REPORT OF THE SECRETARY OF THE SMITHSONIAN INSTITUTION

AND

FINANCIAL REPORT OF THE EXECUTIVE COMMITTEE OF THE BOARD OF REGENTS

1937

SMITHSONIAN INSTITUTION
WASHINGTON, D. C.

REPORT OF THE SECRETARY OF THE SMITHSONIAN INSTITUTION

AND

FINANCIAL REPORT OF THE EXECUTIVE COMMITTEE OF THE BOARD OF REGENTS

FOR THE

YEAR ENDED JUNE 30

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June 30, 1937

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Frank M. Setzler, acting head curator; W. H. Egberts, chief preparator.

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Section of Musical Instruments: Hugo Worch, custodian.

Section of Ceramics: Samuel W. Woodhouse, collaborator.

Division of Archeology: Neil M. Judd, curator; Waldo R. Wedel, assistant curator; R. G. Paine, aid; J. Townsend Russell, honorary assistant curator of Old World archeology.

Division of Physical Anthropology: Aleš Hrdlička, curator; Thomas D. Stewart, assistant curator.

Collaborators in anthropology: George Grant MacCurdy; D. I. Bushnell, Jr.

Associate in historic archeology: Cyrus Adler.

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Leonhard Stejneger, head curator; W. L. Brown, chief taxidermist.

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Division of Reptiles and Batrachians: Leonhard Stejneger, curator; Doris M. Cochran, assistant curator.

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Section of Myriapoda: O. F. Cook, custodian.

Section of Diptera: Charles T. Greene, assistant custodian.

Section of Coleoptera: L. L. Buchanan, specialist for Casey collection.

Section of Lepidoptera: J. T. Barnes, collaborator.

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Section of Forest Tree Beetles: A. D. Hopkins, custodian.

Division of Marine Invertebrates: Waldo L. Schmitt, curator; C. R. Shoemaker, assistant curator; James O. Maloney, aid; Mrs. Harriet Richardson Searle, collaborator; Max M. Ellis, collaborator; Maynard M. Metcalf, collaborator; J. Percy Moore, collaborator; Joseph A. Cushman, collaborator in Foraminifera; Charles Branch Wilson, collaborator in Copepoda.

Division of Mollusks: Paul Bartsch, curator; Harald A. Rehder, assistant curator; Joseph P. E. Morrison, senior scientific aid; Mary Breen, collaborator.

Section of Helminthological Collections: Maurice C. Hall, custodian.

DEPARTMENT OF BIOLOGY—Continued.

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Section of Lower Fungi: D. G. Fairchild, custodian.

Section of Diatoms: Paul S. Conger, custodian.

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Associate Curator in Zoology: Hugh M. Smith.

Associate in Marine Sediments: T. Wayland Vaughan.

Collaborator in Zoology: Robert Sterling Clark.

Collaborators in Biology: A. K. Fisher, David C. Graham.

DEPARTMENT OF GEOLOGY:

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Division of Mineralogy and Petrology: W. F. Foshag, curator; Frank L. Hess, custodian of rare metals and rare earths.

Division of Stratigraphic Paleontology: Charles E. Resser, curator; Gustav A. Cooper, assistant curator; Margaret W. Moodey, aid for Springer collection.

Section of Invertebrate Paleontology: T. W. Stanton, custodian of Mesozoic collection; Paul Bartsch, curator of Cenozoic collection.

Division of Vertebrate Paleontology: Charles W. Gilmore, curator; C. Lewis Gazin, assistant curator; Norman H. Boss, chief preparator.

Associate in Mineralogy: W. T. Schaller.

Associate in Paleontology: E. O. Ulrich.

Associate in Petrology: Whitman Cross.

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Section of Mechanical Technology: Frank A. Taylor, in charge; Fred C. Reed, scientific aid.

Section of Aeronautics: Paul E. Garber, assistant curator.

Section of Mineral Technology: Carl W. Mitman, in charge.

Division of Textiles: Frederick L. Lewton, curator; Mrs. E. W. Rosson, aid.

Section of Wood Technology: William N. Watkins, assistant curator.

Section of Organic Chemistry: Aida M. Doyle, aid.

Division of Medicine: Charles Whitebread, assistant curator.

Division of Graphic Arts: R. P. Tolman, curator; C. Allen Sherwin, scientific aid.

Section of Photography: A. J. Olmsted, assistant curator.

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Archeologist.—FRANK H. H. ROBERTS, Jr.
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Director.—CHARLES G. ABBOT.
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Associate research assistant.—WILLIAM H. HOOVER.

DIVISION OF RADIATION AND ORGANISMS

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Assistant director.—EARL S. JOHNSTON.
Associate research assistant.—EDWARD D. MCALISTER.
Assistant in radiation research.—LELAND B. CLARK.
Research associate.—FLORENCE E. MEIER.

REPORT OF THE SECRETARY OF THE SMITHSONIAN INSTITUTION

C. G. ABBOT

FOR THE YEAR ENDED JUNE 30, 1937

To the Board of Regents of the Smithsonian Institution.

GENTLEMEN: I have the honor to submit herewith my report showing the activities and condition of the Smithsonian Institution and the Government bureaus under its administrative charge during the fiscal year ended June 30, 1937. The first 24 pages contain a summary account of the affairs of the Institution, and appendixes 1 to 10 give more detailed reports of the operations of the National Museum, the National Collection of Fine Arts, the Freer Gallery of Art, the Bureau of American Ethnology, the International Exchanges, the National Zoological Park, the Astrophysical Observatory, the Division of Radiation and Organisms, the Smithsonian library, and of the publications issued under the direction of the Institution. On page 117 is the financial report of the executive committee of the Board of Regents.

OUTSTANDING EVENTS

The most notable event of the year was the establishment of the new National Gallery of Art as a bureau of the Smithsonian Institution, the result of the munificent gift by Andrew W. Mellon of his great art collection and funds exceeding $10,000,000 for the construction of a suitable gallery building.

The equipment of the National Zoological Park was greatly improved by the completion, under a P. W. A. grant, of three new exhibition buildings, a machine shop, a garage, and new heating and electric installations. Dr. W. M. Mann, Director of the Zoo, headed the National Geographic Society-Smithsonian Institution Expedition to Sumatra for the purpose of obtaining specimens of the interesting animals of that region for the National Zoo. The expedition was still in the field at the close of the year, but reports indicate a highly successful trip.

In the Division of Radiation and Organisms, notable advances have been made in the studies of photosynthesis, phototropism, and the reactions of ultraviolet rays on plant growth.

The Smithsonian radio program, a weekly half-hour dramatization of the Institution's researches and exhibits, put on the air through the cooperation of the Office of Education and the National Broadcasting Co., continued throughout the year with undiminished popularity. The little magazine issued in conjunction with the broadcasts, presenting popular articles and reading lists on the subjects treated, had reached a circulation of 150,000 for the June issue.

SUMMARY OF THE YEAR'S ACTIVITIES OF THE BRANCHES OF THE INSTITUTION

National Museum.—The total appropriation for the maintenance of the Museum was $763,970, an actual increase of $28,228 over the previous year. Specimens added to the collections, mainly as gifts or through Smithsonian expeditions, numbered 361,951. It is difficult to select the outstanding accessions among this great amount of valuable material, but the following may be mentioned as examples of the interest of the year's additions: In anthropology, a valuable collection of skeletal material resulting from Dr. Hrdlička's archeological excavations in Alaska; in biology, welcome specimens of the little-known fauna of Siam, including 1,100 birds, 800 fishes, as well as mammals, insects, and other forms; in geology, specimens representing 29 distinct meteoric falls, obtained through the Roebling fund, bringing the number of falls represented in the Museum to 635; in arts and industries, the gondola of the successful stratosphere balloon *Explorer II*, presented by the National Geographic Society. A number of expeditions went out during the year in the interests of the Museum's researches in anthropology, biology, and geology. These were financed mainly by Smithsonian private funds or by the assistance of friends of the Museum. The number of visitors to the several Museum buildings for the first time in its history exceeded 2,000,000, the actual number for the year being 2,288.532. The Museum published an annual report, 2 bulletins, and 29 proceedings separates.

National Collection of Fine Arts.—The name of this bureau of the Institution was changed by act of Congress on March 24, 1937, from "National Gallery of Art" to "National Collection of Fine Arts", in order that the former name might be assigned to the collection of fine arts and the building to house it given by Andrew W. Mellon to the Nation. The sixteenth annual meeting of the National Gallery of Art Commission was held on December 8, 1936. Dr. George Harold Edgell was nominated as a member of the Commission to succeed Joseph H. Gest, deceased. A number of portraits and other art works were accepted by the Commission for the Gallery, and two paintings purchased by the council of the National Academy

of Design from the fund provided by the Henry Ward Ranger bequest were recalled and claimed, according to the terms of the Ranger will. Two miniatures were acquired through the Catherine Walden Myer fund. The Gallery held two special exhibitions, as follows: Paintings and etchings by Thomas Moran, installed in the lobby of the Natural History Building on the one hundredth anniversary of the painter's birth; and the exhibition of the Second Annual Metropolitan State Art Contest, 1937, including 305 prints, paintings, and pieces of sculpture, by 148 artists.

Freer Gallery of Art.—The year's additions to the collection include a bronze Cambodian Buddha, a bronze Chinese ceremonial vessel, and three early Chinese mirrors; three Armenian volumes of the fourteenth and seventeenth centuries—the Gospel, a psalter, and a hymnal; a thirteenth century New Testament in Aramaic; Arabic volumes and paper and parchment leaves from several Arabic manuscripts of various periods from the ninth to the seventeenth centuries; a sixteenth century Persian volume and 3 leaves from a Persian manuscript of the same period; 1 Chinese, 4 Indian, and 11 Persian paintings; and in pottery 1 Chinese cup holder and 2 Chinese vases, a Persian bowl, and 2 Syrian pitchers. Curatorial work was devoted to the study of Chinese, Tibetan, Japanese, Aramaic, Armenian, Arabic, Persian, East Indian, and Cambodian objects in the collection and of the texts and seals associated with them. During the year 810 objects and 286 photographs of objects were submitted to the curator for opinion as to provenance, age, quality, or other significance, and 31 inscriptions for translation. Visitors totaled 140,881, and 10 groups were given docent service. Three illustrated talks were given by members of the Gallery staff before three local organizations.

Bureau of American Ethnology.—The researches of the Bureau covered a wide variety of archeological and ethnological studies of the Indians of North, South, and Central America. Mr. Stirling, Chief of the Bureau, completed his ethnological report on the Jivaro Indians of Ecuador, and examined a number of mounds in Georgia and Florida. Dr. Swanton, as chairman of the United States De Soto Expedition Commission, made two field trips through that part of the South crossed by De Soto's route; he later completed a 600-page report, which was submitted by the Commission to Congress. Dr. Michelson continued his ethnological researches among the Algonquian tribes of James and Hudson Bays, Canada. Dr. Harrington prepared papers on ethnological and linguistic subjects relating to a number of tribes including the Karuk, Kiowa, Navajo, Apache, Hopi, and Shoshonean; he also completed a report on the Siberian origin of the American Indian. Dr. Roberts continued his archeo-

logical excavations at the Lindenmeier site in Colorado, adding important material to that which he had already discovered relating to Folsom man. In March 1937 he represented the United States at the International Conference of Archeologists at Cairo, Egypt. Dr. Strong devoted the year to completing the report on his archeological expedition of the previous year to Honduras. Dr. Steward continued ethnological studies of the Shoshonean tribes of the Great Basin and Plateau areas. Mr. Hewitt continued his researches on the League of the Iroquois. The Bureau published its annual report and one bulletin.

International exchanges.—Since the conclusion at Brussels in 1886 of two exchange conventions between the United States and a number of other countries, the Smithsonian Institution has been charged by Congress with the important duty of carrying on the exchange with other countries of governmental and scientific documents on behalf of the United States. During the year the exchange service handled a total of 657,346 packages weighing 651,461 pounds. The number of full and partial sets of governmental publications forwarded abroad is now 111, and 105 copies of the Congressional Record and the Federal Register are sent to other countries in exchange for their parliamentary journals. Four new depositories in Switzerland were added to the interparliamentary exchange list, and one in Germany, the Bibliothek des Preussischen Landtags, Berlin, was discontinued, as the Lantags was abolished.

National Zoological Park.—The fiscal year 1937 was outstanding in the history of the Zoo. The construction under the P. W. A. grant of $892,920 of five new buildings was completed. Under this same grant, three 250-horsepower down-draft boilers were installed in the central heating plant, the conduit system was extended to two mammal houses, and the electric supply distribution system was rearranged. An expedition headed by Dr. William M. Mann, Director of the Zoo, and financed by the National Geographic Society left Washington in January to collect animals in the Far East for the Zoo. They took with them 28 animals which were intended for zoos in the regions visited. The expedition is expected to return to Washington in October with a large collection of rare animals, advance reports indicating that the trip has been a very successful one. Accessions of animals during the year numbered 1,067. Losses by death and otherwise totaled 916, leaving the collection at the close of the year at 2,342 animals, representing 701 different species. Visitors numbered 2,435,520, including groups from 638 schools and organizations from 20 States and the District of Columbia.

Astrophysical Observatory.—Measurements of the solar constant of radiation have been continued on all favorable days (amounting to about 80 percent of all days) at the three Smithsonian observing sta-

tions at Table Mountain, Calif.; Montezuma, Chile; and Mount St. Katherine, Egypt. A flaw was discovered in the "short method" reduction of observations, used since 1923, making it necessary to devise a new method. After this was done, the field observers remeasured the photographic records of observation since that date, and great progress has been made by an augmented computing staff at Washington in recomputing by the new method all observations since 1923. A solar radiation steam boiler (pl. 7) was prepared under the direction of Dr. Abbot and successfully operated in September 1936. Dr. Abbot later devised a small solar flash boiler which embodies many improvements and which holds much promise of practical application in the future. Frederick E. Fowle, a member of the staff of the Astrophysical Observatory since 1894, was retired for disability at the close of the fiscal year.

Division of Radiation and Organisms.—The staff of the Division obtained important results from studies on the following subjects: the normal growth of tomatoes under laboratory conditions; photosynthesis in wheat; perfection of a spectral absorption method of measuring carbon dioxide concentration in air; time relations in photosynthesis; the efficiency of different wave lengths of light to promote germination in light-sensitive lettuce seed; the inactivation of plant growth substance by light; and the stimulation of multiplication in algae by minute dosage of ultraviolet rays known to be lethal in doses of sufficient intensity. Four papers describing the investigations of the staff were published during the year in the Smithsonian Miscellaneous Collections, and others were in preparation.

THE ESTABLISHMENT

The Smithsonian Institution was created by act of Congress in 1846, according to the terms of the will of James Smithson, of England, who in 1826 bequeathed his property to the United States of America "to found at Washington, under the name of the Smithsonian Institution, an establishment for the increase and diffusion of knowledge among men." In receiving the property and accepting the trust, Congress determined that the Federal Government was without authority to administer the trust directly, and, therefore, constituted an "establishment" whose statutory members are "the President, the Vice President, the Chief Justice, and the heads of the executive departments."

THE BOARD OF REGENTS

The law establishing the Institution specifies that the three Senator Regents shall serve during the term for which they shall hold, without reelection, their office as Senators, and the three Members of

the Senate on the Board of Regents, Joseph T. Robinson, of Arkansas; M. M. Logan, of Kentucky; and Charles L. McNary, of Oregon, having been reelected to the Senate for a new term beginning January 3, 1937, the Vice President on January 6, 1937, reappointed them to succeed themselves on the Board of Regents.

The roll of Regents at the close of the year was as follows: Charles Evans Hughes, Chief Justice of the United States, Chancellor; John N. Garner, Vice President of the United States; members from the Senate—Joseph T. Robinson, M. M. Logan, Charles L. McNary; members from the House of Representatives—T. Alan Goldsborough, Clarence Cannon, Charles L. Gifford; citizen members—Frederic A. Delano, Washington, D. C.; John C. Merriam, Washington, D. C.; R. Walton Moore, Virginia; Robert W. Bingham, Kentucky; Augustus P. Loring, Massachusetts; Roland S. Morris, Pennsylvania.

Proceedings.—The annual meeting of the Board of Regents was held on January 14, 1937. The Regents present were Chief Justice Charles Evans Hughes, Chancellor; John N. Garner, Vice President of the United States; Senators Joseph T. Robinson and M. M. Logan; Representatives T. Alan Goldsborough, Charles L. Gifford, and Clarence Cannon; citizen Regents Frederic A. Delano and R. Walton Moore; and the Secretary, Dr. Charles G. Abbot.

The Secretary presented his annual report, detailing the activities of the several Government branches and of the parent institution during the year, and Mr. Delano presented the report of the executive committee, covering financial statistics of the Institution. The Secretary also presented the annual report of the National Gallery of Art Commission.

In lieu of his usual special report the Secretary presented to the Regents a brief review of the principal achievements of the Smithsonian Institution during the 10 years since the death of Secretary Walcott in 1927. In accordance with the wishes of the Regents, this résumé has been printed in pamphlet form.

The Regents also adopted resolutions approving in principle the proposed gift of the Hon. Andrew W. Mellon of a collection of masterpieces of painting and sculpture, and of a gallery to house them. This matter is treated in detail on pages 7–17 of this report.

In addition to the annual meeting, there was a special meeting of the Board of Regents on June 24, 1937, at which the following Regents were present: Senators Joseph T. Robinson and M. M. Logan; Representatives T. Alan Goldsborough and Clarence Cannon; citizen Regent Roland S. Morris; and the Secretary, Dr. Charles G. Abbot. This meeting was called to take action on matters connected with the above-mentioned offer by the Hon. Andrew W. Mellon, of which full details will be found on pages 7–17.

FINANCES

A statement will be found in the report of the executive committee, page 117.

MATTERS OF GENERAL INTEREST

ANDREW W. MELLON'S ART GIFT TO THE NATION

Probably the greatest impetus ever given to the development of art in the Nation's Capital and in the Nation itself will result from Andrew W. Mellon's munificent gift to the American people of his unexcelled art collection, a $10,000,000 building to exhibit it, and an endowment fund to pay the salaries of the directing officials and for the acquisition of additional art works. The proposal was made by Mr. Mellon in a letter to President Roosevelt dated December 22, 1936, which began as follows:

> Over a period of many years I have been acquiring important and rare paintings and sculpture with the idea that ultimately they would become the property of the people of the United States and be made available to them in a national art gallery to be maintained in the city of Washington for the purpose of encouraging and developing a study of the fine arts.
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> In order to carry out this purpose, and with the approval of the other trustees, I wish to propose a plan to give the art collection which I have brought together to the Smithsonian Institution or to the United States Government for the benefit of the people of this country, and also to erect or cause to be erected on public land a suitable building for a national gallery of art, the design and materials of which shall be subject to the approval of the Fine Arts Commission.

Following an exchange of correspondence with the President, Mr. Mellon made his formal offer in a letter dated December 31, 1936. In consultation with representatives of the Department of Justice and the Secretary of the Smithsonian Institution a bill was prepared by representatives of Mr. Mellon as House Joint Resolution 217 covering the matter. After hearings, the resolution was agreed to by Congress and approved by the President on March 24, 1937. The full text of the resolution follows:

> *Resolved by the Senate and House of Representatives of the United States of America in Congress assembled*, That the area bounded by Seventh Street, Constitution Avenue, Fourth Street, and North Mall Drive, Northwest, in the District of Columbia, is hereby appropriated to the Smithsonian Institution as a site for a National Gallery of Art. The Smithsonian Institution is authorized to permit the A. W. Mellon Educational and Charitable Trust (hereinafter referred to as the donor) to construct on said site for the Smithsonian Institution a building to be designated the National Gallery of Art, and to remove any existing structure and landscape the grounds within said area. The adjoining area bounded by Fourth Street, Pennsylvania Avenue, Third Street, and North Mall Drive, Northwest, in the District of Columbia, is hereby reserved as a site for

future additions to the National Gallery of Art. The project shall be in accordance with plans and specifications approved by the Commission of Fine Arts.

SEC. 2. (a) There is hereby established in the Smithsonian Institution a bureau, which shall be directed by a board to be known as the Trustees of the National Gallery of Art, whose duty it shall be to maintain and administer the National Gallery of Art and site thereof and to execute such other functions as are vested in the board by this Act. The board shall be composed as follows: The Chief Justice of the United States, the Secretary of State, the Secretary of the Treasury, and the Secretary of the Smithsonian Institution, ex officio; and five general trustees who shall be citizens of the United States, to be chosen as hereinafter provided. No officer or employee of the Federal Government shall be eligible to be chosen as a general trustee.

(b) The general trustees first taking office shall be chosen by the Board of Regents of the Smithsonian Institution, subject to the approval of the donor, and shall have terms expiring one each on July 1 of 1939, 1941, 1943, 1945, and 1947, as designated by the Board of Regents. A successor shall be chosen by a majority vote of the general trustees and shall have a term expiring ten years from the date of the expiration of the term for which his predecessor was chosen, except that a successor chosen to fill a vacancy occurring prior to the expiration of such term shall be chosen only for the remainder of such term.

SEC. 3. Upon completion of the National Gallery of Art, the board shall accept for the Smithsonian Institution as a gift from the donor a collection of works of art which shall be housed and exhibited in the National Gallery of Art.

SEC. 4. (a) The faith of the United States is pledged that, on completion of the National Gallery of Art by the donor in accordance with the terms of this Act and the acquisition from the donor of the collection of works of art, the United States will provide such funds as may be necessary for the upkeep of the National Gallery of Art and the administrative expenses and costs of operation thereof, including the protection and care of works of art acquired by the board, so that the National Gallery of Art shall be at all times properly maintained and the works of art contained therein shall be exhibited regularly to the general public free of charge. For these purposes there are hereby authorized to be appropriated such sums as may be necessary.

(b) The board is authorized to accept for the Smithsonian Institution and to hold and administer gifts, bequests, or devises of money, securities, or other property of whatsoever character for the benefit of the National Gallery of Art. Unless otherwise restricted by the terms of the gift, bequest, or devise, the board is authorized to sell or exchange and to invest or reinvest in such investments as it may determine from time to time the moneys, securities, or other property composing trust funds given, bequeathed, or devised to or for the benefit of the National Gallery of Art. The income as and when collected shall be placed in such depositaries as the board shall determine and shall be subject to expenditure by the board.

(c) The board shall appoint and fix the compensation and duties of a director, an assistant director, a secretary, and a chief curator of the National Gallery of Art, and of such other officers and employees of the National Gallery of Art as may be necessary for the efficient administration of the functions of the board. Such director, assistant director, secretary, and chief curator shall be compensated from trust funds available to the board for the purpose, and their appointment and salaries shall not be subject to the civil-service laws or the Classification Act of 1923, as amended. The director, assistant director, secretary, and chief curator shall be well qualified by experience and training to perform the

duties of their office and the original appointment to each such office shall be subject to the approval of the donor.

(d) The actions of the board, including any payment made or directed to be made by it from any trust funds, shall not be subject to review by any officer or agency other than a court of law.

SEC. 5. (a) The board is authorized to adopt an official seal which shall be judicially noticed and to make such bylaws, rules, and regulations, as it deems necessary for the administration of its functions under this Act, including, among other matters, bylaws, rules, and regulations relating to the acquisition, exhibition, and loan of works of art, the administration of its trust funds, and the organization and procedure of the board. The board may function notwithstanding vacancies, and three members of the board shall constitute a quorum for the transaction of business.

(b) In order that the collection of the National Gallery of Art shall always be maintained at a high standard and in order to prevent the introduction therein of inferior works of art, no work of art shall be included in the permanent collection of the National Gallery of Art unless it be of similar high standard of quality to those in the collection acquired from the donor.

(c) The board shall have all the usual powers and obligations of a trustee in respect of all trust funds administered by it and all works of art acquired by it.

(d) The board shall submit to the Smithsonian Institution an annual report of its operations under this Act, including a detailed statement of all acquisitions and loans of works of art and of all public and private moneys received and disbursed.

SEC. 6. (a) The Commissioners of the District of Columbia are hereby authorized and directed to close Sixth Street, Northwest, within the boundaries of the site for the National Gallery of Art. The National Capital Park and Planning Commission shall determine the building lines and approve the plan of approaches for said gallery, and shall also make recommendations for the widening and adjustment of Third, Seventh, Ninth, and such other streets in the vicinity as may be necessary and desirable to provide for the traffic which would otherwise use Sixth Street.

(b) Section 10 of the Public Building Act, approved March 4, 1913 (37 Stat. L., p. 881), relating to the George Washington Memorial Building, and all provisions of law amendatory thereof, are hereby repealed.

(c) The existing bureau of the Smithsonian Institution now designated as a national gallery of art shall hereafter be known as the National Collection of Fine Arts.

(d) The fifth paragraph under the heading "Smithsonian Institution" in the Independent Offices Appropriation Act for the fiscal year 1924, approved February 13, 1923 (42 Stat. L. 1235), relating to the erection of a national gallery of art, is hereby repealed.

Approved, March 24, 1937.

At a special meeting of the Board of Regents of the Institution held on June 24, 1937, there were submitted copies of a trust indenture between the A. W. Mellon Educational and Charitable Trust, the Smithsonian Institution, and the trustees of the National Gallery of Art. After consideration, the following resolution was adopted:

Resolved: That the trust indenture between the A. W. Mellon Educational and Charitable Trust, the Smithsonian Institution and the trustees of the National Gallery of Art, a draft whereof has been presented at this meeting,

and hereby is directed to be inserted in the minute book of the Regents immediately following the minutes of this meeting, be, and hereby it is, approved, and the Secretary of the Institution be, and hereby he is, authorized and directed to execute such indenture, in triplicate, in the name and under the corporate seal of this Institution, and upon its due execution and by the other parties thereto to make proper delivery thereof.

The full text of the trust indenture is as follows:

TRUST INDENTURE

Dated the 24th day of June 1937, and intended to be effective upon that date, although executed by the parties hereto on various other dates, by, between, and among

Andrew W. Mellon, Paul Mellon, Donald D. Shepard and David K. E. Bruce, as trustees of the A. W. Mellon Educational and Charitable Trust, established under and by virtue of a deed of trust of Andrew W. Mellon to said trustees, dated December 30, 1930, parties of the first part, and hereinafter sometimes referred to as the "Donor";

Smithsonian Institution, an establishment created and existing under and by virtue of an act of the Congress of the United States of America, approved August 10, 1846, party of the second part, and hereinafter referred to as the "Institution"; and

The trustees of the National Gallery of Art, constituted under and by virtue of a Joint Resolution of the Congress of the United States, entitled "Joint Resolution providing for the Construction and Maintenance of a National Gallery of Art," approved March 24, 1937, parties of the third part, and hereinafter sometimes referred to as the "Trustees."

Whereas in December 1936, by correspondence between the President of the United States of America and Andrew W. Mellon, the donor proposed to give a collection of works of art for the benefit of the people of the United States of America and to cause to be erected on public land a suitable building in which to house and exhibit such collection, copies of such correspondence being hereunto attached and made part hereof; and

Whereas by said joint resolution of the Congress, there was established a bureau in the Institution to be directed by the trustees, and provision was made for the construction of said building, the acceptance of a collection of works of art as a gift from the donor and the exhibition thereof and of other appropriate works of art in said building, and the administration by the trustees of said building, the site and contents thereof, and all matters and affairs that pertain to the use thereof for the public benefit; and

Whereas it is now desired to consummate the gift of said building and said collection of works of art and to specify more particularly the terms and conditions upon which said gift is made by the donor and accepted by the Institution and the trustees, and

Whereas by said correspondence, one of the conditions of the gift was that the upkeep of the gallery building and other administrative expenses and costs of operation and functioning of the gallery would be provided for annually in appropriations to be made by Congress; and by said joint resolution, the faith of the United States was pledged that it would provide such funds as would be necessary for the upkeep of the gallery and the administrative expenses and costs of operation thereof, including the protection and care of works of art acquired by the trustees;

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

I

ERECTION OF THE NATIONAL GALLERY OF ART

In accordance with the provisions of said joint resolution of the Congress, the Institution hereby permits the donor to construct, and the donor hereby agrees to construct for the Institution, a building to be designated and hereinafter referred to as the "National Gallery of Art" upon the area bounded by Seventh Street, Constitution Avenue, Fourth Street, and North Mall Drive, N. W., in the District of Columbia (being the site appropriated to the Institution by said joint resolution), and to remove any existing structure and to landscape the grounds within said area, all in accordance with plans and specifications approved by the Commission of Fine Arts. The building line and plans of approaches for said building shall be approved by the National Capital Park and Planning Commission. The donor, in its uncontrolled discretion but at its sole expense, shall engage such architects, contractors, builders, and others, and shall take or cause to be taken any and every other action necessary or advisable in connection with the construction, completion, equipment, and furnishing of said building, and the landscaping of said area upon which it is erected. The donor shall pay all costs and expenses in connection with, or incident to, said project. In no event and under no circumstances shall the Institution or the trustees be responsible or liable for any part of such cost or expense, and the donor shall indemnify and save harmless the Institution and the trustees from any and every liability whatsoever with reference to anything done or omitted to be done in connection with the carrying out of said project or any part thereof. The Institution and the trustees are expressly relieved of any responsibility or duty pertaining to said project, and the entire and exclusive jurisdiction and responsibility thereover and with regard thereto are imposed upon and vested in the donor. Said project shall be commenced as soon after the execution and delivery hereof as, in the judgment of the donor, the necessary plans, specifications, and arrangements can be made and effected, and will be proceeded with as expeditiously as, in the judgment of the donor, the execution of the work can properly be effected, but as the building is of monumental character and is intended to have outstanding architectural merit, it is agreed that undue haste is not desirable, and no time for the final completion of the project can be fixed. As and when said project shall be finally completed by the construction, equipment, and furnishing of said building and the landscaping of said area in accordance with said plans and specifications, the donor will give written notice thereof to the Institution and the trustees and thereupon, without further action by any of the parties hereto, the legal title to said building shall be deemed to be vested in the Institution, but the maintenance and administration of said building and of the site shall be vested exclusively in, and shall be the sole obligation and duty of, the trustees as a separate bureau of the Institution, and distinct from the other activities of the Institution, which are under the management of its Board of Regents.

II

NAME OF GALLERY

Said gallery shall be known and designated perpetually as the "National Gallery of Art", to which the entire public shall forever have access, subject only to reasonable regulations from time to time established by the trustees.

III

GIFT OF COLLECTIONS OF WORKS OF ART

The donor hereby gives to the Institution and the trustees, and they hereby accept from the donor, in trust, however, for the uses and purposes and subject to the provisions and conditions hereinafter expressed, the collection of works of art listed in the schedule hereto attached, made part hereof and marked "Exhibit 1."

IV

CUSTODY OF COLLECTION PENDING COMPLETION OF THE NATIONAL GALLERY OF ART

Pending the completion of the National Gallery of Art, said collection of works of art shall remain in the custody of the donor. During such period of custody, the donor will care for all said works of art, and will keep the same insured in favor of the Institution and the trustees, as their respective interests may appear, against loss or damage by fire, theft, or burglary, in such amounts and with such parties as the donor, in its discretion, may determine, if and to the extent that such insurance may be obtainable. The donor shall pay all costs, premiums, and other charges incident to such care and insurance. Upon the completion of the National Gallery of Art, said collection shall be delivered to the trustees and thereafter shall remain under their exclusive control.

V

PASSAGE OF TITLE AND RESPECTIVE FUNCTIONS OF INSTITUTION AND OF TRUSTEES

Forthwith upon the execution and delivery hereof, the title to said collection of works of art shall pass to and be vested in the Institution. While it is the intention that the title to said works of art shall be forever vested in the Institution, yet it is also the intention of the parties hereto, and this gift is made upon the express understanding, agreement, and trust, that from and after the completion of the National Gallery of Art, the actual custody, control, management, and exhibition of said works of art, as well as of such other works of art as, in accordance with the provisions of said joint resolution, from time to time may be housed or exhibited in said National Gallery of Art, and all the details pertaining thereto, shall be, and hereby are, delegated to and vested solely, exclusively and forever in the trustees.

VI

DISPLAY OF COLLECTION

Subject to the subsequent provisions of this section VI, the said collection of works of art shall always be kept in the National Gallery of Art, and none thereof shall be removed from said building or from their settings therein except for most cogent reasons therefor, such as repairs to said building or said works of art, or temporary exhibition of some of such works of art elsewhere, and then only with the prior approval of a majority of the entire membership of the trustees. The works of art constituting said collection shall receive such care and attention from time to time as shall be necessary for their preservation and exhibition, shall always be exhibited in said National Gallery of Art in spacious

arrangement so that overcrowding will be avoided, and shall always be displayed with dignity, in appropriate units, with suitable settings and with due regard to their importance and quality.

While the parties hereto presently recognize that all the works of art constituting said collection are of such high standard of quality that it is essential that such collection perpetually remain intact and be a part of the permanent collection on exhibition in the National Gallery of Art, and such is the purport of this indenture, the donor at the same time recognizes the inadvisability of perpetually foreclosing any discretion in the trustees in regard to the disposition of any of the works of art constituting such collection and, consequently, the donor authorizes and empowers the trustees, but only upon the prior approval of not less than three-fourths of the entire membership of the trustees, to exchange or otherwise dispose of any particular work of art then a part of said collection, if in such exchange or by reason of such other disposition the trustees are enabled to obtain for the Institution, to be and become a part of the collection under this Indenture, some other work of art which, in the judgment of the trustees, would be a highly desirable acquisition to such collection. Furthermore, the donor recognizes that with the passing of time it may come to be thought by at least three-fourths of the entire membership of the trustees that some particular work of art, then constituting a part of said collection, has become unsuitable longer to remain as a part of said collection, and therefore the donor provides that in the event that, in the opinion of at least three-fourths of the entire membership of the trustees, any particular work of art then a part of said collection is not in keeping with said collection as a whole, the trustees are authorized and empowered to make such disposition thereof as they, in their uncontrolled discretion, shall deem advisable by sale, exchange, gift, loan, or otherwise.

VII

MAINTENANCE OF THE NATIONAL GALLERY OF ART

The National Gallery of Art shall be the permanent home of the said collection of works of art hereby given by the donor. It shall be used exclusively for the storage and exhibition of works of art and the administration of the affairs of the trustees. In order that the collection of the National Gallery of Art shall always be maintained at a high standard and to prevent the introduction therein of inferior works of art, no work of art shall be included in the permanent collection of the National Gallery of Art unless it be of similar high standard of quality to those in the collection hereby given by the donor. The building and the contents and operations thereof shall at all times remain in the exclusive jurisdiction and control of the trustees in accordance with such by-laws, rules, and regulations as they from time to time shall prescribe.

It is an express condition of the trust of said collection of works of art, hereby created, that the faith of the United States is pledged that, on completion of the National Gallery of Art by the donor in accordance with the terms of said joint resolution and the acquisition from the donor of the collection of works of art, the United States will provide such funds as may be necessary for the upkeep of the National Gallery of Art and the administrative expenses and costs of operation thereof, including the protection and care of works of art acquired by the Board, so that the National Gallery of Art shall be at all times properly maintained and the works of art contained therein shall be exhibited regularly to the general public free of charge.

VIII

THE TRUSTEES

The trustees shall always be not less than nine persons, of whom a minority, to be known as ex-officio trustees, shall be officers of the United States or of the Institution, ex-officio, and of whom a majority to be known as general trustees, shall be citizens of the United States, none of whom at the time of his or her election to the office of general trustee shall be an officer or employee of the United States of America. Any vacancy in the office of general trustee by reason of the expiration of the term, death, or resignation of the incumbent, or otherwise howsoever, shall be filled by the election of a competent person by a majority of the remaining general trustees.

IX

ALTERATION OR MODIFICATION OF THIS INDENTURE

(*a*) During the existence of the donor

At any time and from time to time hereafter, with the consent of the Institution, the trustees, and the donor, this trust indenture may be altered, modified, or supplemented in any respect whatever, as the parties hereto may deem advisable or necessary, which shall not be inconsistent with the general purpose and scope of this trust indenture and of the said joint resolution.

(*b*) After the termination of the donor

While this trust indenture is entered into by the parties hereto with the intention, and it is the purport hereof, that the trust hereby created shall be administered strictly in accordance with the terms, provisions, and conditions of this indenture and of said joint resolution, the parties hereto recognize that with the passing of time and changed conditions, some of such terms, provisions, or conditions may become inconvenient or impossible of observance or the observance thereof may become detrimental to the primary purpose of the donor that the National Gallery of Art and the contents thereof, including the donor's collection of works of art, shall at all times be available for the benefit and enjoyment of the public, or situations or conditions, not now thought of or inadequately provided for in this indenture, may arise and the proper administration of this trust may require such conditions or situations to be properly and practically dealt with, and consequently, the parties hereto agree and expressly provide that if at any time and from time to time, but only after the termination of the A. W. Mellon Educational and Charitable Trust by the terms of the deed of trust creating such trust or otherwise, three-fourths of the entire membership of the trustees and three-fourths of the entire number of the regents or other duly constituted governing body of the Institution shall be of the opinion that in order properly to administer the National Gallery of Art and the site and contents thereof in the interest and for the benefit of the public, this indenture of trust should be altered, modified, or amended as respects any of its terms, provisions, or conditions, or should be supplemented so as adequately to provide for new conditions or situations, then and in every such event the trustees, with the approval of at least three-fourths of the entire membership of the trustees, and the Institution, pursuant to approval of at least three-fourths of its Board of Regents or other duly constituted authority, shall have the right, power, and authority, by supplemental indenture, to effect any such alteration, modification, or amendment hereof, or supplement hereto, provided however, that no alteration, modification, or amend-

ment of this trust indenture, or any supplement thereof, shall be made which shall be in violation of the provisions of said joint resolution or of any future act of Congress relating to the National Gallery of Art; and provided further, that in no event and under no circumstance shall this trust indenture be altered, modified, amended, or supplemented as respects the provisions of article VIII hereof, it being the intention and one of the express conditions of the gift hereby made by the donor that the trust hereby created shall perpetually be administered by trustees constituted in accordance with the provisions of article VIII hereof.

For the purpose of this section IX, the A. W. Mellon Educational and Charitable Trust shall be conclusively deemed to have been terminated if three-fourths of the entire membership of the trustees, after such careful inquiry as they shall deem to be sufficient, shall be of the opinion that such trust no longer continues to exist.

In witness whereof, The A. W. Mellon Educational and Charitable Trust has caused this indenture of trust to be executed by the hands and seals of the trustees thereof; the Smithsonian Institution, pursuant to a resolution duly adopted by its Board of Regents, has caused this indenture of trust to be signed and its official seal to be hereunto affixed by its secretary; and the trustees of the National Gallery of Art have caused this indenture of trust to be executed by the hands and seals of the trustees, all as of the day and year first above written.

THE A. W. MELLON EDUCATIONAL AND CHARITABLE TRUST,

By (Signed) ANDREW W. MELLON,
(Signed) PAUL MELLON,
(Signed) DONALD D. SHEPARD,
(Signed) DAVID K. E. BRUCE,
Trustees thereof.

SMITHSONIAN INSTITUTION,

[SEAL] By (Signed) C. G. ABBOT, *Secretary.*

NATIONAL GALLERY OF ART,

By (Signed) CHARLES EVANS HUGHES,
(Signed) CORDELL HULL,
(Signed) HENRY MORGENTHAU, JR.,
(Signed) C. G. ABBOT,
(Signed) A. W. MELLON,
(Signed) DAVID K. E. BRUCE,
(Signed) DUNCAN PHILLIPS,
(Signed) S. PARKER GILBERT,
(Signed) DONALD D. SHEPARD,
Trustees thereof.

At the same meeting of the Board of Regents the following gentlemen were appointed as general trustees of the National Gallery of Art:

Mr. Donald D. Shepard, for the term expiring July 1, 1939;
Mr. S. Parker Gilbert, for the term expiring July 1, 1941;
Mr. Duncan Phillips, for the term expiring July 1, 1943;
Mr. David K. E. Bruce, for the term expiring July 1, 1945;
Mr. A. W. Mellon, for the term expiring July 1, 1947.

Following this final step in the consummation of Mr. Mellon's gift to the Nation, work was started promptly on the preparation of the site. The architect selected for the building by Mr. Mellon was John Russell Pope, the architect for many art galleries, museums, and public buildings here and abroad, including the National Archives Building, Constitution Hall, the Masonic Temple, and others in Washington. According to Mr. Pope, the building will follow the finest traditions of American architecture and will be carefully scaled in proportion with the surrounding buildings. Constructed of marble, the gallery will be 829 feet long, about 350 feet wide at its greatest width, with the central dome 150 feet high. Mr. Pope has assured that the building will incorporate all the best features of the world's art galleries, and in certain respects will be in advance of any existing gallery, notably in relation to lighting and in provision to lessen the fatigue of visitors.

Regarding the collection itself, which will be installed in the building upon its completion and which will form the nucleus and establish the standard of excellence of the National Gallery of Art, the following brief description was given before the House Committee on the Library by Mr. David E. Finley:

Mr. Mellon has been making this collection for more than 40 years. It is not large as regards the number of pictures. It contains something like a hundred paintings by old masters. But practically all are important, for Mr. Mellon has tried to buy not only paintings by the greatest masters, but also the best examples of their work obtainable. As a result, everyone who sees the collection—and many of the greatest experts in this country and Europe have seen it—is impressed with the exceptional quality of the pictures.

* * * * * * *

In range it covers all the important schools of western European painting. The Italian school is particularly well represented by painters such as Raphael, Perugino, Botticelli, Fra Angelico, Titian, Bellini, Antonella di Messina, and by such rare and early masters as Cimabue, Masaccio, and Andrea del Castagno. There is a Byzantine Madonna and Child, painted in Constantinople early in the thirteenth century, which takes the collection back to the very source of western art, and with the other paintings gives a historical sequence to the collection that will prove very valuable to students.

The Flemish school is represented by most of its greatest painters, beginning with the Annunciation by Jan van Eyck, and continuing through Petrus Christus, Rogier van der Weyden, Memling, Gerard David, and ending with two magnificent Rubens from the Hermitage Gallery and three Van Dycks, including the exceptionally fine portrait, painted in Genoa, of the Marchesa Balbi.

In the Dutch school there are several outstanding examples of Rembrandt and Frans Hals and three Vermeers, as well as several Hobbemas, and works by Terburg, Metsu, deHoogh, and so forth.

The Spanish paintings include three portraits by Velasquez, one of Pope Innocent X from the Hermitage, being particularly important. There are also four Goyas and two El Grecos, while the German and French paintings include such names as Holbein, Durer, and Chardin. The British school is quite

largely represented by works of Gainsborough, Reynolds, Raeburn, Romney, Lawrence, Hopner, Turner, and Constable.

In addition to these paintings, Mr. Mellon also acquired a number of portraits by important American painters, such as Gilbert Stuart, Copley, West, Sully, and others. He bought also, in its entirety, the Clarke collection of American portraits, containing some 175 paintings by practically all our earlier well-known American painters. This was not done with the idea that these should go into the National Gallery of Art, but rather that such as were suitable and of general or historic interest should form the nucleus of a National Portrait Gallery, which should be entirely distinct from the art gallery and would be housed, eventually at least, in its own building. A few of the finest of these portraits, which have the greatest artistic merit, will find their place in the art gallery and will form a fitting sequence to the British art of the eighteenth century represented in the collection.

There is just one other matter that I must mention. Mr. Mellon's idea had been originally that the gallery should be for paintings only. Then an opportunity came to buy the Dreyfus collection of Renaissance sculpture—a collection that had been in the making in Paris for many years and included outstanding works by such great artists as Donatello, Verrocchio, Desiderio da Settignano, Luca della Robbia, and others. Naturally, such an opportunity could not be refused and he acquired these sculptures. He also bought two very important large bronzes by Sansovino and a Mercury by Giovanni da Bologna, all of which will find their place in the new gallery, either with the paintings or near them.

This report covers only the year ending June 30, 1937, but to anticipate slightly the next fiscal year, I must record here with profound regret the death of Mr. Mellon on August 26, 1937, and of Mr. Pope on August 27, 1937. It is indeed tragic that these two men could not have lived to see the completion of this splendid project—a remark which will be repeated by many of the millions of Americans who in future years will enter the National Gallery of Art to benefit from Mr. Mellon's patriotic gift to the Nation.

PROPOSED SMITHSONIAN GALLERY OF ART

On March 15, 1937, a joint resolution was introduced in the House of Representatives by Mr. Keller of Illinois to establish a Smithsonian Gallery of Art for the proper housing and display of the national collections of fine arts. These collections have been in the custody of the Smithsonian Institution for many years, and since 1920 have been administered by the Institution as a Government bureau officially designated the National Gallery of Art. Lacking a building for their public exhibition, these valuable art collections have been shown in the Natural History Building of the United States National Museum. With the creation in 1937 of the new National Gallery of Art as a result of the munificent gift of Andrew W. Mellon, the Smithsonian gallery was officially renamed the National Collection of Fine Arts. It is for the proper housing of this collec-

tion, now valued at approximately $10,000,000, that the present joint resolution provides.

The resolution sets aside a tract of land on the Mall between Twelfth and Fourteenth Streets and Constitution Avenue and North Mall Drive; creates a Smithsonian Gallery of Art Commission to make preliminary investigations and obtain designs for the building; authorizes the appropriation of $4,800,000 for the building; authorizes annual appropriations for the maintenance of the gallery; and states the policy of the gallery as follows:

SEC. 7. It shall be the policy of the gallery to maintain a worthy standard for the acceptance of art objects for exhibition in the Smithsonian Gallery of Art; to foster by public exhibitions from time to time in Washington and other parts of the United States a growing public appreciation of art both of past and contemporary time; and further, as funds are available, to encourage the development of art by the purchase of worthy examples of contemporary or other art works, and to invite the private donation of funds therefor.

SEC. 8. The Smithsonian Gallery of Art shall be under the administration of the Regents and Secretary of the Smithsonian Institution.

The resolution did not pass the first session of the Seventy-fifth Congress, but it is hoped that favorable action may be taken at the next session.

For many years the Smithsonian Institution has urged the construction of a suitable building for the housing and public exhibition of the art collections belonging to the Nation. These collections contain many works of art of high quality, mainly gifts from private citizens, and there is no doubt that many more such gifts would be made were proper exhibition space available. As much of the collection as possible has been exhibited to the public in the halls of the National Museum, but the available space there was not specifically designed for the display of art works, and in spite of being overcrowded, the space is entirely inadequate, so that many things which should be on exhibition are forced into storage. It is the urgent hope of the Institution that the proposed Smithsonian Gallery of Art may become a reality in the near future.

It will in no sense be a duplication of the newly received National Gallery, for the National Gallery is restricted to classic painting and sculpture, leaving the fields of National collections in contemporary art of all kinds, portraits, jewels, glass, tapestry, and other kinds of art unprovided for. There is already a large national collection of such objects, and every reason to expect great increase if a suitable gallery were available.

SMITHSONIAN RADIO PROGRAM

The Smithsonian's newest activity, its weekly radio broadcast in cooperation with the United States Office of Education and the

National Broadcasting Co., has now operated for a full year. The series, known as "The World is Yours", was initiated by the Office of Education as part of the radio project of the Works Progress Administration. Its purpose was to bring to the people of the United States more of the wealth of knowledge and vitally interesting information on the earth and its inhabitants available in the laboratories and exhibit halls of the Smithsonian Institution. It was further intended as a pioneering experiment in educational radio to determine the most effective means of presenting to a Nation-wide audience solid information in a form that would hold the listener's interest. Before listing the titles of the broadcasts and telling something of the success of the series, it may be of interest to describe briefly the series itself.

The character of the series and the subjects to be covered were worked out in collaboration between the radio experts of the Office of Education and the Smithsonian's editorial office. The basic requirement was that each subject must be presented in dramatized form. Radio lectures and dialogues have apparently failed to hold the listener's interest, but dramatic incidents well written and produced appeal to listeners of all age groups. The subjects to be dramatized covered all phases of the Institution's activities—science in all its branches, art, invention, and history. About half of the year's broadcasts were on Smithsonian research activities, the other half being based on the exhibits in the National Museum and the art galleries under the Institution's direction. The various subjects were carefully planned to come around in fairly regular rotation, so that those listeners with decided preferences for one or another feature could count on hearing their favorite subjects if they listened regularly.

The subject once selected for a particular broadcast, the Office of Education's expert script writers conferred with the Smithsonian authority in that field. After preliminary research, they then prepared the script, which was carefully checked by the Smithsonian. The script then went to New York, where it was produced by the National Broadcasting Co. in their Radio City studios by a selected cast.

Beginning on June 7, 1936, the series covered up to June 30, 1937, the following subjects:

	1936
The Smithsonian, and Famous Exhibits	June 7
Scientific Explorations	June 14
The Sun	June 21
The American Indian	June 28
Costumes of Ladies of the White House	July 5
Transportation	July 12
Meteorites	July 19

	1936
The Human Side of Art	July 26
Mammals	Aug. 2
Power	Aug. 9
The Story of Man in America	Aug. 16
Textiles	Aug. 23
Precious Stones	Aug. 30
Ship Models	Sept. 6
Birds	Sept. 13
Flight (aviation)	Sept. 20
Sculpture	Sept. 27
Insects	Oct. 4
Medicine	Oct. 11
Zoological Park	Oct. 18
Indian Petroglyphs	Oct. 25
Evolution of Life	Nov. 1
Early Man	Nov. 8
What's New in Science	Nov. 15
Color and Life (radiation)	Nov. 22
Musical Instruments	Nov. 29
Coins	Dec. 6
Botany	Dec. 13
Freer Gallery	Dec. 20
Life Story of Smithsonian	Dec. 27
	1937
Maya Indians	Jan. 3
Clocks	Jan. 10
Printing	Jan. 17
Stamps	Jan. 24
Tribes of Africa	Jan. 31
Gold	Feb. 7
Clipper Ships to Modern Liners	Feb. 14
George Washington	Feb. 21
Animals in Armor (mollusks)	Feb. 28
Photography	Mar. 7
Grasses	Mar. 14
Pueblo Indians	Mar. 21
Health	Mar. 28
Early American Inventors	Apr. 4
Uses of Wood	Apr. 11
Scientific Exploration	Apr. 18
Story of Lighting	Apr. 25
Fishes	May 2
Gellatly Art Collection	May 9
Copper	May 16
Birds	May 23
Mound Builders	May 30
Communication	June 6
Mansfield Theatrical Costumes	June 13
Subterranean Caverns	June 20
Indian Arrowheads	June 27

From the beginning the broadcasts were supplemented by brief illustrated articles on the subjects covered, at first issued in mimeographed form, and from January on, printed as a small monthly magazine. Copies were mailed by the Office of Education to those who wrote in to request them, and the demand for the magazine showed a steady increase, as follows:

1937:		1937:	
January	35,000	April	100,000
February	50,000	May	125,000
March	75,000	June	150,000

The success of the series is indicated by the enthusiastic approval of the listeners as voiced in the more than 160,000 letters received. This almost unanimous mail approval is believed to be unique among sustaining programs and is very gratifying to both the Institution and the Office of Education in justifying their efforts toward better educational radio.

I wish again to express here the appreciation of the Institution to the Office of Education and to the National Broadcasting Co. for making available this unsurpassed means of carrying out the Smithsonian's function, "the diffusion of knowledge among men."

WALTER RATHBONE BACON TRAVELING SCHOLARSHIP

The Walter Rathbone Bacon Traveling Scholarship of the Smithsonian Institution was awarded in June 1935 to Dr. Richard E. Blackwelder for studies of the Staphylinidae of the West Indies. In 1935–36 Dr. Blackwelder collected specimens on the islands of Jamaica, Hispaniola, Puerto Rico, St. Thomas, Guadeloupe, Trinidad, Tobago, Grenada, Carriacou, St. Vincent, Barbados, St. Lucia, and Dominica, as previously reported.

During the second year, to June 1937, collections were made on the islands of Montserrat, Antigua, St. Kitts, and St. Croix, and return visits were made to Puerto Rico and Jamaica. It was found to be impracticable to revisit Hispaniola in spite of the importance of that island in the series.

The collections obtained from the 21 months' field work include more than 45,000 staphylinids and 10,000 other Coleoptera. A considerable part of this number were taken by the use of equipment for mass collection which was used on St. Croix and Jamaica. (On the latter island Dr. Blackwelder worked in conjunction with Dr. E. A. Chapin for 5 weeks. The collections were made jointly.)

After finishing the collecting Dr. Blackwelder returned to Washington, where he prepared the staphylinid collections and sorted the specimens to genera and species. A set containing each species found was then prepared to be taken to England, where it will be compared

with the types of West Indian and tropical American Staphylinidae in the collections of the British Museum and Dr. Malcolm Cameron.

The extension of the award for a third year made possible the additional 9 months of field work in 1936. Dr. Blackwelder plans to visit Cuba for a week in the fall of 1937 to study the collection of Staphylinidae of Alexander Bierig. The remainder of the year will be occupied with the preparation of a revision of the 500 to 600 species collected or known from the islands.

SIXTH ARTHUR LECTURE

The sixth Arthur lecture, Discoveries from Solar Eclipse Expeditions, by Samuel Alfred Mitchell, director of the Leander McCormick Observatory, University of Virginia, was given in the auditorium of the National Museum on the evening of February 9, 1937. Dr. Mitchell, a leading authority on eclipses, has personally observed nearly all the total solar eclipses of the present century. In his lecture he touched upon the frequency of eclipses and their prediction, facts learned from a study of the gorgeous corona which accompanies a total eclipse, the use of eclipses in the verification of the relativity theory, and many other interesting aspects of this grandest of natural phenomena—an eclipse of the sun. The lecture will be published in full with illustrations in the 1937 Smithsonian Report.

EXPLORATIONS AND FIELD WORK

Field expeditions play an important part in many of the Institution's researches in biology, geology, anthropology, and astrophysics. During the last calendar year 19 expeditions were in the field; the regions visited included, besides 18 States in the United States, Greenland, Alaska, Canada, the Bahamas, Honduras, Guatemala, England, Germany, Holland, and Siam.

Secretary C. G. Abbot continued at Washington his work on perfecting an engine to convert the sun's rays into power. Dr. R. S. Bassler studied the geology of several classic European areas and conducted researches on fossil echinoderms and corals in European museums. E. P. Henderson collected epidote and other minerals in southeastern Alaska. Dr. G. Arthur Cooper studied and collected fossils from the Devonian beds of the midwestern United States. Dr. C. Lewis Gazin conducted a successful search for fossil mammals in New Mexico and Arizona. Dr. Alexander Wetmore studied and collected the birds of the Guatemalan highlands. Watson M. Perrygo and Carleton Lingebach collected birds and mammals in an area in West Virginia hitherto unrepresented in the National Museum's collections. H. G. Deignan made a zoological survey of the little-

known easternmost districts of North Siam, journeying through the provinces of Nan and Chiengrai. Capt. Robert A. Bartlett's 1936 Greenland expedition collected for the Institution specimens of the marine plant and animal life in the seas along the east and northeast coast of Greenland. Austin H. Clark continued his exhaustive investigation of the butterfly fauna of Virginia. E. P. Killip collected series of specimens of the flora of the Florida Keys, hitherto poorly represented in the National Herbarium.

Dr. Aleš Hrdlička continued his archeological investigations in Alaska in connection with his study of the origin and early migrations of the American Indian. Henry B. Collins, Jr., conducted archeological investigations in the vicinity of Bering Strait, Alaska, to coordinate the results of his previous work at St. Lawrence Island and at Barrow. Herbert W. Krieger made an archeological reconnaissance of the Bahama Islands and excavated prehistoric village sites on five of the larger islands. Dr. Frank H. H. Roberts, Jr., continued his investigations of the Folsom complex, mainly at the Lindenmeier site in northern Colorado. Dr. William Duncan Strong led an archeological expedition to northwestern Honduras, excavating sites on the Ulua River and at Lake Yojoa which gave a stratigraphic section from the historic occupation at Naco, through the various polychrome horizons on the Ulua and at Lake Yojoa, and down to the Playa de los Muertos culture which preceded the Maya culture. J. N. B. Hewitt continued his studies of the League of the Iroquois in New York State and Ontario, Canada. Dr. Julian H. Steward made an ethnological reconnaissance of the desert Shoshoni of southern Idaho, northern Utah, and a part of eastern Nevada.

PUBLICATIONS

The "diffusion of knowledge", one of the Institution's primary functions, is accomplished chiefly through its several series of publications. As is to be expected from the nature of the Institution's scientific work, the large majority of its publications are technical in character, presenting the results of researches in astrophysics, radiation, geology, biology, and anthropology. The Smithsonian annual report, however, is intended primarily for the layman, for in it are presented each year a series of understandable articles written by recognized authorities, which together constitute a survey of advances and interesting developments in nearly all branches of science. The wider diffusion of knowledge is accomplished by a system of news releases furnished to more than 300 newspapers and press services describing in popular form the Institution's researches, expeditions, and publications; and recently by a weekly radio program

dramatizing the work and exhibits of the Institution put on the air through the cooperation of the Office of Education, the Works Progress Administration, the National Broadcasting Co., and the Institution's editorial office.

Of the 80 volumes and pamphlets published during the year, 46 were issued by the Smithsonian proper, 32 by the National Museum, and 2 by the Bureau of American Ethnology. Details of these various publications are given in the report of the editor, appendix 10. The total number of copies of publications distributed was 144,817.

LIBRARY

The Smithsonian library comprises 10 major and 35 minor units, which together contain a total of 876,522 volumes, pamphlets, and charts. The new accessions for the year numbered 11,469, most of these coming in exchange for the publications of the Institution and its branches. The library received many gifts during the year, outstanding among which was the botanical library of the late Dr. Frederick V. Coville, numbering 4,500 items, presented by Mrs. Coville. The routine work of the staff included cataloging 6,766 publications, preparing and filing 28,967 cards, entering 24,212 periodicals, and making 10,995 loans, of which 196 were to libraries outside the Smithsonian system. In addition to considerable work on the union catalog, much time was spent on the preparation of periodicals for binding, and a total of 3,803 volumes were bound. This unusually large amount of binding was made possible by the deficiency appropriation of $12,000 approved toward the close of 1935. There still remain thousands of volumes in urgent need of binding to prevent loss of parts, many of which would be very difficult to replace.

Respectfully submitted.

C. G. Abbot, *Secretary.*

APPENDIX 1

REPORT ON THE UNITED STATES NATIONAL MUSEUM

SIR: I have the honor to submit the following report on the condition and operation of the United States National Museum for the fiscal year ended June 30, 1937:

Funds provided for the maintenance of the National Museum for the year totaled $763,970. This was a net increase of $3,228 over the previous year, but since $25,000 was expended last year for the purchase of the airplane *Winnie Mae* for the aeronautical collections, the actual increase was $28,228 for purposes of maintenance and operation, printing and binding, and preservation of collections.

COLLECTIONS

Additions to the Museum collections during the year, coming mostly as gifts from individuals or from expeditions sponsored by the Smithsonian Institution, comprised the usual wide variety of material in all departments. A total of 361,951 specimens were received in 1,800 separate accessions and distributed as follows: Anthropology, 1,790; biology, 292,250; geology, 62,757; arts and industries, 3,180; and history, 1,974. These accessions are all listed in detail in the full report on the Museum, printed as a separate pamphlet, but the more important are summarized as follows:

Anthropology.—Important archeological material included two Guatemalan vases—a replica of a stuccoed vase from Uaxactun and an original Maya vase from Lake Petén. Alaska was represented by 52 bone and stone artifacts from the Rat Islands, Aleutians, and by an ivory harpoon socket from St. Lawrence Island belonging to the Old Bering Sea culture. From South Africa came 29 Neolithic stone artifacts and potsherds. Other valuable specimens came from the Bull Creek archeological site in Georgia; the Black Mountains, Ariz.; and the Rappahannock River, Va.

Of special interest among the ethnological material received were unusual specimens presented by Mrs. Charles D. Walcott representing the Kiowa Indians of Oklahoma, the Navahos, the Jivaros of South America, and from Hawaii. Other accessions include Madagascan woven fabrics and basketry and Kashmir copper and silver objects collected nearly 50 years ago by the late Dr. W. L. Abbott; baskets, idols, combs, figurines, and other objects from Dahomey, Cameroons,

Nigeria, Belgian Congo, Portuguese East Africa, and Southern Rhodesia; jewelry from Tibet; a collection of ethnological material from Guatemala; and costumes and ceremonials of the Blackfeet and the Indiana Algonkians. Nearly 100 specimens were received in the division of ceramics, 57 in musical instruments, and 43 in period art and textiles.

The 600 specimens added to the physical anthropology collection came mostly from Alaska, as a result of the field work of the curator, and from Florida, as a result of Smithsonian-C. W. A. projects. Another lot of skeletal material came from three ossuaries in Maryland and the District of Columbia.

Biology.—Nearly 300,000 biological specimens a year now come to the Museum, and the total now exceeds 12,000,000. Of those received during the past year the following are outstanding: An unusually large number of mammals from Panama, West Virginia, Siam, Japan, Formosa, and the Philippine Islands, and Dr. Ira N. Gabrielson's private collection, numbering 855 specimens, which were transferred from the Biological Survey; more than 1,100 skins and skeletons of birds from Siam, 360 from Guatemala, and 1,000 from West Virginia; types and paratypes of many new forms of reptiles and amphibians, both North and South American; 90 large fishes from Lower California, over 1,700 fishes collected on the Smithsonian-Roebling expedition, over 800 Siamese fishes, nearly 6,900 fishes deposited in the Museum by the University of Washington, and over 4,400 fishes from Maryland, Virginia, and miscellaneous localities; 60,000 insects transferred from the Bureau of Entomology and Plant Quarantine, 60,000 more collected in the West Indies by Drs. E. A. Chapin and R. E. Blackwelder, and the J. F. G. Clarke collection of 10,000 Lepidoptera, mostly from the Pacific Northwest; over 15,000 marine invertebrates chiefly from various expeditions cooperating with the Smithsonian; 108,000 mollusks from many sources, including 10,000 from Siberia, from the Walter Rathbone Bacon Traveling Scholarship, and 11,000 purchased through the Frances Lea Chamberlain fund; and more than 45,000 plants, about a fourth of which were transferred from the United States Bureau of Plant Industry.

Geology.—Income from several Smithsonian funds brought valuable mineralogical specimens. Through the Roebling fund, crystal groups and mineral examples from many localities; through the Canfield fund, minerals from the copper mines at Tsumeb, Southwest Africa, and crystals of various kinds that make up an unusually colorful exhibit; and through the Frances Lea Chamberlain fund, four rare gem stones. There were also many donated specimens of rare crystals, ores, and other minerals that notably enhance the Museum's collections.

Additions to the meteorite collection were obtained largely through the Roebling fund. The total number of distinct meteoritic falls represented in the Museum was increased from 606 to 635 during the year. The new material came from Chile, Australia, Canada, and the United States. Outstanding additions to the rock collections were from Easter Island, Mexico, the Carolinas, Arkansas, Wyoming, and Colorado.

In the field of stratigraphic paleontology most of the year's accessions were obtained by members of the staff: 30,000 Devonian invertebrates collected by Dr. G. A. Cooper and P. E. Cloud in the Eastern States and 20,000 Tertiary and Cretaceous invertebrates obtained by Dr. R. S. Bassler in Europe. Exchanges arranged with other museums and with individuals brought in many other specimens from Africa, Australia, Austria, Bohemia, England, France, Hawaiian Islands, Italy, and the United States, representing various geologic periods and formations and many classes of fossil animals and plants.

About 625 fossil vertebrates were added to the paleontological series. These included 600 Paleocene and Pliocene mammals collected by Dr. C. L. Gazin and party in New Mexico and Arizona last year, a mountable skeleton of the giant sloth *Mylodon harlani* from the Rancho La Brea deposits in California, a mounted skeleton of the antilocaprid *Merycodus* from the Miocene of Montana, an excellently preserved extinct musk-ox skull (*Symbos cavifrons*) from the Pleistocene of Indiana, a nearly complete fossil turtle (*Aspideretes superstei*) from the Paskapoo formation of Alberta, and two eggs of *Struthio andersoni*, an extinct ostrich, from China.

Arts and industries.—The outstanding accession in aeronautics was the gondola of the stratosphere balloon *Explorer II*, in which Capts. A. S. Stevens and O. A. Anderson in 1935 established the present altitude record of 72,395 feet for a manned balloon, presented by the National Geographic Society. The collection of scale models of aircraft was increased by 12 of commercial airmail planes (made for the Great Lakes Exposition), 4 of current Navy types, 2 of World War German planes, and several others including the Stinson Detroiter and Lockhead Vega used by George Hubert Wilkins in his 1927 and 1928 Arctic flights. Mrs. Wiley Post presented instruments that were used on the *Winnie Mae*. There were also accessioned various objects connected with the historic flights or aircraft of Calbraith P. Rodgers (1911), Maj. Russell L. Maughan (1924), John Moisant (1910), and Alberto Santos-Dumont.

An interesting accession in watercraft is a collection relating to the life and work of John W. Griffiths, naval architect, writer, and editor, whose ships the *Rainbow*, 1845, and the *Sea Witch*, 1846, were the first of the famous American clippers. A number of half-models,

many as a result of the Historic American Merchant Marine Survey work, also were added. For the transportation group came the first Franklin automobile (no. 3) to leave the factory in 1902, the oldest existing example of that car; a gig phaeton of about 1840; and a fine operating scale model of the Baltimore & Ohio Railroad's Royal Blue train. Many objects of historical radio equipment, phonographs, typewriters, calculating machines, clocks, tools, and electrical devices continued to come in, as well as over 2,000 specimens pertaining to textiles, organic chemistry, wood technology, history of agriculture, and medicine, and about 500 photographs, prints, drawings, engravings, books, tools, and other material relating to the graphic arts.

History.—Nearly 2,000 objects of historic and antiquarian interest and value were received, many of them pertaining to the lives and public careers of eminent Americans and other historic characters, such as Lafayette, Benjamin Franklin, Napoleon I, and President Benjamin Harrison. The numismatic collection was increased by 321 coins, including an important series of United States commemorative half-dollars; and the philatelic collection by 1,384 stamps, most of which were specimens of current foreign postage stamps transferred from the Post Office Department.

EXPLORATIONS AND FIELD WORK

The scientific explorations of the year were financed mainly by grants from the invested funds of the Smithsonian Institution or by the assistance of friends of the Museum.

Anthropology.—Henry B. Collins, Jr., assistant curator of ethnology, in October 1936 terminated his archeological investigations on St. Lawrence Island, Alaska, conducted under the joint auspices of the National Geographic Society and the Smithsonian Institution. Previous work on St. Lawrence Island and at Point Barrow had revealed the existence of an ancient but highly developed Eskimo culture, with intermediate stages between it and the modern Eskimo. One objective of the expedition was to search for pre-Eskimo remains in the vicinity of Bering Strait, where man may first have entered the American Continent. Mr. Collins and his assistants, James A. Ford and Harrison Prindle, obtained definite evidence on the sequence of prehistoric Eskimo cultures, but nowhere did they find traces of human occupancy antedating that of the Eskimo.

From October to February, Herbert W. Krieger, curator of ethnology, conducted archeological investigations in the Bahaman Archipelago under a Smithsonian grant. He excavated kitchen middens and burials on Long Island, Inagua, and New Providence Island and uncovered data pointing to a close cultural contact between the Luca-

yan Indians of the Bahamas and the Arawak of Hispaniola and to the tribal migration of the Lucayans at a comparatively recent date from the island of Hispaniola.

Dr. Waldo R. Wedel, assistant curator of archeology, devoted some time to the supervision of excavations at an Indian village site near Seneca, Montgomery County, Md. On May 15 he left to conduct a general archeological survey of northeastern Kansas and to excavate part of an old Kansa site near Kansas City; he was still in the field as the year closed.

Dr. Aleš Hrdlička, curator of physical anthropology, assisted by four students, during July and August 1936 investigated sites on the Aleutian Islands, in continuation of his Alaskan researches. He unearthed an important burial cave on Kagamil Island, transportation being furnished through the cooperation of the United States Coast Guard. In May 1937 he returned again to the Aleutians to continue the work.

Dr. T. Dale Stewart, assistant curator of physical anthropology, visited Indian-burial sites along the Potomac River, assisting private investigators. Also, with the help of Dr. Wedel, he excavated two ossuaries at Bolling Field, D. C.

Biology.—Gerrit S. Miller, curator of mammals, assisted by Charles M. Wheeler, spent 3 months in Panama making collections for the Museum. With Corozal, C. Z., as a base, he worked over most of the Canal Zone from Gatun and Barro Colorado to the Pacific coast and along the national highway of Panama, with side trips to the Pearl Islands, Taboga Islands, and the Indio River. The material brought back includes about 450 mammals, 150 birds, 150 reptiles and amphibians, and 400 plants, as well as fishes, shells, marine invertebrates, and Indian artifacts.

Dr. Remington Kellogg, assistant curator of mammals, was one of the three delegates to represent the United States at a whaling conference, which convened in London on May 24, 1937, on invitation of the British Government.

H. G. Diegnan continued collecting in Siam and sent three large shipments of birds and other material to the Museum. Dr. Alexander Wetmore collected birds in the highlands of Guatemala in the fall of 1936 and brought back a series of valuable specimens. W. M. Perrygo and Carleton Lingebach collected birds during the year in West Virginia and Tennessee. Dr. David C. Graham continued his work in western China, forwarding collections mainly of birds and insects.

Dr. Leonard P. Schultz, assistant curator of fishes, and E. D. Ried, aid, made several successful collecting excursions into Virginia as part of a survey of the fresh-water fish fauna of that State.

Dr. E. A. Chapin, curator of insects, spent about 6 weeks in Jamaica, where, after examining entomological collections in Habana, he collected insects on the island in conjunction with Dr. and Mrs. Richard E. Blackwelder. Several families of beetles, hitherto unknown from the island, were taken, as well as many species recognized as new to science. They also took over a thousand specimens representing seven species of the family Dryopidae, previously recorded as nonexistent on the island. A new and interesting coccinellid of the genus *Psyllobora* was found feeding on a mold growing upon the leaves of beach-grape (*Coccoloba uvifera*), and at least two undescribed species of Scarabaeidae have been recognized in the material collected.

Dr. Waldo L. Schmitt, curator of marine invertebrates, was naturalist on the Smithsonian-Hartford expedition to the West Indies, traveling on one of the last of the square-rigged ships afloat, the *Joseph Conrad*, through invitation of the owner, G. Huntington Hartford, and accompanied by Robert G. Lunz, of the Charleston Museum, as assistant. The party began work on March 15 at Nassau in the Bahamas and in 2 months traveled as far south as Barbados. In all they covered about 4,500 miles, making 19 stops for collecting on 15 different islands. The expedition, aided greatly by the excellent equipment provided by Mr. Hartford, was eminently successful. More than 4,000 specimens of marine invetebrates were obtained, chiefly Crustacea, but including also sponges, coelenterates, annelids, mollusks, echinoderms, and lower chordates. Vertebrate material brought back included fishes and two adult porpoises, in one of which was found an embryo.

Dr. Paul Bartsch, curator of mollusks, was a member of the Smithsonian-Roebling expedition to the Caribbean Sea and the Gulf of Mexico in the spring of 1937. Traveling on Donald Roebling's yacht *Iorano*, the party worked from Habana, Cuba, around the western end of the island and along the south coast as far as Guantanamo. Extensive marine collections were obtained over a wide area. These include material previously poorly represented in the Museum, which is now being studied and rapidly identified.

Geology.—Sponsored by the Smithsonian Institution, Dr. R. S. Bassler, head curator of geology, spent the first 3 months of the fiscal year in geological studies of several classic European areas and in researches on echinoderms and other fossils in English, German, and Dutch museums. He completed studies on several groups of Paleozoic corals and sponges, prepared about 600 casts of Upper Paleozoic crinoid types, collected Tertiary fossils from the Paris, Vienna, and London Basins, and visited the Devonian area of Germany and Czechoslovakia.

Under the auspices of the Roebling fund, E. P. Henderson, assistant curator of physical and chemical geology, spent several months on Prince of Wales Island, Alaska, for the purpose of collecting specimens of epidote and other minerals for which this locality is noted. With the aid of his assistants, Arthur Montgomery, Edwin Over, and C. B. Ferguson, he collected hundreds of fine crystals of epidote, thousands of garnets, and many miscellaneous minerals. In May 1937 Mr. Henderson left to attend the Seventeenth International Geological Congress at Moscow.

In the summer of 1936, Dr. G. A. Cooper, assistant curator of stratigraphic paleontology, with Preston E. Cloud as field assistant, visited Middle Devonian localities in the Middle West to collect fossils and study the Middle Devonian rocks. In June 1937 these two men pursued further field work on the Middle Devonian rocks of Michigan, New York, and Ontario.

Dr. E. O. Ulrich, associate in paleontology, accompanied by R. D. Mesler, of the Geological Survey, collected fossils and studied Lower Ordovician stratigraphy in Arkansas and nearby States.

C. W. Gilmore, curator of vertebrate paleontology, with Dr. Remington Kellogg, made two short trips to the Chesapeake Bay region to collect cetacean specimens, including several porpoise skulls, previously located by Dr. W. F. Foshag.

Dr. C. Lewis Gazin, assistant curator of vertebrate paleontology, under funds provided by the Smithsonian Institution, conducted an expedition to the San Juan Basin, N. Mex., during the summer of 1936 to explore the Eocene Wasatch and the Puerco and Torrejon formations of the Paleocene for fossil mammal remains. Besides Dr. Gazin, the party included G. F. Sternberg and Harold Shepherd. They were successful in gathering a representation of the important faunas from these classic early Tertiary horizons, about 500 determinable specimens being collected from the Paleocene alone. Later in the season they went to Arizona and explored the Gila and San Pedro Valleys for fossils.

Dr. R. Lee Collins, of Bryn Mawr, was given a small grant by the Smithsonian Institution for work in the Miocene deposits along Chesapeake Bay, during the course of which he collected a number of cetacean specimens, parts of a sirenian, and two bird bones.

MISCELLANEOUS

Visitors.—For the first time, the number of visitors to the various Museum buildings exceeded the 2 million mark, the total for the year being 2,288,532, which is 314,859 more than the previous year. The 351,219 visitors during August 1936 is the largest number ever recorded for a single month. The attendance in the four Museum build-

ings was recorded as follows: Smithsonian Building, 364,057; Arts and Industries Building, 1,050,388; Natural History Building, 702,657; Aircraft Building, 171,430.

Publications and printing.—The sum of $22,000 was available during the year for printing the Museum Annual Report, Bulletins, and Proceedings, an increase of $17,950 over the previous year, and a corresponding increase in volume of publication was reflected. Thirty-three publications were issued—the Annual Report, 1 volume of Proceedings (completed), 2 Bulletins, and 29 Proceedings separates. The two Bulletins issued were: No. 153, part 2, "Birds Collected by the Childs Frick Expedition to Ethiopia and Kenya Colony: Passeres", by Dr. Herbert Friedmann; and no. 167, "Life Histories of North American Birds of Prey: Part 1, Order Falconiformes", by Arthur Cleveland Bent, the tenth volume in this series of life histories of North American birds. The total number of octavo pages printed was 1,604; and of plates, 135. Volumes and separates distributed during the year to libraries and individuals throughout the world aggregated 68,822, more than twice as many as last year.

An important step in the advance of Museum efficiency was the thorough overhauling and equipping of the Museum's Branch Printing Office early in the year. Through the generous cooperation of the Public Printer, a reconditioned and fully equipped linotype machine was installed by the Government Printing Office, together with new type faces suitable for the printing of Museum labels. As a direct result of this new equipment, the labeling and job-printing work of the Museum is practically up to date for the first time in many years.

Assistance from work relief agencies.—The Museum profited much by the continued assignment of workers from the Works Progress Administration of the District of Columbia. The number of such workers increased from 66 at the beginning of the year to 88 at the end, and the work totaled 89,419 man-hours, covering the following tasks: Checking, labeling, and repairing library material; preparing drawings and photographs; typing; arranging, cataloging, labeling, mounting, and numbering specimens; model making; translating; work on plaster casts; and drafting.

Special exhibitions.—Sixteen special exhibitions were held during the year under the auspices of various scientific, educational, and Government agencies, such as the Works Progress Administration, Third World Power Conference, Association of Federal Architects, and the District of Columbia Federation of Women's Clubs.

The division of graphic arts featured 18 special exhibits—9 in graphic arts and 9 in photography.

Changes in organization and staff.—No major change in administrative organization occurred during the year and but few changes in the scientific staff. The designation of the carpenter shop was

changed in April to cabinet shop, and steps were taken for the appointment of an assistant foreman of the shop to be directly charged with its building-repair activities.

Eight persons were retired for age or disability, as follows—through age: Frank H. Cole, assistant mechanical superintendent in charge of the carpenter shop, on February 28, 1937, with over 39 years of service; William F. Wicks, guard, on May 31, 1937, with 10 years of service; Minor R. Stonnell, tinner's helper, on June 30, 1937, with nearly 27 years of service; Mrs. Hanorah Downey, attendant, on October 31, 1936, with nearly 25 years of service; and Mrs. Elizabeth Merritt, charwoman, on November 30, 1936, with nearly 22 years of service. Through disability: William Henry Goldsmith, foreman of laborers, on April 30, 1937, with 41 years of service (Mr. Goldsmith died on May 4, 1937, 4 days after his retirement); Mrs. Elizabeth E. Dorsey, foreman of charwomen, on June 15, 1937; and Mrs. Gertrude Green, charwoman, on May 6, 1937.

Dr. George S. Myers resigned as assistant curator of fishes on September 15, 1936, to accept an appointment at Stanford University. Dr. Leonard P. Schultz, of the University of Washington, was appointed to succeed Dr. Myers, December 31, 1936. Dr. Waldo R. Wedel was appointed assistant curator of archeology on August 15, 1936. The designation of Dr. William R. Maxon as head of the division of plants (the National Herbarium) was changed from associate curator to curator on February 1, 1937. Mrs. Agnes F. Chase, senior botanist in the United States Bureau of Plant Industry, long associated with the late Dr. A. S. Hitchcock, was given honorary appointment on February 15, 1937, as custodian of the section of grasses in the Museum.

Other additions to and changes on the staff during the year included the appointments of Henry Kaskowitz as junior scientific aid in the division of vertebrate paleontology on August 1, 1936, and of Andreas J. Andrews as scientific aid in the department of anthropology on May 14, 1937; the reallocation of Mrs. Bertha T. Carwithen to senior clerk, assistant personnel officer, on February 16, 1937; the appointment of Owen F. Croggon, senior mechanic (senior cabinetmaker) on July 1, 1936, to fill a new position included in the appropriations for the year; the advancement of John H. Chance to assistant engineer, on September 19, 1936; of Ernest Desantis from guard to principal guard (sergeant of watch) on November 1, 1936, and of John J. Queeney from guard to foreman of laborers on June 19, 1937.

On January 1, 1937, Norman H. Boss, chief preparator, invertebrate paleontology, returned to duty from temporary detail to the Texas Centennial Exposition, at Dallas, and on June 16, 1937, he

was detailed as exhibit supervisor for the Smithsonian for the Greater Texas and Pan American Exposition at Dallas.

Necrology.—Through death the Museum lost during the year three employees from its active roll: William H. Vanneman, principal guard, on August 20, 1936, after 39 years of service; Frank M. Cheeks, laborer, on January 3, 1937, after 27 years of service; and William C. McKinnon, guard, on February 13, 1937, after 13 years of service. From its list of honorary workers the Museum lost by death on January 9, 1937, Dr. Frederick Vernon Coville, honorary curator of plants since March 28, 1893, associated with the division of plants for many years, and one of those deeply interested always in furthering the Museum's botanical work.

Respectfully submitted.

ALEXANDER WETMORE,
Assistant Secretary.

Dr. CHARLES G. ABBOT,
Secretary, Smithsonian Institution.

APPENDIX 2

REPORT ON THE NATIONAL COLLECTION OF FINE ARTS

SIR: I have the honor to submit the following report on the activities of the National Collection of Fine Arts for the fiscal year ended June 30, 1937:

For nearly 8 months of the fiscal year, this bureau of the Smithsonian Institution carried the name "National Gallery of Art", but this was changed by an Act of Congress, approved by the President on March 24, 1937, to "National Collection of Fine Arts", and the old name was assigned to the new Smithsonian bureau created as the result of Andrew W. Mellon's gift to the Nation of his unexcelled art collection and funds to erect a splendid building to house it.

A new system of lighting was installed over gallery 3, which produces a pleasing soft light and also does away with the lighting fixtures and gives a ceiling to the gallery. This also made possible the installation of four stained glass windows, two by John La Farge and two by William Willet.

Miss Louise A. Rosenbusch, who had been connected with the Smithsonian Institution for 44 years and had served as Recorder of the National Gallery of Art since it was made a separate unit in 1920, was retired on November 30, 1936.

Visitors to the office concerning art matters numbered 111 during the last 5 months.

APPROPRIATIONS

For the administration of the National Collection of Fine Arts by the Smithsonian Institution, including compensation of necessary employees, purchase of books of reference and periodicals, traveling expenses, uniforms for guards, and necessary incidental expenses, $34,275.00 was appropriated, of which $16,893.29 was expended for the care and maintenance of the Freer Gallery of Art, a unit of the National Collection of Fine Arts.

THE NATIONAL GALLERY OF ART COMMISSION

The sixteenth annual meeting of the National Gallery of Art Commission was held on December 8, 1936. The members met at 10:30 at the National Gallery of Art, where, as the advisory committee on

the acceptance of works of art which had been submitted during the year, they accepted the following:

Two lithographs: "Drying Fish Nets, Charlevoix" and "Edge of the Canyon", by Grace Neville Carrothers. Gift of the artist in the name of her son, Edgar M. Carrothers, Jr.

Bronze relief portrait of Daniel Chester French (1850–1935), by Evelyn Beatrice Longman (Batchelder). Gift of Mrs. E. B. L. Batchelder, of Windsor, Conn. (Accepted for the National Portrait Gallery.)

A water color by Samuel Prout (1785–1852). Gift of Mrs. John T. Devine, of Washington, D. C. (The legal status of this gift is in the hands of the executor and has not been decided to date.)

A collection of 197 intaglio prints, by members of the Chicago Society of Etchers, to be added to the 497 intaglio prints given last year. Gift of the Chicago Society of Etchers.

Two line engravings "The Old Tinker" and "The Sister", and two pencil drawings both entitled "Study for 'The Hedger' ", by Stanley Anderson. Gift of the artist.

The following two paintings, purchased by the Council of the National Academy of Design from the fund provided by the Henry Ward Ranger bequest were recalled and claimed, according to the terms of the will: "Central Park and the Plaza", by William A. Coffin (1855–1925) and "Cliffs of the Upper Colorado River, Wyoming Territory", by Thomas Moran (1837–1926).

A pair of stained glass windows, "Peacock and Peony", by John LaFarge (1835–1910). Gift of Henry LaFarge.

An oil painting entitled "Dressing for the Rehearsal", by Seymour J. Guy, N. A. (1824–1910). Gift of Miss Jennie A. Guy, the artist's daughter.

(In 1928, a Portrait of George Inness, by F. C. Courter, offered as a gift by an anonymous donor, was accepted by the Commission. It was actually received in May 1937, but as a gift of August Franzen.)

The members then proceeded to the Smithsonian Building, where the annual meeting was called to order by the chairman, Mr. Borie. The members present were: Charles L. Borie, Jr., chairman; Frank Jewett Mather, Jr., vice-chairman; Dr. Charles G. Abbot (ex officio), secretary; and Herbert Adams, Frederick P. Keppel, John E. Lodge, Paul Manship, George B. McClellan, Charles Moore, Edward W. Redfield, Edmund C. Tarbell, and Mahonri Young. Ruel P. Tolman, curator of the division of graphic arts in the United States National Museum and acting director of the National Collection of Fine Arts, was also present.

Mr. Moore, chairman of the executive committee, stated that Mr. Mellon had had tentative plans for the National Gallery of Art building prepared by John Russell Pope. These plans, as well as the present status of the National Portrait Gallery, were discussed.

The Commission recommended to the Board of Regents the nomination of Dr. George Harold Edgell, director of the Museum of Fine Arts, Boston, to succeed Mr. Gest, deceased.

The Commission recommended to the Board of Regents the reelection for the succeeding term of 4 years of the following members:

John E. Lodge, Andrew W. Mellon, Edward W. Redfield, and Paul Manship.

The following officers were elected for the ensuing year: Charles L. Borie, Jr., chairman; Frank Jewett Mather, Jr., vice chairman; and Dr. Charles G. Abbot, secretary; as well as the members of the executive committee—Charles Moore, Herbert Adams, and George B. McClellan (Charles L. Borie, Jr., as chairman of the Commission, and Dr. Charles G. Abbot, as secretary of the Commission, are ex officio members of the executive committee).

The following minute was adopted to express the policy of the Commission in connection with its action in accepting or rejecting Ranger fund paintings:

> In reaching a decision as to the acceptance of paintings purchased from the Ranger fund, it was the sense of the Commission that the artistic quality of the painting in question should not necessarily be the only factor to be taken into consideration. The presence of other examples of the artist's work in the national collection, for example, may properly be taken into consideration, or the desirability of a wide distribution of these paintings in the permanent collections of the country.

SPECIAL MEETINGS

In accordance with the request of the chairman, Mr. Borie, the Commission met at the Smithsonian Institution April 6, 1937, for the purpose of affording the members an opportunity of discussing the acceptance by Congress of the Mellon gift under the title of the National Gallery of Art, and the project for the proposed Smithsonian Gallery of Art.

The Commission's attention was also called to the desire of Mrs. Mabel Johnson Langhorne, daughter of the donor of the Ralph Cross Johnson collection of old masters, to name the Smithsonian Institution in her will to receive certain pictures left to her by her father, if the Institution thought them worthy of acceptance for the national collection.

After the adjournment of the meeting the members inspected the Mellon and Langhorne collections.

On May 11, 1937, a committee of three, appointed by Dr. Abbot and Mr. Borie, consisting of Mr. Redfield, Mr. Tarbell, and Mr. Young, met at the home of Mrs. Langhorne to select the paintings which eventually will come to the Institution to be closely associated with the Ralph Cross Johnson gift. Almost every painting was considered of such high quality that it would be a valuable addition to the collection.

THE CATHERINE WALDEN MYER FUND

Two miniatures were acquired from the fund established through the bequest of the late Catherine Walden Myer, "for the purchase of

first-class works of art for the use and benefit of the National Gallery of Art", as follows: "Portrait of Charles Boynton Darling" and "Portrait of Elizabeth Ellis Darling", by unknown artist; from Laurence B. Darling, New York, N. Y.

This endowment, although small, has in 5 years made possible the purchase of 11 first-class miniatures, illustrating how a small endowment can be used to build up over a period of years an important collection.

DEPOSITS

Portrait of Dr. Leonhard Stejneger, Head Curator of the Department of Biology, United States National Museum, by Bjorn P. Egeli, presented to the Smithsonian Institution by Dr. Stejneger's friends on his birthday, October 30, 1936, was deposited in the Gallery by the Smithsonian Institution.

Portrait bust in bronze of Lord Kelvin (William Thomson 1824–1907), British physicist, by Herbert Hampton, given by the Kelvinator Co. to the English Speaking Union for presentation to the Smithsonian Institution, and presented by the British Embassy through the American Branch of the Union, October 9, 1936, was deposited in the Gallery by the Smithsonian Institution.

LOANS ACCEPTED

A stained glass window, "Consumatum Est", designed and executed by William Willet (1869–1921) in 1906, which won the contract for a sanctuary window in the United States Military Chapel at West Point; also a pair of small stained glass windows, "Dante" and "Beatrice", by William Willet. Lent by Mrs. William Willet, of Philadelphia, Pa.

LOANS MADE

Two portrait drawings in red chalk of Victor Chapman and Norman Prince, by John Elliott, were lent to the Art Association of Newport for exhibition at the Tercentenary Retrospective Exhibition, Newport, R. I., from July 25 to August 16, 1936. (Returned Aug. 20, 1936.)

The painting, "High Cliff, Coast of Maine", by Winslow Homer, was lent to the Whitney Museum of American Art, New York, N. Y., for the Winslow Homer Exhibition which was held from December 15, 1936, to January 15, 1937. (This was sent directly to the Carnegie Institute at the close of the exhibition.)

Two paintings by Winslow Homer, entitled "High Cliff, Coast of Maine" and "The Visit of the Mistress", were lent to The Carnegie Institute, Pittsburgh, Pa., for the Winslow Homer Memorial Exhibi-

tion held January 28 through March 7, 1937. (These were returned Mar. 13 and 19, 1937, respectively.)

Through the cooperation of Miss Leila Mechlin, director of the Southern Art Projects, 16 paintings were lent to the New Mint Museum of Art, Charlotte, N. C., for its special inaugural exhibition from October 22 to December 31, 1936, as follows:

June, by John Alexander.
Caresse Infantine, by Mary Cassatt.
Summer, by Charles H. Davis.
Portrait Sketch of Walter Shirlaw, by Frank Duveneck.
Illusions, by Henry B. Fuller.
Sundown, by George Inness.
An Interlude, by Wm. Sergeant Kendall.
Visit of Nicodemus to Christ, by John La Farge.
Three Trees, by W. L. Lathrop.
A Family of Birches, by Willard L. Metcalf.
Bradbury's Mill Pond No. 2, by Henry W. Ranger.
The Torrent, by John H. Twachtman.
November, by Dwight Tryon.
The Cup of Death, by Elihu Vedder.
A Gentlewoman, by J. Alden Weir.
Autumn at Arkville, by Alexander H. Wyant.

Seven of the above paintings were returned January 5, 1937. The following nine paintings were shipped directly from the New Mint Museum of Art at the close of the exhibition to the University of North Carolina, Chapel Hill, N. C., for an exhibition from January 15 to February 20, 1937; the paintings were then forwarded to Savannah, Ga., where they were exhibited at the Telfair Academy of Arts and Sciences from March 7 to 28, 1937. (They were returned Apr. 2, 1937.)

Portrait Sketch of Walter Shirlaw, by Frank Duveneck.
Bradbury's Mill Pond No. 2, by Henry W. Ranger.
The Torrent, by John H. Twachtman.
A Gentlewoman, by J. Alden Weir.
Autumn at Arkville, by Alexander H. Wyant.
Visit of Nicodemus to Christ, by John La Farge.
A Family of Birches, by Willard L. Metcalf.
Caresse Infantine, by Mary Cassatt.
Three Trees, by W. L. Lathrop.

Three paintings, by undetermined artists, were lent December 17, 1936, to the Public Library of the District of Columbia, as follows:

Madonna with Halo of Stars.
Adoration of the Christ Child.
The Christ Child with Cross and Torch.

An oil painting, "Mother Love", by Charles F. Naegele, was lent March 10, 1937, to the High Museum of Art, Atlanta, Ga. (It was returned May 5, 1937.)

A bronze statue of Lincoln, by Augustus Saint Gaudens, was lent, with the consent of the owners, the Estate of Mrs. John Hay, to the Great Lakes Exposition, Cleveland, Ohio, for exhibiton from May 29 to September 6, 1937.

GALLERY LOANS RETURNED

The painting entitled "The Moose Chase", by George de Forest Brush, lent through the Carnegie Public Library at Fort Worth, Tex., to the Fort Worth Frontier Centennial Exhibition, held at Forth Worth, was returned November 20, 1936.

Two small bronzes by Edward Kemeys, entitled "Bear" and "Coyote", lent with permission of their owner, Mr. William Kemeys, to the Dallas Museum of Fine Arts for exhibition at the Texas Centennial Exposition, were returned December 7, 1936.

The painting "Fired On", by Frederic Remington, and the "Portrait of Premier Georges Clemenceau", by Cecilia Beaux, lent to The Dallas Museum of Fine Arts for exhibition at the Texas Centennial Exposition, were returned December 8, 1936.

The following five paintings, lent to the Public Library of the District of Columbia on February 28, 1936, were returned December 17, 1936:

Portrait of Henry B. Fuller, by George Fuller.
Portrait of Jessie J. Burge, by Abbott H. Thayer.
Portrait of Wyatt Eaton, by J. Alden Weir.
The Visit of the Mistress, by Winslow Homer.
Moonlight, by Albert P. Ryder.

The "Portrait Sketch of Walter Shirlaw", by Frank Duveneck, lent to the Cincinnati Museum of Art, Cincinnati, Ohio, for an exhibition of the works of Duveneck, was returned September 15, 1936.

WITHDRAWALS BY OWNERS

Two portraits in pastel by James Sharples (1751–1811) of Gen. James Miles Hughes, original member of the Society of the Cincinnati, and Mrs. James Miles Hughes, his wife, lent in 1932; withdrawn by their owner, Madame Florian Vurpillot on December 15, 1936.

One oil painting entitled "A Farnese Investiture", lent in 1928; withdrawn by the owner, Mrs. Estelle Bakewell-Green on March 2, 1937.

A reproduction in silver, made in England about 1850, of a silver-gilt wine pitcher, attributed to Benvenuto Cellini, lent in 1933; withdrawn by the owner, Capt. Frank O. Ferris, on April 20, 1937.

A painting entitled "Adoration of the Kings", by B. Van Orley (1493–1542); withdrawn by the owner, Mrs. Marshall Langhorne, on May 3, 1937.

A bronze bust of Dr. John Wesley Hill, by Joseph Anthony Atchison, lent by the sculptor in 1930; withdrawn by Mr. Wade H. Cooper, the owner, on May 5, 1937.

THE HENRY WARD RANGER FUND PURCHASES

Since it is a provision of the Ranger bequest that paintings purchased from the fund and assigned to American art institutions may be claimed by the National Gallery during the 5-year period beginning 10 years after the death of the artist represented, five paintings were recalled for action of the National Gallery of Art Commission at its meeting December 8, 1936.

Two paintings were accepted by the Commission to become permanant accessions of the Gallery, as listed earlier in this report.

The following three paintings were returned, thus becoming the absolute property of the respective art institutions:

"The Maumee River", by Carlton T. Chapman, N. A., to the Toledo Museum of Art, Toledo, Ohio.

"Dawn", by Dwight W. Tryon, N. A., to the Carnegie Institute, Pittsburgh, Pa.

"Repose of Evening", by Ben Foster, N. A., to the University of Michigan, Ann Arbor, Mich.

SPECIAL EXHIBITIONS

Two exhibitions were held as follows:

January 12, 1937.—A special exhibition commemorating the one-hundredth anniversary of the birth of Thomas Moran, N. A. (1837–1926). This exhibition remains on view.

April 9 to 29, 1937.—Exhibition of the Second Annual Metropoliton State Art Contest, 1937, under the auspices of the department of fine arts of the District of Columbia Federation of Women's Clubs, cooperating with the following Washington art organizations: The Arts Club, the League of American Pen Women, Miniature Painters Sculptors and Gravers Society, Society of Washington Artists, Washington Landscape Club, Washington Society of Etchers, Washington Water Color Club, and a free lance group. There were 305 exhibits, prints, paintings, and sculpture by 148 artists. Cards were issued by the Gallery to an opening view.

THE NATIONAL COLLECTION OF FINE ARTS REFERENCE LIBRARY

The 388 publications accessioned during the year were obtained through purchase, transfer, gift, and exchange. One hundred and

nine volumes of periodicals were sent to the bindery. The physical equipment of the library was improved by replacing the remaining wooden bookcases with steel shelves.

Miss Lucile A. Torrey was appointed librarian January 18, 1937.

SPECIAL DETAILS

The Acting Director was detailed from November 4 to 7, 1936, to visit the Syracuse Museum of Fine Arts. This made possible a careful study of the contemporary work in ceramics being done in the United States. He also visited the Walters Gallery, the Baltimore Museum of Art, and the Municipal Museum, which is devoted to the relics of Rembrandt Peale and his time.

A second detail from December 18 to 20, 1936, was granted to visit the art galleries at Chapel Hill and Charlotte, N. C.

PUBLICATIONS

Tolman, R. P. Report on the National Gallery of Art for the year ending June 30, 1936. Appendix 2, Report of the Secretary of the Smithsonian Institution for the year ending June 30, 1936, pp. 29–35.

Lodge, J. E. Report on the Freer Gallery of Art for the year ending June 30, 1936. Appendix 3, Report of the Secretary of the Smithsonian Institution for the year ending June 30, 1936, pp. 36–39, pls. 1–2.

Respectfully submitted.

R. P. Tolman, *Acting Director.*

Dr. C. G. Abbot,
Secretary, Smithsonian Institution.

APPENDIX 3

REPORT ON THE FREER GALLERY OF ART

SIR: I have the honor to submit the seventeenth annual report on the Freer Gallery of Art for the year ending June 30, 1937:

THE COLLECTIONS

Additions to the collections by purchase are as follows:

BRONZE

37.29. Cambodian (Khmer), twelfth century. A seated Buddha. Coppery bronze with a green patina. 0.240 by 0.132 over all.

37.1. Chinese, early Chou dynasty. A ceremonial vessel of the type *yü*. White bronze with a rough green patina; small areas of unaltered metal and earthy incrustation. Decoration in low relief. Inscription in seven characters. 0.418 by 0.565 over all. (Illustrated.)

37.30. Chinese, Han dynasty. A mirror; so-called TLV type. The surface is immaculate, with a glossy black patina slightly clouded with green on the face. Diameter, 0.143.

37.15. Chinese, late Han or later. A mirror. The surface has a glossy gunmetal black patina with small areas of green *aerugo* on the back; brilliant gray clouded with black and green on the face. The decoration is in high and countersunk relief. Inscription of 56 characters. Diameter, 0.135. (Illustrated.)

37.14. Chinese, Six Dynasties or earlier. A mirror. The surface has a dark olive green patina on the back; brilliant bluish gray on the face; earthy adhesions. The principal decoration is of figures and horse-drawn chariots in moderately high relief. Diameter, 0.210.

MANUSCRIPT

37.6. Arabic, ninth-tenth century. A section of the *Qur'ān* (from Chapter II) written on 32 parchment leaves; later binding of "marbled" paper. Kufic script in dark brown ink; diacritics in red; golden *'ashiras* and verse-stops. 0.245 by 0.330, average leaf.

37.11. Arabic, ninth-tenth century. A parchment leaf from a *Qur'ān* with full page designs in gold, marking, respectively, the end of a chapter and the beginning of another. 0.122 by 0.190.

37.28. Arabic, A. D. 1283. Yāqūt al-Musta'simī, calligrapher. A bound book; later leather binding (broken): The collected verses of al-Hādira. *Thulth* and *naskhī* scripts in black. Dated colophon. 0.277 by 0.205, average leaf.

37.31. Arabic, fourteenth century (?). A paper leaf from a *Qur'ān*. *Naskhī* script in gold, nine lines to a page; diacritics in blue and light red. Illuminated verse-stops and two marginal *'ashiras*. 0.340 by 0.217.

37.32. Arabic, fourteenth-fifteenth century (?). A paper leaf from a *Qur'ān*. *Naskhī* script in gold, 11 lines to a page; diacritics, verse-stops, and marginal ornaments illuminated in gold and blue. 0.335 by 0.254.

37.37. Arabic (Turkey), seventeenth century (?). A bound volume; leather binding (damaged): A collection of prayers entitled *Munājāt Qur'ān sharīf*. Small, clear *naskhī* script in black on 53 paper leaves; headings in *thulth* script in gold and silver. Golden verse-stops; illuminated corner-pieces. 0.252 by 0.172.

37.40. Arabic (Turkey), sixteenth-seventeenth century (?). A section of the *Qur'ān* (Chapters LXVII–LXXVII); leather binding. Alternations of *naskhī* and *thulth* scripts in black on 28 paper leaves. Titles in gold, green, or blue. 0.309 by 0.270, average leaf.

37.33–37.34. Arabic (Persia), late tenth century. Two leaves from a *Qur'ān*. Slender Kufic script in dark brown ink on paper; diacritics in red, brown, and blue. Illuminated chapter heading (37.34 *verso*), marginal lectionary marks and verse-stops. 0.240 by 0.340. (37.33. Illustrated.)

37.41. Aramaic (Syriac), A. D. 1213–14. A bound volume (covers missing): *The New Testament*. *Estrangelo* script in black and red on 7 paper leaves plus 324 parchment leaves. Two colophons. 0.257 by 0.193, average leaf.

36.15. Armenian, A. D. 1669 and 1670. A volume in contemporary binding of leather overlaid with red velvet and silver appliques: The *Gospel* according to the four Evangelists. Black, red, blue, green, and golden round-hand (*bolorgir*) on 293 parchment leaves. Initials, paragraphs, title-pages, arcades, and 6 full-page miniatures, all in colors and gold. Dated colophons. 0.252 by 0.185 over all; 0.248 by 0.178, average leaf.

37.13. Armenian, fourteenth century. A leather bound volume: The *Psalter* of the orthodox Church. Black, red, blue, and golden, round-hand (*bolorgir*) on 302 parchment leaves. Miniatures (12); illuminated headings (9), initials (71), and paragraphs (70). Colophon. 0.124 by 0.086 over all; 0.115 by 0.083, average leaf.

37.19. Armenian, A. D. 1650–1. A leather bound volume with silver clasps: the orthodox *Hymnal* (*Sharaknotz*). Black, red, and golden round-hand (*bolorgir*) with musical notation on 437 parchment leaves. Miniatures (16); illuminated headpieces (9), initials (145), and paragraphs (145 plus 1). Dated head-piece and colophon. 0.121 by 0.085 over all; 0.119 by 0.078, average leaf.

37.2–37.4. Persian, sixteenth century. Three leaves from a manuscript of *Yūsuf u-Zulaikhā* by Jāmī. Each leaf is inlaid in a larger leaf of colored paper upon which border designs of animals, birds, a grapevine, and floral scrolls are executed in gold. 0.252 by 0.150, average leaf. From the same manuscript as 36.9–36.12.

37.35. Persian, sixteenth century. A leather bound volume containing three manuscripts:

I. Shāh Mahmūd Nīshāpūrī, calligrapher. Fine *nasta'līq* script on 28 paper leaves. Illuminated headpiece. Colophon dated in correspondence with A. D. 1523.

II. A collection of lyric poems. Minute *nasta'ljq* script on 13 paper leaves, much illuminated.

III. Salīm al-Kātib (Nīshāpūrī), Calligrapher. Bold *nasta'līq* script in white on 5 green paper leaves. Colophon.

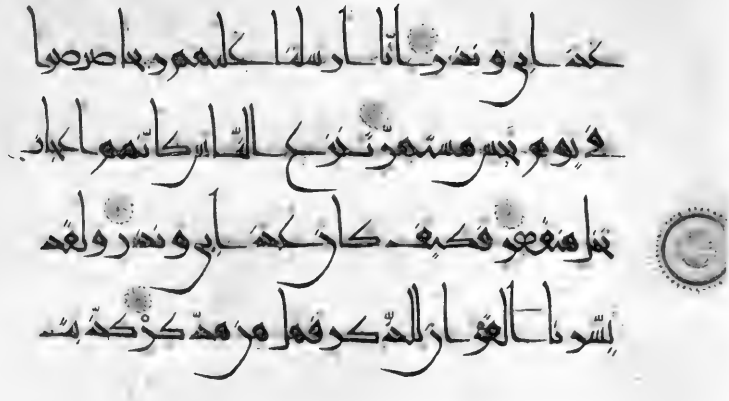
0.261 by 0.163, average leaf.

37.15

37.1

SOME RECENT ADDITIONS TO THE COLLECTION OF THE FREER GALLERY OF ART.

37.21



37.33

SOME RECENT ADDITIONS TO THE COLLECTION OF THE FREER GALLERY OF ART.

PAINTING

37.12. Chinese Yüan period, A. D. 1352. By Wu Chên (A. D. 1280–1354). A river landscape entitled "Fishermen", after a design by Ching Hao. Ink on paper. Signature, label, poem, and dated colophon by the artist. Makimono: 0.325 by 5.622.

37.36. Indian, Rājput, Rājasthānī, sixteenth century. A musical mode (*Gujarī rāginī*): a night scene with two figures—a distraught lady and her attendant. Full color on paper. Inscription. 0.196 by 0.145.

37.42. Indian, Rājput, Pahāṛī (Kāngṛā), eighteenth century. A girl with a pet antelope. Full color on paper. 0.211 by 0.149.

37.43. Indian, Rājput, Pahāṛī (Kāngṛā), late eighteenth century. A musical mode (*Pūrvā, rāgā*): Rādhā's toilette—a scene on a terrace. Colors on paper. 0.154 by 0.103.

37.44. Indian, Rājput, Pahāṛī (Kāngṛā), eighteenth–nineteenth century. A musical mode (*Pūrvā rāgā*): Rādhā's toilette—in a garden. Colors on paper. 0.169 by 0.107.

37.38–37.39. Persian, fourteenth century. Two paper leaves (trimmed): Studies of trees, from Qaswinī's Cosmography. Colors on paper. 0.090 by 0.113; 0.064 by 0.120.

37.22. Persian, Herāt school, late fifteenth century. A dromedary, hoppled, with its keeper. Full color and slight gold on paper. 0.115 by 0.145.

37.24. Persian, Herāt school, late fifteenth century. The prophets Elias and Khaḍir at the Fountain of Life: An episode from Nizami's *Sikandarnāma*. Colors and silver (darkened) on paper. 0.157 by 0.134.

37.25. Persian, Herāt school, fifteenth century. Two demons, fettered—one with cup and wine flask, one playing a musical instrument. Tinted drawing with additions of gold on paper. 0.146 by 0.220.

37.26. Persian, Herāt school, fifteenth century. A horseman killing a lion. Colors and gold on paper. 0.140 by 0.210.

37.27. Persian, Herāt school, fifteenth century. The abduction by sea: an illustration of an episode in the poem "The Eight Paradises", included in the *Khamsah* of Amīr Khusraw Dihlawī. Full color, gold and silver (darkened) on paper. 0.270 by 0.193.

37.7. Persian, Safawī period, mid-sixteenth century. By Shāh Qūlī. An angel, flying, with cup and wine flask. In ink, slight tint and gold on paper. Signature. 0.180 by 0.135.

37.8. Persian, Safawī period, sixteenth century. By Muḥammad of Herāt. Portrait of a prince wearing a mantle of gold brocade figured with pairs of captors and captives. Full color and gold on paper. Signature. 0.195 by 0.105.

37.20. Persian, Safawī period, early sixteenth century. A horse, saddled and bridled, attended by a groom. Full color and gold on paper. Inscribed with an attribution to Master Haydar 'Alī. 0.113 by 0.110.

37.21. Persian, Safawī period, sixteenth century. A camel, richly caparisoned, and his conductor. Full color and gold on paper. Signature and date written within the border: Shaykh Muḥammad, 964 (A. D. 1556–7). 0.109 by 0.132. (Illustrated.)

37.23. Persian, Safawī period, sixteenth century. Portrait of a young prince, with a parrot on his wrist. Line drawing, with additions of color, on paper. 0.147 by 0.083.

POTTERY

37.16. Chinese, Sung dynasty. *Kuan yao:* a miniature vase with tubular handles and two corresponding holes in the foot-rim. Dense, hard clay; lustrous gray glaze with large, irregular crackle. 0.102 by 0.061.

37.17. Chinese, Sung dynasty. *Ju yao:* a cup holder, with wide five-foiled flange. Hard, gray porcelaneous clay; lustrous grayish green glaze, medium crackle. 0.067 by 0.166.

37.18. Chinese, Sung dynasty. *Lung-ch'üan yao:* a vase with long neck and two handles of fish form. Hard, dense clay; lustrous celadon glaze. 0.259 by 0.113.

37.5. Persian, Rhages (Raiy), thirteenth century. By 'Alī bin Yūsuf. A bowl (broken and repaired). Soft, sandy, white clay; white tin enamel glaze (crazed) and a transparent wash under the foot. The decoration of people and horses is painted in polychrome enamels and leaf-gold. Kufic inscription inside; *naskhī* inscription outside; both with signature. 0.087 by 0.206.

37.9. Syrian, eleventh-twelfth century. A pitcher, thin-walled, with a low foot-rim (broken and repaired). Soft, sandy white clay; cream-white enamel glaze with traces of iridescence. Decorated with a band of Kufic lettering in low relief. 0.130 by 0.120.

37.10. Syrian, twelfth–thirteenth century. A pitcher (broken and repaired). Fairly hard, white clay; lustrous white enamel glaze of egg-shell texture. The decoration is carved in relief, with details in pierced work filled with glaze. 0.100 by 0.083.

Curatorial work has, as before, consisted largely in the study of Chinese, Tibetan, Japanese, Aramaic, Armenian, Arabic, Persian, East Indian, and Cambodian objects in the collection, of the texts and seals associated with them, and in the preparation of this material for Gallery records. In addition, 810 objects and 286 photographs of objects, Oriental for the most part, were submitted to the Curator for expert opinion as to provenance, age, quality, or other significance. Written or oral reports on these things were made to the institutions or private owners who had requested this service. Written translations of 31 inscriptions in Oriental languages were also made upon request, and 2 inscriptions—one in Chinese, the other in Egyptian hieroglyphics—were composed for the use of two Departments of the Government.

Changes in exhibition have involved a total of 92 objects, as follows:

Brass, Persian	1
Bronzes, Chinese	2
Paintings:	
American	62
Chinese	25
Textiles, Chinese	2

ATTENDANCE

The Gallery has been open to the public every day from 9 until 4:30 o'clock, with the exception of Mondays, Christmas Day, and New Year's Day.

The total attendance of visitors coming in at the main entrance was 140,881. The total attendance for week-days, exclusive of Mondays, was 94,221; Sundays, 46,660. The average week-day attendance was 365; the average Sunday attendance, 897. The highest monthly attendance was reached in April (30,837) and in August (14,084); the lowest monthly attendance in December (6,413).

There were 1,600 visitors to the main office during the year. The purposes of their visits were as follows:

For general information		354
To see objects in storage		348
Far Eastern paintings	98	
Tibetan paintings	3	
Near Eastern paintings and manuscripts	33	
East Indian paintings	5	
American paintings	83	
Whistler prints	14	
Oriental pottery, jade, bronzes, sculptures	82	
Byzantine objects	2	
American pottery	1	
Washington Manuscripts	27	
To read in the library		201
To make tracings and sketches from library books		5
To see building and installation		15
To obtain permission to photograph or sketch		7
To submit objects for examination		159
To examine or purchase photographs		370
To see members of the staff		230
To see the exhibition galleries on Mondays		40

LECTURES AND DOCENT SERVICE

Three illustrated talks were given by members of the staff before three local organizations. Upon request, 15 groups, ranging from 2 to 15 persons (total 149), were given instruction in the study rooms, and 10 groups, ranging from 10 to 50 persons (total 262), were given docent service in the exhibition galleries.

PERSONNEL

On February 15, 1937, Thomas R. Fullalove, painter, retired, after 16 years of most excellent service.

Grace T. Whitney worked intermittently at the Gallery between October 15, 1936, and June 30, 1937, on translations of Persian texts.

Respectfully submitted.

J. E. Lodge, *Curator.*

Dr. C. G. Abbot,
Secretary, Smithsonian Institution.

APPENDIX 4

REPORT ON THE BUREAU OF AMERICAN ETHNOLOGY

SIR: I have the honor to submit the following report on the field researches, office work, and other operations of the Bureau of American Ethnology during the fiscal year ended June 30, 1937, conducted in accordance with the act of Congress of March 19, 1936. The act referred to contains the following item:

American ethnology: For continuing ethnological researches among the American Indians and the natives of Hawaii, the excavation and preservation of archeologic remains under the direction of the Smithsonian Institution, including necessary employees, the preparation of manuscripts, drawings, and illustrations, the purchase of books and periodicals, and traveling expenses, $58,730.00.

SYSTEMATIC RESEARCHES

M. W. Stirling, Chief, spent the major part of the fiscal year in Washington, during which time the ethnological report on the Jivaro Indians of Ecuador was completed and submitted to the printer.

At the end of February 1937 Mr. Stirling left Washington for St. Augustine, Fla., in order to attend the conference held under the auspices of the Carnegie Institution of Washington for the purpose of outlining a program of research concerning the historical and archeological past of the city of St. Augustine and vicinity. At the conclusion of this conference he continued to Manatee, Fla., in order to examine some interesting newly discovered mounds in that vicinity. Continuing up the Gulf Coast of Florida, a visit was made to Bristol, on the Apalachicola River, where a sherd collection was made on a large mound near the river south of the town. Mr. Stirling then proceeded to Panama City, Fla., in order to photograph several private archeological collections.

From Panama City, Mr. Stirling went to Macon, Ga., for the purpose of examining the large archeological project there which was inaugurated by the Smithsonian Institution with the Society for Georgia Archeology and now being conducted under the auspices of that society by Dr. A. R. Kelly. From Macon, Mr. Stirling proceeded to Philadelphia, Pa., in order to attend the International Conference on Early Man, held under the auspices of the Philadelphia Academy of Sciences. On the conclusion of this conference Mr. Stirling returned to Washington.

Mr. Stirling was delegated to represent the Smithsonian Institution at the meeting held at Media, Pa., on May 13, 1937, in honor of the one hundredth anniversary of the birth of Daniel Brinton.

Dr. John R. Swanton, ethnologist, devoted the greater part of his time during the past fiscal year to work as chairman of the United States De Soto Expedition Commission. This involved field expeditions from November 11 to December 9, 1936, and from May 16 to June 4, 1937, except for 3 days, December 3 to 5, devoted to a meeting of the Commission at the University of Alabama, Tuscaloosa, Ala. The first field trip extended over parts of Florida, Georgia, Alabama, Mississippi, Louisiana, and Texas. The second was confined to an intensive study of that section of De Soto's route which passed through northern Mississippi. During these expeditions small collections of potsherds were made, which will be of assistance in studying the cultures of the prehistoric inhabitants of the several areas visited. As chairman of the fact-finding committee of the same Commission, Dr. Swanton prepared a report covering about 600 typewritten pages, and this was adopted by the Commission at its Tuscaloosa meeting and embodied in its report to Congress. The entire report has since been submitted, but, as publication has not yet been ordered, it is still possible to add material, and he is engaged in doing so.

During the year Dr. Swanton also made some additions to his data on the Indians of the Southeast, and he has been collecting from original sources the most important references to the Quapaw Indians.

Until the end of the fiscal year Dr. Swanton continued as a member of the executive committee of the Division of Anthropology and Psychology of the National Research Council and as vice-president of section H of the American Association for the Advancement of Science for the current calendar year.

Dr. Truman Michelson, ethnologist, renewed his researches among the Algonquian tribes of the James and Hudson Bay region under a grant-in-aid by the American Council of Learned Societies. He spent some time at Moose Factory, and a short time at Fort George, Attawapiskat, and Weenusk. Owing to the presence of some Albany Cree at Moose Factory and some Indians from Ruppert's House as well as on shipboard, he was able to do personal work with them. By correspondence he obtained some additional text-material from Rupert's House; by meeting the manager of the Hudson Bay Co.'s post at the Ghost River and an Indian from Lac la Ronge he obtained data from these regions. The results of the previous expedition were checked up as much as feasible. It results that the statement made previously that east of Hannah Bay Cree leaves off and Montagnais-Naskapi begins is confirmed. Besides texts and vocabularies from the general area, a rather complete schedule of kinship terms for the Great Whale River Indians, those of Fort George, the Cree

of Moose Factory, Albany, Attawapiskat, and Weenusk was obtained. Very obviously the system of consanguinity favors cross-cousin marriage; and it is to be noted that at the Great Whale River and Albany both types of this marriage occur; at Moose and Attawapiskat it is restricted to marriage with paternal aunt's daughter; at Weenusk apparently neither type obtains. It may be mentioned that by linguistic technique it is possible to show in the places named that a number of old terms have been replaced, e. g., the term for cross-nephew has been replaced by the term originally restricted to son-in-law, etc. Also the kinship systems favor exogamy, but he has not been able to find a true gens or clan organization in the whole area.

Dr. Michelson returned to Washington September 20, where he studied the material gathered on this and previous expeditions. By correspondence with Hudson Bay Co.'s officials and a missionary he obtained data on the Cree of Cumberland House, Norway House, Oxford House, Trout Lake, God's Lake (all dialects in which original *l* is replaced by *n*), Montreal Lake, Stanley, Pelecan Narrows (dialects in which original *l* is replaced by *y*). A study was made of the Montagnais of Le Jeune, over 300 years ago; the orthography plainly indicates kh, tch, and some other variations are representatives of one and the same sound, namely, the one usually transcribed by *tc*. This study enabled him also to make at least one correction to the Handbook of American Indians, and prove one supposed Algonkin tribe actually was Montagnais-Naskapi. From correspondence it would appear that the dialect spoken at Island Lake is a mixture of Cree, Ojibwa, and possibly Algonkin proper. This indicates that in a number of places there is such a mixture, but apparently not on the same scale. A map showing the distribution and interrelations of the Cree and Montagnais-Naskapi dialects has been made. Technical papers have appeared in professional journals, and others have been prepared and are awaiting publication. The Bureau published Fox Miscellany (Bulletin 114), the proof-sheets of which were corrected during the fiscal year.

At the beginning of the fiscal year, Dr. John P. Harrington, ethnologist, prepared a report on the Use of Ferns in the Basketry of the Indians of Northwestern California, centering on the use of fern species among the Karuk tribe. The baskets of this section are really built of lumber, that is, of the shredded roots of the Oregon pine. But the two materials which make the baskets beautiful are the glossy black of maidenhair fern stems and the handsome red of Woodwardia fern filaments, dyed with alder bark.

Dr. Harrington next prepared a paper on Kiowa Memories of the Black Hills and of the Devil's Tower. The Kiowa Indians, 600 miles to the south, still have memories of the Black Hills country of South Dakota, which they occupied some 150 years ago. They

also retain knowledge of myths regarding the remarkable basalt column near Sundance, Wyo., on the northwestern slope of the Black Hills, known as the Devil's Tower, but to the Kiowa as the Rock Standing Like a Tree. An elaborate paper was finished on the subject, going into the geology, history, and mythology of the Devil's Tower.

Dr. Harrington next finished a report on The Northern Provenience of the Navajo and Apache, tracing related languages in detail to Alaska, northwestern Canada, and the Pacific Coast of the United States, and telling in detail how the relationship of Navajo and Apache to the Indians of the far northwest was discovered by W. W. Turner, librarian in the Patent Office, Washington, D. C., in 1852. This voluminous report resulted in the discovery by Dr. Harrington of a curious distribution of these languages, the map of which takes the form of a wishbone. Their nucleus is in the far Northwest, one prong extending down the Pacific Coast and terminating a little north of San Francisco Bay, another eastern prong extending down through the Rocky Mountain region and culminating in the Navajo and Apache of the Southwest. An exhaustive study was made of the earliest documents and maps on the subject, in the compilation of which Dr. Harrington was assisted by the Geographic Board of Canada.

A report was completed on the Siberian Origin of the American Indian, presenting the background, the earliest historic writings on the subject, the Eskimo problem, the problem of the means of crossing (whether by boat, over ice, or by means of former land bridge), the distribution of tribes and density of population as bearing out the theory, and general aspects. In this study he was assisted by many other students, including native interpreters of the Bering Strait region. This report suggests that America was first discovered as a result of over-population which developed in the east of Asia and forced Paleo-Siberian peoples to enter the Chukchi Peninsula. From this point they sighted and spilled over into America, using the Diomede Islands as resting places on their transit, if this were during the period of the existence of the Bering Strait, and followed the food supply down what is now the Alaskan coast, without realizing that they had discovered anything more than an outlying island.

A paper was prepared on the Life of Jeronimo, Apache Indian Chief, and the Indian leader whose expeditions probably cost the United States Government more money and trouble than did those of any other chieftain. The life and times of Jeronimo were minutely searched, and data were compiled in chronological order. The material of this paper is especially interesting to the American

public as it deals with a period already dimming in the memories of living men. The name, Alope, of the first wife of Jeronimo, was discovered to be merely a corruption of the Mexican Spanish name Guadalupe.

Studies on linguistic relationship in the Southwest and California were continued. These studies have resulted in the discovery that Tano-Kiowan and Aztecan are genetically related, and to this larger group Dr. Harrington gave the name Patlan. The discovery was also made that Hopi is a Southern California Shoshonean dialect, showing developments in common with the Southern California Shoshonean dialects, and constituting with them a dialectic group of the Aztecan family in contradistinction to any other group. This unity of Hopi with Southern California Shoshonean was first noticed many years ago, the word for wood-rat (e. g., Hopi *qáala*, wood-rat, Southern California Shoshonean *qáala*, wood-rat) leading immediately to the discovery. It was also noticed by Dr. J. R. Swanton and Dr. Harrington that Tano-Kiowan and Shoshonean have genetic relationship with the languages of the Southeastern United States (Muskhogean, Chitimacha, Atakapa, Tonkawa, Timucua), Tano-Kiowan, for instance, and all the Southeastern languages above-mentioned showing the characteristic prefix *na-*, something, used in deriving nouns from verbs (e. g., Tanoan *tha*, to dwell; *natha*, house).

At the beginning of the fiscal year Dr. Frank H. H. Roberts, Jr., archeologist, was engaged in excavating at the Lindenmeier site in northern Colorado. At this place remains attributable to the material culture of Folsom man, one of the earliest known inhabitants of the New World, are found. The 1936 investigations constituted the third season's work there, and valuable new information was obtained on this important phase in the study of the history of the American Indian. Digging was carried on at three different portions of the site, and considerable new bone material and several new types of implements came from the excavations. Most of the bones were from the large extinct species of bison (*Bison taylori*) which the people hunted, but in addition a number of bones from the American camel, probably *Camelops*, were obtained in direct association with the bison bones and with stone implements. This adds one more extinct species of animal to the list of those found with Folsom artifacts. One of the significant facts established by the work is that the site was occupied before and during a period characterized by the formation of a thick, black soil layer produced by heavy vegetation that thrived when conditions were more favorable than those of recent times. That the people were there before the inception of this era of abundant growth points to an even greater antiquity than that suggested by the presence of implements and bones in the bottom

of the soil level. The work was brought to a close September 5, 1936.

In the latter part of August Dr. Roberts also investigated a site near Kersey, Colo., where Folsom type objects were found by F. W. Powars and his son Wayne, residents of Greeley. This location is on a low terrace of the rolling terrain lying along the south side of the South Platte River valley. Present evidence indicates that it was a camp, but one occupied for a relatively short period of time. Specimens obtained there represent a typical Folsom complex. They are so similar to those from the Lindenmeier site that it is difficult to distinguish between specimens from the two sites. Bones are scarce, and those recovered are so fragmentary that they are valueless for determining the species of the animals represented.

After the completion of the Lindenmeier and Powars site investigations Dr. Roberts proceeded to Sterling, Colo., where he visited and inspected a number of sites in that vicinity. All proved to be of more recent origin than the Folsom type material. From Sterling Dr. Roberts returned to Washington. The autumn months were spent in the office working over the material obtained during the summer's investigations.

February 24 Dr. Roberts sailed for Cairo, Egypt, where he served as one of two American experts at the International Conference of Archeologists held March 9 to 17, under the auspices of the Committee for Intellectual Cooperation of the League of Nations. As his part of the agenda for the sessions, Dr. Roberts presented a paper on the subject "The Material Organization of an Archeological Mission." This included a discussion of the choice of personnel for a field staff, the securing of equipment, the establishment of field headquarters, and the general administration of such a project. At the close of the conference he visited a number of sites in Egypt and had an opportunity to study methods of excavation and general archeological procedure as practiced in the Egyptian area. From Egypt he went to Greece, Italy, France, and England and studied collections in the museums at Athens, Naples, Rome, Paris, and London. He returned to Washington April 24.

On May 21 Dr. Roberts left Washington for Kingman, Ariz., where he and Dr. C. W. Gilmore, curator of vertebrate paleontology, United States National Museum, investigated a find of mastodon bones and man-made objects. The deposit is located near a large spring 24 miles west of Kingman. A week's study and excavation demonstrated that the material was a secondary deposit, washed in from surrounding slopes, and of no importance from the standpoint of the association of man and extinct mammals. Dr. Roberts left Kingman on June 2 for Denver, Colo., and Fort Collins. On June 12 he resumed excavations at the Lindenmeier site. By the

end of the fiscal year an area covering 375 square feet had been uncovered. Numerous implements and considerable additional information were obtained from this work. These data serve to round out more fully the story of the customs and habits of Folsom man.

During the winter months Dr. Roberts also prepared several manuscripts on the subject of the work at the Lindenmeier site and on Southwestern archeology in general.

Upon his return from Spanish Honduras early in the fiscal year, Dr. W. D. Strong, anthropologist, spent his entire time in working over the archeological collections from the Ulua River. With the assistance of Alfred Kidder II, and Drexel A. Paul, Jr., Dr. Strong completed the report on this work which is to be published in the Smithsonian Miscellaneous Collections under the title "Preliminary Report on the Smithsonian Institution-Harvard University Archeological Expedition to Northwestern Honduras, 1936."

From July 1 until late October 1936, Dr. Julian H. Steward, associate anthropologist, continued his work of the previous year among Shoshonean tribes in the Great Basin and Plateau areas. He had two objectives: First, to study the ecological basis of the social and political organization of the bands of horse Shoshoni in Utah and Idaho to supplement his previous study of the foot Shoshoni of Nevada; second, to continue his ethnographic survey by means of an element list. An element list and satisfactory ecological material were procured from the following: Bannock, Fort Hall Shoshoni, Lemhi Shoshoni, and Grouse Creek (northwestern Utah) Shoshoni at Fort Hall, Idaho; Promontory Point (Great Salt Lake) Shoshoni at Washakie, Utah; Pahvant Ute (now almost extinct) at Kanosh, Utah; Gosiute (determined to be actually Shoshoni) at Skull Valley and at Deep Creek, Utah. Before returning to Washington, Dr. Steward drove to Fallon, Nev., to examine guano caves said to hold promise, but found little of interest. He returned by way of southern Nevada and southern Utah, making brief visits to several Southern Paiute reservations. The remainder of the year was devoted to preparation of research material for publication, and eight manuscripts have been completed.

The beginning of the fiscal year found J. N. B. Hewitt, ethnologist, on the Tuscarora Reservation near Lewiston, N. Y., where he went to continue his researches on the League of the Five Iroquois Tribes. From Lewiston Mr. Hewitt proceeded to the Grand River Grant to the Six Nations in Ontario. Here he had the good fortune to obtain a complete Mohawk text embodying the so-called Handsome Lake religious teaching, this document consisting of more than 5,700 Mohawk terms. Considerable additional information was obtained concerning the interesting dual nature of the tribal organiza-

tion. On his return to Washington Mr. Hewitt completed the translation of the Mohawk text giving details of the birth and early childhood of Deganawida, also another Mohawk text giving an account of the dancing lads who finally became the Pleiades.

During the month of June 1937, Mr. Hewitt again left Washington for Brantford, Canada, in order to check over in the field his two large manuscripts in Onondaga text, one being the Iroquois New Year Ceremony and the other consisting of the four Thanksgiving Festivals. The end of the fiscal year found Mr. Hewitt still in the field engaged in this task.

EDITORIAL WORK AND PUBLICATIONS

The editing of the publications of the Bureau was continued through the year by Stanley Searles, editor.

Bulletin 114, Fox Miscellany, by Truman Michelson, was issued during the year.

Bulletin 115, Journal of Rudolph Friederich Kurz, edited by J. N. B. Hewitt, was released for printing.

Bulletin 116, Ancient Caves of the Great Salt Lake Region, by Julian H. Steward, was released for printing.

An index of Schoolcraft's Indian Tribes, in six volumes, has been further advanced toward completion.

Work has been done on other manuscripts in the custody of the editor.

Publications distributed totaled 14,708.

LIBRARY

Miss Miriam B. Ketchum continued in charge throughout the year as librarian.

Accessions during the fiscal year numbered 580 volumes, bringing the total number of volumes in the library to 31,115; there are also about 20,000 pamphlets and about 2,000 volumes of unbound periodicals and society transactions.

The number of volumes prepared and sent to bindery was 1,330.

Library of Congress cards have been obtained for practically all of the new books received during the year and for some of the older material. All new material is being classed in the Library of Congress scheme of classification and separately shelved. A partial depository set of Library of Congress catalog cards has been established and will shortly be installed in working order.

The work of refiling the catalog continues. Thirteen drawers are now finished.

A great many missing numbers have been requested and nearly all of these have been supplied, amounting in some cases to several volumes of a set. Of the exchange sets, 8 old sets which had been allowed to lapse have been reestablished, and 11 new sets have been established.

ILLUSTRATIONS

Following is a summary of the work accomplished by E. G. Cassedy, illustrator:

Line drawings	266
Graphs	13
Plates lettered or numbered	199
Plates assembled	64
Plates sized for engraver	129
Airbrush jobs	6
Photos retouched	51
Topographic maps	3
Maps	3
Mechanical drawings	3
Lettering jobs	3
Engrossings	2
Water color paintings	1
Total	743

COLLECTIONS

Accession number

140,528. Skeletal material from two sites on Canaveral Peninsula, Brevard County, Fla., collected by the Bureau in cooperation with the Federal Civil Works Administration during the winter of 1933–34. (250 specimens.)

142,561. Archeological specimens and human and animal bones collected during mound excavations in Florida during the winter of 1933–34 in cooperation with the Federal C. W. A.

MISCELLANEOUS

During the course of the year information was furnished by members of the Bureau staff in reply to numerous inquiries concerning the North American Indians, both past and present, and the Mexican peoples of the prehistoric and early historic periods. Various specimens sent to the Bureau were identified and data on them furnished for their owners.

Personnel.—Miss Helen Heitkemper, junior stenographer, resigned March 16, 1937. Miss Ethelwyn E. Carter was appointed May 1, 1937, to fill the vacancy.

Respectfully submitted.

M. W. Stirling, *Chief.*

Dr. C. G. Abbot,
Secretary, Smithsonian Institution.

APPENDIX 5

REPORT ON THE INTERNATIONAL EXCHANGE SERVICE

SIR: I have the honor to submit the following report on the activities of the International Exchange Service during the fiscal year ended June 30, 1937:

For that year the congressional appropriation was $44,260. Some years ago, in order to supplement the amounts granted by Congress, which have never been sufficient to meet the entire expenses of the Exchange Service, the Board of Regents of the Institution gave authority to charge governmental establishments 5 cents a pound for forwarding their publications abroad through exchange channels. The collections from that source during the year were $3,871.49, making the total resources available $48,131.49.

The number of packages handled during 1937 was 657,346, an increase of 60,395. The weight was 651,461 pounds, an increase of 32,672 pounds.

The following table gives the number and weight of packages sent and received through the Exchange Service separated into three classes: Parliamentary documents, departmental documents, and scientific and literary publications.

	Packages		Weight	
	Sent	Received	Sent	Received
			Pounds	*Pounds*
United States parliamentary documents sent abroad	303,054		114,439	
Publications received in return for parliamentary documents		9,633		29,316
United States departmental documents sent abroad	122,261		123,286	
Publications received in return for departmental documents		9,010		32,624
Scientific and literary publications sent abroad	160,631		239,402	
Scientific and literary publications received from abroad for distribution in the United States		52,757		112,394
Total	585,946	71,400	477,127	174,334
Grand total	657,346		651,461	

The number of boxes shipped abroad was 2,620, an increase of 145 over the preceding year. Of these boxes, 540 were for depositories of full sets of United States governmental documents, and the remainder (2,080) were for distribution to miscellaneous establishments and individuals. In addition to the packages forwarded in these boxes there were transmitted by mail 87,296, an increase of 16,397 over last year.

BRUSSELS EXCHANGE CONVENTIONS

In 1886, some years after the organization of the Smithsonian system of exchanges, there were concluded at Brussels between the United States and a number of other countries two exchange conventions. The first, Convention A (Stat., XXV, 1465), provided for the international exchange of official documents and scientific and literary publications; and the second, Convention B (Stat., XXV, 1469), provided for the immediate exchange of the official journal. The Smithsonian Institution was charged by the Congress with the duty of carrying out the provisions of those conventions on the part of the United States (Stat., XIV, 573—Congressional Resolution approved Mar. 2, 1867, setting aside 50 copies of all governmental documents for exchange purposes; Stat., XXXI, 1464—Congressional Resolution approved Mar. 2, 1901, increasing the number of documents for exchange to not exceeding 100 copies; Stat., XLIII, 1106—Printing Act approved Mar. 2, 1901, further increasing the number to 125 copies; and Stat., XXXV, 1169—Congressional Resolution approved Mar. 4, 1909, setting aside copies of the Congressional Record for exchange with foreign parliamentary bodies).

Eight countries signed the first convention, namely the United States, Belgium, Brazil, Italy, Portugal, Serbia (now Yugoslavia), Spain, and Switzerland. The second convention was signed by all of those countries except Switzerland. Since the ratification of the Brussels Conventions the following countries have signified their adherence thereto in the order in which they are listed:

1. Uruguay—both conventions, 1889.
2. Argentine Republic—convention A, 1889.
3. Paraguay—convention A, 1889.
4. Czechoslovakia—both conventions, 1919.
5. Poland—convention A, 1920; convention B, 1921.
6. Rumania—both conventions, 1923.
7. Hungary—both conventions, 1923.
8. Dominican Republic—both conventions, 1923.
9. Latvia—both conventions, 1924.
10. Free City of Danzig—both conventions, 1924.
11. China—both conventions, 1925.
12. Egypt—convention A, 1925.

Although not all countries joined the exchange conventions, most of those not listed above have entered into exchange relations with the United States and have established official bureaus to conduct the work.

FOREIGN DEPOSITORIES OF GOVERNMENTAL DOCUMENTS

There are forwarded to foreign depositories 111 sets of United States official publications, 61 of these being full sets and 50 partial sets. The depository of the full set forwarded to Peru has been

changed from the Biblioteca Nacional to the Sección de Propaganda y Publicaciones, Ministerio de Relaciones Exteriores, Lima.

DEPOSITORIES OF FULL SETS

ARGENTINA: Ministerio de Relaciones Exteriores, Buenos Aires.
BUENOS AIRES: Biblioteca de la Universidad Nacional de La Plata, La Plata. (Depository of the Province of Buenos Aires.)
AUSTRALIA: Library of the Commonwealth Parliament, Canberra.
NEW SOUTH WALES: Public Library of New South Wales, Sydney.
QUEENSLAND: Parliamentary Library, Brisbane.
SOUTH AUSTRALIA: Parliamentary Library, Adelaide.
TASMANIA: Parliamentary Library, Hobart.
VICTORIA: Public Library of Victoria, Melbourne.
WESTERN AUSTRALIA: Public Library of Western Australia, Perth.
AUSTRIA: National Bibliothek, Wien I.
BELGIUM: Bibliothèque Royale, Bruxelles.
BRAZIL: Bibliotheca Nacional, Rio de Janeiro.
CANADA: Library of Parliament, Ottawa.
MANITOBA: Provincial Library, Winnipeg.
ONTARIO: Legislative Library, Toronto.
QUEBEC: Library of the Legislature of the Province of Quebec.
CHILE: Biblioteca del Congreso, Santiago.
CHINA: National Central Library, Nanking.
COLOMBIA: Biblioteca Nacional, Bogotá.
COSTA RICA: Oficina de Depósito y Canje Internacional de Publicaciones, San José.
CUBA: Secretaría de Estado (Asuntos Generales y Canje Internacional), Habana.
CZECHOSLOVAKIA: Bibliothèque de l'Assemblée Nationale, Prague.
DENMARK: Kongelige Bibliotheket, Copenhagen.
EGYPT: Bureau des Publications, Ministère des Finances, Cairo.
ESTONIA: Riigiraamatukogu (State Library), Tallinn.
FRANCE: Bibliothèque Nationale, Paris.
GERMANY: Reichstauschstelle im Reichsministerium des Innern, Berlin C 2.
BADEN: Universitäts-Bibliothek, Freiburg. (Depository of the State of Baden.)
BAVARIA: Bayerische Staatsbibliothek, München.
PRUSSIA: Preussische Staatsbibliothek, Berlin, N. W. 7.
SAXONY: Sächsische Landesbibliothek, Dresden—N. 6.
WURTEMBURG: Landesbibliothek, Stuttgart.
GREAT BRITAIN:
ENGLAND: British Museum, London.
GLASGOW: City Librarian, Mitchell Library, Glasgow.
LONDON: London School of Economics and Political Science. (Depository of the London County Council.)
HUNGARY: A Magyar országgyülés könyvtará, Budapest.
INDIA: Imperial Library, Calcutta.
IRISH FREE STATE: National Library of Ireland, Dublin.
ITALY: Ministero dell'Educazione Nazionale, Rome.
JAPAN: Imperial Library of Japan, Tokyo.
LATVIA: Bibliothèque d'État, Riga.
LEAGUE OF NATIONS: Library of the League of Nations, Geneva, Switzerland.

Mexico: Biblioteca Nacional, Mexico, D. F.
Netherlands: Royal Library, The Hague.
New Zealand: General Assembly Library, Wellington.
Northern Ireland: H. M. Stationery Office, Belfast.
Norway: Universitets-Bibliothek, Oslo. (Depository of the Government of Norway.)
Peru: Sección de Propaganda y Publicaciones, Ministerio de Relaciones Exteriores, Lima.
Poland: Bibliothèque Nationale, Warsaw.
Portugal: Bibliotheca Nacional, Lisbon.
Rumania: Academia Română, Bucharest.
Spain: Servicio de Cambio Internacional de Publicaciones, Paseo de Recoletos 20, Madrid.
Sweden: Kungliga Biblioteket, Stockholm.
Switzerland: Bibliothèque Centrale Fédérale, Berne.
Turkey: Ministère de l'Instruction Publique, Ankara.
Union of South Africa: State Library, Pretoria, Transvaal.
Union of Soviet Socialist Republics: State Central Book Chamber, Moscow 4.
Ukraine: All-Ukrainian Association for Cultural Relations with Foreign Countries, Kiev.
Uruguay: Oficina de Canje Internacional de Publicaciones, Montevideo.
Venezuela: Biblioteca Nacional, Caracas.
Yugoslavia: Ministère de l'Éducation, Belgrade.

DEPOSITORIES OF PARTIAL SETS

Afghanistan: Ministry of Foreign Affairs, Publications Department, Kabul.
Austria: Vienna: Magistrat der Stadt Wien, Abteilung 51-Statistik.
Bolivia: Biblioteca del H. Congreso Nacional, La Paz.
Brazil:
Minas Geraes: Directoria Geral de Estatistica em Minas, Bello Horizonte.
Rio de Janeiro: Bibliotheca da Assemblea Legislativa do Estado, Nictheroy.
British Guiana: Government Secretary's Office, Georgetown, Demerara.
Bulgaria: Ministère des Affaires Étrangères, Sofia.
Canada:
Alberta: Provincial Library, Edmonton.
British Columbia: Provincial Library, Victoria.
New Brunswick: Legislative Library, Fredericton.
Nova Scotia: Provincial Secretary of Nova Scotia, Halifax.
Prince Edward Island: Legislative Library, Charlottetown.
Saskatchewan: Government Library, Regina.
Ceylon: Chief Secretary's Office (Record Department of the Library), Colombo.
China: National Library, Peiping.
Danzig: Stadtbibliothek, Danzig.
Dominican Republic: Biblioteca del Senado, Ciudad Trujillo.
Ecuador: Biblioteca Nacional, Quito.
Finland: Parliamentary Library, Helsingfors.
Germany:
Bremen: Senatskommission für Reichs- und Auswärtige Angelegenheiten.
Hamburg: Staats-und Universitäts-Bibliothek.
Hesse: Universitäts-Bibliothek, Giessen.
Lübeck: President of the Senate.
Thuringia: Rothenberg-Bibliothek, Landesuniversität, Jena.
Greece: Library of Parliament, Athens.

GUATEMALA: Biblioteca Nacional, Guatemala.
HAITI: Secrétaire d'État des Relations Extérieures, Port-au-Prince.
HONDURAS: Biblioteca y Archivo Nacionales, Tegucigalpa.
ICELAND: National Library, Reykjavik.
INDIA:
ASSAM: General and Judicial Department, Shillong.
BENGAL: Secretary, Bengal Legislative Council Department, Council House, Calcutta.
BIHAR and ORISSA: Revenue Department, Patna.
BOMBAY: Undersecretary to the Government of Bombay, General Department, Bombay.
BURMA: Secretary to the Government of Burma, Education Department, Rangoon.
CENTRAL PROVINCES: General Administration Department, Nagpur.
MADRAS: Chief Secretary to the Government of Madras, Public Department, Madras.
PUNJAB: Chief Secretary to the Government of the Punjab, Lahore.
UNITED PROVINCES OF AGRA AND OUDH: University of Allahabad, Allahabad.
JAMAICA: Colonial Secretary, Kingston.
LIBERIA: Department of State, Monrovia.
LITHUANIA: Ministère des Affaires Étrangères, Kaunas (Kovno).
MALTA: Minister for the Treasury, Valletta.
NEWFOUNDLAND: Department of Home Affairs, St. John's.
NICARAGUA: Superintendente de Archivos Nacionales, Managua.
PANAMA: Secretaría de Relaciones Exteriores, Panama.
PARAGUAY: Secretario de la Presidencia de la República, Asunción.
SALVADOR: Ministerio de Relaciones Exteriores, San Salvador.
SIAM: Department of Foreign Affairs, Bangkok.
STRAITS SETTLEMENTS: Colonial Secretary, Singapore.
VATICAN CITY: Biblioteca Apostolica Vaticana, Vatican City, Italy.

INTERPARLIAMENTARY EXCHANGE OF THE OFFICIAL JOURNAL

The forwarding of copies of the Congressional Record and the Federal Register to the Bibliothek des Preussischen Landtags, Berlin, has been discontinued as the Landtag has been abolished. The following have been added to the list of those receiving the Congressional Record and the Federal Register: Staatskanzlei des Kantons Berne, Staatskanzlei des Kantons St. Gallen, Staatskanzlei des Kantons Schaffhausen, and Staatskanzlei des Kantons Zürich. The total number of copies of these documents now forwarded abroad is 105. A complete list of the depositories is given below:

DEPOSITORIES OF CONGRESSIONAL RECORD

ALBANIA: Ministrija Mibretnore e Punëvetë Jashtme, Tirana.
ARGENTINA:
Biblioteca del Congreso Nacional, Buenos Aires.
Cámara de Diputados, Oficina de Información Parlamentaria, Buenos Aires.
AUSTRALIA:
Library of the Commonwealth Parliament, Canberra.
NEW SOUTH WALES: Library of Parliament of New South Wales, Sydney.
QUEENSLAND: Chief Secretary's Office, Brisbane.
WESTERN AUSTRALIA: Library of Parliament of Western Australia, Perth.

AUSTRIA: Bibliothek des Hauses der Bundesgesetzgebung, Wien I.
BELGIUM: Bibliothèque de la chambre des Représentants, Bruxelles.
BOLIVIA: Biblioteca del H. Congreso Nacional, La Paz.
BRAZIL:
Bibliotheca do Congresso Nacional, Rio de Janeiro.
AMAZONAS: Archivo, Bibliotheca e Imprensa Publica, Manáos.
BAHIA: Governador do Estado da Bahia, São Salvador.
ESPIRITO SANTO: Presidencia do Estado do Espirito Santo, Victoria.
RIO GRANDE DO SUL: "A Federação", Porto Alegre.
SERGIPE: Bibliotheca Publica do Estado de Sergipe, Aracajú.
SÃO PAULO: Diario Official do Estado de São Paulo, São Paulo.
BRITISH HONDURAS: Colonial Secretary, Belize.
CANADA:
Library of Parliament, Ottawa.
Clerk of the Senate, Houses of Parliament, Ottawa.
CHINA: National Central Library, Nanking.
CUBA: Biblioteca del Capitolio, Habana.
CZECHOSLOVAKIA: Bibliothèque de l'Assemblée Nationale, Prague.
DANZIG: Stadtbibliothek, Danzig.
DENMARK: Rigsdagens Bureau, Copenhagen.
DOMINICAN REPUBLIC: Biblioteca del Senado, Ciudad Trujillo.
DUTCH EAST INDIES: Volksraad von Nederlandsch-Indië, Batavia, Java.
EGYPT: Bureau des Publications, Ministère des Finances, Cairo.
ESTONIA: Riigiraamatukogu (State Library), Tallinn.
FRANCE:
Chambre des Députés, Service de l'Information Parlementaire Étrangère, Paris.
Bibliothèque du Sénat, au Palais du Luxembourg, Paris.
Bibliothèque, Direction des Accords commerciaux, Ministère du Commerce, Paris.
GERMANY:
Deutsche Reichstags-Bibliothek, Berlin, N. W. 7.
Reichsfinanzministerium, Berlin, W. 8.
ANHALT: Anhaltische Landesbücherei, Dessau.
BRAUNSCHWEIG: Bibliothek des Braunschweigischen Staatsministeriums, Braunschweig.
MECKLENBURG: Staatsministerium, Schwerin.
OLDENBURG: Oldenburgisches Staatsministerium, Oldenburg i. O.
SCHAUMBURG-LIPPE: Schaumburg-Lippische Landesregierung, Bücheburg.
GIBRALTAR: Gibraltar Garrison Library Committee, Gibraltar.
GREAT BRITAIN: Library of the Foreign Office, London.
GREECE: Library of Parliament, Athens.
GUATEMALA: Biblioteca de la Asamblea Legislativa, Guatemala.
HONDURAS: Biblioteca del Congreso Nacional, Tegucigalpa.
HUNGARY: A Magyar országgyülés könyvtará, Budapest.
INDIA: Legislative Department, Simla.
IRAN: Library of the Iranian Parliament, Téhéran.
IRAQ: Chamber of Deputies, Baghdad.
IRISH FREE STATE: Dail Eireann, Dublin.
ITALY:
Biblioteca della Camera dei Deputati, Rome.
Biblioteca del Senato del Regno, Rome.
Ufficio degli Studi Legislativi, Senato del Regno, Rome.
LATVIA: Valsts Biblioteka, Riga.

LEAGUE OF NATIONS: Library of the League of Nations, Geneva, Switzerland.
LIBERIA: Department of State, Monrovia.
MEXICO: Secretaría de la Cámara de Diputados, Mexico, D. F.
AGUASCALIENTES: Gobernador del Estado de Aguascalientes, Aguascaiientes.
CAMPECHE: Gobernador del Estado de Campeche, Campeche.
CHIAPAS: Gobernador del Estado de Chiapas, Tuxtla Gutierrez.
CHIHUAHUA: Gobernador del Estado de Chihuahua, Chihuahua.
COAHUILA: Periódico Oficial del Estado de Coahuila, Palacio de Gobierno, Saltillo.
COLIMA: Gobernador del Estado de Colima, Colima.
DURANGO: Gobernador Constitucional del Estado de Durango, Durango.
GUANAJUATO: Secretaría General de Gobierno del Estado, Guanajuato.
GUERRERO: Gobernador del Estado de Guerrero, Chilpancingo.
JALISCO: Biblioteca del Estado, Guadalajara.
LOWER CALIFORNIA: Gobernador del Distrito Norte, Mexicali, B. C., Mexico.
MEXICO: Gaceta del Gobierno, Toluca, Mexico.
MICHOACÁN: Secretaría General de Gobierno del Estado de Michoacán, Morelia.
MORELOS: Palacio de Gobierno, Cuernavaca.
NAYARIT: Gobernador de Nayarit, Tepic.
NUEVO LEON: Biblioteca del Estado, Monterey.
OAXACA: Periódico Oficial, Palacio de Gobierno, Oaxaca.
PUEBLA: Secretaría General de Gobierno, Puebla.
QUERETARO: Secretaría General de Gobierno, Sección de Archivo, Queretaro.
SAN LUIS POTOSI: Congreso del Estado, San Luis Potosi.
SINALOA: Gobernador del Estado de Sinaloa, Culiacan.
SONORA: Gobernador del Estado de Sonora, Hermosillo.
TABASCO: Secretaría General de Gobierno, Sección 3a, Ramo de Prensa, Villahermosa.
TAMAULIPAS: Secretaría General de Gobierno, Victoria.
TLAXCALA: Secretaría de Gobierno del Estado, Tlaxcala.
VERA CRUZ: Gobernador del Estado de Vera Cruz, Departamento de Gobernación y Justicia, Jalapa.
YUCATÁN: Gobernador del Estado de Yucatán, Mérida, Yucatán.
NEW ZEALAND: General Assembly Library, Wellington.
NORWAY: Storthingets, Bibliothek, Oslo.
PERU: Cámara de Diputados, Lima.
POLAND: Bibljoteka Narodowa, Warsaw.
PORTUGAL: Secretario da Assemblea Nacional, Lisboa.
RUMANIA:
Bibliothèque de la Chambre des Députés, Bucharest.
Ministère des Affaires Étrangères, Bucharest.
SPAIN:
Biblioteca del Congreso Nacional, Madrid.
Catalunya: Biblioteca del Parlament de Catalunya, Barcelona.
SWITZERLAND: Bibliothèque de l'Assemblée Fédérale Suisse, Berne.
Berne: Staatskanzlei des Kantons Berne.
St. Gallen: Staatskanzlei des Kantons St. Gallen.
Schaffhausen: Staatskanzlei des Kantons Schaffhausen.
Zürich: Staatskanzlei des Kantons Zürich.
SYRIA:
Ministère des Finances de la République Libanaise, Service du Matériel, Beirut.
Governor of the State of Alaouites, Lattaquié.

TURKEY: Turkish Grand National Assembly, Ankara.
UNION OF SOUTH AFRICA:
Library of Parliament, Cape Town, Cape of Good Hope.
State Library, Pretoria, Transvaal.
URUGUAY: Diario Oficial, Calle Florida 1178, Montevideo.
VENEZUELA: Biblioteca del Congreso, Caracas.
VATICAN CITY: Biblioteca Apostolica Vaticana, Vatican City, Italy.

FOREIGN EXCHANGE AGENCIES

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LIST OF EXCHANGE AGENCIES

ALGERIA, via France.
ANGOLA, via Portugal.
ARGENTINA: Comisión Protectora de Bibliotecas Populares, Canje Internacional, Calle Callao 1540, Buenos Aires.
AUSTRIA: Internationale Austauschstelle, National-Bibliothek, Wien, I.
AZORES, via Portugal.
BELGIUM: Service Belge des Échanges Internationaux, Bibliothèque Royale de Belgique, Bruxelles.
BOLIVIA: Oficina Nacional de Estadística, La Paz.
BRAZIL: Serviço de Permutações Internacionaes, Bibliotheca Nacional, Rio de Janeiro.
BRITISH GUIANA: Royal Agricultural and Commercial Society, Georgetown.
BRITISH HONDURAS: Colonial Secretary, Belize.
BULGARIA: Institutions Scientifiques de S. M. de Roi de Bulgarie, Sofia.
CANADA: Sent by mail.
CANARY ISLANDS, via Spain.
CHILE: Servicio de Canjes Internacionales, Biblioteca Nacional, Santiago.
CHINA: Bureau of International Exchange, National Central Library, Nanking.
COLOMBIA: Oficina de Canjes Internacionales y Reparto, Biblioteca Nacional, Bogotá.
COSTA RICA: Oficina de Depósito y Canje Internacional de Publicaciones, San José.
CUBA: Sent by mail.
CZECHOSLOVAKIA: Service Tchécoslovaque des Échanges Internationaux, Bibliothèque de l'Assemblée Nationale, Prague 1–79.
DANZIG: Amt für den Internationalen Schriftenaustausch der Freien Stadt Danzig, Stadtbibliothek, Danzig.
DENMARK: Service Danois des Échanges Internationaux, Kongelige Danske Videnskabernes Selskab, Copenhagen V.
DUTCH GUIANA: Surinaamsche Koloniale Bibliotheek, Paramaribo.
ECUADOR: Ministerio de Relaciones Exteriores, Quito.
EGYPT: Government Press, Publications Office, Bulaq, Cairo.
ESTONIA: Riigiraamatukogu (State Library), Tallinn.
FINLAND: Delegation of the Scientific Societies of Finland, Kasärngatan 24, Helsingfors.
FRANCE: Service Français des Échanges Internationaux, 110 Rue de Grenelle, Paris.

GERMANY: Amerika-Institut, Universitätstrasse 8, Berlin, N. W. 7.
GREAT BRITAIN AND IRELAND: Wheldon & Wesley, 2–4 Earnshaw St., New Oxford St., London, W. C. 2.
GREECE: Bibliothèque Nationale, Athens.
GREENLAND, via Denmark.
GUATEMALA: Instituto Nacional de Varones, Guatemala.
HAITI: Secrétaire d'État des Relations Extérieures, Port-au-Prince.
HONDURAS: Biblioteca Nacional, Tegucigalpa.
HUNGARY: Hungarian Libraries Board, Ferenciektere 5, Budapest, IV.
ICELAND, via Denmark.
INDIA: Superintendent of Government Printing and Stationery, Bombay.
ITALY: R. Ufficio degli Scambi Internazionali, Ministero dell' Educazione Nazionale, Rome.
JAMAICA: Institute of Jamaica, Kingston.
JAPAN: Imperial Library of Japan, Uyeno Park, Tokyo.
JAVA, via Netherlands.
LATVIA: Service des Échanges Internationaux, Bibliothèque d'Etat de Lettonie, Riga.
LIBERIA: Bureau of Exchanges, Department of State, Monrovia.
LITHUANIA: Sent by mail.
LOURENÇO MARQUEZ, via Portugal.
LUXEMBOURG, via Belgium.
MADAGASCAR, via France.
MADEIRA, via Portugal.
MEXICO: Sent by mail.
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NETHERLANDS: International Exchange Bureau of the Netherlands, Royal Library, The Hague.
NEW SOUTH WALES: Public Library of New South Wales, Sydney.
NEW ZEALAND: General Assembly Library, Wellington.
NICARAGUA: Ministerio de Relaciones Exteriores, Managua.
NORWAY: Service Norvégien des Échanges Internationaux, Bibliothèque de l'Université Royale, Oslo.
PALESTINE: Hebrew University Library, Jerusalem.
PANAMA: Sent by mail.
PARAGUAY: Sección Canje Internacional de Publicaciones del Ministerio de Relaciones Exteriores, Asunción.
PERU: Sección de Propaganda y Publicaciones, Ministerio de Relaciones Exteriores, Lima.
POLAND: Service Polonais des Échanges Internationaux, Bibliothèque Nationale, Warsaw.
PORTUGAL: Secção de Trocas Internacionaes, Bibliotheca Nacional, Lisboa.
QUEENSLAND: Bureau of Exchanges of International Publications, Chief Secretary's Office, Brisbane.
RUMANIA: Bureau des Échanges Internationaux, Institut Météorologique Central, Bucharest.
SALVADOR: Ministerio de Relaciones Exteriores, San Salvador.
SIAM: Department of Foreign Affairs, Bangkok.
SOUTH AUSTRALIA: South Australian Government Exchanges Bureau, Government Printing and Stationery Office, Adelaide.
SPAIN: Servicio de Cambio Internacional de Publicaciones, Paseo de Recoletos 20, bajo derecha, Madrid.

SUMATRA, via Netherlands.
SWEDEN: Kongliga Svenska Vetenskaps Akademien, Stockholm.
SWITZERLAND: Service Suisse des Échanges Internationaux, Bibliothèque Centrale Fédérale, Berne.
SYRIA: American University of Beirut.
TASMANIA: Secretary to the Premier, Hobart.
TRINIDAD: Royal Victoria Institute of Trinidad and Tobago, Port-of-Spain.
TUNIS: via France.
TURKEY: Robert College, Istanbul.
UNION OF SOUTH AFRICA: Government Printing and Stationery Office, Cape Town, Cape of Good Hope.
UNION OF SOVIET SOCIALIST REPUBLICS: Library of the Academy of Sciences of the U. S. S. R., Exchange Service, Leningrad, V. O.
URUGUAY: Oficina de Canje Internacional de Publicaciones, Ministerio de Relaciones Exteriores, Montevideo.
VENEZUELA: Biblioteca Nacional, Caracas.
VICTORIA: Public Library of Victoria, Melbourne.
WESTERN AUSTRALIA: Public Library of Western Australia, Perth.
YUGOSLAVIA: Section des Échanges Internationaux, Ministère des Affaires Étrangères, Belgrade.

Respectfully submitted.

C. W. SHOEMAKER, *Chief Clerk.*

Dr. C. G. ABBOT,
Secretary, Smithsonian Institution.

APPENDIX 6

REPORT ON THE NATIONAL ZOOLOGICAL PARK

SIR: I have the honor to submit the following report on the operations of the National Zoological Park for the fiscal year ended June 30, 1937:

The regular appropriation made by Congress for the maintenance of the Park was $225,000, all of which was expended.

IMPROVEMENTS

The fiscal year 1937 was probably the most outstanding in the history of the Zoo. The construction under the Public Works Administration grant of $892,920 was completed. These improvements include a brick exhibition building for small mammals and great apes; a stone exhibition building to house large mammals; a new wing to the bird house; a two-story building for machine and carpenter shops; a stone garage; the installation of three 250-horsepower down-draft boilers in the central heating plant; an extension of the conduit system to the small mammal house and large mammal house; and rearrangement of the electric supply distribution system, a portion of which was put underground.

The small mammal and great ape house was completed and opened to the public in May 1937. It is approximately 185 by 115 feet and contains 96 cages and tanks varying in size from 18 by 12 by 26 inches to 12 by 40 by 10 feet, which provide accommodations for a considerable variety of animals. The building consists of four sections: A large central room with cages in the center and around the sides, some with glass fronts and others with steel bars; a wing for the great apes with a glass partition between the animals and the public; a third room for the gibbons, which are likewise partitioned from the public by glass; and a fourth room, semicircular in form, which is termed the nocturnal room and is designed to house an array of small creatures that are rarely shown in collections. The building is fairly easy to keep clean, and the system of forced ventilation eliminates practically all the odor.

The contract work on the large mammal house was completed in June 1937, but considerable still remains to be done before it is ready for occupancy. This work is being carried on by the Zoo's regular personnel which it is hoped will be augmented by assistance from

W. P. A. It is anticipated that the building will be occupied by animals late in the summer of 1937.

The structure is about 227 by 90 feet and is designed to accommodate elephants, rhinos, hippos, pigmy hippos, tapirs, and giraffes, for which it has 13 inside cages ranging in size from 12 by 19 feet to 22 by 58 feet. Several of the inside cages have pools, and each cage connects with an outside yard in which the animals are retained by dry moats in lieu of fences. The design of the building is simple, well proportioned, and beautiful. The public space is 30 by 165 feet, and the sound-deadening effect of the acoustical tile on the ceiling produces a highly satisfactory condition. The walls of the cages for the hippo, African and Indian elephants, and giraffe have been painted with appropriate backgrounds by artists of the Treasury art relief project.

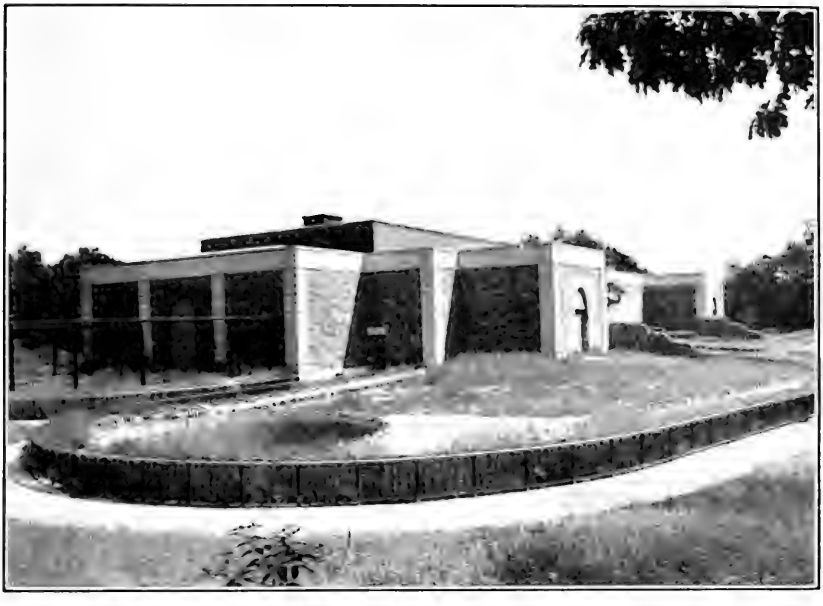
The addition to the bird house, 43 by 133 feet, was completed in November 1936. This wing contains 27 glass-fronted cages, one of which has insulated walls and a glass top and is provided with a refrigeration system which makes it a well-lighted cold storage room. This was stocked with penguins, which are thriving in the uniform temperature of 63° F. The backs of a number of the cages, including that of the penguin room, have been decorated with scenes representing various geographical regions, which greatly enhances the attractiveness of the exhibits. The art work was done by the Treasury art relief project.

The installation of new boilers in the central heating plant was completed late in the summer of 1936, and the plant was used during the winter of 1936–7.

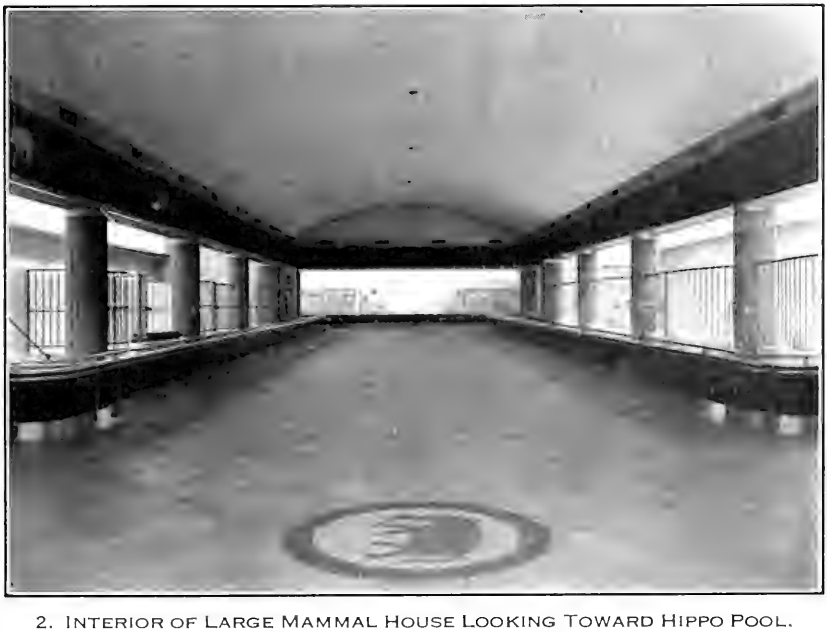
The mechanical shop building is of stone, 51 by 100 feet, 2 stories; the lower story accommodates a stockroom and iron and machine work, and the upper story is mainly for carpentry work. The improved facilities provided by this have permitted much greater efficiency of operations in the maintenance of the Park than had been possible heretofore.

The stone garage, 56 by 64 feet, was built near the boiler room and completed late in the summer of 1936.

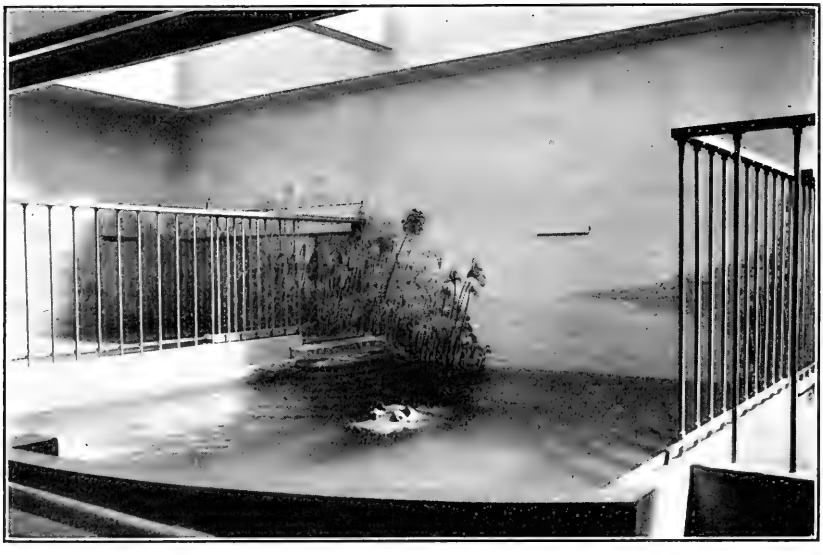
From July 1, 1936, until January 27, 1937, a small and diminishing group of W. P. A. laborers was available for miscellaneous work about the Park. With this labor a variety of work was accomplished, including repairing and resurfacing some roads and walks. A trench 600 feet long was dug for the laying of electric conduit from the bird house to the large mammal house. Trenches also were dug for the laying of about 600 feet of sanitary sewers and drains. More than 400 cubic yards of sand was hauled from the creek bed, cleaned and screened for use in concrete work. Miscellaneous grading was



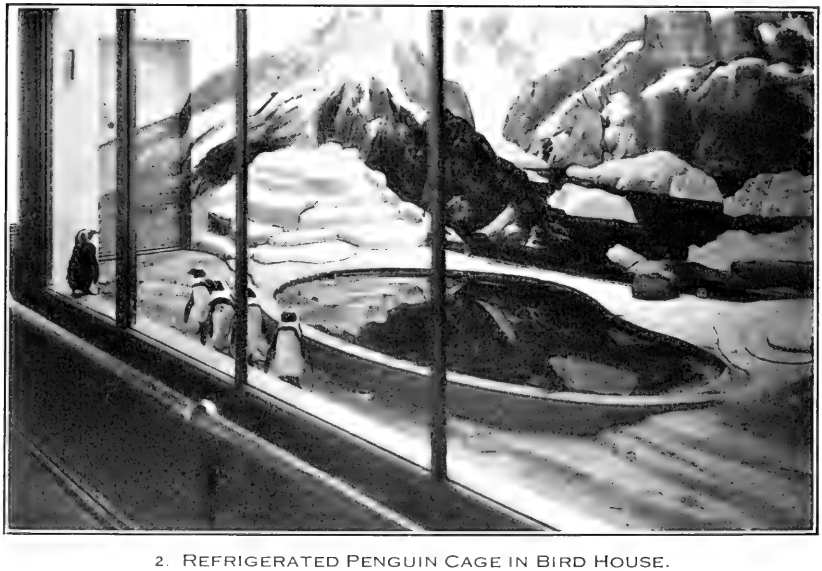
1. LARGE MAMMAL HOUSE AS SEEN FROM THE WEST. ELEPHANT YARD AND POOL IN FOREGROUND, AND GIRAFFE YARD AT LEFT.



2. INTERIOR OF LARGE MAMMAL HOUSE LOOKING TOWARD HIPPO POOL.



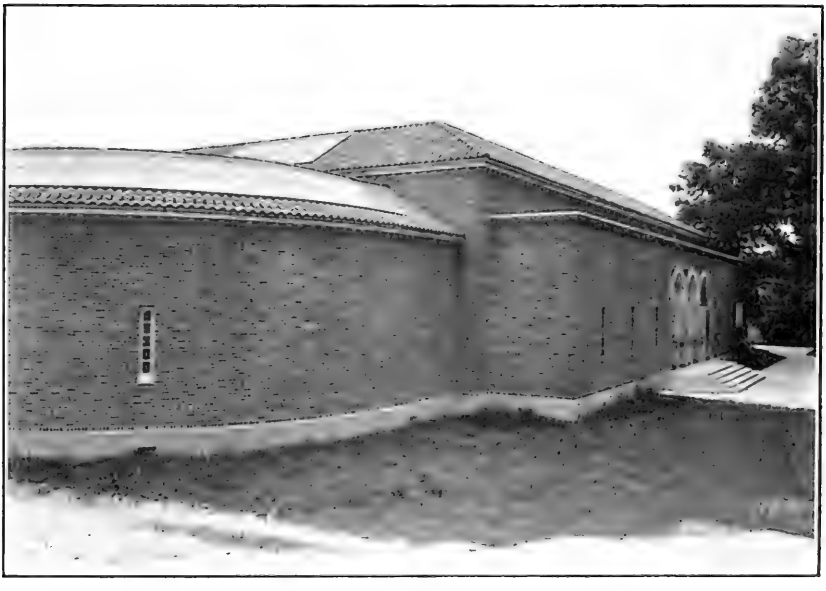
1. HIPPO IN POOL IN LARGE MAMMAL HOUSE.



2. REFRIGERATED PENGUIN CAGE IN BIRD HOUSE.

1. EXTERIOR OF NEW ADDITION TO BIRD HOUSE.

2. INTERIOR OF NEW ADDITION TO BIRD HOUSE.



1. SMALL MAMMAL HOUSE AS SEEN FROM THE ROAD.

2. INTERIOR OF NOCTURNAL ROOM OF SMALL MAMMAL HOUSE.

done about the Park. General improvement work about the grounds, including seeding, sodding, and planting of trees and shrubs, was carried on as well as the continuance of eradication of poison ivy in the sections of the Park most used by the public.

Normal maintenance operations of the Park required all the materials and personnel that could be supplied under the regular appropriation, so almost no improvements were made under the regular funds. Indeed, a great deal of finishing up work remains to be done around the newly constructed buildings or in them but is progressing very slowly because of lack of manpower and materials.

A bookbinder assigned to the Smithsonian Institution by the W. P. A. has bound, rebound, or repaired a considerable number of publications in the Zoo branch of the Smithsonian Institution library, resulting in a great improvement in the condition and usefulness of the library.

The work of classifying and arranging in their proper places in the library various publications of use in the Zoo has progressed very satisfactorily through the arrangement whereby a member of the Smithsonian Institution's regular library force comes to the Zoo once a week and carries out this type of work.

EXPEDITION

The National Geographic Society-Smithsonian Institution East Indies Expedition, which is financed by the National Geographic Society to obtain animals for this Zoo, left Washington in two sections. Dr. William M. Mann, Director of the Park, Mrs. Mann, and Dr. Maynard Owen Williams, chief of the foreign editorial staff of the National Geographic, left Washington January 12 and sailed from Vancouver, B. C., January 19 on the *Empress of Asia* for southern Asiatic points. On February 9, Roy Jennier, assistant head keeper, and Malcolm Davis, keeper, in the National Zoological Park, left Washington with 28 animals (2 black bears, 2 pumas, 2 jaguars, 4 raccoons, 3 opossums, 10 alligators, and 5 hellbenders), sailed from New York February 11 on the steamer *Talisse* and arrived at Belawan-Deli, Sumatra, March 22, 1937, where Dr. Mann had previously landed and had established headquarters for the expedition. The American animals were intended for zoos in the Far East. At the close of this fiscal year the expedition is still in the field, and it will not return to Washington until late in September or October 1937. Information as to the animal collection being assembled indicates a satisfactory trip.

NEEDS OF THE ZOO

The remaining two most important structural needs of the Zoo are a new antelope building and a new restaurant building.

The old frame structure now called the antelope house accommodates animals of a higher total value than any other single structure now occupied in the Park. It is an unhealthful type of structure, a dangerous fire hazard, is difficult to heat and expensive to maintain. A new building adapted for the magnificent and remarkable group of rather delicate even-toed hoofed creatures is much needed.

The old frame shelter now housing the restaurant and concession stand is badly deteriorated and entirely inadequate to accommodate the large volume of business that has developed with the increasing attendance at the Zoo. The construction of a suitable building would be a self-liquidating undertaking, as the annual revenue derived from the restaurant concession has been $6,012 per annum for the past 3 years, and for the forthcoming 3 years will be $9,012 per annum.

There is also need for some additional walks and roads that we hope may be constructed with the aid of the W. P. A.

VISITORS FOR THE YEAR

July	236,500	February	95,000
August	329,400	March	176,500
September	255,500	April	239,700
October	164,400	May	318,350
November	153,450	June	265,600
December	81,250		
January	88,450	Total	2,435,520

The attendance of organizations, mainly classes of students, of which there is definite record was 34,120 from 638 different schools in 20 States and the District of Columbia, as follows:

State	Number of persons	Number of parties	State	Number of persons	Number of parties
Alabama	20	1	North Carolina	1,262	37
Connecticut	109	2	Ohio	934	26
Delaware	486	10	Pennsylvania	8,552	167
District of Columbia	6,638	132	Rhode Island	40	1
Georgia	363	11	South Carolina	234	7
Maine	107	2	Tennessee	16	1
Maryland	4,659	75	Virginia	4,870	85
Massachusetts	337	9	West Virginia	452	10
Michigan	86	2	Conventions—Members of various States	140	2
Missouri	46	1			
New Hampshire	72	1	Total	34,120	638
New Jersey	2,519	32			
New York	2,178	24			

About 3 o'clock every afternoon, except Sundays and holidays, a census is made of the cars parked on the Zoo grounds. During the year 32,668 were so listed, representing every State in the Union, Canada, Mexico, Canal Zone, Alaska, and Cuba. Since the total

number is merely a record of those actually parked at one time, it is not of value as indicating a total attendance but is of importance as showing the percentage attendance by States, Territories, and countries. The District of Columbia comprised slightly over 48 percent; Maryland, 21 percent; Virginia, 14 percent; and the remaining cars were from other States, Territories, and countries. During years in which counts have been made on Sunday as well as during the week it has been found that the percentage of cars from the District of Columbia, Maryland, and Virginia is less, and the percentage of the more distant States is correspondingly increased. This is brought about by tourists coming to the Zoo on Sundays when other points of interest are closed to them.

The nineteenth annual meeting of the American Society of Mammalogists was held in Washington May 4 to 8, inclusive. Their program included a trip to the Zoo on May 8, where luncheon was served in the large mammal house. The small mammal house was first opened to the public as this organization entered it.

ACCESSIONS

Gifts.—Many specimens were received as gifts this year. Interesting additions were a pair each of cheer pheasants and white-crested kaleege from Dr. J. Delacour, Cleres, France; a pair of blue-crowned hanging paroquets and a tui paroquet from Alan N. Steyne, Washington, D. C., and a male Kaibab squirrel from the United States Forest Service.

We take this opportunity to express appreciation for the assistance and cooperation of the personnel of the United States Biological Survey, National Park Service, and Forest Service, and Vernon Bailey, of Washington, D. C., Theodore Scheffer, of Puyallup, Wash., Alex Walker, of Tillamook, Oreg., and John M. Davis, of Arlington, Va., for gifts of American small mammals for stocking the small mammal house when it was opened. More than 150 small mammals were received through them from localities ranging from Georgia to Washington and Oregon.

When the small mammal and great ape house was completed, the Director of the Park was on an extended trip to the southern Asiatic region to assemble a collection for the Zoo, so it was not advisable, even if it had been financially possible, to stock this building with exotic animals. Arrangements were accordingly made for placing on exhibition a collection of American small mammals. It was probably the largest and best collection of its kind ever assembled, and has attracted much favorable attention. It is particularly valuable in showing the considerable diversity of forms common to North America and which are frequently overlooked or ignored.

22606—37——6

Also, it is of value because it has given visitors an opportunity to study rather closely animals that are of great economic importance either because of their beneficial or destructive habits or their value for fur.

DONORS AND THEIR GIFTS

Mrs. Anna E. Anderson, Washington,. D. C., alligator.
A. M. Aytona, Washington, D. C., opossum.
L. D. Babbitt, Petersham, Mass., through Dr. Doris M. Cochran, copperhead snake, hog-nosed snake, spotted turtle, musk turtle.
Miss M. B. Bailey, Hyattsville, Md., 3 Pekin ducks.
Vernon Bailey, Washington, D. C., 3 flying squirrels, short-tailed shrew.
Mrs. John B. Baker, Durham, N. C., rhesus monkey.
Marshall Banks, Washington, D. C., screech owl.
Dr. Thos. Barbour, Cambridge, Mass., chicken snake, corn snake, 3 garter snakes, 2 black snakes, 2 king snakes, 15 water snakes.
Mrs. Virgil Barker, Fort Myers, Fla., broad-winged hawk.
Mrs. Beavers, Mt. Rainier, Md., black widow spider and eggs.
C. T. R. Bohannon, Carlsbad, N. Mex., prairie rattlesnake.
V. E. Bolton, Washington, D. C., opossum.
W. L. Bond, Fredericksburg, Va., 2 barn owls.
Julius Booker, C. C. C., Belvoir, Va., copperhead snake.
Miss Mary L. Borger, Chevy Chase, Md., white rabbit.
Harlie Branch, Washington, D. C., alligator.
R. D. Brands, Washington, D. C., groundhog.
Mrs. Richard Brickway, Washington, D. C., orange-fronted parrot.
Dr. Alice L. Brown, Washington, D. C., 18 black skimmers.
Miss Caroline Brown, Washington, D. C., alligator.
Elwood Brown, Washington, D. C., white-throated capuchin.
S. K. Brown, Eustis, Fla., 4 corn snakes, 2 pine snakes, 3 coral snakes, water moccasin.
Mrs. T. R. Brown, Washington, D. C., Belgian rabbit.
L. J. Burner, Maurertown, Va., raccoon.
Dr. A. Busk, Washington, D. C., 2 grass paroquets.
Miss Anna Butler, Washington, D. C., yellow-naped parrot.
Adjutant Carnahan, Washington, D. C., raccoon.
Dr. Doris M. Cochran, Washington, D. C., blacksnake.
Frederick Cochrane, Washington, D. C., alligator.
C. P. Coe, Chevy Chase, Md., raccoon.
Mrs. J. L. Cotton, Washington, D. C., Pekin duck.
Mrs. S. C. Cotton, Washington, D. C., 2 grass paroquets.
Mrs. J. M. Cox, Washington, D. C., 6 moles.
Raymond Crawford, Warren, Ohio, 2 sidewinder rattlesnakes, 2 chuckwalla lizards, gopher tortoise, 2 horn snakes, king snake.
C. R. Cruey, Centerville, Va., great white heron.
Frank Cundall, Kingston, Jamaica, Jamaica boa.
P. B. Darling, Washington, D. C., red fox.
Miss Priscilla Deane, Washington, D. C., bobwhite.
B. L. Deitzel, Washington, D. C., tarantula.
Dr. J. Delacour, Cleres, France, 2 cheer pheasants, 2 white-crested kaleege.
J. P. Delphey, Frederick, Md., Javan macaque, rhesus monkey.
Irving Denenberg, Washington, D. C., pied-billed grebe.
C. F. Denley, Glenmont, Md., 2 ring-necked pheasants, 2 white ring-necked pheasants.

Mario DePrato, Washington, D. C., 3 geckos, garter snake.
Mrs. Catherine L. Devine, Washington, D. C., alligator.
F. H. Dreyer, Laurel, Md., Cooper's hawk.
Vernon Dye, Alexandria, Va., barred owl.
Billy Earman, Washington, D. C., alligator.
Mrs. C. W. Elliott, Washington, D. C., double yellow-headed parrot.
Mrs. J. H. Elvin, Washington, D. C., 3 Pekin ducks.
Dr. Wm. O. Emory, Washington, D. C., 5 salamanders.
Mrs. Arnold Flack, Washington, D. C., 2 grass paroquets.
Florida Reptile Institute, Silver Springs, Fla., 2 red-shouldered hawks.
Dr. R. H. Ford, Washington, D. C., screech owl.
Mrs. C. R. Fornwald, Washington, D. C., screech owl.
Mrs. Agnes L. Fort, Washington, D. C., double yellow-headed parrot.
M. B. Foster, Orlando, Fla., corn snake, mud or horn snake.
Mrs. Edith Frazier, Washington, D. C., yellow-naped parrot.
C. B. Freeman, Washington, D. C., 4 screech owls.
R. L. George, King City, Calif., yellow-billed magpie.
Frank Glaisdell, Washington, D. C., 24 horned lizards.
Sol Gnatt, Washington, D. C., water moccasin.
W. R. Gorman, Washington, D. C., Pekin duck.
Louis Granados, Riverdale, Md., blacksnake.
Donald Griffin, Cambridge, Mass., 9 hibernating bats.
R. Grove, Washington, D. C., raccoon.
Joseph Gruss, Waldorf, Md., bald eagle.
Mrs. Emma T. Hahm, Washington, D. C., 3 fan-tailed pigeons.
Miss Matilda J. Hahn, Washington, D. C., alligator.
Miss Reba Haiden, Washington, D. C., alligator.
Hugh M. Hamill, Sells, Ariz., desert rattlesnake.
J. Harvey, Washington, D. C., Pekin duck.
Thaddeus Hess, Marine Band, Washington, D. C., 5 pygmy rattlesnakes, 5 Florida diamond-back rattlesnakes, 12 water moccasins, blacksnake, corn snake, 2 Florida king snakes, hoop snake or rainbow snake.
W. E. Hill, Petersburg, Va., banded rattlesnake.
P. J. Hollohan, Washington, D. C., Cuban parrot.
Mrs. N. Horan, Washington, D. C., African gray parrot.
L. C. Hosley, Washington, D. C., screech owl.
E. N. Hosmer, Arlington, Va., alligator.
Billy Householder, Phoenix, Ariz., Agassiz's tortoise.
Bob Householder, Phoenix, Ariz., Gila monster.
Tom Householder, Phoenix, Ariz., tarantula.
Dr. Claude Hudson, Washington, D. C., 18 red moon fish.
C. L. Hugh, Washington, D. C., opossum.
John H. Jackson, Oak Grove, Va., great horned owl.
W. B. Jones, Tuscaloosa, Ala., 2 water moccasins, 2 chicken snakes, copperhead snake.
Ellis S. Joseph, New York City, 10 banded finches.
L. S. Julier, Chevy Chase, Md., 2 Java sparrows.
Mrs. Martha Junkin, Washington, D. C., screech owl.
Wilbert Kaiser, Laurel, Md., bald eagle.
Walter Karig, Alexandria, Va., red-vented bulbul.
Mrs. A. S. Keever, Washington, D. C., ground squirrel.
Jacob W. Kennedy, Washington, D. C., tarantula.
C. T. Kettler, Washington, D. C., ribbon snakes.
J. B. Kimes, Silver Spring, Md., barn owl.

R. Lambert, Washington, D. C., 2 bobwhites.
Lester Leigh, Dade City, Fla., 3 garter snakes, chicken snake, 3 southern pilot snakes, 3 Florida king snakes, 3 mud or horned snakes.
M. Libert and Wm. Spawn, Washington, D. C., trap door spider and nest.
Letty L. Light, Washington, D. C., sparrowhawk.
Capt. G. E. Lightcap, Washington, D. C., barred owl.
Mr. and Mrs. F. C. Lincoln, Washington, D. C., salamander.
A. Loveridge, Cambridge, Mass., 2 chicken snakes, black snake, king snake, corn snake.
Rowland Lyon, Chevy Chase, Md., opossum.
W. Mackay, Washington, D. C., alligator.
E. B. Maddox, Hyattsville, Md., 2 raccoons.
Herbert Magruder, Washington, D. C., black snake.
Harry A. Mahone, Roanoke, Va., indigo snake.
Harold E. Martin, Washington, D. C., horseshoe crab.
Maryland University through Dr. Burhoe, 8 hairless rats.
H. W. D. Mayers, Collinsville, Conn., 2 green guenons.
R. H. McCauley, Ithaca, N. Y., 2 pine snakes, indigo snake.
Miss J. McDuffie, Washington, D. C., Pekin duck.
Mrs. J. D. McDuffie, Washington, D. C., Pekin duck.
E. A. McIlhenny, Avery Island, La., 10 wood ducks, black Carolina and turkey vulture hybrid.
Dr. Kenneth Meyers, Detroit, Mich., 5 lizards.
Mrs. Robert Montgomery, Washington, D. C., 2 horned lizards.
R. S. C. Morman, Washington, D. C., alligator.
Wesley McC. Morris, Ednor, Md., 2 Formosan ring-necked pheasants.
Miss F. C. Mortimer, Washington, D. C., screech owl.
E. C. Moyer, Washington, D. C., opossum.
Stanley Mulaik, Rio Grande City, Tex., through Dr. Doris M. Cochran, 2 scaly lizards.
Mrs. J. Murcelle, Washington, D. C., blue jay.
Miss Ann C. Murray, Cumberstone, Md., 2 gray foxes.
National Park Service, through A. E. Borell, Phoenix, Ariz., 12 desert pocket mice.
Mrs. E. Page, Washington, D. C., double yellow-head parrot.
Drury Parks, Washington, D. C., orange-crested cockatoo.
R. L. Parnell, Alexandria, Va., 2 great-horned owls.
Mrs. E. Penn, Washington, D. C., flying squirrel.
D. N. Pratt, Washington, D. C., mouse opossum.
L. C. Probert, Olney, Md., mute swan.
U. S. Randle, Randle Highlands, D. C., American black bear.
F. A. Rapp, Washington, D. C., great blue heron.
Miss Helen Roach, Washington, D. C., 2 Pekin ducks.
E. H. Rolston, Alexandria, Va., 2 gopher tortoises.
Carroll W. Ruhle, Washington, D. C., pilot snake, queen snake, water snake, 3 ring-necked snakes, worm snake.
Mrs. Charles Saltzman, Silver Spring, Md., 2 flying squirrels.
Andrew Santorios, Washington, D. C., 2 tarantulas.
James R. Sarton, Washington, D. C., alligator.
Earl Saunders, Washington, D. C., Canadian porcupine.
Edward Saunders, Kensington, Md., screech owl.
Theodore H. Scheffer, Puyallup, Wash., 4 yelm pocket mice, 2 mountain beavers, varying hare.

Dr. Schultz and Mr. Reid, Washington, D. C., pilot snake.
W. W. Schwink, Washington, D. C., woodchuck.
Harry Sedley, Washington, D. C., marine turtle.
Miss Carolyn Sheldon, Woodstock, Vt., 2 eastern chipmunks.
W. H. Sherbert, Edgewater, Md., red-shouldered hawk.
John Shorey, Washington, D. C., screech owl.
G. W. Shuster, Washington, D. C., baby raccoon.
Allen Smith, Washington, D. C., 2 fence lizards.
Miss Betty Smith, Washington, D. C., white rabbit.
Miss Daisy Smith, Newark, Del., ferret.
Otto Smith, Harpers Ferry, W. Va., gray fox.
Wm. Spawn and M. Libert, Washington, D. C., trap door spider and nest.
Miss Daisy R. Spradling, Athens, Tenn., osprey or fish hawk.
Miss Katherine Stafford, Baltimore, Md., white-throated capuchin, marmoset.
F. F. Stayton, Chestertown, Md., brown capuchin.
Alan N. Steyne, Washington, D. C., 2 blue-crowned hanging paroquets, Tui paroquet.
H. F. Stroup, Washington, D. C., grivet monkey.
J. J. Talcott, Washington, D. C., horned lizard.
Dr. W. M. Tallant, Manatee, Fla., indigo snake.
Ralph Taylor, Washington, D. C., black widow spider.
Mrs. S. G. Taylor, Washington, D. C., yellow-naped parrot.
M. R. Thorp, Washington, D. C., double-yellow-headed parrot.
Mrs. Ethel B. Timmons, Washington, D. C., Pekin duck.
Miss Mary Troiano, Washington, D. C., salamander.
Carl Tucker, Washington, D. C., hog-nosed snake.
Horace A. Tucker, Washington, D. C., indigo snake.
U. S. Biological Survey, through C. E. Beebe, St. Regis, Mont., puma; through J. S. C. Boswell, Washington, D. C., 3 corn snakes; through H. N. Elliott, El Paso, Tex., 9 prairie dogs, 6 pocket gophers; through J. Finley and C. E. McFarland, Cashmere, Wash., 3 mantled ground squirrels, 5 Hollister chipmunks; through John H. Gatlin, Albuquerque, N. Mex., puma, 2 prairie wolves; through Gill Gigstead, Havana, Ill., 4 coyotes; through A. S. Hamm and N. E. Buell, Casper, Wyo., long-tailed weasel, 2 picket-pin gophers; through L. E. Hicks and L. Baumgartner, Columbus, O., 4 red squirrels; through F. N. Jarvis, Washington, D. C., 3 meadow mice, pied-billed grebe; through E. V. Komarek, Thomasville, Ga., opposum, 3 cotton rats; through Kenneth Krumm, Middle River, Minn., muskrat; through C. R. Landon, San Antonio, Tex., 4 Baird wood rats, 4 cotton rats, 3 Rio Grande ground squirrels, hispid pocket mouse; through C. R. Landon and J. M. Hill, Jr., Bryan, Tex., 6 pocket gophers; through C. R. Landon and L. C. Whitehead, San Antonio, Tex., Baird wood rat, cotton rat, hispid pocket mouse, 2 gray pigmy mice, 3 Merriam's silky pocket mice, 2 nine-banded armadillos, 3 pallid white-footed mice, ground squirrel, red house mouse; through J. Manweiler, Baudette, Minn., 6 varying hares or snowshoe rabbits; through Wm. H. Marshall, Bingham, Utah, 3 marmots; through O. J. Murie, Seattle, Wash., bald eagle, glaucous-winged gull; through C. E. Mushback, Cache, Okla., 8 prairie dogs, 2 cotton rats, 2 round-tail wood rats, Old field mouse; through W. D. Parker, Fort Totten, N. Dak., 6 flag squirrels, 11 Richardson ground squirrels; through W. Taylor and V. W. Lehmann, Eagle Lake, Tex., 7 Texan red wolves; through H. W. Terhune, DeWitt, Ark., 6 cotton rats; through Stanley Young, Washington, D. C., bay lynx.
U. S. Forest Service, Washington, D. C., Kaibab squirrel.
W. C. Varner, Washington, D. C., horseshoe crab.

Dr. Charles T. Vorhies, Tucson, Ariz., 2 Merriam kangaroo rats.
Alex Walker, Tillamook, Ore., Washington varying hare, Oregon creeping mouse.
Col. W. E. Welliver, Washington, D. C., 2 African monitors.
P. C. Wercks, Washington, D. C., grass paroquet.
W. David White, Washington, D. C., 3 red-shouldered hawks.
Mrs. J. H. Whitmore, Washington, D. C., yellow-naped parrot.
L. Wilkins, Takoma Park, Md., banded rattlesnake.
Mrs. B. F. Williams, Chevy Chase, Md., Canadian porcupine.
G. B. Williams, Thurmont, Md., 12 banded rattlesnakes, 10 copperheads, 5 water snakes, 2 hog-nosed snakes, 11 pilot snakes, 2 fence lizards.
Mrs. R. Williams, Washington, D. C., alligator.
R. W. Williams, Washington, D. C., 2 rhesus monkeys.
E. W. Wilson, Washington, D. C., groundhog.
Lee Guy Wilson Estate, Tree Top, Va., barred owl.
John Wyman, Washington, D. C., duck.
Philip N. Youtz, New York City, kinkajou.
Yugoslav Legation, Washington, D. C., alligator.

Births.—There were 50 mammals born, 37 birds hatched, and 14 reptiles hatched or born in the Park during the year. These include the following:

MAMMALS

Scientific name	Common name	*Number*
Ammotragus lervia	Aoudad	3
Axis axis	Axis deer	3
Bison bison	American bison	2
Bos frontalis	Gayal	2
Bos indicus	Zebu	1
Camelus dromedarius	Arabian camel	1
Canis lupus lycaon	Timber wolf	2
Capromys pilorides	Hutia	3
Cervus elaphus	Red deer	2
Dama dama	Fallow deer	8
Dolichotis salinicola	Dwarf cavy	4
Equus przewalskii	Mongolian wild horse	1
Erethizon dorsatum	Eastern porcupine	1
Felis onca	Jaguar	3
Lama glama	Llama	3
Mephitis nigra	Common skunk	1
Oryx beisa annectens	Ibean beisa oryx	1
Sika nippon	Japanese deer	8
Ursus gyas	Alaska Peninsula bear	1

BIRDS

Anas undulata	African yellow-billed duck	1
Ardea herodius×*A. occidentalis*	Heron hybrid	3
Branta canadensis	Canada goose	2
Chrysolophus pictus	Golden pheasant	5
Larus novaehollandiae	Silver gull	14
Pavo cristatus	Peafowl	5
Streptopelia risoria	Ring-necked dove	2

REPTILES

Boa canina	Green tree boa	6
Egernia cunninghami	Cunningham skink	2
Sistrurus catenatus catenatus	Massasauga	6

Exchanges.—In an exchange with the Philadelphia Zoological Gardens there were received the following: Hybrid tree kangaroo, American elk or wapiti, 2 European water snakes, 4 European vipers, 6 green tree frogs, and 10 small European lizards. From Louis Ruhe, Inc., New York City, were received a cock of the rock and a koel. A pair of gannets was received from the Toronto Park Zoo, Toronto, Canada. From Dr. Johan Beetz, Director, Service de l'Élevage des Animaux a' Fourrure, Province of Quebec, was received a splendid specimen of ranch-bred mink obtained by him from the mink farm of Dr. J. E. La Forest, near the city of Quebec.

Purchases.—Important purchases during the year were three pronghorn antelopes, 6 jackass penguins, a pair of jabiru storks, and 3 black-tailed marmosets. In December 1936, 30 hummingbirds were purchased in Habana, Cuba, and transported by airplane to the Park. Only 2 died en route, the remainder arriving in good condition.

REMOVALS

Deaths.—Important losses by death during the year include two chimpanzees, one of which, "Soko", had been in the collection since September 8, 1915. A Komodo dragon received June 21, 1934, died July 11, 1937. A Burmese deer and saiga antelope died during this period.

During the year 405 specimens that died were sent to the National Museum.

ANIMALS IN COLLECTION THAT HAD NOT PREVIOUSLY BEEN EXHIBITED

MAMMALS

Scientific name	*Common name*
Callithrix argentata	Black-tailed marmoset.
Cricetomys gambianus	African pouched rat.

BIRDS

Catreus wallichii	Cheer pheasant.
Gennaeus albocristatus	White-crested kaleege.

REPTILES

Epicrates subflavus	Jamaica boa.

Statement of accessions

Class	Presented	Born	Received in exchange	Purchased	On deposit	Total
Mammals	185	50	3	26	15	279
Birds	97	37	26	204	18	382
Reptiles	224	14	16	36	25	315
Amphibians	7		6	19		32
Fishes			50			50
Arachnids	6					6
Crustaceans	2					2
Insects	1					1
Total	522	101	101	285	58	1,067

Summary

Animals on hand July 1, 1936	2,191
Accessions during the year	1,067
Total animals in collection during year	3,258
Removal from collection by death, exchange, and return of animals on deposit	916
In collection June 30, 1937	2,342

Status of collection

Class	Species	Individuals	Class	Species	Individuals
Mammals	200	644	Insects	1	50
Birds	313	890	Mollusks	1	1
Reptiles	127	438	Crustaceans	1	1
Amphibians	30	150			
Fishes	26	159	Total	701	2,342
Arachnids	2	9			

ANIMALS IN THE NATIONAL ZOOLOGICAL PARK, JUNE 30, 1937

MAMMALS

MARSUPIALIA

		Number
Didelphidae:		
Didelphis virginiana	Opossum	9
Metachirus opossum	Zorro or banana opossum	1
Macropodidae:		
Dendrolagus ursinus×*D. inustus*	Hybrid tree kangaroo	1

CARNIVORA

Felidae:		
Felis concolor azteca	Mexican puma	1
Metachirus opossum	Puma	4
Felis leo	Lion	6
Felis ocreata	Uganda wild tabby	1
Felis onca	Jaguar	5
	Black jaguar	2
Felis pardus	Black leopard	1
Felis pardus suahelicus	East African leopard	1
Felis temmincki	Golden cat	1
Felis tigris longipilis	Siberian tiger	2

Felidae—Continued.		
Felis tigris sondaicus	Sumatran tiger	2
Lynx baileyi	Bailey's lynx	1
Lynx caracal	Caracal	1
Lynx rufus	Bay lynx	5
Viverridae:		
Civettictis civetta	Civet	1
Genetta dongalana neumanni	Neumann's genet	1
Moschothera megaspila	Civet	3
Hyaenidae:		
Crocuta crocuta germinans	East African spotted hyena	1
Hyaena brunnea	Brown hyena	2
Canidae:		
Canis latrans	Coyote	13
	Albino coyote	1
Canis latrans × *domestica*	Coyote and dog hybrid	2
Canis lupus lycaon	Timber wolf	4
Canis lupus nubilus	Wolf	8
Canis lupus nubilus × *domesticus*	Wolf and dog hybrid	1
Canis rufus	Texan red wolf	7
Chrysocyon jubata	Maned wolf	1
Urocyon cinereoargenteus	Gray fox	7
Vulpes fulva	Red fox	9
Procyonidae:		
Nasua narica	Gray coatimundi	3
Potos flavus	Kinkajou	3
Procyon cancrivorus	Crab-eating raccoon	1
Procyon lotor	Raccoon	17
	Albino raccoon	1
	Black raccoon	1
Bassariscidae:		
Bassariscus astutus	Ring-tail or cacomistle	2
Mustelidae:		
Galictis barbara barbara	White tayra	2
Lutra canadensis vaga	Florida otter	2
Mellivora capensis	Ratel	1
Mephitis nigra	Skunk	7
Mustela cicognani cicognani	Bonaparte's weasel	1
Mustela eversmanni	Ferret	3
Mustela longicauda longicauda	Long-tailed weasel	1
Mustela vison vison	Mink	1
Spilogale ambarvalis	Florida spotted skunk	1
Ursidae:		
Euarctos americanus	American black bear	6
Euarctos emmonsii	Glacier bear	1
Helarctos malayanus	Malay or sun bear	1
Thalarctos maritimus	Polar bear	2
Thalarctos maritimus × *Ursus gyas*	Hybrid bear	3
Ursus arctos	European brown bear	4
Ursus gyas	Alaska Peninsula brown bear	4
Ursus kidderi	Kidder's bear	2
Ursus middendorffi	Kodiak bear	3
Ursus sitkensis	Sitka brown bear	3
Ursus thibetanus	Himalayan bear	1

PINNIPEDIA

Otariidae:		
Eumetopias jubatus	Steller's sea lion	1
Zalophus californianus	California sea lion	2
Phocidae:		
Phoca richardii	Pacific harbor seal	3

PRIMATES

Callitrichidae:		
Callithrix jacohus	Common marmoset	1
Mico argentata	Black-tailed marmoset	3
Oedipomidas geoffroyi	Central American marmoset	1
Cebidae:		
Cebus apella	Brown capuchin	1
Cebus capucinus	White-throated capuchin	5
Cebus fatuella	Weeping capuchin	4
Cebus sp	Brown capuchin	2
Cercopithecidae:		
Cercocebus fuliginosus	Sooty mangabey	5
Cercopithecus albigularis	Syke's guenon	2
Cercopithecus aethiops aethiops	Grivet monkey	1
Cercopithecus aethiops roloway	Roloway monkey	1
Cercopithecus aethiops sabaeus	Green guenon	4
Cercopithecus diana	Diana monkey	1
Cercopithecus neglectus	De Brazza's guenon	1
Cercopithecus petaurista	Lesser white-nosed guenon	2
Colobus polycomos caudatus	White-tailed guereza	1
Colobus polycomos polycomos	White-tailed colobus	1
Macaca fuscata	Japanese monkey	2
Macaca mordax	Javan macaque	3
Macaca mulatta	Rhesus monkey	13
Macaca silenus	Wanderoo monkey	2
Macaca sinica	Bonnet monkey	1
Macaca sp	Macaque monkey	1
Magus maurus	Moor monkey	1
Mandrillus leucophaeus	Drill	1
Mandrillus sphinx	Mandrill	3
Papio comatus	Chacma	2
Papio hamadryas	Hamadryas baboon	1
Papio papio cynocephalus	East African baboon	2
Papio papio papio	West African baboon	1
Theropithecus gelada	Gelada baboon	1
Hylobatidae:		
Symphalangus syndactylus	Siamang gibbon	1
Pongiidae:		
Pongo abelii	Sumatran orangutan	1

RODENTIA

Sciuridae:		
Callospermophilus saturatus	Mantled ground squirrel	2
Citellus beecheyi douglassii	Douglas ground squirrel	1
Citellus mexicanus parvidens	Rio Grande ground squirrel	3
Citellus richardsonii	Richardson ground squirrel	9

Sciuridae—Continued.		
Citellus richardsonii elegans	Picket-pin gopher	1
Citellus tridecemlineatus	Flag squirrel	6
Cynomys ludovicianus	Prairie dog	13
Eutamias amoenus ludibundus	Hollister chipmunk	2
Glaucomys volans	Flying squirrel	5
Marmota flaviventris	Marmot or whistler	3
Marmot monax	Woodchuck or groundhog	7
	Albino woodchuck or groundhog	1
Sciurus finlaysoni	Lesser white squirrel	2
Sciurus hoffmani sub. sp	Hoffman's squirrel	2
Sciurus kaibabensis	Kaibab squirrel	1
Sciurus niger	Fox squirrel	1
Tamias striatus	Eastern chipmunk	2
Tamiasciurus hudsonicus	Red squirrel	2
Geomyidae:		
Geomys arenarius	Sand pocket gopher	4
Thomomys douglasii yelmensis	Yelm pocket gopher	1
Heteromyidae:		
Perognathus hispidus	Hispod pocket mouse	1
Perognathus merriami merriami	Merriam's silky pocket mouse	2
Perognathus penicilliatus	Desert pocket mouse	2
Castoridae:		
Castor canadensis	Beaver	2
Cricetidae:		
Baiomys taylori taylori	Gray pigmy mouse	1
Microtus oregoni oregoni	Oregon creeping mouse	1
Microtus pennsylvanicus	Meadow mouse	2
Neotoma floridana attwateri	Round-tailed wood rat	2
Neotoma micropus	Baird wood rat	2
Ondatra zibethica	Black muskrat	1
Peromyscus leucopus	White-footed mouse	4
Peromyscus maniculatus pallescens	Pallid white-footed mouse	2
Sigmodon hispidus hispidus	Cotton rat	9
Sigmodon hispidus texianus	Cotton rat	5
Muridae:		
Cricetomys gambianus	Gambia pouched rat	2
Mus musculus	Red house mouse	2
Mus wagneri	Waltzing mouse	3
Rattus domestica	Hairless rat	4
Dipodidae:		
Dipodomys merriami	Merriam kangaroo rat	2
Hystricidae:		
Acanthion brachyurum	Malay porcupine	2
Hystrix galeata	East African porcupine	2
Erethizontidae:		
Erethizon dorsatum	Eastern porcupine	1
Myocastoridae:		
Myocastor coypu	Coypu rat	2
Capromyidae:		
Capromys pilorides	Hutia	9
Cuniculidae:		
Cuniculus paca virgatus	Central American paca	2

Dasyproctidae:		
Dasyprocta croconota prymnolopha	Agouti	2
Dasyprocta rubrata	Trinidad agouti	2
Myoprocta sp	Tailed agouti	1
Caviidae:		
Cavia porcellus	Domestic guinea pig	6
Dolichotis magellanica	Patagonian cavy	1
Dolichotis salinicola	Dwarf cavy	2
Hydrochoeridae:		
Hydrochoerus hydrochoerus	Capybara	1

LAGOMORPHA

Leporidae:		
Lepus americanus	Varying hare or snowshoe rabbit	1
Oryctolagus cuniculus	Domestic rabbit	2
	Angora rabbit	1

ARTIODACTYLA

Bovidae:		
Ammotragus lervia	Aoudad	11
Anoa depressicornis	Anoa	1
Antilope cervicapra	Black buck or Indian antelope	1
Bison bison	American bison	21
Bos frontalis	Gayal	4
Bos indicus	Zebu	4
Boselaphus tragocamelus	Nilgai	1
Bubalus bubalis	Indian buffalo	1
Capra sibirica	Siberian ibex	1
Connochaetes gnu	White-tailed gnu	2
Connochaetes taurinus albojubatus	White-bearded gnu	2
Hemitragus jemlahicus	Tahr	5
Onotragus lechee	Lechee antelope	1
Oryx beisa annectens	Ibean beisa oryx	3
Ovis europaeus	Mouflon	5
Poephagus grunniens	Yak	4
Taurotragus oryx	Eland	2
Antilocapridae:		
Antilocapra americana	Pronghorn antelope	3
Cervidae:		
Axis axis	Axis deer	8
Cervus canadensis	American elk	3
Cervus duvaucellii	Barasingha deer	4
Cervus elaphus	European red deer	18
Cervus xanthopygus	Bedford deer	2
Dama dama	Fallow deer	16
	White fallow deer	19
Muntiacus sinensis	Barking or rib-faced deer	1
Odocoileus costaricensis	Costa Rican deer	2
Odocoileus virginianus	Virginia deer	3
Rusa moluccensis	Molucca deer	2
Sika nippon	Japanese deer	23
Camelidae:		
Camelus bactrianus	Bactrian camel	1
Lama glama	Llama	10
Lama huanacus	Guanaco	2

Tayassuidae:		
Pecari angulatus	Collared peccary	3
Tayassu pecari	White-lipped peccary	2
Suidae:		
Babirussa alfurus	Babirussa	2
Phacochoerus aethiopicus massaicus	East African warthog	3
Sus scrofa	European wild boar	1
Hippopotamidae:		
Choeropsis liberiensis	Pigmy hippopotamus	2
Hippopotamus amphibius	Hippopotamus	1

PERISSODACTYLA

Equidae:		
Equus grevyi	Grevy's zebra	1
Equus grevyi-asinus	Zebra-ass hybrid	1
Equus grevyi-caballus	Zebra-horse hybrid	1
Equus onager	Asiatic wild ass or kiang	2
Equus przewalskii	Mongolian wild horse	3
Equus quagga chapmani	Chapman's zebra	8
Equus zebra	Mountain zebra	2
Tapiridae:		
Tapirella bairdii	Baird's tapir	1
Tapirus terrestris	Brazilian tapir	1
Rhinocerotidae:		
Diceros bicornis	Black rhinoceros	1

PROBOSCIDEA

Elephantidae:		
Elephas sumatranus	Sumatra elephant	1
Elephas maximus	Indian elephant	1
Loxodonta africana oxyotis	African elephant	1

EDENTATA

Choloepodidae:		
Choloepus didactylus	Two-toed sloth	4
Dasypodidae:		
Dasypus novemcinctus	Nine-banded armadillo	4

CHIROPTERA

Desmodontidae:		
Desmodus rotundus	Trinidad vampire bat	3

BIRDS

STRUTHIONIFORMES

Struthionidae:		
Struthio camelus	South African ostrich	1

RHEIFORMES

Rheidae:		
Rhea americana	Common rhea or nandu	1

CASUARIIFORMES

Casuariidae:		
Casuarius unappendiculatus	Single-wattled cassowary	1
Dromiceiidae:		
Dromiceius n. hollandiae	Common emu	1

SPHENISCIFORMES

Spheniscidae:		
Spheniscus demersus	Jackass penguin	6

PELECANIFORMES

Pelecanidae:		
Pelecanus californicus	California brown pelican	2
Pelecanus conspicillatus	Australian pelican	1
Pelecanus erythrorhynchos	American white pelican	7
Pelecanus erythrorhynchos × *P. occidentalis*	Hybrid pelican	1
Pelecanus occidentalis	Brown pelican	5
Pelecanus onocrotalus	European pelican	2
Pelecanus roseus	Rose-colored pelican	2
Sulidae:		
Morus bassanus	Gannet	2
Sula granti	Blue-footed booby	1
Phalacrocoracidae:		
Nannopterum harrisi	Flightless cormorant	2
Phalacrocorax auritus albociliatus	Farallon cormorant	2
Phalacrocorax auritus floridanus	Florida cormorant	1
Anhingidae:		
Anhinga anhinga	Anhinga	2

CICONIIFORMES

Ardeidae:		
Ardea herodias	Great blue heron	1
Ardea herodias × *A. occidentalis*	Hybrid heron	4
Ardea occidentalis	Great white heron	1
Casmerodius albus egretta	American egret	2
Nycticorax nycticorax naevius	Black-crowned night heron	15
Cochleariidae:		
Cochlearius cochlearius	Boatbill heron	3
Balaenicipitidae:		
Balaeniceps rex	Shoe-bill stork	1
Scopidae:		
Scopus umbretta	Hammerhead	1
Ciconiidae:		
Dissoura episcopus	Woolly-necked stork	1
Ephippiorhynchus senegalensis	Saddle-billed stork	1
Jabiru mycteria	Jabiru	2
Leptoptilus crumeniferus	Marabou	1
Leptoptilus dubius	Indian adjutant	1
Leptoptilus javanicus	Lesser adjutant	2
Mycteria americana	Wood ibis	1

Threskiornithidae:		
Ajaia ajaja	Roseate spoonbill	1
Guara alba	White ibis	4
Guara alba × G. rubra	Hybrid ibis	1
Guara rubra	Scarlet ibis	2
Threskiornis aethiopica	Sacred ibis	2
Threskiornis melanocephala	Black-headed ibis	2
	ANSERIFORMES	
Anatidae:		
Aix sponsa	Wood duck	18
Alopochen aegyptiacus	Egyptian goose	2
Anas domestica	Peking duck	15
Anas platyrhynchos	Mallard	35
	Call duck (white)	1
Anas rubripes	Black or dusky mallard	2
Anas undulata	African yellow-billed duck	8
Anser albifrons	American white-fronted goose	3
Anser fabalis	Bean goose	2
Branta bernicla	Brant	3
Branta canadensis	Canada goose	6
Branta canadensis hutchinsii	Hutchin's goose	4
Branta canadensis minima	Cackling goose	4
Branta canadensis occidentalis	White-cheeked goose	20
Branta leucopsis	Barnacle goose	1
Cairina moschata	Muscovy duck	3
Casarca variegata	Paradise duck	1
Cereopsis novaehollandiae	Cereopsis or Cape Barren goose	1
Chen atlantica	Snow goose	7
Chen caerulescens	Blue goose	9
Chloephaga leucoptera	Magellan goose	1
Cygnopsis cygnoides	Chinese goose	1
Cygnus columbianus	Whistling swan	3
Cygnus olor	Mute swan	3
Dafila acuta	Pintail duck	5
Dafila bahamensis	Bahaman pintail	1
Dafila acuta × D. sp	Pintail hybrid	1
Dendrocygna arborea	Black-billed duck	5
Dendrocygna autumnalis	Black-bellied tree duck	4
Dendrocygna viduata	White-faced tree duck	1
Leptotarsis eytoni	Eyton's tree duck	1
Mareca americana	Bald pate	3
Neochen jubata	Orinoco goose	1
Nettion carolinense	Green-winged teal	1
Nyroca collaris	Ring-neck duck	1
Nyroca valisineria	Canvas-back duck	1
Philacte canagica	Emperor goose	11
Plectropterus gambensis	Spur-winged goose	1
Querquedula cyanoptera	Cinnamon teal	1
Querquedula discors	Blue-winged teal	1
Sarkidiornis melanota	Comb duck	1
Tadorna tadorna	Shelldrake	1

FALCONIFORMES

Cathartidae:		
Cathartes aura	Turkey vulture	3
Cathartes aura × *Coragyps atratus*	Black Carolina and turkey vulture hybrid	1
Coragyps atratus	Black vulture	1
Gymnogyps californianus	California condor	3
Vultur gryphus	South American condor	1
Accipitridae:		
Aegypius monachus	Cinereous vulture	1
Aquila chrysaetos	Golden eagle	2
Buteo borealis	Red-tailed hawk	5
Buteo lineatus	Red-shouldered hawk	3
Buteo platypterus	Broad-winged hawk	1
Buteo swainsoni	Swainson's hawk	1
Gypaetus barbatus grandis	Lammergeyer	1
Gyps rueppelli	Ruppell's vulture	1
Haliastur indus	Malay brahminy kite	1
Haliaeetus leucocephalus	Bald eagle	20
Milvus migrans	Yellow-billed kite	1
Pandion haliactus carolinensis	Osprey or fish hawk	2
Stephanoaetus coronatus	Crowned hawk eagle	1
Torgos tracheliotus	African eared-vulture	1
Uroactus audax	Wedge-tailed eagle	1
Falconidae:		
Falco sparverius	Sparrow hawk	1
Polihierax semitorquatus	African pigmy falcon	3
Polyborus cheriway	Audubon's caracara	2
Polyborus plancus	South American caracara	1

GALLIFORMES

Cracidae:		
Crax globulosa	Spix's wattled curassow	1
Crax rubra	Panama curassow	1
Mitu mitu	Razor-billed curassow	1
Mitu salvini	Salvin's curassow	1
Phasianidae:		
Argusianus argus	Argus pheasant	1
Calophasis ellioti	Elliot's pheasant	1
Catreus wallichii	Cheer pheasant	1
Chrysolophus amherstiae	Lady Amherst's pheasant	3
Chrysolophus amherstiae × *Syrmaticus reevesi*	Hybrid	1
Chrysolophus pictus	Golden pheasant	5
Colinus virginianus	Bobwhite	1
Coturnix japonica	Asiatic migratory quail	3
Crossoptilon mantchuricum	Manchurian pheasant	2
Gennaeus albocristatus	White-crested kaleege	1
Gennaeus lineatus	Lineated pheasant	3
Gennaeus nycthemerus	Silver pheasant	2
Gennaeus nycthemerus bellii	Bell's silver pheasant	1
Hierophasis swinhoei	Swinhoe's pheasant	2

Phasianidae—Continued.		
Lophophorus impeyanus	Himalayan Impeyan pheasant	2
Pavo cristatus	Blue peafowl	7
	White peafowl	1
Pavo muticus	Green peafowl	2
Phasianus torquatus	Ring-necked pheasant	4
	White ring-necked pheasant	2
Phasianus torquatus formosanus	Formosan ring-necked pheasant	2
Syrmaticus reevesi	Reeve's pheasant	2
Numididae:		
Numida mitrata reichenowi	Reichenow's helmeted guinea fowl	1
Meleagrididae:		
Meleagris gallopavo	Domestic turkey	1

GRUIFORMES

Gruidae:		
Anthropoides virgo	Demoiselle crane	3
Antigone australasiana	Australian crane	1
Balearica pavonina	West African crowned crane	1
Balearica regulorum gibbericeps	East African crowned crane	1
Grus canadensis canadensis	Little brown crane	1
Grus canadensis tabida	Sandhill crane	1
Grus leucauchen	White-naped crane	1
Grus leucogeranus	Siberian crane	2
Psophiidae:		
Psophia crepitans	Gray-backed trumpeter	1
Rallidae:		
Fulica americana	American coot	1
Gallinula chloropus cachinnans	Florida gallinule	1
Limnocorax flavirostra	African black rail	3
Porphyrio melanotus	New Zealand mud hen	1
Porphyrio poliocephalus	Gray-headed porphyrio	2
Eurypygidae:		
Eurypyga helias	Sun bittern	2
Otididae:		
Otis cafra	Denham's bustard	1
Otis caffra jacksoni	Jackson's bustard	1

CHARADRIIFORMES

Haematopodidae:		
Haematopus ostralegus	European oyster catcher	2
Charadriidae:		
Belonopterus cayennensis	South American lapwing	1
Sarciophorus tectus	Black-headed plover	1
Scolopacidae:		
Philomachus pugnax	Ruff	2
Laridae:		
Larus argentatus	Herring gull	2
Larus delawarensis	Ring-billed gull	5
Larus glaucescens	Glaucous-winged gull	1
Larus novaehollandiae	Silver gull	60
Larus occidentalis	Western gull	1
Larus ridibundus	European gull	1

COLUMBIFORMES

Pteroclidae:		
Pterocles orientalis	Oriental sandgrouse	2
Columbidae:		
Caloenas nicobarica	Nicobar pigeon	1
Columba leuconota	Tibetan pigeon	2
Columba palumbus	Wood pigeon	2
Columba, domestic variety	Archangel pigeon	2
Columba, domestic variety	Fan-tailed pigeon	3
Goura victoria	Victoria crowned pigeon	2
Leptotila rufaxilla	Scaled pigeon	1
Streptopelia risoria	Ring-necked dove	7
Streptopelia senegalensis	East African ring-necked dove	1
Turtur risorius	Turtle dove	1
Zenaidura macroura macroura	West Indian dove	1

PSITTACIFORMES

Loriidae:		
Eos rubra	Red lory	1
Trichoglossus cyanogrammus	Green-naped lory	1
Trichoglossus forsteni	Forsten's paroquet	1
Trichoglossus novaehollandiae	Blue-bellied lory	1
Psittacidae:		
Agapornis lilianae	Nyassa lovebird	2
Amazona albifrons	White-fronted parrot	4
Amazona amazonica	Orange-winged parrot	2
Amazona arausiaca	Bouquet's parrot	1
Amazona auropalliata	Yellow-naped parrot	9
Amazona farinosa	Mealy parrot	1
Amazona festiva	Festive parrot	1
Amazona leucocephala	Cuban parrot	2
Amazona ochrocephala	Orange-fronted parrot	2
Amazona ochroptera	Yellow-shouldered parrot	3
Amazona oratrix	Double yellow-head parrot	7
Amazona sp	Red-fronted parrot	1
Amazona ventralis	Hispaniolan white-fronted parrot	1
Amazona viridigenalis	Red-crowned parrot	1
Anodorhynchus hyacinthinus	Hyacinthine macaw	1
Ara ararauna	Yellow and blue macaw	2
Ara chloroptera	Red and yellow macaw	1
Ara macao	Red, yellow and blue macaw	4
Ara maracana	Illiger's macaw	4
Ara mexicana	Mexican green macaw	3
Ara severa	Severe macaw	1
Aratinga holochlora	White-eyed parrot	1
Aratinga jendaya	Jenday conures	1
Aratinga solstitialis	Yellow paroquet	1
Brotogeris jugularis	Tovi paroquet	2
Coracopsis nigra	Lesser vasa parrot	1
Cyanopsittacus spixi	Spix's macaw	2
Eolophus roseicapillus	Roseate cockatoo	4
Eupsittula aurea	Golden-crowned paroquet	1

Psittacidae—Continued.		
Eupsittula canicularis	Petz paroquet	1
Forpus guianensis	Green-rumped parrotlet	1
Kakatoe citrinocristata	Orange-crested cockatoo	1
Kakatoe galerita	Sulphur-crested cockatoo	2
Kakatoe leadbeateri	Leadbeater's cockatoo	2
Kakatoe moluccensis	Great red-crested cockatoo	1
Kakatoe sulphurea	Lesser sulphur-crested cockatoo	1
Leptolophus novaehollandicus	Cockatiel	2
Melopsittacus undulatus	Grass paroquet	20
Microglossus aterrimus	Great black cockatoo	1
Myopsitta monachus	Quaker paroquet	1
Nandayus nanday	Nanday paroquet	1
Nestor notabilis	Kea	4
Pionites xanthomera	Amazonian caique	2
Pionus menstruus	Blue-headed parrot	1
Psittacula k. krameri	Long-tailed paroquet	3
Psittacula nepalensis	Nepalese paroquet	1
Psittacus erithacus	African gray parrot	2
Tanygnathus megalorhynchus	Great-billed parrot	1

CUCULIFORMES

Cuculidae:		
Centropus sinensis	Sumatran coucal	1
Cuculus canorus	European cuckoo	1
Eudynamis scolopaccus	Koel	2

STRIGIFORMES

Tytonidae:		
Tyto alba pratincola	Barn owl	3
Strigidae:		
Bubo virginianus	Great horned owl	5
Otus asio	Screech owl	6
Strix varia	Barred owl	12

CAPRIMULGIFORMES

Caprimulgidae:		
Chordeiles minor	Night hawk	1

TROGONIFORMES

Trogonidae:		
Priotelus temnurus	Cuban trogon	2

CORACIIFORMES

Alcedinidae:		
Dacelo gigas	Kookaburra	2
Momotidae:		
Momotus momotus parensis	Motmot	2
Bucerotidae:		
Buceros rhinoceros	Rhinoceros hornbill	1
Bucorvus abyssinicus	Abyssinian ground hornbill	2
Dichoceros bicornis	Concave casque hornbill	2

PICIFORMES

Ramphastidae:		
Aulacorhynchus erythrognathus	Venezuelan toucanette	1
Pteroglossus bitorquatus	Two-banded aracari	3
Ramphastos ariel	Ariel toucan	1
Ramphastos toco	Toco touuan	2
Selenidera culik	Guiana toucanette	1

PASSERIFORMES

Cotingidae:		
Chasmorhynchus nudicollis	Naked-throated bell-bird	1
Graculidae:		
Gracula palawanensis	Palawan mynah	2
Gracula religiosa	Southern hill mynah	4
Tyrannidae:		
Pitangus sulphuratus	Kiskadee flycatcher	2
Corvidae:		
Aphelocoma californica woodhousei	Woodhouse's jay	2
Calocitta formosa	Mexican magpie jay	1
Cissa chinensis	Chinese cissa	1
Corvus albus	White-breasted crow	2
Corvus brachyrhynchos	American crow	5
Corvus corax sinuatus	American raven	1
Corvus coronoides	Australian crow	1
Corvus cryptoleucus	White-necked raven	7
Cyanocitta cristata	Blue jay	1
Cyanocorax cyanopogon	White-naped jay	2
Pica nuttalli	Yellow-billed magpie	5
Pica pica hudsonia	American magpie	6
Urocissa occipitalis	Red-billed blue magpie	2
Xanthoura luxuosa guatemalensis	Guatemalan green jay	1
Paradiseidae:		
Paradisea minor	Lesser bird of paradise	1
Seleucides niger	12-wired bird of paradise	2
Timaliidae:		
Pomatorhinus erythrogenys imberbis	Salvadori's scimitar-babbler	1
Pycnonotidae:		
Molpastes haemorrhous	Black-headed bulbul	1
Otocompsa jocosus	Red-eared bulbul	1
Turdidae:		
Mimocichla rubripes	Western red-legged thrush	6
Turdus grayi	Bonaparte's thrush	1
Laniidae:		
Lanius dorsalis	Teita fiscal shrike	2
Sturnidae:		
Cosmopsaris regius	Splendid starling	3
Galeopsar salvadorii	Crested starling	1
Lamprocolius sycobius	Southern glossy starling	1
Coerebidae:		
Cyanerpes cyaneus	Blue honey creeper	1
Icteridae:		
Agelaius assimilis	Cuban red-winged blackbird	3
Agelaius icterocephalus	Yellow-headed marsh bird	1

Icteridae—Continued.		
Amblyrhamphus holosericeus	Red-headed marsh troupial	1
Gymnomystax mexicanus	Giant oriole	1
Icterus giraudi	Giraud's oriole	1
Molothrus ater	Cowbird	1
Psomocolax oryzivora	Rice grackle	1
Xanthocephalus xanthocephalus	Yellow-headed blackbird	4
Thraupidae:		
Spindalis pretrei	Cuban spindalis	3
Tanagra luteicapilla	Yellow-crowned euphonia	1
Thraupis cana	Blue tanager	1
Thraupis palmarum melanoptera	Palm tanager	1
Ploceiidae:		
Amadina fasciata	Cut-throat finch	1
Coliuspasser ardens	Red-necked whydah	4
Diatropura procne	Giant whydah	8
Euplectes capensis	Yellow-shouldered whydah	1
Neochmia phaeton	Crimson or blood finch	1
Padda oryzivora	White Java sparrow	2
Ploceus intermedius	Black-cheeked weaver	20
Ploceus rubiginosus	Chestnut-breasted weaver	8
Poephila acuticauda	Long-tailed finch	9
Poephila gouldiae	Gouldian finch	5
Quelea sanguinirostris intermedia	Southern masked weaver finch	1
Steganopleura bichenovii	Banded finch	5
Steganura paradisea	Paradise whydah	7
Taeniopygia castanotis	Zebra finch	3
Fringillidae:		
Carduelis carduelis	European gold finch	1
Fringilla montifringilla	Brambling finch	1
Melopyrrha nigra	Cuban bullfinch	2
Paroaria cristata	Red-crested or Brazilian cardinal	1
Pheucticus tibialis	Yellow grosbeak	1
Serinus canarius	Canary	8
Sicalis minor	Lesser yellow finch	1
Sporophila aurita	Hick's seed-eater	4
Sporophila gutturalis	Yellow-bellied seed-eater	2
Tiaris canora	Melodius grassquit	2
Tiaris olivacea	Mexican grassquit	15
Volatinia jacarini	Blue-black grassquit	2

Reptiles

Loricata

Crocodylidae:		
Alligator mississipiensis	Alligator	36
Caiman sclerops	Caiman	3
Crocodylus acutus	American crocodile	1
Crocodylus cataphractus	West African crocodile	1
Crocodylus porosus	Salt water crocodile	1
Osteolaemus tetraspis	Broad-nosed crocodile	1

SQUAMATA

Lacertidae:		
Lacerta muralis	Wall lizard	3
Lacerta viridis	Green lizard	3
Agamidae:		
Physignathus lesueurii	Lesueur's water dragon	2
Iguanidae:		
Anolis carolinensis	False chameleon	12
Anolis equestris	Giant anolis	8
Anolis porcatus	Cuban anolis	2
Conolophus subcristatus	Galapagos iguana	1
Cyclura cornuta	Rhinoceros iguana	1
Leiocephalus cubensis	Cuban curl-tailed lizard	13
Phrynosoma cornutum	Horned lizard	6
Phrynosoma platyrhinos	Horned lizard	3
Plica plica	Plicated lizard	1
Sceloporus magister	Western spiny lizard	1
Sceloporus torquatus cyanogenys	Scaly lizard	2
Sceloporus undulatus	Fence lizard	8
Gerrhosauridae:		
Gerrhosaurus validus	Robust plated lizard	1
Helodermatidae:		
Heloderma horridum	Mexican beaded lizard	1
Heloderma suspectum	Gila monster	1
Teiidae:		
Cnemidophorus s. sexlineatus	Six-lined lizard	4
Crocodilurus lacertinus	Crocodile lizard	3
Dracaena guianensis	Dragon lizard	1
Tupinambis nigropunctatus	Tegu lizard	2
Scincidae:		
Egernia cunninghami	Cunningham's skink	4
Egernia major	Greater skink	1
Eumeces fasciatus	Red-headed skink	1
Eumeces obsoletus	Brown skink	3
Tiliqua nigrolutea	Mottled lizard	1
Tiliqua scincoides	Blue-tongued lizard	2
Trachysaurus rugosus	Stump-tailed lizard	2
Varanidae:		
Varanus gouldii	Gould's monitor	1
Varanus niloticus	African monitor	1
Zonuridae:		
Zonurus giganteus	Black spiny lizard	1

OPHIDIA

Boidae:		
Boa canina	Green tree boa	3
Constrictor constrictor	Common boa	3
Constrictor mexicana	Mexican boa	1
Epicrates angulifer	Cuban tree boa	3
Epicrates cenchris	Rainbow boa	13
Epicrates subflavus	Jamaica boa	1
Eunectes murinus	Anaconda	3
Tropidophis melanurus	Cuban boa	1

Pythonidae:		
Python molurus	Indian python	1
Python regius	Ball python	1
Python reticulatus	Regal python	4
Colubridae:		
Abastor erythrogrammus	Hoopsnake or rainbow snake	3
Alsophis angulifer	Jubo or culebra	3
Coluber c. constrictor	Black snake	3
Drymarchon corais cooperi	Indigo snake	1
Elaphe guttata	Corn snake	7
Elaphe laeta	Emory's snake	1
Elaphe obsoleta confinis	Southern pilot snake	1
Elaphe o. obsoleta	Pilot snake	9
Elaphe quadrivittata	Chicken snake	6
Elaphe vulpina	Fox snake	1
Farancia abacura	Mud or horn snake	1
Heterodon contortrix	Hog-nosed snake	2
Lampropeltis getulus floridana	Florida king snake	7
Lampropeltis g. getulus	King snake	2
Leimadophis andreae	Jubito or magdalena	2
Liopeltis vernalis	Smooth green snake	1
Masticophis sp	Coachwhip snake	2
Natrix cyclopion	Water snake	13
Natrix sp	Water snake	18
Opheodrys aestivus	Rough-scaled green snake	1
Pituophis melanoleucus	Bull snake	1
Pituophis sayi	Pine snake	1
Thamnophis sauritus	Ribbon snake	3
Thamnophis s. sirtalis	Garter snake	8
Tretanorhinus variabilis	Cuban water snake	1
Elapidae:		
Micrurus fulvius	Coral snake	1
Naja flava	Golden cobra	1
Naja tripudians sumatrana	Sumatran black-hooded cobra	1
Crotalidae:		
Agkistrodon mokasen	Copperhead	6
Agkistrodon piscivorus	Water moccasin	15
Crotalus adamanteus	Diamond-backed rattlesnake	7
Crotalus atrox	Desert rattlesnake	1
Crotalus confluentus	Western rattlesnake	3
Crotalus horridus	Banded rattlesnake	6
Sistrurus catenatus catenatus	Massasauga	2
Sistrurus miliarius	Pigmy rattlesnake	3
Trimeresurus monticola	Mountain pit viper	1
Viperidae:		
Bitis arietans	Puff adder	1
Vipera berus	European viper	2

TESTUDINATA

Chelydidae:		
Hydromedusa tectifera	South American snake-necked turtle	4
Platemys platycephala	Flat-head turtle	1

Pelomedusidae:		
Pelomedusa galeata	Common African water-tortoise	2
Podocnemis expansa	South American river tortoise	1
Kinosternidae:		
Kinosternon flavescens	Musk turtle	1
Kinosternon subrubrum	Musk turtle	4
Chelydridae:		
Chelydra osceola	Osceola snapping turtle	1
Chelydra rossignonii	Rossignon's snapping turtle	1
Chelydra serpentina	Snapping turtle	4
Macrochelys temminckii	Alligator snapping turtle	1
Testudinidae:		
Chrysemys picta	Painted turtle	6
Clemmys guttata	Spotted turtle	1
Clemmys insculpta	Wood tortoise	2
Clemmys muhlenbergii	Muhlenberg's tortoise	1
Cyclemys amboinensis	Malayan box turtle	1
Gopherus agassizii	Agassiz's tortoise	2
Gopherus polyphemus	Gopher tortoise	7
Graptemys pseudogeographica	False geographic turtle	1
Malaclemmys centrata	Diamond-back terrapin	8
Pseudemys concinna	Cooter	5
Pseudemys decussata	Haitian terrapin	1
Pseudemys elegans	Cumberland terrapin	2
Pseudemys floridana	Florida terrapin	2
Pseudemys rugosus	Cuban terrapin	2
Terrapene carolina	Box tortoise	25
Terrapene major	Florida box turtle	2
Terrapene ornata	Ornate tortoise	1
Testudo elephantina	Elephant tortoise	1
Testudo ephippium	Duncan Island tortoise	4
Testudo hoodensis	Hood Island tortoise	3
Testudo radiata	Radiated tortoise	1
Testudo tabulata	South American tortoise	1
Testudo torneri	Soft-shelled land tortoise	9
Testudo vicina	Albemarle Island tortoise	1
Trionychidae:		
Amyda ferox	Soft-shelled turtle	7

Amphibia

caudata

Salamandridae:		
Salamandra salamandra	Salamander	3
Triturus pyrrhogaster	Red-bellied Japanese newt	6
Triturus viridescens	Common newt	18
Amphiumidae:		
Amphiuma means	Blind eel or Congo snake	2
Amphiuma tridactylum	Blind eel or Congo snake	1
Cryptobranchidae:		
Cryptobranchus alleganiensis	Hellbender	3
Necturidae:		
Necturus maculosus	Mud puppy	2

SALIENTIA

Brachycephalidae:		
Atelopus varius cruciger	Yellow atelopus	1
Atelopus varius varius	Yellow atelopus	6
Discoglossidae:		
Bombina bombina	Fire-bellied toad	2
Dendrobatidae:		
Dendrobates auratus	Arrow-poison frog	30
Dendrobates pumilio	Red dendrobates	1
Bufonidae:		
Bufo alvarius	Green toad	5
Bufo americanus	Common American toad	2
Bufo empusus	Sapo de concha	15
Bufo marinus	Marine toad	4
Bufo peltocephalus	Cuban giant toad	10
Ceratophrydae:		
Ceratophrys dorsata	Horned toad	2
Hylidae:		
Acris gryllus	Cricket frog	2
Hyla arborea	Green tree frog	4
Hyla caerulea	Australian tree frog	7
Hyla cinerea	Florida tree frog	1
Hyla crucifer	Tree frog	4
Hyla septentrionalis	Cuban tree frog	17
Pipidae:		
Pipa americana	Surinam toad	1
Xenopus mulleri	Muller's clawed frog	5
Ranidae:		
Rana aesopus	Gopher frog	1
Rana catesbeiana	Bull frog	1
Rana clamitans	Green frog	1
Rana sphenocephala	Southern leopard frog	1

FISHES

Acanthopthalmus kuhlii	----------	5
Barbus sp	----------	8
Betta splendens	Siamese fighting fish	1
Brachydanion rerio	Zebra fish	5
Corydoras aeneus	Trinidad armored catfish	4
Corydoras melanistius	Armored catfish	1
Electrophorus electricus	Electric eel	1
Helostoma temminckii	Kissing gourami	2
Hemigrammus unilineatus	----------	1
Heterandria formosa	----------	8
Hyphessobrycon bifasciatus	Yellow characin	1
Hypostomus sp	Armored catfish	1
Jordanella floridae	American flag fish	7
Kryptopterus bicirrhus	Glass catfish	4
Lebistes reticulatus	Guppy	50
Lepidosiren paradoxa	South American lungfish	3
Leporinus fasciatus	----------	1
Malopterurus electricus	Electric catfish	1
Pantodon buchholzi	Butterfly fish	1

Platypoecilus maculatus	Goldplaties	20
Pristella riddlei		10
Protopterus annectens	African lungfish	2
Pterophyllum scalare	Angel fish	4
Rasbora heteromorpha		3
Trichogaster trichopterus	Three-spot gourami	3
Xiphophorus hellerii	Swordtail	12

ARACHNIDS

Eurypelma sp	Tarantula	5
Latrodectus mactans	Black widow spider	4

INSECTS

Blabera sp	Giant cockroach	50

MOLLUSKS

Achatina variegata	Giant land snail	1

CRUSTACEA

Cardisoma guanhumi	Great land crab	1

Respectfully submitted.

W. M. MANN, *Director.*

DR. C. G. ABBOT,
Secretary, Smithsonian Institution.

APPENDIX 7

REPORT ON THE ASTROPHYSICAL OBSERVATORY

SIR: I have the honor to submit the following report on the activities of the Astrophysical Observatory for the fiscal year ended June 30, 1937:

WORK AT WASHINGTON

REVISION OF SOLAR-CONSTANT VALUES

At the beginning of the fiscal year preparations were being made to publish a table of best values of the solar constant of radiation since 1930. This table involved the comparison of results from three field stations, searching for errors of reduction, and examining the records of each individual day for evidences of imperfect observation or unfavorable sky conditions.

But in considering certain discrepancies it suddenly occurred to the Director that a flaw had been overlooked when he devised the so-called short method of reduction in 1923. It will be recalled that in the years 1903 to 1919 all observations of the solar constant had been made by the fundamental or long method. This involved measurements of the intensity of sun rays from early morning until mid-forenoon, and about 2 days of computing to yield one value of the solar constant of radiation. Moreover, if the sky gradually became clearer or more hazy during the several hours of observation, the value obtained would be too high or too low, without any means of recognizing this error.

To save work, to avoid error, and to multiply results, the short method was introduced in 1919. Two solar-constant values could be obtained from observations of only 10 minutes' duration for each, by computations requiring only 1 day for both. In 1923, however, a method occurred to the Director whereby the computing could be almost eliminated, through the use of tables computed once for all. All through the years which have since elapsed this method has been used. Usually, five values were obtained without undue labor for each day observed.

But some months ago, as above stated, the Director perceived that this brief method has a fatal flaw. Without going into technicalities, the defect consists in this: that if the results of two equally clear days are to be compared, on one of which the sun actually emits 1 percent

more intense radiation than on the other, the brief method of 1923 will indeed distinguish the day of more intense radiation, but will show less than the true 1 percent change. Moreover the deficiency of amplitude in solar variation, due to the method of 1923, is greater the more hazy the days, and the lower in altitude the station from which the sun is observed.

Consequently, although the published record of solar variation since 1923 shows solar changes at their right times and in their right directions, the amplitudes of variation found are too small. Also, the hazier stations are at a disadvantage, not only because of their less favorable sky conditions, which naturally give inferior results, but because the method of reduction of 1923 inevitably diminishes the resulting amplitude of the variation of the sun, which they were established to determine, even more than it affects clearer stations.

Our first care was to devise a correct method of reduction, retaining as far as possible the brevity of computation which was the merit of that of 1923. Several months were occupied by the staff at Washington in comparing different proposed methods, checking their results, and at length in computing tables for the one finally selected. This new brief method, although somewhat shorter than the short method used from 1919 to 1923, is far longer than that of 1923. It requires, what was unnecessary for the method of 1923, the complete measurement of the photographic records of observation, just as complete, indeed, as the long method used prior to 1919.

Accordingly, orders were sent to all field stations to have measured, if possible, three bolographs for each day since 1923 when the sun was observed. This heavy task has been to a large degree accomplished by the field observers.

In the meanwhile, by financial aid of John A. Roebling, and by the assistance of W. P. A., the computing staff at Washington has been much enlarged. Great progress has been made in the rereduction of the solar-constant observations. Mount Montezuma observations since 1932 have been fully recomputed, and several years' observations at Table Mountain are done. However, it will require many months before the recomputations are fully completed.

SILVER-DISK PYRHELIOMETERS

As in former years, orders have come from foreign lands for silver-disk pyrheliometers, either new or to be repaired and restandardized. These instruments are in use at nearly a hundred stations in many countries, in all of the continents of the world, to measure the solar radiation. But nowhere are they used in cooperation with the spectroscope, as with us, to make complete determinations of the solar constant of radiation.

ADDITIONAL SOLAR STATIONS

Great hope had been aroused by favorable action of the Senate in June 1936, with approval of the President and the Bureau of the Budget, that as many as seven additional stations for observing the solar constant of radiation could be established. But the hoped-for appropriation having failed in the House, the item was rejected by the Bureau of the Budget in the estimates for 1938, and with the present stress on economy in Government expenditure seems unlikely to be revived. It is still believed that valuable advance in weather forecasting would follow the accurate daily determination of solar variation, such as might be attained with additional solar-constant stations.

LONG-RANGE FORECASTING, LAKE LEVELS, AND TREE RINGS

Letters have been received nearly every day by the Director from drought-stricken areas, some telling of observations confirmatory of his expectations as to the progress of the drought, but most of them begging for predictions to cover ensuing years. The Director, in his replies, has always pointed out the insecurity of such predictions. He has limited himself to referring to indications arising from the history of Great Lakes levels since 1837. These point to a probability that drought conditions in the Northwestern States and neighboring Canada will mend beginning in 1938, but recur in 1975. This view is supported by a record of 400 years' duration in tree rings at Fairlee, Vt., measured by Professor Lyon, of Dartmouth College. Periodicities of 23, 46, and 92 years are plainly apparent therein, which have close relations to the levels of the Great Lakes.

SOLAR ENGINE

The Director caused to be prepared and tested in September 1936 a solar radiation steam boiler of his design. The machine is represented in the accompanying illustration. It exposed 36 square feet (pl. 7) of mirror surface and was intended to produce about ½ horsepower at the engine. Cinematograph records were made of it, and by operating an electric generator a short program was broadcast by solar power. However, the device had many defects, and was not in that form practical for utilizing solar radiation for power. A small solar flash boiler has since been prepared which offers much greater promise.

FIELD WORK

Solar radiation observing stations have been maintained by public funds, supplemented by private resources of the Smithsonian Insti-

tution, at Table Mountain, Calif.; Montezuma, Chile; and Mount St. Katherine, Egypt. At these three stations the observations to determine the solar constant of radiation have been made on all favorable days. The average number of days per year suitable for these exacting observations is about the same at these three elevated cloudless desert stations and approaches 80 percent of all days.

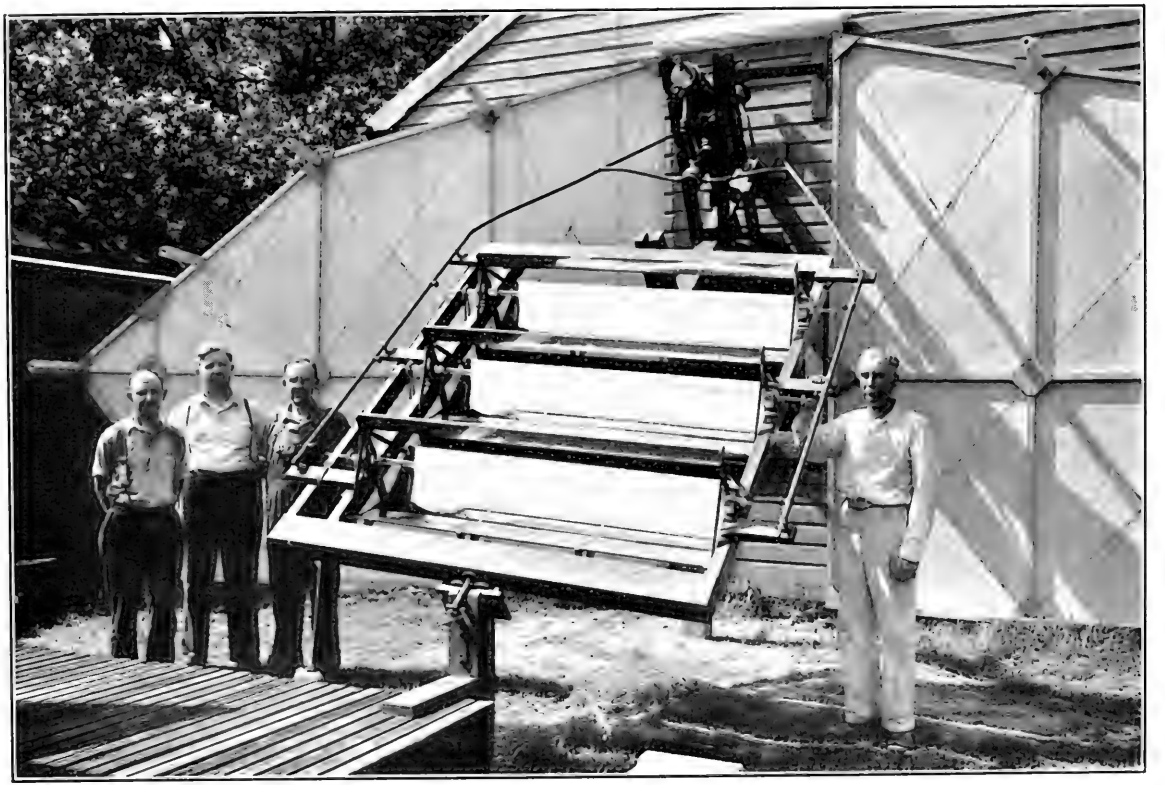
PERSONNEL

Frederick E. Fowle, research assistant, who joined the staff of the Astrophysical Observatory in the year 1894, was retired for disability at the end of the fiscal year. Mr. Fowle has been associated with practically the entire history of the Observatory, and has taken a large part in its observing, computing, theoretical studies, and plans for its work. He will be especially remembered for his researches on water vapor and ozone in the atmosphere, for his long investigation of the extreme infrared spectrum of water vapor, and for his authorship of numerous editions of "Smithsonian Physical Tables", which enjoy an enviable reputation.

Respectfully submitted.

C. G. Abbot, *Director.*

The Secretary,
Smithsonian Institution.



THE ABBOT SOLAR RADIATION STEAM BOILER IN THE YARD OF THE ASTROPHYSICAL OBSERVATORY, SEPTEMBER 1936.

APPENDIX 8

REPORT ON THE DIVISION OF RADIATION AND ORGANISMS

SIR: I have the honor to submit the following report on the activities of the Division of Radiation and Organisms during the year ended June 30, 1937:

Notable successes have been attained during the year in the studies of photosynthesis, of phototropism, and of special reactions of ultraviolet rays in the economy of various plant forms.

W. H. Hoover published the results of several years' study of photosynthesis in wheat. This basic study was made with wheat grown in glass tubes of measured temperature, humidity, and carbon dioxide content, under nearly monochromatic selected spectral rays of measured intensity.[1] Various radiation sources were employed, sometimes the Mazda electric light, sometimes the mercury arc, sometimes the sun. The results are of high accuracy. They give to a probable error of only 2 percent in most spectral regions the dependence on wave length of the assimilation of carbon dioxide by wheat. The accompanying figure shows that photosynthesis in wheat, starting from zero at the end of the visible red, reaches a high maximum in the red at 6500 A, diminishes through the yellow and green, reaches a subordinate maximum in the blue at 4400 A, and then fades away in the violet.

Mr. Hoover's work was accomplished by a chemical method of estimating the air content of carbon dioxide. During the year Dr. McAlister has further perfected a spectral absorption method of extraordinary sensitiveness and extreme rapidity for measuring carbon dioxide concentration in air. The apparatus has been standardized by him and has become a tool which bids fair to be of immense value for the detection and measurement, not only of carbon dioxide, but carbon monoxide, and other organic chemical compounds of extreme interest in plant physiology, human metabolism, mine explorations, and perhaps in other industrial fields. In connection with this apparatus, L. B. Clark has developed an extremely sensitive and rugged thermocouple, the evacuated housing of which is sealed by a bubble window of microscopically thin glass. These beautiful devices together add greatly to the practical success of the spectral absorption

[1] Smithsonian Misc. Coll., vol. 95, no. 21, pp. 1–13, figs. 1–4, pls. 1–3, 1937.

method. The new apparatus has been duplicated in our shop for intensive use in photosynthetic studies. We expect to observe photosynthesis quantitatively in various families of plants.

Dr. McAlister published preliminary results of a research on time relations in photosynthesis. He showed that intermittent illumination gives very different growth rates depending on the rapidity of intermittance. With alternations of light and darkness 60 times per second the growth rate over a period of several hours was actually twice as rapid as with continuous illumination of an equal total quantity of light supplied. Owing to the practically instantaneous character of his measurements, he was able, for the first time, in studies

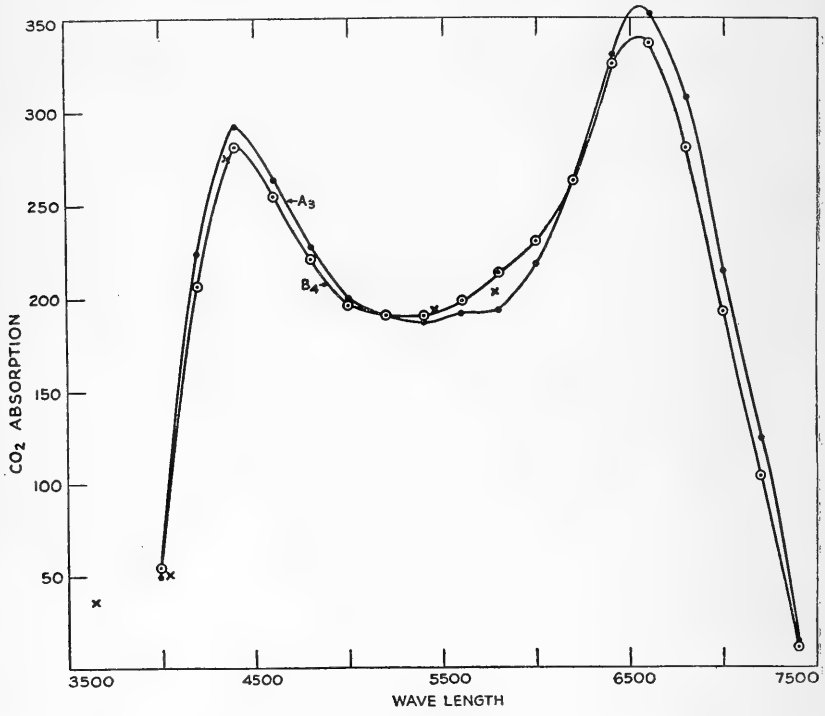


FIGURE 1.—Wave-length assimilation curves.

of plant physiology, to turn on the light and continuously follow what happens in plant growth. Many most interesting observations were recorded.[2]

In a cooperative research with Dr. Flint, of the United States Department of Agriculture, Flint and McAlister examined the efficiency of different wave lengths of light to promote germination in light-sensitive lettuce seed.[3] Their results tie in most suggestively with the

[2] Smithsonian Misc. Coll., vol. 95, no. 24, pp. 1–17, figs. 1–10, pls. 1, 2, 1937.
[3] Smithsonian Misc. Coll., vol. 96, no. 2, pp. 1–8, figs. 1, 2, pl. 1, 1937.

curve of chlorophyll absorption. Wave length regions inhibiting germination were found in the blue and in the infrared spectrum.

Dr. E. S. Johnston continued with marked progress his investigations tending to produce normal growth of tomato plants under laboratory conditions. The great difficulty is to obtain from artificial sources light of sufficient intensity and proper wave-length distribution. By various ingenious expedients he has to a considerable degree solved the problem.

He also continued phototropic experiments, studying the bending of plants toward the light as well as carbon dioxide assimilation with polarized as compared to normal light. It had been suggested that a real difference would be found, but he found none.

With Dr. P. R. Burkholder, of Connecticut College, Dr. Johnston investigated the inactivation of plant growth substance by light.[4] A very beautiful technique was developed, whereby live tips and half tips of oat seedlings were applied in various ways to decapitated oat seedlings in order to determine what are the circumstances which govern elongation under the influence of light. The results appear to show that under considerable intensities of light the growth hormones are inactivated rather than displaced in producing the well-known lower stature of illuminated plants as compared with plants grown in semidarkness. For further information see their very interesting paper.

Dr. Meier did much work on the classification of a large collection of algae for the National Herbarium. Her own investigations concerned a search for the stimulation of multiplication in algae by ultraviolet rays known to be lethal in doses of sufficient intensity. The research is not finished as yet, but plainly shows great stimulative influence by minute doses of these lethal rays, and that the degree of stimulation is most interestingly connected both with wave length and with the lethal dosage.

The instrument maker, Mr. Fillmen, and the glass technician, Mr. Clark, constructed apparatus of invaluable use in these investigations.

Respectfully submitted.

C. G. Abbot, *Director.*

The Secretary,
Smithsonian Institution.

[4] Smithsonian Misc. Coll., vol. 95, no. 20, pp. 1–14, fig. 1, pls. 1, 2, 1937.

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APPENDIX 9

REPORT ON THE LIBRARY

SIR: I have the honor to submit the following report on the activities of the Smithsonian library for the fiscal year ended June 30, 1937:

THE LIBRARY

The library, or library system, of the Smithsonian is made up of 45 libraries, all more or less specialized and independent in their nature and location, but all cooperating under the central purpose of the Institution. They are the Smithsonian deposit in the Library of Congress, which is the main unit of the system; the library of the United States National Museum; the library of the Bureau of American Ethnology; the Smithsonian office library; the library of the Astrophysical Observatory; the library of Radiation and Organisms; the library of the Freer Gallery of Art; the library of the National Collection of Fine Arts (until recently the National Gallery of Art); the Langley aeronautical library, since 1930 on special deposit in the Library of Congress; the library of the National Zoological Park; and, finally, the 35 sectional libraries of the National Museum.

PERSONNEL

There were two changes in the permanent staff. Lucile A. Torrey, senior stenographer in the office of the librarian, was appointed to the newly established position of library assistant in the National Collection of Fine Arts, and Mrs. George C. Rodgers was chosen for the vacancy—a position she had formerly held. Carroll M. Martin, assistant messenger in the National Museum library, was transferred to the Social Security Board, and Joseph Salat, Jr., succeeded him.

The temporary assistants were Helen G. Rankin and Margaret Kober. Fifteen workers were also assigned to the library for various periods by the Works Progress Administration.

EXCHANGE OF PUBLICATIONS

The exchange work of the year brought to the library, as usual, a wealth of publications. These represented most of the 22,714 pack-

ages received by mail and the 2,226 by the International Exchange Service—a total of 24,940, or an increase of 764 over 1936. Each package contained one or more items. Among the largest sendings were those from the Australian National Research Council, Sydney; Deutsche Chemische Gesellschaft, Berlin; Royal Society of Tasmania, Hobart; Royal Society of Victoria, Melbourne; Société Géologique de Belgique, Liége; Society for the Preservation of the Fauna of the Empire, London; Verein der Freunde der Naturgeschichte in Mecklenburg, Rostock; and Zoological Society of London.

The number of dissertations received was 5,367, or 1,654 fewer than the year before. Of these, 2,292 were sent to the Smithsonian deposit; the other 3,075, being medical in character, were forwarded to the Surgeon General's library. They came from the Academy of Freiberg, the universities of Basel, Berlin, Bern, Bonn, Braunschweig, Breslau, Cornell, Delft, Erlangen, Freiburg, Giessen, Heidelberg, Helsingfors, Jena, Johns Hopkins, Kiel, Königsberg, Leipzig, Liége, Lund, Lwów, Marburg, Neuchâtel, Pennsylvania, Rostock, Strasbourg, Tübingen, Utrecht, Wittenberg, Würzburg, and Zürich, and the technical schools of Berlin, Braunschweig, Dresden, Karlsruhe, and Zürich.

The staff wrote 2,307 letters, most of which had to do with the exchange of publications. They obtained by special correspondence and by search among the Smithsonian duplicates 4,580 volumes and parts needed in various sets, particularly in the Smithsonian deposit and the libraries of the National Museum, Astrophysical Observatory, and National Zoological Park. They also arranged for 262 new exchanges.

It should be noted that, while the number of small sendings received has increased somewhat during recent years, the number of large ones has diminished. This falling off in the large sendings would indicate that the special effort of the employees in the libraries of the Smithsonian, begun sometime ago, to recheck the main sets for missing numbers and obtain by exchange as many of these as possible while they were still available, has been highly successful, at least so far as the gaps, especially the longer ones, can be filled in this manner. It is reasonable to expect, therefore, that most of the substantial sendings in the future will not be to fill out old sets, but rather to supply the library with earlier numbers of comparatively new serials needed in the work of the Institution. For the staff in taking up new exchanges have two aims constantly before them—to serve Smithsonian scientists and to conserve Smithsonian publications. They also, of course, do what they can, in cooperation with the offices of publications, to encourage the return of duplicates not wanted by institutions to which they have been distributed, that these may be used again

in the exchange work of the Institution. The success of this cooperative service the past few years has been noteworthy.

GIFTS

There were many gifts during the year. The Philosophical Society of Washington turned over to the library several thousand copies of its Bulletin to be used for exchange purposes. The Geophysical Laboratory presented 838 miscellaneous publications; the American Association for the Advancement of Science, 525; the American Art Association, Anderson Galleries, 38 priced catalogs of art objects; and both the Anthropological Society and the Biological Society of Washington, a substantial number of journals. The outstanding gift, however, was a collection, numbering nearly 4,500, mainly on botany, that had been part of the working library of the late Dr. Frederick V. Coville, chief botanist of the Department of Agriculture and honorary curator of the division of plants in the National Museum. The collection was presented by Mrs. Coville.

Among other important gifts were, Ancient Egyptian Paintings, in three volumes, by Nina M. Davies, with the editorial assistance of Alan H. Gardiner, from John D. Rockefeller, Jr.; Red-Figured Athenian Vases in the Metropolitan Museum of Art, in two volumes, by Gisela M. A. Richter, from the Metropolitan Museum; Catalogue of Hispanic Pottery, by Alice Wilson Frothingham, and Catalogue of Laces and Embroideries, by Florence Lewis May, in the collection of the Hispanic Society of America, from the Society; Index Catalogue of the Library of the Surgeon General's Office, fourth series, volume 1 (two copies), from the Army Medical Library; A Catalogue of the Collection of Martinware Formed by Frederick John Nettlefold, together with a Short History of the Firm of R. W. Martin and Brothers of Southhall, by Charles R. Beard, from Frederick John Nettlefold; Nel Cinquantenario della Società Edison, 1884–1934, in four volumes, edited by Giacinto Motta, from the editor; Gregorio Vázquez de Arce y Ceballoz, by Roberto Pizano Restrepo, from the Government of Colombia; Georg Wilhelm Steller, the Pioneer of Alaskan Natural History, by Leonhard Stejneger, from the author; French Arts and Letters and Other Essays, by W. Francklyn Paris, from the author; An Essex Index, in four volumes, compiled by Fred J. Brand, from the compiler; Bibliography and Index of Geology Exclusive of North America, volume 2, by John M. Nickles and Robert B. Miller, and volume 3, by John M. Nickles, Marie Siegrist, and Eleanor Tatge, from Marie Siegrist; Oceanic Birds of South America, in two volumes, by Robert C. Murphy, from the American Museum of Natural History; The Birds of the Malay Peninsula, volume 3, by Herbert C. Robinson and Fred-

erick N. Chasen, from Gertrude Abbott; Proboscidea, volume 1, by Henry Fairfield Osborn, from the Osborn Library; Fragments of Entomological History, by Herbert Osborn, from the author; Moss Flora of North America North of Mexico, volume 1, part 1, by A. J. Grout, from the author; Praktikum der Edelsteinkunde, by Georg O. Wild, from Alfred N. Goldsmith; and several publications, including J. M. W. Turner, by W. L. Wyllie, and the De Luxe Illustrated Catalogue of Early American Portraits Collected by Thomas B. Clarke, from Theodore Bolton.

Finally, there were gifts from members and associates of the Smithsonian staff, notably Secretary Abbot and Assistant Secretary Wetmore. Mrs. Charles D. Walcott also gave a large number of items, including two copies of her recently published Illustrations of North American Pitcherplants.

SOME STATISTICS

Accessions to the various libraries:

	Volumes	Pamphlets and charts	Total	Approximate holdings June 30, 1937
Astrophysical Observatory	326	95	421	9,197
Bureau of American Ethnology	580		580	51,000
Freer Gallery of Art	629	114	743	12,674
Langley Aeronautical	34	25	59	3,328
National Collection of Fine Arts	402	355	757	5,784
National Museum	2,486	951	3,437	207,142
National Zoological Park	89	10	99	3,571
Radiation and Organisms	4	3	7	245
Smithsonian deposit, Library of Congress	3,037	2,006	5,043	553,078
Smithsonian office	302	21	323	30,503
Total	7,889	3,580	11,469	[1] 876,522

[1] These holdings do not, of course, include the thousands of volumes still unbound, uncataloged, or incomplete.

The number of periodicals entered was 24,212; of publications cataloged, 6,766; of cards prepared and filed, 28,967; of loans made, 10,995, of which 196 were to libraries outside the Institution and its branches. From the Library of Congress 1,942 publications were borrowed, and from other libraries, 386.

The index of Smithsonian publications was kept up to date; the index of exchange relations was advanced; and the union catalog received considerable attention, as the following table will show:

Volumes cataloged	4,122
Pamphlets and charts cataloged	2,427
New serial entries made	218
Typed cards added to catalog and shelf list	4,733
Library of Congress cards added to catalog and shelf list	2,239

BINDING

More time than usual was spent by the staff in preparing periodicals for binding, with the following results: the library of the National Museum sent to the bindery 1,846 volumes; the library of the Bureau of American Ethnology, 1,330; the Smithsonian office library, 271; the library of the Astrophysical Observatory, 189; the library of the National Collection of Fine Arts, 113; and the library of the Freer Gallery of Art, 54. The binding of these 3,803 volumes—or all but 106 of them, which were otherwise provided for—was made possible by the deficiency appropriation of $12,000 approved toward the close of 1935. Mention should also be made of the fact that an experienced binder, assigned to the National Zoological Park under the W. P. A., bound 389 volumes for the library of the Park and several other libraries of the Smithsonian; and of the further fact that this expert and two other W. P. A. workers repaired about 500 books, thus extending their period of usefulness.

OTHER ACTIVITIES

Special attention was given during the year to the libraries of the National Collection of Fine Arts and the National Zoological Park. As a consequence, much progress was made in sorting their accumulations of miscellaneous material and rendering the publications retained available for use. Many items needed in the files were supplied by the Library of Congress, National Museum, and Smithsonian Institution.

The work of the 15 W. P. A. employees assigned to the library consisted largely of typing letters, copying cards, repairing books, putting pamphlets into binders and labeling them appropriately, preparing, mounting, and filing aeronautical clippings, checking and sorting publications, shelving duplicates, recording periodicals, and assisting with the cataloging.

Smithsonian duplicates were sent, on special exchange, to the Bureau of Mines, Ecuador, and the following colleges and universities: Brown, Columbia, Franklin and Marshall, Harvard, Pennsylvania, Princeton, Rollins, and Yale.

Steps were taken late in the year to provide a third lot of steel shelving for the technological library. When this is installed, it will increase materially the shelf space for this important collection and make possible, it is hoped, the early completion of the reorganization of the libraries in the Arts and Industries Building begun some years ago.

The reference and bibliographical work of the various libraries of the Institution, which has steadily increased since 1924, reached

in 1937 a high point of effectiveness, requiring much time from several members of the staff and involving service, not only to the scientists and associates of the Smithsonian and to other Government employees, but to many inquirers outside of Washington.

NEEDS

The library needs a larger annual allotment for binding, so that this essential activity may be brought and kept up to date. There should also be an increase in the funds available for purchasing publications that have a direct bearing on the projects, both present and prospective, of the scientific staff and cannot be found in Washington or obtained by exchange. Two other needs should be considered in due time: more trained catalogers to correct and revise the catalog of the National Museum library and more shelf room for its collections.

Respectfully submitted.

WILLIAM L. CORBIN, *Librarian.*

Dr. C. G. ABBOT,
Secretary, Smithsonian Institution.

APPENDIX 10

REPORT ON PUBLICATIONS

SIR: I have the honor to submit the following report on the publications of the Smithsonian Institution and the Government branches under its administrative charge during the year ended June 30, 1937:

The Institution published during the year 16 papers in the series of Smithsonian Miscellaneous Collections, 1 annual report, and pamphlet copies of the 27 articles contained in the report appendix, and 2 special publications.

The United States National Museum issued 1 annual report, 2 bulletins, and 29 Proceedings papers.

The Bureau of American Ethnology issued 1 annual report and 1 bulletin.

Of the publications there were distributed 144,817 copies, which included 70 volumes and separates of the Smithsonian Contributions to Knowledge, 34,178 volumes and separates of the Smithsonian Miscellaneous Collections, 23,906 volumes and separates of the Smithsonian Annual Reports, 2,220 Smithsonian special publications, 68,822 volumes and separates of the National Museum publications, 14,708 publications of the Bureau of American Ethnology, 90 publications of the National Gallery of Art, 110 publications of the Freer Gallery of Art, 24 annals of the Astrophysical Observatory, 16 reports of the Harriman Alaska Expedition, and 673 reports of the American Historical Association.

SMITHSONIAN MISCELLANEOUS COLLECTIONS

Of the Smithsonian Miscellaneous Collections, volume 73, there was issued 1 paper; volume 91, 2 papers; volume 95, 12 papers and title page and table of contents; and volume 96, 1 paper, making 16 papers in all, as follows:

VOLUME 73

No. 8. Opinions rendered by the International Commission on Zoological Nomenclature. Opinions 124 to 133. 44 pp. (Publ. 3395.) October 28, 1936.

VOLUME 91

Reports on the collections obtained by the first Johnson-Smithsonian Deep-Sea Expedition to the Puerto Rican Deep.

No. 25. A new Actinian, by Oskar Carlgren. 4 pp., 3 figs. (Publ. 3401.) January 30, 1937.

No. 26. New species of mysidacid crustaceans, by Walter M. Tattersall. 18 pp., 10 figs. (Publ. 3413.) May 7, 1937.

VOLUME 95

No. 13. A comparative study of the labium of coleopterous larvae, by W. H. Anderson. 29 pp., 8 pls. (Publ. 3393.) August 11, 1936.

No. 14. Morphology of the insect abdomen. Part III. The male genitalia (including arthropods other than insects), by R. E. Snodgrass. 96 pp., 29 figs. (Publ. 3396.) October 12, 1936.

No. 15. Further evidence on the dependence of terrestrial temperatures on the variations of solar radiation, by C. G. Abbot. 4 pp., 2 figs. (Publ. 3397.) August 12, 1936.

No. 16. A seventeenth century letter of Gabriel Diaz Vara Calderón, Bishop of Cuba, describing the Indians and Indian missions of Florida, by Lucy L. Wenhold. 14 pp., 12 pls. (Publ. 3398.) November 20, 1936.

No. 17. A new race of the song sparrow from the Appalachian region, by Alexander Wetmore. 3 pp. (Publ. 3399.) September 26, 1936.

No. 18. Two original photographic negatives of Abraham Lincoln, by Alexander Wetmore. 2 pp., 4 pls. (Publ. 3400.) October 16, 1936.

No. 19. Cycles in tree-ring widths, by C. G. Abbot. 5 pp., 1 fig. (Publ. 3402.) December 16, 1936.

No. 20. Inactivation of plant growth substance by light, by Paul R. Burkholder and Earl S. Johnston. 14 pp., 2 pls., 1 fig. (Publ. 3403.) February 5, 1937.

No. 21. The dependence of carbon dioxide assimilation in a higher plant on wave length of radiation, by W. H. Hoover. 13 pp., 3 pls., 4 figs. (Publ. 3406.) February 27, 1937.

No. 22. Third contribution to nomenclature of Cambrian trilobites, by Charles Elmer Resser. 29 pp. (Publ. 3408.) April 5, 1937.

No. 23. On the corrections to be applied to silver-disk pyrheliometry, by C. G. Abbot. 7 pp. (Publ. 3409.) March 10, 1937.

No. 24. Time course of photosynthesis for a higher plant, by E. D. McAlister. 17 pp., 2 pls., 10 figs. (Publ. 3410.) May 4, 1937.

Title page and table of contents. (Publ. 3415.)

VOLUME 96

No. 2. Wave lengths of radiation in the visible spectrum promoting the germination of light-sensitive lettuce seed, by Lewis H. Flint and E. D. McAlister. 8 pp., 1 pl., 2 figs. (Publ. 3414.) June 16, 1937.

SMITHSONIAN ANNUAL REPORTS

Report for 1935.—The complete volume of the Annual Report of the Board of Regents for 1935 was received from the Public Printer in October 1936.

Annual Report of the Board of Regents of the Smithsonian Institution showing operations, expenditures, and condition of the Institution for the year ending June 30, 1935. xiv+580 pp., 95 pls., 89 text figs. (Publ. 3348.)

The appendix contained the following papers:

Weather governed by changes in the sun's radiation, by C. G. Abbot.
Seasonal weather and its prediction, by Sir Gilbert T. Walker.
The sun's place among the stars, by Walter S. Adams.
The atmospheres of the planets, by Henry Norris Russell.
The surface features of the moon, by F. E. Wright.
The upper atmosphere, by G. M. B. Dobson, D. Sc., F. R. S.
The nature of the cosmic radiation, by Thomas H. Johnson.
What is electricity? by Paul R. Heyl.
New facts about the nucleus of the atom, by Carl D. Anderson.
The approach to the absolute zero of temperature, by F. Simon, D. Phil.
Discovery and significance of vitamins, by Sir Frederick Gowland Hopkins, P. R. S.
The salinity of irrigation water, by Carl S. Scofield.
Selenium absorption by plants and their resulting toxicity to animals, by Annie M. Hurd-Karrer.
The glacial history of an extinct volcano, Crater Lake National Park, by Wallace W. Atwood, Jr.
Concretions—freaks in stone, by R. S. Bassler.
Biology and human trends, by Raymond Pearl.
The relation of genetics to physiology and medicine, by Thomas Hunt Morgan.
Conservation of the Pacific halibut, an international experiment, by William F. Thompson.
The swallowtail butterflies, by Austin H. Clark.
Those ubiquitous plants called algae, by Florence E. Meier.
The Boulder Canyon project, by Wesley R. Nelson.
Wings over the sea, by Louis Blériot.
The coming of man from Asia in the light of recent discoveries, by Aleš Hrdlička.
The antiquity of man in America in the light of archeology, by N. C. Nelson.
A survey of southwestern archeology, by Frank H. H. Roberts, Jr.
Nuzi and the Hurrians: The excavations at Nuzi (Kirkuk, Iraq) and their contribution to our knowledge of the history of the Hurrians, by Robert H. Pfeiffer.
The ruins of Tenampua, Honduras, by Dorothy H. Popenoe.

Report for 1936.—The report of the Secretary, which included the financial report of the executive committee of the Board of Regents, and will form part of the annual report of the Board of Regents to Congress, was issued in January 1937.

Report of the Secretary of the Smithsonian Institution and financial report of the executive committee of the Board of Regents for the year ending June 30, 1936. 107 pp., 2 pls. (Publ. 3404.)

The report volume, containing the general appendix, was in press at the close of the year.

SPECIAL PUBLICATIONS

Explorations and field work of the Smithsonian Institution in 1936. 100 pp., 98 figs. (Publ. 3407.) April 6, 1937.

Statement to the Smithsonian Board of Regents on 10 years of Smithsonian affairs, by Secretary C. G. Abbot. 10 pp. (Publ. 3412.) April 1937.

PUBLICATIONS OF THE UNITED STATES NATIONAL MUSEUM

The editorial work of the National Museum has continued during the year under the immediate direction of the editor, Paul H. Oehser. There were issued 1 annual report, 2 bulletins, 1 volume of the Proceedings, and 29 separates from Proceedings volumes 83 and 84, as follows:

MUSEUM REPORT

Report on the progress and condition of the United States National Museum for the year ended June 30, 1936. 8vo, iii+115 pp., January 14, 1937.

PROCEEDINGS: VOLUME 83

Complete volume:

Proceedings of the United States National Museum. Vol. 83, 8vo, viii+617 pp., 37 pls., 71 figs.

Separates:

No. 2990. A revision of the chalcid flies of the genus *Perilampus* Latreille occurring in America north of Mexico. By M. T. Smulyan. Pp. 369–412. October 16, 1936.

No. 2991. Pycnogonids from Puget Sound. By Harriet I. Exline. Pp. 413–422, fig. 33. July 9, 1936.

No. 2992. California Crustacea of the order Cumacea. By Carl Zimmer. Pp. 423–439, figs. 34–39. August 27, 1936.

No. 2993. A comparison of the shallow-water sponges near the Pacific end of the Panama Canal with those at the Caribbean end. By M. W. deLaubenfels. Pp. 441–466, figs. 40–45, July 31, 1936.

No. 2994. New species of polychaetous annelids of the family Nereidae from California. By Olga Hartman. Pp. 467–480, figs. 46–53. July 11, 1936.

No. 2995. Four new species of Chalcidoidea parasitic on cactus insects. By A. B. Gahan. Pp. 481–486. August 7, 1936.

No. 2996. The Tertiary Foraminifera of the genera *Operculina* and *Operculinoides* from North America and the West Indies. By T. Wayland Vaughan and W. S. Cole. Pp. 487–496, pls. 35–38. October 8, 1936.

No. 2997. Review of the seahorses (*Hippocampus*) found on the coasts of the American continents and of Europe. By Isaac Ginsburg. Pp. 497–594, figs. 54–71. January 18, 1937.

—— Title page, table of contents, and index. Pp. i–viii, 595–617. March 17, 1937.

VOLUME 84

Separates:

No. 2998. Report on the fishes collected by H. C. Raven in Lake Tanganyika in 1920. By George S. Myers. Pp. 1–15, pl. 1. September 24, 1936.

No. 2999. The ichneumon-flies of the genus *Brachycyrtus* Kriechbaumer. By R. A. Cushman. Pp. 17–24, figs. 1–4. September 26, 1936.

No. 3000. New cottid fishes from Japan and Bering Sea. By Rolf L. Bolin. Pp. 25–38, figs. 5–8. October 10, 1936.

No. 3001. Revision of North American beetles of the staphylinid subfamily Tachyporinae—Part I: Genus *Tachyporus* Gravenhorst. By Richard E. Blackwelder. Pp. 39–54. November 17, 1936.

No. 3002. Revision of the fishes of the family Microdesmidae, with descriptions of a new species. By Earl D. Reid. Pp. 55–72, pl. 2, figs. 9–12. December 10, 1936.

No. 3003. Two new species of hawks from the Miocene of Nebraska. By Alexander Wetmore. Pp. 73–78, figs. 13, 14. November 3, 1936.

No. 3004. A new North American mason-wasp from Virginia, with notes on allied forms. By Joseph Bequaert. Pp. 79–87, fig. 15. November 24, 1936.

No. 3005. The nest of *Odynerus tempiferus* var. *macio Bequaert*, with notes on the habits of the wasps. By Austin H. Clark and Grace A. Sandhouse. Pp. 89–95. November 24, 1936.

No. 3006. Crested millipeds of the family Lysiopetalidae in North America, with descriptions of new genera and species. By H. F. Loomis. Pp. 97–135, pls. 3, 4, figs. 16–18. May 15, 1937.

No. 3007. Notes on phallostethid fishes. By George S. Myers. Pp. 137–143. January 6, 1937.

No. 3008. The deep-sea zeomorph fishes of the family Grammicolepidae. By George S. Myers. Pp. 145–156, pls. 5–7. January 18, 1937.

No. 3009. New North American species of earthworms of the family Megascolecidae. By Frank Smith. Pp. 157–181. January 8, 1937.

No. 3010. Observations on the trematode genus *Brachycoelium* Dujardin. By Elon E. Byrd. Pp. 183–199, pls. 8, 9. April 7, 1937.

No. 3011. New muscoid flies (Diptera) in the United States National Museum. By David G. Hall. Pp. 201–216, figs. 19–26. April 6, 1937.

No. 3012. The pupa of *Myocera tabanivora* Hall (Diptera). By Charles T. Greene. Pp. 217–218, fig. 27. April 6, 1937.

No. 3013. A new subspecies of the nymphalid butterfly *Polygonia faunus*. By Austin H. Clark. Pp. 219–222, pl. 10. April 9, 1937.

No. 3014. A new species of trematode from the mud-eel (*Siren lacertina*). By C. Courson Zeliff. Pp. 223–226, pl. 11. May 4, 1937.

No. 3015. Mexican fossil Echini. By Robert Tracy Jackson. Pp. 227–237, pls. 12–15. June 12, 1937.

No. 3016. Two new beetles of the family Mordellidae from orchids. By Eugene Ray. Pp. 239–241. April 21, 1937.

No. 3018. A revision of the clapper rails (*Rallus longirostris* Boddaert). By Harry C. Oberholser. Pp. 313–354. June 30, 1937.

No. 3020. Synopsis of the Puerto Rican beetles of the genus *Mordellistena*, with descriptions of new species. By Eugene Ray. Pp. 389–399, fig. 28. June 26, 1937.

BULLETINS

No. 153, part 2. Birds collected by the Childs Frick expedition to Ethiopia and Kenya Colony: Passeres. By Herbert Friedmann. xii+506 pp., 14 pls., 30 figs. (colored frontispiece). June 25, 1937.

No. 167. Life histories of North American birds of prey. Part 1: Order Falconiformes. By Arthur Cleveland Bent. viii+409 pp., 102 pls. May 3, 1937.

PUBLICATIONS OF THE BUREAU OF AMERICAN ETHNOLOGY

The editorial work of the bureau has continued under the immediate direction of the editor, Stanley Searles. During the year one annual report and one bulletin were issued, as follows:

Fifty-third Annual Report on the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 1935–36. 8 pp.

Bulletin 114. Fox miscellany. By Truman Michelson. 124 pp., 9 figs.

REPORT OF THE AMERICAN HISTORICAL ASSOCIATION

The annual reports of the American Historical Association are transmitted by the association to the Secretary of the Smithsonian Institution and are communicated by him to Congress, as provided by the act of incorporation of the association.

Volume I of the report for 1935 and volume III of the report for 1931 (Writings on American History, 1932) were issued during the year. The annual report for 1936, volume I, and Writings on American History, 1933 and 1934, were in press at the close of the year.

REPORT OF THE NATIONAL SOCIETY, DAUGHTERS OF THE AMERICAN REVOLUTION

The manuscript of the Thirty-ninth Annual Report of the National Society, Daughters of the American Revolution, was transmitted to Congress, in accordance with law, December 3, 1936.

ALLOTMENTS FOR PRINTING

The congressional allotments for the printing of the Smithsonian Annual Reports to Congress and the various publications of the Government bureaus under the administration of the Institution were virtually used up at the close of the year. The appropriation for the coming year ending June 30, 1938, totals $65,000, allotted as follows:

Smithsonian Institution	$12,500
National Museum	30,000
Bureau of American Ethnology	13,300
International Exchange Service	200
National Zoological Park	200
Astrophysical Observatory	400
American Historical Association	8,000
National Collection of Fine Arts	400

Respectfully submitted.

W. P. True, *Editor.*

Dr. C. G. Abbot,
Secretary, Smithsonian Institution.

REPORT OF THE EXECUTIVE COMMITTEE OF THE BOARD OF REGENTS OF THE SMITHSONIAN INSTITUTION

FOR THE YEAR ENDED JUNE 30, 1937

To the Board of Regents of the Smithsonian Institution:

Your executive committee respectfully submits the following report in relation to the funds of the Smithsonian Institution, together with a statement of the appropriations by Congress for the Government bureaus in the administrative charge of the Institution.

SMITHSONIAN ENDOWMENT FUND

The original bequest of James Smithson was £104,960 8s 6d—$508,318.46. Refunds of money expended in prosecution of the claim, freights, insurance, etc., together with payment into the fund of the sum of £5,015, which had been withheld during the lifetime of Madame de la Batut, brought the fund to the amount of	$550,000.00
Since the original bequest the Institution has received gifts from various sources chiefly in the years prior to 1893, the income from which may be used for the general work of the Institution. To these gifts has been added capital from savings on income, gain from sale of securities, etc., bringing the total endowment for general purposes to the amount of	1,132,868.57

The Institution holds also a number of endowment gifts, the income of each being restricted to specific use. These are invested and stand on the books of the Institution as follows:

Arthur, James, fund, income for investigations and study of sun and lecture on the sun	$39,993.48
Bacon, Virginia Purdy, fund, for a traveling scholarship to investigate fauna of countries other than the United States	50,101.00
Baird, Lucy H., fund, for creating a memorial to Secretary Baird	13,489.06
Barstow, Frederic D., fund, for purchase of animals for the Zoological Park	760.67
Canfield Collection fund, for increase and care of the Canfield collection of minerals	38,247.22
Casey, Thomas L., fund, for maintenance of the Casey collection and promotion of researches relating to Coleoptera	7,728.33
Chamberlain, Francis Lea, fund, for increase and promotion of Isaac Lea collection of gems and mollusks	28,160.59
Hillyer, Virgil, fund, for increase and care of Virgil Hillyer collection of lighting objects	6,572.25
Hodgkins fund, specific, for increase and diffusion of more exact knowledge in regard to nature and properties of atmospheric air	100,000.00

Special Research fund, gift, in form of real estate	$20,946.00
Hughes, Bruce, fund, to found Hughes alcove	15,150.12
Myer, Catherine Walden, fund, for purchase of first-class works of art for the use of, and benefit of, the National Gallery of Art	18,956.10
Pell, Cornelia Livingston, fund, for maintenance of Alfred Duane Pell collection	2,413.55
Poore, Lucy T., and George W., fund, for general use of the Institution when principal amounts to the sum of $250,000	67,717.14
Reid, Addison T., fund, for founding chair in biology in memory of Asher Tunis	29,084.86
Roebling fund, for care, improvement, and increase of Roebling collection of minerals	120,682.75
Rollins, Miriam and William, fund for investigations in physics and chemistry	52,902.67
Springer, Frank, fund, for care, etc., of Springer collection and library	17,932.90
Walcott, Charles D., and Mary Vaux, research fund, for development of geological and paleontological studies and publishing results thereof	10,736.20
Younger, Helen Walcott, fund, held in trust	50,112.50
Zerbee, Frances Brincklé, fund, for endowment of aquaria	761.08
Total endowment for specific purposes other than Freer endowment	692,448.47

The capital funds of the Institution, except the Freer funds, are invested as follows:

Fund	United States Treasury	Consolidated fund	Separate fund	Total
Arthur, James		$39,993.48		$39,993.48
Bacon, Virginia Purdy		50,101.00		50,101.00
Baird, Lucy H		13,489.06		13,489.06
Barstow, Frederic D		760.67		760.67
Canfield Collection		38,247.22		38,247.22
Casey, Thomas L		7,728.33		7,728.33
Chamberlain		28,160.59		28,160.59
Hillyer, Virgil		6,572.25		6,572.25
Hodgkins, specific	$100,000			100,000.00
Special Research			$20,946.00	20,946.00
Hughes, Bruce		15,150.12		15,150.12
Myer, Catherine W		18,956.10		18,956.10
Pell, Cornelia Livingston		2,413.55		2,413.55
Poore, Lucy T., and George W	26,670	41,047.14		67,717.14
Reid, Addison T	11,000	13,584.86	4,500.00	29,084.86
Roebling Collection		120,682.75		120,682.75
Rollins, Miriam and William		43,402.67	9,500.00	52,902.67
Smithsonian unrestricted:				
Special			1,400.00	1,400.00
Avery	14,000	37,236.81		51,236.81
Endowment		193,460.03		193,460.03
Habel	500			500.00
Hachenberg		4,021.50		4,021.50
Hamilton	2,500	403.68		2,903.68
Henry		1,209.42		1,209.42
Hodgkins (general)	116,000	30,223.12		146,223.12
Parent	727,640	1,220.78		728,860.78
Rhees	590	473.07		1,063.07
Sanford	1,100	890.16		1,990.16
Springer		17,932.90		17,932.90
Walcott, Charles D., and Mary Vaux		10,736.20		10,736.20
Younger, Helen Walcott			50,112.50	50,112.50
Zerbee, Frances Brincklé		761.08		761.08
Total	1,000,000	738,858.54	86,458.50	1,825,317.04

FREER GALLERY OF ART FUND

Early in 1906, by deed of gift, Charles L. Freer, of Detroit, gave to the Institution his collection of Chinese and other oriental objects of art, as well as paintings, etchings, and other works of art by Whistler, Thayer, Dewing, and other artists. Later he also gave funds for the construction of a building to house the collection, and finally, in his will, probated November 6, 1919, he provided stock and securities to the estimated value of $1,958,591.42 as an endowment fund for the operation of the gallery. From the above date to the present time these funds have been increased by stock dividends, savings of income, etc., to a total of $4,881,986.96. In view of the importance and special nature of the gift and the requirements of the testator in respect to it, all Freer funds are kept separate from the other funds of the Institution, and the accounting in respect to them is stated separately.

The invested funds of the Freer bequest are classified as follows:

Court and grounds fund	$546,932.11
Court and grounds maintenance fund	137,506.17
Curator fund	556,567.59
Residuary legacy	3,640,981.09
Total	4,881,986.96

SUMMARY

Invested endowment for general purposes	$1,132,868.57
Invested endowment for specific purposes other than Freer endowment	692,448.47
Total invested endowment other than Freer endowment	1,825,317.04
Freer invested endowment for specific purposes	4,881,986.96
Total invested endowment for all purposes	**6,707,304.00**

CLASSIFICATION OF INVESTMENTS

Deposited in the U. S. Treasury at 6 percent per annum, as authorized in the United States Revised Statutes, sec. 5591		$1,000,000.00
Investments other than Freer endowment (cost or market value at date acquired):		
Bonds (19 different groups)	$300,367.31	
Stocks (41 different groups)	474,721.18	
Real estate and first-mortgage notes	41,746.00	
Uninvested capital	8,482.55	
		825,317.04
Total investments other than Freer endowment		1,825,317.04

Investments of Freer endowment (cost or market value at date acquired):		
Bonds (44 different groups)	$2,379,555.93	
Stocks (54 different groups)	2,449,697.40	
Real estate first-mortgage notes	24,500.00	
Uninvested capital	28,233.63	
		$4,881,986.96
Total investments		6,707,304.00

CASH BALANCES, RECEIPTS, AND DISBURSEMENTS DURING THE FISCAL YEAR [1]

Cash balance on hand June 30, 1936		$222,452.43
Receipts:		
Cash income from various sources for general work of the Institution	$72,439.29	
Cash gifts and contributions expendable for special scientific objects (not to be invested)	33,440.45	
Cash gifts for special scientific work (to be invested)	105.00	
Cash income from endowments for specific use other than Freer endowment and from miscellaneous sources (including refund of temporary advances)	64,517.29	
Cash received as royalties from Smithsonian Scientific Series	40,793.33	
Cash capital from sale, call of securities, etc. (to be reinvested)	52,674.65	
Total receipts other than Freer endowment		263,970.01
Cash receipts from Freer endowment, income from investments, etc	$280,969.53	
Cash capital from sale, call of securities, etc. (to be reinvested)	754,715.98	
Total receipts from Freer endowment		1,035,685.51
Total		1,522,107.95
Disbursements:		
From funds for general work of the Institution:		
Buildings, care, repairs, and alterations	$4,717.66	
Furniture and fixtures	570.51	
General administration [2]	28,464.76	
Library	2,101.26	
Publications (comprising preparation, printing, and distribution)	14,639.95	
Researches and explorations	27,254.20	
International Exchanges	3,263.08	
		81,011.42

[1] This statement does not include Government appropriations under the administrative charge of the Institution.

[2] This includes salary of the Secretary and certain others.

Disbursements—Continued.		
From funds for specific use, other than Freer endowment:		
Investments made from gifts, from gain from sale, etc., of securities and from savings on income	$26,168.15	
Other expenditures, consisting largely of research work, travel, increase and care of special collections, etc., from income of endowment funds and from cash gifts for specific use (including temporary advances)	78,947.71	
Reinvestment of cash capital from sale, call of securities, etc	44,383.42	
Cost of handling securities, fee of investment counsel, and accrued interest on bonds purchased	2,079.24	
		$151,578.52
From Freer endowment:		
Operating expenses of the gallery, salaries, field expenses, etc	49,422.18	
Purchase of art objects	141,942.96	
Investments made from gain from sale, etc., of securities	230,665.78	
Reinvestment of cash capital from sale, call of securities, etc	490,327.70	
Cost of handling securities, fee of investment counsel, and accrued interest on bonds purchased	22,864.69	
		935,223.31
Cash balance June 30, 1937		354,294.70
Total		1,522,107.95

EXPENDITURES FOR RESEARCHES IN PURE SCIENCE, PUBLICATIONS, EXPLORATIONS, CARE, INCREASE, AND STUDY OF COLLECTIONS, ETC.

Expenditures from general funds of the Institution:		
Publications	$17,090.34	
Researches and explorations	27,254.20	
		$44,344.54
Expenditures from funds devoted to specific purposes:		
Researches and explorations	49,757.28	
Care, increase, and study of special collections	10,787.39	
Publications	5,606.02	
		66,150.69
Total		110,495.23

The practice of depositing on time in local trust companies and banks such revenues as may be spared temporarily has been continued during the past year, and interest on these deposits has amounted to $1,249.26.

The Institution gratefully acknowledges gifts or bequests from the following:

Dr. William L. Abbott, portion of bequest left to the Smithsonian Institution.

Friends of Dr. Albert S. Hitchcock, for establishment and care of a library in his name.

Edith C. Long, bequest for care of collection of laces, etc., presented to the Institution.

Mr. John A. Roebling, further contributions for researches in radiation.

Mrs. Mary Vaux Walcott, for certain publications and purchase of specimens.

Research Corporation, further contributions for researches in radiation.

The Garden Club of America, the Amateur Gardener's Club of Baltimore, the Herb Society of America, and others, for the publishing of the Badianus Manuscript.

All payments are made by check, signed by the Secretary of the Institution on the Treasurer of the United States, and all revenues are deposited to the credit of the same account. In many instances deposits are placed in bank for convenience of collection and later are withdrawn in round amounts and deposited in the Treasury.

The foregoing report relates only to the private funds of the Institution.

The following annual appropriations were made by Congress for the Government bureaus under the administrative charge of the Smithsonian Institution for the fiscal year 1937:

Salaries and expenses		$36,330
International Exchanges		44,260
American Ethnology		58,730
Astrophysical Observatory		30,850
National Museum:		
Maintenance and operation	$134,390	
Preservation of collections	604,580	
		738,970
National Gallery of Art[1]		34,275
Printing and binding		55,500
National Zoological Park		225,000
Total		1,223,915

The expositions at Cleveland, Ohio, and Dallas, Tex., were continued from last year and the following allotments made for participation therein by the Smithsonian Institution:

Great Lakes Exposition, 1937 and 1938	$350
Greater Texas and Pan American Exposition	5,000

An allotment of $500 was also made to enable the Smithsonian Institution to place an exhibit in the International Exposition held in Paris, France.

[1] Name changed to National Collection of Fine Arts by Public Res. 14, 75th Cong., 1st sess., approved Mar. 24, 1937.

The report of the audit of the Smithsonian private funds is printed below:

AUGUST 27, 1937.

EXECUTIVE COMMITTEE, BOARD OF REGENTS,
Smithsonian Institution, Washington, D. C.

SIRS: Pursuant to agreement we have audited the accounts of the Smithsonian Institution for the fiscal year ended June 30, 1937, and certify the balance of cash on hand, including petty cash fund, June 30, 1937, to be $356,194.70.

We have verified the record of receipts and disbursements maintained by the Institution and the agreement of the book balances with the bank balances.

We have examined all the securities in the custody of the Institution and in the custody of the banks and found them to agree with the book records.

We have compared the stated income of such securities with the receipts of record and found them in agreement therewith.

We have examined all vouchers covering disbursements for account of the Institution during the fiscal year ended June 30, 1937, together with the authority therefor, and have compared them with the Institution's record of expenditures and found them to agree.

We have examined and verified the accounts of the Institution with each trust fund.

We found the books of account and records well and accurately kept and the securities conveniently filed and securely cared for.

All information requested by your auditors was promptly and courteously furnished.

We certify the balance sheet, in our opinion, correctly presents the financial condition of the Institution as at June 30, 1937.

Respectfully submitted.

WILLIAM L. YAEGER & CO.,
WILLIAM L. YAEGER,
Certified Public Accountant.

Respectfully submitted.

FREDERIC A. DELANO,
R. WALTON MOORE,
JOHN C. MERRIAM,
Executive Committee.

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