he has resumed his work on the tropical American and West Indian isopods. Figures have already been drawn by him and this will form the major part of his research work during the next few months.

During the early part of the year, Curator Miner continued his work on his textbook on animal evolution, which, with the colored plates accompanying it, is awaiting the pleasure of the Museum regarding the form and method of publication. During the greater part of the year Mr. Miner devoted much of his time to his paper on "The Pectoral Limb of Eryops and Other Primitive Vertebrates," on which he is working in conjunction with the Department of Comparative Anatomy. More than one hundred figures have been prepared and the text is nearly finished. It is expected that it will be ready for publication early in 1923. Mr. Miner has also written a short article entitled "Biological Work in Mount Desert Island," and has completed two popular articles for outside publication entitled "The Conquest of the Environment" and "The Story of Animal Evolution."

Research Associate A. L. Treadwell of Vassar College identified and returned to the Museum during the year a large number of annulates from the Atlantic Coast region. He has also nearly completed his work on the annulates of the Albatross Expedition, and has in press for outside publication, papers on the annulates of Samoa and Good Friday Harbor, Washington. As soon as they are published, the collections involved, including a number of types, will be presented to this Museum.

Research Associate Frank J. Myers has continued his work in conjunction with H. K. Harring of the United States National Museum, on "The Monograph of North American Rotifers." A series of the material used in this connection is rapidly being added to the collections of this Museum.

Research Associate Stunkard has published a paper in Novitates entitled "Two New Genera of North American Blood Flukes," and has presented the types to this Museum. He has also completed and presented for publication an extensive paper, "Studies on North American Blood Flukes," illustrated with 68 figures, in which this very interesting group is completely revised and several new species described, of which the types are now in this Museum.

Professor Hubert L. Clark of the Museum of Comparative Zoology of Harvard has completed a supplementary paper on the Albatross echinoderm collections, which is now in the hands of the Editor of the Bulletin.

Miss Mary J. Rathbun of the United States National Museum has practically completed a paper on the Albatross Brachyura, which will be ready for publication within a few weeks.

Mr. Waldo L. Schmitt, also of the United States National Museum, has practically completed a paper on the Albatross Macrura, and this will be in our hands early in 1923.

Mr. Clarence R. Shoemaker of the United States National Museum has nearly completed his paper on the Congo amphipods and has partly finished a paper on the amphipods of the Albatross Expedition. Both of these will be ready for press by March.

Doctor Paul Bartsch of the United States National Museum has reported progress on his work on the mollusks of the Albatross Expedition, and hopes to complete it during 1923.

Mrs. Harriet Richardson Searle is at work on the isopods of the Albatross Expedition.

Professor H. A. Pilsbry of the Philadelphia Academy of Sciences expects to finish the Congo fresh water and marine mollusks before the close of the coming year.

Professor Ralph V. Chamberlin, of the Museum of Comparative Zoology, Harvard, has continued his work on the myriapods of the Congo region, which he has promised to complete during 1923.

Professor C. Branch Wilson is working upon certain parasitic copepods in our collection, with a view to publication.

Professor Raymond C. Osburn of Ohio State University, Columbus, Ohio, has progressed in his work on the Bryozoa of the Albatross Expedition.

Professor Leon J. Cole has a short paper in progress on the pycnogonids of the Albatross Expedition.

All these Albatross publications are on the material received by this Department in April, 1921, from those in charge of the expedition.

Preliminary arrangements have been entered into with Yale University, through Professor Wesley R. Coe, whereby the identification and revision of their large and important invertebrate collections will be undertaken by this department, in return for which we are to receive an extensive series of specimens which will fill many gaps in our collections. Its results will be invaluable, as the collections comprise many species collected by Professor Verrill during his connection with Yale University, and are the fruits of many expeditions. It would be impossible for this Museum to obtain an equivalent series of forms through expeditions, without great expenditure of time and money.

Arrangements have been made with the United States National Museum whereby we are to receive a liberal series of specimens from the collections made by the Albatross in Philippine waters in 1909, as a result of the coöperation of this department in placing these collections with specialists for identification.

Through coöperation with the New York Committee on Marine Piling Investigations of the National Research Council, the Museum has offered laboratory facilities to Doctor Sidney I. Kornhauser and Mr. F. A. Varrelman, biologists in connection with work for the Committee, with the result that this Museum is receiving an excellent series of original identified material and examples of the destructive effects of marine borers.

During the year, Mr. Miner lectured before various scientific societies, and to students, chiefly upon the subject of evolution.

The accessions have been unusually numerous and of considerable value. The most significant are as follows:

About 100 mounted and identified rotifers and aquatic invertebrates, from Mr. Frank J. Myers; a collection of *Arca* shells from Panama, including three paratypes, from Professor Axel Ollson of Cornell University; a collection

of 136 named Pacific and West Indian annulates, from Professor A. L. Treadwell, including five types; a collection of Lower Florida Crustacea, from Mr. L. L. Mowbray, formerly Director of the Miami Aquarium; a collection of wharf piling and Teredo specimens from the Committee on Marine Piling Investigations of the National Research Council; a fine collection of 436 myriapods and other invertebrates collected by C. M. Breder in the mountains of North Carolina; a collection of 124 shells and other invertebrates from the Gulf of California, from Professor A. L. Herrera, Director of Biological Studies in the Republic of Mexico; a collection of eight mounted blood flukes, including five types, from Dr. H. W. Stunkard; a collection of 18 named gastropods, including 1 type, from Monterey, California, and Puget Sound, Washington, given by Mrs. Ida S. Oldroyd.

The most important accession by exchange during the year was a collection of Australian and New Zealand amphipods, isopods and *Peripatus* from Professor Charles Chilton of Canterbury College, Christchurch, New Zealand.

An excellent specimen of the extremely rare shell Conus gloriamaris has been purchased. Not more than a dozen specimens of this shell are known to exist.

About 1,500 specimens of invertebrates were added by Museum expeditions, and more than 1,700 named specimens were purchased.

report of the findings.

INSECTS AND SPIDERS*

FRANK E. LUTZ, Curator

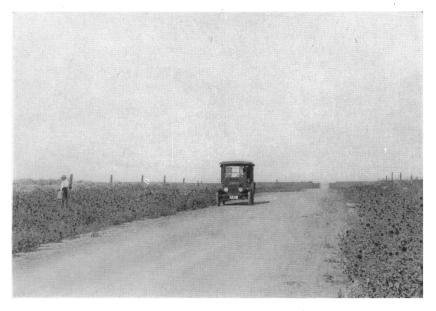
The most interesting and important activity of the year was the field work in Colorado. The department's field automobile was used throughout the summer not only for transportation but also as living quarters and laboratory.

There were two distinct phases of the work. The first was in continuation of the studies by Curator Lutz on the distribution of wild bees in Colorado, and this year particular attention was paid to the effects of the changes in environment between the hot plains at an altitude of about 5,500 feet and the limit of the range of bees along the snow banks at an altitude of about 13,500 feet. This is the third season of entomological field work in Colorado by the Museum. Many notes and thousands of specimens have been secured, resulting in a list of about 900 different kinds of bees from that State. Professor T. D. A. Cockerell, of the University of Colorado, and Curator Lutz are now working on a full

The other phase of the work was in connection with the studies being made by the National Research Council's Committee on the Biological Relations Between Flowers and Insects, of which Curator Lutz is Chairman. This is dis-Insects and tinctly a coöperative study. Experiments have Flowers indicated that insects can see ultraviolet rays, invisible to us. If flowers reflect ultraviolet, they would then have an ultraviolet color as viewed by the insects. It is generally believed that floral color is important in connection with the visits to and the consequent pollination of flowers by insects. If so, we should know something about the ultraviolet colors of flowers, and Dr. F. K. Richtmyer, Professor of Physics at Cornell University, spent the summer with Curator Lutz working on this problem. He found that some flowers do indeed have ultraviolet color and that flowers differ in this respect just as they differ in their reflection of wave-lengths of light that give us the sensation

^{*}Under the Department of Entomology (see also pages 210 and 211).





DEPARTMENT OF ENTOMOLOGY

THE UPPER LIMIT OF THE RANGE OF BEES ON LONGS PEAK, COLORADO (above)

The Department Field Car on the Colorado Plains (below)

Colorado Expedition

Supported by the Jesup Fund, in coöperation with Cornell University, The University of Colorado and the National Research Council

of red, blue, and so on. Other coöperators were from the University of Colorado. For example, Miss Pope studied the pollen of more than 150 different kinds of plants and has tabulated the results so that now we can get a very definite idea by the examination of the pollen found on an insect concerning the flowers it has been visiting.

Mr. Watson returned from Haiti in April after nearly five months of successful work on the butterflies and moths of that island.

It is pleasing to report that the first of a series of insect habitat groups has been installed and that others are under way. Progress has also been made with the problem of suitable illumination in the general exhibition cases so that a lens may be placed above each small specimen, thus enabling the visitor to see more easily what is being exhibited.

The most noteworthy publication of the year is Volume XLV of the Bulletin, "Ants of the American Museum Congo Expedition. A Contribution to the Myrmecology of Africa," by Professor W. M. Wheeler with the collaboration of J. Bequaert, I. W. Bailey, F. Santschi, and W. M. Mann. Professor Wheeler is Research Associate in Social Insects. He and his collaborators have produced a masterpiece.

Other contributions to the Bulletin were "Altitude in Colorado and Geographical Distribution," by Frank E. Lutz; "The Lycidæ, Lampyridæ and Cantharidæ (Telephoridæ) of the West Indies," by Chas. W. Leng and Andrew J. Mutchler; and "New Pacific Coast Cynipidæ (Hymenoptera)," by Alfred C. Kinsey. In Novitates there have been published from this department "Bees of the Genus Perdita from the Western States," "Bees of the Genus Panurginus Obtained by the American Museum Rocky Mountain Expeditions," "Notes on Some Western Bees," and "Two New Subgenera of North America Bees," all by Professor T. D. A. Cockerell; also "The Ants of Trinidad," "A New Genus and Subgenus of Myrmicinæ from Tropical America," and "Neotropical Ants of the Genera Carebara, Tranopelta and Tranopeltoides, New Genus," by Professor W. M. Wheeler.

RECENT AND EXTINCT FISHES*

BASHFORD DEAN, Honorary Curator JOHN T. NICHOLS, Associate Curator of Recent Fishes, in Charge

The group of deep sea fishes, intermittently illuminated so that they may be examined in detail, and darkened again to show only their gleams of phosphorescent light against a background of inky blackness (the condition prevailing in their deep sea habitat), has undergone repairs and has been again opened to view. The lighting problem involved has been more satisfactorily solved than when this group was formerly shown.

No member of the regular department staff has been in the field the present year, and the most important accession of new material consists of further shipments received from the Third Asiatic Expedition and from Mr. Harry R. Caldwell. It is probable that such material already received constitutes the most important collection of Chinese fresh-water fishes ever brought together. It is hoped that Mr. Henry W. Fowler of the Philadelphia Academy of Natural Sciences will assist in its determination. He has already examined some of the first Asiatic Expedition shipment and described a new loach, found therein, in Novitates.

Chancellor David Starr Jordan, of Stanford University, commissioned by the Department to obtain fish material during a two months' visit to Japan, reports that he has secured important collections.

On returning from Miami, to resume connection with the New York Aquarium, Mr. L. L. Mowbray presented the Museum with a collection of interesting marine fishes from southern waters, which have been the basis of several notes published in *Copeia* (two by L. L. Mowbray, three by J. T. Nichols).

Mr. Fred Kessler, the laboratory assistant, has been occupied largely with necessary care of the ever growing collections. He has also found time to prepare skeletal material, and to work out fossils for study under the direction of Dr. W. K. Gregory. A series of about 20

^{*}Under the Department of Ichthyology (see also pages 211 and 212).

skeletons in constant use in the Department of Comparative Anatomy have been transferred to that Department. Incident to the determination and cataloging of material already on hand, a paper has been published in the *Bulletin*, one in *Novitates*, and a third submitted to *Novitates* for publication, wherein six new fishes (from Peru, Hawaii, and Equatorial Africa) are described and named.

Work on the Bibliography of Fishes made satisfactory progress during the year 1922. In the early spring, 320 pages, comprising the Addendum and part of the Pre-Linnæan section, were printed, and are now stored in the Museum. The remainder of the Pre-Linnæan section, amounting to 18 pages, and the sections "General Bibliographies," "Voyages and Expeditions," "Periodicals," and "Errata and Corrigenda," containing 22 pages, were finished and are in final page proof ready for the press.

The "Morphological and General Section" of the Subject Catalogue is finished, except Skull, and is in second galley proof. This section amounts to about 220 pages, and is a thorough analytical subject catalogue of the material listed in Volumes I and II and in the Addendum and Pre-Linnæan sections of Volume III. It will at once put into the hands of the ichthyological investigator all the known references on any particular subject, however obscure. Concerning this section, Dr. H. M. Lydenberg, reference librarian of the New York Public Library, after looking over the proof sheets, has thus written to the editors: "This work once finished will certainly be a standard for future enterprises of like importance; and I am sure that the scientific world will owe you a debt of gratitude for having made possible this contribution to the two sciences of ichthyology and bibliography."

All the above material, amounting to about 260 pages, is in page or final galley proof, and will be printed in February, brought to the Museum, and stored with the other 320 pages.

There remains then to be done the "Systematic Section" of the Subject Catalogue, and the Index. The first of these consists of the material for which no place could be found in the "Morphological and General Section." It comprises those papers having to do with the fish as a fish: its fossil forms, natural history, occurrence and taxonomy. The amount of material left for this section is relatively small, and the difficulties of analyzing and working it up are negligible compared to those met with and overcome in the "Morphological Section." Work on this Systematic Section is well started.

The Index to the Subject Catalogue will be of the ordinary alphabetical kind, and on it also work has been started.

During the year there have been some changes in the personnel of the Bibliography staff. Because of ill health, Miss E. M. Heinrich resigned on August 1. On October 2, Miss Francesca La Monte, after a year's absence in Europe, resumed the position of secretary. Mr. A. W. Henn, Curator of Fishes in the Carnegie Museum of Pittsburgh, left us on November 9 to take up his long deferred duties there. And in this connection, the editors wish to put on record their sense of obligation to Directors W. J. Holland and Douglas Stewart of the Carnegie Museum for the extended leave of absence courteously granted Mr. Henn in order that he might give his help to the Bibliography.

The work will be brought to completion by Dr. E. W. Gudger and Miss La Monte.

Several articles by Dr. E. W. Gudger have appeared in Natural History, dealing with "Rains of Fishes," "Rains of Fishes and Frogs," "An Odd Place of Refuge. The Habit of the Shark Sucker of Taking Refuge in the Gill Chamber or Mouth Cavity of Its Host," "Foreign Bodies Embedded in the Tissues of Fishes." In Science he published "The Most Northerly Record of the Capture in Atlantic Waters of Manta birostris," and "The Fourth Record of the Occurrence in the Atlantic Ocean of the Whale Shark Rhineodon typus."

Examination of a collection of fishes from the Gulf of Mexico, submitted to Mr. C. M. Breder, Jr. (of the New York Aquarium) and to Mr. J. T. Nichols, by the United States Bureau of Fisheries, for determination, has been completed. One new form found therein has been described in the *Proceedings of the Biological Society of Washington*, and a second is not yet published. The Museum is permitted to retain certain interesting material from this collection.

EXISTING REPTILES AND AMPHIBIANS*

G. KINGSLEY NOBLE, Associate Curator, in Charge

The year 1922 may well be called a banner year in the history of the Department. The number of specimens received exceeded all previous records. More material was mounted and placed on exhibition than in previous years. Extensive field work was carried on with success, both near home and in the tropics. The rearrangement of our study collection was completed. The year has been one of marked progress in every direction.

It is much to be regretted that Assistant Curator Karl P. Schmidt withdrew from the Department towards the end of July,

to accept the position of head of the newly created section of Herpetology in the Field Museum of Natural History, Chicago. Mr. Schmidt had been associated with the American Museum since 1916. The long list of papers which he has published bears witness to the ability and thoroughness he applies to all his work. Mr. Schmidt's position was filled by Mr. Arthur I. Ortenburger of the University of Michigan. As a student of Doctor A. G. Ruthven, Mr. Ortenburger has been carrying on extensive investigations, chiefly on the Black Snakes and Racers.

In anticipation of the preparation of a Handbook on "The Reptiles and Amphibians Found Within Fifty Miles of New York City," the Department staff carried on field work in the Local region throughout the spring. The most noteworthy result of this work was the securing of full life history data on the Anderson Tree Frog, one of the rarest and most beautiful of North American batrachians. Important observations were made on the life history of the Spadefoot Toad. Numerous photographic records were made with the flash gun. Portraits of several other species of local batrachians were taken under natural conditions to illustrate important features of their behavior.

^{*}Under the Department of Herpetology (see also pages 212 to 214).

Through the interest of friends of the Museum, Mr. and Mrs. Paul J. Sachs, the donors of the Angelo Heilprin Exploring Fund,

Expedition to Santo Domingo

an expedition was sent, toward the last of July, to the Dominican Republic to secure materials for the construction of two new habitat groups. Although reptiles and amphibians are most abundant in the tempt had previously been made in the Museum to

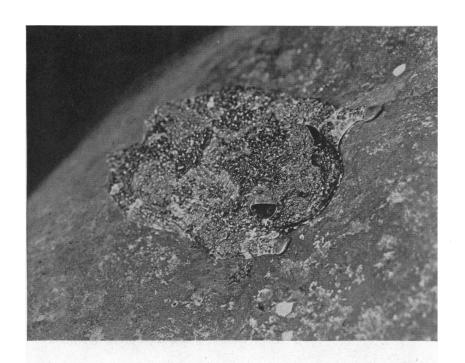
tropics, no attempt had previously been made in the Museum to reproduce the home life of forms other than those found in the United States.

On Santo Domingo there occur not only the largest tree frog in the world, but also the most powerful, if not the largest, lizard in the Americas. Nothing was known about the life history of either form, but it was hoped that sufficient data might be secured to reproduce the life story of these spectacular creatures. The expedition was conducted by Doctor and Mrs. Noble of the Museum Staff. They were fortunate in finding both forms and in working out their life histories. Over forty iguanas and over two hundred frogs were shipped to the Museum alive, while twenty-five casts were made in the field. Sufficient accessories were collected to reproduce the ancient sea bed where the giant lizards now occur. Ferns, shrubbery, and other vegetation were prepared and shipped to the Museum, to furnish the basis from which will be reproduced a small section of the bank of a Dominican mountain torrent—the home of the giant tree frog.

The expedition secured a large amount of scientific data. The life histories of most of the frogs and toads of Santo Domingo were determined with more or less completeness. A new type of breeding habit was found among the hylids. Observations were made on the development of eight species of frogs and toads. About 3,500 specimens of reptiles and amphibians were secured, including several interesting new species. The photographic results embrace 624 negatives. No one had previously attempted to photograph tropical frogs and toads at night. In this the expedition was highly successful. Both the scientific and exhibitional results far exceeded anticipations.

The expedition was known as "The Angelo Heilprin Expedition to the Dominican Republic." Its results will stand as a memorial to the geologist and philosopher, Angelo Heilprin.

During the year, 11,429 specimens were secured and acces-





DEPARTMENT OF HERPETOLOGY

GIANT TREE FROG (above); RHINOCEROS IGUANA (below)

Santo Domingo Expedition

Supported by the Angelo Heilprin Exploring Fund

sioned. The greater number of these, namely, 6,095, were received through Museum expeditions. Of the remainder,

Additions to the Collection

2,416 were secured through purchase, while 1,658 were donated to the Museum. The specimens obtained by exchange number 140, while the loans number a little over a thousand. The Depart-

ment is indebted to many friends for this increase of more than 5,000 specimens over the splendid record of last year. Among the first of these should be mentioned Mr. Thomas Hallinan, who personally collected 928 reptiles and amphibians and donated them to the Department. At the suggestion of the Department, Mr. Hallinan made an exhaustive investigation of the Gopher Turtle burrows of Florida, and has deposited in the Museum the results of his studies. Among the other naturalists who have contributed specimens and data to the Department, are: Mr. Jay A. Weber, who made a trip last spring to the southern and southwestern states; Mr. F. E. Watson, who brought back 107 reptiles and amphibians from Haiti, although primarily engaged in his entomological researches, and Mr. Clyde L. Patch, formerly of this Museum, who donated a collection of rare Canadian salamanders. One of the most important gifts of foreign material was a collection of African Crocodilia made by Mr. Irving K. Taylor. Some of the old friends of the Department have made further donations this year. Colonel M. L. Crimmins, Mr. Ernest Thompson Seton, Professor L. A. Mannhardt, Professor A. R. Cahn, Professor F. G. Speck, Mr. O. F. Quarterman, Mr. Leslie Graf, and Mr. B. T. B. Hyde were especially generous.

More material was secured by expeditions this year than during any previous year. The Third Asiatic Expedition secured a splendid collection of 1,969 reptiles and amphibians, well preserved and accompanied by full data. The Whitney South Sea Expedition, primarily engaged in bird work, secured 225 reptiles. The Angelo Heilprin Expedition brought together the 3,500 reptiles and amphibians already mentioned, besides some mammals, birds, fishes, and invertebrates.

Considerable satisfaction is felt in the new exchange relations established this year. Material has been received from the Canterbury Museum, Christchurch, New Zealand; the Bernice P. Bishop Museum, Honolulu, Hawaii; the Instituto Oswaldo Cruz, Bello Horizonte, Minas Geraes, Brazil; and from Dr. Karl Wein-

gand, of Württemberg. Exchanges with American institutions continued as usual. Eighteen specimens were received from the California Academy of Sciences, seven from the Museum of Zoology, University of Michigan, and four from New York University.

Several important collections of reptiles and amphibians were purchased this year. These include a collection of 1,132 specimens secured in Ecuador by Mr. G. H. H. Tate; another Ecuadorian collection of 130 specimens; a Peruvian collection of 693 specimens; a Brazilian collection of 99 amphibians; another Brazilian collection of 153 specimens, and several European and American collections numbering collectively nearly two hundred specimens.

Last year a complete rearrangement of our study collections was commenced. The work continued throughout the year, and is now complete except for a redistribution of the turtles. The lizard collection was moved to the new storeroom, arranged in the new trays, shelved and labeled. The collection is now placed systematically in dust-tight cases. The snake collection has been spread out to cover the shelves formerly occupied by the lizards. The cases occupied by the Amphibia were labeled, while all tanks have been reëxamined and labeled. Constant attention is necessary for any large collection of alcoholic specimens.

Although this work has required much of the time of every Department member, Mr. Schmidt and Mr. Ortenburger gave it their special consideration. The routine work of accessioning, tagging and shelving incoming material absorbed most of their time. Few realize the great amount of purely mechanical work which must precede any technical or exhibition work.

In anticipation of the new Hall of Reptiles and Amphibians, to occupy the third floor of the southwest wing now under construction, every effort was made this year to develop new exhibits. Three major habitat groups were planned, the field work carried out and the groups well started. All of these, it is hoped, will be completed during the coming year. The first group illustrates the home life of the Rhinoceros Iguana, a huge three-horned lizard. Very few people realize that lizards lay eggs, and no group at present in the Museum illustrates this feature. Rhinoceros Iguanas were found by the Angelo Heilprin

Expedition to live along the borders of a dead sea in Santo Domingo, digging their burrows through cliffs of extremely well preserved fossil corals. A section of this impressive region is to be reproduced in this group. As the Rhinoceros Iguanas live in small colonies, it is possible to illustrate the chief features of the biology of this saurian without overcrowding the group unnaturally or detracting from the artistic effect.

The second group will contrast the two chief types of life history found among the frogs and toads. Many frogs lay small eggs, and always in ponds, streams or other water. These develop into tadpoles, which after a more or less protracted period change into tiny froglets. On the other hand, other frogs lay large eggs, and always on land, generally in moist situations. These do not develop into tadpoles, but hatch out as fully formed frogs. It so happens that in Santo Domingo there occur two spectacular tree frogs, which, although they live side by side, exhibit these two extremes of breeding habit. One is the largest tree frog in the world and the other is one of the largest of the tadpoleless frogs. They occur together near mountain torrents. It is planned to reproduce a small section of one of the mountain ravines of Santo Domingo, especially studied by the Angelo Heilprin Expe-Material for the group was not brought back to the Museum until the first of November, but by the end of the year the group was well started.

The third group illustrates one of striking examples of mimicry found among the snakes, and gives the visitor a glimpse of the conditions under which the sea snakes generally live. Many sea snakes are conspicuously cross-banded with black. It has been assumed that this was a warning coloration, for sea snakes are poisonous. On the same East Indian reefs frequented by the sea snakes is found an eel having an almost identical coloration. It has been assumed that the eel mimics the snake's color and gains protection against its enemies, but it is more probable that the coloration of both eel and sea snake is in some way controlled, possibly molded, by the environment.

Early in the year, before the construction of these habitat groups was begun, an effort was made to secure and prepare material for the synoptic series and for our exhibit of "Reptiles and Amphibians Found Within Fifty Miles of New York City." Forty-nine specimens were thus prepared. Perhaps the most

striking specimens placed on exhibition this year were a giant Galapagos Tortoise and an enlarged model of the Surinam Toad, showing a female with the young in the act of hatching from pockets in their parent's back. A large series of specimens were prepared during the year in the Department of Preparation. A method was devised by Mr. Escherich for mounting a snake skin in such a way that the scales do not curl or appear abnormal on drying. Among the snakes mounted and placed on exhibition this year were a large Boa Constrictor, and a Western Tree Snake mounted in the act of shedding its skin. Two Jamaican Iguanas and three Dominican Spike-Tailed Iguanas soon will be installed in a synoptic group of Iguanas. Six other reptiles were prepared for the general synoptic series. Casts were made of fifteen sala-These have been carefully colored and placed in manders. temporary exhibits. Through the courtesy of the Department of Lower Invertebrates, models of the spotted salamander eggs were reproduced in glass. They eventually will form part of one of the small habitat groups in the corridor of local reptiles at the south end of the new hall. Seven frogs and eight snakes reproduced in wax have been placed temporarily in the synoptic cases. Others were prepared but have not vet been placed on exhibition.

Lastly it should be mentioned that photographs necessary for the completion of the Sphenodon Group have been secured, while additional material for the Gopher Turtle Group was received and prepared during the year.

For a long time it has been fully realized that the present quarters of the Department are much too restricted for efficient

New Technique and Equipment or even convenient work. For that reason no effort has been made to add any equipment which would crowd our limited space, even though the equipment was necessary for effective work. Distributional studies require little apparatus, but when one turns

to any other phase of herpetology: morphology, embryology, or physiology, equipment is essential. The Department published some morphological studies in 1922, and has work on other morphological problems in progress. The need for equipment was so urgent that some material (chemicals, stains, scales and other apparatus) was purchased during the year. It is hoped that the completion of the new wing will relieve this congestion, permitting the Department to function to its fullest extent. Some

improvement was made in our present quarters this year. Mr. Ortenburger installed a new injecting apparatus which will mean a great saving of time and labor over the old method of syringe injection. Mr. Ortenburger has been experimenting with celluloid varnishes to be utilized in coating the labels on the glassware. His experiments have proven very satisfactory. It is expected that the repeated relabeling of jars will soon be eliminated.

Thanks to the kindness of Dr. Howard A. Kelly, of Johns Hopkins University, the Department was loaned a large studio camera and lens. This will be used by Mr. Ortenburger in making studies for his monograph of the Black Snakes and Racers.

The collections are now in such good order that they are extensively used by visiting herpetologists as well as by members

of the staff. Among those who utilized the collections this year are Miss D. Cochran of the United States National Museum, Dr. E. R. Dunn of Smith College, and Dr. A. Amaral of Butantan, Brazil.

Local field naturalists are finding the collections of great use to them in the problems of distribution and variability.

- Mr. C. L. Camp completed his work on the Osteology and Myology of the Lacertilia, and has presented his results for publication. These researches were carried on in the Department under the direction of Dr. W. K. Gregory. The results include an exhaustive treatise of the classification of the Lacertilia based upon osteological and myological data.
- Mr. K. P. Schmidt continued his work on the lizards of south-western United States, and before leaving the Museum last July had completed a review of the genera *Holbrookia* and *Uta*. He also continued his work on the reptiles secured by the Whitney South Sea Expedition.
- Mr. Ortenburger, while primarily engaged in a study of the reptiles secured by the Third Asiatic Expedition, has devoted much time toward the completion of his monograph of the Black Snakes and Racers. This work was begun over two years ago at the University of Michigan, and when completed will embrace a full account of our knowledge in regard to two groups of well known and yet much confused North American snakes.

The Associate Curator continued his work on neotropical herpetology. He also carried out an intensive study of the life history of two local and yet little known batrachians: the Anderson

Tree Frog and the Spade-foot Toad. His morphological investigations on the Geckos and Salientia continued. A paper on the Amphibian carpus and tarsus is well under way. Progress was made on the second part of his "Phylogeny of the Salientia." The laboratory work was interrupted by three months of field investigation in Santo Domingo. Since the Associate Curator's return from the field in November, he has been engaged chiefly in a study of the material secured. A paper on the new species of frogs and toads discovered by the expedition has been presented for publication.

Three papers were published in the *Bulletin* this year by the Department staff. One is "A Review of the North American Genus of Lizards Holbrookia" by Mr. Schmidt. Another by Mr. Schmidt deals with "The Amphibians and Reptiles of Lower California and the Neighboring Islands." The third paper is by Dr. Noble. It is entitled "The Phylogeny of the Salientia, 1. The Osteology and Thigh Musculature; Their Bearing on Classification and Phylogeny." Two papers were published in *Copeia*, one by Mr. Schmidt on a "Second Report on Lizards Secured by the Whitney South Sea Expedition"; the other by Mr. Ortenburger, entitled "Some Cases of Albinism in Snakes."

Several papers by Department members are in press. The most extensive is by Mr. Camp, entitled "The Classification of the Lacertilia." A paper by Dr. Noble on "Six New Batrachians from the Dominican Republic" will appear soon in *Novitates*: another by Dr. Noble on "Voice as a Factor in the Mating of Batrachians" has been accepted by *Science* for publication.

BIRDS*

FRANK M. CHAPMAN, Curator

Both in the field and in the Museum the year has been one of steady progress in the development of the plans of our Department. It has been our policy to select definite problems for investigation, and to pursue them consistently rather than to take such minor tasks as might be based on a single collection or short expedition. Our energies in the main, therefore, have been directed toward the completion of the important monographs on the bird-life of South America, both marine and terrestrial, and of Africa, Polynesia, and the New York region, in the belief that such works have a greater and more enduring value than less intensive studies based on inadequate collections and incomplete field work.

Equipped with a satisfactory vessel, the power-schooner "France," the naturalists of the expedition greatly extended their field and multiplied their successes during 1922. The most notable single trip made by Messrs. Beck Whitney South Šea and Quayle was a long eastward journey to the Expedition little known islands of Oeno, Henderson, Pitcairn, and Ducie, which form the southeastern limit of Polynesia. Here sea birds of several rare species were found in great Not only were adequate collections made, but many interesting and valuable observations on the environment and the life-histories of the birds were entered in the field notebooks. Much of this information, and the striking photographs made by Mr. Beck, have been published from time to time in Natural History.

Of no less interest were supplementary voyages to numerous islands of the Tuamotu, Austral, and Marquesas groups. Some of these were worked over for the first time; others had been visited previously by Mr. Beck, who made a second call to take advantage of seasonal changes in the bird population, whether of breeding residents or of migrants.

^{*}Under the Department of Ornithology (see also pages 214 to 216),

Many species which are accounted great rarities, such as the Polynesian sandpiper and ground dove, were added to the expedition's list during the year. The necessity for undertaking such a survey now, rather than at some time in the future, is indicated by Mr. Beck's report on the contemporary process of extermination which is even now going on at some of the pearl islands of the Tuamotus, and elsewhere.

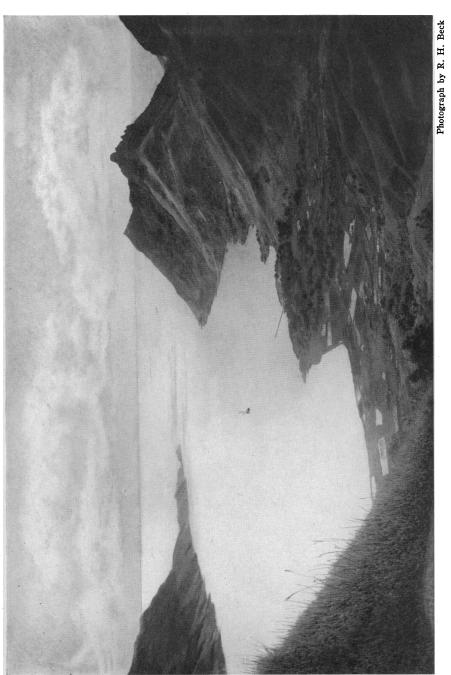
A detailed report to date on the work of the Whitney South Sea Expedition, which is generously maintained by Mr. Harry Payne Whitney, was published in *Science* for December 22, 1922. The "France" has returned recently from the Marquesas Islands, and is refitting for the inauguration of the next year's work at the western islands of the Society group.

Mr. José G. Correia, who conducted field work for the Museum at the Azores during 1921, has subsequently made a journey to the Cape Verde Islands. Working upon six of the main islands of this archipelago, and upon numerous Cape Verde Islands outlying islets, he prepared a collection of several Expedition hundred bird skins, which have all been received by the Museum. The collection is particularly rich in water birds, including boobies, tropic birds, and no less than six kinds of petrels. They are of particular importance because many of the early European naturalists, such as Linnæus, Gmelin, and Lesson, based their original descriptions of marine species upon specimens from the eastern side of the tropical Atlantic. Cape Verde resident forms are in many instances topotypical, and they greatly facilitate the identification of sea birds from other parts of the world. Hitherto, birds from the Cape Verde Islands or their vicinity have been very poorly represented in the museums of the United States.

On June 20, 1922, Dr. Frank M. Chapman, with Mr. George K. Cherrie and Captain Geoffrey O'Connell, who was detailed by the War Department to act as topographer, left New York for Ecuador, and returned to this city on September 24.

The expedition was designed to advance our biological survey of the Andes by personal examination of localities visited by former collectors, as well as by the acquisition of specimens.

Headquarters were first made in Guayaquil, whence, with the cooperation of Dr. Herman B. Parker of that city, a recon-



DEPARTMENT OF ORNITHOLOGY

AHUREI BAY, RAPA ISLAND, POLYNESIA

Expedition Contribution of Mr. Harry Payne Whitney Whitney South Sea Expedition

naissance was made in the Chongon Hills to the northwest. A second expedition was made by launch with Mr. W. H. Tweedy down the Gulf of Guayaquil to Santa Clara Island. This covered virgin territory, so far as ornithology is concerned, and resulted in the addition of about one dozen birds to the known fauna of Ecuador, and also established the presence in large numbers of various species of shore-birds which are known to breed only north of the Arctic Circle.

The third expedition from Guayaquil as a center was made up the Chimbo Valley to Pallatanga. On this trip specimens were secured of the extremely local Buarremon inornata, believed to be a mutant form of Buarremon brunneinucha; and data were obtained concerning the factors which govern the distribution of life, of high importance in determining the boundaries of life zones in this interesting region. The expedition then made its base at Quito, where it was most hospitably received by Mr. Ludovic Söderstrom, the veteran naturalist of that city. Here, with the aid of mules, horses and arrieros supplied by Señor Jijon, of Quito, reconnaissances were made to the Cañon of the Guaillamba and the Mojanda Mountains, at the northwest base of Pichincha at Verdecocha; also the classic collecting localities in the vicinity of Quito were visited.

While with Mr. Söderstrom, an opportunity was given not only to examine his collection of birds, but to take from it, at our own price, any specimens which we might desire. We thereby secured some 200 exceptionally valuable additions to our growing Ecuadorian collections, many of which were not before represented in the Museum. We also made a study of the activities of local native collectors-through whom have come a very large proportion of specimens of birds which are contained in museumslearning their methods and particularly the localities in which they work and the names they give to them. Arrangements were made with one group of these collectors, Señor Olalla and his four sons, to collect specimens in eastern Ecuador, whence we have practically no material in the Museum. As a whole, therefore, in view of the comparatively short time we were in the field, the work of the Ecuador Expedition was attended by important results.

Mt. Itatiaya, lying between Rio de Janeiro and São Paulo, is one of the highest mountains in South America, outside the

Andean system. In our study of the origin of zonal life, it was particularly important that we should have, for com-

Expedition to Mt. Itatiaya, Brazil

parison with the bird-life of the Andes, the results of investigations of zonal life in an independent mountain group. We therefore took advantage of the presence in Brazil of Mr. Ernest G. Holt, formerly connected with the Biological Survey at

Washington, to make for us a representative collection of the birds of Mt. Itatiaya, as well as to report on the character of the country in which they were found, and on their distribution. Mr. Holt has sent us a collection of some 500 specimens of the species known to Mt. Itatiaya, and is now preparing his report upon the country and its bird-life.

In compliance with our instructions, Mr. Harry Watkins reached Paita in northwestern Peru in September.

Expedition to Peru

The plan under which he will operate includes the establishment of a series of collecting stations from Paita to humid Amazonia at Tutumberos.

This section will be of the first importance in our attempt to determine the origin of west Ecuadorian bird-life. The Pass over the Western Andes, between Paita and Huancabamba, is reported to be lower than that of any part of the Andes, from southern Chile to the end of the chain in Colombia. The information we have already received from Mr. Watkins is exceedingly encouraging, and induces the belief that we have actually found here a still existing connection between the fauna of Amazonia and that of the Pacific coast.

Under date of December 26, Mr. Watkins wired that a collection was on the way. It contains the results of some two months' work on the Pacific slope of the Western Andes at Palambla, on the summit of this range, and at Huancabamba. Mr. Watkins has now returned to the interior, and from Huancabamba will continue his labors eastward to Chinchipe, thence southward to the Marañon, and down that stream to the heavy Amazonian forests.

During the summer, Dr. Jonathan Dwight, Research Associate, worked for some time at the British Museum in preparing his

Visits to Other Museums important monograph of the Gulls of the World, and Mrs. E. M. B. Reichenberger, Research Assistant, studied at the museums of Munich, Vienna, Frankfurt, Tring, and London, in connection with a

report on the Roosevelt Expeditions, which she is preparing with the coöperation of Mr. George K. Cherrie.

At times during the year members of the staff have visited the museums in Cambridge, Philadelphia, Pittsburgh, Chicago, and Washington, to examine the collections contained therein.

The most important collections received from our field expeditions include 2,304 specimens from the Whitney South Sea Ex-

Additions to the Collections

pedition, giving us now a larger number of specimens from Polynesia than are contained in all the other museums of the world; and some 2,500 specimens from Ecuador, making our collections from that

country more complete than that of any other museum. Through exchange we have received from the Bishop Museum of Honolulu, 329 specimens of Hawaiian birds, comparatively few of which have heretofore been represented in our collections. Through continued exchange with that museum, and from other sources, we hope eventually to have an essentially complete representation of the Hawaiian avifauna.

An important exchange has also been arranged with the Brooklyn Museum whereby we shall receive a large collection of South American study skins, chiefly from the Orinoco region.

Among the specimens received by gift, especial attention should be called to the extinct *Nestor productus* donated by Mr. J. Sanford Barnes, as well as to 163 specimens from Africa, the gift of Mr. Irving K. Taylor, and 91 specimens from Dr. L. C. Sanford, collected by himself in the Bahamas.

With the exception of those most recently received, all the collections acquired during the year have been catalogued.

Care of the Collections

We are greatly handicapped by lack of adequate storage facilities, but as far as space permits, the specimens are well cared for. The rearrangement of the study collection, which was completed last year, and the establishment of a type series, have greatly facilitated reference to our birds, and thereby added to their working value.

The time of the Curator, which has been available for study, has been employed chiefly on his *Bulletin* on the Birds of Ecuador.

Research During the course of this investigation, subjects arise which it seems desirable to treat monographically; chief among these have been productive studies of the distribution of the Motmots, and of mutation among birds in the genus Buarremon.

Mr. Miller continued his study of the pterylosis of the wing, etc., the aftershaft, viscera (particularly intestinal cæca), chiefly from several hundred fresh birds; also on the classification of the woodpeckers and their allies, and on Ramphocænus and related forms. A paper on "Variations in the Structure of the Aftershaft and their Taxonomic Value" was prepared for the annual meeting of the American Ornithologists' Union. Mr. Miller has also taken charge of the details of an exchange between this museum and the Brooklyn Museum, and has completed his selection of the duplicates available from that museum.

Dr. Murphy devoted his time to his important systematic work on South American marine and littoral birds, and prepared a report of progress on the work of the Whitney Expedition, also a paper on the birds of the Azores, as well as one on the Cape Verde Islands.

Dr. Chapin, after returning from Europe at the end of January, 1922, resumed work on his monograph of the birds of the Congo region. A list of all species and subspecies of birds now known from this area, with a condensed statement of their range, was prepared. This list comprises 1,053 distinct species, of which the American Museum Expedition alone secured about two-thirds. Dr. Chapin has concluded the introductory and ecological chapters of his monograph, and in early November they were offered as a dissertation for the doctorate in philosophy at Columbia University. As an immediate product of his systematic studies, a paper has been prepared on the species and geographic races of Steganura, as well as one on Size Variation in the genus Pyrenestes.

Mr. Griscom devoted the major portion of the year to the preparation of a Guide to our Local Collections, which, at the same time, will form an authoritative handbook on the birds of the New York City region.

Dr. Dwight, Research Associate, completed a monograph on the Gulls of the World, embodying the result of several years of research.

Mrs. Reichenberger, Research Assistant, continued her study of the birds of the Matto Grosso region, contained in the Roosevelt collections, and added greatly to the value of her determinations by comparison of our specimens with type species contained in European museums.

The following papers, based chiefly on a study of Museum material, were published by members of the Department staff during the year:

By Dr. Frank M. Chapman, two in American Museum Novitates and one in Natural History; by Dr. Robert Cushman Murphy, one each in the Brooklyn Museum Quarterly, Auk, National Geographic Magazine, Natural History, Bulletin of The American Museum of Natural History, and Science, also nine shorter articles and notes; by Mr. James P. Chapin, one each in the American Museum Novitates, Auk, and Ibis; by Mr. Ludlow Griscom, two in the Auk.

Fifteen papers were presented by members of the staff before various scientific societies, chiefly the American Ornithologists'

Union: Four by Dr. Frank M. Chapman, one by Mr. Waldron DeWitt Miller, four by Dr. Robert Cushman Murphy, two by Mr. James P. Chapin, two by Mr. Ludlow Griscom, one by Dr. Jonathan Dwight, and one by Mrs. E. M. B. Reichenberger.

An article by Dr. Chapman, "The Distribution of Motmots of the Genus *Momotus*," two articles by Mr. Chapin, and one by Mr. Griscom are in press.

The spirit of coöperation which exists between this department and the corresponding departments of sister museums, enables us to draw on them for such specimens, needed in our studies, as are not contained in our own collections, and in return for the privilege of examining this material we freely meet the demands of our colleagues for such specimens as they may require in their investigations. During the past year, therefore, we have loaned material to practically all the working bird departments in the museums of this country as well as to some abroad.

Under the head of Office Routine are included correspondence, and information and assistance given to those who apply for it personally.

Office Routine

One of the penalties of the close contact which this Museum has with the public is the number of calls which are made upon us for information in regard to all matters pertaining to ornithology. In short, this department has become a Bureau of Information for the press and public concerning every phase of bird life, including not only identification of

species, but advice as to where they may be found, data concerning the bird laws and their enforcement, and various other questions affecting the relation of birds to man. While of necessity much time is required to meet these demands upon us, we feel that in their extent we have a measure of our practical value to the public, and as such we therefore welcome them.

Our card catalogue of references to the descriptions of new species, and to the literature of ornithology, has been kept up to date by Mrs. Fraser, and forms an indispensable part of our department equipment.

Mrs. Fraser also acts as librarian to the Department, binds our authors' separates and keeps our very large collection of literature of this kind up to date; the whole forming a valuable working tool.

Lack of space has discouraged any attempt to add to our exhibits; but specimens which have been received in the flesh—chiefly from the New York Zoological Society—have been mounted when it was deemed advisable, to make additions to our collections.

The staff meetings, which were inaugurated in April, 1921, have been continued through the year. These meetings are taken charge of in turn by members of the staff, who present the results of their work for discussion. Papers which are to be given before scientific societies are often previously read at the staff meetings, in order that all may benefit by the criticism and suggestions there presented. Departmental matters are also brought before the staff meetings for discussion, and these meetings develop not only a unity of feeling but give to each member of the staff the coöperative and constructive criticism of his colleagues.

MAMMALS*

ROY C. Andrews, Associate Curator of Mammals of the Eastern Hemisphere

H. E. Anthony, Associate Curator of Mammals of the Western Hemisphere

The total number of specimens received is 2,829, acquired in the following manner: by expedition, 1,567; by purchase, 1,037; by gift, nearly 200, including a number from the New York Zoological Park and from the Department of Parks; by exchange, 39. The most noteworthy of these accessions are, Third Asiatic Expedition, 1,002; field work in Ecuador, about 1,700 specimens collected; by expedition to Africa, 5 gorillas; by local expedition (Mr. Goodwin), 145; by purchase, from Mr. James L. Clark, 136 African mammals; by expedition to Santo Domingo, 100 bats; by purchase from Mr. Kleinschmidt, 4 Alaska Brown Bears and 6 Steller's Sea-lions.

Mr. Roy Chapman Andrews, Associate Curator of Mammals of the Eastern Hemisphere, in charge of the Third Asiatic Expedition, has carried on work in China during the entire year. One large shipment of mammals was received in 1922 from Mr. Andrews, and a smaller shipment from Mr. Caldwell, who has been collecting for Mr. Andrews. The total number of mammals received from the expedition, for 1922, is 1,122 (including the Caldwell shipment). There is no question that this collection contains many rare and interesting species and doubtless some new to science, while it is expected that some of the mammals will be used for groups in the new Hall of Asiatic Mammals.

Mr. H. E. Anthony, Associate Curator of Mammals of the Western Hemisphere, has throughout the year acted in charge of the entire department. This has entailed the expenditure of considerable time, not only upon matters of general routine, but upon items falling within the province of the Eastern Hemisphere, which, in the absence of Associate Curator Andrews, called for immediate attention. Because of these additional duties, Mr.

^{*}Under the Department of Mammalogy (see also pages 216 to 218).

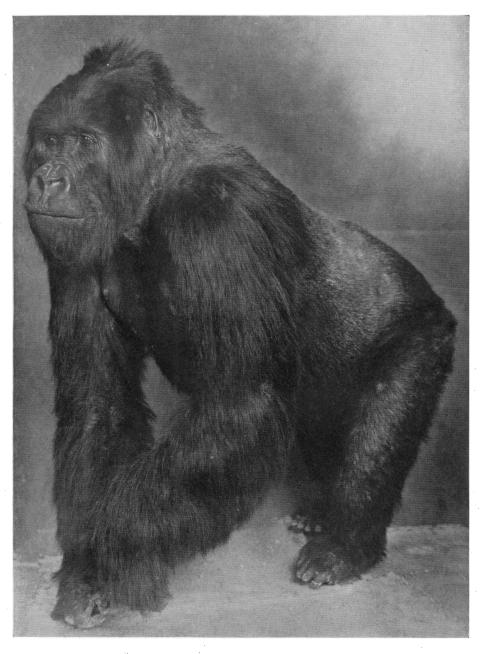
Anthony was unable to do any field work, personally, during 1922, but carried on the work in Ecuador by sending a field collector, Mr. G. H. H. Tate, south early in the year. Mr. Tate has done exceedingly well, remaining in Ecuador until the close of the year; he was joined in August by Mr. H. E. Wickenheiser. mammals collected by these two men will number more than 1,700 specimens, which makes 1922 one of the banner years for South American mammals. The itinerary of these field collectors was planned to cover many of the classical type localities of earlier workers, and, in addition to securing valuable topotypes, many forms new to science have been secured. The result of the year's work in Ecuador will be a notable advance toward the completion of the plan to monograph the mammals of Ecuador; and it is a safe assertion that the American Museum has in its Ecuadorian collection the finest series of mammals from a single South American country possessed by any museum in the world.

Research upon the Ecuadorian collections has been carried on whenever press of other duties has allowed; this includes preliminary identification, description of new genera and species, and preparation of text-figures.

Mr. Carl E. Akeley returned early in 1922 from his expedition to Africa for the purpose of studying the gorilla and securing material for a habitat group. Mr. Akeley was eminently successful in his quest and brought back an abundance of valuable material, including five specimens of the gorilla and motion pictures of the living animals.

Mr. Herbert Lang, Assistant Curator of Mammals of the Eastern Hemisphere, spent the greater part of 1922 bringing toward completion the series of Congo reports. In September he left for an extended vacation in British Guiana, planning to return early in 1923. While not on an official Museum expedition, Mr. Lang planned to make comparisons between the tropical rain forests of the Congo and of British Guiana. The collecting of mammals was to be incidental and the primary purpose was photography. Recent letters from Mr. Lang reported that he was about ready to undertake the ascent of Mt. Roraima and had already made a small collection of mammals.

Mr. Harry C. Raven carried on field work in Australia for the Department of Mammals during the entire year. He has been very successful, and the collections of the Department of Mam-



DEPARTMENT OF MAMMALOGY
GORILLA FROM MOUNT KARISIMBI, CENTRAL AFRICA
Collected and mounted by Carl E. Akeley, Akeley African Expedition
Supported by Mr. Ogden Mills, the Jesup Fund and Mr. Carl E. Akeley

mals will be greatly enriched by the expedition. Mr. Raven will return to New York early in 1923.

Through the generosity of Colonel J. C. Faunthorpe, resident Commissioner of Lucknow, the Faunthorpe Indian Expedition has been organized. The Department expects to receive very valuable accessions of the mammalian fauna of India, also of the avian fauna, which will be mounted in the new Asiatic Hall to be completed in 1924. The expedition is headed by Colonel J. C. Faunthorpe, and Mr. Vernay joined him on January first for four months' work in the field, the object being to collect as many species of the mammals as possible, but with special emphasis to be laid upon the tiger, the lion, the rhinoceros, the sloth bear, the gaur ox, and the different deer and antelope. Mr. John Jonas, an experienced taxidermist, was selected to accompany the party and take care of the material for the Museum. Many splendid groups for the new hall of Asiatic mammals are expected as the result of this expedition.

Mr. George Goodwin, department assistant, spent most of his annual vacation collecting mammals for the Museum, in the Adirondacks, and at other times in New Jersey. He secured some 145 specimens, among other species two beaver.

A great deal of the time and efforts of the two department assistants, Mr. Goodwin and Mr. Carter, have, as in 1921, been concentrated upon the care and arrangement of the research collections.

The cataloguing of new material has been kept up to date, and considerable recataloguing of old collections has been done for the new card catalogue. Rearranging of the series, to conform with the new storage cases and the ever-growing general collection, has been carried on whenever possible.

The reconstruction of the entire group of rooms in the north attic has thrown upon the Department the great task of restoring and rearranging many thousands of skulls and skeletons.

The year just passed has brought the research collections much nearer the condition where adequate and suitable storage is given to every specimen. That ideal state of affairs may now be said to be truly in sight, since the contemplated installations of 1923 will make it possible.

As in 1921, plans for exhibition have been held somewhat in abeyance because of the congested condition of the existing halls.

During 1922, the Cougar group and a group showing the Muskrat have been finished, also a group of Baboons, and a group of Fur Seals which replaces the former group and includes some finely mounted specimens. Material for many superb groups is awaiting only the erection of new halls.

The unpublished manuscript of the late Dr. J. A. Allen, dealing with the mammals of the Congo Expedition, has been arranged by Mr. Herbert Lang for publication in a memorial volume of the Bulletin. Two parts of this volume have already been printed; the third and final part is in press. This memorial volume will appear as a posthumous publication of the last work done by the late Curator of this department.

Mr. Andrews has been in the field throughout the year and his opportunities for publication have therefore been limited. He has written several popular accounts of the work in China which have appeared in *Asia*.

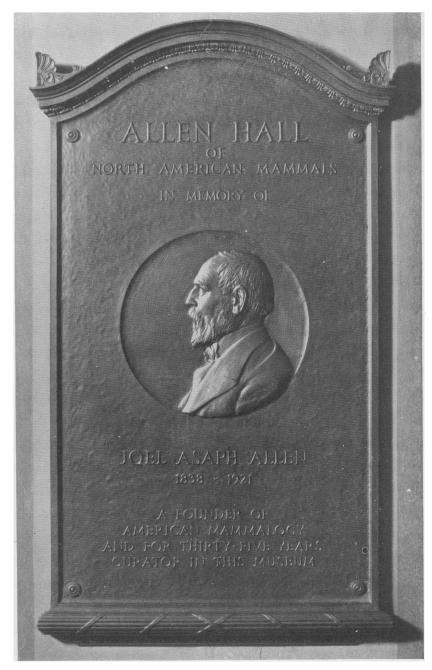
Mr. Anthony has confined most of his research activities to the mammals of Ecuador, but has published papers on several other subjects as well. His publications for 1922 include several articles in Natural History, two in the Journal of Mammalogy and several in Novitates. At the close of the year he had in galley proof two important papers in Novitates and had partly ready a third upon a new fossil Perissodactyl from Peru, while copy for an article in Natural History was in the hands of the editor.

Mr. Carl E. Akeley, Associate in Mammalogy, published a series of four popular articles based upon his expedition to Africa for gorilla. These appeared in the June, July, August and September numbers of *World's Work* and were also published in England, in the English edition of the same magazine.

Mr. Lang has been occupied with the Congo reports. While he himself has published very little for the year of a technical nature, he has had the supervision of a great mass of publications based upon his collections, and this has demanded most of his time.

The publications of the Department for 1922 were: By Mr. Roy C. Andrews, three in Asia, and two in Natural History; by

Mr. Roy C. Andrews and Dr. W. D. Matthew, one in Asia; by Mr. H. E. Anthony, two in Novitates, one in the Journal of Mammalogy, and one in Natural History;



DEPARTMENT OF MAMMALOGY

TABLET

Erected by the Trustees in memory of Doctor Joel Asaph Allen, Curator in the American Museum for thirty-five years by Professor Henry Fairfield Osborn and Mr. Harold Elmer Anthony, one in the Journal of Mammalogy and one in Natural History; by Mr. Herbert Lang, one each in the Journal of Mammalogy, Bulletin of The American Museum of Natural History, Natural History, The New York Sun, and World's Work.

Numerous lectures and papers before popular audiences and before scientific bodies have been presented by members of the Department of Mammals.

Other Activities of Staff Members Mr. Carl E. Akeley has lectured very extensively upon his important expedition after gorilla.

Mr. Anthony collaborated with President Osborn

in a joint paper before the annual meeting of the American Society of Mammalogists in May, the subject being "The Close of the Age of Mammals." Before the annual conference of the American Game Protective Association, Mr. Anthony presented "Some Aspects of the Close of the Age of Mammals" while acting as Museum delegate to the conference. At the May meeting of the Mammalogists, Mr. Anthony assisted in the campaign to raise a memorial to Dr. J. A. Allen, and he was appointed by the Society as a member of the Central Committee for the J. A. Allen Memorial Fund. Later he became secretary and treasurer of the Central Committee.

The American Museum arranged a special exhibition of mammal photographs which were on display during May and June. Upon Mr. Lang devolved the task of arranging for this exhibit, because Mr. Anthony, Chairman of the Committee, was absent from the Museum during the weeks that the photographs were being assembled. Mr. Lang succeeded beyond the fondest expectations, and a wonderful display of photographs was sent to the Museum. About 1,650 prints were received and handled by Mr. Lang.

The outstanding features of the past year's work in the Department of Mammals are, the accumulation of valuable material by expeditions in the field; the completion of much preliminary research upon the mammals of Ecuador in preparation for a monograph; the bringing toward completion of the Congo reports and the publication of the memorial volume on the Congo mammals; the extensive rearrangement made in the general study collections working toward permanent, safe and accessible storage of the department material; the con-

ducting of a successful prize exhibition of mammal photographs; and campaigning for public attention upon the approaching "Close of the Age of Mammals."

EXISTING AND EXTINCT RACES OF MEN*

CLARK WISSLER, Curator

The Department of Anthropology is concerned with three groups of problems: a, the cultures, or habits and customs, of living races of men; b, archæology, or the science of extinct cultures and civilizations; and c, the anatomical characteristics of man's body. In the immediate past, the greatest emphasis in exploration and research was upon the cultures of the living, or the surviving human faunæ; archæological research was next in order, while the collection of data and material for the study of man's body was practically neglected. At present, the chief emphasis is upon archæological collecting, with increasing attention to racial anatomy. These disparities are especially obvious in our exhibition halls, where a large amount of space is given to depicting the life habits of primitive peoples, a somewhat smaller space to archæology or extinct cultures, but relatively little space to the racial constitution and history of man.

In order to make up in part for this deficiency, arrangements have been made for an exhibit of race types to be installed on the second floor. The detailed plans for this exhibit have been worked out by Assistant Curator Sullivan and are being carried through in his absence under the direction of the Curator, assisted by Dr. Milo Hellman. The sections for the Polynesian, Malayan, and Indonesian peoples are nearing completion and contain typical face casts, detailed studies of the long bones, hair form, eye color and form, ear, stature, brain capacity, etc. All these points will be demonstrated by special models. A number of life-sized figures have been added; a modeled figure of a Dakota man, a life cast of an Iroquois Indian, and of a northern European.

Also during the year the exhibition series for living races was enriched by the addition of new collections from Borneo, and the African collections were rearranged and provided with labels. The mural work for the Jesup North Pacific Hall has progressed to the completion of the first large end panel and work begun upon the final canvas. Further, the necessary architectural

^{*}Under the Department of Anthropology (see also pages 218 to 222).

alterations in this hall, for the complete installing of totem poles and other carvings, have been made. The other large exhibition project, the group for the Navajo Indians, still awaits the modeling of the full complement of human figures, but we are able to report that five of these figures have been completed and are ready for painting. The Mexican Hall was improved by the installation of three models of Maya temples: The Temple of the Cross, Palenque; the Red House, Chichen Itza; and a typical temple, Tikal. These models were designed and executed by Mr. Horter under the direction of former Associate Curator Herbert I. Spinden. Mr. Clarence L. Hay, Research Associate in Mexican Archæology, has made progress with a special chronological exhibit to show the succession and development of several culture periods in ancient Mexico. Associate Curator N. C. Nelson made progress with the installation of material from the Old Stone Age, completing a section on the early archæology of Egypt, one on northwest Africa, and one summarizing the development of man during the period. The remainder of the time was taken up with the preparation of labels and maps for these exhibits and in the selection of suitable material for mural decorations, a number of which have been executed by Mr. Operti. archæological material in the Eastern Woodland Hall is so arranged that the exhibition series is on view in the case while the storage and study series pertaining to the same localities may be found in the cabinets underneath. Mr. Howard McCormick has continued work on the model of the Aztec Ruin. It is hoped that this will be ready for installation early in the year.

One hundred nine accessions were received for the year, as follows: gifts, seventy-nine; purchases, twenty-four; exchanges, three; field collections, three. Most of these were small individual specimens or lots, yet in the aggregate they are of considerable importance. The most notable contributions are those made by Mr. Charles L. Bernheimer, consisting of archæological specimens from Southwestern United States, and a large North American archæological collection, received by bequest from the late Miss Mary A. Booth. The anatomical collections were greatly strengthened by a series of Australian skulls, skulls and skeletons from the Crow Indians, and a series of Bushmen and South African skeletons. Mention should also be made of an important archæological collection



DEPARTMENT OF ANTHROPOLOGY

The monument in the foreground is part of the front of the Temple at Chichen Itza, secured and cast by Edward Thompson. The front will be erected complete in the future Hall of Mexican Archæology

The other monuments in this hall are the gifts of the Duc de Loubat from 1896 to 1904

from Chile, secured through the kindness of Mr. P. L. Thommen. This collection was made by careful excavation and contains artifacts representing three successive periods of occupation, the most interesting of which is an early stone culture analogous to that of the Old World. A careful study of this material is under way for future publication. Finally, note should be taken of valuable acquisitions representing important phases of culture in prehistoric Europe, a large type collection from the distinguished French archæologist, Dr. L. Capitan, a number of small collections representing the bronze and early iron ages, and a model showing a reconstruction of a Lake Dwelling, presented by Mr. Ernst Koch. The special enrichment of our collections representing the earliest known forms of human culture was due to the efforts of President Henry Fairfield Osborn and Associate Curator N. C. Nelson. The latter spent six months in Europe, visiting museums, studying their collections, carefully examining the most noted archæological stations, and acquiring by exchange and purchase the necessary type specimens for the completion of the Museum's exhibit for the cultures of the Stone Ages. The data and new insights thus attained will be of the greatest possible service in the work of the Museum and will keep us in close touch with the many new advances in palæolithic research.

Mr. Charles L. Bernheimer, distinguished by his many gifts to the Museum, equipped, financed, and led a second expedition to the Rainbow Bridge district in northern Arizona and southern Utah, Mr. Morris of the Museum staff accompanying him as archæologist. The route

of the party, starting from Kayenta, lay southward to Marsh Pass, then west to the eastern base of Navajo Mountain. The real objective of the expedition was to explore the practically unknown stretch of rough country between Segi-to spring and the Rainbow Bridge. Traveling was extremely difficult, it being necessary to blast away numerous ledges to get the pack train over. Proceeding in this way, a new canyon was discovered with walls 1,500 feet high, to which Mr. Bernheimer gave the name Cliff Canyon. Here numerous pictographs pecked into the rocky walls indicated former occupation. These proved to be of both Basket Maker and Cliff Dweller type, remains of the former being found within caves in the Canyon walls. Upon the return trip the expedition visited the cliff house of Keetseel, partially ex-

plored by the Hyde Expedition in 1894. In general, then, this expedition yielded results of both geographical and archæological importance.

The Museum's archæological investigations in New Mexico and Arizona were continued under the direction of Mr. Earl H.

Archaeological Research in Southwestern United States Morris and consisted of three units: a, explorations in the La Plata Valley; b, resumption of work at the Navajo Reservation site; and c, explorations in and around Aztec. The first of these was undertaken jointly with the University of Colorado and was a continuation of plans for coöperation inter-

rupted by the late war. This season's activities were confined to a site which proved to be pre-Pueblo and which yielded very satisfactory data as to the time-relations between the several types of pottery found in the valley. Of special interest are the very primitive kiva-like structures, suggesting that even this striking character of late Pueblo culture is of ancient origin. Navajo Reservation site, to which we referred last year, proves to be especially rich; in fact, it is a key site, since here are to be found in place all the known culture periods of the San Juan area. The data, so far, confirm the chronological relations established from fragmentary sections scattered throughout the area, but their working out will no doubt reveal many new points of sequence and thus give us a complete chronology for the San Juan basin. Finally, the time remaining for work at the Aztec site was given to the study of specimens on hand, to the care of the ruin property, and to occasional excavation. Late in the year a discovery of unusual importance was made in a room adjoining the painted room noted in the report for 1920. Among other things, a well-preserved coiled basket and a perfect hafted stone ax were taken out. Since complete haftings of these axes are of rare occurrence, this is a fortunate find. But of even greater interest was the discovery of a ladder of ingenious structure. This is the first time during all the excavations at this ruin that even a trace of one has been found, though, since all the lower rooms were entered through the roof, such objects must have been numerous. Attention was also given to the preparation of a report in which the culture of these ancient people will be reconstructed.

Late in the year, Doctor Waldemar Jochelson came to the

Museum from Russia with his remaining notes on Siberian explorations in connection with the Jesup North Pacific Expedition.

The Jesup North Pacific Expedition

His time here has been devoted to the preparation of his report upon the Yukaghir and Yakut, primitive tribes of Northern Siberia. When these are printed, they will close the series of volumes dealing with this important work, the printing of which was delaved by the late war and the unfavorable conditions following in its wake. As an aid to the Museum visitor, the manuscript for a special handbook upon the natives of Siberia and the less civilized parts of Asia has been completed, the early publication of which is desirable, particularly in view of the progress now being made by the Museum's Third Asiatic Expedition.

During the summer, Curator P. E. Goddard made a field trip to the North Pacific Coast to collect totem poles and other accessories for the completion of the Jesup North Pacific Hall. This expedition was undertaken at the instance of Lieut. G. T. Emmons, distinguished for his many researches among the Indians of Alaska, who volunteered to accompany the party. Visits were made to the following tribes: the Salish, Nootka, Kwakiutl, Bella Coola, and Tsimshian. A part of the trip was made in the boat of Doctor C. F. Newcombe of Victoria, B. C., a well known authority upon the tribes of the coast. The Museum is indebted to both Lieutenant Emmons and Doctor Newcombe for the success of this expedition, as a result of which there are now available enough totem poles and carvings to complete the exhibition for the North Pacific area. In addition, illustrative data were secured for the preparation of a visitor's handbook upon the hall.

Among the other researches conducted in the Museum, note should be made of a study of South American musical instruments by Assistant Curator Charles W. Mead; an investigation of the dentition and accompanying morphology of Australian natives by Doctor Milo Hellman; finally, the compilation of anthropometric data secured upon the Hawaiian Expedition, in which the special services of Mrs. Beardsley Ruml were employed. addition to the above, Doctor Louis R. Sullivan completed a study of the Marquesas Islanders.

The following publications were issued by the Department during 1922: "Basket Designs of the Mission Indians of California." by A. L. Kroeber, Anthropological Papers, Vol. XX, Part 2: "The Material Culture of the Crow Indians," by Robert H. Lowie," Anthropological Papers, Vol. XXI, Part 3; "Crow Indian Art," by Robert H. Lowie, Anthropological Papers, Vol. XXI, Part 4; "Religion of the Crow Indians," by Robert H. Lowie, Anthropological Papers, Vol. XXV, Part 2; "The Frequency and Distribution of some Anatomical Variations in American Crania," by Louis R. Sullivan, Anthropological Papers, Vol. XXIII, Part 5; "Ancient Civilizations of Mexico and Central America," by Herbert J. Spinden, Handbook, No. 3, Second Edition, revised.

COMPARATIVE ANATOMY*

WILLIAM K. GREGORY, Curator

Mr. H. C. Raven, field representative of the Australian Expedition, has remained in Australia since June, 1921, and has made excellent collections of the native mammals Field Work in various localities in New South Wales, Queensland and Tasmania. The object of the expedition, namely, the securing of exhibition and study material for an Australian hall, is nearing accomplishment. On all sides the expedition has received the most cordial assistance from the Australian museums and museum men, but the serious depletion of the mammalian fauna and the government restrictions on collecting, set a narrow limit to the number of specimens that may be secured. Nevertheless a thoroughly representative collection is being brought together. It is planned that Mr. Raven shall collect marine birds off the western coast of Australia for the Whitney collection. and return to the Museum in the spring of 1923.

The steadily growing collection of skeletons of recent Equidæ, mounted by Mr. S. H. Chubb, has been removed from the Department of Vertebrate Palæontology and rearranged in the hall formerly occupied by the gem collection. The series has been enriched by several important additions during the past year, and in its new installation these beautiful skeletons, as well as the statues of horses by the late Erwin S. Christman and by Mr. Simons, are for the first time seen to advantage as parts of a carefully planned whole.

The cast of the skeleton of *Diprotodon*, purchased from the South Australian Museum, has been mounted by Mr. Charles Lang under the direction of Dr. Matthew and the Curator of this department. It constitutes the first exhibit for the proposed Australian Hall.

Work on the exhibits illustrating the evolution of man has been steadily carried forward, although slowly, due to the fact that this department has no regular staff of technical assistants and is mostly dependent upon overtime work by employees of

^{*}Under the Department of Comparative Anatomy (see also page 222).

other departments. Professor J. H. McGregor has set up his model of the skeleton of the Neanderthal man and has modeled the flesh upon it. Dr. A. S. Romer has completed the models of the skeletons of Seymouria, the most primitive known reptile, and of Cynognathus, an advanced mammal-like reptile, and these models have been cast by Mr. Otto Falkenbach. Dr. Romer has in preparation a series of ten models of skulls to illustrate the evolution of the human face. Four of these are completed and ready to be cast.

The plans for exhibits entitled "Man's Family Tree" and "Man's Place among the Primates" were completed, and a full-sized "dummy" was arranged. Professor J. H. McGregor has kindly undertaken to supply some of the casts and models for this exhibit, while Mr. Falkenbach is working on others. Under the direction of the Curator, Mr. Falkenbach is reconstructing from the original fossils the crushed and broken skulls and jaws of several early primates, and his remarkable skill in this work has won the formal recognition and acknowledgment of the staff of the Department of Vertebrate Palæontology.

In the course of his recent archæological tour of Europe, Mr. Nelson made repeated and persistent efforts to secure casts and replicas of various important prehistoric human remains for the exhibit in the Hall of the Age of Man, but found that only very few of the desired casts could be obtained at present.

In accordance with the request of the Department of Anthropology, the Curator has planned a synoptic exhibit, illustrating the principal stages in the evolution of the human skeleton, to serve as an introduction to a general exhibit of the Races of Man.

The educational work and the research of the Department are so closely connected that it would be difficult to treat them separately. On the more technical side may be men-

Educational tioned the following investigations:

and Research Work

The plans for Dr. G. K. Noble's article in the Museum Bulletin on "The Phylogeny of the Salientia, Part I," were worked out in conference with the Curator, and they embody as far as possible the present ideals of the Departments of Comparative Anatomy and Herpetology. Dr. Noble's studies on the origin of the alisphenoid bone of vertebrates, begun in collaboration with the Curator, have been carried on during the past year.

Dr. A. S. Romer's excellent work on "The Locomotor Apparatus of certain Primitive and Mammal-like Reptiles," published in the *Bulletin*, is not only a notable contribution to comparative myology and vertebrate palæontology, but affords a firm foundation for future studies on the osteology of reptiles and amphibians of all ages. Dr. Romer is continuing his researches on the comparative myology of recent reptiles, in order to develop the studies on the skeleton and musculature of the dinosaurs already made by the Curator.

Dr. C. L. Camp's Bulletin article on "The Classification of the Lizards" is now in press. This work, the first fruits of many years of intensive study in field and laboratory, will be of exceptional importance to the systematist, and gives a comprehensive picture of the evolution of this large and highly varied order of reptiles.

Mr. R. W. Miner has practically completed his investigations on the "Locomotor Adaptations of the Shoulder Girdle and Fore Limb of the Primitive Amphibian *Eryops*." The illustrations, including 112 pen drawings, are also completed.

Miss Helga Pearson, of the staff of University College, London, who had been studying in this department during the past eighteen months, completed her excellent work on "Some Skulls of Perchærus (Thinohyus) from the White River and John Day Formations," and returned home in November.

The molar tooth of Hesperopithecus haroldcookii Osborn, which was found in the Lower Pliocene formation in Nebraska, has aroused great interest and wide publicity. At the request of President Osborn, Dr. Milo Hellman and the Curator undertook an intensive examination of this famous specimen. Their principal results are reported in two articles published in Novitates.

The work by Dr. D. J. Morton on "The Evolution of the Human Foot," which has been planned and conducted chiefly in the laboratory of the Department, is placing the whole subject on a solid basis of fact. The departments of anatomy at Columbia and Yale Universities have also assisted materially by placing their resources at the disposal of the investigator. The first instalment of Dr. Morton's work is being published in the American Journal of Physical Anthropology.

The Curator's studies on the classification of human races have been revised and enlarged during the past year. They will be published in the second edition of his work on "The Origin and Evolution of the Human Dentition."

The Curator's paper on "A Middle Jurassic Fish Fauna from Western Cuba" has been completed.

The material for many newspaper articles and one magazine article relating to the various phases of human evolution has been supplied to reporters and other writers throughout the year by this department.

The Curator has served as Secretary and Treasurer of the Galton Society for the Study of the Origin and Evolution of Man, which holds its monthly meetings in the Osborn Library; also as secretary to the Journal Club, which also holds its meetings in the Osborn Library, for the review of recent literature in vertebrate zoölogy and palæontology. The Journal Club is proving to be a most favorable medium for the discussion of current scientific methods and discoveries, being especially valuable for the opportunity which it gives to each member of learning of the work of others and of appreciating their point of view.

The Curator and Dr. Murphy are also responsible for the arrangement of the scientific programs of the Section of Biology of the New York Academy of Sciences. The meetings during the past year have been devoted chiefly to subjects relating to human and comparative anatomy and vertebrate evolution.

The Curator has served as one of the editors of The Journal of Dental Research.

These associations and organizations afford the necessary media for the diffusion of the results of Museum work.

The Department aims not only to conduct researches in its own laboratory, but to stimulate and to provide material for investigation in other places by those most competent to undertake it. Accordingly, the Department, with the approval of the Director, has acted in a small way as a clearing house for research in certain lines, loaning necessary material to investigators and helping them to secure it through the courtesy of other institutions. In this way the Department has supplied specimens to Dr. J. Leon Williams for his investigations on the structure of enamel in mammals, to Professor Tilney for his studies on the brains of mammals, to Dr. D. J. Morton for his work on the anatomy of the foot, and to Dr. Milo Hellman for his studies of human and mammalian dental arches.

The principal accessions are: Brains, hands and feet and other organs of gorillas collected by Mr. Carl E. Akeley in 1921:

Accessions Cataloguing Office Work

the brains are being studied by Dr. Tilney and his colleagues at the College of Physicians and Surgeons, and the feet by Dr. Morton; a mounted human skeleton presented by Dr. Charles A. Leale

and one presented by Miss Hazel Kleipa; a model of an Ichthyosaur, presented by the Brooklyn Museum.

The study collection illustrating vertebrate anatomy and evolution is constantly used by members of the Departments of Vertebrate Palæontology, Herpetology and others. The cataloguing of some 981 specimens has been completed.

The steady increase in the collections has necessitated constant rearrangement and expansion of shelf room in the laboratory of the Department.

By request of the Museum and of the New York Zoölogical Park, the Curator has undertaken to arrange for the proper dis-

Coöperation with Other Institutions

tribution and partition of the specimens that die in the Park and are desired either by the Museum for its exhibition and study collections, or by the Prosector of the Park for anatomical investigation.

Since March, 1921, some 235 specimens have been distributed under this arrangement.

A number of lectures were delivered by the Curator before scientific societies, and to students, during the year.

THE LIBRARY*

RALPH W. Tower, Curator

The outstanding features of 1922 are, as last year, the gifts to the Library by Mr. Ogden Mills. These number some 52 books and include many titles which have long been listed among the Library's desiderata. Chief among these works are:

- Mémoires pour servir à L'Histoire des Insectes. Par Charles de Geer, Tomes 1-7 Stockholm 1752-1778.
- Histoire Naturelle des Oiseaux. (Planches enluminées. Par Georges Louis Leclerc de Buffon) Tomes I-X Paris 1770-1786.
- A Monograph of the Pittidæ, or Family of Ant-Thrushes. By Daniel Giraud Elliot. (Second Edition, Revised and Enlarged) 1893-1895.

The volumes are of vital importance to the research work of the institution, are handsomely bound, and of considerable intrinsic value.

The titles acquired during the year through the Anson W. Hard fund are:

Travaux de la Station Zoologique de Wimereux. Tomes 1-6. Lille. 1877-1900.

United States Exploring Expedition—1838-1842, under the command of Charles Wilkes. Volumes XIII and (XIV) with folio atlas. Crustacea by James D. Dana. 1852-1855.

Besides these and the ordinary accumulation of books, current and old, scientific and popular, the accessions are chiefly noteworthy through the enormous addition of periodicals. With the end of the war, "lacunæ" lists were placed with several dealers abroad, and this year has seen the securing of many volumes long urgently needed. The chance gaps existing in files already owned by the Library have thus been filling up, and many complete sets long searched for have eventually been secured. The Museum, already justifiably proud of its Library's collection of scientific journals, has reason for further self-congratulation this year.

Several of the more striking titles are listed below:

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

Asiatic Researches. 1788-1839.

Bibliographie Anatomique. 1893-1918.

Bulletin de la Société Géologique de Normandie. 1873-1915. Bulletin de la Société d'Histoire Naturelle de Metz. 1843-1884.

Bulletin de la Société Royale Belge de Géographie. 1877-1905. Comptes Rendus de l'Association des Anatomistes. 1899-1921. Danmarks Geologiske Undersogelse. Raekke 1-4. 1893-1920. Le Frelon. Chateauroux. 1891-1911.

Jahrbuch der Naturwissenschaften. Freiburg im Breisgau. 1885-1912.

Mémoires de la Société Géologique de France Paléontologie. 1890-1922.

Mémoires de la Société des Sciences . . . de Lille. 1827-1882. Natura. Revista di Scienze Naturali edita dalla Società Italiana di Scienze Naturali. Milano. 1909-1921.

Notizen aus dem Gebiete der Natur-und Heilkunde . . . Froriep. 1821-1897.

Proceedings of the Dorset Natural History and Antiquarian Field Club. 1877-1909.

Revue d'Entomologie. Caen. 1882-1906.

Revue d'Ethnographie. 1882-1890.

La Revue Préhistorique. Annales de Palethnologie. 1906-1911. Transactions of the Asiatic Society of Japan. 1872-1920.

Transactions of the Society of Naturalists at the Imperial Kazan University. 1871-1899.

Zeitschrift der Deutschen Morgenländischen Gesellschaft. 1846-1921

Zeitschrift für Naturwissenschaft . . . Halle. 1853-1913.

The year has been marked by steady growth, 3,566 volumes having been added to the collections during the twelvemonth, and by necessary routine activity, rather than by any unusual incident or the inauguration of any of the several new systems which are projected for the perfection of library methods.

Crowded stacks have necessitated a general readjustment, and this slow and laborious task of moving has been well begun. Moreover, the apparently unending work of installing the new charging system undertaken two years ago has gone steadily forward. This has been materially advanced through the very effi-

cient assistance which Miss Helene Stern has generously given us since November.

The Library report for 1921, being in the nature of a general résumé of department history, unfortunately failed to record the addition to its staff of Miss Constance Van Vliet. Miss Van Vliet has been a regular employee since July, 1921, and has proved of invaluable assistance.

In the Osborn Library during 1922 there were 436 accessions. The most noteworthy of the new publications was the purchase by the library of the Mémoires de la Société Paléontologique Suisse, consisting of 44 volumes, and a set of the Mémoires de la Société Géologique de France—Paléontologie, containing 24 volumes. Of interest also is the receipt of the first numbers of Palæontologia Sinica, the new publication of the Geological Survey of China.

The publications of The American Museum of Natural History for the year have been the Annual Report, Bulletin, Anthropological Papers, Novitates, Natural History—the Journal of The American Museum of Natural History, Handbook and Guide Leaflet.

The Bulletin is devoted to the publication of the results of field and laboratory work. During 1922, Bulletin Volume XLVI was issued, containing thirteen articles, of which three were devoted to Herpetology, one to Mineralogy, four to Palæontology, three to Invertebrate Zoology, one to Ichthyology and one to Comparative Anatomy. The volume consisted of seven hundred thirtyseven pages, sixty plates, one hundred twenty-seven figures and seven tables. Bulletin Volume XLV, the title of which is "Ants of the American Museum Congo Expedition, a Contribution to the Myrmecology of Africa," has also appeared during the year. The work contains nine parts which were written by Dr. William Morton Wheeler, with the collaboration of Doctors Irving W. Bailey, Joseph Bequaert, William M. Mann and F. Santschi. The volume contains eleven hundred thirty-nine pages, forty-five plates, forty-seven maps, and one hundred three text figures. Two articles have appeared of Volume XLVII, which is to be known as the Allen Memorial Volume, containing the unpublished writings of the late Dr. Joel Asaph Allen.

The American Museum Novitates are devoted to the publication of preliminary announcements and descriptions of new forms.

Twenty-three numbers were issued during 1922, with a total of one hundred eighty-one pages, forty-two text figures, and five maps. Of these, four are on Ornithology, one on Mammalogy, seven on Invertebrate Zoology, six on Vertebrate Palæontology, one on Invertebrate Palæontology, one on Lower Invertebrates, two on Ichthyology and one on Geology.

The Anthropological Papers are devoted entirely to the results of field work and other researches conducted by the staff of the Department of Anthropology. Of the five parts which have appeared during 1922, three deal with the Crow Indians, one with Mission Indian Basketry, and one with anatomical variations in American crania. The total number of pages is three hundred forty-nine, with six plates and one hundred forty-seven text figures.

Two new editions of *Handbooks* have been issued, one, the sixth edition of *Handbook* Number 4, "Animals of the Past," by F. A. Lucas, the other, the second edition of *Handbook* Number 3, "Ancient Civilizations of Mexico and Central America," by H. J. Spinden.

Three new Guide Leaflets have been added to the Series, Number 54, "Plants of Wax"; Number 55, "Basketry Designs of the Mission Indians"; and Number 56, "The Geology of New York City and Vicinity." There have also been new editions of Guide Leaflet Number 50, "Indian Beadwork" (second edition); Number 49, "The Collection of Minerals" (second edition); Number 46, "Peruvian Art" (third edition); and Number 38, "Our Common Butterflies" (fourth edition). Last year's sale of the "General Guide to the Exhibition Halls" was some 5,000 copies. The ninth edition was published in 1922.

Natural History has completed its twenty-second volume with a circulation that has greatly increased during the past year.

SUMMARY OF THE PROGRAM OF THE MUSEUM FOR THE YEARS 1923-1933

The completion of the plan of The American Museum of Natural History from Roosevelt Hall on the east to the Mexican and Central American Hall on the west is the main feature of the program for the next decade. This will be sixty-four years after the Museum was incorporated and the Charter given. It will include the Roosevelt Memorial, if the people of the City and State of New York shall so decide by vote of the entire electorate. It will include the Central Rotunda Section, entirely devoted to Astronomy, with a natural science Lecture Hall of a seating capacity adequate for the audiences of young people, of students and of adults which will assemble almost every afternoon in the week, excepting Sunday, and at least two evenings of the week. We trust that this section may be constructed as a unit and include not only the large Lecture Hall, but lesser lecture halls on the upper floor, which will be used by teachers of the schools, colleges, and universities in this community with their students and pupils.

The West Central Section should be erected by the City of New York, inasmuch as it will include the engineering houses and the heating and ventilating plant of the new sections, and especially of the Auditorium, which will be devoted wholly to the service of the City.

The Mexican and Central American Section, however, should be erected as a donation to the City, as a Memorial to one or more of the forceful men who have opened up our western territory and especially the Pacific Coast to its present remarkable civilization.

The completed American Museum building will afford an educational sequence unrivaled by any other institution in the four great subjects to which the Museum is devoted: the Early History of the Earth, the Early Animal and Plant Life of the Earth, the Present Life of the Earth, and the Prehistory of Man.

Respectfully submitted,

Henry Fairfield Osborn,

President.

FINANCES, MAINTENANCE, ENDOWMENT

There has been no material change during the year in the method of handling the Museum finances. The accounts are so kept as to show clearly the receipts and disbursements within the several funds or accounts. A complete record of the transactions will be found in the detailed report of the Treasurer on pages 122 to 135. It is highly desirable to segregate the Museum's moneys in this way because of the different restrictions that apply to their use. Thus all the money received from the City for maintenance is received and disbursed through one account, the City Maintenance Account—an important fact when the City examiner wishes to ascertain the specific purposes for which the City's appropriation was actually spent. Similarly, the Morris K. Jesup Fund Account was established to record the receipts and disbursements of the Jesup Fund Income, which must be applied solely to scientific purposes and not to operating expenses. There are five major and four minor accounts.

The major accounts are:

The Endowment and Investment Account: the capital account of the Permanent Endowment.

The General Account, through which the Trustees' general funds are received and disbursed.

The Morris K. Jesup Fund Account: the record of the receipts and disbursements for scientific work carried on through the income of the Jesup Fund.

The Special Funds Account, through which contributions for specific purposes are disbursed.

The City Maintenance Account, which records the use of the city's appropriation for operating expenses.

The minor accounts include:

The Corporate Stock Account, which shows the disbursements of moneys appropriated by the City for case construction and equipment.

The Trustees' Building Fund Account, through which the income only of the Trustees' Building Fund is disbursed.

The Crocker Land Expedition Fund Account, an inactive account pertaining to the Crocker Land Expedition.

The Incidental Account, in which are recorded moneys which are not part of the Museum funds proper but are handled by the Trustees as a matter of courtesy or convenience.

While the present system has been in use for many years and has proven practical and satisfactory, it does not give readily a general summary of the cost of Museum activities irrespective of the various funds. This general summary for 1922 is as follows:

OPERATING ACCOUNTS:	Receipts	Disbursements	Balances	Deficit
Morris K. Jesup Fund Account General Account	\$298,968.67 321,517.23	\$280,788.37 336,518.20	\$18,180.30	*\$15,000.97
, Special Funds Account Corporate Stock Ac-	185,563.38	157,562.69	28,000.69	φ13,000.97
count	17,452.00	17,452.00		
count	359,498.77	344,498.77	15,000.00	
Totals	\$1,183,000.05	\$1,136,820.03	\$61,180.99	\$15,000.97
OTHER ACCOUNTS: Endowment and In-				
vestment Account Museum Building	\$1,966,076.66	\$1,721,048.03	\$245,028.63	
Fund Account	30,869.53	28,203.11	2,666.42	
Incidental Account Crocker Land Expe-	11,994.38	11,763.80	230.58	
dition Fund Account	15,600.00	15,600.00		
Totals	\$2,024,540.57	\$1,776,614.94	\$247,925.63	
Grand Totals	\$3,207,540.62	\$2,913,434.97	\$309,106.62	\$15,000.97

^{*}The deficiency in the General Account is due to the fact that only a part of the expected accrued interest of the Sage Bequest was received in 1922. This deficiency, however, is temporary, because the accrued interest above mentioned is being reserved to meet this deficiency when the interest is received, which will probably be in 1923. The Budget classification shows a net balance of \$6,888.43, after all loans and accrued interest have been received and all contracts and obligations allowed.

The endowment fund has received special attention during the year. Following the policy inaugurated by the late Henry P. Davison, the Finance Committee has been assisted by an Advisory Committee on Investments, composed of Mr. Arthur M. Anderson, Mr. Francis D. Bartow and Mr. Charles M. Mitchell, who have given careful study to the securities of the Permanent Endowment.

At the beginning of the year, the permanent endowment fund consisted of bonds and stocks of a par value of \$9,503,750. Approximately 72% of the securities were railroad bonds. The

Finance Committee, acting in cooperation with the Advisory Committee on Investments, decided to sell all the stocks and a considerable amount of bonds, to reinvest the proceeds in bonds of a higher quality and to give greater diversification to the Museum holdings. The proceeds of these sales amounted to \$1,510,193.60, and this sum, augmented by cash contributions, was invested in bonds (par value, \$1,654,000), the purchase price amounting to \$1,652,651.

In November, the Trustees liberalized their policy with respect to investments, and the Finance Committee was enabled to make investments more advantageously for the Museum.

The Endowment Fund has been increased during the year by the gift of \$250,000 from Mr. George F. Baker; by stocks valued at \$1,025,000 contributed by Mr. John D. Rockefeller, Jr.; by \$240,000 from the estate of Mr. Amos F. Eno; by \$50,000 of the \$100,000 given by Mr. Edward S. Harkness; and by \$10,000 contributed by Mr. Adrian Iselin.

Respectfully submitted,

George F. Baker, Jr., Treasurer.

SUMMARY OF CLASSIFICATION THE AMERICAN MUSEUM OF NATURAL HISTORY

Jest	Jesup Fund		GENERAL ACCOUNT		CITY MAINT. ACCOUNT	
Salaries	Other Items	Salaries	Other Items	Salaries	Other Items	
Scientific\$189,587.49	\$89,068.77	\$60,692.18	\$46,026.33	\$57,416.11		
Administration	, ,	51,475.21	34,936.39	189,762.07	\$16,530.59	
Heating and Lighting		4,739.83	8,901.95	23,270.17	13,956.79	
Repairs and Construction						
of Heating and Lighting			4 ,449.99	3,156.96	5,933.30	
Repairs and Construction		4,242.35	4,087.77	27,975.20	6,497.58	
General Expenses	2,132.11	25,505.34	15,077.79			
\$189,587.49	\$91,200,88	\$146 654 01	\$113,480.22	\$301,580,51	\$42,918.26	
Totals by Accounts \$280,7	88.37	\$260),135.13	, ,	,498.77	
Morgan Memorial Hall Fund		• • • • • • • • • • •				

OF DISBURSEMENTS OF FOR THE YEAR ENDING DECEMBER 31, 1922

TRUSTEES'

Spec Funds A	Account	Building Fund Account	Corporate Stock Account	Grand 1		Totals	Totals
Salaries	Other Items	Other Items	Salaries	19 Salaries	922 Other Items	1922	1921
\$40,534.29	\$79,263.71	\$1,751.00	Salaries	\$348,230.07	\$216,109.81	\$564,339.88	\$530,068.97
ψ 10,00	Ψ, Σ,Ξου Ξ	276.00		241,237,28	51,742.98	292,980,26	291,754.96
				28,010.00	22,858.74	50,868.74	49,679.99
				3,156.96	10,383.29	13,540.25	15,303.81
			\$17,452.00	49,669.55	10,585.35	60,254.90	64,443.51
		254.90		25,505.34	17,464.80	42,970.14	38,929.60
\$40,534.29 \$119,2	\$79,263.71 798.00	\$2,281.90	\$17,452.00 17,452.00	\$695,809.20	\$329,144.97	\$1,024,954.17	\$990,180.84
•	10,219.86	19,943.03	•		30,162.89	30,162.89	89,780.14
\$40,534.29 130,0	\$89,483.57 017.86	\$22,224.93		\$695,809.20	\$359,307.86	\$1,055,117.06	\$1,079,960.98
•					FRED F	Н. Ѕмутн,	Bursar.

February 5, 1923.

FINANCIAL STATEMENT 1922

PERMANENT ENDOWMENT

Book Value

Par Value

	\$6.554)4,143.93
Morris K. Jesup FundGeneral Endowment Fund*	1 441		35,266.31
The Come Found	1 470		
The Sage Fund	1,4/0		14,300.63
George F. Baker Fund	203		19,847.00
John D. Rockefeller, Jr., Fund	266	,500.00 8	18,658.50
Special Endowment Funds:	200	400.00	20 007 25
J. P. Morgan Fund	322		22,987.35
J. P. Morgan Fund	26		24,180.00
Matilda W. Bruce Fund	11		11,000.00
Margaret Olivia Sage Fund	11	,000.00	9,995.00
Physical Anthropology Fund	10	,528.55	9,997.59
Anson W. Hard Library Fund		,000.00	5.000.00
Thison W. Hard Entrary Lund			
Uninvested Cash	\$10,390	,150.00 \$10,1	15,376.31
Morris K. Jesup Fund \$2,395	5.10		·
General Endowment Fund			
	1.76		
The Sage Fund	1.00		1 75
John D. Rockefeller, Jr., Fund 208,00		,	r
J. P. Morgan Fund	7.65		
George F. Baker Fund	3.00		
Jonathan Thorne Memorial Fund 750	5.79		
·	245	,028.63 2	45,028.63
	\$10.635	5,178.63 \$10,3	60,404.94
		,176.03 \$10,3	
TRUSTEES' BUILDING	FUND		
	Par	Value Boo	ok Value
Bonds	\$105	5,500.00 \$1	02,931.91
Cash		,666.42	2,666.42
Casii			2,000.42
*Contributors to the General Endowment Fund—1884-1922:	\$108	3,166.42 \$ <u>1</u>	05,598.33
		- G: 1	
Auchincloss, Hugh \$10,223.56 Babcock, Samuel D \$5, Baker, George F 250,000.00 Baugh, Margaret L 10,		Emma Chambe	
Baker, George F. 250,000.00 Baugh, Margaret L. 10, Bridgham, Fanny. 15,000.00 Bishop, Cortlandt Field.	000.00 Lando 500.00 Lanie	on, Charles r, Charles	4,500.00
Bridgham, Fanny 15,000.00 Bishop, Cortlandt Field. Combe, Louisa 39,769.15 Bishop, David Wolfe	500.00 Lawre	nce, Mrs. Samu	iel. 500.00
Constable, James M 25,000.00 Bishop, H. R 1	,000.00 Loeb,	C.I.	
	ooo.oo Loeb.	Solomon	5,000.00
Davis, Benjamin P 22,799.25 Bliss, George 1,		iesson, F. O	5,000.00
Combe, Louisa. 39,769.15 Bishop, David Wolfe. Constable, James M. 25,000.00 Bishop, H. R. 1 Davis, Benjamin P. 22,799.25 Bliss, George. 1 Douglas, James. 100,000.00 Bliss, Mrs. William H. 5		Solomon iesson, F. O ns, John E	5,000.00 1,000.00 1,000.00
Davis, Benjamin P. 22,799.25 Bliss, George. 1 Douglas, James. 100,000.00 Bliss, Mrs. William H. 5 Eno, Amos F. 218,000.00 Bondy, Emil C. 10		iesson, F. O ns, John E Percy R	5,000.00 1,000.00 1,000.00 2,500.00
Davis, Benjamin P. 22,799.25 Bliss, George. 1 Douglas, James. 100,000.00 Bliss, Mrs. William H. 5 Eno, Amos F. 218,000.00 Bondy, Emil C. 1 Harkness, Edward S. 50,000.00 Booth, Mary A. 1		iesson, F. O ns, John E Percy R	5,000.00 1,000.00 1,000.00 2,500.00 100.00
Eno, Amos F		iesson, F. O ns, John E Percy R lander, Charles	5,000.00 1,000.00 2,500.00 100.00 E 4,000.00
Eno, Amos F		iesson, F. O ns, John E Percy R George C lander, Charles feller, William.	5,000.00 1,000.00 2,500.00 100.00 E. 4,000.00 10,000.00
Eno, Amos F	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rocke 000.00 Rocke	iesson, F. O ns, John E Percy R George C lander, Charles feller, William. ing, John A s, Mrs. Mary E	5,000.00 1,000.00 2,500.00 100.00 E. 4,000.00 1,000.00 1,000.00
Eno, Amos F	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rhine 000.00 Rocke 000.00 Roger 95.25 Russ.	ns, John E Percy R George C lander, Charles feller, William. ing, John A s, Mrs. Mary E Edward S	1,000.00 2,500.00 100.00 E 4,000.00 1,000.00 1,000.00
Eno, Amos F	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rhine 000.00 Rocke 000.00 Roger 95.25 Russ.	ns, John E Percy R George C lander, Charles feller, William. ing, John A s, Mrs. Mary E Edward S	1,000.00 2,500.00 100.00 E 4,000.00 1,000.00 1,000.00
Douglas, James	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rhine 000.00 Rocke 000.00 Roger 95.25 Russ, 50.00 Sands	ns, John E Percy R George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R	1,000.00 2,500.00 100.00 E. 4,000.00 1,000.00 1,000.00 1,000.00
Douglas, James	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rhine 000.00 Rocke 000.00 Roger 95.25 Russ, 50.00 Sands	ns, John E Percy R George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R	1,000.00 2,500.00 100.00 E. 4,000.00 1,000.00 1,000.00 1,000.00
Douglas, James	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rhine 000.00 Rocke 000.00 Roger 95.25 Russ, 50.00 Sands	ns, John E Percy R George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R	1,000.00 2,500.00 100.00 E. 4,000.00 1,000.00 1,000.00 1,000.00
Douglas, James	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rhine 000.00 Rocke 000.00 Roger 95.25 Russ, 50.00 Sands	ns, John E Percy R George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R	1,000.00 2,500.00 100.00 E. 4,000.00 1,000.00 1,000.00 1,000.00
Bondy Bondy Bondy Brail C 10,	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Roke 000.00 Rocke 000.00 Roger 95.25 Russ, 50.00 Sands 000.00 Scher 000.00 Swor 000.00 Van 956.72 Villar	ns, John E Percy R George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R	1,000.00 2,500.00 100.00 E. 4,000.00 1,000.00 1,000.00 1,000.00
Bondy Bondy Emil C September Sep	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rhine 000.00 Rockb 000.00 Roebl 000.00 Rosh 50.00 Sands 000.00 Scher 000.00 Scher 000.00 Seligr 000.00 Van 955.72 Villar 990.00 Wilso	ns, John E Percy R George C lander, Charles feller, William. ing, John A s, Mrs. Mary E Edward S	1,000.00 2,500.00 100.00 E. 4,000.00 1,000.00 1,000.00 1,000.00
Douglas, James.	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rock 000.00 Rock 000.00 Rock 000.00 Scher 000.00 Scher 000.00 Swor 000.00 Swor 000.00 Wilso 100.00 Wilso	ns, John E Percy R George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R	1,000.00 2,500.00 100.00 100.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 5,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00
Douglas, James.	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Roin 000.00 Rock 000.00 Roebl 000.00 Scher 95.25 Russ, 50.00 Scher 000.00 Scher 000.00 Swort 000.00 Swort 000.00 Wilso 100.00 Wilso	ns, John E George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R. merhorn, Wm. nan, Henry ls, Mrs. James I Praag, Leonidas d, Henry n, R. T	1,000.00 2,500.00 100.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00
Douglas, James.	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Roke 000.00 Rocke 000.00 Roger 95.25 Russ, 50.00 Sanda 000.00 Scher 000.00 Van	ns, John E George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R. merhorn, Wm. (han, Henry) s, Mrs. James J Praag, Leonidas d, Henry ns, R. T nship Fees	1,000.00 2,500.00 100.00 100.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00
Douglas, James.	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rocke 000.00 Rocke 000.00 Roger 95.25 Russ, 50.00 Sande 000.00 Scher 000.00 Swor 000.00 Wilso 100.00 Wilso 100.00 Patro 000.00 Patro 000.00 Petlor	ns, John E Percy R George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R	1,000.00 2,500.00 100.00 100.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00
Douglas, James.	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rocke 000.00 Rocke 000.00 Rocke 000.00 Scher 000.00 Scher 000.00 Scher 000.00 Wilso 000.00 Wilso 000.00 Patro 000.00 Patro 000.00 Patro 000.00 Life	ns, John E George C lander, Charles feller, William ing, John A s, Mrs. Mary E Edward S , William R. merhorn, Wm. (han, Henry) s, Mrs. James J Praag, Leonidas d, Henry ns, R. T nship Fees	1,000.00 2,500.00 100.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00
Douglas, James.	000.00 Matth 000.00 Parso 000.00 Pyne, 124.13 Rand, 000.00 Rock 000.00 Rock 000.00 Rock 000.00 Rosh 000.00 Sands 000.00 Scher 000.00 Scher 000.00 Van 000.00 Write 100.00 Write 000.00 Patro 000.00 Patro 000.00 Life	ns, John E George C lander, Charler feller, William ing, John A s. Mrs. Mary E Edward S , William R. merhorn, Wm. (han, Henry ls, Mrs. James J Praag, Leonidas d, Henry n, R. T nship Fees whip Fees Membership Fee	1,000.00 2,500.00 100.00 100.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00 1,000.00

ENDOWMENT AND INVESTMENT ACCOUNT Receipts, 1922 General Endowment Fund: Balance \$ 14,079.12 Proceeds from sale of Bonds and Stocks..... 236,553.62 Bequest of Charles E. Rhinelander..... 3,000.00 Bequest of Amos F. Eno, Principal and Interest..... 240,000.00 200.00 250,000.00

288,012,50 50,000.00 Adrian Iselin Gift..... 10,000.00 Membership Fees 7.000.00 The Sage Fund: 74,905.15 Sale of Bonds..... 450,469.84

580.277.97 Total General Endowment.....

Special Endowment Funds: Morris K. Jesup Fund: Balance 143.75 261,375.85 Sale of Bonds and Stocks.....

261,519.60 J. P. Morgan Fund:
Sale of Bonds..... 23,025.00 Jonathan Thorne Memorial Fund: Sale of Bonds..... 756.79 Interest on Credit Balances..... 1,652.06

\$1,966,076.66

\$1,437,284.12

245,028,63

\$1.679.123.21

Disbursements, 1922

Purchase of Bonds	. \$508 606 14
Bequest of Amos F. Eno, Accrued Interest to Ge	
Account	
Bequest of Mary A. Booth: Expenses Transferre	
General Account	75.87
George F. Baker Gift, Purchase of Bonds	249,847.00
John D. Rockefeller, Jr., Gift, Purchase of Bonds	80,008.50
The Sage Fund:	•
Purchase of Bonds 542,0	551.00
Accrued Interest (to General Account) 34,6	005.61
	576.656.61

General Endowment Fund.

Total General Endowment..... Special Endowment Funds: Morris K. Jesup Fund: Purchase of Bonds..... 247,539.75 Payment of Loans of 1921..... 11,584.75

Cash on hand December 31, 1922.....

259,124,50 J. P. Morgan Fund: Purchase of Bonds 22,987.35 Interest on Credit Balances (to General Account)..... 1,652.06

\$1,966,076.66

^{*}Mr. George F. Baker's original gift was \$250,000 in bonds.

**Mr. John D. Rockefeller, Jr.'s, gift was stock valued at \$1,025,000.

**There were also received bonds and stocks amounting to \$217,154.52, making a total of \$292,059.67, which, together with Inheritance Taxes, \$7,940.33, paid in States other than New York, makes a total of \$300,000 received from the Sage Estate as the second payment on account of this teguest.

CITY MAINTENANCE ACCOUNT * Receipts, 1922

Capital Fund	_	Receipts, 1922		
	d:			
_ Cash on ha	nd January 1, 1922.	riation for 1922):		\$15,000.00
Department	of Parks (Appropr	riation for 1922):		_
Salaries, R	egular Employees		\$301,580.5	1
Expenses 1	or Other Than Per	rsonal Service:	T/0 0T	
		\$10,		
			304.42	
3. Lau	ndry, Cleaning and L	Disinfecting Supplies 1,	917.00	
4. Moto 5. Gen	or Vehicle Supplies.	م ،	823.33	
	eral Plant Supplies		464.00	
	ring Apparel e Equipment		.155.00 155.00	
	eral Plant Equipmen		565.70	
	eral Plant Materia		240.00	
	eral Repairs and Re		695.00	
	onhone Service		847.00	
12. Fixe	phone Service ed Charges and Cor	itributions 4	989.60	
Bills Awai	ting Reimbursement	Code No. 2	73.49	
" "	ing Remodisement	" " 3	8.00	
" "	"	" " 3 " " 4 " " 8	100.67	
u u	44	" " 8	11.80	*
			\$42,918.2	6
			· · · · · · · · · · · · · · · · · · ·	_
Total net re	ceipts for the mai	ntenance of all depar	rtments	. \$344,498.77
Interest on	Credit Balances .			466.35
				\$359,965.12
	,			
		Disbursements, 1922	44.004	'
Geology and	Invertebrate Palæo	ntology	\$4.201.4	·V
Mineralogy .			2047	ń
3.6 1	• • • • • • • • • • • • • • • • • • • •		3.047.4	.9
Mammalogy				9 3
Mammalogy Ornithology			3,047.4 5,234.8 3,893.4	19 13 14
Mammalogy Ornithology Vertebrate I	Palæontology		3,047.4 5,234.8 3,893.4 3,889.2	19 13 14 18
Mammalogy Ornithology Vertebrate I Anthropology	Palæontology		3,047.4 5,234.8 3,893.4 3,889.2 8,095.4	19 13 14 18 12
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology	Palæontologyy		3,047.4 5,234.8 3,893.4 3,889.2 8,095.4	9 3 4 8 8 2 0
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology	Palæontologyy		3,047.4 5,234.8 3,893.4 8,095.4 1,885.5 1,495.1	9 3 4 8 8 2 0 6
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver	Palæontologyy		3,047.4 5,234.8 3,893.4 3,889.2 8,095.4 1,495.1 5,109.9	9 3 4 8 8 2 0 6
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver Entomology	Palæontology y tebrates		3,047.4 5,234.8 3,893.4 3,889.2 8,095.4 1,495.1 5,109.9	9 3 4 8 8 2 0 6 6 15
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver Entomology Library	Palæontology y tebrates		3,047.4 5,234.8 3,893.4 8,095.4 1,885.5 1,495.1 5,109.5 3,204.4 9,935.4	9 3 14 8 12 0 6 6 15 17
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ	Palæontology tebrates		3,047.4 5,234.8 3,893.4 8,095.4 1,885.5 1,495.1 5,109.9 9,935.4	9 3 4 8 8 2 0 6 6 6 6 7 7
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation	Palæontology tebrates ation and Exhibition		3,047.4 5,234.8 3,893.4 8,095.4 1,885.5 1,495.1 5,109.9 3,204.4 9,935.4 10,963.3	19 3 14 18 8 18 18 19 10 10 10 10 10 10 10 10 10 10 10 10 10
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of	Palæontology tebrates ation and Exhibition Printing		3,047.4 5,234.8 3,893.4 8,095.4 1,885.5 1,495.1 5,109.9 3,204.4 9,935.4 10,963.3 1,537.0	9 3 4 8 8 2 0 6 6 6 5 5 7 7 7 2 2 9 9 9
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and	Palæontology tebrates ation and Exhibition Printing		3,047,4 5,234,8 3,893,4 3,889,2 8,095,4 1,885,5 1,495,1 5,109,9 3,204,4 9,935,4 10,963,3 1,537,6 5,433,3 45,283,2	9 3 4 4 8 12 0 6 6 6 15 17 12 12 12
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and	Palæontology tebrates ation and Exhibition Printing Lighting Installation		3,047.4 5,234.8 3,893.4 8,095.4 1,885.5 1,495.1 5,109.6 3,204.4 9,935.4 10,963.3 1,537.0 45,283.2 45,555.8	9 3 14 8 8 12 0 6 6 15 17 12 10 12 14
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup	Palæontology tebrates ation and Exhibition. Printing. Lighting Installation. plies and Expenses.		3,047.4 5,234.8 3,893.4 8,095.4 1,885.5 1,495.1 5,109.6 3,204.4 9,935.4 10,963.3 1,537.0 5,433.3 45,283.2 45,555.8	9 3 4 8 8 2 0 6 6 6 5 7 7 7 12 10 12 14 13 13
Mammalogy Ornithology Vertebrate I Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup Administrati	Palæontology tebrates ation and Exhibition Printing Lighting Installation plies and Expenses on		3,047,4 5,234,8 3,893,4 3,889,2 8,095,4 1,885,5 1,495,1 5,109,9 3,204,4 9,935,4 10,963,3 1,537,6 5,433,3 45,283,2 45,555,8 15,099,4	9 3 4 4 8 12 0 6 6 6 15 17 12 12 14 15 13 13
Mammalogy Ornithology Vertebrate IA Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup Administrati	Palæontology tebrates ation and Exhibition Printing Lighting Installation plies and Expenses on	he maintenance of all	3,047,4 5,234,8 3,893,4 3,889,2 8,095,4 1,885,5 1,495,1 5,109,9 3,204,4 9,935,4 10,963,3 1,537,6 5,433,3 45,283,2 45,555,8 15,099,4 170,634,1	9 3 4 8 8 12 0 6 6 6 6 7 12 13 13 13 13 14 15 15 16 17 18 18 18 18 18 18 18 18 18 18
Mammalogy Ornithology Vertebrate IA Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup Administrati	Palæontology tebrates ation and Exhibition Printing Lighting Installation plies and Expenses on	he maintenance of all	3,047,4 5,234,8 3,893,4 3,889,2 8,095,4 1,885,5 1,495,1 5,109,9 3,204,4 9,935,4 10,963,3 1,537,6 5,433,3 45,283,2 45,555,8 15,099,4 170,634,1	9 3 4 8 8 12 0 6 6 6 6 7 12 13 13 13 13 14 15 15 16 17 18 18 18 18 18 18 18 18 18 18
Mammalogy Ornithology Vertebrate IA Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup Administrati Total net di Interest on Capital Fun	Palæontology tebrates ation and Exhibition. Printing. Lighting. Installation. plies and Expenses. on Credit Balances (td:	he maintenance of all	3,047.4 5,234.8 3,893.4 3,889.2 8,095.4 1,885.5 1,495.1 5,109.6 3,204.4 9,935.4 10,963.3 1,537.0 5,433.3 45,283.2 45,555.8 15,099.4 170,634.1	99 33 44 44 498 77 466 35
Mammalogy Ornithology Vertebrate IA Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup Administrati Total net di Interest on Capital Fun Cash on hi	Palæontology tebrates ation and Exhibition Printing Lighting Installation plies and Expenses on isbursements for the Credit Balances (the disput of the control of the co	he maintenance of all o General Account).	3,047.4 5,234.8 3,893.4 3,889.2 8,095.4 1,885.5 1,495.1 5,109.9 3,204.4 9,935.4 10,963.3 1,537.0 5,433.3 45,283.2 45,555.8 170,634.1	99 33 44 44 498 77 466 35
Mammalogy Ornithology Vertebrate IA Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup Administrati Total net di Interest on Capital Fun Cash on ha Bills Awa:	realeontology tebrates ation and Exhibition Printing Lighting Installation plies and Expenses on isbursements for ti Credit Balances (td: and December 31, 19 iting Reimbursement	he maintenance of all to General Account).	3,047, 4 5,234, 8 3,893, 4 3,889, 2 8,095, 4 1,885, 5 1,495, 1 5,109, 9 3,204, 4 9,935, 4 10,963, 3 1,537, 6 5,433, 3 45,283, 2 45,555, 8 15,099, 4 170,634, 1 1 departments.	99 13 14 18 19 10 10 10 10 10 10 10 10 10 10
Mammalogy Ornithology Vertebrate IA Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup Administrati Total net di Interest on Capital Fun Cash on ha Bills Awa:	realeontology tebrates ation and Exhibition Printing Lighting Installation plies and Expenses on isbursements for ti Credit Balances (td: and December 31, 19 iting Reimbursement	he maintenance of all o General Account).	3,047, 4 5,234, 8 3,893, 4 3,889, 2 8,095, 4 1,885, 5 1,495, 1 5,109, 9 3,204, 4 9,935, 4 10,963, 3 1,537, 6 5,433, 3 45,283, 2 45,555, 8 15,099, 4 170,634, 1 1 departments.	99 13 14 18 19 10 10 10 10 10 10 10 10 10 10
Mammalogy Ornithology Vertebrate IA Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup Administrati Total net di Interest on Capital Fun Cash on ha Bills Awa:	realeontology tebrates ation and Exhibition Printing Lighting Installation plies and Expenses on isbursements for ti Credit Balances (td: and December 31, 19 iting Reimbursement	he maintenance of all to General Account).	3,047, 4 5,234, 8 3,893, 4 3,889, 2 8,095, 4 1,885, 5 1,495, 1 5,109, 9 3,204, 4 9,935, 4 10,963, 3 1,537, 6 5,433, 3 45,283, 2 45,555, 8 15,099, 4 170,634, 1 1 departments.	99 33 44 48 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
Mammalogy Ornithology Vertebrate IA Anthropology Ichthyology Herpetology Lower Inver Entomology Library Public Educ Preparation Division of Heating and Repairs and General Sup Administrati Total net di Interest on Capital Fun Cash on ha Bills Awa:	realeontology tebrates ation and Exhibition Printing Lighting Installation plies and Expenses on isbursements for ti Credit Balances (td: and December 31, 19 iting Reimbursement	he maintenance of all to General Account).	3,047, 4 5,234, 8 3,893, 4 3,889, 2 8,095, 4 1,885, 5 1,495, 1 5,109, 9 3,204, 4 9,935, 4 10,963, 3 1,537, 6 5,433, 3 45,283, 2 45,555, 8 15,099, 4 170,634, 1 1 departments.	99 13 14 18 19 10 10 10 10 10 10 10 10 10 10

[&]quot;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 1922, amounting to \$160,843.76, has been met from the Trustees' General Account.

MORRIS K. JESUP FUND ACCOUNT * Receipts, 1922

Trustees' Restricted Funds:

Cash on hand January 1, 1922 \$21,954.85 Income from Morris K. Jesup Fund \$224,446.89 Sale of Publications 1,238.17 Sales and Exchanges 768.42 Interest on Credit Balances 560.34 Total net receipts for the development of all departments \$298,968.67	frustees Restricted Funds:	* 1	
Sale of Publications. 1,238.17 Sales and Exchanges 768.42 Interest on Credit Balances. 560.34 Disbursements, 1922 Geology and Invertebrate Palaeontology 13,132.24 Mineralogy 1,915.07 Mammalogy 30,599.91 Ornithology 18,553.10 Vertebrate Palaeontology 34,667.73 Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,20.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Preparation and Exhibition 49,803.15 Preparation and Exhibition 550.00	Income from Morris K. Jesup Fund	\$274,446.89	\$21,954.85
Disbursements, 1922 13,132.24 Mineralogy 13,132.24 Mineralogy 1,915.07 Mammalogy 30,599.91 Ornithology 18,553.10 Vertebrate Palaeontology 34,667.73 Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17,10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 49,803.15 Preparation and Exhibition 49,803.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 †	Sale of Publications	1,238.17 768.42	•;
Disbursements, 1922 13,132.24 Mineralogy 1,915.07 Mammalogy 30,599.91 Ornithology 18,553.10 Vertebrate Palaeontology 34,667.73 Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17,100 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 † 18,180.30	interest on Credit Datanees		277,013.82
Disbursements, 1922 13,132.24 Mineralogy 1,915.07 Mammalogy 30,599.91 Ornithology 18,553.10 Vertebrate Palaeontology 34,667.73 Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17,100 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 † 18,180.30	Total net receipts for the development of all departments		R298.968.67
Geology and Invertebrate Palaeontology 13,132.24 Mineralogy 1,915.07 Mammalogy 30,599.91 Ornithology 18,553.10 Vertebrate Palaeontology 34,667.73 Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,20.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments<	Total not recorpts for the development of an department.		
Mineralogy 1,915.07 Mammalogy 30,599.91 Ornithology 34,553.10 Vertebrate Palaeontology 34,667.73 Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 †	Disbursements, 1922		
Mineralogy 1,915.07 Mammalogy 30,599.91 Ornithology 34,553.10 Vertebrate Palaeontology 34,667.73 Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 †	Geology and Inverteheate Palaeontology	13 132 24	
Mammalogy 30,599,91 Ornithology 18,553,10 Vertebrate Palaeontology 34,667,73 Comparative Anatomy 10,025,50 President Osborn's Science Fund 7,727,43 Anthropology 27,136,74 Ichthyology 6,202,42 Dr. Dean's Research and Publication Fund 1,200,00 Herpetology 8,062,99 Lower Invertebrates 4,741,04 Entomology 8,420,43 Comparative Physiology 17,10 Public Health 464,15 Woods and Forestry 802,90 Library 17,863,27 Public Education 6,539,15 Preparation and Exhibition 49,803,15 Publications 10,772,32 Division of Printing 11,014,22 General Supplies and Expenses 645,40 Administration 7,800,00 Crocker Land Deficiency 7,800,00 Interest on Bank Loans 2,132,11 Total net disbursements for the development of all departments \$280,788,37 Cash on hand December 31, 1922 † 18,180,30		1 915 07	
Ornithology 18,553.10 Vertebrate Palaeontology 34,667.73 Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 † 18,180.30		30 500 01	
Vertebrate Palaeontology 34,667.73 Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 † 18,180.30			
Comparative Anatomy 10,025.50 President Osborn's Science Fund 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 18,180.30			
President Osborn's Science Fund. 7,727.43 Anthropology 27,136.74 Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 † 18,180.30			
Anthropology			
Ichthyology 6,202.42 Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 18,180.30			
Dr. Dean's Research and Publication Fund 1,200.00 Herpetology 8,062.99 Lower Invertebrates 4,741.04 Entomology 8,420.43 Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 18,180.30			
Herpetology	Do Dood Door 1 Dodd's A Food		
Lower Invertebrates	Dr. Dean's Research and Publication Fund		
Entomology	Herpetology		
Comparative Physiology 17.10 Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 18,180.30			
Public Health 464.15 Woods and Forestry 802.90 Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 18,180.30	Entomology		
Woods and Forestry. 802.90 Library. 17,863.27 Public Education. 6,539.15 Preparation and Exhibition. 49,803.15 Publications. 10,772.32 Division of Printing. 11,014.22 General Supplies and Expenses. 645.40 Administration 550.00 Crocker Land Deficiency. 7,800.00 Interest on Bank Loans. 2,132.11 Total net disbursements for the development of all departments. \$280,788.37 18,180.30			
Library 17,863.27 Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 † 18,180.30			
Public Education 6,539.15 Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 18,180.30	Woods and Forestry		
Preparation and Exhibition 49,803.15 Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 18,180.30			
Publications 10,772.32 Division of Printing 11,014.22 General Supplies and Expenses 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 † 18,180.30			
Division of Printing. 11,014.22 General Supplies and Expenses. 645.40 Administration 550.00 Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 † 18,180.30			
General Supplies and Expenses			
General Supplies and Expenses	Division of Printing		
Crocker Land Deficiency 7,800.00 Interest on Bank Loans 2,132.11 Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 † 18,180.30	General Supplies and Expenses		
Interest on Bank Loans			
Total net disbursements for the development of all departments \$280,788.37 Cash on hand December 31, 1922 †	Crocker Land Deficiency		
Cash on hand December 31, 1922 †	Interest on Bank Loans	2,132.11	
Cash on hand December 31, 1922 †	Total net dishursements for the development of all department	ents	\$280.788.37
\$298,968.67	Cash on hand December 31, 1922 †		
			\$298,968.67

^{*}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.

†The Treasurer's books show a balance on hand December 31, 1922, of \$18,180.30, of which \$17,073.32 has been carried forward to 1923 to meet pledges and obligations contracted in 1922. Therefore, the net cash balance as of December 31, 1922, is \$1,106.98.

GENERAL ACCOUNT Receipts, 1922

Income from General Endowment		\$60,573.11	
Income from The Sage Fund		60,724.40	
Income from George F. Baker Fund		3,391.52	
Income from John D. Rockefeller, Jr., Fund		18,775.55	
Accrued Interest, Amos F. Eno Bequest		22,000.00	
Interest on Credit Balances		3,093.74	
Annual Members		35,550.00	
Sustaining Members		3,250.00	
Associate Members		4,435.00	
Sales and Exchanges		944.01	
Sale of Publications		4,865.59	
Subscriptions to Natural History		2,495.80	
Contributions of Trustees for General Purposes:		-,	
George F. Baker\$5	.000.00		
	,000.00		
	.500.00		
Thomas DeWitt Cuyler	500.00		
	.000.00		
	,500.00		
	.500.00		
	,000.00		
	.000.00		
	,500.00		
Walter B. James	500.00		
	,000.00		
	,000.00		
	.000.00		
George D. Pratt	,500.00		
Percy R. Pyne	.500.00		
John B. Trevor	500.00		
	,500.00		
renx M. Warding	,500.00	\$36,000.00	
Contributions for General Purposes:		φυσ,σσσ.σσ	
	500.00		
S. R. Guggenheim	500.00		
Anonymous	3.00		
Anonymous	5.00	\$1,003.00	
		φ1,005.00	
Total net receipts for the development of all depart	rtments		\$257,101.72
Income from The Sage Fund, 1921	. caaroan co		32,600.65
Contributions of Trustees for General Purposes for	1023		02,000.00
Childs Frick			3,500.00
Loans:			0,000.00
Crocker Land Expedition Fund Account		15,600.00	
Endowment and Investment Account		11,584.75	
Incidental Account		1,130.11	
Bursar's Account		50,000.00	
Daisai S Trecount			\$78,314.86
Bank Loans:			• • • • • • • • • • • • • • • • • • • •
Proceeds of Notes held by United States Trust Co	mpany	of	
New York		• •	250,000.00
			\$621,517.23

GENERAL ACCOUNT Disbursements, 1922		
Geology and Invertebrate Palaeontology	\$6,305.14	
Mineralogy	2,173.73	
Mammalogy	7,779.72	
Ornithology	3,862.06	
Vertebrate Palaeontology	3,531.14	
Comparative Anatomy	1,348.57	
Anthropology	9,634.05	
Ichthyology	3,134.88	
Herpetology	564.34 4.148.98	
Lower Invertebrates Entomology	2,270.27	
Public Health	2.099.98	
liheary	6,137.66	
Library Public Education	11,192,80	
Preparation and Exhibition	6,087.98	
Publications	29,226.99	
Division of Printing	12,878.23	
Heating and Lighting	15,234.09	
Repairs and Installation	14,432.45	
General Supplies and Expenses	38,342.13	
Administration	46,458.11	
Pension Fund	16,610.72 4,319.87	
Group Life Insurance	7,800.00	
Interest on Bank Loans	4.561.24	
Interest on Bank Loans		
Total net disbursements for the development of all department Deficit of 1921 Account		73,983.07
Incidental Account	2,400.00 50,000.00	52,400.00
Balance December 31, 1922: Proceeds of Notes held by United States Trust Company of		
New York to meet overdrafts		234,999.03*
·		\$621,517.23
*Balance of December 31, 1922, is the remainder of the N by the United States Trust Company of New York	otes held	\$234,999.03
Group Life Insurance advance	1,269.89	
of the Sage Request during 1021 balance		
Ditto for 1922 (of the \$20,000 anticipated in 1922, the Mu-	23,399.35	
of the Sage Bequest during 1921, balance	23,399.35 12,237.02	36 9 06 26
Ditto for 1922 (of the \$20,000 anticipated in 1922, the Museum received \$7,762.98)		36,906.26
Orders and contracts outstanding of 1922 Account		36,906.26 271,905.29
Orders and contracts outstanding of 1922 Account Contributions of Trustees for General Purposes for 1923 (Paid in 1922)	12,237.02	
Orders and contracts outstanding of 1922 Account	12,237.02 11,516.86 3,500.00	
Orders and contracts outstanding of 1922 Account Contributions of Trustees for General Purposes for 1923 (Paid in 1922)	12,237.02	271,905.29
Orders and contracts outstanding of 1922 Account	12,237.02 11,516.86 3,500.00	

SPECIAL FUNDS ACCOUNT Receipts, 1922

GEOLOGY AND INVERTEBRATE PALAEONTOLOGY:		
James Douglas Geological Fund:		
	6050 00	7
Balance	\$850.00	
J. P. Morgan Fund:		****
Transferred from Reserve	65.00	\$ 915. 00
MINERALOGY:		
Matilda W. Bruce Fund:		
Balance		
Interest	1,596.26	
J. P. Morgan Fund:	•	
Transferred from Reserve	2,082.62	3,678.88
Transferred from Reserve	_,,,,,,,,,	0,0.0.0
and the control of th		
Mammalogy:		
George S. Bowdoin Whale Model Fund:		
Balance	1,000.00	
Thind Asiatic Functition Fund.	•	
Polonce \$7.075.73 Gilbert S. McClintock \$ 100.00		
American Asiatic Asso 6 000 00 T P Morgan 7.500.00		
George F. Baker 1.000.00 John D. Rockefeller, Jr 7,500.00	ı	
Henry P. Davison 1,000.00 Mrs. Willard D. Straight 3,000.00	l .	
W. A. Harriman 250.00 Morris K. Jesup Fund		
Balance	,	
	\$39,425.73	
Mammal Fund:		40,525.73
John M. Phillips	100.00	40,323.73
· <u>_</u>		
Ornithology:		
Crandall Oological Fund:		
Balance	1,160.00	
Margaret Olivia Sage Fund:	1,100.00	
Margaret Olivia Sage Fund:		
Balance 491.16	010 04	
Interest	919.04	
Whitney South Sea Expedition Fund:		
Balance 3,052.84		
Harry Payne Whitney	23,052.84	
Panama Bird Fund:	•	
Balance	1,000.00	
Amazon Field Fund:	2,000.00	
Amazon Field Fund:	250.00	
Mrs. E. M. B. Reichenberger	230.00	
South American Exploration Fund:		
George B. Case		
Benjamin Strong		
D. E. Pomeroy		
Graham Sumner		
	950.00	
J. Sanford Barnes Fund:		
J. Sanford Barnes	448 NO	27.779.88
J. Santord Darnes	440.00	
		¢72 000 40
Carried forward		φ/ 4 ,0>>.4>

\$66,359.97

SPECIAL FUNDS ACCOUNT

Disbursements, 1922

GEOLOGY AND INVERTEBRATE PALAEONTOLOGY: J. P. Morgan Fund: Analysis of Meteorite		\$65.00
MINERALOGY: Matilda W. Bruce Fund: Purchase of Specimens	1,047.25 2,082.62	3,129.87
Mammalogy: Third Asiatic Expedition Fund: Field expenses in China	39,275.39	39,375.39
Ornithology: Margaret Olivia Sage Fund: Field Expenses in Ecuador Whitney South Sea Expedition Fund: Field Expenses in South Sea Islands South American Exploration Fund: Field Expenses in Ecuador J. Sanford Barnes Fund: Purchase of Specimens	919.04 21,472.67 950.00 448.00	23,789.71

Carried forward.....

SPECIAL FUNDS ACCOU Receipts, 1922	NT		
Brought forward			\$72,899.49
Balance		\$300.00	
Balance		50.00	
Balance		12,267.97	
Childs Frick European Fossil Fund:		167.28	
Balance	1,000.00	107.28	
Anonymous	1,000.00	2,000.00	
South Asiatic Field Fund: Balance		40 40 4 0 ·	
J. P. Morgan Fund:	***************************************	12,494.90	
Transferred from Reserve		23,447.21	
Transferred from Childs Frick European Fund Anonymous	167.28 6,000.00	6,167.28	56,894.64
Comparative Anatomy: Evolution of Man Fund: Balance		878.10	
Comparative Anatomy Fund: Anonymous		2,000.00	2,878.10
ANTHROPOLOGY: East Asiatic Fund:		012.40	2,070.10
Balance		913.49	
Balance Physical Anthropology Fund:		198.68	
Balance		459.85	1,572.02
ICHTHYOLOGY: Cleveland H. Dodge Ichthyology Fund:			
Balance		714.17	
Balance Bashford Dean	433.91 1,200.00	1,633.91	2,348.08
HERPETOLOGY: Angelo Heilprin Exploring Fund: Transferred from Angelo Heilprin Exploring Fund Reserve			,
Fund Reserve			1,950.00
Carried forward			\$138,542.33

SPECIAL FUNDS ACCOUNT Disbursements, 1922 Brought forward		\$66,359 .97
VERTEBRATE PALAEONTOLOGY: American Pliocene Fund: Services of Preparators and Field Expenses Childs Frick European Fossil Fund:	7,008.47	
Transferred to Western Field Fund	167.28	
Field Expenses in China	1,000.00	
Salary of Field Assistants and Expenses	8,178.37	
Special Grant for Research and Publication Work, Murals and Purchase of Specimens	23,447.21	
Field Expenses	1,335.81	41,137.14
Comparative Anatomy: Evolution of Man Fund:		
Special Services		
Anthropology: East Asiatic Fund: Purchase of Specimens Anthropology of the Southwest Fund: Expenses of Field Work. Physical Anthropology Fund: Special Services.	100.00 175.00	765.33 675.00
ICHTHYOLOGY: Cleveland H. Dodge Ichthyology Fund: Purchase of Specimens		1,833.91
HERPETOLOGY: Angelo Heilprin Exploring Fund: Field Expenses in Santo Domingo		1,950.00
Carried forward		\$112,721.35

SPECIAL FUNDS ACCOUNT Receipts, 1922

Brought forward		138,542.33
Entomology: Entomological Fund: Balance \$400. Herbert F. Schwarz 200.	00	
Clark Haitian Expedition Fund: B. Preston Clark	600.00 400.00	1,000.00
LIBRARY: Anson W. Hard Library Fund: Interest		212.50
PUBLIC EDUCATION: School Fund: Department of Education of the City of New York— 1921 Account 519. 1922 Account 2,944.	52	
Jonathan Thorne Memorial Fund: Balance	94	
Nature Study Fund: E. G. Stillman	1,372.78 1,000.00	5,836.93
Publications: Jesup North Pacific Expedition Publication Fund: Balance Morgan Memorial Hall Fund:		1,121.65
Balance George F. Baker	219.86 10,000.00	10,219.86
Total net receipts for the development of specific departmed J. P. Morgan Fund Reserve:	ents\$	156,933.27
Balance Interest J. P. Morgan	4,935.43 16,194.68 5,000.00	26,130.11
Angelo Heilprin Exploring Fund Reserve: Balance	2,000.00 500.00	2,500.00
Interest on Credit Balances		937.13
	<u>\$</u>	186,500.51

SPECIAL FUNDS ACCOUNT Disbursements, 1922

Brought forward		\$112,721.35
Clark Haitian Expedition Fund: Expenses of Field Work		400.00
LIBRARY: Anson W. Hard Library Fund: Purchase of Books		212.50
Public Education: School Fund:		
Loaning Slides to Public Schools:		
1921 Account		
1922 Account	3,464.15	
Jonathan Thorne Memorial Fund: Education for the Blind		
Nature Study Fund:	1,230.00	
Expenses of Boy Scout Master	1,000.00	5,694,15
Publications: Jesup North Pacific Expedition Publication Fund:		
Special Services		770.00
Alteration and Installation		10,219.86
Total net disbursements for the development of specific department	rtments\$	3130,017.86
J. P. Morgan Fund Reserve:		
Transferred to J. P. Morgan Fund, Geology """ Mineralogy	65.00 2,082.62	
" " " " Vertebrate	2,062.02	
Palæontology	23,447.21	25,594,83
Angelo Heilprin Exploring Fund Reserve:		23,334.63
Transferred to Angelo Heilprin Exploring Fund, Herpetology		1,950.00
Interest on Credit Balances:		-,>00.00
Transferred to General Account		937.13
Cash on Hand December 31, 1922		28,000.69
	, .	186,500.51

CORPORATE STOCK ACCOUNT 1922

Receipts: Department of Parks Interest on Credit Balances	\$17,452.00 6.51
	\$17,458.51
Disbursements: Payrolls of Mechanics, etc Interest on Credit Balances, Transferred to General Account	\$17,452.00 6.51 \$17,458.51
TRUSTEES' BUILDING FUND ACCOUNT	
1922	
Receipts:	
Cash on hand January 1, 1922	\$5,245.52 4.978.92
Investment Fund: Proceeds from Sale of Bonds	20,526.18 118.91
- -	\$30,869.53
Disbursements:	
Investment Fund: Purchase of Bonds	5,978.18
Morgan Memorial Hall, Case Construction	19,943.03
Architects' Commissions	254.90 1.751.00
Roosevelt Memorial Hall	276.00
Cash on hand December 31, 1922	2,666.42
	\$30,869.53

CROCKER LAND EXPEDITION FUND ACCOUNT 1922

Receipts: Subscriptions: Morris K. Jesup Fund Account	\$15,600.00
Loans: General Account	\$15,600.00 \$15,600.00 .60
Dishussana	<u>\$31,200.60</u>
Disbursements: Deficit of 1920 Account	\$15,597.71 2.29
Payment to General Account	15,600.00
TATA TANDA TA A GOOTING	\$31,200.60
INCIDENTAL ACCOUNT	
1922	
Receipts: Cash on hand January 1, 1922 Received from Individuals and Societies Group Life Insurance: Employees' Premium Payments	\$483.15 5,990.85
Interest on Credit Balances	5,520.38 31.09
	\$12,025.47
Disbursements: Disbursements for Individuals and Societies Group Life Insurance:	\$6,243.42
Premiums	
Interest on Credit Balances, Transferred to General Account Cash on hand December 31, 1922	5,520.38 31.09 230.58
	\$12,025.47
All the foregoing accounts have been	
Examined and Approved E. & O. E. Second E. & O. E. Auditing Committee Auditing Committee	
NEW YORK, December 31, 1922 GEORGE F. BAKER, JR.,	Treasurer

MEMBERSHIP

In 1922, the American Museum had Members in every state and in twenty-one foreign countries. The new Members enrolled during the year numbered 755. The total number on December 31 was 6,550, indicating that many friends are interested in our educational work.

Members receive our journal, Natural History, a bi-monthly magazine giving the results of recent exploration and research. The articles are written in popular style by eminent scientists and explorers, and they are illustrated by numerous field photographs. A section of the magazine is devoted to current notes on general scientific and museum work.

On the third floor of the Museum is the Members' Room, where Members are invited to rest, read or write letters during visits to the Museum. Members wishing to be shown the most interesting features of the exhibits may make their wishes known to the attendant in this room, and an instructor will meet them.

Every year, in addition to the regular courses of lectures for Members, a number of lectures are given to which Members are welcome.

The American Museum, in conjunction with The State Historical and Natural History Society of Colorado, Denver; the

Reciprocal Membership Privileges Newark Museum Association; the Washington State Historical Society, Tacoma, Washington; the Toledo Museum of Art, and Saint Paul Institute, Saint Paul, Minnesota, is reciprocating with the

Buffalo Society of Natural Sciences in the exchange of membership privileges. When a Member of the American Museum of Natural History visits the museums of any of these societies and presents his membership card at the office, the privileges accorded the Members of these societies will be accorded the Member of the American Museum. This plan, with which we are heartily in sympathy, was suggested by the Buffalo Society of Natural Sciences, with the hope that this step would promote the friendly relations already existing between these museums, encourage and stimulate the interest of Members, and increase scientific knowledge.

Some of the lectures and meetings to which Members were invited are:

The Spring Course of Lectures for Members: "Colorado and the Southwest in Natural Colors," by F. F. Clatworthy; "Mountaineering in the Northwest," by LeRoy Jeffers; "Wild Brother," by William Lyman Underwood; "An American's Impression of British Bird-Life," by Frank M. Chapman.

The Autumn Course for Members: "The Gorillas of the Kivu Country," by Carl E. Akeley; "The Story of Evolution As Told by the Rocks," by William Diller Matthew; "An Interpretation of Nature" (A Synchronization of Slides and Music), by Branson De Cou; "Australia, the Land of Strange Animals," by William K. Gregory.

The Spring Course for Children of Members: "Wild Animals Near Home," by G. Clyde Fisher; "Woodland Tales in City Streets," by Philip D. Fagans; "Wonderful Work Lectures for of Water," by George H. Sherwood; "Animal Children of Members Friends and Foes," by Raymond L. Ditmars.

The Autumn Course for Children of Members: "Wild Bird Guests," by Ernest Harold Baynes; "The Sea-Elephants and Their Neighbors," by Robert Cushman Murphy; "The Earth and Neighbor Worlds," by G. Clyde Fisher; "The Kingdom of Jack Frost," by Ann E. Thomas.

The American Museum of Natural History coöperated with the New York Academy of Sciences in giving a popular illustrated lecture on February 6, by Dr. Leon Campbell, on "Recent Advances in Astronomy"; and on March 27, by Morten P. Porsild, on "The People of Greenland; Their Origin, Social Life, Educational and Economic Problems."

On April 17, The New York Academy of Sciences gave in the Museum auditorium a lecture by Dr. Charles Lane Poor, on "The Einstein Theory; For and Against."

On May 1, the Morgan Hall of Minerals and Gems, presented to the City of New York by George Fisher Baker in memory of his friend John Pierpont Morgan, was formally opened to the public.

The Forty-eighth Annual Convention of the American Bankers'

Association was held in New York in October, and the Museum gave a reception to the ladies attending the convention.

On November 20, the New York Academy of Sciences presented a popular illustrated lecture on "Our Granular Universe—Some Modern Views on How the Atom Is Built," by John Mills, in the Museum auditorium.

On December 27 was held at the Museum a celebration of the Centenary of Louis Pasteur, by the New York Mineralogical Club, associated with the American Museum of Natural History, Alliance Française de New-York, The French Institute in the United States, the American Scenic and Historic Preservation Society, the United States Department of Agriculture, the Department of Health of the City of New York, Fédération de l'Alliance Française, the New York Academy of Sciences, the New York Academy of Medicine, Pasteur Laboratories of America, the State Department of Health, and the Rockefeller Institute for Medical Research.

The number of new Members enrolled during 1922 was 755, of which 50 were Life Members. The loss through death and resignation was 356. There was a net gain of 399, and on December 31, 1922, the total membership was 6,550, divided into classes as follows:

Founders	0	Honorary Fellows	12
Benefactors	8	Fellows	53
Associate Founders	9	Honorary Life Members	33
Associate Benefactors	20	Life Members	
Patrons	123	Sustaining Members	126
Annual Members3,610			
Associate Members (non-resident)1,628			

NEW MEMBERS

The following were elected Benefactors:

GEORGE F. BAKER

OGDEN MILLS

JOHN D. ROCKEFELLER, JR.

The following was elected an Associate Founder:

HARRY PAYNE WHITNEY

The following was elected an Associate Benefactor:

JOHN D. ROCKEFELLER, JR.

The following were elected Patrons:

GEO. F. BAKER, JR.
GEO. J. BALDWIN
CHARLES L. BERNHEIMER
MISS HELEN CLAY FRICK
MRS. CLEMENT ACTON
GRISCOM, JR.

Mrs. Sophia Handforth Kunz* Edward C. Moore, Jr. Frank J. Myers Thos. Newbold A. Perry Osborn

Dr. Ernest G. Stillman Mrs. Ruby Kunz Zinsser

The following was elected an Honorary Fellow:

PROF. WILLIAM M. WHEELER

The following were elected Fellows:

Hon. Recaredo Amengual, N. Mrs. Charles L. Bernheimer Mrs. Urban H. Broughton Murry Guggenheim

S. R. GUGGENHEIM
DWIGHT W. MORROW
JOHN T. PRATT
GRAHAM SUMNER

The following were elected Honorary Life Members:

PHILIP DE RONDE

A. K. HAAGNER

CHARLES R. KNIGHT

The following were elected Life Members through Contribution of One Hundred Dollars, or by Gift of Books or Specimens Valued at Two Hundred Dollars or more:

Hugh D. Auchincloss
Frank L. Babbott, Jr.
J. Sanford Barnes
Howard Bayne
Miss A. J. Borden
Mrs. J. C. Brady
Barnum Brown
Herbert Pomeroy Brown
Dorothy Bull
Ludlow S. Bull
Philip A. Carroll
Miss Marian Roby Case

MRS. CLARENCE L. HAY
PROF. ALFRED C. KINSEY
T. W. LAMONT
WADSWORTH RUSSELL LEWIS
J. M. MACDONOUGH
MRS. HENRY K. MCHARG
CHAS. B. J. MITTELSTAEDT, M.D.
MRS. J. S. MORGAN, JR.
HERMANN NORDEN
SIDNEY W. NOYES
H. OBERMAIER
MRS. STELLA EDRINGTON PENN

^{*}Deceased.

George Agnew Chamberlain John M. Phillips IOHN B. CLARK MISS ZELINA T. CLARK Mrs. E. H. Danforth JOSEPH DOWD

MISS ISABEL ROGERS EDGAR MISS MARGARET H. ELLIOT THOMAS ANDREW FEUSS

Mrs. Harry Harkness FLAGLER

PHILIP L. GOODWIN HENRY E. GREGORY

D. E. Pomeroy

Mrs. Thomas R. Proctor

STEPHEN K. REED

Mrs. Victor M. Reichenberger HERBERT PRESCOTT SHREEVE

HARPER SILLIMAN LUDOVIC SODERSTROM

MISS ANNE W. STUYVESANT PROF. HUTTON WEBSTER HENRY H. WEHRHANE BENJAMIN L. WINCHELL

The following have become Sustaining Members:

Mrs. Ethel Clyde MISS CORNELIA K. MANLEY W. RODMAN FAY Mrs. George W. Mann George T. Fillius MRS. VAN S. MERLE-SMITH

HENRY F. HERPERS JESSE METCALF

Mrs. Frederick Lewisohn Mrs. Charles P. Soden

GEORGE WHITNEY

DECEASED TRUSTEES AND MEMBERS

Trustees

THOMAS DEWITT CUYLER HENRY P. DAVISON

Associate Founders

WILLIAM ROCKEFELLER Mrs. John B. Trevor

Associate Benefactors

WILLIAM ROCKEFELLER THOMAS DEWITT CUYLER HENRY P. DAVISON Mrs. John B. Trevor

Patrons

Mrs. A. H. Brawner HENRY P. DAVISON ALEX. H. BROWN, M.P. WILLIAM ROCKEFELLER THOMAS DEWITT CUYLER Mrs. John B. Trevor

Honorary Fellow

SIR ERNEST HENRY SHACKLETON

Fellow EMERSON McMillin

Life Members

A. BARTON HEPBURN Dr. Pearce Bailey C. W. CHAPIN RICHARD B. KELLY HENRY P. DAVISON George Gordon King EMERSON McMillin Dr. Carroll Dunham Dr. Edward K. Dunham A. M. Post MITCHELL B. H. DUTCHER Mrs. John E. Parsons CHARLES EDDISON Mrs. Theodore Peters I. SANFORD SALTUS Alessandro Fabbri

SIR ERNEST HENRY SHACKLETON

A complete list of Members is appended.

Respectfully submitted,

Percy R. Pyne, Secretary.

TRUSTEES AND TERMS OF SERVICE

1869-1923

The Mayor of the City of New York190	08-
The President of the Department of Parks190	08-
The Comptroller of the City of New York	08-
Auchincloss, Hugh	76-1890
Baker, George F	14-
Baker, George F., Jr	21-
Bickmore, Albert S	85-1914
Bishop, H. R	82-1891
Blatchford, Richard M186	69-1872
Blodgett, William T	59-1875
Bowdoin, George S	03-1913
Bowdoin, George S	13-
Choate, Joseph H	69-1917
Colgate, Robert	69-1885
Constable, James M	72-1900
Cutting, R. Fulton	
Cuyler, Cornelius C	04-1909
Cuyler, Thomas DeWitt	10-1922
Dana, Chas. A	69-1872
Davison, Frederick Trubee	23-
Davison, Henry P	16-1922
Dodge, A. G. Phelps	59-1872
Dodge, Cleveland Earl	
Dodge, Cleveland H	
Dodge, W. E., Jr	
Douglas James	09-1918
Douglas, Walter	19-
Drexel, Joseph W	72-1888
Elliot, Daniel Giraud	15-1915
Field, Benjamin H	69-1893
Frick, Childs	
Frick, Henry C	14-1919
Gerry, Elbridge T	94-1902
Grant. Madison	
Grant, maurova	

Maria A 4 TT	10/0 1003
Green, Andrew H.	1809-1903
Grinnell, Moses H. Haines, William A.	1809-18/2
Haines, William A.	1809-1880
Hard, Anson W. Harriman, Oliver	1094-1917 1070 100E
Harriman, William Averell	1010-1033
Havemeyer, H. O	1910- 1909-1007
Havemeyer, Theodore A.	1801_1807
Haven, George G	1805_1008
Hewitt, Abram S	1874-1903
Huntington, Archer M	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	1889-1903
James, Walter B.	1911-
Jesup, Morris K	1869-1908
Juilliard, A. D	1898-1919
Kissel, Gustav E.	1894-1911
Landon, Charles G.	1882-1893
Lanier, Charles	18/4-1923
Low, Seth	1905-1910
Mills, Ogden	1002-1910
Morgan, J. Pierpont	1860-1013
Morgan, J. P	1908-
Morton Levi P	1889-1890
Osborn. A. Perry	1921-
Osborn, Henry Fairfield	1901-
Ottendorfer, Oswald	1886-1900
Parish Henry	1869-1872
Potter, Howard	1869-1880
Pratt, George D	1921-
Pvne. Percv R	1872-1895
Pyne, Percy R	1900-
Robb, J. Hampden	1886-1911
Rockefeller William	1895-1913
Rogers, Archibald	1891-1910
Roosevelt. Theodore	1869-1878
Roosevelt. Theodore	1886-1891
Roosevelt, Theodore	1919-
Sanford, Leonard C	1921-
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	1878-1899
Warburg, Felix M	1910-
Wickersham, George W	1910-1917
Whitney. William C	1891-1904
Wolfe, John David	1869-1872

LIST OF MEMBERS

December 31, 1922

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 to the funds of the Museum, or by gift of books or specimens valued at \$100,000 or more

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

GEORGE F. BAKER

DARIUS OGDEN MILLS*
OGDEN MILLS
J. P. MORGAN
J. PIERPONT MORGAN*
HENRY FAIRFIELD OSBORN
PERCY R. PYNE*
JOHN D. ROCKEFELLER, JR.
MRS. RUSSELL SAGE*
MRS. ROBERT L. STUART*
CORNELIUS VANDERBILT*

WM. H. VANDERBILT*

ASSOCIATE FOUNDERS

By contribution of \$25,000 to the funds of the Museum, or by gift of books or specimens valued at \$50,000 or more

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
William Rockefeller*
Miss Phebe Anna Thorne*
Charles E. Tilford*
Mrs. John B. Trevor*
Cornelius Vanderbilt, 1st*
Felix M. Warburg

HARRY PAYNE WHITNEY

WILLIAM C. WHITNEY*

^{*}Deceased

Patrons

ASSOCIATE BENEFACTORS

By contribution of \$10,000 to the funds of the Museum, or by gift of books or specimens valued at \$20,000 or more

Hugh Auchingloss* GEORGE F. BAKER EMIL C. BONDY* George S. Bowdoin* FREDERICK F. BREWSTER IOSEPH H. CHOATE* ROBERT COLGATE* THOMAS DEWITT CUYLER* BENTAMIN P. DAVIS* HENRY P. DAVISON* CLEVELAND H. DODGE WILLIAM E. DODGE, 2D* MRS. WILLIAM E. DODGE* MRS. JOSIAH M. FISKE* JAMES B. FORD CHILDS FRICK HENRY C. FRICK* MRS. 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 IOSEPH F. LOUBAT OGDEN MILLS I. P. Morgan HENRY FAIRFIELD OSBORN PERCY R. PYNE JOHN D. ROCKEFELLER, JR. WILLIAM ROCKEFELLER* MRS. RUSSELL SAGE* WM. R. SANDS* JACOB H. SCHIFF* ROBERT L. STUART* JOHN B. TREVOR MRS. JOHN B. TREVOR* FELIX M. WARBURG HARRY PAYNE WHITNEY

PATRONS

By contribution of \$1,000 to the funds of the Museum, or by gift of books or specimens valued at \$2,000 or more

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 Auchingloss* BENTAMIN AYMAR* SAMUEL D. BABCOCK* GEO. F. BAKER, JR. GEORGE F. BAKER MRS. GUY ELLIS BAKER GEO. J. BALDWIN MRS. HARLEY GRANVILLE BARKER A. H. BARNEY* D. N. BARNEY*

JAMES GORDON BENNETT* CHARLES L. BERNHEIMER 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* Mrs. A. H. Brawner* FREDERICK F. BREWSTER

*Deceased

ALEX. H. BROWN, M.P.* TAMES BROWN* MISS MATILDA W. BRUCE* HERMON C. BUMPUS JOHN L. CADWALADER* MRS. CARNEGIE Andrew Carnegie* HAZEL DORIS CARTIER Dr. Walter Channing* Joseph H. Choate* John J. Clancy* B. PRESTON CLARK EDWARD CLARK* JONAS G. CLARK* JAMES B. COLGATE* ROBERT COLGATE* SIDNEY M. COLGATE Frederick A. Constable* Mrs. Frederick A. Constable TAMES 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* W. B. DICKERMAN JULIAN A. DIMOCK A. G. PHELPS DODGE* CLEVELAND H. DODGE WILLIAM E. DODGE, 1st* WILLIAM E. Dodge, 2D* Mrs. William E. Dodge* **JAMES DOUGLAS*** WALTER DOUGLAS Andrew E. Douglass* IOSEPH W. DREXEL* *Deceased

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.* JAMES B. FORD Prof. Auguste Forel ARTHUR A. FOWLER CHILDS FRICK MISS HELEN CLAY FRICK 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* MRS. CLEMENT ACTON GRISCOM, JR. WILLIAM A. HAINES* Anson W. Hard* Dr. James M. B. Hard E. H. HARRIMAN* Mrs. E. H. HARRIMAN OLIVER HARRIMAN* WILLIAM AVERELL HARRIMAN HENRY O. HAVEMEYER* THEODORE A. HAVEMEYER* GEORGE G. HAVEN* GEORGE G. HAVEN George A. Hearn* AUGUST HECKSCHER MRS. WM. TOD HELMUTH ABRAM S. HEWITT* Mrs. Abram S. Hewitt* W. L. HILDBURGH 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 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* DR. WALTER B. JAMES MORRIS K. JESUP* MRS. MORRIS K. JESUP* CHARLES M. JESUP H. J. JEWETT* J. TAYLOR JOHNSTON* MRS. ISABELLE FIELD JUDSON A. D. Juilliard* JAMES R. KEENE* MRS. DAVID J. KELLEY L. D. KELLOGG GUSTAV E. KISSEL* Mrs. Sophia Handforth Kunz* 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.* JOHN B. MARCOU* PHILIPPE B. MARCOU EDWARD MATTHEWS Francis O. Matthiessen* PRINCESS VILMA LWOFF-PARLACHY GEORGE B. McCLELLAN Dr. Edgar A. Mearns, U. S. A.* HERMAN A. METZ GERRISH H. MILLIKEN DARIUS OGDEN MILLS* OGDEN MILLS *Deceased

MASON MITCHELL EDWARD C. MOORE, IR. I. P. Morgan J. PIERPONT MORGAN* FRANK J. MYERS THOS. NEWBOLD A. Perry Osborn HENRY FAIRFIELD OSBORN Mrs. 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 PHOENIX* 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* JOHN A. ROEBLING 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 TAMES BAKER SMITH* CATHERINE L. SPENCER* FREDERIC W. STEVENS D. JACKSON STEWARD* A. T. STEWART* Dr. Ernest G. Stillman JAMES STOKES* I. 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 SAMUEL SWORDS* JOHN T. TERRY REV. RODERICK TERRY, D.D. JOHN E. THAYER Mrs. F. F. Thompson

EDWIN THORNE JOEL WOLFE THORNE IONATHAN THORNE* IONATHAN THORNE* MISS PHEBE ANNA THORNE* SAMUEL THORNE* VICTOR CORSE THORNE JOHN B. TREVOR* JOHN B. TREVOR Mrs. John B. Trevor* Mrs. John B. Trevor OSWALD W. UHL 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 HARRY PAYNE WHITNEY WILLIAM C. WHITNEY* GEORGE W. WICKERSHAM RICHARD T. WILSON* Mrs. Robert Winthrop MISS C. L. WOLFE* JOHN D. WOLFE* Mrs. Ruby Kunz Zinsser

HONORARY FELLOWS

Through election in recognition of distinguished scientific service to the Museum

ROALD AMUNDSEN
HERBERT L. BRIDGMAN
GEORGE K. CHERRIE
PROF. T. D. A. COCKERELL
MADAME MARIE SKLODOWSKA CURIE
DR. BASHFORD DEAN
LIEUT. GEORGE T. EMMONS, U.S.N.
GEO. BIRD GRINNELL
*Deceased

BARON LUDOVIC MONCHEUR REAR-ADMIRAL ROBERT E. PEARY, U.S.N.*

THEODORE ROOSEVELT*
DR. LEONARD C. SANFORD
SIR ERNEST HENRY SHACKLETON*
VILHJÁLMUR STEFÁNSSON
PROF. WILLIAM M. WHEELER

FELLOWS

By contribution of \$500 to the funds of the Museum, or by gift of books or specimens valued at \$1,000 or more

JOHN ALSTYNE* Hon. Recaredo Amengual, N. SAMUEL P. AVERY* CHARLES T. BARNEY* THOMAS BARRON* THE DUKE OF BEDFORD CHARLES L. BERNHEIMER MRS. CHARLES L. BERNHEIMER CORTLANDT FIELD BISHOP DAVID WOLFE BISHOP* GEORGE BLISS* STEPHEN NORMAN BOND TEMPLE BOWDOIN* ROBERT S. BREWSTER MRS. URBAN H. BROUGHTON 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* MISS MARY CYNTHIA DICKERSON 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* *Deceased

John A. Grossbeck*
Murry Guggenheim
S. R. Guggenheim
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* MISS E. M. KITTREDGE GEORGE W. KORPER 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 DWIGHT W. MORROW SAMUEL F. B. MORSE* RICHARD MORTIMER* LEVI P. MORTIMER* ABRAM G. NESBITT Francis Child Nicholas, M.D. LLOYD PHOENIX PHILLIPS PHOENIX* LEWIS A. PLATT* HENRY W. Poor*

FREDERICK POTTER HOWARD POTTER* O. B. Potter* JOHN T. PRATT 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 RUTHERFORD STUYVESANT* GRAHAM SUMNER 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 LIFE MEMBERS

Through election in recognition of distinguished scientific service to the Museum

CARL E. AKELEY
ADMIRAL E. ALEXEIEFF
ROBERT A. BARTLETT
REAR ADMIRAL GUY H. BURRAGE,
U. S. N.

James P. Chapin
Harold J. Cook
Dr. Carlos de la Torre
Philip De Ronde
Capt. A. Radclyffe Dugmore
Charles J. Eder
Dr. John A. Fordyce
Madison Grant
Norman Grant
Dr. E. W. Gudger
A. K. Haagner
Dr. William T. Hornaday
*Deceased

ROBERT HENDRE KELBY Prof. C. R. Kellogg CHARLES R. KNIGHT HERBERT LANG Dr. Frederic A. Lucas PROF. RICHARD S. LULL. Dr. George M. Mackenzie WILLIAM NIVEN HON. JOSEPH J. NUNAN PROF. RAYMOND C. OSBURN Hon. Benjamin F. Pankey PAUL J. RAINEY Dr. WILLIAM S. RAINSFORD Dr. Hugh M. Smith NICOLI SOKOLNIKOFF GEN. S. HERBERT WOLFE JOHN G. WORTH

LIFE MEMBERS

By contribution of \$100 to the funds of the Museum, or by gift of books or specimens valued at \$200 or more

EDWARD G. ACHESON

C. R. AGNEW

G. B. Agnew

J. V. AGUILERA

C. F. Ahlstrom

Mrs. Frank E. Aiken

EDWARD F. ALBEE

SIMON A. ALCAIDE

JOHN EDWARD ALDRED

ANNIE M. ALEXANDER

HARRY ALEXANDER

Rev. Arthur Huntington Allen

F. D. ALLER

A. M. ANDERSON

LARZ ANDERSON

CHARLOTTE L. ANDREWS

JAMES M. ANDREWS, 4TH

Francis R. Appleton

MISS MARY APPLETON

MRS. MARTIN ARCHER-SHEE

ALLISON V. ARMOUR

S. T. Armstrong, M.D.

MRS. WILLIAM ARMSTRONG

BENJAMIN WALWORTH ARNOLD

EDWARD W. C. ARNOLD

JOHN ASPEGREN

JOHN ASPINWALL

VINCENT ASTOR

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

FRANK L. BABBOTT, JR.

JULES S. BACHE

MISS CHARLOTTE S. BAKER

GEO. F. BAKER, IR.

H. MARTYN BAKER

EDWIN SWIFT BALCH

ALBERT H. BALDWIN

Joseph C. Baldwin, Jr.

S. PRENTISS BALDWIN

HENRY BALFE

MISS VIRGINIA FRANCES BALLARD

HENRY McC. BANGS

THOMAS BABROUR

THOMAS BARING

FREDERIC BARNARD

JAMES BARNES

J. SANFORD BARNES

D. Newton Barney

JOHN HENDLEY BARNHART, M.D.

JAMES H. BARR

GEORGE D. BARRON

BERNARD M. BARUCH

MRS. H. ROSWELL BATES

HOWARD BAYNE

Joseph Ainslie Bear

C. WILLIAM BEEBE

DENNISTOUN M. BELL

GORDON KNOX BELL

Mrs. Helen A. Bell Louis V. Bell

WM. F. BELLER

AUGUST BELMONT

H. Benis

THOMAS G. BENNETT

C. M. Bergstresser

CHARLES L. BERNHEIMER

Mrs. Charles L. Bernheimer

JOHN E. BERWIND

SAMUEL R. BETTS

Sydney Bevin

VICTOR D. BEVIN

WILLIAM G. BIBB

LYNFORD BIDDLE

MISS ELIZABETH BILLINGS

ROBERT WORTH BINGHAM R. CLIFFORD BLACK

MRS. EMMONS BLAINE

J. INSLEY BLAIR

CORNELIUS N. BLISS, JR.

ROBERT WOODS BLISS MRS. ROBERT WOODS BLISS SAMUEL I. BLOOMINGDALE George Blumenthal HENRY W. BOETTGER ROBERT BOETTGER EDWARD C. BOHDE CHARLES WATSON BOISE L. M. BOOMER Miss A. J. Borden W. B. Bourn Louis J. Boury MRS. WM. H. BRADFORD, SR. JOHN R. BRADLEY JAMES C. BRADY Mrs. J. C. Brady BRIG.-GEN. DAVID L. BRAINARD, U.S.A.

COURTENAY BRANDRETH FREDERICK F. BREWSTER GEORGE S. BREWSTER WILLIAM BREWSTER CHARLES LYMAN BRINSMADE WM. RUTGER BRITTON MRS. CLIFFORD V. BROKAW WILLIAM GOULD BROKAW EDGAR B. BRONSON, JR. MISS ELIZABETH VERNON BRONSON REGINALD BROOKS BARNUM BROWN DICKSON Q. BROWN Geo. McKesson Brown HERBERT POMEROY BROWN STANLEY DOTY BROWN WM REYNOLDS BROWN HENRY G. BRYANT WILLIAMSON BUCKMAN DOROTHY BULL LUDLOW S. BULL GEORGE BULLOCK ALBERT C. BURRAGE MIDDLETON S. BURRILL R. L. Burton B. H. Buxton M. L. BYERS REV. HARRY R. CALDWELL

FULLER E. CALLAWAY W. R. CALLENDER Mrs. Alex. Cameron FREDERIC ALMY CAMMANN Dr. FELIPE GARCIA CAÑIZARES HAMILTON CARHARTT C. L. CARPENTER PHILIP A. CARROLL PIERRE C. CARTIER GEORGE B. CASE MRS. GEORGE B. CASE MISS MARIAN ROBY CASE WALTER S. CASE EDWARD PEARCE CASEY CHAS. M. CAULDWELL, M.D. GEORGE AGNEW CHAMBERLAIN ROBERT A. CHAMBERS CHARLES M. CHAPIN S. B. CHAPIN Mrs. Geo. H. Chatilion CHARLES CHENEY EVERSLEY CHILDS Mrs. George E. Chisholm E. D. CHURCH JAMES A. CHURCH LESTER B. CHURCHILL MICHAEL J. CLANCY B. Preston Clark E. W. CLARK F. AMBROSE CLARK JOHN B. CLARK ROBERT STERLING CLARK MISS ZELINA T. CLARK BANYER CLARKSON Mrs. George C. Clausen CHAS. D. CLEVELAND HENRY CLEWS CAPT. EDWARD B. CLOSE WM. P. CLYDE ALEXANDER SMITH COCHRAN ADAM W. S. COCHRANE W. R. COE BIRD S. COLER RUSSELL J. COLES S. BAYARD COLGATE SIDNEY M. COLGATE

MRS. SIDNEY M. COLGATE WILLIAM COLGATE ALFRED M. COLLINS SAMUEL D. COLLINS MRS. WILLIAM H. COLLINS CHESTER L. COLTON FRED. H. COMSTOCK WASHINGTON E. CONNOR MISS MARIE LOUISE CONSTABLE Mrs. E. C. Converse Mrs. JAY COOGAN C. MONTAGUE COOKE, JR. C. FOSTER COOPER HENRY DODGE COOPER HUGH L. COOPER S. WILBUR CORMAN R. R. CORNELL DANIEL W. CORY JOHN LYMAN COX WILLIAM R. CRAIG R. T. CRANE, JR. GEORGE A. CROCKER, JR. MRS. WILLIAM H. CROCKER WM. Nelson Cromwell FRANCIS B. CROWNINSHIELD WALTER GRAY CRUMP, JR. J. S. CULLINAN CHARLES B. CURTIS HEYWARD CUTTING Mrs. W. Bayard Cutting MISS ELEANOR DE GRAFF CUYLER ALFRED G. DALE MARCUS DALY MRS. DAVID T. DANA Mrs. E. H. Danforth EDGAR B. DAVIS JOHN T. DAVIS WM. T. DAVIS CHAS. STEWART DAVISON LIEUT. FREDERICK TRUBEE DAVISON HARRY VALLETTE DAY LEE GARNETT DAY EDGAR DEAL ANDRE DE COPPET EDWARD J. DE COPPET GEORGE B. DE FOREST

A. V. DE GOICOURIA Mrs. Carlos de Heredia ALFRED DETONGE S. DE TONGE LEWIS L. DELAFIELD HENRI DECKERT DE LA MEILLAIE MOREAU DELANO JOHN B. DENNIS CHAUNCEY M. DEPEW. JR. CHARLES DE RHAM HENRY A. C. DE RUBIO D. George Dery F. W. DEVOE THEODORE DE WITT WILLIAM G. DE WITT George M. Dexter W. B. DICKERMAN MRS. C. N. DIETZ WALTER F. DILLINGHAM CLARENCE DILLON MRS. HENRY F. DIMOCK Mrs. W. B. DINSMORE RAYMOND L. DITMARS CLEVELAND H. DODGE MRS. CLEVELAND H. DODGE MARCELLUS HARTLEY DODGE HENRY L. DOHERTY Anna Edgar Donald CAPT. T. E. DONNE JOHN WALDO DOUGLAS IOSEPH DOWD HENRY C. DRAYTON Miss Ethel Du Bois MISS KATHARINE DU BOIS WILLIAM A. DU BOIS LEWIS L. DUNHAM Dr. Theodore Dunham GANO DUNN JAMES CARR DUNN GEO. ELSWORTH DUNSCOMBE Alfred I. DU PONT GEN. COLEMAN DU PONT IRÉNÉE DU PONT WILLIAM DU PONT MISS ADELIA A. DWIGHT CLARENCE H. EAGLE

GEO. EASTMAN GEORGE L. EATON THOMAS T. ECKERT, JR. MISS ISABEL ROGERS EDGAR WILLIAM FRANKLIN LUXTON EDWARDS MRS. DAVID S. EGLESTON GEORGE EHRET Louis J. Ehret CARL EICKEMEYER OTTO M. EIDLITZ MISS MARGARET H. ELLIOT W. DIXON ELLIS JAMES W. ELLSWORTH LINCOLN ELLSWORTH CORNELL EMERY GRENVILLE T. EMMET WM. P. ENO Dr. Evan M. Evans ALLEN W. EVARTS EBERHARD FABER MRS. ERNEST A. FAIRCHILD PERCIVAL FARQUHAR EDWARD J. FARRELL THOMAS ANDREW FEUSS MARSHALL FIELD D. K. ESTE FISHER, JR. HARRY HARKNESS FLAGLER Mrs. Harry Harkness Flagler MAX C. FLEISCHMANN Mrs. Henry Fletcher Dr. Austin Flint WEBB FLOYD MAYNARD D. FOLLIN W. CAMERON FORBES BRUCE FORD JAMES B. FORD **EUGENE G. FOSTER** Austen G. Fox NOEL BLEECKER FOX Mrs. Frank Pierce Frazier C. LINCOLN FREE Mrs. John French CHILDS FRICK VARICK FRISSELL Louis Agassiz Fuertes

DALLETT FUGUET HOWARD FUGUET ARTHUR D. GABAY ALFRED WARREN GALE WILLIAM LOUIS GARRELS MRS. PHILIP C. GARRETT C. M. GARRISON FRANCIS P. GARVAN E. H. GARY EMANUEL GERLI F. WILLIAM GERTZEN FRANK LEGRAND GILLISS Dr. George H. GIRTY S. A. GOLDSCHMIDT P. J. GOODHART Dr. Frederic G. Goodridge MRS. JAMES J. GOODWIN PHILIP L. GOODWIN C. W. GORDON MRS, GEORGE B. GORDON MRS. W. R. GRACE GEORGE SCOTT GRAHAM GEORGE M. GRAY E. H. R. GREEN MORRIS M. GREEN TOHN GREENOUGH LEVI H. GREENWOOD FRANKLIN U. GREGORY HENRY E. GREGORY F. GRAY GRISWOLD DANIEL GUGGENHEIM LIEUT. HARRY F. GUGGENHEIM, U.S.N.

MURRY GUGGENHEIM
S. R. GUGGENHEIM
BERNARD G. GUNTHER
FRANKLIN L. GUNTHER
WILLIAM D. GUTHRIE
ALFRED HAFNER
WALTER ALFRED HAFNER
MRS. JAMES B. HAGGIN
MISS E. S. HAINES
GAYLORD C. HALL
HENRY S. HALL, JR.
H. M. HANNA, JR.
ANSON W. HARD, JR.

W. P. HARDENBERGH J. Horace Harding Mrs. Edward S. Harkness Mrs. Stephen V. Harkness MRS. W. L. HARKNESS WM. E. HARMON MRS. FLETCHER HARPER CHARLES J. HARRAH Alan C. Harris H. B. HARRIS BENTAMIN V. HARRISON FRANCIS B. HARRISON GEORGE L. HARRISON, JR. Dr. Louis Haupt McDougall Hawkes MRS. CLARENCE L. HAY Mrs. WILLIAM HAYWARD GEN. WARREN M. HEALEY MRS. WILLIAM RANDOLPH HEARST AUGUSTUS HEMENWAY N. B. HERSLOFF GEORGE G. HEYE JAMES J. HIGGINSON MRS. JAMES J. HIGGINSON HUGH HILL SAMUEL HIRD MRS. FREDERIC DELANO HITCH FRANCIS R. HITCHCOCK GEO. W. HOADLEY GARRET A. HOBART MRS. RICHARD MARCH HOE HENRY HORNBLOWER ALFRED O. HOYT MRS. HENRY R. HOYT JOHN SHERMAN HOYT MISS ROSINA S. HOYT THEODORE R. HOYT JOHN HUBBARD JOHN HUGHES Dr. Alex. C. Humphreys FENLEY HUNTER ARCHER M. HUNTINGTON H. E. HUNTINGTON MISS HELEN HURD DR. FREDERICK E. HYDE JAMES H. HYDE

GEORGE ILES R. L. IRELAND John V. Irwin Mrs. Columbus O'D. Iselin O'Donnell Iselin CHAS. B. ISHAM PAUL A. ISLER LEON ISRAEL V. H. JACKSON, M.D., D.D.S. MISS LAURA JACOBI S. K. JACOBS M. R. JACOBUS ARTHUR CURTISS TAMES Mrs. Arthur Curtiss James MRS. HENRY JAMES NORMAN JAMES DR. WALTER B. JAMES REYNOLD JANNEY O. G. JENNINGS Mrs. Oliver G. Jennings Mrs. James R. Jesup WM. KENNON JEWETT ELIAS M. JOHNSON R. D. O. Johnson Mrs. Adrian Hoffman Joline Mrs. Edward H. Jones FREDERIC A. JUILLIARD FELIX E. KAHN Mrs. John Innes Kane Eph. A. Karelsen MRS. WILLIAM D. KEARFOTT FRANK B. KEECH ALEXANDER SANFORD KELLOGG WALTER SCHUYLER KEMEYS EDWARD DUDLEY KENNA FREDERICK H. KENNARD RUDOLPH KEPPLER LEWIS SAYRE KERR, JR. SAMUEL KISSAM KERR WM. M. KERR NATHANIEL T. KIDDER ROBERT S. KILBORNE JAMES GORE KING, JR. IRVING B. KINGSFORD D. P. KINGSLEY Prof. Alfred C. Kinsey

STANTON D. KIRKHAM SIDNEY A. KIRKMAN WILLIAM ADAMS KISSAM MISS E. M. KITTREDGE ALFRED J. KLEIN ARNOLD KNAPP THEODOR WHITMAN KNAUTH OTTO R. KOECHL MRS. ARTHUR A. KORTH H. R. KUNHARDT George F. Kunz ALPHONSE H. KURSHEEDT EDWIN KUTTROFF Prof. A. Lacroix Mrs. Adolf Ladenburg T. W. LAMONT BELLA C. LANDAUER FAIRFAX S. LANDSTREET HENRY LANG WOODBURY G. LANGDON Dr. F. LANGE GEORGE LANGFORD Dr. J. V. LAUDERDALE JOHN BURLING LAWRENCE MRS. FREDERIC S. LEE S. M. LEHMAN CHARLES W. LENG ISOBEL H. LENMAN WADSWORTH RUSSELL LEWIS ALFRED F. LICHTENSTEIN EDWARD K. LINCOLN EDWARD H. LITCHFIELD MRS. FRANK CAMPBELL LITTLETON P. W. LIVERMORE EDWARD DE P. LIVINGSTON GOODHUE LIVINGSTON MISS EMMA H. LOCKWOOD M. J. Look CHAS. H. LOUIS JOHN H. LOVE WM. G. Low JAMES A. MACDONALD PIRIE MACDONALD I. M. MACDONOUGH CLARENCE H. MACKAY MALCOLM S. MACKAY MARY SUTTON MACY, M.D.

V. EVERIT MACY MRS. V. EVERIT MACY Mrs. John Magee I. MALFEYT EDWARD MALLINCKRODT, JR. LINDA V. MALLINSON MRS. JOHN MARKOE JOHN MARSHALL LOUIS MARSHALL W. A. MARSHALL W. H. MARSHALL THEO. N. VAIL MARSTERS HUNTER S. MARSTON GEORGE GRANT MASON EVERETT MASTEN E. P. MATHEWSON Dr. WILLIAM DILLER MATTHEW CHARLES A. MAURICE WM. MAXWELL GEORGE W. MAYNARD WALTER E. MAYNARD COMMENDATORE BARTOLOMEO MAZZA FU CRESCENZO CHAS. W. McAlpin Mrs. D. Hunter McAlpin Mrs. Kenneth R. McAlpin Mrs. George McAneny GILBERT S. McCLINTOCK MRS. HAROLD F. McCORMICK Mrs. John G. McCullough Mrs. Paul McEwen GATES W. McGARRAH MRS. HENRY K. McHARG GLENN FORD MCKINNEY MRS. JAMES McLEAN MARION McMillin GEORGE MERCER JOHN W. MERCER MANTON B. METCALF MRS. AUGUST R. MEYER Moses Charles Migel DUNLEVY MILBANK 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 FRANCIS L. MITCHELL CHAS. B. J. MITTELSTAEDT, M.D. CHARLES A. MOORE, JR. EDWARD C. MOORE. IR. WILLIAM H. MOORE VICTOR MORAWETZ JOHN M. MOREHEAD HENRY S. MORGAN I. P. MORGAN Mrs. J. PIERPONT MORGAN J. S. Morgan, Jr. Mrs. J. S. Morgan, Jr. PAUL B. MORGAN MENGO L. MORGENTHAU Effingham B. Morris Dr. Lewis R. Morris NEWBOLD MORRIS DWIGHT W. MORROW MRS. JAY C. MORSE LOUIS L. MOWBRAY ALFRED H. MULLIKEN HENRY A. MURRAY HENRY A. MURRAY, JR. J. F. FREIRE MURTA PERCY MUSGRAVE FRANK J. MYERS E. VIRGIL NEAL ABRAM G. NESBITT ACOSTA NICHOLS Mrs. George Nichols George L. Nichols HERMAN ARMOUR NICHOLS JOHN TREADWELL NICHOLS Mrs. John W. T. Nichols MORTON C. NICHOLS Mrs. Wm. G. Nichols WM. H. NICHOLS DELANCEY NICOLL HERMANN NORDEN GEORGE NOTMAN SIDNEY W. NOYES H. OBERMAIER C. H. ODELL IDA H. OGILVIE, PH.D.

DUDLEY OLCOTT, 2D ALBERT OPERTI FRANK G. ORMSBY Mrs. P. F. O'ROURKE A. Perry Osborn Mrs. Henry Fairfield Osborn H. FAIRFIELD OSBORN, IR. Mrs. William Church Osborn JOHN C. OSGOOD HARRISON GRAY OTIS Dr. Rodrigues Ottolengui MISS JULIETTE A. OWEN R. G. PACKARD, JR. C. A. PALM EDWARD C. PARISH EDWARD LUDLOW PARKER T. B. PARKER JAMES C. PARRISH Mrs. Herbert Parsons JOSEPH PARSONS WILLIAM F. PATTERSON GEORGE FOSTER PEABODY Mrs. Anne W. Penfield EDMUND PENFOLD MRS. STELLA EDRINGTON PENN Mrs. Paul G. Pennoyer Dr. CHARLES B. PENROSE C. P. PERIN MRS. CHARLES ALBERT PERKINS NORTON PERKINS RUSSELL PERKINS SEYMOUR PERKINS W. H. PERKINS THEODORE PETERS THOMAS M. PETERS W. R. Peters CURT G. PFEIFFER CARL H. PFORZHEIMER CAPT. JOHN J. PHELPS PHELPS PHELPS JOHN M. PHILLIPS HENRY PHIPPS HENRY C. PHIPPS HOWARD PHIPPS JOHN S. PHIPPS HENRY CLAY PIERCE ANNA J. PIERREPONT

JOHN J. PIERREPONT JULIA J. PIERREPONT R. STUYVESANT PIERREPONT Hon. GIFFORD PINCHOT GIFFORD PINCHOT, 2D MISS ROSAMOND PINCHOT S. C. PIRIE D. E. Pomeroy GEORGE B. POST CHAS. E. POTTS ALBERT HOUGHTON PRATT GEO. D. PRATT HAROLD I. PRATT HERBERT L. PRATT JOHN T. PRATT MRS. HENRY D. PRESCOTT EVELYN PRESTON MISS CORNELIA PRIME FREDERICK T. PROCTOR Mrs. Thomas R. Proctor Dr. T. MITCHELL PRUDDEN Mrs. Percy Rivington Pyne HENRY C. QUINBY Mrs. Samuel Ouincy CHARLES T. RAMSDEN ISOLINE D. RAY MRS. HENRY R. REA HENRY S. REDMOND STEPHEN K. REED Mrs. Victor M. Reichenberger DANIEL G. REID ALEXANDER HAMILTON RICE E. W. RICE, JR. WILLIAM LATHROP RICH MRS. GEORGE H. RICHARDSON ARNOLD F. RIEGGER CLARENCE B. RIKER JOHN J. RIKER Louis A. Ripley CHANDLER ROBBINS WM. M. ROBERTSON HENRY J. ROBINSON NELSON ROBINSON Mrs. J. D. Rockefeller, Jr. F. L. RODEWALD JOHN A. ROEBLING JOHN ROGER

Col. Archibald Rogers EDWARD H. ROGERS, M.D. HENRY H. ROGERS L. HARDING ROGERS, JR. ROBERT ROGERS PHILIP A. ROLLINS Franklin D. Roosevelt Mrs. JAMES ROOSEVELT WILLIAM ROSENBAUM GEORGE D. ROSENGARTEN DONALD ROWELL FREDERICK C. ROWLEY HENRY ROWLEY HORATIO S. RUBENS C. H. RUDDOCK JACOB RUPPERT ARCHIBALD D. RUSSELL Mrs. Horace Russell Mrs. Robert S. Russell JOHN D. RYAN THOMAS F. RYAN ARTHUR RYLE PAUL I. SACHS Mrs. Paul J. Sachs MISS CORNELIA SAFFORD MISS E. LOUISE SANDS C. H. SANFORD Dr. Leonard C. Sanford Mrs. Ralph Sanger H. E. SARGEANT HERBERT L. SATTERLEE Mrs. Armar D. Saunderson M. F. SAVAGE WILLIAM M. SAVIN ERNEST SCHERNIKOW SCHUYLER SCHIEFFELIN CHAS. A. SCHIEREN MRS. JACOB H. SCHIFF ARNOLD SCHLAET PAUL A. SCHOELLKOPF MISS EMILY E. SCHWARZ HERBERT F. SCHWARZ MISS IDA T. L. SCHWARZ ROBERT J. F. SCHWARZENBACH ARCHIBALD T. SCOFIELD STEVENSON SCOTT MISS GRACE SCOVILLE

Mrs. NATHAN A. SEAGLE R. E. SEAMANS WALTER SELIGMAN HENRY D. SHARPE Louis A. Shaw OUINCY A. SHAW EDWARD SHEARSON ALBERT JAMES SHELDON EDWARD W. SHELDON FINLEY J. SHEPARD MISS ALTHEA R. SHERMAN Mrs. Gardiner Sherman Mrs. W. Watts Sherman GEORGE SHIRAS, 3D HERBERT PRESCOTT SHREEVE CHAS. H. SHULTZ HIRAM W. SIBLEY HARPER SILLIMAN C. RITCHIE SIMPKINS MISS JEAN WALKER SIMPSON MORTIMER M. SINGER ALANSON SKINNER Francis Skinner JENS SKOUGAARD GEORGE T. SLADE JOHN R. SLATTERY MRS. E. A. SLAVEN MRS. WILLIAM SLOANE E. E. SMATHERS ALBERT SMITH ALBERT ERNEST SMITH MRS. CHARLES STEWART SMITH E. A. CAPPELEN SMITH HENRY ATTERBURY SMITH HOWARD CASWELL SMITH R. A. C. Smith Dr. Emilie Snethlage VALENTINE P. SNYDER LUDOVIC SODERSTROM S. N. SOLOMON THOMAS F. SOMERS MISS CLARA B. SPENCE JAMES SPEYER PAUL CECIL SPOFFORD JOHN A. SPOOR STUART C. SQUIER WILLIAM C. SQUIER, 3D

ADOLFO STAHL George L. Stebbins Dr. James H. Stebbins ROBERT D. STERLING Louis Stern EDW. R. STETTINIUS Mrs. Byam K. Stevens Mrs. Robert Stewart CHARLES CHAUNCEY STILLMAN MAX WM. STÖHR MISS OLIVIA E. P. STOKES MISS ANNIE STONE CHARLES A. STONE EDMUND J. STONE ALBERT H. STORER ADOLPH. D. STRAUS IAMES STREAT Mrs. Gustav Stromberg BENTAMIN STRONG Mrs. Benjamin Strong Frederick Sturgis. Ir. FRANK K. STURGIS HERMAN STUTZER MISS ANNE W. STUYVESANT A. VAN HORNE STUYVESANT, JR. WILLIAM L. SWAN Frederick Taylor IRVING K. TAYLOR STEVENSON TAYLOR WILLIAM H. TAYLOR Mrs. Thaw Dr. Allen M. Thomas EMERY J. THOMAS, M.D. W. B. THOMAS WM. S. THOMAS, M.D. COLONEL ROBERT M. THOMPSON WILLIAM BOYCE THOMPSON MISS ANNE THOMSON WARREN THORPE H. N. THURSTON THEODORE TIEDEMANN MISS EDITH W. TIEMANN Col. John C. F. Tillson, U.S.A. ROBERT E. TOD HENRY R. TOWNE J. H. Towne Dr. CHARLES H. TOWNSEND

IRA OTIS TRACY, M.D. A. F. TROESCHER S. Breck P. Trowbridge EDWARD TUCK PAUL TUCKERMAN MRS. MARY A. TUTTLE MRS. LAWRENCE L. TWEEDY SEWELL TAPPEN TYNG CARL UPMANN INGLIS M. UPPERCU FREDERICK T. VAN BEUREN A. VAN CORTLANDT F. W. VANDERBILT W. K. VANDERBILT, JR. I. M. VANDERGRIFT AMBROSE ELY VANDERPOEL BAREND VAN GERBIG MRS. WARNER M. VAN NORDEN ROBERT A. VAN WYCK MRS. JAMES M. VARNUM SAMUEL M. VAUCLAIN A. C. VEATCH ARTHUR S. VERNAY JAMES DE LANCEY VERPLANCK MRS. F. VETTEL Louis B. Wade WILLIAM PERKINS WADSWORTH D. EVERETT WAID FREDERIC C. WALCOTT ALEXANDER WALKER JAMES N. WALLACE HENRY WALTERS Mrs. Felix M. Warburg PAUL M. WARBURG Mrs. Paul M. Warburg CAROLINE CONSTANTIA WARD C. Blaine Warner JOHN I. WATERBURY PAUL WATKINS C. W. WATSON JAMES S. WATSON Mrs. J. Henry Watson THOMAS J. WATSON J. GRISWOLD WEBB I. WATSON WEBB SILAS D. WEBB MRS. WILLIAM SEWARD WEBB

W. SEWARD WEBB BENTAMIN L. WEBSTER EDWIN S. WEBSTER FRANK G. WEBSTER HAMILTON FISH WEBSTER Prof. HUTTON WEBSTER JENNIE E. B. WEBSTER MRS. SIDNEY WEBSTER MISS ALICE DELANO WEEKES FREDERIC DELANO WEEKES HENRY H. WEHRHANE HUGO WEIGERT MISS ALICE LEE WELCHER MISS AMY OGDEN WELCHER MISS EMMA PARKE AVERY WELCHER BENTAMIN WELLES RICHARD WELLING Sol. Wertheim WILLIAM P. WHARTON FRANCIS BEACH WHITE MRS. HENRY WHITE IAMES DUGALD WHITE JAMES GILBERT WHITE WILLIAM WHITMAN ALFRED RUTGERS WHITNEY, JR. Mrs. H. P. WHITNEY HENRY D. WHITON MRS. DELOS O. WICKHAM ALBERT H. WIGGIN MISS THEODORA WILBOUR JAMES B. WILBUR ELMORE A. WILLETS HOWARD WILLETS BLAIR S. WILLIAMS John J. Williams R. F. WILLIAMS RICHARD H. WILLIAMS WILLIAM WILLIAMS Mrs. M. Orme Wilson BENJAMIN L. WINCHELL EMIL WINTER Grenville L. Winthrop HENRY ROGERS WINTHROP WALTER C. WITHERBEE HENRY R. WOLCOTT Mrs. Chas. Boughton Wood

CORNELIUS AYER WOOD GEORGE WOOD WILLIAM M. WOOD DR. ROBERT S. WOODWARD HUSTON WYETH Mrs. John J. Wysong Farnham Yardley Mrs. Cornelius Zabriskie Geo. A. Zabriskie Samuel Zemurray

MRS. A. A. ZUCKER

SUSTAINING MEMBERS

By payment of \$25 annually

FRITZ ACHELIS C ADSIT STEPHEN PHILBIN ANDERTON JOHN V. BACOT. IR. Francis D. Bartow Dr. Edwin Beer WM. R. BEGG R. D. Benson MISS SUSAN DWIGHT BLISS Mrs. Walter Phelps Bliss PAUL I. BONWIT Mrs. Clarence W. Bowen ISAAC BRANDON MRS. BENT. BREWSTER Louis Bry HARRY C. BURNHAM Louis Pierre Cartier O. E. CHANEY EDWARD H. CLARK MRS. ETHEL CLYDE R. R. COLGATE WALTER B. CONGDON CLEMENT L. DESPARD WALLACE DE WITT MRS. J. HENRY DICK I. S. Douglas MRS. COLEMAN DU PONT MRS. H. B. DURYEA Mrs. Charles W. Dustin MRS. E. F. DWIGHT MRS. THOMAS A. EDISON A. W. ERICKSON W. RODMAN FAY GEORGE T. FILLIUS WM. H. FISCHER

EDWARD H. FLOYD-JONES GERARD FOUNTAIN GEORGE I. FOX Mrs. Wm. Fox LE ROY FROST Mrs. B. GOLDFRANK HENRY GOLDMAN WILLIAM B. GOODWIN CHAS. J. GRAHAM GEORGE COE GRAVES SUSAN D. GRIFFITH LYMAN P. HAMMOND EDWARD S. HARKNESS JOHN F. HARRIS HORACE HAVEMEYER BENJAMIN A. HEGEMAN, JR. E. C. HENDERSON MISS M. I. HENDERSON MAX HERMAN HENRY F. HERPERS ELON HUNTINGTON HOOKER WALTER C. HUBBARD CONRAD HUBERT MRS. THOMAS HUNT MRS. EMILY N. HUYCK JESSE H. JONES MRS. OTTO H. KAHN EUGENE S. LA BAR THEODORE H. LAMPRECHT Mrs. J. F. D. Lanier Mrs. L. H. Lapham MRS. FREDERICK LEWISOHN Mrs. Donald C. Malcom MISS CORNELIA K. MANLEY Mrs. George W. Mann

GEO. W. MANN ALFRED E. MARLING OTTO MARON E. L. MAYER G. B. McCann A. McEwen MRS. JAMES McLEAN Mrs. Van S. Merle-Smith JESSE METCALF EUGENE MEYER, IR. JOHN G. MILBURN GARDINER H. MILLER HENRY S. MILLIGAN Mrs. Pierpont Morgan ALFRED NATHAN ARTHUR NOTMAN HOWARD NOTMAN Mrs. George W. Perkins Mrs. Wm. R. Peters MRS. N. M. POND MRS. C. M. PRATT MRS. JOHN T. PRATT Mrs. Benjamin Prince M. TAYLOR PYNE OGDEN M. REID MISS EMELINE ROACH Louis I. Robertson MARIE L. RUSSELL

SAMUEL SACHS D. SCHNAKENBERG EWALD H. SCHNIEWIND Mrs. Isaac N. Seligman FREDERICK W. SENFF HAROLD S. SLOAN E. C. SMITH ELIAS D. SMITH MRS. CHARLES P. SODEN LISPENARD STEWART Mrs. Robert Stewart WILLIAM R. STEWART CASIMIR I. STRALEM CHARLES STRAUSS ALBERT TAG J. KENNEDY TOD C. J. Ulmann F. D. UNDERWOOD ISRAEL UNTERBERG Mrs. Helen Hall Vail Mrs. P. A. VALENTINE W. I. WALTER F. E. WATERMEYER GEORGE WHITNEY FRANK D. WILSEY Mrs. M. Orme Wilson C. H. ZEHNDER FRIDA ZINSSER

ANNUAL MEMBERS

By payment of \$10 annually

Aaron, David
Abbe, Robert
Abbott, James
Abbott, Mrs. Theodore J.
Abeel, John H.
Abegg, Dr. Fritz
Abell, E. F.
Abercrombie, David T.
Abert, Benjamin
Abrahams, Michael M.
Abrahams, Robert
Academy of the Sacred
Heart
Achelis, Miss Elizabeth A.

Achelis, John
Adams, Benton E.
Adams, F. B.
Adams, John Dunbar
Adams, Samuel
Adams, Wm. Crittenden
Adee, Daniel D.
Adee, George Townsend
Adler, Jerome C.
Adler, Major Julius Ochs
Adler, Mortimer C.
Adler, Siegmund
Adriance, Wm. A.
Agar, John G.

Aitken, John
Albert, Henry A.
Alcuin Preparatory School
Alden, Percy S.
Aldrich, Spencer
Aldrich, Mrs. Winthrop W.
Aldridge, Darwin R.
Aldridge, Mrs. W. H.
Alexander, Sir Douglas,
Bart.
Alexander, Mrs. Henry A.
Alexander, John F.
Alexander, Mrs. John W.

Alexander, J. S.

Alexander, Paul W. Alexander, Mrs. William Alexandre, Mrs. J. E. Alger, George W. Alison, Thomas H. Alker, Henry A. Alker, James W. Allaun, William Edwin Allen, Charles Dexter Allen, Frederic W. Allen, Frederick L. Allen, James Fred Allen, J. Roy Allen, Katharine Allen, Leroy V. Allen, Miss Mary Allen, Philip Allerton, Mrs. Samuel W. All Hallows Institute Almond, Mrs. T. R. Altschul, C. Altschul, Miss Clara Altschul, Frank Amdur, Morris Amerman, Wm. L. Amory, Copley Amory, John J. Anderson, Alexander L. Anderson, P. Chauncey Andreini, J. M. Andrew, Mrs. Henry Hersey Andrews, Charles Lee Andrews, Richard M. Andrews, W. H. Ansbacher, David A. Ansbacher, Mrs. Louis Archbold, John F. Archer, Mrs. G. A. Arend, F. J. Arkush, Reuben Armour, Mrs. H. O. Arnold, E. H. Arnstein, Mrs. Leo Aron, Harold G. Aronson, David A. Arthur, George D. Asch, Edgar S. Ascher, Mrs. Moses

Ashforth, Albert B. Ashley, Clifford W. Ashmun, B. I. Aspell, John, M.D. Ast, Abraham W. Atkins, G. W. E. Atkins, Harold B. Atterbury, Mrs. Anson P. Atwater, Mrs. William C. Atwood, Kimball C. Auchincloss, C. C. Auchineloss, Mrs. C. C. Auchincloss, Mrs. E. S. Auchincloss, Hugh Auchincloss, John W. Auchincloss, J. W. Auerbach, Joseph S. Auerbach, Mrs. Jos. S. Auger, C. L. Austen, Mrs. Vallé Austin, Chellis A. Avery, Edward S. Avinoff, Andrew N. Aycrigg, B. Arthur Ayer, James C., M.D.

Babbott, Frank L. Babcock, Mrs. F. Huntington Babcock, Woodward Bachmann, Isaac D. Bacon, Daniel Bacon, Mrs. Francis McNeil Bacon, Geo. W. Bacon, Marshall Chandler Bacon, Mrs. Robert Baer, Mrs. Rose O. Baerwald, Paul Bagot, P. Bainbridge, Arthur C. Baird, Charles Baird, Robt. Breckenridge Baker, Alfred L. Baker, Charles Chaney Baker, George R. Baker, Mrs. James McF.

Baker, Stephen

Babbitt, Genevieve C.

Baldwin, Frederick H. Baldwin, George V. N., Jr. Baldwin, Henry de Forest Ball, Alwyn, Jr. Ball, Ancell H. Ball, Florence V. Ball, T. Arthur Ballard, Charles W. Ballard, Edward L. Ballin, Gustav N. Ballin, Mrs. Jacques Bambach, Chris Bandler, Harry S. Banks, Henry W., 3d Bannard, Otto T. Barber, Thomas H. Barbour, Mrs. Alexander L. Barbour, F. K. Barbour, John Edwards Barclay, Mrs. James Lent Barclay, Mrs. Reginald Barker, Louis H. Barker, Perceval M. Barlow, Mrs. Francis C. Barnard, Miss E. J. Barnard, Mrs. J. A. Barnes, A. Victor Barnes, C. D. Barnes, Henry B. Barnes, Miss Katherine M. Barnes, Mrs. Richard S. Barnes, T. Howard Barnett, C. P. Barney, Ashbel H. Barney, Edgar S., Sc.D. Barnum, Wm. Henry Barnum, William M. Barr, James I. Barr, Robert I. Barringer, D. M. Barrows, Ira Barry, Eugene T. Barry, Llewellyn Bartlett, Miss Mary F. Bartlett, Philip G. Bartol, Henry G. Bartol, Henry G., Jr. Barton, Mrs. C. Vanderbilt

Barton, Edward R. Barton, Mrs. F. O. Bass, Dr. Murray H. Bastedo, W. A., M.D. Bates, James H. S. Bateson, Mrs. E. Farrar Battin, Mrs. A. Battle, Geo. Gordon Bauchle, Thomas Henry, Jr. Bauer, Walter Baumann, C. Ludwig Baumgart, Isidor Baumgarten, Paul Baumgarten, Paul J. Bausher, C. L. Bava, Felice Baxter, M., Jr. Baylies, Edmund L. Bayne, Mrs. Howard Bayne, Mrs. Lawrence P. Beach, Wm. N. Beadleston, Edith Beal, Mrs. Robert C. Beall, Jeremiah Beatty, A. Chester Beatty, W. Gedney Beck, Martin Beckhard, Martin Beckman, H. C. Beckwith, Edward P. Beckwith, Sidney Forbes Beekman, Charles K. Beer, Mrs. J. Behr, Herman Behre, Mrs. A. Frederick Behrend, Otto F. Beinecke, B. Beller, A. Bend, Mrs. G. H. Bender, George Bendix, Joseph H. Benedict, Miss Clara J. Benedict, H. H. Benedict, James H. Benedict, Lemuel C. Benjamin, E. Benjamin, Wm. M. Benkard, J. Philip

Bennett, F. H. Bent, Arthur Cleveland Bentley, Bertha M. Benziger, Miss Lulu Berdan, Temple T. Berger, Mrs. Charles F. Berggren, E. R. T. Bernard, Robert W. Bernheim, Dr. Alice R. Bernheim, Mrs. Eli H. Bernheim, Geo. B. Bernheim, Henry J. Bernheim, Isaac J. Bernheimer, Miss Rosie Bernstein, Theodore Bernstorff, Mrs. Hans Berolzheimer, A. C. Berolzheimer, Philip Bertron, S. R. Berwind, Edward J. Biberman, Charles Bickerton, Joseph P., Jr. Biddle, Mrs. Nicholas Biddle, William C. Bier, Mrs. Sylvan Bigelow, Dr. Wm. S. Biggs, Herman M., M.D. Bijur, Nathan I. Bijur, Samuel H. Bill, Edward Lyman Bill, Nathan D. Bill, Raymond Billings, C. K. G. Billington, Cecil Bing, Alexander M. Binger, Mrs. Frances Binswanger, Max Birch, Miss Florence Birnbaum, Martin Bishop, H. R. Bishop, Wm. F. Black, George P. Black, Mrs. Robert C. Blackall, Frederick S. Blagden, Dexter Blagden, Mrs. F. M. Blagden, Mrs. George Blagden, Mrs. Samuel P.

Blair, C. Ledyard Blair, Mrs. C. Ledyard Blair, James A., Jr. Blair, J. P. Blake, Mrs. Joseph Blake, Dr. Joseph A. Blanchet, Joseph U. Blashfield, Edwin H. Bleyer, Alfred Bliss, Maj.-Gen. Tasker H., U.S.A. Blodgett, Thos. H. Blodgett, Mrs. William T. Blodgett, William T., 3d Blood, George Whitefield Blood, Samuel Shipley Bloodgood, Robert F. Bloomingdale, Hiram C. Bloomingdale, Irving I. Blossom, Mrs. Dudley S. Bluen, Mrs. M. J. Blum, Albert Blum, Mrs. H. L. Blumenthal, Gustav Blumenthal, Hugo Blumenthal, Sidney Blumgart, Louis Blumstein, William Boardman, Kenneth Boardman, Miss R. C. Bodenhofer, F. Boettger, Pauline Boettger, Theodore Bogue, Morton G. Bolles, Miss Elinor A. Bolton, Charles C. Bolton, Reginald Pelham Bond, Miss Annie W. Bond, Mrs. Wm. E. Bondy, Richard C. Bondy, Wm. Bonner, G. T. Bonner, Paul Hyde

Bonnett, Charles P. Bonties, H. P.

Boocock, Miss Molly

Booth, Enos S.

Borden, Edw. P.

Borden, Howard S. Borg. Sidney C. Borg, Mrs. Sidney C. Born, Edward Boston, Charles A. Bound, Mrs. Charles F. Bourne, Mrs. George G. Bourne, Miss Marion C. Bouvier, M. C. Bowdoin, George T. Bowers, Miss Ethel Boyd Bowers, Henry S. Bowmall, L. W. Bowman, John McE. Bowman, W. P. Boyd, Jackson H. Braden, Welcome W. Bradley, Mary T. Bragg, Caleb S. Braman, Chester A. Brawner, A. H. Brayton, Mrs. Hezekiah A. Brearley School, The Breckinridge, Mrs. John C. Brengle, Lawrence J. Brennan, Dr. Robert Emery Brewer, George E. Brewer, Horatio J. Briggs, James Ellis Briggs, Russell E. Brightman,

Mrs. Horace Irving Brill, Dr. A. A. Brill, Henry S. Brinton, Willard C. Brisch, Ernst Bristol, John I. D. Bristow, William B. Brite, Mrs. James Britton, Dr. N. L. Broadwell, Mrs. Samuel J. Brokaw, Clifford V. Brokaw, George T. Bronson, Dr. E. B. Brookfield, Henry Morgan Brookman, Mrs. H. D. Brooks, Frederick Brooks, Dr. Harlow

Brosseau, A. J. Brower, Wm. L. Brown, Mrs. Addison Brown, Charles Hilton Brown, Charles S., Jr. Brown, Edwin H. Brown, Ernest Clive Brown, Franklin Q. Brown, Mrs. Franklin Q. Brown, Mrs. Harold Brown, J. Alexander Brown, John D. Brown, J. Wright Brown, Lathrop Brown, Dr. Lawrason Brown, Nat. I. Brown, Thatcher M. Brown, Vernon C. Brown, Walston H. Brown, Wm. Adams Browne, Dr. Charles Brownell, F. H. Browning, Mrs. J. Hull Bruns, Edwin G. Brunswick, Mrs. E. Bryant, Dr. Alice G. Bryant, Chas. E. Bryce, William Buch, Miss Emily Buck, Mrs. Dudley Buckley, B. Lord Buckner, M. N. Buckner, Thos. A. Buckner, Walker Buechner, C. Fred Bulkley, Edwin M. Bulkley, Mrs. Edwin M. Bulkley, Jonathan Bulkley, Mrs. Jonathan Bulkley, Joseph E. Bulkley, L. Duncan, M.D. Bullowa, Dr. Jesse G. M. Bunker, William Burchard, Mrs. Anson W. Burden, James A. Burden, Mrs. W. A. M. Burgess, Thornton W. Burghard, Mrs. Edward M. Campbell, J. W. C.

Burgi, Oscar Burhorn, Edwin Burke, Mrs. J. K. Burkhard, Thomas Burleigh, Mrs. George W. Burleigh, Geo. Wm. Burlingham, Mrs. Charles C. Burnett, E. R. Burns, William J. Burr, Algernon T. Burr, Geo. H. Burr, Winthrop Burr, Wm. H. Burroughs, Chas. W. Bursch, Mrs. H. Harrington Burton, Mrs. J. H. Bush, D. Fairfax Bushnell, Charles E. Busk, Fred T. Butler, Charles S. Butler, Dr. E. Santley Butler, Ethan Flagg, M.D. Butler, Miss Helen C. Butler, J. G., Jr. Butler, Maxwell Evarts Butler, Miss Virginia Butler, Wm. Allen Butt, Mrs. McCoskry Button, Mrs. W. H. Byrne, James Byrne, Mrs. James

Caballero, G. A. Cæsar, H. A. Cæsar, Harry I. Cahen, James P. Cahn, Mrs. Leopold Cahn, Mrs. S. Caldwell, Edward T. Caldwell, Prof. Otis W. Calkins, Miss E. W. Calman, Henry L. Calvocoressi, L. J. Cammann, Henry L. Cammann, H. H. Campbell, Dr. C. G.

Campbell, Mrs. Robert James Candee, Howard Sumner Canfield, Frederick A. Canfield, George F. Cannon, Henry B. Cannon, H. W. Cannon, Mrs. S. T. Cantor, Harry B. Cape, Emily Palmer Capen, Mrs. Frances I. Caplin, Harry Carden, George A. Cardozo, Ernest A. Cardozo, Michael H., Jr. Carey, Henry R. Carhart, Miss M. Renée Carlebach, Emil Carlebach, Walter M. Carlisle, G. Lister, Jr. Carlisle, Mrs. G. Lister, Ir. Carlson, Frank Carlton, Newcomb Carnegie, Mrs. George L. Carnochan, G. M. Carns, Arthur L. Carpender, Wm. Carpenter, Chas. W. Carr, Herbert J. Carr, James A. Carse, John B. Carter, Ernest T. Carter, Robert A. Carty, John J. Carver, John L. Casamajor, Dr. Louis Case, Mrs. Charles L. Case, J. Herbert Case, Theodore W. Caspary, A. H. Cass, Charles Anderson Cassard, Wm. J. Castle, Chas. C. Castles, Mrs. John W. Cauty, Frank H.

Chadbourne, William M.

Chamberlain, Edward B.

Chalmers, Arthur A.

Chambers, Frank R. Chambers, Geo. J. Chambers, Hilary R. Champ, William S. Chandler, George W. Chandler, Percy M. Chandor, Miss Valentine L. Chanler, Winthrop Channon, Harry Chapin, C. H. B. Chapin, Miss Cornelia Van A. Chapin, Elizabeth G. Chapin, Miss Maria Bowen Chapman, Clarence E. Chapman, John Jay Chapman, Mrs. John Jay Charita, Sister M. Charles, Lillian M. Chase, George Chatillon, George E. Chauncey, A. Wallace Chaves, José E. Cheever, H. Durant Chenevert, C. T. Cheney, Geo. L. Cheney, Mrs. K. D., Jr. Cheney, Louis R. Cheney, O. H. Child, Miss Ruth Auchincloss Childs, Mrs. Starling W. Childs, S. W. Childs, Wm. Chilton, H. P. Chisholm, George E. Chisholm, Hugh J. Chisholm, Mrs. Hugh J. Chisolm, B. Ogden Chisolm, Mrs. B. Ogden Choate, Mrs. Caroline S. Choate, Mabel Christie, R. E. Chubb, Mrs. F. Y. Chubb, Percy Chubb, S. H. Church, C. T. Church, Louis P.

Cillis, Hubert Claflin, John Clancy, John Evarts Clapp, A. P. Clapp, Frederick G. Clapp, George H. Clark, Anna M. Clark, A. Wayne Clark, Mrs. Charles M. Clark, Charles Martin Clark, Clarence M. Clark, Edward S. Clark, Miss E. Mabel Clark, George C., Jr. Clark, George H. Clark, Harold Benjamin Clark, Harold T. Clark, Henry A. Clark, Howard R. Clark, John M. Clark, Mrs. John Peyton Clark, J. William Clark, Louis C. Clark, Nelson S. Clark, W. A. Clark, William Clarke, E. A. S. Clarke, Thomas B. Clarkson, Miss Annie Clausen, George U. Clayburgh, Albert Clemens, Dr. James B. Clerici, John Cleveland, Clement, M.D. Cleveland, M. E. Clinch, Edward S. Close, Walter H. Clowes, Francis J. Clowes, Frederick V. Clowry, Robert C. Coakley, Cornelius G., M.D. Coates, Mrs. O. B. Cobb, Frank I. Cochran, G. D. Coddington, Mrs. Clarence Morgan Coffin, Miss Alice S. Coffin, C. A.

Coffin. Edmund Coffin, Francis A. Coffin, I. Sherwood Coffin, Mrs. Sturgis Coffin, William S. Coggeshall, Edwin W. Cohen, DeWitt Clinton Cohen, Julius Henry Cohen, Dr. Martin Cohen, Max Cohen, Morse K. Cohen, William W. Cohen, Wm. N. Cohn, Martin L. Coker, James Lide Cole, Frederic A. Cole, Rufus Cole, Mrs. Rufus Colebrook, Charles B. Coleman, C. Philip Colgate, Mrs. A. W. Colgate, Gilbert Colgate, Henry A. Colgate, James C. Colgate, Lathrop Colgate, Mrs. Richard M. Colgate, Russell Collier, Mrs. R. J. Collins, Harry Collins, Mrs. Robert W. Colon, George Edward Colt, Harris D. Colt, Richard C. Comly, Garrard Conboy, Martin Condé, Frederic Cone, Mrs. Ceasar Cone, Frederick H. Conheim, Hermann Conklin, R. C. Conklin, Mrs. W. R. Connable, Mrs. John Lee Connell, Herbert Stanley Connett, E. V., Jr. Connfelt, Charles M. Constable, Mrs. Howard Constable, Mrs. William Content, Walter

Conway, W. Palen Cook, Mrs. Alfred A. Cook, Mrs. Chas. T. Cook, Robert H. Cooke, Walter E. Cooley, Arthur N. Cooley, Mrs. Elmer E. Cooper, Mrs. Charles W. Cooper, F. G. Cooper, Henry E. Cooper, Mrs. M. Le Brun Cooper, Theodore H. Copeland, Royal S., M.D. Corbin, Austin Cordley, Frank R. Corlies, Howard Cornell, Miss Emily L. Corning, Christopher R. Corroon, R. A. Corscaden, Dr. James A. Corson, H. C. Costello, Alfred Coster, Mrs. C. H. Cote, Arthur J. Cottrell, J. C. Covell, Henry H. Cowl, Clarkson Cowl, Mrs. Clarkson Cowles, Dr. Edward S. Cowperthwait, J. H. Coxe, Mrs. Alfred C., Jr. Coyle, Robert M. Crabbe, Miss Louise G. Crain. Miss Christobelle Crandall, E. H. Crane, Charles R. Crane, H. M. Crane, Mrs. Jonathan H. Cravath, Mrs. Paul D. Crawford, H. L. Crawford, Wm. Crile, George W., M.D. Crimmins, Mrs. Thomas Crocker, William H. Crocker, W. T. Crockett, Mrs. Stuart Cromwell, James W. Cromwell, Lincoln

Cromwell, Seymour L. Crosby, Maunsell S. Cross, George D. Cross, Miss M. R. Cross, Mrs. R. J. Cross, W. R. Crossley, G. R. Crowley, Timothy F. Crozer, John P. Crump, Dr. Armistead C. Cullman, Jos. F. Cummin, Gaylord C. Cunningham, Francis de L. Cunningham, W. de L. Curie, Chas. Curiel, H. Curtis, Brian C. Curtis, F. Kingsbury Curtis, G. Warrington Curtis, Mrs. Philip N. Curtis, Ronald Eliot Curtis, W. J. Curtis, Wm. Edmond Curtiss, Roy Cushing, Howard G., Jr. Cushman, Burritt A. Cushman, James Stewart Cutcheon, F. W. M. Cutler, Mrs. Charles F. Cutler, J. Warren Cutter, Ralph L. Cypra, Anton

Daily, George M.
Dakin, Mrs. Henry D.
Dale, Chester
Dallett, Frederic A.
Dalziel, Mrs. F.
Dana, Paul
Danforth, Mrs. Francis J.
Daniel, Annie S., M.D.
Daniels, Lorenzo
Daniels, Mrs. Lorenzo
Daniels, Miss Norma M.
Danziger, Virginia
Darby, D. M.
Darlington, Clinton Pelham
Dashew, Jacob

Report of the Secretary

Deming, L. C.

Dater, John Grant Davenport, Chas. B. Davenport, Mrs. Ira Davenport, Wm. B. Davenport, Wm. R. Davey, Wm. Nelson Davidge, Wm. H. Davie, Mrs. Preston Davies, J. Clarence Davis, George S. Davis, Gherardi Davis, John W. A. Davis, Leonard M. Davis, Morgan Davis, R. C. Davis, Waters S. Davis, Mrs. William C. Davison, Miss Alice M. Davison, Alvah Davison, Miss E. H. Davison, E. Mora Davison, George W. Day, Joseph P. Day, Miss Sarah J. Day, W. A. Dazian, Henry Dean, Miss Florence de Bary, A. Debevoise, Thomas M. De Buys, A. de Forest, Mrs. Henry W. de Forest, H. W. de Forest, Johnston de Forest, Lockwood de Forest, Robert W. de Forest, Mrs. Robert W. Degener, John F. Degener, John F., Jr. De Golyer, E. Delafield, Frederick P. Delafield, Mrs. John R. Delamar, Alice A. Delano, Lyman De Lanoy, William C. de Laugier-Villars, Countess De Leon, Donald de Long, Mrs. George B. Deming, Mrs. Horace E.

Dempsey, Geo. C. Demuth, Leopold Denison, Mrs. Charles Halbert Denny, Mrs. Lucy W. Denton, Dr. Myron P. Deppé, W. P. De Sola, Mrs. J. C. Despard, Walter D. Detjen, Wm. Edward Detmer, Julian F. Deutsch, Lee De Vinne, T. B. DeWolf, W. Ashley Dexter, Mrs. Stanley W. Dey, Richard Varick Deyo, Robert E. Dick, Adolph M. Dick, Mrs. Fairman R. Dick, J. Henry Dick, Madeleine T. Dickerman, Mrs. Wm. C. Dickey, Mrs. Charles D. Dickey, Charles D., Jr. Diedel, Henry R. Diefenthäler, Charles E. Dieterich, Chas. F. Dill, Miss Mary A. Dillingham, F. A. Dillon, Charles J., M.D. Dillon, Herbert Lowell Dilworth, Jos. R. Ditson, Charles H. Dittrich, Hermann Dix, Mrs. Alfred P. Dix, John A. Dixon, Miss M. Louise Dobbyn, William A. Dodd, Frederick G. Dodd, Miss Gertrude Dodds, Lida L. Dodge, Mrs. Arthur M. Dodge, Francis P. Doelger, Charles P. Doelger, Frank G. Doherty, Mary Dolan, H. Yale

Dominick, Bayard, Jr. Dominick, Gayer G. Dominick, H. B. Dommerich, L. W. Dommerich, O. L. Donaldson, Robert M. Donoho, Mrs. Ruger Donohugh, Mrs. Agnes C. L. Dorman, Benjamin Dorman, Mrs. Richard A. Dorr, John V. N. Dorrance, Rev. Samuel M. Dorsett, R. Clarence Doubleday, F. N. Doubleday, Nelson Doughty, Edgar M. Douglas, Miss Elizabeth Douglas, Mrs. Walter Douglas, Wm. Harris Douglass, Mrs. Chas. Douglass, Mrs. G. A. Dow, Mrs. Frederic G. Dowd, Wyllys E., Jr. Dowling, F. N. Downer, William J. Downes, William A., M.D. Downey, John I. Dows, Mrs. David Drake, Miss Mary E. Draper, Charles D. Draper, Mrs. William K. Draper, Mrs. Wm. P. Drayton, Mrs. Henry Coleman Drayton, J. Coleman Dressler, Mrs. Oscar Drexel, Mrs. John R. Dribben, S. F. Driggs, Alice A. Drummond, Isaac Wyman DuBois, Arthur

DuBois, Eugene

DuBosque, F. L.

Duer, Mrs. J. B.

Dull, Mrs. A. P. L.

DuBois, Mrs. Matthew B.

Duke, Mrs. Cordelia Biddle

Duell, Major Holland S.

Dumbell, Henry T. Duncan, Frederick S. Duncan, Mrs. John P. Duncan, Stuart Duncan, Wm. A. Dunham, Mrs. Carroll Dunham, H. F. Dunkak, Henry Dunn, Henry E. Dunne, Mrs. Finley Peter Dunning, Dr. William B. du Pont, Henry F. Durkee, Eugene W. Durkee, Richard P. H. d'Utassy, George Dutcher, John Gerow DuVal, Mrs. Clive L. Du Val, Guy Duvall, William C. Dwight, Major A. S. Dwight, John E. Dwight, Jonathan, M.D. Dwight, Mrs. M. E. Dwight, P. D. Dwight, Mrs. Winthrop Dworetzky, Morris

Earle, Ellis P. Eaton, A. W. Eaton, Cyrus S. Eaton, Mrs. Frederick H. Eaton, Geo. Dummer Ebbitt, Mrs. W. H. Ebert, C. R. Eckart, Edmund Ecker, F. H. Eddy, Geo. Simpson Eddy, Wm. H. Eden, John H., Jr. Edgar, Mrs. Herman LeRov Edge, Mrs. C. N. Edgell, George Harold Edie, Richard, Jr. Edmonds, John W. Edson, Franklin Edson, Marmont Ehret, George, Jr.

Ehret, Mrs. Louis I. Ehrich, Mrs. Adelaide Price Ehrmann, Mrs. E. Eilers, Karl Eimer, A. O. Eimer, Walter R. Einstein, I. D. Einstein, Wm. Eisman, Max Eisner, William J. Eldridge, Lewis A. Elkan, Benno Elkus, Mrs. Abram I. Elliman, Lawrence Bogert Ellinger, Ernest Elliott. Howard Ellis, Ralph Ellsworth, John S. Elmer, C. W. Elms, Franklin M. Ely, Carl B. Ely, Mrs. William Henry Emanuel, John Henderson, Jr.

Embury, Miss Emma C.
Emerson, Miss Julia T.
Emerson, Mrs. Wm.
Emmerich, Robert D.
Emmet, C. Temple
Emmet, Miss Lydia F.
Emmet, Robert Temple
Endicott, William

Crowninshield Enclow. H. G. Engelhard, George H. English, Geo. W. Erb. Newman Erbsloh, R. Erdmann, Albert J. Erdmann, John F., M.D. Erdmann, Martin Erdmann, William Erdwurm, Frank, M.D. Erlanger, Abraham Erlanger, Milton S. Erlanger, Sidney C. Ernst, Irving L. Erstein, Benedict

Esberg, Florence Sutro Esberg, Henry Ethical Culture School Ettlinger, Louis Eustis, Mrs. W. C. Evangelical Lutheran Church of St. Matthew, Parish School Evans, Jackson Evans, Dr. Samuel M. Everitt, John W. Ewing, B. M. Ewing, Charles Ewing, George R. M. Exton, H. E. Eyer, George A., Jr. Eyer, Mrs. George A.

Fabbri, Ernesto G. Fabbri, Mrs. Ernesto G. Fahnestock, Harris Fahnestock, William Fahs, Louis A. Fairbanks, Wallace Fairchild, Charles S. Fairchild, S. W. Fairchild, Mrs. Chas. S. Fairlie, Chester W. Falconer, Elizebeth Falk, Kaufman George Farber, Charles Farish, John B. Farmer, Mrs. F. Malcolm Farnam, Thomas W. Farnsworth, William Farrand, Max Farrel, Mrs. Franklin Fatman, Morris Fatman, S. A. Fay, Charles J. Fayerweather, Charles S. Feingold, M. W. Feldman, S. J. Ferenbach, Mrs. Carl Ferguson, Alfred L. Ferguson, C. V. Ferguson, Miss Eleanor Ferguson, Harry L.

Ferguson, William C. Ferry, Mrs. Charles H. Feustman, L. P. Field, Henry Field, Wm. B. Osgood Field, Mrs. Wm. B. Osgood Filley, Oliver D. Fink, E. C. Finn, Mrs. J. A. Firuski, Louis L. Fischer, Hermann, M.D. Fischer, T. Tasso Fish, Erland F. Fish, Wm. L. Fisher, Edwin A. Fisher, Howell Fisher, Mrs. Irving R. Fisher, Miss Ruth B. Fisher, Samuel H. Fisher, Walter G. Fiske, Alex. P. Fitzhugh, John L. Fitzpatrick, Frank J. E. Flagg, Mrs. Thyrza Benson Flanagan, Mrs. Chas. A. Flanigan, Horace Fleitmann, Fred. T. Fleitmann, H. C. Fleitmann, William

Fleming, Mrs. George W. Fleming, Matthew C. Fleming, Stephen B. Fletcher, Henry Flexner, Mrs. Simon Flood, Alaquah Flower, Mrs. Anson R. Floyd, William Floyd, William T. Fobes, Harriet Keith Fogg, Julius H. B. Foot, Sandford D. Foote, Mrs. Sterling Forbin, V. Ford, Franklin Forsch, Mrs. F. Forsyth, Robert Fosdick, Raymond B.

Foshay, P. Maxwell
Foster, Edward W.
Foster, Frank B.
Foster, Harold A., M.D.
Foster, Howard Crosby
Foster, Macomb G.
Foster, Pell W.
Foster, Walter H.
Fowler, Mrs. R. L., Jr.
Fowler, Dr. Robert H.
Fowler, Russell S., M.D.
Fowler, Mrs. Thomas

Fox, Miss Alice Bleecker

Fox, Mrs. A. J.

Fox, Cornelius F. Fox, Frederick P. Fox, Mortimer J. Fox. William Francklyn, Mrs. Cyril Frank, Alfred Frank, Edgar E. Frank, Joseph S. Frank, Mrs. Laurence Frank, Lawrence D. Franke, Albert Franke, Mrs. Albert Franke, Julius Frankel, D. J. Medlicott Frankel, Herbert Frankel, Jacob L. Frankenberg, Henry E. Frankenberg, Werner V. Frankenstein, Edwin Frankfeld, B. Frankfield, A. Frankfort, M. Franklin, George S. Fraser, Mrs. A. V. Fraser, Mrs. C. D. Fraser, George C. Fraser, Miss J. K. Fraser, Miss S. Grace Fraser, Wm. A.

Frauenthal, Henry W., M.D.

Fredrick, Mrs. Leopold

Freedman, Leo

Freisinger, Paul R.

Frelinghuysen, Mrs. Frederick Frelinghuysen, P. H. B. French, Daniel C. French, Mrs. Daniel C. French, Fred F. Frese, Fred Freundlich, Dr. David B. Frew, Walter E. Fréy, Arthur G. Friede, Sydney A. Friedlander, Louis Powell Friedlander, Victor Friedlander, Wm. S. Friedman, Henry M. Friends School Fries, Miss Emilie Fries, Harold H. Frissell, A. S. Frissell, Miss Leila S. Frobisher, Dr. Hamilton B. Frost, Frank J. Frothingham, Major John W. Frothingham, Mrs.

Randolph Frothingham, Robert

Frothingham, William I. Fuld, Felix Fulle, Chas. A. Fulle, John H. Fuller, Mrs. Eugene Fuller, Melville B. Fulton, John H. Fulton, Robert Edison Funke, Herbert F. L.

Gaillard, Mrs. Wm. D.
Galban, Eugenio
Gale, Mrs. Thomas K.
Gallatin, Albert
Gallatin, Mrs. Albert
Gallatin, Goelet
Gallowhur, W. G.
Gamble, Miss Martha
Gammell, Mrs. Robert Ives
Ganss, Herman O.
Gardin, John E.

Gardiner, Mrs. Robert A. Garfunkel, Aaron Garrard, Miss Margaret H. Garrett, John W. Garrett, Mrs. Thos., Jr. Garrison, Mrs. E. E. Gartland, George E. Garver, John A. Gaston, Wm. G. Gatti-Casazza, Giulio Gawtry, Lewis B. Gay, Edwin F. Gay, William O. Gaylord, Irving C. Geer, Robert C. Geer, Walter Geiger, J., M.D. Geigerman, Charles Geller, Frederick Gelshenen, William H. Gerrish, Frank Scott Gerry, Robert L. Gerster, Mrs. A. G. Gertzon, Sven, D.D.S. Gibb. Mrs. H. E. Gibb, Dr. W. Travis Gibson, Miss Florence Wier Gibson, W. Frazer Gidding, Jacob Meyer Gifford, Mrs. E. Garfield Gifford, Walter S. Gilbert, Clinton Gilbert, Miss Ellen G. Gilbert, Mrs. M. B. Gilbreth, Frank B. Gilchrist, George R. E. Gill, Kermode F. Gillespie, Robert McM. Gillespie, Samuel H. Gilsey, Margaret Girden, B. B. Gladding, J. R. Glauber, M. Glazier, Henry S. Gleason, Herbert P. Glenn, John M. Glokner, Edward O. A. Glyn, W. E.

Goadby, W. H. Goddard, Mrs. F. Norton Goddard, Mrs. Frederic N. Goddard, Mrs. Morrill Goddard, Ralph Godfrey, Mrs. E. D. Godley, George McMurtrie Goetchius, Mrs. J. M. Goetz, Mrs. Joseph Addison Goldberg, H. B. Goldman, Albert Goldman, Julius Goldman, Samuel P. Goldman, Wm. Goldmann, Nathan Goldmark, Mrs. Emil Goldsmith, Alex Goldsmith, Frederick Goldsmith, Mrs. H. B. Goldsmith, James A. Goldsmith, Mrs. Maurice Goldstone, Abraham L. Goldwasser, I. Edwin Goldzier, Morris Good, Dr. Robert Goodfriend, Jacob Goodfriend, Meyer Goodhue, Chas. E. Goodwin, Walter L. Gordon, Fred W. Gordon, George B. Gordon, Walter R. Gordon, Mrs. Wm. S. Gossler, G. H. Götberg, Miss Anna S. Gotshall, W. C. Gottgetreu, Wm. Gottheil, Mrs. Paul Gotthold, Arthur F. Gould, Charles A. Gould, Edwin Gould, Horace S. Gould, Lyttleton B. P. Gove, Marguerite Grace, Mrs. L. A. Graham, Miss M. D. Grandin, George Wilbert Grasselli, C. A.

Gratz, Anderson
Gratz, Frank W.
Graves, Henry, Jr.
Gray, Albert Z.
Gray, Arthur R.
Gray, Henry G.
Graydon, Mrs. Clendenen
Greeff, Bernhard, Jr.
Greene, Miss Augusta
Borland

Greene, G. S., Jr.
Greenbaum, Fred H.
Greenhut, Benedict J.
Greening, Alfred C.
Greenstein, Dr. Harry
Greer, Louis M.
Gregory, Dr. Alice
Greims, Mrs. Herbert

Spencer
Grenier, Mrs. Arthur S.
Griffin, W. V.
Griggs, John W.
Grinnell, E. Morgan
Grinnell, Dr. Robt. S.
Griswold, Mrs. Chester
Griswold, Wm. E. S.
Groff, Mrs. Eugene A.
Gross, James S.
Gross, Moritz
Grossmann, Mrs. Edward A.
Grosvenor, Thomas

Howard, M.D. Grueby, Edward L. Grueby, Wm. H. Gruner, William C. Gude, O. J. Guernsey, Henry William Guggenheim, B. Guggenheim, Simon Guggenheim, Mrs. Simon Guggenheim, William Guggenheimer, Mrs. J. Cæsar Guinzburg, A. M. Guinzburg, Mrs. Victor Guiterman, Percy L. Gunari, Andrew P. Gurnee, Mrs. Walter S. Gushee, R. A.

Guthrie, William B. Guthrie, Rev. William Norman

Gutterson, John Harris Guye, C, H.

Haas, Miss Edith Haas, Sidney V., M.D. Hackett, Frank S. Haggin, Mrs. Terah Hague, Miss Marian Haigh, George C. Haines, Charles D. Hale, Dr. Henry E. Hall, Mrs. Clinton M. Hall, Edward E. Hall, Henry B. Hall, Henry J. S. Hall, William Webster Hallett, Harrison H. Halls, William, Jr. Halsey, Charles D. Halsey, Charles W. Halsey, Frederick A. Halsey, Herbert D. Halsey, Robert H. Halsey, R. T. H. Hamann, Wm. A. Hamburger, D. Ellis Hamburger, Samuel B. Hamerschlag, Royal P. Hamersley, Louis Gordon Hamilton, Alexander Hamilton, Miss E. S. Hamilton, Mrs. W. Pierson Hamlin, Mrs. Harry L. Hammerslough.

Alexander I. Hammerslough, Edward Hammond, Mrs. John Henry Hammond, Ogden H. Hanauer, Jerome J. Hance, John A. Hand, Joseph C. Handy, Parker D. Hansen, Ferdinand Harbeck, Mrs. J. R. Hard, DeCourcy L.

Hardenbergh, Mrs. T. E. Hardenbergh, Mrs. W. P. Hardin, William B. Hardinge, Mrs. H. Hardon, Mrs. Henry W. Hardy, Charles J. Hardy, Dr. Sarah Belcher Hare, J. Montgomery Harlow, Arthur H. Harmon, Mrs. Clifford Harmon, Rawson B. Harriman, E. Roland Harrington, Mary E. Harris, Abraham Harris, Albert H. Harris, Alfred Harris, Chas. C. Harris, Geo. A. Harris, Ida M. Harris, Mrs. Victor Harrison, Archibald Harrison, L. Harrison, Philip Harrison, Sidney Hartshorn, Stewart Hartshorne, Edward C. Haskell, J. Amory Hastings, Thomas Hatch, Edward, Jr. Hatch, Mrs. Harold Ames Hatcher, Arthur B. Hathaway, Charles Hathaway, Walter T. Havemeyer, F. C. Havemeyer, H. O. Havemeyer, J. C. Havemeyer, John F. Havemeyer, T. A. Haven, Mrs. G. G. Haven, J. Woodward Hawes, W. Gerald Hawk, Mrs. William Samuel Hernsheim, Joseph Hawkes, Eva Hawkes, Mrs. Forbes Hawkes, George Walter Hawkes, Mrs. McDougall Hawley, Mrs. Henry E. Hawley, Samuel B.

Hay, Clarence L. Hayden, Warren S. Haves, Carroll Hayes,

Dr. Wm. Van Valzah Haynes, W. deF. Hays, David S. Hayward, J. B. Hazard, Mrs. R. G. Hazen, George H. Heck, George C. Heckscher, Mrs. August Heckscher, Mrs. G. Maurice Hedges, Job E. Heide, Henry Heide, Henry, Jr. Heide. Herman L. Heide, William F. Heilner, Julius Heine, J. F. Heinsheimer, Alfred M. Heller, Abraham A. Heller, Samuel Heller, William H. Hellman, Edgar A. Hellman, Milo, D.D.S. Helme, Mrs. Geo. A. Helmer, Phoebe A. Helmuth, John Lockman Hemenway, Thomas Hencken, Hancke Henderson, Mrs. E. C. Henderson, John B. Hendrick,

Josephine Pomeroy Hendricks, Mrs. Edgar Hendricks, Harmon W. Henry, Miss H. Maud Henry, Nelson H. Henry, Philip W. Hermes, Frank J. Hernstadt, William L. Heroy, James H. Heroy, W. W. Herrick, Harold Herrick, Newbold L. Herrick, Mrs. W. W.

Herrman, Mrs. Henry S. Herrmann, Charles E. Hershey, Andrew H. Herter, Albert Herty, Chas. H. Herz, Fred. W. Herzog, Max Herzog, Paul M. Herzog, Samuel A. Hess. Dr. Alfred F. Hess, Simon Hess, Victor R. Hetzler, Theo. Hewitt, Mrs. Charles B. Hewitt, Mrs. E. R. Hewitt, Mrs. Lucy W. Hewlett, Louis Hewlett, Walter Jones Hevdt, Herman A. Heymann, Albert Heymann, Charles E. Heymann, Everett B. Heymann, Seymour E. Hicks, John M. W. Higbie, James S. Higgins, Arthur G. Higgins, R. H. Higgins, William Valentine Higginson, Rear-Admiral Francis J., U. S. N.

Hilder, Moritz
Hill, Robert Carmer
Hillhouse, C. B.
Hilyard, George D.
Hindley, Chas. T.
Hine, Francis L.
Hine, Lyman N.
Hine, Thomas A.
Hines, Walker D.
Hirsch, Chas. S.
Hirsch, Mrs. H.
Hirsch, Morris J.
Hirschberg, M. H.

Hirschhorn, Fred

Hirschland, F. H.

Hirshon, Mrs. Charles

Hilborn, Walter S.

Hoch, Herman Hochschild, Berthold Hochschild, Harold K. Hodenpyl, Anton G. Hodenpyl, Mrs. Eugene Hodes, Hal Hodges, Geo. W. Hoe, Geo. E. Hoe, Richard M. Hoe, Mrs. Robert Hoffman, Charles L. Hoffman, Charles W. Hoffman, F. B. Hoffman, F. Burrall, Jr. Hoffman, Harry L. Hoffman, Joseph E. Hogan, Mrs. Jefferson Hoggson, W. J. Holbrook, Mrs. Edward Holden, Dean Hawley Holden, Mrs. Edwin B. Holden, Laurence C. Hollenback, Miss Amelia B. Hollingshead, Rev. Geo. G., D.D. Hollister, Frank C., M.D. Hollister, Granger A. Holt, George C. Holt, L. Emmett, M.D. Holt, R. S. Holter, Mrs. E. O. Holzmaister, L. V. Holzman, A. Holzman, Elkan Homan, B. H. Hooker, Mrs. Elon H. Hooker, Mrs. Ransom S. Hoole, C. H. Hope, Walter E. Hopkins, A. A. Hopkins, Miss Augusta D. Hopkins, Emma B. Hopkins, Mrs. Henry Hopkinson, Ernest Hopper, John J. Hoppin, G. Beekman Hoppin, Mrs. W. W., Jr.

Hoagland, Mrs. Joseph C. Hopwood, Mrs. Everard B. Hunter, George Leland

Hord, John H. Horne, Hon, W. E., M.P. Horowitz, Dr. Philip Horr, A. R. Horr, L. Wm. Horst, L. G. Horvitz, Harry Hoskier, H. C. Hoskins-Miner, Miss Charlotte Houghton, Clement S. House, Edward M. House, Miss Florence E. House, Frederick B. Housman, Clarence J. · Hovet, Henry A. Howell, M. D. Howell, Thomas A. Howells, Mrs. John Howes, Mrs. Reuben Hoyer, F. Hoyt, Elizabeth S. Hoyt, Francis S. Hoyt, Geo. H. Hoyt, Geo. S. Hoyt, Gerald L. Hoyt, Mrs. John Sherman Hoyt, Miss Virginia Scott Hubbard, Louis B. Huber, Mrs. J. M. Huddleston, Carrol H. Hudson, Marjorie V. L. Hughes, Charles E., Jr. Hughes, Percy Huidekoper, Edgar Hull, Mrs. A. G. Hull, Miss Elizabeth A. Hulswit, Frank T. Humphrey, Martha K. Humphrey, Rev. Wm. Brewster Humphreys, Fredric E. Humphreys, F. W. Humphreys, Geo. H. Hunt, Seth B. Hunt, W. Roger

Hunter, Arthur M.

Hunter, Stephen C. Huntington, F. J. Huntington, Hester Gibson Huntington, Mrs. R. P. Hüpfel, Adolph G. Hüpfel, Chris. G. Hüpfel, J. Chr. G. Hurd, Dr. Lee M. Hurlbut, Miss Margaret C. Hurst, Mrs. Albert Edward Hutcheson, Wm. A. Hutchins, A. S. Hutchins, Mrs. R. G., Jr. Hutchinson, Cary T. Huyler, C. D. Huyler, David Huyler, Frank DeK. Hyatt, A. M. Hyde, A. Fillmore Hyde, Mrs. Augustus L. Hyde, Mrs. Clarence M. Hyde, Courtney Hyde, E. Francis Hyde, Miss Hazel Hyde, Seymour Worrall Hyman, Abraham, M.D.

Imboden, Harry M. Ingalls, Mrs. F. Abbott Ingalls, Fay Ingersoll, Jonathan Ingersoll, Robt. H. Ingraham, Geo. L. Ingraham, Mrs. George Inman, John H. Innes, O. G. Inslee, Edwin W. Irwin, William Fletcher Isaacs, Stanley M. Iselin, C. Oliver Iselin, Mrs. C. Oliver Iselin, Miss Georgine Iselin, Lewis Iselin, Mrs. William E. Iselin, Wm. E. Isham, William B. Isham, Mrs. Wm. B.

Jackson, Mrs. C. D. Jackson, Francis DeMilt Jackson, Mrs. Frederic W. Jackson, Frederick W. Jackson, Mrs. Percy Jackson, Robert A. Jackson, Samuel Jacobus, John S. Jaeckel, Albert F. Jaffray, Robert James, Ellerton James, Henry James, Mrs. Walter B. James, Mrs. Wortham Jameson, Mrs. Edwin C. . Jansen, Ed. Jaretzki, Mrs. Alfred Jarvie, James N. Jefferson, John Percival Jekyll, Mrs. Arthur B. Jenkins, A. C. Jenkins, Alfred W. Jenks, Mrs. Robert I. Jennings, Miss A. B. Jennings, Percy H. Jennings, Mrs. Percy Hall Jennings, Mrs. Philip B. Jennings, Robt. E. Jennings, Walter Jephson, George S. Jermain, Miss M. C. Jersawit, Louis Jesup, Richard M. Jetter, J. Edward Jewett, George L. (In Memoriam) Jobe, Miss Mary L. Johnson, Mrs. Bradish Johnson, F. Elmer, M.D. Johnson, Gilbert H. Johnson, Guy B. Johnson, Thos. W. Johnston, J. Herbert Johnston, Mrs. J. Herbert Johnston, Dr. Marius E. Jones, Mrs. Adam Leroy Jones, A. H. Jones, Mrs. Cadwalader

Jones, De Witt Clinton
Jones, Mrs. Dwight A.
Jones, Francis C.
Jones, Frank Morton
Jones, H. Bolton
Jones, William R.
Jordan, Richard, M.D.
Joseph, Eli
Joseph, Mrs. John A., Jr.
Josephthal, Louis M.
Judson, Mrs. Albert L.
Judson, William D.
Julian, R. L.
Jungbluth, Karl

Kahle, Mrs. Julie Kahn, Arthur J. Kahn, Otto Kahn, Otto H. Kahn, Dr. Robert Johnstone Kahn, Walter N. Kahrs, J. Henry Kane, Mrs. De Lancey Kane, Miss Sybil Kent Karelsen, Frank E., Jr. Karsch, Oswald J. Kassing, Edwin S. Kathan, Reid A. Kaufmann, Ernst B. Kaufmann, H. M. Kaufmann, Julius Kaufmann, Max Kaufmann, Mrs. M. J. Kaupe, Albert G. Kayser, Henry A. Keagey, Esther Kean, Mrs. Hamilton Fish Keech, Mrs. Frank Browne Keeler, Mrs. Charles Bradley

Keen, Barton L.
Keene, Charles S.
Keep, C. H.
Keigwin, Rev. Dr. A. Edwin
Keith, Henry M.
Keith, Minor C.
Keith, Mrs. Minor C.

Kelchner, William W. Keller, Joseph F. Keller, Morris Kelley, Augustus W. Kellogg, L. D. Kellogg, Mrs. Morris W. Kelsey, Robert B. Kemmerer, M. S. Kemp, Prof. James F. Kempner, Elias Kennedy, Dr. Harris Kennedy.

Mrs. H. Van Rensselaer Kennedy, Mrs. John S. Kennerly, M. M. Kent, Edwin C. Kent, G. H. Keppel, David Kern, William M. Kerr, E. Coe Kerr, John B. Kerr, John Clapperton Kerrison, Dr. Philip D. Kessel, Leo, M.D. Keuffel, W. G. Keyes, Dr. E. L. Keyser, Mrs. Samuel Kibbee, W. B. Kieger, Emil L. Killeen, Edward V. Kilner, S. E. Kilsheimer, James B., Jr. Kimbel, Anthony Kimbel, Henry King, Mrs. Edward King, Herbert T. King, Miss Isabella C. King, James Gore King, Ierome A. Kingsford, Daniel P. Kingsford,

Miss Margaret S. Kingsley, W. M. Kinney, Morris Kinney, Warren Kip, Clarence Van S. Kip, Mrs. Garrett B. Kip, W. Ruloff

Kirchberger, M. Kirkpatrick, John Kirkpatrick, Mrs. Thomas Kissel, Mrs. G. E. Kissel, W. Thorn Kitchel, Allan F. Klaas, G. P. Klee, Sigmund Klein, D. Emil Klein, Leo M. Kleinberger, François Klenke, William H. Klingenstein, Charles Klipstein, E. C. Knapp, Edward I. Knapp, Mrs. H. K. Knapp, Joseph P. Knapp, William Jared Knight, Mrs. J. P., Jr. Knight, Samuel Howell Knoblauch, Geo. W. Knoedler, Roland F. Knowlton, Eben B. Koch, Wilhelm Koch, William T. Kodjbanoff, Basil G. Koehler, Robert Portner Koenig, Otto Kohler, Miss M. E. Kohlman, Chas. Kohlman, Mrs. M. L. Kohn, Albert M. Kohn, Mrs. Walter T. Kohns, Lee Kohnstamm, Lothair S. Koles, Henry M., M.D. Konta, Alexander Kops, Daniel Kops, Mrs. Max Korn, Robert Kosmak, Geo. W., M.D. Kovacs, Dr. Richard Krakeur, Arthur F. Krause, Holger E. Kremer, Mrs. William N. Lanier, Reginald B. Kress, Claude W. Kridel, Alexander H. Kudlich, H. C.

Kugelman, Julius G. Kugler, H. G., Ph.D. Kuhirt, Geo. A. Kuhn, Arthur K. Kuhn, August Kuhn, Edward Kuhn, Julius Kuhn, Mrs. Walt Kursheedt, Roland S. Kurzman, Charles C. Kuser, Mrs. Anthony R. Kuser, John Dryden Kuttroff, Adolf

Lacombe, E. Henry Ladd, W. M. La Dow, Stanley V. Lagai, Dr. G. Lage, Frederico Lagemann, C. Lagowitz, Miss H. L. Laidlaw.

Mrs. George Frederick Lamarche, Mrs. Henry J. Lamb, Dr. Albert R. Lambelet, Mrs. H. Lambert, Adrian V. S. Lambert, Alexander Lambert, Samuel W. Lambert, Vitus C. Lancashire, Mrs. J. H. Landon, Francis G. Landon, Henry Hutton Lane, Edward V. Z. Lane, James Warren Lane, Melvin Lane, Wolcott G. Lange, Gustav. Ir. Langeloth, Mrs. Jacob Langmann, Mrs. G. Langstadter, Aaron Langzettel, Mrs. Marion B. B.

Lapham, Mrs. John J. Lapham, Lewis H. Lapsley, Anna Welsh

Larkin, Mrs. James S. Larkin, Wm. B. la Rosa, Carlos, Jr. Larson, Mrs. Peter Lathers, Miss Ida Lathrop, Alanson P. Lauder, Mrs. Geo., Jr. Lauer, Edgar J. Lauten, Henry G. F. Lavelle, M. J. Lawrence, Mrs. Arthur W. Lawrence, Emlen N. Lawrence, Miss Margaret Lawrence, Townsend Lawrence, W. V. Lawson, John D. Lawton, William W. Lea, Charles M. Leach, Mrs. Henry G. Leach, Henry Goddard Leale, Charles A., M.D. Leary, Mrs. George Leavitt, Mrs. Charles W. Leberman, Jacob Le Blanc, Alfred Ledoux, Albert R. Ledyard, Mrs. Lewis Cass Lee, Mrs. Arthur Lee. Charles H. Lee, Charles N. Lee, Frederic S. Lee, Ivy L. Lee, J. W., Jr. Lee, Dr. Marguerite T. Lee, Samuel Leeds, Mrs. Warner M. Leewitz, Adolph Le Fevre, C. R. Lefferts, Mrs. Barent Lefferts, Marshall C. Legg, George Leggett, Clinton H. Lehmaier, James M. Lehmaier, Mrs. Louis A. Lehman, Arthur Lehman, Harold M. Lehman, Irving Lehman, Isidore H.

Lehner, Ernst, Ph.D. Leigh, R. Walter Leland, Mrs. Amory Lemp, Louis Leo, Brother Leon, Henry Leonori, Charles L. Le Roy, Mrs. E. A. LeRoy, Dr. Louis C. Leslie, J. C. Lester, A. Edward Lester, George Bacon Leupp, Wm. H. Leventritt, David Levi, Emil S. Levi, George Levi, Philip J. Levine, Edmund J. Levison, Benno Levy, B. E. Levy, Edgar A. Levy, Ephraim B. Levy, Louis S. Levy, Moe Lewis, Mrs. August Lewis, Esther J. Lewis, Mrs. Eugene Lewis, Mrs. Frederic Elliott Lewis, Montgomery H. Lewis, Robert Parker Lewis, Wm. J., M.D. Lewisohn, Miss Irene Lewisohn, Sam A. Lexow, Mrs. Allan Lichtenstein, Oscar R. Lichtenstein, Mrs. Paul Lieb, Charles C., M.D. Lieb, J. W. Lieber, Dr. Hugo Liebmann, Mrs. Charles J. Lowther, George Liebmann, Samuel Lilienthal, Albert M. Lilienthal, Jos. L. Lilly, Mrs. Henry Limburg, Herbert R. Lincoln, Mrs. Lowell, Jr. Lindenmeyr, Fritz Lindheim, Norvin R.

Lindsay, C. Seton Lindsey. Edward Lisman, Frederick J. Lissauer, Robert Lissberger, Miss Alma L. Lissberger, Milton L. Littauer, Lucius N. Little, Bascom Littlefield, Chas. W. Livermore, Mrs. John R. Livingston, Miss Alida Livingston, Miss A. P. Livingston, Philip Lloyd, Mrs. Francis G. Lobenstine, Mrs. Wm. C. Lobsitz, Maurice Lockwood, Dr. George Roe Loeb, C. M. Loeb, J. Loeb, Mrs. Morris Loeb, Mrs. William, Jr. Loewenthal, Mrs. Julius Loewi, Hugo V. Long, Louis Lord, Daniel M. Lorenz, Mrs. Leo Loring, D. A. Lorsch, Henry Louderback, Arthur E. Lounsbery, Richard Loveland, Major John W. Lovett, R. S. Low, Ethelbert I. Low, Mrs. Seth Low, William Gilman, Jr. Lowenstein, Oscar Lowndes, M. E. Lowrey, Mrs. G. C. W. Lowther, Christopher M. Ludington, Mrs. Charles H. Ludlow, Mrs. Banyer Ludlow, Edwin Ludlow, Israel Ludlum, Albert C. Ludlum, C. A. Lueder, E. L. Lueders, George

Lufkin, E. C.
Luke, Adam K.
Luke, David L.
Lummis, Benjamin Rush
Lundquist, Miss G.
Luquer, Lea Shippen
Lusk, Miss Anna H.
Lustbader, Samuel, Jr.
Lybrand, William M.
Lyeth, J. M. R.
Lyman, Robert H.
Lyman, Theodore
Lynch, Mrs. John H.
Lynch, W. J. Turner
Lyons, Howard J.

Maas, Gustavus Maas, Milton A. Mabon, J. B. MacCracken, Mrs. Henry M. MacCurdy, George Grant MacFadden, Carl K. Macfadden, Robyn Macfarlane, Wm. M. MacIver, David Randall Mack, Arthur C. Mack, Arthur J. Mack, Fred. A. MacKee, Geo. M. Mackenzie, Kenneth K. MacMurray, C. F. Macy, W. Kingsland Mager, F. Robert Mainzer, Herbert R. Mainzer, Robert H. Mallet-Prevost, S. Malone, L. Wm. Manchester, Percival Mandell, K. Manges, Dr. Morris Mannes, David Mansfield, Howard Mantle, J. G. C. Manville, H. Estelle Mapes, Eugene E. Marble, William A. Marbury, Miss Elisabeth

Marckwald, A. H. Marcus, B. K. Marcus, Samuel Marcuse, Alexander J. Marcuse, Bernhard Markle, John Markle, Mrs. John Marks. Maurice Marsh, Charles Capron Marshall, Charles A. Marshall, Charles C. Marston, Edgar J. Marston, Edgar L. Martin, Bradley Martin, Robert W. Martin, Thomas W., M.D. Martin, Walton, M.D. Martin, W. M. Marvin, Langdon Parker Masback, Robert J. Mason, Miss Fanny P. Mason, Mrs. George Grant Mason, M. D. Massey, Mrs. George Massey, Miss Harriet F. Masters, Francis R. Masters, Sarah W. Mastin, Mrs. J. Edward Mather, Samuel Mathesius, Fredk., Jr. Matheson, Wm. J. Mathews, Dr. Frank S. Mathewson, Charles E. Maxwell, George T. Maxwell, Henry L. Maxwell. Howard W. May, Sir George May, George O. Mayer, Joseph L. B. Mayer, Josh. W. Mayer, Dr. Leo Mayer, M. R. Mayer, Nelson B. Mayer, Mrs. R. A. de Lima Mayer, Theresa Mayo, Mrs. George H. McAdoo, William McAfee, John Knox

McAleenan, Joseph A. McAllister. Robert Edgar McAlpin, Dr. D. H. McAlpin, George L. McAlpin, Kenneth R., M.D. McAteer, Mrs. D. McBride, Mrs. Herbert McBride, Thomas J. McBride, Wm. M. McCabe, T. T. McCagg, Louis B. McCall, John C. McCarthy, J. M. McClure, Samuel G. McCook, Philip J. McCourt, James McCrea, W. S. McCreery, Henry Forbes McCulloh, Charles S. McCulloh, James S. McCurdy, Robert H. McCutchen, Chas. W. McDonald, Ellice McDonald, Wm. McDuffie, Marshall William McElheny, Victor K., Jr. McGee, Wm. H. McGinley, J. R. McGraw, Stanley D. McGregor, Mrs. R. G. McGregor, Robert McIlhenny, E. A. McIlvaine, Tompkins McIntvre, John G. McKay, R. G. McKelvey, Charles W. McKelvey, J. J. McKelvy, Robert McKenna, Thos. P. McKenney, Henry P. McKeown, Matilda J. McKernon, Dr. Jas. F. McKim, John A. McKim, Le Roy McKinley, Lindsay P. McKnight, Charles McKune, Clarence S. McLain, F. J.

McLane, Mrs. Allan, Jr. McLane, Miss Elizabeth McLane, Miss Sophie Hoffman McLane, Thomas S. McLaren, W. A. McLean, Miss Ethel L. McLean, John Emery McLean, Malcolm, M.D. McMahon, Rev. Joseph H. McManus, Edward F. McMillan, Francis W. McNair, William McNall, Robert H. McNaugher, David W. McNeir, George McNeir, Thomas S. McRoberts, Samuel McWilliams, Howard McWilliams, Mrs. Josephine Miller, Roswell Mead, Carl A. Mead, Charles N. Mead, Herbert, Jr. Meeker, Henry E. Meeks, Howard V. Mehl, Henry Meigs, Mrs. Ferris J. Meinhard, Morton H. Melcher, John S. Mellen, Chase Meloy, Andrew D. Menke, William Mergentime, Mrs. Charles Merle-Smith, Van S. Merle-Smith, Mrs. Wilton Merriam, Edwin W. Merriam, Henry F. Merrihew, George W. Merrill, Edwin G. Merrill, John Lenord Merrill, Mrs. Payson Merritt, Dr. Arthur Hastings Metcalf, Stephen O. Metcalf, Mrs. Walter Willson Metcalfe, Henry Meyer, Mrs. Eugene, Jr.

Meyer, Felix

Mever. Harry H. Meyer, J. Edward Meyer, Dr. Julian J. Meyer, Max Meyer, Robert B. Meyers, Edwin L. Mezes, S. E. Michalis, C. G. Middlebrook, Frederic J. Migel, J. A. Milbank, Albert G. Millard, William J. Miller, Andrew J. Miller, Mrs. Charles E. Miller, Clifford L. Miller, Emanuel Miller, Mrs. Henry Wise Miller, Mrs. H. R. Miller, Nathan J. Miller, Mrs. Roswell, Jr. Miller, Simon Miller, William W. Millett, Gardner W. Millett, Stephen C. Milliken, Hugh K. Mills, Dr. Adelaide Mills, Frederic C. Milne, Clyde Miner, Mrs. Charles Miner, Edward G. Minford, Levis W. Minot, G. W. Minot, Mrs. G. W. Mitchell, Miss Addison Mitchell, A. M. Mitchell, C. E. Mitchell, Mrs. John Murray Mitchell, Wesley C. Mitchell, Mrs. William Moffatt, Mrs. R. Burnham Moffit, Mrs. A. R. Mohlman, Mrs. John H. Moller, William G. Molleson, George A. Monaè-Lesser, Dr. A. Monaè-Lesser, Mozart Monroe, Robert Grier

Montague, C. D. Montgomery, Carleton Montgomery, Charles S. Montgomery, Mrs. Henry Eglinton, 2d Montgomery, Robert H. Montross, N. E. Moore, Major Barrington Moore, Benjamin Moore, Casimir de R. Moore, Mrs. Casimir de R. Moore. Dwight Moore, Frederic P. Moore, H. H. Moore, Miss K. T. Moore, William A. Moorhead, Horace R. Moos, Louis H. Moot, Adelbert Moran, Chas. Morgan, Miss Anne Morgan, E. D. Morgan, Mrs. Junius S. Morgan, Shepard A. Morgan, W. Forbes, Jr. Morgan, Wm. Fellowes Morgan. Mrs. Wm. Fellowes Morgenthau, Henry Morgenthau, Mrs. Henry Morris, Ira Nelson

Morris, Joseph L. Morris, Lewis Spencer Morris, Louis M. Morris, Mrs. L. R. Morris, P. Randolph Morris, Theodore Wilson Morrison, A. Cressy Morrison,

Mrs. Charles King Morse, Perley Mortimer, Geo. T. Morton, Quincy L. Mosenthal, Philip J. Moses, Mrs. E. Moses, Mrs. Henry L. Mosle, A. Henry Mosle, Max. A.

Mosman, Philip A. Moss, Mrs. Frederick W. Motley, Jas. M. Mott, Henry C. Mott, Howard S. Mott, Mrs. J. L. Mott, Mrs. John B. Mott, Miss Marian Mowry, Eugene C. Muendel, Christina Mulford, Edwin H. Müller, Carl Müller, Mrs. Carl Muller-Schall, Fred. Mundy, Floyd W. Munn, Charles A. Munn, Dr. John P. Munroe, Vernon Munsey, Frank A. Munson, C. W. Munson, S. L. Murdock, Harvey Murphy, Deas, M.D. Murhpy, Franklin Murphy, G. M.-P. Murphy, Wm. C. Murray, F. W., M.D. Murray, J. Archibald Murtha, Thomas F. Muschenheim, Fred. A. Musliner, Silas Myers, L. Myers, William S. Myers, Winter W. Myerson, Mrs. Joseph G.

Nadelman, Mme. Elie Nagle, James Franklin Nally, Edward J. Nash, William A. Nathan, Harmon H. Naught, Mrs. George L. Naumburg, Aaron Necarsulmer, Henry Neeser, John G. Neilson, Raymond P. R. Nesmith, James Nessler, H. D.

Neuburger, David Neugass, Isidore Neuhof, Dr. Harold Neustadt, Mrs. S. Newberry, Truman H. Newbold, Fredc. R. Newborg, M. Newborg, Sidney Newburger, Mrs. Lester M. Olcott, E. E. Newcomb, Mrs. James E. Newcomb, James G. Newhall, Henry B., Jr. Newton, Mrs. Francis Newton, Rollin C. Nichols, Mrs. Chas. Walter Nichols, C. W. Nichols, Edward T. Nichols, William B. Nicholson, John E. Nickerson, Hoffman Nicoll, Mrs. Benjamin Nicoll, Mrs. Fancher Nightingale,

Miss Frances N. Nisbet, Dr. J. Douglas Niven, John Ballantine Nolan, John H., M.D. Nones, Walter M. Noonan, W. T. Norman, Mrs. Bradford Norris, Beverly Arden North, George B. Northrup, Wm. P. Norton, Charles Dyer Norton, Mrs. N. R. Norton, W. P. Noyes, D. Raymond Nugent, Frank L. Nute, Mrs. John W.

Oak, Dorothy Oakes, Geo. W. Ochs Oakes, Gill N. Oastler, Dr. F. R. Oberdorfer, George Obermayer, Charles J. Obermeyer, Jos. O'Brien, Morgan J.

Obrig, Mrs. Adolph Ochs, Adolph S. O'Connell, Dr. J. H. Offerman, John Ogden, David B. Ogden, Geo. B. Ogle, Mrs. Ponsonby O'Gorman, Mrs. Richard Oldroyd, Ida S. Olds. George S. Olin, S. H. Ollesheimer, Henry Olmsted, William Beach Olney, Elam Ward Olyphant, Robert Oman, Rear-

Admiral J. W., U. S. N. O'Neil, Mrs. Matthew O'Neill, Edwin F. Opdycke, Mrs. Leonard E. Openhym, George J. Oppenheim, Laurent Oppenheimer, Harry C. Oppenheimer, Julius O'Reilly, John B. Orr, William C. Orteig, Raymond Orvis, Mrs. Charles E. Orvis, Edwin W. Osborn, Mrs.

Frederick H. Osborn, Mrs. William H. Osborn, Wm. H. Osterholt, Ehler Otheman, Mrs. Francis W. Otis, Charles Otis, Mrs. George L. Otis, Harold Ottinger, Marx Oudin, Lucien Outerbridge, Mrs. Adolph I. Overton, Frank Ovington, Charles K.

Pace, Homer S. Paddock, Mrs. Eugene H. Page, Mrs. Arthur W.

Page, F. Palmer Pagenstecher, A. Pagenstecher, A., Jr. Pagenstecher, G. Paine, A. G., Jr. Paine, Edward S. Painter, Dr. H. McM. Palmenberg, Emil T. Palmer, Edgar Palmer, Howard Palmer, John Stanton Palmer, Laura A. Pappenheimer, Alvin M., M.D.

Pardee, Ario Pardoe, J. B., D.D.S. Parish, Mrs. Henry Parish, Wainwright Park, Charles F., Jr. Park, F. A. Parker, A. W. Parker, Bedell Parker, Junius Parker,

Mrs. William Lincoln Parker, Winthrop Parks, Elton Parodi, Dr. Teofilo Parson, Hubert Templeton Parsons, Chas. W. Parsons, Edgerton Parsons, Frank H. Parsons, Miss Gertrude Parsons, Herbert Parsons, Mrs. Joseph Parsons, Wm. Barclay Paskus, Benj. G. Paton, David Paton, Dr. Stewart Patterson, Frederick H. Patterson, Henry S., M.D. Patterson, Joseph Read Patterson, Mrs. Rufus L. Patterson, Stuart H. Patterson, T. H. Hoge Paul, John J. Paulding, Charles C. Peabody, Lincoln R.

Peabody, Stephen Peacock, Charles A. Pearsall, Samuel Pearson, Mrs. Frederick Peck, Charles E. Peck, Charles H. Peck, E. Stuart Peck, Morton R., M.D. Peck, Wm. Halsey Peckham, Mrs. Wheeler H. Pedersen, Dr. James Pedersen, Victor C., M.D. Platt, Henry B. Pell, James D. Pell, Mrs. Stephen Pell, Walden Pels, Walter Peper, Fred. H., Jr. Perera, Lionello Perine, William D. N. Perkins, F. Curtis, Jr. Perkins, G. Lawrence Perkins, Miss Hattie W. Perkins, R. P. Perrine, Mrs. F. A. C. Perry, O. B. Perry, Mrs. William A. Peter, Mrs. Armistead, 3d Peters, Miss Alice R. Peters, Mrs. Charles G. Peters, Capt. Edward McClure

Peters, Miss Isabel M. Peterson, Frederick, M.D. Petrasch, Carl Schurz Peyton, William C. Peyton, Mrs. William C. Pfender, W. S. Pforzheimer, Walter Phelan, John J. Philipp, M. Bernard Philipp, Philip B. Phillips, Mrs. Alfred

Phillips, T. W. S. Phipps, Henry Pickhardt, Carl Pierrepont, Seth Low Pierson, Mrs. C. W.

Pierson, D. H. Pierson, J. Fred Pinchot, Mrs. Gifford Pinkerton, Allan Piquet, Lily S. Pitkin, William Taft Pitman, Gen. John, U. S. A. Pitney, Mrs. J. O. H. Pitney, John O. H. Place, Ira A. Platt, Mrs. Frank H. Platt, Livingston Platzek, M. Warley Plaut, Edward Plaut, Joseph Pless, Martin Poillon, Cornelius Polhemus, Miss R. A. Polk, Frank L. Polk, Mrs. William M. Pollak, Bernard E. Pollitzer, Dr. S. Polytechnic Preparatory School Pomroy, H. A. Pomroy, H. K. Pond, Miss Florence L. Poole, Mrs. Ernest Poor, Elwyn W. Poor, Roger M. Poor, Ruel W. Poor, Walter S. Pope, G. D. Pope, Mrs. James E. Popper, A. W. Popper, Wm. C. Porter, Alexander J. Porter, Cole Porter, Mrs. Rachel Lenox Porter, Wm. H. Post, Abram S. Noroton Post, Mrs. Charles A. Post, Charles K. Post, Sylvester Potter, Miss Blanche

Potter, Frank H.

Potter, Dr. Mary Goddard

Potter, Orlando B. Potter, R. Burnside Pottier, Auguste Ruffin Potts, William B. Pouthier, Rev. Edward Pratt, Dallas B. Pratt, Mrs. George D. Pratt, Mrs. Herbert Prentice, Clare E. Prescott, Amos L. Prescott, Sherburne Preston, Veryl Price, Mrs. Walter Winston Priddy, Lawrence Prince, Benjamin Prince, Julius Prince, Leo. M. Prince, Theodore Prizer, Edward Procter, Rodney Procter, William Proctor, Wm. Ross Proskauer, Joseph M. Pruyn, Erving Pulitzer, Mrs. Joseph Pulitzer, Ralph Pulsifer, Harold T. Pulsifer, N. T. Purdy, Wm. Macneven Putnam, Mrs. Albert E. Putnam, Helen C., M.D. Putnam, H. S. Putney, Miss Eva C. Pyle, D. H. McAlpin Pyle, James McAlpin Pyne, Mrs. M. Taylor

Quackinbush, B. F. Quincy, C. F. Quinn, John Quinn, Martin J. Quintard, Dr. Edward

Rabe, Rudolph F., M.D. Rafferty, Mrs. Ewing L. Rahlson, K. J. Raiman, Robert Insall Raisler, Samuel Ramsperger, H. G. Randolph, Coleman Randolph, Evan Ranger, Stanley G. Ransom, William L. Rathborne, Richard C. Rau, Henry M. Rawle, Henry Raymond, Dr. E. H., Jr. Raymond, H. E. Raymond, Irving E. Raynes, George W. Raynor, Forrest Read, Geo. R. Read, Mrs. William A. Rebman, Francis J. Reckford, John King Redmond, Miss Emily Redmond, Mrs. Henry S. Redmond, Roland L. Reed, G. Ellis Reed, Henry H. Reed, Miss Mary E. Reed, Robert R. Reed, Wm. E. Rees, Mrs. R. Llewelyn Reese, Dr. Robert G. Regensburg, Mrs. Jerome Reich, Dr. Adolph Reichard, Gladys A. Reichenbach, L. Reid, Martha Doane Reid, Mrs. Ogden Mills Reid, Wallace Reiland, Rev. Karl Reimann, Vilhelm Reincke, Hans Reischmann, Henry R. Remington, Franklin Rennult, William Renwick, Edward Brevoort Reyburn, Saml. W. Reynal, Mrs. E. S. Reynolds, Thos. A. Rheinauer, Daniel Rhoades, Miss Katharine N. Rhoades, Miss Nina Rice, Arthur

Rice, Louis W. Rice, Philip B. Rich, Jos. S. Rich, M. P. Rich, William L., Jr. Richard, E. A. Richard, Miss Elvine Richard, Oscar L. Richards, Eben Richards, Ellis G. Richards, Mrs. J. Ernest Richards, Mrs. W. B. Richardson, Mrs. C. Tiffany Richardson, Sinclair Richter, Max Ricker, Mrs. Eleanor A. Ridder, Victor F. Riddle, Mrs. Theodate Pope Ridgway, Mrs. Robert Riem, Simon R. Riesenberg, Adolph Riggs, George C. Riglander, Mrs. M. M. Riker, Wm. J. Ripley, Henry B. H. Rippenbein, Morris Rittenberg, Mrs. Isaac Rives. F. Bavard Robbins, Mrs. Helen C. Robert, Samuel Roberts, Fanny E. Roberts, Irving Bruce Roberts, Owen F. Robertson, Miss J. Robins, Kingman Nott Robinson, Beverley R. Robinson, Mrs. C. L. F. Robinson, Mrs. Douglas Robinson, Edward Robinson, Dr. John A. Robinson, Monroe D. Robinson, Mrs. T. Douglas Rockefeller, Percy A. Rockefeller, Mrs. Wm. G. Rockwood, Miss K. C. Roddy, Harry Justin Roelker, Alfred Rogers, Allen Merrill

Rogers, Edmund P. Rogers, Edwin M. Rogers, Francis Rogers, Mrs. Francis Rogers, Geo. M. Rogers, Gustavus A. Rogers, G. Vernor Rogers, Henry W. Rogers, Hubert E. Rogers, Mrs. Jas. Gamble Rogers, John S. Rogers, Dr. Oscar H. Rogers, Ruth Langdon Rogers, Saul E. Rogers-Jenkins, Mrs. A. Rohdenburg, G. L. Rokenbaugh, H. S. Rolle, Augustus J. Roller, Emil Rollins, Max Ronalds, Miss Thora Roome, William J. Roos, M. Roosevelt, G. Hall Roosevelt, Mrs. Hilborne L. Roosevelt, W. Emlen Root, Elihu Rose, Alfred L. Rose, Mrs. A. Sumner Rose, Mrs. George Rose, Mrs. Oscar Rosen, Mrs. Felix T. Rosenbaum, Harold A. Rosenbaum, Selig Rosenbaum, Sol. G. Rosenfeld, Edward L. Rosenfeld, Ernst Rosensohn, Mrs. S. J. Rosenthal, S. M. Rosenthal, Sylvan E. Ross, H. C. Rossbach, Jacob Rossbach, Mrs. L. Rossin, Alfred S. Rossin, Morris Rothbarth, A. Rothschild, Clarence G. Rothschild, Mrs. V. Sydney Satterlee, Mrs. Herbert L.

Rothschild, Walter N. Roumage, C. C. Rounds, Arthur C. Rounds, Ralph Stowell, Jr. Rousmaniere, John E. Rowe, Gavin Rowe, Wm. V. Rowland, Mrs. Chas. B. Rowland, Thos. Ruggles, Donald S. Ruhl, Louis Ruhlender, Henry Rumely, Mrs. Edward A. Rumsey, Mrs. C. C. Runk, Mrs. Geo. S. Runsheim, Joseph Runyon, Mefford, M.D. Runyon, Walter Clark Ruppert, Mrs. Jacob Rupprecht, Frederick K. Rusch, Adolphe, Jr. Rusch, Henry A. Russell, Walter Rust, Edgar C. Rutherfurd, Livingston Ryan, Clarence M. Ryan, John Barry Ryle, Miss Julia Sabin, Charles H. Sachs, Arthur Sachs, Bernard, M.D. Sachs, Harry Sachs, Julius Sachs, Walter E. Sage, Dean

Sage, Mrs. Henry W.

St. John, Mrs. Jesse

Sampson, Charles E.

Sanborn, William A.

Sands, Mrs. B. Aymar

Saks, Isadore

Salant, Aaron B.

Sand, Alice Low

Sanders, John E.

Sandhagen, H.

Saril, August

Schley, Evander B. Schling, Max Schmelzel, James H. Schmidt, Mrs. Charles Frederick Schmidt, Hans Schmitt, George Schmoll, Armand Schmuck, Thomas K. Schnakenberg, H. Srnest Schniewind, Mrs. Elma M. Schniewind, Heinrich, Jr. Scholle, A. H. Scholle, Howard A. Scholle, William D. Schrader, William Schramm, W. Schrenkeisen, Raymond M. Schüllinger, J. Schuster, R.

Schutz, Bernard

Schuyler, Miss Georgiana

Schwab, Mrs. Gustav

Satterlee, Miss Mabel

Sawyer, Miss Mildred

Sayles, Mrs. Robert W.

Scarborough, Wm. S.

Saunders, William Lapham

Saul, Charles R.

Sauter, Fred., Jr.

Sayles, Robert W.

Schaefer, Geo. G.

Schaefer, J. Louis

Schanck, George E.

Schauffler, Mrs. A. F.

Schell, Miss Mary E.

Scheuer, Arnold L.

Schiffer, Jack W.

Schieffelin, Wm. Jay

Schiff, Lieut. Herbert,

U.S.N.R.F.

Scheel, Henry Van Riper

Schaefer, Henry

Schaefer, R. J.

Schaetzer, Carl

Schefer, A. H.

Schall, W.

Sauter, A. J.

Annual Members

Schwab, L. E. Schwartz, H. J. Schwarz, Arthur A. Schwarz, Henry F. Schwarz, Dr. Herman Schwarz, Mrs. Max Schwarz, Mrs. Philipin Schweitzer, Mrs. H. Schweitzer, Isidor S. Schwerdtfeger, Otto M. Schwob, Adolphe Scofield, Miss Marion Scott, Donald Scott, Mrs. Russell Scott, Walter Scott, William Scoville, Herbert Scoville, Robert Scribner, Charles Scrymser, Mrs. J. A. Scudder, Edward M. Scudder, Hewlett Scudder, Myron T. Scudder, Willard Scull, Chas. O. Seaman, Frank Seaman, Joseph H. Seaman, Lloyd W. Seaman, Louis L., M.D. Seasongood, Edwin A. Seaver, Benj. F. Seckels, Richard See, A. B. Seed, Miss R. Seeman, Carl Seeman, Fred. R. Seeman, Joseph Seidenberg, Otto Selig, Arthur L. Seligman, A. J. Seligman, Edwin R. A. Seligman, Eustace Seligman, George W. Seligman, Jefferson Seligmann, George A. Seligsberg, Albert J. Seligsberg, Alfred F. Semken, Dr. George H. Semler, Geo.
Seton, Alfred
Seymour, Henry T.
Shailer, William G.
Shallcross, Cecil F.
Shannon,

Mrs. William Cummings Shapiro, Harry H., D.M.D. Shardlow, Miss Eliza Sharpe, Elizabeth M. Shattuck, A. R. Shattuck, Frank G. Shaw, Mrs. James F. 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. Sheppard, Mrs. Charles E. Shibley, Fred. W. Shields, William Shiman, Abraham Shipman, R. D. Shipway, S. W. Shoemaker, Ernest Shoemaker, Henry W. Shonk, Herbert B. Shonnard, Mrs. Frederic Shreve, J. Nelson Shulhof, Otto B. Shull, Frank R. Shulof, Herman Humboldt Shumway, Mrs. A. Ritter Sibbald, Dr. Douglas W. Sibbernsen, I. Sidenberg, Geo. M. Sidenberg, Richard Sidenberg, William R. Siedenburg, R., Jr. Siegel, Jacob Siegel, William Siegman, Samuel M. Silberstein, Abraham

Silberstein, Sol. D.

Sillcocks, Mrs. Henry

Silverstein, Joshua Simmonds, Capt. A. P. Simmons, Chas. H. Simon, Alfred L. Simon, Franklin Simon, Mrs. H. G. Simon, Horatio S. Simon, Leo L. Simon, R. E. Simon, Theo. A. Simonson, Miss Lucy C. Simpson, David B. Simpson, Mrs. Ernest L. Simpson, Frederick Boulton Simpson, John Boulton Sinclair, Mrs. John Sisters of the Good Shepherd Sizer, Robt, R. Skeel, Frank D., M.D. Skeel, Mrs. Roswell, Jr. Skiddy, W. W. Skinner, Milton P. Skinner, William Slade, Francis Louis Slaughter, Rochester B. Sleigh, Arthur H. Sloan, Benson Bennett Sloan, Russell R. Sloan, Samuel Sloan, Mrs. Samuel Sloane, Henry T. Sloane, John Sloane, Wm. M. Slocum, H. Jermain, Jr. Slocum, J. J. Slocum,

Capt. Myles Standish Slocum, Thomas W. Slosson,

Mrs. Annie Trumbull
Smidt, Frank B.
Smidt, Thos.
Smiley, Daniel
Smillie, James C.
Smillie, Ralph
Smith, Abel I., Jr.
Smith, Arthur
Smith, Augustine J.

Report of the Secretary

Smith, Augustus Smith, B. Herbert Smith, Caswell M. Smith, C. Harold Smith, Mrs. De Cost Smith, Ernest L. Smith, Miss Fanny A. Smith, Mrs. Fayette Smith, Mrs. Fitch W. Smith, Harriet Otis Smith, Henry G. Smith, Henry G. Smith, Mrs. John T. Smith, Miss Josephine C. Smith, Lenox Smith, Pierre J. Smith, Mrs. Pierre J. Smith, Mrs. Raymond Hart Smith, Stanley Smith, Van W. Smith, W. Hinckle Smithers, Mrs. F. S. Smull, J. B. Smyth, Francis Snare, Frederick Snell, Thomas Snow, Elbridge G. Snow, Mrs. Frederick A. Snow, Wm. Benham, M.D. Soldwedel, Frederic Solley, Mrs. John B., Jr. Solomon,

Mrs. Albert Edward Somers, Arthur S. Sondern, Frederic E. Sondheim, Phineas Sondheimer, Julius Sonne, Hans C. Soule, Louis H. Spafford, Joseph H. Spalding, Keith Sparrow, Mrs. E. W. Spear, James Spector, Joseph Spedden, Frederic O. Spencer, Mrs. Edwards Spencer, J. Clinton Spencer, Nelson S.

Speranza, Gino C. Sperling, Emil M. Sperry, Elmer A. Sperry, Eugene E. Sperry, Wm. M. Spingarn, Mrs. J. E. Spitzner, Geo. W. Spotts, Mrs. R. L. Squibb, Dr. Edward H. Stafford. Mrs. Wm. Frederick Stallknecht, C. P. Stanfield, Theodore Stanko, Markian Stanley, Alfred T. Stapleton, Chas. W. Starbuck, C. A. Starbuck, Charles L. Starr, Howard W. Starr, Louis Morris Starr, M. Allen, M.D., LL.D. Starrett, Mrs. Paul Staudt, John Stearns, Louis Steers, Mrs. James R. Steffanson, Mrs. Hakan B. Stein, Enrico N.

Stein, Jacob Stein, Joseph W. Stein, Leonard L. Steiner, Walter R. Steinthal, Martin Steinway, Fred. T. Steinway, Wm. R. Sterling, Duncan Stern, Mrs. Albert Stern, Benjamin Stern, Edwin H. Stern, Emil

Stein, Fred M.

Stein, Mrs. Gerda

Stern, Isaac Stern, Leopold Stern, Meyer Stern, Simon T. Stern, Mrs. Stella Sternberg, Isaac E.

Sterrett, J. E.

Stettenheim, I. M. Stettinius, Mrs. Edw. R. Stevenot, Chas. I. Stevens, Dr. Albert M. Stevens, Mrs. Jos. Earle Stevens, Miss Mary O. Stewart, Alexander M. Stewart, Cecil P. Stewart, Glenn Stewart, John A. Stewart, Mrs. John Wood Stewart, Mrs. Percy H. Stewart, Philip B. Stewart, Spencer W. Steyne, Mrs. Abram N. Stickels, Edward H. Stieff, Frederick Philip, Jr. Stieglitz, Albert Stiger, E. M. Stiger, William E. Stiles, H. S. Stillman, Miss B. G.

Stetten. Dr. De Witt

Stillman, Miss Charlotte R. Stillman, J. A. Stillman, Leland S.

Stix, Sylvan L. Stockmann, Marie F. C. Stockton, Mrs. Herbert K. Stoddard, Ralph George Stokes, Frederick A. Stokes, Harold Phelps Stone, Alfred W.

Stone, Miss Annie Stone, Miss Elizabeth B.

Stone, Geo. C. Storm, Jules P. Storm, Raymond W. Storrs, Frank V. Straus, Herbert N. Straus, Mrs. H. Grant Straus, Jesse Isidor Straus, Marcus Straus, Nathan Straus, Nathan, Jr.

Straus, Percy S. Straus, Mrs. Roger W. Strauss, Albert

Strauss, Mrs. Albert Strauss, Mrs. Daisy Strauss, Frederick Strauss, Miss Henriette Strauss, John Francis Strauss, Martin Strauss, Samuel Strawn, Wm. H. Street, Mrs. C. F. Streeter, Thomas W. Streit, Raymond E. Strong, Mrs. Benjamin Strong, John R. Strong, Nat. C. Strong, Prentice Strong, R. A. Strong, Mrs. William E. S. Stroock, Joseph Stroock, Louis S. Stroock, Moses J. Stroock, Mrs. S. M. Struthers, Duncan Stuart, Mrs. David Stuart, Robert Sturges, Mrs. E. C. Sturmdorf, Arnold, M.D. Stursberg, Julius A. Stursberg, W. Sullivan, Mrs. James Sulzberger, Arthur Hays Sulzberger, Cyrus L. Sumner, Mrs. Graham Sussman, Dr. Otto Sutphen, Duncan D. Sutphen, John S. Sutro, Lionel Sutro, Mrs. Lionel Sutro, Richard Sutro, Victor Suydam, Lambert Swan, Mrs. C. F. Swan, Charles F. Swan, James A. Swann, Mrs. A. W. Swanson, Dr. F. J. Swartwout, Robert Egerton Swayne, Francis B. Swetland, H. M.

Swift, Dr. George M. Swift, Samuel, M.D. Switzer, Maurice Swope, Gerard Sykes, Walter H., Jr. Symmes, L. M. Symons, W. E.

Taber, David Shearman Taber, Miss M. Taft, Henry W. Taft, Walbridge S. Taintor, Charles Wilson Talbot, Richmond Talcott, Rev. J. Frederick Tallman, Dr. Malcolm H. Talmage, Mrs. Edward T. H. Tanenbaum, Moses Tarbell, Gage E. Tate, Joseph Tatlock, John Taussig, Charles William Taussig, N. W. Taylor, Emma Fellowes Taylor, F. Carroll Taylor, Fredk. M. P. Taylor, Mrs. George Taylor, Henry R. Taylor, Herbert C. Taylor, Howard C. Taylor, Myron C. Taylor, W. A. Taylor, William E. Taylor, William R. K. Tefft, Erastus T. Tenney, Daniel G. Teresa, Mother Terry, Charles Thaddeus Terry, Roderick, Jr. Thacher,

Major Archibald G. Thacher, Mrs. T. D. Thacher, Mrs. Thomas Thaw, J. C. Thaw, Stephen Dowes Thayer, B. B. Thayer, H. B.

Thayer, Rev. William
Greenough, D.D.
Thedford, Harry W.
Thiele, E.
Thomas, Dr. Belle
Thomas, Mrs. Howard L.
Thomas, Mrs. John H.
Thomas, Mrs. T. Gaillard
Thompson,

Mrs. J. Todhunter Thompson, Lewis M. Thompson, Samuel A. Thompson, Rev. Dr. Walter Thomson, A. T. Thomson, Belle Thomson, Miss Evelyn M. Thorley, Charles Thorne, Mrs. Edwin Thorne, Mrs. Landon K. Thorne, Robert Thorne, Samuel, Jr. Thorne, S. B. Thorne, Mrs. W. V. S. Thornton, Mrs. George M. Thowless, Herbert L. Thurston, Miss Ada Tibbals, Saml. G. Tiedemann, Mrs. Theodore Tiers, Mrs. Cornelius Tiffany, Charles L. Tiffany, Louis C. Tilford, Mrs. Henry M. Tillotson, Norton B. Tilney, Frederick, M.D. Tim, Bernard L. Timolat, J. G. Timpson, James Tinkham, Julian R. Tipper, Harry Titus, Erastus, Jr. Titus, George F. Titus, Norman E., M.D. Tjader, Mrs. Richard Toch, Mrs. Maximilian Todd, Ambrose G. Tolfree, Edward R. Tompkins, Miss Augusta N. Tonnelé, Mrs. John N.

Torrance, Norman F. Totten, John R. Townley, J. M. Townsend, David C. Townsend, E. M. Townsend, H. N. Townsend, Howard Townsend, J. Henry Trabulsi, Nesib Travis, John C. Trawick, S. W. Trowbridge, E. Kellogg Trowbridge, Gardiner Truslow, Henry A. Tucker, Carll Tucker, Hrs. Carll Tuckerman, Dr. Alfred Tuckerman, Paul Tunis, Mrs. Edna K. Turnbull, Arthur Turnbull, Mrs. Ramsay Turnbull, William Turner, D. B. Turner, Wallis S. Turnure, George E. Tuttle, Donald Seymour Tweedie, Miss Annie Tweedie, N. L. B. Tweedy, Alice B. Twining, Kinsley Tyler, A. Ranger Tyler, Mrs. Victor Morris Tysen, Edward P.

Ullmann, E. S. Ulmann, Albert Ulmann, Ludwig Underwood, William Lyman Untermyer, Alvin Untermyer, Isaac

Vaillant, Mrs. G. H. Valentine, Mrs. Henry C. Valentine, Wm. A., M.D. van Beuren, F. T., Jr. van Beuren, Mrs. M. M. Van Brunt, Jeremiah R. Van Cortlandt,

Mrs. Augustus

Van der Bent, W. S. Vanderbilt, Miss Cathleen Vanderbilt, Reginald C. Vanderlip, Mrs. F. A. Vanderlip, Frank A. Vanderpoel, Mrs. J. A. van Dyke, Tertius Van Iderstine, Robert Van Norden, Ottomar H. van Ooosterzee, Mrs. L. Luykx Van Sinderen, Howard Vanston, W. J. K. Van Winkle. Miss Elizabeth M. Van Wyck, Philip V. R. Veit, Maurice Veltin, Miss Louise VerPlanck, William G. Vietor, Carl Vietor, Ernest G. Vietor, Mrs. Geo. F. Vietor, Thos. F. Villa, Alfonso P. Villard, Mrs. Henry Vincent, Mrs. George E. Vineberg, Dr. Hiram N. Virgin, Dr. Frederic O. Vitelli, G. B. Voelker, John Ph. Vogel, Felix A. Vogel, Fred, Jr. Vogel, H. G. Vogel, Martin

von Zedlitz, Mrs. Anna M. Vore, Gladys Voss, F. G. Vreeland, Frederick K. Vuilleumier, Dr. Jules A.

von Bernuth, Miss Louise E.

Vonderschmitt, Louis, Ph.D.

Vondermuhll, George A.

von Lengerke, Justus

von Oefele, Dr. Felix

Vogelstein, L.

Wacker, Harry Wadleigh, Francis Rawle

Wadsworth, James W., Jr. Wagner, T. B. Wainwright, Wm. P. Wakeman, Stephen H. Walbridge, H. D. Walcott, Mrs. F. C. Walden School, The Waldo, Miss Julia L. Wales, Edward H. Walker, Charles C. Walker, Harry L. Walker, Horatio Walker, John B., M.D. Walker, Mrs. Joseph Walker, Mrs. R. A. Walker, Mrs. Roberts Walker, William I. Wallenstein, Milton H. Waller, John Wallerstein, Leo Wallerstein, Dr. Max Walsh, Mrs. J. R. Walsh, Myles Walter, Edw. J. Ward, Artemas Ward, John Gilbert Ward, Owen Wardwell, Allen Warner, Mrs. Frank Osman Warner, Geo. H. Warner, Mrs. Henry

Wolcott Warner, Lucien C. Warren, Charles Elliot Warren, Mrs. Howard

Crosby Warren, Mrs. J. Kearny Warren, Mrs. John Hobart Washburn, Thomas G. Washburn, Wm. Ives Washburne, Chester W. Washington School, The Wasserman, Samuel Waterbury, Miss Florence Waterbury, Mrs. John I. Waters, Horace Wathen, George

Watson, A. W.

Watson, Miss Emily A. Watson, Mrs. J. E. Watson, John J., Jr. Wearne, Harry Weatherbee, Mrs. E. H. Weathers, Niel A. Webb, Louis Webb, Mrs. Vanderbilt Weber, Ferdinand Webster, Annie M. Weeks, Andrew Gray Weeks, Dr. John E. Weeks, Rufus W. Wegel, R. L. Weidenfeld, C. Weighart, Joseph B. Weigle, Chas. H. Weil, Arthur William Weil, Edmond Weil, Emil Weil, Mrs. Harriet Weil, Dr. Isaac Weil, Leon Weinberg, Alex. Weinberg, Charles Weinberger, Dr.

Bernhard W. Weinberger, Mrs. Jacques Frederick S.

Weingarten, Dr. Weir, William J. Weiss, Mrs. Chas. Weitling, Wm. W. Weld, Mrs. Francis M. Weiss, Mrs. Samuel W. Weisse, Faneuil Suydam Welinsky, Max Wells, Bulkeley Wells, Mrs. John Wells, Judd Elwin Wells, Oliver J. Welsh, S. Chas. Welwood, John Caldwell Wentz, Theodore Werner, Charles J. Werner, Theodore Wertheim, Mrs. Maurice Wesendonck, M. A.

Wessell, Arthur L. West, Harry D. West, James E. Weston, Dr. Edward Westover, Myron F. Wheeler, Dr. Herbert L. Wheeler, Miss L. Wheelock, Geo. L. Wheelright, Joseph S., M.D. Whitaker, John E. White, Alexander M. White, A. Ludlow White, Miss Caroline White, Rev. Eliot White, Henry White, John Jay White, Lazarus White, Martha R. White, Mrs. Stanford White, W. A. White, W. Foster Whitehouse, J. Henry Whitfield, Mrs. H. D. Whitin, Miss Louise Whiting, Mrs. James R. Whitman, Bret H., Jr. Whitman, Wm., Jr. Whitmarsh, Theo. F. Whitney, Casper Whitney, Edward F. Whitney, Mrs. Eli Whitney, Frank Whitney, Mrs. George Whitney, Mrs. Howard F. Whitney, Joseph B. Whitney, Mrs. Payne Whitney, Richard Whitney, Travis H. Whitney, William Whitridge, Mrs. Arnold Whittemore, Howard Wiborg, F. B. Wickham, Miss Louise F. Wickwire, Jere R. Wiemann, Albert B. Wight, J. Sherman, M.D. Wilcox, Prof. Alice Wilson Wilcox, Arthur R.

Wilcox, C. H. Wilcox, T. Ferdinand Wile, Ernest J. Wile, Ira S. Wile, Irwin Wile, Oscar J. Wiley, J. S. Wiley, Louis Wilkie, John L. Wilkins, Mrs. Morris Wilkinson, Alfred (In Memoriam) Wilks, Matthew A. Willcox, William G. Willenbrock, Mrs. Fred Willets, Miss Maria Williams, Alex. S. Williams, Arthur Williams, Ellis D. Williams, Harrison Williams, James D. Williams, Laidlaw Williams, Lewis Blair Williams, Mrs. Percy H. Williams, Mrs. Richard H. Williams, Roger B., Jr. Williams, William H. Willis, W. P. Williston, James R. Willstatter, A. Wilmerding, Lucius Wilmerding, Mrs. Lucius K. Wilson, Rev. Andrew Chalmers Wilson, Edmund B.

Wilson, H. A. Wilson, Mrs. Henry B. Wilson, John E., M.D. Wilson, M. Orme Wilson, Orme, Jr. Wilson, R. Thornton Wilson, Walter H. Wilton, H. Leonard Wimelbacher, Sigmund Wimpfheimer, Chas. A. Winchester, W. E. Wing, Morgan Wingate, Geo. W.

Report of the Secretary

Winkelman, L. L. Winslow, Rear Admiral C. McR., U.S.N. Winston, Owen Winthrop, Bronson Wise, Edmond E. Wisner, Charles Wisner, Miss E. H. Wisner, Percy Witherbee, Mrs. Frank S. Wittmann, Joseph Woerishoffer, Mrs. Anna Woerz, F. W. Wolbarst, Eli S. Wolf, W. Irving Wolfe, Lee J. Wolff, Mrs. Lewis S. Wolff, Wm. E. Wolfson, T. Wood, Arthur E. Wood, Mrs. John D. Wood, Mrs. J. Thomas Wood, J. Walter

Wood, Otis F.
Wood, Willis D.
Wood, Mrs. Willis D.
Wood, Wm. C.
Woodin, Mrs. C. R.
Woods, Westley
Woolley, G. Byron
Woolley, Scudder J., M.D.
Woolman, Edward W.
Worcester, Wilfred J.
Worthington, Henry
Rossiter

Wray, A. H.
Wray, Miss Julia
Wright, Alice I.
Wright, Mrs. J. Hood
Wright, P. D.
Wulsin, Mrs.
Wurzburger, Mrs. Walter
Wyckoff, Barkley
Wyckoff, Edward Guild
Wyckoff, Mrs. Peter B.

Wyeth, Dr. Geo. A. Wyman, Walter Channing

Yeisley, Rev. Dr. George C. Yorke, George M. Young, A. Murray Young, Mrs. A. Murray Young, Miss Annette Yuille, T. B.

Zabriskie, Charles L.
Zabriskie, George
Zeno, Norman L.
Ziegler, Frederick J.
Ziegler, Miss Jessie
Zimmerman, Dr. G. H.
Zimmermann, Charles
Zimmermann, John
Zinsser, August
Zinsser, William H.
Zoller, Charles
Zuckerman, Henry

ASSOCIATE MEMBERS

(Non-Resident)

By payment of \$3 annually

Aborn, Mrs. Vinnie R. Abrams, Duff A. Ackley, Miss Adeline E. Acton, Miss Agnes A. Adams, C. F. Adams, Chas. E. Adams, F. W. Adams, Joseph Adams, Wm. A. Aderhold, T. M. Ahl, Mrs. Leonard Aitken, Mrs. R. G. Alba, The Duke of Albrecht, Walter G. Albree, Fred W. Albright, Mrs. John J. Albright, Philip N. Aldridge, Alfred H. Alexander, Rev. J. A. Alexander, T. W. Alexander, W. L. Allabach, Lulu F. Allen, Charles H. Allen, C. L. Allen, Mrs. Horatio C. Allen, Mateal Allen, M. Catherine Althans, Dr. Carl Althouse, H. W. Alvord, George B. Ames, Charles E. Ames, Frederick D. Ames, Oakes Ames, Ward, Jr. Amos, Charles L. Amsbry, Lewis B., M.D. Anders, Fred G. Anderson, Edwin C. Anderson, Louis Francis Andrews, Billy

Andrews, E. A. Andrews, Eliza Frances Andrews, Col. James M. Andrews, W. S. Angier, Roswell P. Angus, Ethel J. App, Orpha Lorena Applebee, John H. Appleton, Mrs. Everard Appleton, Maj.-Gen. Francis Henry Archbald, Joseph A. Arensberg, Charles F. C. Aresten, A. J., Jr. Armour, M. Cochrane Armstrong, D. Curry Armstrong, Edw. E. Armstrong, E. J. Armstrong, J. D. Armstrong, J. M., M.D. Armstrong, Newton G. Arnold, Clarence M. Arnold, Miss Mittie Arter, Charles K. Asbell, H. T. Atkins, Mrs. E. F. Atkinson, Alice A. Atlee, E. I. Atterbury, J. S. Atwater, Chas. B. Atwell, George C. Austell, Alfred Averill, Mark R. Avery, Mary S. Ayer, Dr. Ira Ayrs, Orla L.

Babcock, Albert Babcock, Mrs. C. H. Babcock, Dean Babcock, Frederick R. Babcock, Horace W. Bacon, Orin S., Jr. Badger, Geo. B. Baehr, Mrs. Meta Bailey, Mrs. Charles Bailey, Dorothy Bailey, Edward P. Bailey, George Guy, Jr. Bailey, L. H. Baily, Henry P. Baird, Don O. Baker, Chas. H. Baker, Geo. L. Baker, Ivan W. Baker, John T. Baker, Roscoe G. Baker, William A. Bakhmeteff, Boris A. Baldrige, J. M. Baldwin, Mrs. A. D. Baldwin, Robert F. Ball, O. M. Ballantine, Percy Ballard, Edwin L. Ballard, James F. Ballard, W. R. Ballou, Henry C. Ballou, Louis Bancroft, Rev. James Bancroft, Wilder D. Bane, R. R. Bangs, Outram Banning, Leland G. Barbour, Prof. Erwin H. Barden, Ed. T. Barnard, Job Barney, Ida Barrett, Charles L.

Barrett, W. H.

Barron, Clarence W. Barstow, Frederic D. Bartels, Mrs. Laura G. Bartlett, A. F. Bartlett, Florence Barton, Geo. H. Batcheller, Robert Bascom, F. Bass, Robert P. Baxter, Harold F. Bayard, Thomas F. Beadle, Phebe H. Beaham, Mrs. Gordon T. Beals, Mrs. P. P. Bean, Miss Betsey Bean, Ralph C. Bean, R. Bennett Bear, Mrs. Chas. Ulysses Beardslee, J. C. Beaumont, Miss Allis Beck, M. A. Beckwith, Mrs. Daniel Beckwith, Q. E. Behrendt, Sam Beise, Dr. R. A. Belden, Mrs. Hanna E. Belknap, Henry Wyckoff Bell, C. Edward Bell, J. L. Bender, Harold B. Beneke, Henry Benjamin, Lieut.-Col. Julian A.

Lieut.-Col. Julian A Bennett, Russell M. Bennett, Winchester Benney, G. A. Benson, Edwin N., Jr. Benson, R. Dale, Jr. Bentley, Cogswell Bentley, De Lancey Bentley, Frederick, M.D. Benton, C. Herbert Berges, Jacob Bergstresser, W. H. Berry, Alfred H. Berry, S. Stillman Beveridge, Dr. James

Bevea, D. H. Beyer, Prof. Geo. E. Bigler, Frank S. Billings, Frank Bindley, Cornelia McK. Bioletti, Frederic T. Bird, John B. Bishop, Miss Abigail H. Bishop, Louis B., M.D. Bissell, C. S. Bissell, Malcolm H. Bissinger, George H. Black, James D. Black, Jeremiah S. Blackford, Charles Minor, 2d, M.D. Blackinton, Robert Larnard Blackmer, James L. Blagden, Henry H. Blair, Dr. J. M. Blakeley, George H. Blakiston, Kenneth M. Blanchard, Mrs. Emma Blanchard, John A. Blanchard, O. S. Blaney, Dwight Bliss, Miss Elizabeth B. Bliss, Lucy B. Blue, Mrs. Charles E. Blumer, George Boardman, Mrs. William D. Boericke, Mrs. Gideon Bogert, William B. Bole, Benjamin Patterson, Jr.

Patterson,
Bole, B. P.
Bonner, B. F.
Borden, Mrs. Ellen L.
Boro, Florence S.
Botsford, Elmer F.
Bouk, Charles L.
Bowen, Charles C.
Bowen, Miss J. H.
Bowerman, George F.
Bowers, Nathan A.
Bowman, Glenn F.

Bowman, Rev. John C., D.D. Bruening, E. H.

Boyd. James P. Boyer, Charles S. Bradford, Sidney Bradley, Edgar C. Bradley, J. Chester Bradshaw, F. Brainard, M. B. Bramlette, M. N. Brannon, Peter A. Brannon, Stephen G. Braunnagel, J., M.D. Braza, Joseph A. Brégy, Louis H. Brennan, Harry M. Bretz, J. H. Brewer, Mrs. Joseph Brewster, Frank Brewster, Frank H. Brewster, Miss Jane E. Bridge, Mrs. Lidian E. Bridge, Norman Briggs, Dr. C. E. Briggs, Edward C. Brigham, Mrs. Clifford Bristol, Mrs. Eugene S. Britton, Wiley Broadhurst, Ralph M. Brode, H. S. Brooks, Allan Brooks, Mrs. A. S. Brooks, Charles T. Brooks, Fred E. Brooks, Gorham Brooks, Mrs. Gorham Brooks, W. B. Brown, C. T. Brown, E. R. Brown, Ernest B. Brown, Ernest W. Brown, Henry C. Brown, Samuel B. Brown, W C. Brown, Wilbur L. Brown, William Rawle Browne, D. L. Browning, Chas. C., M.D.

Brumfield, W. A., M.D. Brummé, C. L. Bruner, Mrs. H. L. Brunsman, Mrs. C. de F. Brush, Edward W. Bruun, Chas. A. Bryant, D. C., M.D. Bryant, Mrs. Ernest A. Bryant, Dr. Harold Childe Calkins, Mrs. Alfa C. B. Bryn, H. Buchanan, Gen. James A. Bucher, Walter H. Buckingham, John Buckland, Forrest N. Buckland, W. L. Buist, George Alexander Bulkley, Barry Bull, Manlius Bull, Thomas M. Bull, Mrs. Wm. L. Bullard, Fred M. Bunce, James H. Bunn, C. W. Burbank, Luther Burdick, Harold O. Burgess, Mrs. T. P. Burgin, Dr. Herman Burnell, Elizabeth F. Burnham, Mrs. Ella F. Burnham, George, Jr. Burnham, Stewart H. Burnham, W. E. Burns, P. Burpee, David Burr, J. H. Ten Evck Burrell, Loomis Burtch, Verdi Burton, Mrs. J. Gilbert Bushnell, Edward Butcher, Henry C. Butterworth, Frank S., Jr. Butzel, Leo M. Buxton, Norman G. Byrnes, Owen

Cabot, George E. Cabrero, Narciso Rabell

Cadwalader, John, 3d Cady, Wm. B. Cahn, Benjamin R. Cain, Brighton C. Caine, William Phillips Caldwell, James H. Caldwell, Ralph R. Caldwell, Dr. Samuel L. Callaway, Wm. T. Calm, Dr. C. E. Cambridge-Haskell School Campagna, Leonardo P. Campbell, Dr. Don. M. Campbell, Mrs. Editha S. Campbell, Gordon R. Campbell, Henry Walton Campbell, Karl Campbell, William Wallace Canby, Henry M. Canniff, William Henry Cannon, Gabriel Cantley, Thos. Carlson, J. Edward Carmalt, William H., M.D. Carroll, Mrs. J. J. Carry, E. F. Carson, Charles C. Carson, J. A. G. Carter, Thomas Chauncey Carton, Alfred T. Cary, Miss Kate Case, E. C. Cassel, Miriam C. Cavaness, Miss Sallie E. Chace, Dr. James Chadeayne, Eleanor J. Chafee, Henry S. Chafee, Mrs. Z. Chamberlain, Chauncy W. Chamberlain, Kenyon Chamberlain, Thomas K. Chamberlin, Gardner Chambers, W. L. Chandler, W. F. Chapin, Mrs. Charles A. Chapman, B. G.

Chapman, Mrs. Helen Charles, Rollin L. Charles, Walter Chase, Frederick S. Chase, I. C. Chase, Mrs. Philip A. Cheever, James G. Cheney, Mary Cheney, Paul H. Chester, Webster Child, Miss Annie C. Child, Wm. A. Chilton, Robert Brent Chisholm, G. H. Chrisp, Hugh P. Christensen, Kermit Chrystie, Percival Church, Austin Church, Morton L. Clark, Bruce L. Clark, Clarence M. Clark, Emory W. Clark, John A. Clark, Miss Katrina Clark, M. A. Clark, Paul Clark, W. A., Jr. Clauder, Rudolph Clause, W. L. Clements, Wayne G. Clifford, Hubert J. Clise, J. W. Clothier, Mrs. Walter Cluett, Sanford L. Cobb, Philip H. Coe, Miss Ella S. Coffel, Hal. H. Coffin, Miss Rosamond P. Coffin, W. E. Cohn, Max M. Coker, W. C. Colby, Frederick L. Cole, Harry N. Colgate, Mrs. Mary F. L. Colgate, Robert Collins, T. Shields

Coman, Rev. A. P.

Report of the Secretary

Cusick, Laurence F., M.D.

Cushing, Harvey

Cushman, Herbert E.

Commons, Frank W. Comstock, Lyman B. Comstock. Walter J. Condit, Dr. Joseph D. Cone, C. C., M.D. Connett, James E. Conover, H. B. Conrad, W. H. Cooke, George J. Cookingham, Edward Cooley, Francis B. Coolidge, John T., Jr. Cooper, Henry S. Fenimore Cope, Francis R., Jr. Corbett, Merrit J. Corbett, R. A. Cordes, William Côrdova, Ramon Gandia Corning, Miss E. A. Corning, Henry W. Cousens, John A. Cover, C. Lee Coyle, Miss C. L. Crabb, Edward D. Craig, Dr. Newton Cramp, Theodore W. Crane, Mrs. A. A. Crane, Charles Williams Crater, Miss Sarah Crawford, R. D. Cresson, E. T., Jr. Criddle, Norman Crocker, Kendall F. Crocker, William G. Cronk, Clifford Crosby, Albert H. Crosby, Mrs. George E. Crosby, John C. Cross, Whitman Crowell, Mrs. Geo. E. Crowell, Nelson B. Crowell, Robert H. Cudahy, Joseph M. Cummings, Byron Cummins, Elizabeth I. Curtis, Winterton C. Cushing, Grafton D.

Cutler, Elbridge G. Cutler, Ira Eugene, Ph.D., LL.D. Cutler, James G. Cutler, William Edmund Dabney, Frank Dabney, T. G. Dall, Marcus Hele Dana, Miss Grace Dane, Mrs. Ernest B. Daniell, J. T. Danziger, J. M. Darlington, Miss Mary O'Hara Dart, William C. Davenport, Mrs. Elizabeth B. Davies, Henry E. Davis, Mrs. Ellery Davis, Foster B. Davis, Jeffrey Davison, Miss Elisabeth T. Davison, Joseph B. Day, Mrs. F. A. Deam, Charles Clemon de Balan, Mrs. B. Dederer, Miss Pauline H. Deecke, Miss Bertha DeForest, Charles Sturges Degener, Otto de Grunne, Count Guillaume De Lury, George De Lury, Ralph E. Deming, Chauncey M. Demmon, Stephen Denègre, Geo. Denégre, Wm. P. Dennison, Henry S. Denny, Anna H. DeNormandie, James, 2d. Denslow, H. C. Derickson, Samuel Hoffman Dewey, Charles A., M.D.

DeWolf, Wallace L.

Dickert, Charles L. Dickey, Donald R. Dickey, Harry S. Dickinson, Dr. George E. Dike, Henry B. Dillard, James Hardy Disston, William D. Dixon, Ephraim W. Dixon, Gertrude E. Dixon, J. Shipley Dobbin, Wm. L. Dodge, Charles Wright Doherty, Miss Katharine T. Dole, Elwyn H. Donaldson, Henry H. Dougan, Rose Douglas, Albert Dove, Wm. Dow, R. P. Dows, Tracy Doyle, W. E. Drake, Chas. R., M.D. Drake, F. A. Drake, Harry Trevor Draper, Wallace S. Drury, Francis E. Drury, W. T. Dryer, Charles Redway Ducharme, F. T. Dudley, Harry C. Duigan, Capt. Valentine R. Dumble, E. T. Dunbar, F. L. Dunbar, Oliver E. Duncan, James H. Duncan, W. M. Dunham, Austin Dunham, Walter L. Dunn, Mrs. H. Almira Dunshee, Mrs. W. H. Durant, Frederick C. Duryee, A. P., M.D. Dymond, J. R.

Eakle, Arthur S. Eastern Liggett School Eaton, Miss Eleanor B. Eaton, Elon Howard Eaton, Frederick W. Eberhart, Axel A. Edson, Wm. L. G. Edwards, E. P. Eggleston, Julius Wooster Ehlers, Dr. J. H. Eisenberg, Moses J., D.M.D. Eldridge, Mrs. Joseph I. Eliot, Willard A. Elliott, James R. Ellis, Robert H., M.D. Elser, Albert C. Elting, John Elwell, W. H. C. Ely, Grosvenor Ely, H. Ashley Ely, Philip V. R. Ely, William Embody, George C. Emerick, F. A. Emerson, Dean Emerson, Mrs. Edward W. Engelhardt, S. M. Engle, Bessie C. Erdmann, Charles A., M.D. Erickson, Mrs. A. Wentworth

Erving, William

Van Rensselaer Erwin, Richard P. Esper, Erwin A. Ethridge,

Mrs. Antoinette H. Evans, Dr. H. Silvester Evans, Walter S. Evans, Wilmot R. Evans, Wilmot R., Jr. Everett, Joseph E.

Fagen, J. Edward
Fahrney, Mrs. E. H.
Fairbanks, Mrs. N. B.
Faithorn, H. G.
Fanning, Jed F.
Farnham, Charles W.
Farnham, Wallace S.
Farrel, Franklin, 3d

Farrington, R. I. Featherstone, Edward A. Feiss, Richard A. Fenton, Horace J. Ferguson, Mrs. Mary Van E. Ffoulkes, S. Wynne Fiebing, J. H. Field, E. B. Field, Wm. L. W. Finch, Edward B., M.D. Fisher, Louis McLane Fisher, Richard T. Fisher, Robert J. Fitzgerald, Chas. G. Fitzpatrick, John F. Fitzsimmons, P. W. A. Fladung, Edmund B. Fleek, Henry S. Fleener, Frank L. Fleming, Arthur H. Flory, Charles F. Fobes, William Huntington Folsom, Dr. Justus Watson Foote, Arthur De Wint Foote, James S. Foote, Thos. H. Ford, Freeman A. Ford, Mrs. John B. Ford, Miss Louise P. Fordyce, Geo. L. Foster, Mrs. A. C. Foster, Mrs. Charles Dorrance

Foster, Miss Fanny
Foster, George Sanford
Foster, Miss Julia R.
Foster, Wm. B.
Foulke, Mrs. J. Roberts
Fowle, Frederick Eugene
Fowler, Edwin
Fowler, Herbert A.
Fowler, Mrs. Mary Moore
Fox, Mrs. Herbert W.
Franchot, Miss Anne
Francis, J. M.
Francis, Mark
Frazier, Nalbro
Freer, Mrs. Watson M.

Freiberg, Dr. Albert H. Frick, Donald J. Friedenwald, Dr. Harry Frierson, L. S. Frost, A. B. Frost, Dr. William Dodge Fry, Anson C. Fry, Donald Hume, Jr. Fry, H. M. Fulton, John W. Fulton, William E. Furbish, Mauran I. Futcher, Dr. Thomas B.

Gage, Simon H. Gaillard, Dr. D. L. Gale, Mrs. Charles W. Galle, Miss Louise Gallogly, E. E. Galloway, D. H., M.D. Gardiner, Charles C. Gardner, James P. Garrett, Edward I. Gates, Thomas S. Gath, John Gay, Leslie N., M.D. Gaylord, Frederick A. Geier, Mrs. Frederick A. Geology & Geography, Dept. of, Northwestern University Gerdes, Mrs. Augustus M. Gere, Mrs. Katherine Gale Gibert, Marie Giffen, R. B. Gifford, Harold Gilbert, Mrs. Frederick M. Gilchrist, T. Caspar, M.D. Gilfillan, Dr. James S. Gilliam, R. A. Gilmore, George F. Gilmore, Melvin Randolph Ginn, Curtiss, M.D. Glassell, Andrew Glenn, Oliver E. Glidden, Ralph Glover, Chas. C. Gnau, George J.

Gochenour, M. L. Godeffroy, Mrs. A. E. Godfrey, J. M., M.D. Godfrey, Mrs. W. H. K. Goodman, Joseph C. Goodrum, J. J., Jr. Goodwin, Mrs. H. M. Goodwin, James L. Goodwin, Miss Margaret S. Goodyear, Mrs. Charles W. Gordon, Mrs. Donald Goslin, Julius Goss, Mrs. George A. Goudy, Alice E. D. Graff, A. Granger, Dr. F. C. Grant, W. W. Graves, Dr. Charles B. Graves, E. M. Graves, Dr. William W. Gray, E. L. Gray, Roland Green, Erik H. Green, James A. Green, Rufus Lot Greene, Arthur Duncan Greene, Laurenz Greenough, Mrs. David S. Greenough, Henry Waldo Greenwood, Miles Greve, Charles Theodore Grew, Joseph C. Gribbel, Mrs. John Griggs, Leland Gross, John Grouard, Miss Maria Louise Guernsey, Dr. Joseph C. Guilbert, C. H. Gurney, C. H., M.D. Guy, Wm. E. Guyer, Michael F.

Haass, Ernest W., M.D. Haass, Lillian Henkel Hadley, Charles E. Hadley, Dr. Philip B. Haigh, Henry A. Haldt, Harry Peale

Hale, Dr. George E. Hale, H. Warren K. Hale, Mrs. R. E. Hall, F. Gregory Hall, Sidney Storrs, M.D. Hallowell, A. Irving Halsey, Miss Jane Hamann, Dr. C. A. Hamilton, Claude Hamilton, Mrs. H. R. Hamilton, R. L. Hancock, John W. Hankinson, T. L. Hanlin, E. W. Hanmer, Chas. C. Hannum, William E. Hapgood, Thomas E. Hardee, N. A. Harder, E. C. Harding, Emor H. Hardwick, C. L. Hardy, Leonard D. Hare, Dr. Hobart Amory Harriman, Mrs. J. Low Harrington, George Harrington, M. H. Harrington, Mrs. W. F. Harris, Frank F. Harris, Gilbert D. Harris, James Coffee Harris, Norvin Trent Harrison, Mrs.

Charles C., Jr. Harrison, George L. Harroun, Mrs. John E. Hart, E. B. Hart, Miss Jean H. Hartman, Dr. Frank G. Hartshorn, Kenneth L. Hartzell, Dr. J. Culver Harvey, J. A. Harvey, Dr. Robert H. Hasbrouck, Mrs. H. C. Haskell, Mrs. W. A. Haskins, Miss Susan F. Hathaway, Mrs. Horatio Hatt, Robert T. Hauss, Mrs. Edward A.

Haven, Herbert M. W. Haviland, Paul B. Hawes, Mrs. Oliver S. Hawley, I. M. Hawley, Mrs. James L. Hays, Dudley Grant Hays, Hoffman R. Hayward, Thos. B. Hazard, Miss Caroline Heald, Philip C. Hebard, Morgan Hecker, Frank J. Heilprin, Laurence Heming, Arthur Hemingway, Lloyd Hempel,

Kathleen Marguerite
Hendrickson, A. P.
Henshaw, Frederick W.
Herman, Raphael
Hero, Geo. A.
Herr, E. M.
Herring, J. P.
Herzstein, Dr. Morris
Heselton,

Mrs. Mabel Strong Hessenbruch, Mrs. H. Hewerdine, Thomas Sloan Hickox, W. B. Hidden, Walter Higgins, Harry E. Hill, George Wm. Hill, Louis W. Hill, William Hurd Hill, Wm. Bancroft Hillard, Oliver C. Hills, Charles F. Hills, Mrs. George F. Hills, Richard Charles Hills, Thomas M. Hilts, Erwin P. Hinchman, Mrs. Charles S. Hine, Jas. S. Hinkle, Frederick W. Hinman, Prof. Jack J., Jr. Hitchcock, Caroline J. Hite, Henry H. Hittinger, Jacob

Hoad, William C. Hodrus, W. F. Hogan, Mrs. John L. Holden, Guerdon S. Hollingshead, John L. Hollister, Evan, Jr. Holmes, Charles L. Holmes, C. M. Holmes, H. E. Holt, Sidney S. Holt, Wm. P. Hooper, Miss I. R. Hopkins, Dr. A. W. Hopkins, R. Brooke Hoppin, Mrs. Joseph Clark Horsfall, R. Bruce Horton, Dr. Geo. M. Houghton, John D. Howard, B. C. Howard, Dr. Leland O. Howat, William Frederick Howe, Howard A. Howe, Dr. Percy R. Howell, A. B. Howland, C. H., D.D.S. Howland, Daniel Hoyt, Edwin Hubbard, George David Hubbard, Miss Mary G. Hubbard, Richard Ledyard Huber, Dr. G. Carl Huber, Mrs. Mary Stewart Huff, N. L. Hughes, Chas. A. Hunnewell, Henry S. Hunt, Wm. B. Hunter, S. M. Huntley, Charles R. Hutcheson, Robert B. Hutchinson, John Palmer Hutchinson, W. J. Hutton, J. Gladden Iddings, George S., M.D. Iknayan, N. C., M.D. Ingersoll, Major J. M. M. R. C., U.S.A. Ingerson, M. J. Ingram, William A.

Ions, Clarendon Irish, Franklin C. Irvine, H. H. Isaacs, Jack A. Isbell, Howard L. Iturbe, Dr. Juan

Jackson, Charles C. Jackson, Dr. H. H. T. Jackson, Richard N. Jackson, Walter M. Jameson, Mrs. Sydney B. Janson, Dr. Ivar Jenness, Chas. G. Jennings, John G. Jepson, Dr. William Jewett, E. H. Jilek, F. E. Johansen, Dr. Erneste Johnson, Arthur Monrad Johnson, J. A. Johnson, James T., M.D. Johnson, Luther H. Johnson, Wellington B. Johnston, J. W. Jonas, Mrs. A. F. Jones, Henry K. Jones, Herbert K. Jones, John S. Jones, Livingston E. Jones, S. Paul Jordan, Edwin O. Judd, Mrs. M. E. Just, Dr. E. E. Justice, Theodore Kahn, Morton C. Kaiser, F. G. Kalbach, Geo. Karsner, Dr. Howard T. Kaufmann, Dr. Franklin John

Keefer, R. Cressler Keen, W. W. Keep, Chauncey Keiser, Robert H. Kell, Delacourt Kellogg, George W. Kellogg, J. H. Kelly, F. M. Kelly, Howard A., M.D. Kelly, Miss Josephine Kelly, William Kennan, George Kennedy, Bernays Kennedy, Owen W. Kent, Earl B. Kerber, Louis H., Jr. Kerr, Abram T. Kerr, Henry Kerr, Laurence T. Kerruish, Sheldon Q. Kiersted, Henry Stevens Kilton, W. S. Kimball, Benjamin Kimball, Walter F. Kimes, R. H. Kingsbury, Benjamin F. Kinsman, Arthur D. Kirkham, William B. Kirkpatrick, S., M.D. Kistler, J. Fred Kleinhaus, George H. Klotz, Dr. Otto Kmentt, Richard E. Knaebel, Ernest Knaus, Warren Knight, Edward Q. Knight, Hervey S. Koehler, Hugo A. Koenig, Adolph, M.D. Koessler, Karl K. Kraus, E. J. Krohn, Irwin M. Krumbhaar, Louis Kuhn, Frank Kuhn, Guido Kuhn, Robert Kurata, T. B.

La Boiteaux,
Miss Lydia M.
La Forge, Laurence
Lampland, Carl O.
Land, W. J. G.
Lane, Prof. H. H.
Lane, L. L.

Report of the Secretary

Logan, Frank G.

Lomb. Carl F.

Lange, Fred Lange, Miss Mathilde M. Langford, Mrs. A. G. Langford, George Lankford, J. S., M.D. Large, Henry Ranney Larrabee, Earl La Rue, Joseph N. Laughlin, Mrs. Geo. M., Jr. Lawrence, Mrs. Annie W. Leach, Mrs. Anna Leadbetter, F. W. Leaird, Byron LeBlond, Richard K. LeConte, Dr. Robert G. Lee, Mrs. George B. Lee, George C. Lee, H. Shumway Lees, James H. Legrand, J. Federico Leibenguth, Russell C. Leister, C. W. Leiter, Joseph

Rowan, U.S.A. Le Moyne, Francis J. Lenihan, Ernest P. Leonard, A. G. Lerche, William, M.D. Leverett, Frank Levey, Mrs. William M. Levy, Dr. Ernest C. Lewandowski, Joseph W. Lewis, Miss Hope Lillie, Frank R. Lindsay, A. M., Jr. Linford, Jas. H. Linsley, Prof. Earle G. Lionberger, I. H. Little, Arthur D. Little, Prof. Homer P. Livingood, Chas. J. Livingston, Major

Lemly, Major Henry

Lloyd, John Uri Lloyd, J. T.

Lodge, F. S. Lofthus, O. E. Longstreet, J. H.
Lovejoy, F. W.
Lovett, Edgar Odell
Lowber, James W.,
Ph.D., Sc.D.
Lowrie, A. L.
Loxley, P. G.
Luce, Matthew
Lucky, Mrs. Julia S.
Ludlow, Dr. Clara S.
Lyding, Jos. B.
Lyford, Edwin F.
Lyman, Herbert
Lyman, Dr. John C.

Macauley, Alvan MacColl, James R. MacCurdy,

Lyman, Storrs H.

Lytle, J. W.

Lyon, Marcus W., Jr.,

Prof. Hansford M. Macdonald, Claude Mack, Edwin F. MacNab, Miss T. Mae Macnamara, Charles Macrum, William Madeira, Mrs. B. C. Madison, Harold L. Main, Frank H. Malcolm, Mrs. Arthur Manchester, Dr. L. B. Mangold, Anne Mann, Elbert B. Manton, W. P., M.D. Mapes, Mrs. N. H. Marble, Richard Merrill Markey, John C. Marlatt, Charles Lester Marlow, Frank William Archibald R. Marsh, Charles E. Marsh, Geo. E. Marsh, M. C.

Marshall, Edwin J.

Marshall, John W.

Marston, Howard F. Martin, Frank G. Martin, William, M.D. Martin, Wm. Barriss Mason, Dean Masson, John G. Matson, Geo. C. Matthews, W. C. McAllister, M. Hall McBride, Donald McCallie, S. W. McCamant, Wallace McCaskey, Hiram Dryer McDonell, Agnes McFarland, G. W. McGregor, Tracy W. McHatton, T. H. McKelvie, Martha Groves McKenna, Mrs.

Reginald J. P. McKinney, Marion McLachlin, Dan. McMath, F. C. McNair, Edward E. McNairy, Amos B. Meckes, Edgar A. Melvin, Hattie E. Memminger, C. G. Mengel, J. Hain Mercer, William R. Merrill, Mrs. J. F. Mershon, Wm. B. Metcalf, Irving W. Metcalf, John Brockway Middleton, R. C. Millard, Fillmore Miller, E. A. Miller, John H. Miller, Louise Klein Miller, Paul H. Miller, Shirley P. Milligan, Dr. Robert Millis, John Mills, Enos Mills, Frank S. Mills, Wilson W. Mills, Wm. C. Mitchell, Mrs. Emma M.

Mitchell, Walter S. Moffett, F. L. Molera, E. J. Molineux. Mrs. Elizabeth M.

Molloy, D. M., M.D. Monroe, S. B. Monson, Mrs. Frances E. Montgomery, Edmund B.,

Montgomery, E. W. Moody, Dr. Robert Orton Nichols, Dr. Susan P. Mooers, C. A. Moore, Chas. C. Moore, Raymond C. Moorehead, Dr. Frederick B. Morgan, Allen Morgan, F. Corlies Morgan, S. Rowland Morris, F. W., Jr. Morris, Miss Lydia T. Morris, R. A., Jr. Morris, W. R. Morrison, W. B. Morse, Warner J. Moseley, Edwin Lincoln Motter, Murray Galt, M.D. Motter, William Calhoun Moulton, Willis Bryant,

Mowrey, J. Hase Mullen, Edward G. Murphy, W. D. Murray, Marshall L. Musgrave, M. E. Muttkowski, R. A. Myers, Benjamin F. Myers, Edward Studley Myers, Paul N.

Nachtrieb, Henry F. Nagel, Charles Narbonne, Gardner H. Nebraska Wesleyan Neeb, H. A. Needham, James G.

Neely, Miss C B.

Neill. Chas. P. Nelson, Dr. Cyril Arthur Nettleton, Charles H. Newberry, Leslie W. Newcomb, C. A., Jr. Newcomb, Ruth W. Newcomb, Dr. Walter E. Newcomb, William W. Newman, Dr. R. A. M.D. Nichols, Major Henry J., M.C., U.S.A.

Nininger, Harvey Harlow Noble, Albert E. Northrop, Edwin C. Norton, Arthur H. Norton, Dr. C. E. Norton, J. Pease Noyes, Winthrop G. Nyeboe, M. Ib Nyman, Carl A.

Oakes, Prescott O'Donoghue,

Prof. Chas. H. Okey, Catherine Warner Oliver, Mrs. G. S. J. Oliver, Dr. J. C. Oliver, John Milton M.D. Oliver, Nelson E., M.D. Olmsted, Mrs. John C. O'Reilly, Andrew J. Osborn, Chase S. Osborn, Henry Leslie Osborn, Herbert Osborne, Arthur A. Osterhout, George E. Owens, The Rev. James M. Owre, Oscar, M.D.

Pabst, Mrs. Frederick Pack, Frederick J. Packard, C. S. W. Packard, John H. University Library Page, Edward S. Page, Frederick S. Page, Hugh Nelson Paine, W. D.

Painter. Kenvon V. Palmer, C. M. Pratt, Dudley James Palmer, W. B. Papworth, Alfred G. Pardee, Lucius C., M.D. Parfitt, Wm. Parke, W. G. Parker, C. S. Parker, George A. Parker, G. H. Parker, Mrs. Robert Parman, D. C. Parrish, M. L. Partridge, H. E. Partridge, Stanley Patch, Edith M. Paterson, Edmund T. Patitz, J. F. Max Patten, Frank Chauncy Patterson, J. T. Patterson, R. M. Paxon, Col. Frederic J. Peabody, Rev. Endicott Pearse, A. S. Pease, Miss Clara A. Pease, W. E. Peek, Dr. Leon Ashley Pellew, Miss Marion J. Pember, Karl A. Pendergast, N. B. Perkins, George H. Perry, Carroll Churchill, Jr. Perry, R. Kenneth Peskind, Dr. Arnold Peskind, Sol. Peter, Julius C. Peters, Mrs. Mary K. Peterson, Dr. Elmer G. Peterson, William Petrie, R. C., D.D.S. Pfeiffer, W. F. Phelps, Mrs. John W. Phillips, Mrs. Granville Phillips, John W. Phillips, Miss Ruth L.

Pierce, Mrs. A. S.

Pirie, John T.

Platt, Mrs. Orville H. Pollard, Harry G. Pool, Raymond J., Ph.D. Pope, Laurence E. Portal, Major M., D.S.O. Porter, Fred H. Porter, James F. Porter, R. A. Powell, A. F. Pratt, Dudley James Pratt, E. H. Pratt, M. M. Prentiss, F. F. Prest, Wm. J. G. Price, Charles P. Proebstel, Win Purdy, F. A. Putnam, Frederic L. Pyatt, Charles W.

Quain, Buell H.

Radcliffe, Lewis Railsback, J. B. Rakestraw, John L. Rand, Mrs. Emily M. Rand, Herbert W. Rathbone, Gerald L. Ray, Francis B. Rayevsky, Charles, M.D. Raymond, Prof. Percy E. Raymond, R. O. Rea, Paul M. Read, L. C. Reavis, Tolbert F. Rebmann, G. Ruhland, Jr. Redfield, Henry A. Redwood, Mrs. Francis Tazewell Rust, C. H.

Reed, H. D.
Reese, Albert M.
Regar, H. Severn
Rehn, James A. G.
Remington, Seth P.
Renaud, Prof. E. B.
Reynolds, Dr. Edward

Rhodes, James M. Rice, Myron A. Rice, Prof. Wm. North Richardson, Russell, M.D. Richardson, W. D. Richardson, W. E. Ricketson, Walton Ricketts, Dr. L. D. Ridgway, Robert Riesman, David, M.D. Ripley, Joseph Rising, Miss Grace B. Robbins, C. H. Roberts, G. Brinton Roberts, Rev. George Roberts, Thos. S., M.D. Robertson, Carl T. Robertson, Mrs. Cynthia B. Robertson, James D. Robertson, Mrs. Lucy H. Rochester, De Lancey, M.D. Rock, W. C. Rockwell, I. E. Roehlke, A. F. Rogers, A. O. Rogers, J. M. Rogers, Rev. Wallace Rogers, Wm. B. Rosendale, Simon W. Ross, William J., M.D. Rothermel, John G. Rothwell, J. E Roy, W. Ormiston Ruggles, Mrs. T. Edwin Rumsey, W. E. Rush, Raymond C., M.D. Russell, B. F. W. Russell, Cyrus A. Russell, Ernest Russell, H. L.

Sabichi, G. C., M.D. Sabin, Florence R. Sachs, Dr. Adolph Sage, John Hall Sailer, Joseph

Ruzicka, Charles

Sanchez, Louis A. Sanford, B. S. Sansom, Paul Sarmiento, Mrs. F. J. Sarton, George, D.Sc. Sawyer, A. R. Schaefer, M. Charlotte, M.D. Schatz, Fredk. Scheffel, Earl Read Schively, Adeline F., Ph.D. Schively, Mary Alice, M.D. Schluederberg, C. G. Schmauk, B. T. Schmidt, Hubert Schmidt, H. W. Schmidt, Karl P. Schmidt, Margaret Jane Schmucker, S. C. Schuchert, Charles Schuneman, Charles Scotford, James Scott, Wm. G. Scranton, B. H. Scranton, G. G. Scudder, C. W. Sears, Frederick E. Sellards, Jas. A., Jr. Selvidge, W. A. Sengstak, Theo. Sessums, Mrs. Davis Severance, John L. Seward, Dr. F. W., Jr. Shaner, Ralph E. Shanklin, George Bryan Shannon, C. W. Sharp, Charles Cutler Sharpe, Mrs. C. A. Sharrard, W. W. Shattuck, Frederick C., M.D. Shedd, Solon Sheldon, George E. Sheldon, Mrs. G. W. Shepard, Roger B. Sherman, Dr. Edward C. Shimer, Hervey Woodburn Shriver, Joseph Nicholas Shufeldt, Dr. R. W. Shultz, W. O.

Simons, W. C. Simpson, A. T. Simpson, W. J. Singleton, Dr. A. O. Sisson, Willard C. Sjöström, Ivar L. Skinner, Dr. Henry Slater, H. N. Sleeth, R. L., Jr. Sloan, Earle Slocum, William H. Slonaker, Dr. J. Rollin Smale, Alverda K. Smith, Adrian E. Smith, Benjamin F. Smith, Charles D., M.D. Smith, David S. H. Smith, D. Laurence, M.D. Smith, Dudley W. Smith, Eugene R. Smith, Miss Iola A. Smith, J. Darrell Smith, K. Harold Smith, Roy H. Snader, Craige McComb Snell, Francis Arnold Snider, Clarence Snyder, Dr. F. D. Snyder, Morton Snyder, Mrs. Z. X. Somers, L. H. Southard, Geo. F. . Spangler, Harry A., M.D. Spaulding, Rolland H. Spencer, Elmer G. Spencer, G. J. Sperry, George B. Spiller, Caryl Sprague, A. A., 2d Sproul, Miss Cleona C. Stanley, Mrs. D. S. Starks, Edwin C. Starr, Charles S. Stauffer, Clinton R. Steiner, Bernard C. Stephan, John F. Sterling, J. M. Sterling, P. B.

Sternberg, Charles H. Stevens, Henry G. Stevens, James C. Stevens, J. P. Stewart, Colin C., Ph.D. Stidham, Harrison Still, Dr. George A. Stillman, Dr. Charles C. Stoddard, Herbert L. Stone, Miss Elisabeth W. Stone, Frank Stone, Harry C. Stone, Julius F. Storrs, Lucius S. Stott, Louis N. Stow, Mrs. Vanderlynn Stowe, Franklin D. L. Strealy, M. W., D.D.S. Streeter, Roy R. Stuart, Dr. P. E. Studley, J. Edward Sturges, Rush Sturgis, S. Warren Sturtevant, Major Charles G. Suman, John R. Swabey, E. C. Swain, W. Moseley Swan, Mrs. J. Andrews Swart, W. G. Swarth, Harry S. Swarthmore College Library Sweeney, Dr. Arthur Sweet, Henry N. Sweetser, Albert R. Swenson, Dr. Carl G. Swift, Carleton B. Synnott, Thos. W.

Tandy, Frank N.
Tate, J. M., Jr.
Taylor, Mrs. A. P.
Taylor, A. Robena
Taylor, Mrs. E. A.
Taylor, Edward B.
Taylor, Hollinshead N.
Tennent, David H.
Terrell, Clyde B.

Terry, Jay Tester, Allen C. Tetrault, P. A. Thacher, Arthur Thayer, George A. Thomas, Abram Owen Thomas, C. H. Thomas, Elmslie Timbs Thomas, L. Alvin Thomas, Samuel Hinds Thompson, A. W. Thompson, John W. Thurston, Emory W. Thysell, John C. Todd, James Todd, Dr. Joe H. Todd, Dr. T. Wingate Toro, Carlos Tovar, Dr. Daniel A. Townsend, J. Barton Townshend, Henry H. Trotter, Wm. Henry Tryon, John W. Tschudy, Earl H. Tucker, Allen B. Tucker, Chas. Edward Tullock, H. S. Tunks, Rev. Walter F. Turman, A. E. Turner, Miss Helen G. Tyrode, Maurice V., M.D. Tyson, Carroll S., Jr.

Uihlein, Edgar J.
University of Pittsburgh,
Department of Mining
Geology, School of Mines
Uren, Edw. C.
Urmston, J. K.
Utter, Henry E., M.D.

Valentine, Colonel
Henry Lee
Van der Laan, Dr. J.
Van Devanter, Willis
van Houten, J.
Van Rossun, Miss Lee

Vaillant, G. W.

Report of the Secretary

van Santvoord, Seymour Vaughn, R. G. Vermillion, Mary S. Verrill, A. E. Vibert, Charles W. Vonsen, M.

Wadsworth, Samuel
Wadsworth, Samuel F.,
M.D.V.

Wagner, Samuel Tobias Waldo, Edward H. Waldron, L. R. Walker, Alex. Walker, Sir Edmund Walker, Elda R. Walker, Harrington E. Walker, Hiram H. Walker, Miss Lydia M. Walker, Thaddeus Wall, Ashbel T. Wallace, Herbert I. Wallace, W. W. Wallden, Mrs. Hannah Walters, L. L. Walton, W. J. Wamback, Carolyn Ward, Jay Quincy Ward, Mrs. William T. Warren, Dr. E. T. Warren, George C. Washburne, A. C. Watson, Thomas A. Webb, Gerald B., Jr. Webb, Roscoe J. Webb, Walter F. Weber, Louis Webster, Dr. Ralph W. Weed, Rt. Rev. Edwin G. Weed, Lewis H. Wehrle, Augustine T. Weidner, M. Robert, M.D. Weis, Dr. Joseph D. Weiss, Albert P. Welch, Louis C. Welcher, Rev. Manfred P. Weld, Elizabeth F. Weller, Stuart

Welles, F. R. Wells, Daniel D. Wells, Edward P., 2d Welsh, Dr. Lilian Welsh, Robert F. Weniger, Dr. Wanda Wernigk, Dr. R. West, Miss Edith West, Dr. Frederic Beall Wetherill, Richard Whalley, Miss Muriel E. Wheeler, Caroline M. Wheeler, Charles Wheeler, H. C. Wheelwright, Wm. D. Whelan, Ralph Whelden, Roy M. Wheless, Wesley E. Wherry, Wm. B. Whipple, B. F. White, Alain C. Associate Members White, Andrew S. White, Dr. Charles J. White, Dudley White, Dr. E. Grace White, Dr. Joseph A. White, Philip T. White, Ralston White, Wm. Henry Whiting, Dr. Henry A. Whitnall, Harold O. Whitney, David C. Whitney, Oscar C. Whitney, Willis R. Whittemore, Harris Whittle, W. O. Wickstrom, Miss Ruth Wilberding, J. B. Wilcox, Edwin J. Wilcox, Walter D. Will, George F. Willard, Bradford

Willcox, Prof. Mary A.

Williams, Mrs. C. S.

Williams, David W.

Willey, Arthur

Willetts, Ernest W., M.D.

Williams, Henry P. Williams, Ira A. Williams, Ralph Williamson, E. B. Willits, Mrs. Charles D. Willits, Dr. J. Pearson Willock, J. Scott Wilson, Charles Branch Wilson, H. E. Wilson, Herrick E. Wilson, Dr. J. Howard Wilson, Rev. Robert, D.D. Wilson, Robert, Jr., M.D. Windle, Ernest Winston, William O. Winter, Dwight Wislocki, George B., M.D. Witcher, William Wolcott, E. R. Wolverton, B. C. Woodbury, Lieut.-Col. Frank Thomas, U.S.A. Woodruff, Mrs. Charles Albert

Woods, Chas. M.
Woodward, Lemuel Fox
Woodwell, John
Woolley, Paul G.
Wright, A. B.
Wright, Albert Hazen
Wright, Mrs. Eva Edgar
Wright, Gifford K.
Wright, John S.
Wright, Robert C.
Wurlitzer, Rembert
Wyer, Samuel S.

Yarnall, Charlton Yoder, I. T. York, George W. Yost, John B. Young, Stanley P.

Zapffe, Carl Zimmerman, John B.

ACCESSIONS. 1922

DEPARTMENT OF PUBLIC **EDUCATION**

By GIFT

MRS. HORACE M. ALBRIGHT, Yellowstone

National Park, Wyo. 16 Photographs: Mule Deer, Pronghorn Antelope, Bull Elk, Black Bear.

Dr. A. A. Allen, Ithaca, N. Y.
8 Photopraphs: Rabbit, Chipmunk,
Red Squirrel, Jumping Mouse.

Dr. Glover M. Allen, Cambridge, Mass. 2 Photographs: Dolphins.

Dr. Thomas Barbour, Cambridge, Mass. Photograph: Woodchuck (Marmota monax rufescens).

L. Bicket, Yellowstone National Park, Wyo.

Photograph: Mule Deer.
C. J. BLANCHARD, Washington, D. C.
5 Photographs of Bad Lands, S. D.

CLARK BLICKENSDERFER, Denver, Col. 5 Photographs: Bull Elk in velvet, Black-tailed Deer, Black-tailed Doe, Mountain Sheep rams.

ESTATE OF MISS MARY A. BOOTH.

5 Photographs: Gray Squirrel, 2 Birds' Eggs, 1 Gourd.

J. T. Boysen, Yosemite, Cal.

9 Photographs: Bear, Mountain Gray Squirrel, Mule Deer.

B. Brazil, Hardy Island, British Columbia.

9 Photographs: White-tailed Deer. MISS LAURA B. BROOMALL, Far Rock-away, N. Y.

J. R. BUHMILLER, Glacier Park, Mont. 3 Photographs: Rocky Mountain Goat.

MRS. J. F. CASLIN, New York City.

Parrakeet, in the flesh. Dr. Frank M. Chapman, New York City.

622 Negatives.

F. P. CLATWORTHY, Estes Park, Col. Photographic enlargement: John Burroughs and John Muir.
Corticelli Silk Mills, Florence, Mass.

Set of colored lantern slides with

manuscript: "Silk-Its Origin, Culture and Manufacture."

A. Dawes DuBois, Springfield, Ill. 3 Photographs: Coyote, Rock Squirrel, Richardson's Spermophile.

DONALD H. EATON, Grand Lake, Col. Photograph: Young Chipmunk.

LINDLEY EDDY, Giant Forest, Tulare Co., Cal.

7 Photographs: Mule Deer, Black Bear, Douglas Squirrel, Sierra Nevada Chipmunk.

T. Benjamin Faucett, Brooklyn, N. Y. Hornets' nest with imbedded pebble. EDWARD FENZ, Lake Louise, Alberta,

Canada. Photograph: Rocky Mountain Goat.

S. Frank, New York City. Ostrich egg.

N. W. Frost, Cody, Wyo.

10 Photographs: American Pronghorn Antelope, Mule Deer in Summer, Mountain Lion in Tree, Six-point Bull Elk in Full Flight, Rocky Mountain Sheep.

WALTER S. GIBB, Glacier National Park, Belton, Mont.

3 Photographs: Sheep. EDMUND GIROUX, New York City. Junco, in the flesh.

Dr. Conrad G. Goddard, New York City. 3 Photographs: Mountain Sheep in British Columbia.

LELAND GRIGGS, Hanover, N. H. 17 Photographs: Black Bear, Red Fox, Raccoon, Skunk, Porcupine, Woodchuck, Rabbit.

MRS. JENNIE M. GRISWOLD, New York Citv.

59 Photographs of Hawaiian Islands. George T. Hastings, New York City.

2 Slides of Chemung River. E. Haug, Waterton Park, Alberta, Can. Photograph: Big Horn Sheep.

J. E. Haynes, St. Paul, Minn.

30 Photographs.

WALTER M. HOLMAN, Douglaston, L. I. Loon, in the flesh.

Prof. N. L. Huff, Minneapolis, Minn. 6 Photographs: Bear, Elk, Whitetailed Deer, Bison.

DR. ROLAND G. ISRAEL, New York City. 9 Negatives, made in Maine. KIRKMAN & SON, Brooklyn, N. Y.

33 Lantern slides with manuscript. F. H. Kitto, Ottawa, Canada. 2 Photographs: Wood Bison.

S. N. LEEK, Jackson, Wyo. 9 Photographs: Elk (panoramic),

MRS. E. S. LOVE, New York City.

Collection of commercial plant fibres and textile specimens.

Dr. Marcus W. Lyon, South Bend, Ind. 2 Photographs: Marmot, Chipmunk. Dan McCowan, Banff, Canada.

8 Photographs of Wild Life: Mule Deer, Goat, Sheep. Dr. D. J. M. McGreary, Saskatoon,

Saskatchewan, Canada.
7 Photographs: Marmot, Rocky Mountain Goat, Pika, Mountain Sheep.
MARSHALL McLean, New York City.
Photograph: Buck Deer.

VIRGINIA McNEILL, New York Miss City.

Mounted Cardinal.

R. E. Marble, Belton, Mont.

3 Photographs: Big Horn Sheep and White-tailed Fawn.

Mrs. W. R. MARKLEY, Saugus, Cal.

Photograph: White-tailed Deer in full flight.

C. HART MERRIAM, Washington, D. C.

Photographs: Chipmunk, Deer, Black Bear.

H. TAYLOR MIDDLETON, Hainesport, N. J. Photographs: Opossum, mouse, Gray Fox, Weasel. Wood-

Enos Mills, Longs Peak, Col.

3 Photographs: Big Horn Sheep, Pony. L. V. Morris, Garden City, L. I., N. Y. 2 Photographs: Tursiops.

O. J. Murie, Fairbanks, Alaska. 2 Photographs: Cougar at bay.

NATURAL RESOURCES INTELLIGENCE BU-REAU, Ottawa, Canada.

8 Photographs: Polar Bear, Buffalo, Mule Deer, Moose Calf, Beaver House.

NEAR EAST RELIEF, New York City. 88 Colored lantern slides, 12 uncolored lantern slides of Asia Minor.

George Nelson, Cambridge, Mass. 8 Photographs: Solenodon, Lyster's Woodchuck, Northern Cotton-tail.

NEW YORK ZOOLOGICAL SOCIETY, New York City.

44 Photographs. Arctic Fox, Sable, Antelope, Kudu, Spring Buck, Bison, Monkey, Chimpanzee, Orang, Black-Monkey, Chimpanzee, Orang, Black-tail Deer, Elk, Mule Deer, Deer, Gibbon, Alaskan Brown Bear, Polar Bear, Tiger. Snow Leopard, Lion, White-tailed Deer, Barasinga Deer, Axis Deer, Fallow Deer, Musk-ox. C. J. Ocampo, Pachuca, Hgo., Mexico. 13 Photographs of Deer.

A. J. Olmsted, Washington, D. C. Photograph: Hippopotamus a n d young.

Prof. Henry Fairfield Osborn, New

York Citv.

2 Photographs: Osborn Caribou. Dr. J. B. Pardoe, Bound Brook, N. J. 13 Photographs: Wild Animals in

Captivity.

George Parmly, Orange, N. J. Collection of Birds' Eggs.

Pathé Exchange, Inc., New York City. 1 Reel motion pictures: "Where Did You Get Your Face?"

1 Reel motion pictures: "Frogland." Pathé Exchange and Revillon Frères,

New York City. 6 Reels motion pictures: "Nanook of the North.

John M. PHILLIPS (through Prof. Henry Fairfield Osborn).

3 Photographs: Rocky Mountain Goats. H. H. PITTMAN, Hartney, Manitoba, Canada.

19 Photographs.

Hon. George D. Pratt, Brooklyn, N. Y.
10 Reels motion pictures: "Forest 10 Reels motion pictures:
Guardian," "White-tailed Deer, "Alaskan Mountain Sheep," "St. Alps," "Borneo," "Su-Gotthard wanee River.'

2 Photographs.

J. M. RAINIE, New York City.

Photograph: Moose.

CHARLES REED, JR., Estes Park, Col. Photographs: Rocky Mountain Sheep.

P. W. REINHARDT, JR., New York City. Mounted Mongoose with Cobra. JENNESS RICHARDSON, Minneapolis.

6 Photographs: Spermophile, Giraffe, Zebra, Jackson's Hartebeest, Leop-

Hobart V. Roberts, Utica, N. Y. 15 Photographs: Raccoon, Buck, Deer, Porcupine, Rabbit, Bear Cubs, Doc. ROBERT B. ROCKWELL, Denver, Col.

5 Photographs: Chipmunks, Rabbit.

KERMIT ROOSEVELT, New York City. Photographs: Gnu, Hartebeest, Oryx, Zebra, Giraffe, Antelope, Ele-

phants, White Rhino, Black Rhino. SIDNEY ROSE, New York City.

Canary in the flesh.
A. N. ROTHOLZ, New York City. Miscellaneous objects-Bird skins, In-

sects, and "curios."

Dr. Henry H. Russell, New York City. 15 Photographs: Llama, Angora Goat, Camel, Ocelot, Kuda, Spotted Deer, European Red Deer, Mongolian Wild Horse, Zebra, Yak, White Fallow Deer, Sea Lion, Nilgai, Tahr. HAROLD St. JOHN, Pullman, Wash.

Photograph: Woodchuck in Tree.

MRS. KATE SCHOCK, New York City. 66 Moths and Butterflies.

SEATTLE CHAMBER OF COMMERCE, Seattle, Wash.

8 Glossy photographs.

ALEX. SPARROW, Crater National Park, Ore.

2 Photographs: Black Bear.

CHARLES H. TAYLOR, Boston, Mass.

4 Negatives of water colors of sperm whaling scenes.

Dr. Charles H. Townsend, New York City.

Photographs: Elephant Guadeloupe Fur Seal, Fur Seal Rookery, Elephant Seal Rookery, Reindeer.

WILLIAM LYMAN UNDERWOOD,

Cambridge, Mass.

Photographs: White-tailed Deer, Moose, Woodchuck, Gray Squirrel, Porcupine, Bay Lynx, young Skunk, Red Fox.

Utica Chamber of Commerce, Utica, N. Y.

21 Photographs.

VICTORIA MEMORIAL MUSEUM, Ottawa, Canada.

Photographs: Porcupine, Ground Squirrel, Canada Lynx.

A. E. VINCELLETTE, Fitchburg, Mass. Photograph of Mountain Goats, Northwestern British Columbia.

A. G. WALLIHAN, Lay, Col. 12 Photographs: Antelope, Mule Deer, Elk, Cougar.

EDWARD R. WARREN, Colorado Springs,

Photographs: Mountain Sheep, White-tailed Deer, Bison, Pika, Cony, Ground Squirrel, Woodchuck, Colorado Chipmunk, Yellow-haired

Porcupine, Rocky Mountain Jumping Mouse, Jack Rabbit, Cottontails, Antelope. Frank Wood, New Bedford, Mass.

2 Negatives of scrimshaw and jagging wheels.

Mrs. J. O. Wright, Fairfield, Conn. 47 Native Birds.

YOSEMITE NATIONAL PARK, Cal.
22 Photographs: Cinnamon cub, Blacktailed Deer, Wild Deer, Yearling Black Bear, Timber Wolf, Rocky Mountain Lion, Reindeer, Fawn, Burros, Sierra Grouse.

By Purchase

3 Casts of Amphibians.

1 Reel Motion Pictures, "Quaint Old Holland."

1 Reel motion pictures of Niagara Falls. 2/3 Reel motion pictures of Switzerland.

DEPARTMENT OF GEOLOGY AND INVERTEBRATE PALÆON-TOLOGY

By GIFT

Dr. E. C. Andrews, Sydney, Australia. Ores, rocks and minerals, Broken Hill, Australia.

Anonymous ("A New York Boy"). Basaltic lava from volcano of Kilauea, Hawaii.

Dr. E. Antevs, New York City.

4 Samples of post-glacial banded clay. DEPARTMENT OF ANTHROPOLOGY (Transfer).

16 Graptolite and Trilobite fragments, southern shore of Lake St. John, Collected by Frank G. Quebec. Speck.

Dr. Baragwanath, Melbourne, Victoria, Australia.

5 Permo-Carboniferous glaciated pebbles, Australia.

Byron A. Beal, New York City. Fossil invertebrates, Ft. Cassin, Vt.

LAWRENCE BENDIX, Caldwell, N. J. Stone containing 2 fossil shells, Caldwell, N. J.

CHARLES L. BERNHEIMER, New York City.

2 Specimens of Rhyolite, Colorado

ESTATE OF MISS MARY A. BOOTH. Miscellaneous rocks and fossils.

C. DeW. Brower, Tampa, Fla. Silicified corals, from Florida.

E. R. Case, Frenchtown, N. J. Red sandstone associated with trap rock, from Montclair, N. J.

GILBERT COLGATE (through Mrs. Stanley M. Rumbough, New York City). Fossils.

S. B. Cooley, Elmsford, N. Y. Shells (Venus mercenaria).

José G. Correia, Pico, Azores (through Dr. R. C. Murphy).

2 Specimens lava, Pico Island.

Mrs. Henry S. Couse, Jersey City, N. J. Filling of a curved groove in sandstone.

E. Dolbear, San Francisco, Cal. (through Dr. G. F. Kunz).

Quartz pebble, Hart Mt., northeast of Lakeview, Ore.

M. Downanich, Yonkers, N. Y. Oyster shell, from ancient bed.

P. W. A. FITZSIMMONS, Detroit, Mich. Aerolite, fragment, 600 grams, Rose City, Mich.

GOVERNMENT EXPERIMENTING STATION. Alaska.

Rocks showing vugs of calcite with bornite, chalcopyrite and other ores, copper, lead, etc., from Alaska.

Grenfell Association of America, New York Citv.

35 Photographs taken by Capt. Pickels on the Arctic trip of the "George B. Cluett" in 1915.

J. C. Gustaveson, New York City. Jet, or cannel coal, branch of a tree, from Wayne Co., Utah.

CARL HERWIG, Yonkers, N. Y. 28 Specimens flint (chalcedony) con-

cretions or nodules and 1 specimen of limestone.

HIRAM W. HIXON, New York City. Specimen of diabase, from Palisades trap sheet, and 20 fossils from Newport, Va.

Dr. E. O. Hovey, New York City. Mounted engravings of Andrew Geddes Bain (1797-1864) and T. C. J. Bain, South African geologists. 12 Fossil Crustaceans from Burgess Pass, B. C.

WALTER HOWCHIN, Goodwood Park, South Australia.

2 Permo-Carboniferous glacial pebbles, from Australia.

E. A. Jackson, Coalinga, Cal.

Sea urchin. JOHNS-MANVILLE Co., New York City. Asbestos ore, from Province of Quebec, Canada.

J. Johnson, Field, B. C. Trilobite, from Mt. Stephen, B. C. O. KEMP, Cleveland, Ohio.

8 Fossils (Calymene senaria).

Dr. G. F. Kunz, New York City. Shells and samples of bed rock, from Federal Reserve Bank Building, New York City.

A. LACK, New York City.

1 Spirifer, 1 conglomerate, 4 ironstone concretions (limonite), 1 crystalline rock, from Cairo, Greene Co., N. Y.

F. Loescher, Pearl River, N. Y. Glacial drift specimen.

Prof. George D. Louderback, Berkeley, Cal.

10 Rocks, vicinity of San Francisco, Cal.

DEPARTMENT OF LOWER INVERTEBRATES (Transfer).

24+ Gastropods, Porto Rico.

DEPARTMENT OF MINERALOGY (Transfer). Polished cylinder of rosolite (garnetiferous limestone), Mexico. Collected by William Niven.

Mt. Tamalpais Muir Woods Railroad, San Francisco, Cal.

Photograph of Summit of Mt. Tamalpais, San Francisco region, Cal. Louis L. Mowbray, Bermuda.

Stalactite containing feathers, from cave, Bermuda.

E. O'Brien, New York City.

Ironstone concretion, from Brooklyn, N. Y.

ROBERT CUSHMAN POPE, New York City. Specimens Cretaceous pelecyod— Inoceramus.

Archibald Raff, Cuba, Mo.

9 Fossils.

H. Justin Roddy, Millersville, Pa. 5 Concretions, Lancaster Co., Pa.

J. M. Rosales, Bogotá, Colombia.

29+ Specimens fossil shells, ammonites, gastropods, and pelecypods, Colombian Andes.

M. F. SAVAGE, New York City. Granite from the obelisk in Central Park.

Frank Smeddle, New York City. 4 Chert concretions.

C. HAROLD SMITH, New York City. 3 Concretions containing crude oil and calcite crystals.

John R. Smith, Bedford, Ind. Cast of a gastropod in limestone.

Southern Pacific Lines, New York City.

6 Photographs: Mt. Tamalpais, Muir Woods, Rocks in Golden Gate Park, San Francisco, Cal.
G. S. Stacy, New York City.
3 Fossils (Oriskany sandstone).

JAMES STEWART & Co.

Granite, Granite Mt., Burnet Co., Tex.

LAURENCE STUCKEY, El Paso, Tex.
Ammonite, from Texas.
Texas and New York Granite Co., New York City.

Texas granite, Granite Mt., Burnet Co., Tex.
P. K. Thomas, St. Johns, Ariz.

20+ Specimens of fossil mussels (Unio cristonensis).

UNITED STATES GEOLOGICAL SURVEY (through Dr. David White), Washington, D. C.

41 Photographs of Yosemite Valley by F. E. Matthes and F. C. Calkins.

8 Photographs of San Francisco Bay. MISS LUCY WALLIAN, New York City. Spheres of brecciated marble (10" and 7" in diameter) with pedestals to match.

MANFRED P. WELCHER, Hartford, Conn. Trilobites and Brachiopods.

96+ Specimens of clay concretions. B. WILLIAMS, New York City.

Limestone from Mt. Beacon, N. Y.

By Purchase

Iron meteorite (Glasgow). Stone meteorite (Bur Hacaba)—entire bolide, 1,057 gr.; smaller piece showing external crust, 84 gr. Stone meteorite, Pitts, Ga.

Iron meteorite, Dungannon, Scott Co., Va.

41 Fossils.

Fossil insects in Baltic amber, Czechoslovakia.

21 Eocene leaves from Texas and 3 from Germany.

Fossil specimen (Conularia).

THROUGH MUSEUM EXPEDITIONS

Cephalopods, from Greece. Collected by Barnum Brown.

Fossil invertebrates and rocks, from Vermont. Collected by E. J. Foyles. 29 Specimens of rocks from Pikes Peak region, Col., and Crater Lake, Ore., and 2 specimens from Mt. Ranier National Park, Wash, Collected by E. O. Hovey.

14 Samples of Mauer sand, Homo heidelbergensis beds. Collected by N. C. Nelson.

Pleistocene specimens from New York, New Jersey and Pennsyl-Collected by C. A. Reeds. vania.

DEPARTMENT OF MINERALOGY

By GIFT

SIMON BARUCH, New York City. 1 Asbestos, from Alleghany Co., Pa. ESTATE OF MISS MARY A. BOOTH, Springfield, Mass.

550 Miscellaneous Minerals.

WILLARD C. BRINTON, New York City. 3 Apophyllite and 1 Sphalerite (Marmatite), from Falls of French Creek,

GILBERT COLGATE (through Mrs. Stanley

M. Rumbough, New York City). 10 Agate, 62 Amethyst, 32 Chalcedony, 10 Flexible Sandstone, 20 Garnet, ! Opalized Wood, 1 Onyx Marble, 6 Pyrolusite (Dendrite), 8 Quartz (Drusy), 650 Quartz crystals, and 28 miscellaneous specimens.

Boris V. Constantinov, New York City. 1 Cut Topaz, 81/4 carats, from Siberia.

MISS PEARL A. DOTY, New York City.

1 Mica, from New York City.

LIEUT. G. T. EMMONS, Princeton, N. J 1 Garnet, from Thompson River, B.C. L. HELLER & Son, Inc., New York City.

2 Synthetic Sapphires.

CHARLES W. HOADLEY, Englewood, N. J. 1 Apatite, 1 Beryl, 1 Cyanite, 2 Garnet, 1 Margarodite, 1 Microcline, 1 Pyrite, 1 Siderite, 1 Tourmaline, 1 Willemite; from Connecticut and New Jersey.

PROF. HIDEO KIMURA, New York City. 1 Blue Chalcedony, from Korea.

Dr. George F. Kunz, New York City (in memory of Mrs. George F. Kunz).

1 Amethyst, 41.20 carats, Brazil, S. A. 1 Aquamarine, 44.94 carats, Stoneham, Me.

1 Arrow Point (Obsidian), Oregon.

1 Ruby, .95 carats, Jenks Mine, Frank-lin, Macon Co., N. C. 1 Sapphire, 2.94 carats, near Helena,

Mont.

1 Sunstone, Tvedestrand, Norway, 1 Rough Turquoise matrix, 34 carats, Nevada.

Topaz, 25.10 carats, Ouro Preto, Brazil.

1 Thimble (Jasper), Siberia. 1 Tourmaline, 57.59 carats, Minas Geraes, Brazil.

Mengo L. Morgenthau, New York City. 2 Barite and 2 Hematite, from Cumberland, England, and 1 Copper, from Lake Superior, Mich.

MRS. HENRY FAIRFIELD OSBORN, New

York City.

1 Jade, antique Chinese Girdle Pendant carved with grain motive, China.

1 Lapis Lazuli, string of 59 large beads, Siberia. 1 Lapis Lazuli, string of 128 beads with Pendant, Siberia.

1 Lapis Lazuli, polished circular slab, Siberia.

1 Lapis Lazuli, matrix fragment, Siberia.

1 Lapis Lazuli, oval carved box, Siberia.

Dr. J. B. Pardoe, Bound Brook, N. J. 2 Iron carbonate concretions, South River, N. J.

Mrs. George T. Slade, New York City, in memory of James J. Hill (through Dr. George F. Kunz).

1 Yellow Sapphire, 61.89 carats, from Ceylon.

W. H. STAVER, New York City.
2 Gold specimens, from Eastern Cordilleras, Southern Peru. Mrs. Lionel Sutro, New York City.

1 Stalactite, Luray Cavern, Va. O. W. WILLCOX, Ridgewood, N. J. 1 Vial of Glauconite, Eatontown, N. J.

By Exchange

PROF. HENRI BUTTENBACH, Brussels, Bel-

3 Monazite, Ambato, Madagascar.

Prof. Aurelio del Rio, National Museum of Natural History, Mexico, D. F.

1 Calcite Stalactite and 1 Gypsum, Mexico.

CHARLES W. HOADLEY, Englewood, N. P.

1 Celestite, Franklin, N. J. 1 Spodumene, Branchville, Conn.

GEORGE S. SCOTT, New York City. 2 Heterogenite, Good Springs, Nev.

2 Turgite, Ore Hill, Conn.

By Purchase

(Matilda W. Bruce Fund)

28 Specimens of Minerals, from various localities in Europe.

1,025 Specimens of Minerals, mostly from Czechoslovakia.

1 Pucherite on Bismutite, from Flores, Brazil.

2 Curite and Soddite, and 1 Kasolite on Torbernite, Belgian Congo; 1 Malachite, Arizona; and 1 Sphalerite and 1 Zincite, New Jersey. 1 Troilite, Del Norte Co., Cal.

(General Fund)

Meyerhofferite and Inoyite, Blanco, Death Valley, Cal.

665 Specimens of Belgian Minerals. 2 Amphibole var. Fasciulite, Charle-

mont, Mass.

1 Apophyllite and Stilbite, 1 Calcite, 1 Hornblende and Basalt, 1 Hornblende and Calcite, 2 Pectolite and Hornblende, from Snake Hill, N. J.

1 Campylite, Cumberland, England. 1 Cerussite, Broken Hill, New South

Wales.

1 Demantoid, Val Malenco, Italy. 1 Hollandite, Shabus State, Central

India. 1 Liroconite, Cornwall, England.

1 Malachite pseud. Azurite, Bisbee,

1 Rhodonite and Axinite, Franklin, N. J.

Rhodonite, Franklin, N. J. 1 Wiluite, Vilni River, Siberia.

1 Xenotime, Tyrol.

1 Higginsite, Bisbee, Ariz. 1 Vashegyite, Nye Co., Nev. 144 Wooden crystal models.

DEPARTMENT OF VERTEBRATE PALÆONTOLOGY

By GIFT

Dr. A. E. B. Alford, Bainbridge, Ga. Supposed fossil human vertebra, near Bainbridge, Ga.

Museum, London, England British (through Dr. A. Smith Woodward).

2 Specimens Piltdown gravel; Eoanthropus dawsoni, casts of second specimen—supraorbital and supraoccipital, m₂ 1.

A. B. CARSTENS, Mexico.

Fragment of human femur, infiltrated with lead carbonate, from an old Spanish working.

T. Donald Carter, New York City. Footprint of Triassic dinosaur, Boon-

ton, N. J.
PROF. T. D. A. COCKERELL, Boulder, Col.
2 Fossil feathers, Roan Mountains,

Col.

W. E. CUTLER, Calgary, Canada.
Fragments of crustaceans and mollusks, Saskatchewan River. Langdon Gibson, Clearwater Beach,

Collection of teeth of Equus, astragali of Bison, fragments of mastodon, crocodile and turtle, from Beach at Clearwater, Fla. C. W. GILMORE, Washington, D. C.

Casts of 5 specimens of fossil bird. MISS LETA HOLLINGSWORTH, New York

Mastodon tooth, from Badlands of Nebraska.

Dr. J. H. McGregor, New York City. Models of first lower molar of second Piltdown specimen, of chimpanzee

and of man.

A. M. Tweedy, Guayaquil, Ecuador. Fossil rodent, palate jaws and frag-ments of skeleton, Nabon, Ecuador.

WILLIAM WILLIAMS, New York City. Tusk of Elephas primigenius, northwest coast of Kamchatka.

By Exchange

AUSTRALIAN MUSEUM, Sydney, Australia.

56 Casts of fossil vertebrates, Aus-

University of Munich (through Dr. F. Broili), München, Germany.

Homæosaurus skeleton, from Jura-PlacodusKalkeim: skull, from Windlach.

Museum of Mines, Sydney, Australia. Cast of fossil turtle (Meiolania).

Prof. G. Schlesinger, Vienna, Austria. 7 Casts of fossil teeth (mastodons).

University of California (Department of Geology), Berkeley, Cal. (through Charles Lang).

Fossil specimens for completion of mounting of ground sloths, from Rancho-la-Brea.

BRITISH MUSEUM (NATURAL HISTORY), London, Engalnd.

(through C. Forster Cooper). Bones of Baluchitherium and casts of bones of Baluchitherium and other fossil ungulates.

By Purchase

6 Models of ancestors of the Horse. Cast of skull and jaws of Plateosaurus. Halberstadt, Germany.

Skeleton of a Ceratopsian dinosaur, from near Tsaya, San Juan Co., N. M. Collected by Charles H. Sternberg.

Skull and jaws of young mastodon. Portions of 2 skeletons of mastodon, including 2 sets of lower jaws, from

Rochester, Ind.

2 Pterodactyl skeletons, from Solenhofen, Bavaria.

Cast of Diprotodon. Moropus skeleton.

Oxydactylus campestris (type).

THROUGH MUSEUM EXPEDITIONS

THIRD ASIATIC EXPEDITION:

40 Boxes of fossil vertebrates, from China; 4 boxes containing skull of Baluchitherium and other Mongolian fossils; collected by Walter Granger.

CHILDS FRICK EXPEDITION:

Fossils from tapir pocket, Pawnee Buttes, Wild Co., Col. Collected by J. D. Figgins.

6 Boxes fossils, from Pawnee Buttes, Col. Collected by H. C. Markham. 3 Boxes fossils, from Bridger Forma-

Wyo. Collected by George Olsen and Paul C. Miller.

Boxes fossil vertebrates, from Snake Creek quarries, Neb. Collected by A. Thomson.

DEPARTMENT OF LOWER INVER-TEBRATES

By GIFT

Anonymous.

12 Seaweed-covered shells, from Nova Scotia.

2 Land slugs, from New York City. Dr. CELESTINO Bencomo, Port-au-Prince, Haiti.

30 Specimens of shells and corals, from Haiti.

Dr. J. BEQUAERT, New York City.

2 Unio shells, from Mulongo, Kantanga, Belgian Congo.

MISS FLORENCE BOOTH.

Collection of shells and other invertebrates, Great Corn Island, off coast of Nicaragua.

ESTATE OF MISS MARY A. BOOTH, Springfield, Mass.

Collection of shells, echinoderms, corals, and other invertebrates.

C. M. Breder, New York City.

436 Specimens of myriapods, crustaceans, and land shells, Ashe Co., N. C.

MRS. WM. P. CHAPMAN, JR., New York City.

Specimen of brain coral.

CHARLES CHRISTMAN, JR., New York

Squid, found in a shrimp.

VAN B. CLAUSSEN, New York City. Specimen of pearl.

J. Connolly, New York City.

12 Isopods and 1 myriapod, Loch Sheldrake, Sullivan Co., N. Y.

W. E. CUTLER, Calgary, Canada.

5 Specimens of mussel shells, from Canada.

DURBAN MUSEUM (through Dr. A. Carrol), Natal, South Africa. Specimens of named gastropod

shells.

HARRY L. EMLAW, New York City. Large specimen of coral, from Guade-loupe Island, W. I.

Dr. Edmundo Escomel, Arequipa, Peru. 15 Specimens of isopods, from Arequipa, Peru.

John Frye, Oil City, Pa. Crawfish, Oil City, Pa.

MARSHALL R. GAINES, New Brighton, S. I., N. Y.

8 Specimens land shells, New Brighton, S. I., N. Y.

Mrs. Eugene Hart, New York City. Sand dollar.

VERNE LEROY HAVENS, New York City. Collection of shells and other invertebrates.

DEPARTMENT OF HERPETOLOGY (Transfer).

4 Myriapods, 41 crustaceans and 2 Arca, from Jacksonville, Fla.

Prof. A. L. HERRERA, Mexico.

Collection of shells and other invertebrates, from Gulf of California. Collected by Professor F. Contreras.

WALTER HUBBELL, New York City. 2 Specimens land shells, near Pikes Peak, Col.

B. T. B. Hyde, New York City. Crayfish, Plainfield, N. J.

DEPARTMENT OF ICHTHYOLOGY (Transfer).

7 Specimens Lernæa composita (paratypes), Atbara River, Egypt.

J. M. Johnson, Ridgewood, N. J. 10 Crustaceans and 3 echinoderms, Bermuda.

MRS. E. G. LOVE, New York City.

Large collection of invertebrates, sponges, corals, crustaceans, shells,

Myron Michaels, New York City. Piece of coral.

L. L. MOWBRAY, New York City. Crustaceans, from Florida; barnacles from a German ship interned in Chile, 1 Scolopendra.

4 Containers of alcoholic invertebrates, from Miami, Fla., and 8 specimens of land shells from southeastern Florida.

Frank J. Myers, Ventnor, N. J.

62 Slides of named and mounted Rotifers and 17 slides of mounted jaw parts of rotifers, 1 slide of cirri of barnacle.

11 Rhizopod slides, 26 rotifer slides, and 8 slides of fresh-water Algæ.

22 Slides of mounted and named Cladocera, 16 slides of mounted and named rotifers, 21 specimens of Eubranchipus dadayi from Northampton Co., Pa.

NATIONAL RESEARCH COUNCIL (Marine Piling Investigations Committee), New York City.

Collection of pilings showing Teredo borings (48 lots).
3 Specimens Teredo, from Guanta-

namo, Cuba.

J. T. Nichols, New York City.

4 Specimens myriapods, Tryon, N. C.

MRS. IDA S. OLDROVD, Washington, D. C.
18 Specimens of named gastropod shells, including 1 type, Monterey, Cal., and Puget Sound, Washington.
AXEL OLLSEN, Ithaca, N. Y. (through

Dr. Carlotta J. Maury).
15 Specimens of named Arca shells, including 3 paratypes (5 species), from Panama.

Mrs. G. Parmly, New York City. Collection of shells.

Miss BERTHA Rieppel, Lanesville, Greene Co., N. Y. Specimen Gordius aquaticus, from Lanesville.

H. F. Schwarz, New York City.

1 Centipede (Scolopendra) and 1 echinoderm, from Bermuda.

ERNEST THOMPSON SETON, Greenwich,

2 Myriapods, Mohave Desert, Victorville, Cal.

MAXWELL SMITH, Hartsdale, N. Y.

50 Specimens of shells (Melania sp.), Basey and Samar, P. I. Prof. H. W. STUNKARD, New York City.

8 Microscopic slides of blood flukes (Platythelminthes), 5 types, Raleigh,

N. C. G. H. H. TATE, Nutley, N. J. 26 Shells, Jambeli, Ecuador.

R. K. THOMAS, Navajo, Ariz.
46 Specimens of land shells (Oreohelix strigosa depressa), Arizona. Dr. RALPH W. Tower, New York City. Nematode (taken from a dog).

Prof. A. L. Treadwell, Poughkeepsie, N. Y. 125 Named polychæte annelids, in-

cluding 4 types (24 species) and 1 vial oligochætes, Friday Harbor, Washington.

11 Named annelids, including 1 type (6 species), Montego Bay, Jamaica.

PROF. RALPH VAN NAME. New Haven. Conn.

20 Specimens of copepods (Lepeophtheirus salmonii), Portland Creek, Newfoundland.

Dr. W. G. VAN NAME, New York City. Clam shell (Mactra solidissima), Long Beach, L. I., N. Y.

2 Specimens of land shells, Tallulah

Falls, Ga.

Prof. A. E. Verrill, Westville, Conn. Specimens of ascidians (Botryllus niger), Bermuda.

By Exchange

CHARLES CHILTON, Christchurch, New Zealand.

23 Specimens of amphipods, 25 isopods, and 2 specimens of Peripatoides novæ zealandiæ.

Dr. Bruno Parisi, Milan, Italy.

120 Specimens of named crustaceans (52 species), various localities in Èurope.

Dr. Waldo L. Schmitt, Washington, D. C.

4 Specimens of crustaceans (named), Gulf of Mexico, Cape Fear, N. C., and Hawaiian Islands.

MAXWELL SMITH, Hartsdale, N. Y. 149 Specimens of identified land shells. FRED TABLEMAN, Newark, N. J.

77 Land and fresh-water shells from New Jersey, and Radula slides (received in 1920).

United States Bureau of Fisheries, Washington, D. C.

2 Vials of bryozoans and 1 of ascidians, Chesapeake Bay.

STATES UNITED NATIONAL Museum, Washington, D. C.

Collection of ascidians, from the New England coast and the Philippine Islands.

W. H. WEEKS, Brooklyn, N. Y. 250 Specimens of named shells.

YALE UNIVERSITY, New Haven, Conn. (Department of Zoology).

60 Specimens of ascidians, New England Coast.

PART EXCHANGE AND PART PURCHASE

MAXWELL SMITH, Hartsdale, N. Y. 161 Specimens of identified land shells.

By PURCHASE

66 Specimens of shells and 2 crusta-(Ocypode hippeus), Cape Verde Islands.

1,160 Specimens of land shells (Liguus

fasciatus), Florida. Crab, Fayal, Azores.

339 Slides of mounted and named Protozoa, Europe.

63 Lots of isopods and 207 lots of myriapods, also 167 slides of myriapods (all named), various localities in Europe.

1 Specimen Conus gloria-maris, from the Moluccas.

THROUGH MUSEUM EXPEDITIONS

THIRD ASIATIC EXPEDITION:

529 Specimens of land shells, crustaceans, and other invertebrates, from China.

Collection of land shells, corals and other invertebrates, from Greece, Asia Minor and British and French Somaliland. Collected by Barnum Brown.

SANTO DOMINGO EXPEDITION:

14 Land shells, 2 Peripatus sp., 2 centipedes, 1 slug, and 1 rock crab, Santo Domingo. Collected by G. Kingsley Noble and Ruth Crosby Noble.

210 Insects

Albatross Expedition of 1911:

88 Containers of alcoholic inverte-Brachyura, echinoderms, brates, parasitic cœlenterates, Bryozoa, worms, barnacles, and bottom samples; from Lower California. Collected by Dr. Charles H. Townsend. WHITNEY SOUTH SEA EXPEDITION:

1 Lot of mixed shells from Christmas Island; 14 specimens land shells and 3 barnacles, from Society Islands; 1 sponge, from Trinoe Island; 26 land shells and 17 hermit crabs, from Mangareva and Maturei Vavao Islands, Collected by R. H. Beck and E. H. Quayle.

DEPARTMENT OF ENTOMOLOGY

By Gift

J. A. Aparicio, Solola, Guatemala, C. A. 4 Lepidoptera, Guatemala.

J. Aselin, Puerto Barrios, Guatemala, C. A.

Beetle, Guatemala.

CHARLES H. BALLOU, Cuba. 18 beetles and larvæ, Cuba.

ERNEST L. BELL, Flushing, L. I., N. Y. 27 Heteroptera, 60 Coleoptera, and 73 Lepidoptera, including 2 types and 2 paratypes.

BRITISH MUSEUM OF NATURAL HISTORY. London, England.

10 Specimens of Coleoptera, West Indies.

Dr. CHAUNCEY REA BURR, Portland, Me. Beetles (Mezium americanum), from Portland, Me.

Samuel E. Cassino, Salem, Mass.

270 Lepidoptera, West Indies. . A. Снарім, Washington, A. Снарін, Washingt (through Dr. Bequaert). C.

27 Hymenoptera, South America.

B. Preston Clark, Boston, Mass. 6 Ornithoptera, Solomon Islands. About 11,000 Invertebrates, chiefly Insects, from Haiti.

PROF. T. D. A. COCKERELL, Boulder, Col. 5 Named Bees.

Cotype of Harpalus gregarius var. cimensis, from Porto Santo, Is. de

Col. M. L. Crimmins, Camp Bullis, Tex. 1 Beetle, 3 walking-sticks, Camp Bullis, Tex.

ERNEST A. DE LIMA, Cali, Colombia. Moth and Beetle, Cali, Colombia.

CHARLES DURY, Cincinnati, Ohio.

4 Weevils (Lepidocircus herricki), Cincinnati, Ohio.

DR. EDMUNDO ESCOMEL, Arequipa, Peru. 137 Insects, Peru.

A. Faz, Santiago, Chile.

170 Insects, Chile. RICHARD K. Fox, New York City. Insects and 7 cabinets (156 specimens).

Hugh Glasgow, Geneva, N. Y. 4 Specimens Beetle-Buprestidæ, Agri-

lus sinnatus, from New York. MISS SARAH GORDON, Poughkeepsie,

 $N. \tilde{Y}.$ Luna Moth, Poughkeepsie, N. Y.

T. HALLINAN, Jacksonville, Fla.

10 Insects, Jacksonville, Fla. H. W. HIPWELL, Port-au-Prince, Haiti. 27 Moths, Port-au-Prince, Haiti.

F. M. Jones, Wilmington, Del. 72 Insects, Florida.
W. F. KEELER, Greer, S. C.

91 Insects, chiefly Lepidoptera, Portau-Prince, Haiti.

PROF. A. C. KINSEY, Bloomington, Ind. 7 Species of insect galls.

13 Holotypes, 34 cotypes of gall insects, 29 cotypes of galls and gall insects.

114 Bees and various specimens of galls, gall insects and termites.

60 Holotypes, 254 paratypes and cotypes of gall insects.

164 paratype and cotype Galls, representing 66 new species.

ARTHUR M. LEA, Adelaide, South Australia.

46 Beetles (Pseudomorphidæ), Australia.

Frederick Lemmer, Irvington, N. J. Collection of about 50 insects of various orders.

F. LOESCHER, Pearl River, N. Y. 2 Cecropia Moths, Pearl River, N. Y.

Mrs. E. G. Love, New York City. 17 Specimens insects and insect work.

A. S. MacFarlane, Jacksonville, Fla. 2 Beetles, Jacksonville, Fla.

W. DEW. MILLER, New York City. 2 Specimens plant lice (Erisoma lani-

gera), Moe, N. J. F. F. MITCHELL, Corona, L. I., N. Y. Walking-stick, Cornwall, N. Y.

HAROLD MORRISON, Washington, D. C. 4 Hemiptera (Xylastodoris luteolus), Santiago de las Vegas, Cuba.

J. T. Nichols, New York City. 4 Lepidoptera, Block Island, R. I. ALAN S. NICOLAY, Brooklyn, N. Y. 102 Coleoptera (Pselaphidæ and Buprestidæ).

CHRIS E. OLSEN, New York City

Homoptera (paratypes).
A. Peterson, New Brunswick, N. J.
5 Diptera, Browntown, N. J.
E. Piazza, San Diego, Cal.

90 Lepidoptera, California.

R. A. Pope.

2 Butterflies and 6 bees, Alaska. ALEXANDRE Poujol, Port-au-Prince, Haiti.

Large wall map of the island of Haiti and Santo Domingo.

L. S. Russell, Calgary, Alberta, Canada. 26 Insects, Alberta.

Dr. L. C. Sanford, New Haven, Conn. 18 Lepidoptera, from Bahama Islands, and 1 Ghost-moth from Quebec.

CHARLES O. Schoof, Brooklyn, N. Y. 153 Lepidoptera, from the Old World. HERBERT F. SCHWARZ, New York City. Collection of insects, Bermuda.

ERNEST THOMPSON SETON, Greenwich,

Conn. 198 Specimens of insects and arach-

nids, California. Mrs. Herbert H. Smith, University,

Ala. 2014 Specimens of Homoptera, Hemip-

tera, and Coleoptera, South America. W. H. Staver, Nepera Park, N. Y. 370 Lepidoptera, Peru.

P. Sterko, Bridgeport, Conn. 2 Phasmidæ (Walking-sticks). J. T. STUMM, Brooklyn, N. Y.

1 Tremex columba.

Dr. A. H. STURTEVANT, New York City. 235 Insects, from United States.

United States NATIONAL MUSEUM, Washington, D. C.

27 Lepidoptera, from Africa.

HARRY B. WEISS, New Brunswick, N. J. Insects and photographs of environ-ment (826 specimens), Monmouth Junction, N. J.

Miss M. Williams, New York City. Scorpion, Miami, Fla.

John D. Wilson, Central La Carlota, Negros Occ., Philippine Islands. Hemipteron, Philippine Islands.

A. B. Wolcott, Chicago, Ill.

Beetle, from Turialba, Costa Rica. George N. Wolcott, Rio Piedras, Porto Rico.

23 Beetles (Lachnosterna), from Porto Rico.

WILLIAM C. WOOD, New York City. 7 Lepidoptera, from Florida, and 30 Coleoptera, from New York.

LUKE YEO, Temenga, Chusan Chi Kiang,

21 Coleoptera, from China.

By Exchange

F. Heikertinger, Wein, Austria. 218 Coleoptera (Halticini), Austria.

By Purchase

About 5,860 Insects, Honduras. About 1,200 Bees. About 2,500 named Bees. 1,300 Hymenoptera.

Through Museum Expedition THIRD ASIATIC EXPEDITION. 27 Insects, from China.

DEPARTMENT OF ICHTHYOLOGY

By GIFT

A. R. Allen, Kingsbridge, N. Y. Photograph of an abnormal Trout. W. L. BEATY, Butte, Mont.

Skin of a Lake Trout, Madison Lake. Mont.

T. O. Brown, New York City.
2 Jaws of Sand Shark, Long Island. Dr. Russell J. Coles, Danville, Va. Tail of a large Sting Ray, Cape Lookout, N. C.

D. R. DICKEY, Pasadena, Cal. Skin of a Northern Trout, Bathurst Lake, North Co., New Brunswick.

John Dilts, New York City.

Photograph of a Weakfish. RICHARD DORN, New York City.

11 Characins, Ecuador. 20 Miscellaneous aquarium fishes.

Mrs. S. W. Eccles, New York City. 13 Mounted fishes, from Florida waters.

Alfred Ehrenreich, New York City. 2 Fossil shark teeth, 1 alligator tooth, 1 sting-ray sting, 1 saw of an embryo sawfish; 20 sawfish saws; from Florida.

DEPARTMENT OF ENTOMOLOGY (Transfer).

35 Poeciliid Fishes, Haiti.

JEROME W. FRANK, New Y (through Alfred Frank). York City

Mounted Trunkfish with sucking fish attached, Long Key, Fla.

L. B. Hunt, Garden City, L. I., N. Y. Sundial, abnormal Flounder, Mackerel, Long Island Sound.

Dr. E. R. P. JANVRIN, New York City.
1 Sand Eel, Long Beach, L. I., N. Y. DEPARTMENT OF LOWER INVERTEBRATES (Transfer).

1 Esox americanus, South Norwalk, Conn.

L. L. Mowbray, Miami, Fla.

About 100 rare and interesting Fishes, from the Florida Keys and Bahamas, 1 abnormal mounted Tarpon, and 1 dried Filefish, from Bermuda.

GEORGE S. MYERS, Jersey City, N. J. Aquarium Fish: type of Platypoecilus maculatus immaculatus Myers, specimen of Haplochilus lujæ.

New York AQUARIUM, New York City. 1 Cobia, from Gulf Stream, Fla.; 100 young Bluefish, 1 banded Rudderfish, and 350 Marine Fishes, Sandy Hook, N. J.

JOHN ODENTHAL, New York City. Mounted Porcupine Fish and Frog in a case.

DEPARTMENT OF ORNITHOLOGY (Transfer).

Young Surgeon-fish, Polynesia. IC MUSEUM, Milwaukee, (through Dr. S. A. Barrett). Wis.

Celluloid Copy of Crappie, Pomoxys sparoides.

A. N. ROTHOLZ, New York City. 3 Large Sawfish saws.

HENRY STEVENS, Lavallette, N. J.

Mounted record rod and line Dolphin, Miami, Fla.

HENRY THURSTON, Ocean Grove, N. J. Moonfish, Vomer setipinnis, from As-

bury Park, N. J. United States Bureau of Fisheries, Washington, D. C.

3 Cusk Eels, including the cotype of Otophidium welshi, from Gulf of Mexico.

About 35 specimens of Carangids, New Jersey Coast.

By Exchange

MUSEUM OF ZOOLOGY, Ann Arbor, Mich. (through Carl H. Hubbs), 2 Lampreys.

By Purchase

450 Fresh-water Fishes, Fukien Province, China.

8 Fishes, from Yunnan-fu, Yunnan, China.

THROUGH MUSEUM EXPEDITION

THIRD ASIATIC EXPEDITION:

3,500 Fishes, from China. 100 Viviparous Poeciliids, from Hispañiola Island. Collected by Dr. G. K. Noble.

DEPARTMENT OF HERPETOLOGY

By GIFT

C. Allgoever, Northport, L. I., N. Y. Snake, from Northport.

ELFRANIO DE AMARAL, New York City. 2 Snakes, Gueimada Grande Island, Sao Paulo, Brazil.

H. E. ANTHONY, New York City.
3 Lizards and 2 salamanders, North Island, Coronados Island.

MISS MABEL E. BAKER, Ellenburg Center, Clinton Co., N. Y

1 Red Eft, from Ellenburg Center. Adrian Banks, Elmhurst, L. I., N. Y. 2 Snakes, Elmhurst.

WILLIAM BEEBE, New York City.

130 Amphibians and 89 reptiles, Tropical Research Station, British Guiana. ALVAH C. BESSIE, Tuxedo, N. Y.

2 Frogs, 2 snakes, 1 turtle, New York State.

Dr. F. N. Blanchard, Ann Arbor, Mich. 5 Salamanders and 6 salamander eggs. Michigan.

MISS FLORENCE BOOTH. 1 Caiman and 3 snakes, Nicaragua. CHARLES F. Bowles, Marietta, O.

5 Salamanders, Marietta, O. C. M. Breder, Jr., New York City. 4 Frogs, Erwin, Tenn.

F. MARTIN BROWN, New York City. 7 Salamanders.

Prof. A. R. CAHN, College Station, Tex.

Salamanders (1 adult and 9 larvæ), Texas.

Douglas R. C. Clark, Mountain Lakes, N. J.

3 Snakes, Mountain Lakes, N. J.

W. R. CONNOR, Newark, N. J.

2 Snakes, Beaufort, N. Y.
Col. M. L. Crimmins, San Antonio, Tex.
7 Snakes, Texas.

Dr. G. B. Engelhardt, Brooklyn, N. Y. 2 Snakes, Brooklyn, N. Y.

FLAMING ARROW TRIBE, LONE SCOUTS OF America, Bellaire, O. (through C. E. Simpson).

30 Salamanders, Bellaire, O.

FLORIDA STATE MUSEUM, Gainesville. Fla.

12 Snakes, from Florida.

John W. FRYE, Oil City, Pa.

Purple Salamander and garter snake, from Oil City, Pa.

E. GEBEAU, Bridgeport, Conn.

4 Salamanders.

LESLIE GRAF, New York City.

16 Salamanders, Van Cortlandt Park, New York City.

Julius Grodenchik, Lanesville, Greene Co., N. Y.

Salamander and garter snake, Lanes-

Thomas Hallinan, Jacksonville, Fla. 928 Amphibians and reptiles, Florida. HERMAN HAUPT, JR., East Setauket, L. I., N. Y.

3 Snakes, 1 Salamander and 1 Frog. East Setauket.

B. T. B. HYDE, New York City.

11 Salamanders, Palisades Interstate Park, N. Y.

R. D. O. Johnson, Lordsburg, N. M. 2 Collared Lizards, New Mexico.

W. F. KEELER, Greer, S. C. Snake (West Indian boa), Haiti. ROLLAND MAIN, Bonhamtown, N. J.

12 Salamanders, from Bonhamtown. DEPARTMENT OF MAMMALOGY (Transfer)).

Turtle (shell and skull), British East Africa.

Prof. L. Alfred Mannhardt, Westfield, N. J.

11 Frogs, 2 turtles, 5 salamanders, Westfield.

Byron C. Marshall, Imboden, Ark. 6 Salamanders, Lawrence Co., Ark. W. DEW. MILLER, New York City.

3 Snakes, New Jersey.

L. L. Mowbray, Miami, Fla.

2 Turtle eggs and 2 turtle embryos, Miami Beach and Florida Keys, Fla. NEW YORK ZOOLOGICAL SOCIETY, New

York City. 3 Frogs, 1 tadpole, 1 salamander, 12 lizards, 3 turtles, 1 Jamaican iguana, 5 alligators, and 74 snakes.

J. T. Nichols, New York City.

8 Salamanders, 1 toad, 1 snake, Tryon, N. C.; 2 turtles and 4 mud turtle eggs, Mastic, L. I., N. Y. A. I. ORTENBURGER, New York City. Snake, Henryville, Ind.

DEPARTMENT OF PARKS, New York City. 2 Snakes.

CLYDE L. PATCH, Ottawa, Canada.

1 Frog, 1 toad, and 21 salamanders, Canada.

MRS. CHARLES S. PHELPS, Gansevoort, N. Y.

5 Salamanders, Saratoga Lake, N. Y. A. LESTER PIERCE, Culver, Ind.

7 Snakes, Culver, Ind.

O. F. QUARTERMAN, Canaveral, Fla. 11 Turtle eggs, Canaveral, Fla.

W. H. RICHARDSON, Jersey City, N. J. Frog, Beaver Lake, Sussex Co., N. J. Dr. H. St. John, Pullman, Wash.

Lizard, Pullman, Wash.

K. P. Schmidt, New York City.
Salamander, New York City.
ERNEST THOMPSON SETON, Greenwich,

Conn.

12 Newts, Greenwich, Conn., and 2 lizards, Victorville, Cal.
PROF. F. G. SPECK, Philadelphia, Pa. 3 Salamanders, Swarthmore, Pa.

R. B. STAPP, Asheville, N. C. Diamond-back rattlesnake, from Ashe-

ville, N. C. IRVING K. TAYLOR, New York City. 11 Crocodiles (10 skulls and 1 skin), Nile River, Egypt.

P. VIOSCA AND JAY A. WEBER, New Orleans, La.

27 Salamanders, 83 frogs and toads, 16 lizards, 1 snake, and 1 turtle, vicinity of New Orleans.
F. E. WATSON, New York City.
18 Frogs, 82 lizards, and 7 snakes,

Haiti.

JAY A. WEBER, Leonia, N. J.

57 Amphibians and reptiles, Florida and New York.

CHARLES S. W. Va. WHITING, Parkersburg.

10 Salamanders, Parkersburg.
CECIL D. WRIGHT, New York City.
Shed snake skin, near Van Cortlandt Park, New York City.

By Exchange

BERNICE P. BISHOP MUSEUM, Honolulu, Hawaii.

14 Lizards, Hawaii and Marcus Is.

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Cal. (through Dr. John Van Denburgh).

15 Amphibians and 3 reptiles, California and Samoa.

Museum, Christchurch, CANTERBURY New Zealand (through Dr. R. Speight).

3 Frogs. 1 Sphenodon and 11 lizards, New Zealand.

H. H. CLEAVES, Staten Island, N. Y. Blue-tailed Skink, San Diego, Cal. INSTITUTO OSWALDO CRUZ, Bello Horizonte, Minas Geraes, Brazil.

24 Snakes, Brazil. D. Adolpho Lutz, Rio de Janeiro, Bra-

18 Frogs and 7 toads, Brazil.

NEW YORK UNIVERSITY (through L. A. Mannhardt).

1 Snake and 3 turtles, Cold Spring-on-Hudson, N. Y. Collected by C. R. Halter.

Museum of Comparative Zoology, Cambridge, Mass.

Frog, from Panama. Dr. R. Speight, Christchurch, N. Z. 1 Hoplodactylus, 2 Naultinus, 3 Lio-

belma.

University of Michigan (through Dr. A. G. Ruthven, Ann Arbor, Mich.)

7 Ascaphus eggs. R. KARL WEINGAND, Württemberg,

Germany. 14 Frogs, 3 toads, 35 salamanders, and

1 turtle. PART EXCHANGE AND PART PURCHASE

HERMANO NICEFORO MARIA, Bogota, Colombia. 33 Snakes, 43 lizards, 118 frogs, 83

salamanders, Bogota, Colombia. By Purchase

3 Lizards, from Cape Verde Islands. 130 Amphibians and reptiles, Ecuador. 99 Amphibians, from Santa Catharina,

1 Salamander, 9 lizards, and 5 snakes, Yunnan-fu, Yunnan, China.

6 Cycluran iguanas, Jamaica.

33 Salamanders, Sisson, Cal.

101 Reptiles, Bolivia.
9 Tadpoles, 38 frogs and 9 salamanders, Lake Cushman, Wash.
2 Snakes (Black Racers), Indiana.

86 Specimens of amphibians and reptiles, Brazil.

36 Amphibians and reptiles, various localities (Rosenberg).

1 Cœcilian, 3 lizards, and 38 snakes, Brazil and Bolivia.

481 Amphibians and 212 reptiles, Peru. 2 Snakes, Brownsville, Tex.

Amphibians and 504 reptiles, Ecuador and Nicaragua.
4 Snakes, Florida.
3 Casts—2 snakes and 1 frog.

1 Salamander, Pennsylvania. 108 Amphibians and reptiles.

9 Salamanders, Germany,

THROUGH MUSEUM EXPEDITIONS

THIRD ASIATIC EXPEDITION:

1969 Reptiles and amphibians, China.

SANTO DOMINGO EXPEDITION:

767 Frogs and toads, 1225 lizards, 81 snakes, 11 turtles, 4 crocodiles, 166 lots of larval and embryonic material, Santo Domingo. Collected by G. Kingsley Noble and Ruth Crosby Noble.

WHITNEY SOUTH SEA EXPEDITION:
225 Lizards, Polymeria, Collected by

225 Lizards, Polynesia. Collected by R. H. Beck.

SURVEY OF LOCAL REPTILES AND AM-PHIBIANS.

42 Frogs and 27 toads, New Jersey and Long Island. Collected by G. Kingsley Noble and Ruth Crosby

21 Frogs and toads, 18 salamanders, 2 lizards and 6 snakes, New Jersey. Collected by Karl P. Schmidt.

DEPARTMENT OF ORNITHOLOGY By GIFT

A. A. Allen, Montauk, N. Y. Dovekie, in the flesh, Montauk. Anonymous.

1 Pigeon and 1 Robin, in the flesh, New York City.

Joseph Bandler, New York City. Homing Pigeon, in the flesh.

J. SANFORD BARNES, New York City. 45 Bird skins, Hawaii.

Parrot (Nestor productus), New Zealand.

E. P. BICKNELL, Hewlett, L. I., N. Y. Razor-billed Auk, from Long Beach,

MISS FLORENCE BOOTH.

Mounted Parrot, Great Corn Island, Nicaragua.

B. S. Bowdish, Demarest, N. J. Finch and Waxbill, in the flesh.

Courtenay Brandreth, Ossining, N. Y. 2 Laughing Gulls, Red-shouldered Hawk, and Gray-cheeked Thrush, in the flesh, Ossining and West Point, N. Y.

Albert Brust, Jr., Scranton, Pa. White Cochin Bantam.

E. J. Burns, Staten Island, N. Y. Saw-whet Owl, Staten Island. T. D. CARTER, New York City.

Fox Sparrow, in the flesh.

Dr. F. M. CHAPMAN, New York City.

2 Wings of Loon (Gavia immer), Ormond Beach, Fla.

R. P. Cowles, Ithaca, N. Y.
Skin of Ibis, Natal, South Africa.

C. B. DAVENPORT, Cold Spring Harbor, L. I., N. Y.

Tanager, in the flesh, Cold Spring Harbor.

DEPARTMENT OF PARKS, New York City. Cockatoo, Kingfisher, Macaw, Ostrich, and Parrot, in the flesh.

EDUARDO DIBOS.

Skin of Nation's Pochard, Mala, Peru. JESSE B. ETHERIDGE, Manteo, N. C. Skin of Starling, Roanoke Is., N. C. CHARLES L. FOURNIER, Greenport, L. I., N. Y.

King Eider, in the flesh, Hanpague Harbor, L. I.

GEOFFREY GILL, Huntington, L. I., N. Y. Red-tailed Hawk and Dovekie.

LUDLOW GRISCOM, New York City. Skin of Forster's Tern, Wakulla Co.,

5 Birds, in the flesh, Dutchess Co.,

N. Y. Nest and 4 eggs of Savannah Sparrow,

Jones Beach, L. I.

Frederick Hard, West Sayville, L. I., N. Y.

Mallard X Black Duck, in the flesh, West Sayville.

JACK L. HELMUTH, New York City. Dowitcher, in the flesh, Easthampton, L. I.

Prof. A. L. Herrera, Mexico.

8 Skins of Hummingbird, Lower California.

GEORGE E. HIX, New York City.

Dovekie and Loon, in the flesh, Long Beach, L. I.

STANLEY HOWELL, East Moriches, L. I., N. Y. (through Miss A. M. Jungmann)

Snowy Owl, in the flesh. A. Johnstone, New York City.

Finch, in the flesh. W. E. Jordan, Cristobal, C. Z.

12 Bird skins, Bolivia. Miss A. M. Jungmann, New York City. 2 Grebes, Golden-eye. Hooded Mer-

ganser.
T. KARASEK, Czechoslovakia. Dr. 5 Bird skins, Czechoslovakia.

Francis B. Kelly, New York City. Red-tailed Hawk, in the flesh. FRED LIMEKILLER, New York City.

Flicker, in the flesh, New York City. VINCENT MARRA, New York City.

2 Juncos, in the flesh, New York City.

Dr. MILLET-HORSIN, Paris, France. 26 Bird skins, from Senegal and French Sudan.

A. D. MILLIKIN, Atlantic City, N. J. Parakeet, in the flesh.

H. N. Moldenke.

Tanager, in the flesh, Watchung, N. J. RICHARD MOLDENKE, JR., Watchung, N. J. Parakeet, in the flesh.

L. L. Mowbray, Miami, Fla.

Skin of Mockingbird and of Limpkin. New York State Conservation Com-mission, New York. Skin of Swan.

NEW YORK ZOOLOGICAL SOCIETY, New York City.

Apostle Bird, Bower Bird, Cockateel, 3 Cockatoos, Crane, Crow-shrike, 2 Ducks, 2 Spotted Ducks, Fieldfare, Ducks, Z Spotted Ducks, Fieldfare, 2 Finches, Lady Gould's Finch, Francolin, Gallinule, Bean Grouse, White-fronted Goose, Sand Grouse, 4 Guans, Guinea-fowl, Gull, Hawk, Heron, Hornbill, Kingfisher, Mallee fowl, 2 Owls, Bird of Paradise, Sixwired Bird of Paradise, 4 Parakeets, Parrot King Parato Santo Designed Parrot, King Parrot, Santo Domingo Parrot, Peacock, Pelican, 6 Pheasants, 2 Fruit Pigeons, egg of Lilacshouldered Fruit Pigeon, Rail, Great-Billed Raven, Screamer, Secretary Bird, Song Bird, Sparrow, 2 Star-lings, 2 Marabout Storks, Swan, 2 Tanagers, 2 Tinamous, 2 Toucans, Troupial, Trumpeter, Eared Vulture, King Vulture, Weaver Bird.

Mrs. F. R. Oastler, New York City. Myna, in the flesh.

Dr. Parker, Guayaquil, Ecuador. Skin of Cock-of-the-Rock, from Ecuador.

T. GILBERT PEARSON, New York City. Mounted Blue Goose, and skin of Carolina Parakeet.

Albert J. Peinecke, New York City.
Black-crowned Night Heron, in the flesh, New York City.

HENRY S. ROBINSON, Point Pleasant, N. J.

Hermit Thrush, Point Pleasant. SIDNEY Rose, New York City. Canary, in the flesh.

L. Ruhe, New York City. Parakeet, in the flesh. Dr. L. C. Sanford, New Haven, Conn. Skins of Woodcock, Rusty Blackbird, Bohemian Wax-wing, Saw-whet Owl, 2 Marsh Hawks, Junco, and of 91 Bahaman Birds. Golden-eye and Buffle-head, in the flesh, Pea Is., Manteo, N. C. G. Sebille, New York City. Troupial and Flycatcher. D. L. SEIDENFIELD, New York City. Flicker, New York City.
MRS. GEORGE W. SMITH, New York City. Pair of Flamingo wings, Great Inagua Is., British West Indies.

IRVING K. TAYLOR, New York City. 163 Bird skins and 1 skeleton, Africa. HENRY THURSTON, Floral Park, L. I., N. Y. Canada Goose. JUSTUS VON LENGERKE, New York City. 3 Cooper's Hawks, 3 Marsh Hawks, Sparrow Hawk, Duck Hawk, Redtailed Hawk, Sussex Co., N. J. HARRY WHITNEY, Wachapreague, Va. Duck Hawk, Wachapreague, Va. HAROLD H. WILCOX, New York City. Leadbeater's Cockatoo, in the flesh. DWIGHT WINTER, Pittsburgh, Pa. 2 Parakeets, in the flesh. Mrs. Mabel Osgood Wright, Fairfield. 16 Bird skins, Fairfield, Conn.

By Exchange BERNICE P. BISHOP MUSEUM, Honolulu,

329 Bird skins, Hawaii and Polynesia. CARNEGIE MUSEUM, Pittsburgh, Pa.

Skin of Venezuelan Sparrow. 2 Skins of Hummingbirds, Bolivia. George E. Mason, London, England. 6 Cassowary eggs, 2 Ostrich eggs, 2 Emu eggs, and 1 Apteryx egg. MUSEO NACIONAL DE HISTORIA NATURAL. Buenos Aires, Argentina (through R. Dabbene). 22 Bird skins.

NATIONAL MUSEUM (through Professor A. L. Herrera), Mexico City, Mexico.

28 Bird skins, Lower California. 2 Ducks, 1 Song Sparrow, mounted, Mexico.

Princeton University Museum, Princeton, N. J. Skin of Rosy Finch and of Tree Swift.

Hummingbird. By Purchase

H. V. Thomson, Newark, N. J.

70 Bird skins, Azores. 129 Bird skins, Ecuador. 33 Bird skins, Colombia. 502 Bird skins, Brazil. 166 Bird skins, Ecuador. 36 East African Bird skins. 12 Bird skins, Ecuador. 6 Skins of Finches. 31 Bird skins. 2 Eggs of Rhea. 187 Bird skins, Ecuador. 585 Bird skins, Peru.

THROUGH MUSEUM EXPEDITIONS

THIRD ASIATIC EXPEDITION: 297 Bird skins, China.555 Bird skins, from Ecuador. Collected by Dr. Frank M. Chapman, George K. Cherrie, and Capt. Geoffrey O'Connell. 1,868 Bird skins, Ecuador. Collected by George K. Cherrie and Geoffrey

Gill. WHITNEY SOUTH SEA EXPEDITION: 2,304 Bird skins. Also a few Reptiles, Plants, etc., from South Sea Islands. Collected by R. H. Beck.

DEPARTMENT OF MAMMALOGY

By GIFT

F. H. ADDYMAN, Ardsley, N. Y. German Police Dog. H. E. Anthony, New York City.
11 Small Mammals, San Diego, Cal. F. D. Barstow, Chittenden, Vt. Silver Fox (cub), Vermont. G. O. Bodensiek, New York City. Russian Shepherd Dog. REV. PERE R. CALLEWAERT, Belgian Congo. Striped Mouse, Belgian Congo. JAMES L. CLARK, New York City. 15 Small Mammal skins, with skulls, and 4 small Mammal skulls without skins, British East Africa. Dr. Russell J. Coles, Morehead, N. C. Skeleton of Whale, Morehead, N. C.

Mr. Crosby, Rhinebeck, N. Y. Jumping Mouse, Rhinebeck, N. Y. DEPARTMENT OF PARKS, New York City. Ocelot, Deer, Macacus Monkey, Red Fox, Brown Bear, Giant Kangaroo, Black Bear, and Axis Deer.

H. L. FERGUSON, New York City. 2 Muskrats, Fishers Island, N. Y. LESTER FERLOW, Jersey City, N. J. Bat, New York.

ALBERT A. GAGNEE, New York City.

Brown Toy Pomeranian Dog. GEORGE McM. GODLEY, New York City. Large Brown Bear and 2 cubs. THOMAS HALLINAN, Jacksonville, Fla.

Skunk, Florida. HERBERT M. HARRIMAN, New York City. Mounted Green Monkey, Africa.

J. P. HERRING, Los Angeles, Cal. Black-tailed Deer, Laguna Ranch, Cal.

F. KESSLER, New York City. Gray Squirrel, Central Park, New York City.

MRS. E. G. LOVE, New York City. Skull of common Rat, New York City. HERMANO NICEFORO MARIA, Bogotá, Colombia.

12 Small Mammals, Bogotá, Colombia. L. L. Mowbray, Miami, Fla.

3 Squirrels, South Florida.

NEW YORK AQUARIUM, New York City. 2 Manatees, Florida.

NEW YORK ZOOLOGICAL SOCIETY, New York City.

Alpaca, Giant Anteater, Black Ape skin, Armadillo, Alaskan Brown Bear, Himalayan Bear, Black Bear skull, young Camel, Margay Cat, Ring-tailed Cat, 2 European Red Deer, Duck-bill, Gibbon, Rocky Mountain Goat, Grison, 2 Spring Hare, Jaguarondi, Kangaroo, Red Kangaroo — Australia, Kinkajou, Kudu, Lagothrix-South America, Leopard, Lion cub, Mongoose, 5 Monkeys, Cebus Monkey, 2 Owl Monkeys, Night Monkey, White-faced Saki Monkey, Mus, 2 Musk-ox, Ocelot, Phalanger, 2 Philander, Porcupine, African Porcupine, Puma, Albino Raccoon, Jumping Rat, Kangaroo Rat, 3 Sciurus, California Sea-lion, Rocky Mountain Sheep, Mexican Squirrel, 2 European Red Squirrels, 2 Prevost Squirrels, 3 Suricate, Tapir, South American Tapir, 2 Tasmanian Devil, 3 Wallaby, Nail-tailed Wallaby, Ring-tailed Wallaby—Australia, 2 Woodchuck, Yak, Zorilla.

HERMANN NORDEN, New York City. Set of four molars of Indian Elephant, Southern Siam.

T. GILBERT PEARSON, New York City. 2 Skins of Mearn's Skunk, Kingsville, Kleberg Co., Tex.

JOHN M. PHILLIPS, Pittsburgh, Pa. Mounted "Maned wolf," Paraguay.

GLING BROTHERS, BARNUM AND BAILEY CIRCUS, Bridgeport, Conn. RINGLING Skin and skeleton of Orang.

MRS. ANDREW W. Rose, New York City. Pomeranian Dog ("Pall Mall His Majesty").

MRS. JAMES GARDNER ROSSMAN, Scotch

Plains, N. J. Maltese Dog ("Ch. Lady of Arr"). LUDOVIC SÖDERSTROM, Quito, Ecuador.

3 Blarina, 1 Canolestes, 1 Ichthyomys, Ecuador.

IRVING K. TAYLOR, New York City. 5 Bats.

W. TAYLOR, Vancouver, B. C. 2 Small Rodents, Vancouver.

THERON WASSON, Tulsa, Okla. Sloth, skin and skull, Canelos, Ecuador.

HAROLD WILCOX, New York City. 2 Galago, Philander, Loris, Copper-colored Monkey, Squirrel, European Red Squirrel, 3 Marmoset, Suricate, and Ocelot kitten.

Estate of Walter Winans (By Bequest).

Heads of Game Mammals. W. H. Wood, Ft. Calhoun, Neb. Tooth of Bear, and bones of Horse, Deer and Bison, Nebraska.

By Exchange

A. B. Howell, Pasadena, Cal. 39 Small Mammals, North America.

By Purchase

3 Skins and skulls of Mammals, Mexico.

Skins: 9 Squirrels, 27 Bats, 2 Muntjac, 18 small Carnivora; skulls: 9 Squirrels, 27 Bats, 4 Muntjac, 4 Boar, 27 Carnivora, 1 Rabbit, 1 Rodent; 18 Bats in alcohol, 1 Shrew in alcohol; Fukien Province, China, 136 Mammals, British East Africa. Bat, from Fayal.

31 Mammals, Peru.

8 Small Mammals, Bogotá, Colombia. 2 Glacier Bears, Alaska.

52 Small Mammals, skins and skulls,

Brazil. 10 Steller's Sea-lions and 4 Brown Bears (2 adults and 2 cubs), Alaska. Fossil Ground Sloth material, Porto Rico.

54 Skins and skulls: 1 Peccary, 1 Tayra Cat, 1 Bush Dog, 25 Bats, 1 small Rodent, 1 Monkey, 4 Squirrel Monkeys, 1 Agouti, 1 Porcupine, 2 Night Monkeys, 3 Anteaters, 1 Squirrel, 1 Rabbit, 4 Armadillos, 1 Opossum, 2 Sloths, 4 Ocelots; from Bolivia.

951 Small Mammals, Ecuador. 8 Fox Squirrels, 1 Red Squirrel, 6 Franklin Spermophiles, 2 13-lined Spermophiles.

2 Skeletons Anoa, Celebes.

THROUGH MUSEUM EXPEDITIONS

THIRD ASIATIC EXPEDITION:

About 1000 Mammals, China. lected by Roy Chapman Andrews. 5 Gorillas, from Kivu Forest, Africa.

Collected by Carl E. Akeley.

145 Small Mammals, New York and Collected by George New Jersey. G. Goodwin.

100 Bats in alcohol, Santo Domingo. Collected by Ruth Crosby Noble.

Small Bat, from St. Marc, Haiti. Collected by F. E. Watson.

WHITNEY SOUTH SEA EXPEDITION: 2 Rats, from Society Islands. Collected by R. H. Beck.

DEPARTMENT OF ANTHRO-POLOGY

By GIFT

CARL E. AKELEY, New York City. 1 Set of bow and arrows, from the Bushmen, Africa.

Anonymous.

Blanket of down.

THOMAS BARBER, New York City. Photograph of a Shinnecock Indian, Long Island, N. Y., and 13 photographs of rock carvings of the Shoshone, Wyoming.

Charles J. Bates, New York City. 4 Archæological specimens from shell mound, Tidy Island, Sarasota Bay, Fla.

Edwin Beach, Orange, N. J. 2 Concretions containing paint, western United States.

CHARLES L. BERNHEIMER, New York City.

Stone hammer, 9 bowls, 3 pitchers, and bird-form vessel, California and Isthmus of Panama; carved stone figure, probably from Central America; and pottery figurine from Utah. Велмісе Р. Візнор Мизеим, Honolulu,

H. I.

67 Photographic prints of Hawaiian

ethnological subjects,
MRS. W. H. BLISS, New York City,
4 Labrets, from Alaska. Collected by Mrs. Zelia Nuttall.

Prof. Franz Boas, New York City. Pottery jar, from New Mexico. Estate of Miss Mary A. Booth.

Archæological and ethnological specimens, eastern United States.

PROF. L'ABBE HENRI BREUIL, Paris, France.

Various collections of Palæontologic material, France, Spain and North Africa.

F. P. Burt, New York City. 2 Paddles, Philippine Islands. Co1lected by Capt. G. C. Martin.

JOHN CASWELL, New York City. Saddle and bridle for a pony, Abys-

sinia. Dr. Frank M. Chapman, New York

City. Animal bones and fragments worked shell and stone pot, Ormond, Fla.

CAPT. GEORGE COMER, East Haddam, Conn.

Basket, Patagonia.

B. J. Comiskey, New York City. 2 Cashmere shawls, probably from

India. CHARLES A. Costes, Annadale, S. I., N. Y.

2 Indian arrow-heads, Annadale.

DAVENPORT ACADEMY OF SCIENCES, Davenport, Iowa.

Native trawl net for capturing cyprinodonts and siluroids in Lake Titicaca and hand net for capturing sea shrimp, Peru and Bolivia. Collected by R. E. Coker.

Joseph Demar, Brooklyn, N. Y. Jews' harp, ring, beetle box, beaded strip, and 8 photographs of the

Moro. L. DIDON, Périgueux, France. About 30 specimens of flint and antler,

various French Palæolithic stations. Mrs. A. W. Dodd, New York City. Tapa cloth and cithara.

HENRY C. EMERY, Providence, R. I. Samoyed woman's reindeer coat, and

child's coat, Siberia.

LIEUT. GEORGE T. EMMONS, Princeton,
N. J.

2 Shell bracelets, Fiji Islands, and carved gourd, Central America.

Ceremonial headdress worn on dance occasions, human hair representing a scalp ornamented with eagle tail feathers, from the "Hootzah-ta-Kwan," and 18 specimens of spruce root basketry material, including grass and plant stems, natural and dyed; Alaska.

ALAQUAH FLOOD, New York City. Birchbark bag-like object with strap,

and oil painting.

FOLKLORE FOUNDATION, Poughkeepsie, N. Y.

72 Phonographic cylinders recorded in the British West Indies by Miss Helen Roberts and Miss Martha Beckwith.

WILLIAM HOWARD GARDINER, New York City.

Rabbit skin blanket, from the Cree.

Mrs. Garvin.

Piece of tapa cloth, Society Islands. DEPARTMENT OF GEOLOGY (Transfer).

Skull from the San Juan, Teotihuacon, near Mexico City.

Bruce George, Canton, N. C. (through Mrs. Jeannette Robinson Murphy). 4 Animal bones, 22 chipped points, and 5 fragments of pottery, Indian mound, North Carolina.

MISS SARAH GOLDBERG, New York City. Pottery vessel, Southwestern United

MARIUS HANSOME, New York City. Haida fishhook, made in the village of Sukkwan.

Mrs. H. W. Hardinge, Forest Hills, L. I., N. Y.

Red clay bowl, from grave in northern Arizona.

G. W. HARTING, New York City. Basket used for berries, Tlingit, Alaska.

Mrs. E. D. HATT, Copenhagen, Denmark.

Bone awl, from Maglemose culture station at Swardborg, Denmark.

CLARENCE L. HAY, New York City. 16 Human figures in clay, from Valley of Mexico.

Mrs. Henry S. Herman, New York City.

Basket, from Alaska.

MRS. C. S. HERZIG, New York City. Ethnological specimens, from Africa, Australia, New Guinea, South Seas, and Malaysia.

MRS. ELIZABETH CARYL BRYAN HILL, New York City.

4 Photographs of Indian games, 6 baskets, and pottery vessel, from Indians of North America.

ROBERT S. HILL, Rapid City, S. D. Spearpoint, Belgian Congo, Africa.

BELA HUBBARD, New York City. Necklace and feathers, Peru. S. Ichikawa, New York City.

10 Pieces of pottery found in shell mound, Kaizuka, Japan.

Mrs. R. A. Johnstone, New York City. Water pipe, carved ivory knife handle, 2 knives, 2 perforated grooved sticks, sword with carved ivory handle, brass dish for carrying charcoal, broken spectacles, carved wooden figure, drum, sword with carved ivory sheath, sword with carved metal sheath; all from China; knife, from Formosa; boomerang, from Australia.

ERNEST KOCH, New Dorp, S. I., N. Y. Model of Swiss Lake-Dweller House.

Dr. G. LALANNE, Bordeaux, France. Cast of paleolithic carved relief of human figure, from Laussel Rockshelter, Dordogne, France.

Earl Larrabee, Edwall, Wash. Archæological specimen, from Lake Chelan, Lakeside, Wash.

LE COMTE DE LIMUR, Vannes, France. 4 Stone axes, Carnac, France. 18 Arrowpoints, United States. 2 Obsidian knives, Mexico.

1 Large fragment of cave breccia.

E. Lindig, Weimar, Germany.
Flint scraper and fragment of worked flint, from pre-Mousterian station at Taubach, near Weimar.

DEPARTMENT OF LOWER INVERTEBRATES (Transfer). Gift of Miss Florence

Indian bow and 3 arrows, Indian cane giving names of all Indian tribes of the Island of Great Corn (off coast of Nicaragua); 5 plain canes, 1 stick, and 2 pottery pitchers; Islands of Jamaica and Great Corn. LARER MATHIESEN, Denmark. Flint flakes, nutshells, etc., Maglemose stations, Denmark.

NICOLAS C. MENGRELIS, Beyla, French

Guinea, West Africa. Chief's chair and hat, West Africa. B. W. MERRELL, Bound Brook, N. J.

Arrow points, Somerset Co., N. J. ROLAND MOORE, New York City.

Piece of carved obsidian, Mexico. Mrs. Howard M. Morse, New York City.

Ethnological collection consisting of spears, arrows, bows, axes, krises, bracelets, dishes, clubs, fishhooks, from Java, Africa, New Guinea, Fiji, Solomon Islands, and North America.

NATIONAL MUSEUM, Copenhagen, Denmark, (through Dr. C. Neergaard). 24 Flint specimens representative of Shellmound culture of Denmark.

HARRY I. NORTH, Sea Cliff, L. I., N. Y. Shark-tooth spear, Gilbert Island.

ANTHONY B. PAPANTONIOU, New York City.

Woven scarf, from Turkey.

Dr. Elsie Clews Parsons, Harrison, N. Y.

About 50 feathersticks, New Mexico. F. J. REBMAN, Hollis, L. I., N. Y.

4 Stone implements, from Melbourne, Australia; fractured chert nodule and fragment of fossil, from Kings-

bridge, N. Y. DEWEL REESE, Bay Minette, Ala. Archæological specimens, including 2 pottery stamps, Spanish Honduras.

RENCOMO, Port-au-Prince, CELESTINO Haiti.

Collection of photographs illustrating important archæological collection from Haiti in the Cuban Museum.

A. M. ROTHOLZ, New York City. Mask, 2 large pieces of bark cloth, plume of wood and bark cloth, 2 cocoanuts to represent human heads,

from Chiriqui and Brazil, ROBERT E. L. RUFFNER, Charleston, W.

Stone gorget, West Virginia. M. F. SAVAGE, New York City.

Stone pestle, halibut hook, sheep horn spoon, from North America, beaded girdle from South America, and photographs from Hawaiian Islands.

MISS ESTHER SCHIFF, New York City. Small prayer meal dish, Laguna, N. M. J. SEALE, New York City.

12 Shell implements, stone celt, and pottery vessel, Barbados.

Mrs. James O. Sheldon, New York City.

Miscellaneous specimens from mound in Missouri, Easter Island, Egypt, and Peru.

WILLIAM STREET, Newport, R. I. 1 Set game sticks, 1 hoof rattle, North America.

MRS. LIONEL SUTRO, New York City. Nubian woman's dancing skirt of beads and shells, from Africa, and 2 small

paintings from India.

Mrs. James L. Taylor, New York City. Painted wooden idol, hand tom-tom, carved black horn spoon, painted wooden spoon, carved wooden spoon, 5 mats, basket with cover, from Alaska; 2 painted water bottles, from Mexico; pottery doll, from Zuñi; 2 cup-shaped vessels and 1 plate. Collected by Col. A. B. Dyer. WILLIAM BELL TAYLOR, New York City.

2 Pottery vessels, Salavery, Peru. S. B. P. Trowbridge, New York City.

2 Bows and 6 arrows, South America. University of Mexico, Mexico City, Mexico.

Miscellaneous collection, containing examples of modern pottery, baskets, work in papier maché, and horsehair. DEPARTMENT OF VERTEBRATE PALÆON-

TOLOGY (Transfer). Fragment of petrified femur, from

Zacatecas, Mexico.

Iron from Column at Odeon, Ephesus, about 2,000 years old; fragments of glass and polished stone and small pottery vessel, from Ephesus; pottery fragment, from Corinth; pottery vase filled with gum arabic, Gesho seeds; Coso plant, from Abyssinia. Collected by Barnum Brown.

Dr. Paul Vouga, Neuchâtel, Switzerland.

Neolithic objects from Swiss Lake Dweller stations, Switzerland.

C. W. WASHBURNE, New York City. Palm fibre headdress of chief of Mussorongo tribe on South Side Congo River, Africa.

Andrew Gray Weeks, Marion, Mass. Chipped stone, Moosehead Lake, Me. Fred S. Whitman, Brooklyn, N. Y.

Eskimo carving of loon from walrus ivory, Southern Labrador, and piece of batik used as table cover, from Java.

ARTHUR T. WILLIAMS, Jacksonville, Fla. Fossilized human skull, St. John's River, Fla.

DR. CLARK WISSLER, New York City. 8 Arrowpoints and 3 fragments of pottery, Cohokia Mound, Ill.

By Exchange

LIEUT. GEORGE T. EMMONS, Princeton,

Aleutian basket and stone knife, from North America, and 2 sets of Chessmen (1 set elaborately carved), from China.

MUSEU NACIONAL, Rio de Janeiro,

Brazil.

Ethnological specimens: 2 bows, 6 arrows, bamboo pointed; 2 bracelets; 2 garters "clamussu"; 2 pack baskets; 1 basket "to-heri"; 1 sieve "atoa"; 6 palm fibres used around neck as ornaments; 2 necklaces of palm nuts; 1 stone axe; from Nhambiquara Indians, Brazil. Collected by Roquette Pinto.

MUSEUM OF NATURAL HISTORY AND ETHNOLOGY, Dresden, Germany.

1 Pair skin trousers, girl's fur cap, 1 pair fur mittens, twisted lasso, com-plete harness for four reindeer; Samoyeds, Russia.

By Purchase

Bone awl, Maglemose Industrial level, Denmark.

Skeletal material, South Africa. 9 Ethnological specimens, Siam.

1,050 Specimens representing the Palæolithic, Neolothic, and Bronze industries of France, together with some Palæolithic specimens from Africa and some Neolithic specimens from Indo-China.

Australian skulls and skeletons.

Ethnological collection, consisting of 1 loom, 1 box beadwork, 1 cradleboard, from the Chippewa; 1 beaded bag from the Ute, Col.; 1 basket used as "punch bowl," 1 basket used as drum, 1 pair rasping sticks, and 1 glass of syrup made from cactus fruit, the Papago.

Ethnological specimens, consisting of 2 leather pouches, 6 basketry pouches, and 3 woven belts; Liberia.

Lower jaw bone of an Indian and 2 parts of ribs, North Dakota.

Collection of Philippine war weapons, and Japanese and Indian ethnological specimens.

Series of North African flints, representative of Mousterian, Solutrean, and Capsian industries of Tunis.

Clothes for figures in Micmac group. Ethnological specimens, consisting of 2 wooden masks, large leather bag, 3 fur and leather pouches, wooden snuff box, leather whip, 2 elephant fly brushes, sword and case, 2 spears and cases, dagger and case, 6 armlets, 2 pieces of fibre cloth; West Africa.

2 Bows with quiver and arrows, Arctic

region.

French Palæolithic series, consisting of 30 Solutrean specimens of flint and bone, from the Fumel station, Lotet-Garonne, and several additional finds from the Vézère Valley Sta-

12 Skulls, 1 complete skeleton, and 31 long and pelvic bones; Crow Indian Reservation, Mont.

Model of Iroquois long house.

Shield, knife and sheath, Philippine Islands.

Necklace,_ Campa Indians, Perene River, Peru.

Ethnological collection from the Montagnais, Huron and Mistassini Indians, Canada.

Prehistoric bronze objects of uncertain French origin.

Archæological collection, consisting of palæoliths, various fishing implements of stone and bone, stone arrowpoints of various kinds, and harpoons with detachable heads: Taltal.

Collection of archæological specimens from the Bronze and Iron Ages in Switzerland.

4 Skulls with lower jaws, New Hebrides.

15 Tardenoisian microlith flints, Lakenheath, Suffolk, England.

THROUGH MUSEUM EXPEDITIONS

Small totem pole, string of blue and amber colored beads, silver bracelet, beginning of basket made of spruce root, piece of greenish-blue paint stone, 3 paint sticks, modern carving of human being, 4 halibut hooks, and

stone implement; Alaska. Collected by Dr. P. E. Goddard and Lieut. G. T. Emmons.

3 Boxes of archæological specimens, consisting of 1 skeleton, 3 parts of skeletons and 4 skulls; New Mexico. Collected by Earl H. Morris.

Several series of archæological speci-mens, England, Denmark, Germany, and France. Collected by Nels C.

Nelson.

DEPARTMENT OF COMPARATIVE ANATOMY

By GIFT

Brooklyn Museum, Brooklyn, N. Y. Model of Ichthyosaur.

Dr. WILLIAM K. GREGORY, New York City.

Series illustrating the morphology of the auditory region of mammals.

Mounted skeleton of Polypterus, mounted parrot fish, gar pike and other miscellaneous fish skeletons, mounted eagle.

DEPARTMENT OF ICHTHYOLOGY (Transfer).

20 Fish skeletons.

E. S. Joseph.

6 Kangaroo embryos.

MISS HAZEL KLEIPA, New York City. Human skeleton.

Dr. Charles A. Leale, New York City. Human skeleton.

DEPARTMENT OF MAMMALOGY (Trans-

200 Parts of skeletons of mammals. NEW YORK ZOOLOGICAL SOCIETY, New York City.

Marmota monax.

Dr. G. K. Noble, New York City.

2 Marsupial embryos.

DEPARTMENT OF PHYSIOLOGY (Transfer). 60 Brain specimens of mammals.

By Purchase

2 Specimens Ornithorhynchus, Australia.

THROUGH MUSEUM EXPEDITION

Brains, hands, feet and other organs of 3 gorillas, also elephant specimens, from the Belgian Congo. Collected by Carl E. Akeley.

DEPARTMENT OF PUBLIC HEALTH

By GIFT

DONALD T. FRASER, Toronto, Canada. 2 Bacterial specimens.

Dr. Pirquet, Vienna, Austria.

Model of Dr. Pirquet's feeding station for children in Vienna.

J. W. RICE, Lewisburg, Pa. Bacterial specimen.

MISCELLANEOUS

MISS EMILY SOMERS HAINES, Toms

River, N. J.
Stuffed Leopard, mounted by J. G.
Bell, 1848, with frame containing
newspaper clippings giving account

of killing of the Leopard.
G. A. Wilkinson, St. Thomas, Ontario.
Photograph of Jumbo taken as he lay
after being killed, with magazine giving correct account of his death.

ART

MRS. E. H. HARRIMAN, New York City. Bronze statuette of Bear, by Charles

R. Knight.
Prof. Henry Fairfield Osborn, New York City.

2 Photographs of J. Pierpont Morgan, one after painting by Baca Hor, the other after painting by Erwin Hampstacnyl.

Dr. McCluney Radcliffe, Philadelphia, Pa.

Half-tone photograph of Louis Pasteur.

DEPARTMENT OF WOODS AND FORESTRY

By Purchase

40 Photographs and posters illustrating forestry work of the New York State Conservation Commission.

INCORPORATION

AN ACT

TO INCORPORATE THE

AMERICAN MUSEUM OF NATURAL HISTORY

Passed April 6, 1869

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

Section 1. John David Wolfe, Robert Colgate, Benjamin H. Field, Robert L. Stuart, Adrian Iselin, Benjamin B. Sherman, William A. Haines, Theodore Roosevelt, Howard Potter, William T. Blodgett, Morris K. Jesup, D. Jackson Steward, J. Pierpont Morgan, A. G. P. Dodge, 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. \$\} ss.:

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

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

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

† 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."

* 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 last named act, and by the Act of April 5, 1871, known as Chapter 290, of the Laws of 1871; and,

Whereas, it is desired as well by the said party of the first part, as by the said party of the second part, that, immediately upon the completion and equipment of said building, the said party of the second part should be established therein, and should

transfer thereto its museum, library and collections, and carry out the objects and purposes of the said party of the second part;

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

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

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

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

W. C. BESSON, (73) Notary Public N. Y. Co.

[SEAL.]

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.

Nore.—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

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 col-

lections, 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 6, 1922

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.

TV

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 the Executive Secretary, and countersigned by one of the following named Trustees: President, First Vice-President, Second Vice-President, 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 or the Executive Secretary, 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 Executive 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 1 Subscriber's Ticket, 10 Complimentary Season Tickets and 10 Tickets for a single admission.

Associate Benefactors, giving \$10,000, are each entitled to 1 Subscriber's Ticket, 10 Complimentary Season Tickets and 10 Tickets for a single admission.

Patrons, giving \$1,000, are each entitled to 1 Subscriber's Ticket, 5 Complimentary Season Tickets and 10 Tickets for a single admission.

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

Life Members, giving \$100, are each entitled to 1 Subscriber's Ticket and 7 Tickets for a single admission.

Sustaining Members, paying \$25 yearly, are each entitled to 1 Subscriber's Ticket and 5 Tickets for a single admission.

Annual Members, paying \$10 yearly, are each entitled to 1 Subscriber's Ticket and 4 Tickets for a single admission.

Associate Members, paying \$3.00 yearly, are each entitled to 1 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.

IX

The Board of Trustees hereby creates a class of honorary Members, without membership fee, to be designated as Corresponding Members. Upon recommendation of the Scientific Staff, any person interested in or actively engaged in scientific research may be elected by the Board of Trustees a Corresponding Member, such election being for a period of five years and subject to renewal. Corresponding Members shall be entitled to current numbers of *Natural History* and to a copy of such scientific publications of the Museum as they may desire for the prosecution of their researches.

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.

FOR EQUIPMENT AND CASE CONSTRUCTION OF THE AMERICAN MUSEUM OF NATURAL HISTORY

LEGAL ENACTMENTS OF 1920

By the Board of Estimate and Apportionment

RESOLVED, By the Board of Estimate and Apportionment that, pursuant to the provisions of section 169 of the Greater New York Charter, the Comptroller be and he is hereby authorized to issue tax notes of the City of New York to an amount not exceeding one hundred fifteen thousand (\$115,000), the redemption of which shall be included in the annual tax levies in the manner provided by section 189 of the Charter; the proceeds to the amount of the par value thereof to be used, under the jurisdiction of the Commissioner of Parks, Boroughs of Manhattan and Richmond, for the following improvements and equipment for the American Museum of Natural History:

Item 1—Material for and installation of 4-ton ice machine	\$3,500.00
Item 2—Blower system for carpenter shop to remove sawdust, etc.	2,000.00 500.00
Item 3—Glass cutting and polishing machinery	
Item 4—Motor for stone cutting saw	200.00
Item 5—Motor for sand papering machine	200.00
Item 6—Panel switchboard and separate lighting system for	
control of lights to exhibition groups	5,000.00
Items 7 to 20—Exhibition cases	37,483.63
Item 21 to 23 Inclusive—Miscellaneous cases	4,270.64
Item 24 to 29 Inclusive—Storage cases	37,064.00
Item 30—Store-room with metal shelves above present storage	
(attic), sixth floor	696.00
Item 31—Storage rack and shelving (attic), sixth floor	900.00
Item 32—Incidental cases and equipment	23,185.73
	115,000.00

—provided, however, that no encumbrance by contract or otherwise shall be made against this authorization nor shall bids upon contemplated contracts be advertised for until after approval by the Board of Estimate and Apportionment of the plans, specifications, estimates of cost, and forms of proposed contracts for said equipment, which must 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 authoriza-

tion except after approval by said Board of such employment and of the fee or wage to be paid by preliminary and final contract, 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.

A true copy of resolution adopted by the Board of Estimate and Apportionment, June 11, 1920.

James Matthews
Assistant Secretary.

APPROPRIATION AND EXPENDITURES THEREON TO DECEMBER 31, 1922

DECEMBER 31, 1922	
Receipts:	
By direct appropriation (June 11, 1920, C. D. P.	
By direct appropriation (June 11, 1920, C. D. P. 3 F., changed to N. D. P. 3 F.)	\$115,000.00
Expenditures:	
Mechanics' Payroll (all expended) \$34,380.00	
Contracts paid or awarded	
Materials	99,186.47
Balance December 31, 1922	\$15,813.53
· · · · · · · · · · · · · · · · · · ·	

FOR THE CONSTRUCTION AND EQUIPMENT OF THE SOUTHEAST WING AND COURT BUILDING OF THE AMERICAN MUSEUM OF NATURAL HISTORY

LEGAL ENACTMENTS OF 1921

By the Board of Estimate and Apportionment

RESOLVED, By the Board of Estimate and Apportionment, that, pursuant to the provisions of section 169 of the Greater New York Charter, as amended by chapter 618 of the Laws of 1921, the Comptroller be and is hereby authorized to issue, in the manner provided by section 169 of the Greater New York Charter, serial bonds of The City of New York, in an amount not exceeding one million five hundred thousand dollars (\$1,500,-000), at such rate of interest as the Commissioners of the Sinking Fund shall prescribe; the proceeds to the amount of the par value thereof to be used by the Department of Parks, Borough of Manhattan, for the construction and equipment of the southeast wing and court building of the American Museum of Natural History; the cost of general construction, estimated at approximately one million three hundred thousand dollars (\$1,300,000), to be financed by an issue of serial bonds, the principal thereof to mature in equal annual installments within a period not exceeding forty (40) years; the cost of plumbing, heating and ventilating, and electric work and fixtures, estimated at approximately one hundred and ninety thousand dollars (\$190,000), to be financed by an issue of serial bonds, the principal thereof to mature in equal annual installments within a period not exceeding fifteen (15) years; and the cost of furniture and equipment, estimated at approximately ten thousand dollars (\$10,000), to be financed by an issue of serial bonds, the principal thereof to mature in equal annual installments within a period not exceeding ten (10) years; said apportionment of the costs to be subject to modification if necessary, upon the awarding of the contracts for the several portions of the work; provided, however that no encumbrance by contract or otherwise shall be made against these authorizations, nor shall bids upon contemplated contracts be advertised for until after approval by the Board of Estimate and Apportionment or its duly authorized representative of such expenditure, or of the plans, specifications, estimates of cost and forms of such contracts, nor shall any architect, engineer, expert or departmental employee be engaged or employed as a charge against such authorization, except after approval by said Board of such employment and of the fee or wage to be paid by preliminary and final contract voucher or budget schedule, unless in the case of departmental employees such employment is in accordance with schedules approved by said Board.

A true copy of resolution adopted by the Board of Estimate and Apportionment, December 28, 1921.

JAMES MATTHEWS

Assistant Secretary.

APPROPRIATION AND EXPENDITURES THEREON TO

DECEMBER 31, 1922		
Receipts:		
By direct appropriation (December 28, 1921, C. D. P. 3 G. H. & J.)		\$1,500,000.00
Disbursements (Including Contracts and Architect	cts' Fees):	
Contract No. 1, Construction and Electrical		
Work		
Contract No. 2, Plumbing	23,961.00	
Contract No. 3, Ventilation and Humidifying		
Contract No. 4, Steam Heating and Fume		
Removal	66,431.00	
Architects' Fees	22,916.33	
	\$1,202,808.33	
Balances:	φ1, =0=, 000.00	
Contract No. 1\$211,558.67		
Contract No. 2 6,764.00		
Contract No. 3		
Contract No. 4		
\$243,291,67		
Unappropriated Balances \$53,900.00	\$297,191,67	\$1,500,000.00
	,	, , , , , , , , , , , , , , , , , , , ,

FOR EQUIPMENT AND CASE CONSTRUCTION OF THE AMERICAN MUSEUM OF NATURAL HISTORY

LEGAL ENACTMENTS OF 1922

By the Board of Estimate and Apportionment

RESOLVED, By the Board of Estimate and Apportionment, that. pursuant to the provisions of section 169 of the Greater New York Charter, as amended, the Comptroller be and is hereby authorized to issue, in the manner provided by said section 169, serial bonds of The City of New York, in an amount not exceeding one hundred and ten thousand nine hundred and seventyfive dollars (\$110,975), at such rate of interest as the Commissioners of the Sinking Fund shall prescribe, the principal thereof to mature in equal annual installments within a period not exceeding two (2) years, the proceeds to the amount of the par value thereof to be used by the Commissioner of Parks, Borough of Manhattan, for construction and equipment in the existing building of the American Museum of Natural History; provided, however, that no encumbrance by contract or otherwise shall be made against this authorization nor shall bids upon contemplated contracts be advertised for, until after approval by the Board of Estimate and Apportionment or its duly authorized representative, of such proposed expenditure or of the plans, specifications, estimates of cost and forms of such contracts, nor shall any architect, engineer, expert or departmental employee be engaged or employed as a charge against such authorization except after approval by said Board of such employment and of the fee or wage to be paid by preliminary and final contract, voucher or Budget schedule, unless in the case of departmental employee, such employment is in accordance with schedule approved by said Board.

A true copy of resolution adopted by the Board of Estimate and Apportionment, April 7, 1922.

JAMES MATTHEWS

Assistant Secretary.

APPROPRIATION AND EXPENDITURES THEREON TO DECEMBER 31, 1922

DECEMBER 31, 1922	
Receipts:	
By direct appropriation (April 7, 1922, C. D. P. 3 K.)	\$110,975.00
Expenditures:	• • • •
Mechanics' Payroll \$9,544.00 Contracts paid or awarded 71,148.45	
Contracts paid or awarded	
Materials	82,289.47
Balance December 31, 1922	\$28,685.53

FOR THE CONSTRUCTION AND EQUIPMENT OF THE SCHOOL SERVICE BUILDING OF THE AMERICAN MUSEUM OF NATURAL HISTORY

LEGAL ENACTMENTS OF 1922

By the Board of Estimate and Apportionment

Resolved, By the Board of Estimate and Apportionment, that, pursuant to the provisions of section 169 of the Greater New York Charter, as amended, the Comptroller be and is hereby authorized to issue, in the manner provided by said section 169, serial bonds of The City of New York, in an amount not exceeding five hundred and seventy thousand dollars (\$570,000), at such rate of interest as the Commissioners of the Sinking Fund shall prescribe, the principal thereof to mature in equal annual installments within a period not exceeding fifteen (15) years, the proceeds to the amount of the par value thereof to be used by the Commissioner of Parks, Borough of Manhattan, for the construction and equipment of a School Service Building in the southwest Court of the American Museum of Natural History; provided, however, that no encumbrance by contract or otherwise shall be made against this authorization nor shall bids upon contemplated contracts be advertised for, until after approval by the Board of Estimate and Apportionment, or its duly authorized representative, of such proposed expenditure or of the plans, specifications, estimates of cost and forms of such contracts, nor shall any architect, engineer, expert or departmental employee be engaged or employed as a charge against such authorization except after approval by said Board of such employment and of the fee or wage to be paid by preliminary and final contract, voucher or budget schedule, unless in the case of departmental employees, such employment is in accordance with schedules approved by said Board.

A true copy of resolution adopted by the Board of Estimate and Apportionment, April 21, 1922.

JAMES MATTHEWS
Assistant Secretary.

APPROPRIATION AND EXPENDITURES THEREON TO DECEMBER 31, 1922

Receipts:

By direct appropriation (April 21, 1922, C. D. P. 3 L.).. \$570,000.00 Expenditures:

Preliminary Architects'	Fees	5,700.00
Balance Decem	ıber 31, 1922	\$564.300.00

TENTH ANNUAL REPORT OF THE PENSION BOARD

OF

THE AMERICAN MUSEUM OF NATURAL HISTORY

FOR THE YEAR 1922

OFFICERS AND MEMBERS OF THE PENSION BOARD

1922

Chairman
FELIX M. WARBURG

Vice-Chairman Ralph W. Tower

Treasurer
George F. Baker, Jr.

Secretary
George N. Pindar

Trustee Members

Adrian Iselin Walter B. James A. PERRY OSBORN 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 Examiner
George M. Mackenzie, 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 submit herewith for your consideration the Tenth Annual Report of the activities of the Pension Fund and of its financial operations for the fiscal year ending December 31, 1922.

FELIX M. WARBURG,
Chairman.

NE scarcely realizes that the Pension System of our institution has passed the first decade of its existence, which fact provides, to my mind, a rather fitting opportunity for a brief notice of the system.

The idea of providing some form of Pension Plan which would take care of superannuated and disabled employees was suggested by President Henry Fairfield Osborn and, after several years of study and discussion, was adopted in 1913 in its present form as a part of the Rules and Regulations of The American Museum of Natural History. Mr. Archer M. Huntington generously contributed the sum of one thousand dollars as the nucleus of a fund for such a purpose upon the acceptance by the Trustees of a practical plan. It might be mentioned, in passing, that institutions similar to our own adopted pension systems at about the same time, starting with an endowment of very considerable amount, that at this time do not report the excellent financial condition and the successful operation displayed by our own fund.

During the past ten years, as a safeguard to our conscience, and to check the exact status of the Pension Fund, we have frequently consulted with Gen. Wolfe, the Actuary, who advised us at the time the Pension Fund was inaugurated. There are undoubtedly few pension funds in operation where such peculiar conditions arise as in our own; peculiar in that its subscribers do not claim all the benefits to which they are entitled, it being well known that many who are eligible to be retired and draw pensions prefer to continue in their usual lines of employment. Therefore, instead of being a source of expense, they remain a source of income. At this date there are twenty-one employees who are eligible for retirement but who have no thought of taking advantage of their privilege. Of these, ten could have retired from three to ten years ago.

Upon the completion of a recent survey by the Actuary, your Committee had a consultation with the Employee Members in

company with the Actuary, and, after hearing all points of view, felt that our experience of the tendency of our employees to continue their work without making any claim on the Pension Fund, although their age and length of service entitled them to it, showed that any danger of a deficiency in the Fund might be theoretical rather than practical. Therefore, we do not feel inclined to recommend at this time any special form of safeguard or the setting aside of an emergency fund on the part of the Trustees, feeling that they, as well as their successors, will at all times, should the need arise, give full consideration to the obligations of the Fund and to the employees. While we hope that this may never occur, it may, at some later date, be necessary to alter the Rules somewhat so as to meet any liabilities which may arise.

It has been suggested that the period of service required for voluntary retirement is too long. About this there is a difference of opinion, best solved by the employer who is conversant with the conditions of employment and their effect upon his employees. In the main, however, we are inclined to feel that a shortening of the service period in our Pension System would best serve the interests of employer and employee alike.

For a number of years it has been evident that the gratuities paid to the beneficiaries of deceased subscribers were inadequate. In the history of our system a number of subscribers have died who have left totally insufficient amounts to care for their survivors, who were either children too young to assist in the up-keep of the family budget, or widows who could not readily step out of the home and support a family unassisted.

So, in order to augment the sums paid according to our plan, it was suggested that a joint committee of Trustees and members be appointed to examine into what is known as group insurance now so generally provided by employers throughout the United States. It is exceedingly gratifying to note that during the past year, through the joint efforts of employer and employee, it was possible to inaugurate this form of insurance for the benefit of all of our employees. The plan provides that all employees, after three months of service, but less than one year, are insured in the sum of \$500. After one year, in a sum equal to the employee's annual salary, the maximum insurance, however, not to exceed \$5,000 for any one

individual. While the current insurance year had not expired up to December 31st, no losses have been paid on account of this form of protection.

During the year it has been possible through friends to secure treatment for our employees who have been ill in hospitals of the City, many of whom have undergone serious major operations. No one friend of the Museum has given more freely the use of his endowed beds than Mr. Richard B. Kelly, the President of the Broadway Savings Institution who has so recently died. Like his predecessor, Mr. Horace Hutchinson, Mr. Kelly never refused aid to our sick employees, and it is with a deep sense of personal loss that we here record the passing away of this generous friend of our institution.

The year closes on our Pension Fund with a membership of 266 subscribers and with five retired members. One retired employee of long and faithful service has died, mention of whom will be found in another portion of the report.

It is our sincere hope that as never before will the Trustees and Employees of this great institution realize and appreciate what a potent force for good will and efficiency the Pension System has become.

Deceased

MICHAEL F. HANLY

Michael F. Hanly was born in New York City on July 8, 1854. After a service of twenty-five years with a banking house, he came to the Museum in 1898 as an assistant to the late Dr. Anthony Woodward, formerly Librarian of the Museum. In this capacity he served faithfully until 1914, when he was placed in charge of the sale of publications, which position he occupied until the time of his retirement in April, 1922. Mr. Hanly served the Museum efficiently and loyally. A man of exemplary character and sterling integrity, his sudden death on September 30, 1922, caused a deep sense of personal loss to his many friends in the institution.

RETIREMENTS

Name	Former Position	Date of Retireme	Yearly nt Allowance	Period of Pension
H. Ernestine Ripley	SecretaryJ	an. 1, 1	1919 \$416.00	.16 years
George A. Young	CarpenterF	Feb. 1. 1	1919 253.03	15 years
Adam Hermann	.Preparator]	Jan. 1, 1	1920 988.00	life
*Michael F. Hanly	Assistant A	Apr. 1, 1	1922 455.56	23 years
John Burke	.AttendantS	ept. 1, 1	1922 527.29	23 years
James Kenney	.AttendantS	ept. 1, 1	1922 406.16	18 years

^{*}Deceased September 30, 1922.

FINANCIAL STATEMENT

OF THE

Pension Fund

OF THE

AMERICAN MUSEUM OF NATURAL HISTORY

1922

\$4,687 50

STATEMENT OF INVESTED FUNDS

ಬ

4,687

4,681 25 4,706 25 4,533 75

5,050 00 4,668 75

4,887

4,825 00 4,518 75

4,717 50 4,656 25 4,808 75 4,608 75

1,592 50 1,582 50 4,456 25 3,250 00

1,602 50

23

	TO INTERPRETATION			THAT THE TOWNS			
Par Value	Securities Securities Traign Davids Daileand Commun. 1et I ion & De	Due	Rate of Int.	f Interest Payable	Ann. Int.	∢	Date Acquired
00 000,00		2008	4%	4% MarSept.	\$200 00	Feb.	Feb. 26, 1914
00 000,6		1987	4%	4% May-Nov.	200 00		July 7, 1914
00 000,5		1965	4½%	41/2% June-Dec.	225 00	June	June 4, 1915
000,00		1995	2%	5% June-Dec.	250 00	Dec.	Dec. 29, 1915
200000		2014	4½%	41/2% AprOct.	225 00		May 5, 1916
00000	General Mortgage Bonds	1995	4%	4% AprOct.	200 00	May	29, 1916
00 000 4		1996	4%	4% AprOct.	200 00	Мау	29, 1916
2,000 00		2013	41/2%	41/2% AprOct.	225 00	May	May 29, 1916
200000		1955	4%	4% JanJuly	200 00	May	29, 1916
00000		2047	41/2%	4½% JanJuly	225 00	July	17, 1916
900,5	innois central Admodu Co., Relimining More-	1955	4%	4% May-Nov.	200 00	Oct.	Oct. 18, 1916
00 000,5		1958	4%	4% MarSept.	200 00	Dec.	30, 1916
00 000,6		1940	4%	JanJuly	200 00	Apr.	12, 1917
5,000 00		1941	4% 4½%	May-Nov. June-Dec.	240 00 225 00	July Oct.	16, 1917 19, 1917
1,000 00	Mortgage Bonds	1995 1996	44 %	AprOct. AprOct.	44 88	Mar. Mar.	12, 1918 12, 1918
2,000,00		2008	4%	MarSept.	80 00	Маг.	Mar. 12, 1918
2,000,2		1955	4%	4% JanJuly	80 00	Mar.	Mar. 12, 1918
4,000,00		1961	41/4%	41/4% JanJuly	212 50	May	10, 1918
00 000 6		1995	4%	4% AprOct.	160 00	Aug.	Aug. 19, 1918
2,000 00		1958	4%	MarSept.	80 00	Aug.	20, 1918

5,000 3,000 00 3,000

2,000 00

\$225,600 00

2,000 00

3,000 00

2,486 25 \$4,890 00 Book Value

120 00 Jan. 27, 1919

Nov. 30, 1918

\$212 50

41/4% Mar.-Sept. 4% Mar.-Sept.

1928 1958

Securities United States of America Third Liberty Loan

Chicago, Burlington & Quincy R. R. Co., General

Mortgage Bonds Bonds

> 3,000 00 3,000 00

3,000 2,000 5,000 00 00 00

5,000 00 5,500 00 5,500 00 5,000 00 40,000 00 5,600 00 5,000 00 5,000 00 5,000 00 5,000 00 5,000 00 5,000 00

App.

2,486 25	2,460 00 3,001 88	1,827		4,364 13	4,838 44	4, 761 44	4,522 12	34,461 88	4,912 82	4,858 13	4,854 13	4,914 73	4,831 11	4,257 50	4,888 75	2,757 00	1,893 00 4,932 50	2,925 70	1,995 50	\$205,068,39
, 1919			, 1920	, 1920	20, 1921	10, 1921	7, 1921	22, 1921	10, 1921	10, 1921	30, 1921	7, 1922	5, 1922	15, 1922	3, 1922	, 1922	, 1922 , 1922	30, 1922	, 1922	
27,	t. 27,		. 11,	. 12,												t. 15,	t. 15,		. 30,	
Jan.	Jan. Sept.	Oct.	Ö Ü	Nov.	Jan.	Feb.	Apr.	July	Aug.	Dec.	Dec.	Mar.	May	June	Aug.	Sept.	Sept. Nov.	Dec.	Dec.	
120 00	120 00 135 00		212 50	212 50	233 75	233 75	212 50	1,700 00	238 00	212 50	212 50	212 50	250 00	200 00	250 00	120 00	80 00 225 00	150 00	100 00	\$9.650.50
MarSept.	MarSept. JanJuly	June-Dec.	MarSept.	AprOct.	May-Nov.	May-Nov.	MarSept.	May-Nov.	May-Nov.	May-Nov.	May-Nov.	MarSept.	AprOct.	May-Nov.	JanJuly	JanJuly	AprOct. JanJuly	AprOct.	JanJuly	
4%	41/2%	5%	4½%	4½%	4½%	4½%	4¼%	4½%	4½%	4¼%	4½%	41/4%	2%	4%	2%	4%	4% 4½%	2%	2%	
1958	2008	1968	1928	1933/38 4¼%	1942	1942	1928	1942	1942	1942	1942	1928	2013	1987	2047	1955	1996 1933	2013	2047	
Mortgage Bonds	Union Pacific Railroad Co., 1st & Refunding Mortgage Bonds	i Z	Bonds Charles of America Fourth Liberty Loan	BondsTrited States of America Second Liberty Loan	Bonds Trifted School of America Second Liberty I con	Bonds Change America Third I Inches I con	America Innia Liberty	United States of America Second Liberty Loans Tries of America Second Liberty Loans Tries of America Second Liberty Loans	United States of America Second Liberty Loan Bonds	Bonds Commence Second Liberty Loan	Bonds	Bonds	ge Bonds	Chicago & Northwestern Kanway Company, General Bonds	Northern Facine Kailway Co., Kerunding Mort-	Southern Facinc K. K. Co., Kerunding Mortgage Bonds	Sage Bonds St. Paul, Minneapolis & Manitoba Consolidated	New York Central Kalifoad Co., Kefunding & Improvement Bonds	Northern Facine Kailway Co., Kerunding & Improvement Bonds	

PENSION FUND ACCOUNT

Receipts, 1922

Cash on Hand January 1, 1922			\$6,452.45
Contributions of Subscribing Employees:			
Deductions of 3% from Payrolls of			
City Maintenance Account	\$8,088.50		
General Account	2,928.23		
Morris K. Jesup Fund Account	4,335.90		
Special Funds Account	122.27		
Corporate Stock Account	351.45		
Incidental Account	5.24		
	\$15,831.59		
Personal Contributions of Subscribing Employees	797.33	#1 6 600 00	
Contributions of Board of Trustees:		\$16,628.92	
To Equal Contributions of Subscribing Employees		16,628,92	
Income from Investment Fund	8,434.05	10,020.72	
Income from Endowment Fund	50.34		
income from Endowment Fund	30.54	8,484.39	
Interest on Credit Balances		213.04	
			41,955.27
Bursar's Account			500.00
		-	

Examined and Adrian Iselin Auditing
Approved A. Perry Osborn Committee.

PENSION FUND ACCOUNT

Disbursements, 1922

, III			
Return of Contributions	\$1,850.92 129.78 18.20	#1 000 00	
Service Pensions "A"	253.03 538.92 988.00 416.01 942.13	\$1,998.90	
Expenses		3,138.09 400.00	\$5 526 00
Purchase of Securities: Investment Fund Loan Account Cash on Hand December 31, 1922:			\$5,536.99 33,372.23 500.00
Deposited with the United States Trust Company of New York		\$8,998.50	9,498.50
			\$48,907.72

E. and O. E. New York, December 31, 1922. GEORGE F. BAKER, Jr., Treasurer.

PENSION FUND—SPECIAL FUNDS ACCOUNT

Receipts, 1922

Welfare Fund:			
Balance January 1, 1922		\$55.75	
Transferred from General Account			
(Allowances from Trustees)	\$128.84		
Transferred from Interest on Credit Balances	19.08		
		147.92	****
Interest on Credit Balances:			\$203.67
		19.08	
Balance January 1, 1922			
Earnings to December 31, 1922		1.83	20.01
			20.91
			\$224.58
			
75			
Examined and Adrian Iselin Auditing Approved A. Perry Osborn Committee.			
Approved (A. Perry Osborn) Committee.			

PENSION FUND—SPECIAL FUNDS ACCOUNT

Disbursements, 1922

Welfare Fund	\$135.84
Interest on Credit Balances: Transferred to Welfare Fund	19.08
Cash on Hand December 31, 1922: Deposited with United States Trust Company of New York	69.66
	\$224.58

E. and O. E. New York, December 31, 1922. GEORGE F. BAKER, Jr., Treasurer.

CITY OF NEW YORK

ENDOWED INSTITUTIONS WITH WHICH THE MUSEUM IS COOPERATING

Columbia University	•	1754
New York Historical Society		1804
New York Academy of Sciences		1817
New Pork University	Enks	1831
American Ethnological Society		1842
American Geographical Society		1852
Cooper Union for the Advancement of Science and Art		1857
Torrey Botanical Club		1867
New York Microscopical Society	•	1877
Linnaean Society of New York	X.	1878
New York Mineralogical Club	•	1886
New York Entomological Society		1892
Aquarium Society		1893
American Scenic and Historic Preservation Society .	がない	1895
Public Education Association of the City of New York	* 5	1895
City History Club of New York		1896
Mooderaft League of America		1902
Hispanic Society of America (Art and Archaeological Collections)		1904
School Garden Association of New York		1908
Boy Scouts of America		1910
Girl Scouts		1912
Camp Fire Girls		1912
School Nature League		1917
Museum of the American Indian		1920

CITY OF NEW YORK

MUNICIPAL INSTITUTIONS WITH WHICH THE MUSEUM IS COOPERATING

The American Museum of Natural History was founded in 1869, to promote the theory and practice of free public education.

						数据数据的
						Founded
Department of Education of the City of	Rew	Po	rk			1842
High Schools and Public Schools						经产生
New York Training School for T	Teache:	rs				1904
Maxwell Training School for Te	achers					1885
Hunter College					• 3	1870
College of the City of New York						1847
Brooklyn Institute of Arts and Science	es .					1823
Central Museum					7. X	1854
Children's Museum						1899
Brooklyn Botanic Garden						1910
New York Public Library						1854
Branch Libraries						
Epiphany	St. C	Seor	ge			
Fort Washington	Sewa	erd 3	Par	k		
Harlem	Compkins Square					
Highbridge	Tremont					
Hudson Park	Washington Heights					
Jackson Square	Pork	bille				
Kingsbridge	58th s	Stre	et			
Melrose	67th	Stre	et			
Morrisania	125th	St	ree	t		
Metropolitan Museum of Art			•	•	•	1870
Staten Island Institute of Arts and S	ciences	3 .			•	1881
New York Botanical Garden, The Br	onx .					1891
New York Zoological Society					2.0	1895
New York Zoological Park, The	Brom				•	1895
Rew Pork Aquarium, Battery P						1896