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SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE YEAR ENDED JUNE 30, 1934

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UNITED STATES NATIONAL MUSEUM,
UNDER DIRECTION OF THE SMITHSONIAN INSTITUTION,
Washington, D. C., October 15, 1934.

SIR: I have the honor to submit herewith a report upon the present condition of the United States National Museum and upon the work accomplished in its various departments during the fiscal year ended June 30, 1934.

Very respectfully,

ALEXANDER WETMORE,
Assistant Secretary.

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

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REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE FISCAL YEAR ENDED JUNE 30, 1934

By Alexander Wetmore

Assistant Secretary of the Smithsonian Institution, in Charge of the National Museum

OPERATIONS FOR THE YEAR

APPROPRIATIONS

Funds for the maintenance of the United States National Museum for the fiscal year ended June 30, 1934, were provided by appropriations carried in the Executive and Independent Offices Act approved June 16, 1933. In addition, under the economy provisions of the Independent Offices Act for 1935, an indefinite appropriation, effective February 1, 1934, amounting to 5 percent of the basic salaries, was made to cover the return of a portion of the salary reduction in force at the beginning of the year. The Museum allotments are summarized as follows:

Preservation of collections	$509,000
Maintenance and operation	128,500
Printing and binding	3,629
Total, regular appropriations	641,129
5 percent increase of salaries, Feb. 1 to June 30:	
Preservation of collections	12,028
Maintenance and operation	1,714
Total available for year	654,871

The direct appropriations for the Museum for 1934 were $60,327 below those for 1933, but this decrease was lessened by $13,742 from the 5 percent salary return, which brought the total to $654,871. The drastic cut carried with it the elimination of the provision effective last year for impoundment of salaries from vacant positions and made it possible to utilize the funds saved from lapses and necessary delays in filling vacancies. Without this change, which allowed essential temporary services and the purchase of miscellaneous materials, the organization would have been unable to operate.

The allotment for printing and binding was $18,725 below the greatly reduced amount of the previous year, and the printing of manuscripts, already greatly in arrears, was entirely stopped except for the annual report. Another serious result of this reduction was the loss of funds for the binding of serial publications and other books for the Museum library.

One position was added to the personnel of the Museum, an assistant librarian transferred from the abolished Regional Bureau of the International Catalogue of Scientific Literature. This position was established to carry on certain bibliographical work greatly needed in the library. No relief was obtained from serious conditions resulting from a greatly undermanned force, and the custodial, clerical, and scientific personnel is still far inadequate for our needs. The return of a portion of the salary cut of last year has been of great assistance to all members of the staff, since living costs have been steadily mounting.

Additional personnel is a recurrent annual need, since clerical and subprofessional aid through the entire staff is at low ebb, resulting in an arrearage of work in arranging and cataloging specimens that increases steadily each year. Further guards are required in order to protect properly our collections and buildings and to allow full leave for Sunday and holiday service, and there is need for an increased force of charwomen and laborers.

The status of the erection of new wings for the Natural History Building remains unchanged, with the project authorized by act of Congress and the preliminary architects' plans completed. It is hoped that under the Public Works Administration or through some other source means may be found to put this building plan into effect, as the Museum's quarters become steadily more crowded, and need for more space is imperative.

COLLECTIONS

Additions of valuable material to the collections continued throughout the year, the receipts being largely in the form of gifts as expeditions were curtailed; no specimens were purchased except in the case of commitments already made. The extensive collections of the Museum prove to be a definite magnet, drawing offers constantly from owners of private collections of various kinds. New material came in 1,842 separate accessions, with a total of 333,874 specimens divided among the five departments as follows: Anthropology, 9,599; biology, 282,441; geology, 30,747; arts and industries, 5,832; history, 5,255. Statement regarding some of the more important additions will be found in the reports of the departments that follow, and all are noted in the accession list. The total increase for the preceding year was 348,012 specimens of all kinds.

For examination and report 1,376 lots of material were received, including much of a botanical and geological nature, and many individual specimens. Part was returned by request to the senders, when it was not consumed during analysis, and part retained for the collections under arrangement with the donors.

Gifts of specimens to schools and other educational organizations numbered 7,197 specimens, including collections of mollusks and fishes, sets to illustrate rock weathering and soils, and illustrative groups of rocks, ores, and minerals. Exchanges of duplicate materials with other institutions and individuals totaled 16,356 specimens, and 50 specimens were transferred to other departments. Loans to workers outside of Washington numbered 30,065 individual specimens.

Following is a summary of specimens now covered in the Museum catalogs:

Anthropology	678,192
Biology	11,104,838
Geology	2,158,455
Arts and industries	121,199
History	494,027
Total	14,556,711

EXPLORATIONS AND FIELD WORK

Work in the field during the year was much curtailed through the reduction in regular appropriations and through the assignment for other purposes of funds usually available from the private income of the Smithsonian Institution. Further, because of reduced moneys, the services of the staff were required more or less continuously in the Museum to carry on the usual routine work in connection with the collections. The field work done was financed mainly through grants from the invested funds of the Smithsonian and other sources, with certain projects of an archeological nature carried on in connection with C. W. A. and P. W. A. projects. Donations from interested friends also helped to make the work more effective and thorough. Additional funds for field investigations are one of the always important needs of our organization.

During the last few weeks of the fiscal year, H. W. Krieger, curator of ethnology, undertook field work in the valley of the Columbia River in Oregon and Washington, the immediate purpose being to salvage archeological information and material in the area to be flooded by the dam under construction at Bonneville, Oreg. This work was carried on at the request of the United States Bureau of Indian Affairs, through an allotment of P. W. A. funds. The field is one familiar to Mr. Krieger, who has worked in the area previously under the auspices of the Bureau of American Ethnology.

From August 19 to November 1, 1933, Frank M. Setzler, assistant curator of archeology, directed the excavation and restoration of several Indian mounds, a neighboring village site, and surrounding earthworks near Marksville, Avoyelles Parish, La., in a cooperative project with the city of Marksville, which had purchased a large portion of the area known to archeologists as the Marksville Works for development as a park and recreational center. The local committee in charge and the city council, cognizant of the value of scientific data to be obtained through careful examination, united in inviting the Smithsonian Institution to supervise the excavation and the restorations. The necessary labor was supplied through the local Emergency Relief Administration. The results more than justified expectations. Various mounds were explored and then restored, and village sites were excavated. The scientific importance of the observations made lies in the fact that material remains, local burial customs, and other factors have made it possible to identify the culture of this site definitely as a southeastern variant of the spectacular Hopewell archeological culture previously known in southern Ohio, with related phases appearing in Wisconsin, Iowa, Illinois, Michigan, and Indiana. Although a few Hopewell vessels from south of the Ohio River had been described prior to the excavations at Marksville, archeologists have never considered the possibility of finding so far south an aboriginal site whose material remains are so closely related to this prehistoric Indian culture. The results obtained at the Marksville Works by Fowke and Setzler have not only enlarged the boundary of the highly developed Hopewell complex but have proved this to be one of the basic cultures in the Southeast.

In mid April, at the request of Hon. T. A. Jenkins, Representative from Ohio, the Institution sent Mr. Setzler to Proctorville, Ohio, to investigate the occurrence of aboriginal remains in trenches being dug for water and sewer lines. After observation and study of the skeletons, potsherds, shells, and bone and stone artifacts recovered, Mr. Setzler concluded that the southeastern part of the town was built on the site of a village once inhabited by Indians considered in Ohio as belonging to the protohistoric Fort Ancient Culture. These otherwise nameless Indians are generally regarded as ancestors of the Ohio Sioux. Specimens and skeletal remains from Proctorville have been donated to the national collections by the resident engineer, B. E. McCown, of Ironton, Ohio.

On May 14, 1934, Dr. Aleš Hrdlička, curator of physical anthropology, left for Kodiak Island, Alaska, to resume excavations at Larsens Bay, where work was carried on 2 years ago. The expedition was made possible by funds provided through the Smithsonian Institution, with assistance from Mrs. Charles D. Walcott.

At the end of May, Dr. C. Lewis Gazin, assistant curator of vertebrate paleontology, aided by George Sternberg, began work in the Pliocene and Pleistocene formations of southern Idaho, particularly in the *Plesippus* quarry near Hagerman, formerly explored by Gidley and Boss. The work was financed by a grant from the Smithsonian Institution. As this expedition was still in progress at the end of the year, a detailed report will be presented later.

Dr. Remington Kellogg and Dr. Gazin, assisted by Raymond Gilmore, spent over a week in August at Governors Run, Md., searching Miocene deposits for remains of fossil cetaceans.

Dr. G. A. Cooper, assistant curator of stratigraphic paleontology, visited Tennessee and Arkansas, where in specially selected Paleozoic localities he collected much material of interest to the Museum. A short trip by Dr. C. E. Resser, curator of the division, resulted in collecting, among other fossils, a rare starfish from the Ordovician rocks of Pennsylvania. This work was done at the expense of those concerned.

James Benn, aid in geology, with the assistance of other members of the department, collected an excellent slab from the Calvert Cliffs of Chesapeake Bay, Md., for the exhibition series. This specimen shows three life zones of the Miocene in different levels. He likewise obtained in the vicinity of Washington a group of Lower Cretaceous lignite logs.

Dr. W. F. Foshag, curator of mineralogy, traveling under the Roebling fund, spent a few days examining the pegmatite pocket at Topsham, Maine. E. P. Henderson, assistant curator of physical and chemical geology, under the Canfield fund, in company with Frank L. Hess, of the United States Bureau of Mines, in June studied the pegmatites of the spruce pine district of North Carolina, where they obtained good exhibition and study material.

Dr. Waldo L. Schmitt, curator of marine invertebrates, was again invited by Capt. G. Allan Hancock to accompany an expedition to the Galapagos Islands on the yacht *Velero III*. The party left Los Angeles on December 30, 1933, and enroute to the Galapagos stopped at Socorro and Clarion Islands, Mexico. They devoted 21 days to the Galapagos Islands and 16 to the coast of South America between Guayaquil, Ecuador, and Panama, making stops at several places in Ecuador and Colombia. On the return along the Central American coast they made collections at Jicaron Island, the Secas Islands and Bahia Honda, Panama, and on the southern Mexican coast at Tangola-Tangola, the White Friars Rocks, Petatlan Bay, Tenacatita, and Isabel Island, and also visited Santa Maria Bay and Cerros Island off the coast of Baja California. The cruise terminated at San Pedro, Calif., on March 14, 1934. The new localities visited and the superior dredging equipment provided by Capt.

Hancock resulted in an extremely valuable collection, adding particularly to knowledge of the carcinological fauna of the region visited. Two porpoises, bats, some fishes, and a series of Galapagos birds were also obtained, as well as several live tortoises for the National Zoological Park.

Dr. David C. Graham, now connected with the West China Museum at Chengtu, capital of the Province of Szechwan, resumed explorations in the mountains of western China, and during the summer of 1933 undertook an expedition along the river Min to the region north of Chengtu. He left that city on July 16 and arrived at Wen-chuan-shien on July 21, where he collected for several days. He next explored the mountains immediately north of the confluence of the rivers To and Min as far as the village of Omu-sang-tsai, crossing a rough mountain pass at an altitude of 10,665 feet. On July 28 he reached the river To at Dong-men-wait (5,600 feet), whence he made excursions into the region to the north until August 23. During this time he ascended the valley leading up to the village of O-er and the high mountains to the northwest, camping at 15,300 feet and at various places between 12,500 and 14,100 feet, gathering important collections, chiefly of large mammals and insects. Another excursion was along the river To past Li-fan to Tsa-gu-low, at 7,500 feet. Dr. Graham returned to Chengtu on September 1 after one of the most successful of his many expeditions, with large and important collections.

Dr. Hugh M. Smith, located in Bangkok, Siam, continued to forward specimens from various parts of that country, gathering large and valuable collections, which have added materially to our representation of the Siamese fauna.

Capt. Robert A. Bartlett during the Norcross-Bartlett expedition made extensive gatherings of marine invertebrates from Baffin Land northward to Fury and Hecla Straits. The party departed from New York early in June and returned October 10, 1933.

Dr. S. F. Hildebrand's investigations of the fisheries of Mississippi and of Puerto Rico under the auspices of the United States Bureau of Fisheries in cooperation with the State of Mississippi and the insular government of Puerto Rico, respectively, brought to the Museum many important specimens of invertebrates.

Dr. Alan Mozley, awarded the Walter Rathbone Bacon traveling scholarship under the Smithsonian Institution for the study of the land and fresh-water molluscan fauna of Siberia, in the summer of 1933 arrived in Omsk before the melting of the snow and was well received by his friends at the experiment station and the Agricultural Institute. Carrying a letter from the president of the Academy of Sciences at Leningrad to the president of the Omsk Soviet, he was able to obtain a wagon and two horses and with a young

medical student set out for the region to the south of Omsk for a journey of about 3 months through the forest steppe. After the return to Omsk he proceeded via Tomsk to the Baikal region and again established headquarters at the limnological station of Professor Vereshagin. After an attempt to visit the northern part of Mongolia he returned to Leningrad via Irkutsk. As during the previous year he spent the winter in Edinburgh working on his collections.

In the division of fishes, Dr. G. S. Myers, assistant curator, and E. D. Reid, aid, continued at their own expense field work in Virginia collecting fishes with the view to preparing a report on the fishes of the State. The trips made this season included one to the tributaries of the Yadkin-Peedee system in southern Virginia, resulting in the addition of several species to the State fauna. Mr. Reid also collected in the Youghiogheny River in western Maryland.

Dr. Paul Bartsch, curator of mollusks, as in previous years, made a short visit to the Tortugas to inspect the *Cerion* colonies planted there. He took some moving pictures under sea, as well as of the tern colonies that are leaving Bird Key to settle on Garden, Bush, and Long Keys.

Aside from a few days given by E. C. Leonard to collecting lower cryptogams in the mountains of Virginia, North Carolina, Tennessee, and West Virginia, the only botanical field work during the year was that of J. R. Swallen, assistant botanist in the section of grasses, under the United States Department of Agriculture, who visited Brazil to search for grasses. This work, begun in November and still in progress at the end of the year, was yielding excellent results, both in extending the range of many species and in the discovery of new ones. The period of exploration will cover about 9 months.

During the summer of 1933, Prof. C. E. Burt, of Southwestern College, Winfield, Kans., was engaged in field work with the special purpose of collecting a series of turtles in the southern part of the Appalachian system, from which region the Museum needed more material to settle certain taxonomic and zoogeographical problems. The results were eminently successful, many turtles, other reptiles, and amphibians being obtained. This work was financed by the Smithsonian Institution.

ASSISTANCE BY CIVIL WORKS ADMINISTRATION

Mention is made at several places in the reports of the head curators of C. W. A. employees who were assigned to various divisions of the Museum. Employment under the C. W. A. in the

Smithsonian Institution was obtained to assist in clearing up an arrearage of work concerned with cataloging and numbering collections, copying permanent records, preparing specimens, and other similar tasks that the regular staff could not undertake because of their regular duties. It included also painting, carpenter, electrical, and allied work where the regular force of mechanics was not available because of employment in other ways. In no instance was this assistance utilized to make up for furloughed or dismissed employees or to carry on current duties properly the task of the permanent staff. The work was in all cases constructive and of permanent value and did not include such routine maintenance as cleaning and char work.

The assistance received came entirely through assignment of personnel through the District of Columbia C. W. A. office; no transfer of funds was made to the Smithsonian Institution for this purpose. All pay rolls were handled through the District office, and all supplies necessary for the work were purchased by our regular funds provided for that purpose.

Under this arrangement 208 persons were employed from December 15, 1933, to February 20, 1934. The group included 29 mechanics and 179 designated under the general term of white-collar workers. The persons employed were assigned to definite duties and placed under direct supervision of those in charge of the offices concerned. Records were kept of all work, and pay rolls were made out in the office of the associate director.

The work accomplished is summarized as follows: In our libraries 3,969 shelves of books were checked, and when necessary individual books were labeled and repaired. In various collections, 99,805 specimens were listed, numbered, or arranged; 4,786 specimens of various kinds were repaired; 542 storage cases were checked and the contents cataloged; and 146 drawings were made for scientific use and study. Catalog cards and labels were prepared or filed to the number of 192,370. Certain other types of accomplishment can be expressed best in total number of hours of labor devoted to them. These included 10,403 man-hours occupied in sorting, labeling, and checking specimens, 1,506 man-hours devoted to translating scientific manuscripts and publications into English, 5,865 man-hours occupied in typing of records, notes, and manuscripts, and 6,000 man-hours in miscellaneous office and laboratory work on our collections. Mechanical work covered 3,267 man-hours in repairs to buildings and equipment, 2,760 man-hours in painting buildings and equipment, and 1,728 man-hours in repairs and replacements in the heating and lighting plant.

As our staff has been for a long time undermanned, the C. W. A. work came at an opportune time, and not only provided employment

but aided materially in placing our records and collections in proper condition for preservation and study. The assistance, though occupying many of the regular staff in supervision, was entirely worth while and much appreciated.

EDUCATIONAL WORK

The National Museum during the year continued its customary activities in educational lines. Our exhibition halls display great series of objects so arranged as to demonstrate facts of many kinds, on subjects ranging from the tools and dress of primitive man to complicated modern machinery, examples of the life of strange lands, of the elements that compose the earth, fossil animals and plants of former ages, and many other things. Descriptive labels accompany all these, and there is constant change to keep them properly arranged and up to date. The whole serves as a compendium of reference to the student or as an attractive display to the one of more casual interest, from which all may profit according to their desires.

In addition, the Museum is constantly active in the dissemination of knowledge in response to many hundreds of inquiries that come by mail or from visitors. Classes from the city schools are guided through the halls, and groups of students from a distance are given similar service. Although the Museum does not maintain regular series of lectures, members of the staff are called on regularly to address meetings. Students throughout the country interested in definite problems come to work with our collections and libraries, and frequently workers from abroad are engaged in investigations here that sometimes continue for months. From this it may be seen how widely varied is the range of our educational activities and how extensive the field that they cover.

VISITORS

Visitors to the various Museum buildings totaled 1,463,375 during the year, an increase of 36,017 over the previous year. The average attendance for week days was 3,849 and for Sundays 5,122. All the buildings were closed on Christmas and New Year's Days. The number of visitors to the Smithsonian Building on week days was 188,519 and on Sundays 43,664; to the Arts and Industries Building 500,519 on week days and 121,571 on Sundays; to the Natural History Building 406,854 on week days and 101,094 on Sundays. Table 1 shows the number of visitors during each month for the past year.

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1934*

Year and month	Smithsonian Building	Museum buildings			Total
		Arts and Industries	Natural History	Aircraft	
1933					
July	26, 069	63, 258	50, 813	11, 539	151, 679
August	28, 534	68, 801	54, 506	12, 902	164, 743
September	23, 628	56, 106	44, 406	9, 806	133, 946
October	18, 549	46, 514	41, 978	5, 719	112, 760
November	11, 393	27, 416	30, 995	4, 112	73, 916
December	10, 621	26, 104	24, 473	4, 660	65, 858
1934					
January	10, 547	25, 979	27, 957	4, 650	69, 133
February	8, 080	19, 105	19, 548	3, 870	50, 603
March	13, 001	36, 444	30, 656	6, 752	86, 853
April	38, 122	121, 964	84, 200	14, 704	258, 990
May	19, 950	65, 403	48, 854	10, 668	144, 875
June	23, 689	64, 996	49, 562	11, 772	150, 019
Total	232, 183	622, 090	507, 948	101, 154	1, 463, 375

LIBRARY

The library of the National Museum, numbering 86,738 volumes and 111,713 pamphlets, consists of 2 general collections, chiefly on natural history and technology, and 35 special collections, which are the immediate working tools of the curators and their assistants. During the year the collection was increased by 2,158 volumes, 11,699 parts of volumes, 965 pamphlets, and 20 charts—in all, 14,842 publications. Some of these came by purchase, but most, as usual, by exchanges. The regular new exchanges entered into were 91. By special exchange the library obtained from the Public Library of the District of Columbia 4 important sets, comprising 77 volumes; and by transfer from the Library of Congress 505 publications. Many valuable items were received from members and associates of the scientific staff.

The work done by the library staff was unusually large in volume, including as it did the supervision of C. W. A. employees. The staff made 11,731 entries in the periodical file, cataloged 3,111 publications, and added 25,925 cards to the catalogs and shelf lists. They lent to the scientific staff and their assistants 9,972 publications, of which 7,339 were from the Museum collections. Of the loans, 2,553 were borrowed from the Library of Congress and 570 from other libraries. They made 110 loans to other libraries, chiefly in Washington, but including the Academy of Natural Sciences of Philadelphia, Alabama Natural History Society, Carnegie Museum (Pittsburgh), College of Physicians of Philadelphia, E. I. Du Pont de Nemours Co., Hopkins Marine Station, John Crerar Library, Los

Angeles Museum, Rice Institute, St. John's College, Tennessee Ornithological Society, and Johns Hopkins, Minnesota, Ohio State, Princeton, and Western Reserve Universities. The staff assigned 5,310 publications to the sectional libraries. They returned 2,600 to the Library of Congress, and 592 to other libraries. Through curtailment of Museum funds it was possible to send only 128 volumes to the bindery.

The work of rearranging and listing the contents of the manuscript case was finished, as was that of revising the file of charges at the main loan desk. The cards of the concilium bibliographicum author set, totaling 6,160, were filed to date, and thousands of old cards of the systematic set were sorted and distributed to the sectional libraries, with the result that the accumulation of unfiled cards in the library was greatly reduced. The current Wistar Institute cards, numbering 463, were also filed.

In the Arts and Industries Building the reorganization of the technological library was continued. A detailed study of the material on the shelves led to the preparation of a list of titles of serials no longer needed by the Museum or Smithsonian, and the offer of them to other Government libraries where they would be useful. By the close of the year 13,940 volumes of these had been transferred to the Library of Congress and other Government libraries and to the Superintendent of Documents. In this connection, it is pleasant to report that on the second floor of the library steel shelving was substituted for the old wooden cases in the north wing, the lighting was much improved, and an adequate heating system installed.

Probably the outstanding event of the year was the appointment, for part of the fall and winter, of 34 C. W. A. library workers, 10 of whom were assigned to the Museum. Among the activities notably advanced by the workers were the following: Sorting by subject and distributing to the curators concerned, for their office files, 33,700 reprints and pamphlets from the west stacks of the Smithsonian Building—a task later finished by a regular member of the Library staff, who thus increased the number of such publications to nearly 50,000; checking sets of publications of learned societies and institutions and preparing 418 want cards for missing parts; cataloging 9,024 pamphlets in the sectional libraries of mammals, mollusks, and invertebrate paleontology and typing 18,048 cards for them; copying shelf lists, correcting old catalog cards, typing subject headings—work that in the case of one person alone involved handling 14,444 cards; labeling 4,000 volumes on the shelves; putting hundreds of pamphlets into binders and cases, and lettering them appropriately; and rearranging and putting in order the natural-history collection.

PUBLICATIONS

Except for the Annual Report of the Museum for 1933, which was issued as part 2 of the Annual Report of the Secretary of the Smithsonian Institution, the output of the editorial office was confined to publications sent to the printer before July 1, 1933, and paid for from 1933 funds. No funds were made available for publishing Museum bulletins and proceedings during the fiscal year 1934. A total of 13 publications appeared during the year; these are listed at the end of this report.

As other work of the editorial office permitted during the year, the editor and his assistant proceeded in the making of the comprehensive index to the publications of the National Museum. The work of arranging, alphabetizing, and filing the index cards was aided, for a period of about 3 months, by the full-time services of one C. W. A. worker and the part-time help of another. At the end of the year the indexing of Bulletins 1–21 and Proceedings volumes 1–8, inclusive, had been completed. These comprised a total of approximately 87,000 cards (after duplicate entries were combined).

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 22,281 copies; while in addition 12,846 copies of publications issued during this and previous years were supplied in response to special requests.

During the year 710,438 forms, labels, and other items were printed, and 273 volumes were bound.

PHOTOGRAPHIC LABORATORY

The photographic laboratory made during the year 2,963 negatives, 17,802 prints, 628 lantern slides, 148 enlargements, 4 photomicrographs, and 1 transparency; developed 40 rolls of film, 40 film packs, and 141 cut films; and dry-mounted 61 prints. This work, representing a slight decrease from that of last year, was required by the Smithsonian proper and the National Museum and by the National Gallery of Art and the Bureau of American Ethnology, whose photographic needs are supplied by the laboratory through a cooperative arrangement. There is a growing demand for facilities for photostatic work and for infrared and ultraviolet photography, but it has not been possible yet to provide these.

BUILDINGS AND EQUIPMENT

Repairs and alterations.—Repainting the southwest, east-south, and northeast (boat hall) ranges and the outside metal and woodwork of the 8 towers and 8 pavilions of the Arts and Industries Building, and the north vestibule and stairway of the Smithsonian

Building; installing new locks on doors throughout the Smithsonian Building; and alterations necessitated by the installation of a new refrigerating plant in the basement of the Smithsonian Building constitute the chief repairs to Museum buildings during the year, other than many of a routine nature.

Heat, light, and power.—The heat, light, and power plant, located in the Natural History Building, was in operation for about 8 months of the year. Owing to the unusually severe winter, the consumption of coal was more than for many years. For heat, light, and power production 3,505.3 tons of bituminous coal were purchased at $4.94 a ton. Nearly 54 tons more than this was actually consumed.

The electric current purchased for the Arts and Industries Building throughout the year and for all the buildings during the summer amounted to 448,320 kilowatt-hours, while the current generated in the Museum plant amounted to 639,585 kilowatt-hours, making 1,087,903 kilowatt-hours used altogether. The current purchased cost $8,030.34, or 1.79 cents a kilowatt-hour, and that generated cost $9,824.74, or 1.54 cents a kilowatt-hour.

Notable progress was made in the huge task of installing brass pipe in the water-heating system in the Natural History Building, more than 5,000 feet being finished during the year.

Ice production.—The refrigerating machine, for furnishing ice to the Museum buildings, was operated 4,081 hours during the year, producing 428.7 tons of ice at a cost of $664.52, or at the rate of $1.55 a ton (45 cents a ton less than for last year).

Fire protection.—In the Arts and Industries Building considerable electric wiring in wooden conduits was replaced by metal cable to eliminate a fire hazard of long standing. Another measure in this direction was to close with plaster block three arch openings in the Arts and Industries Building. There still is much to be done toward fire protection, the east end of the Smithsonian Building being especially bad because of the antiquated electric wiring. This work will continue as available funds permit. The usual periodic inspections of fire alarms, extinguishers, and plugs, and of the sprinkler system in the Aircraft Building, were made.

Furniture and fixtures.—The furniture added during the year included 39 exhibition cases; 592 pieces of storage, office, and laboratory furniture; and 2,623 drawers, boxes, and frames of various kinds. Equipment condemned consisted of 13 exhibition cases and bases, 26 pieces of storage, office, and laboratory furniture, and 7 wooden drawers. An inventory of furniture on hand on June 30, 1934, showed 3,769 exhibition cases and bases, 17,567 pieces of storage, office, laboratory, and other furniture, and 105,678 drawers, boxes, and frames.

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MEETINGS AND SPECIAL EXHIBITS

The use of the auditorium and lecture room in the Natural History Building is offered by the Museum to scientific and educational associations for regular and special meetings, and whenever possible assistance is given in carrying out their programs. During the year 109 such meetings were held in these rooms by a wide variety of organizations and societies, including several other Government agencies.

Memorial meetings.—Three memorial meetings held during the year commemorated the notable services of members of the staff lost through death:

October 9, for WILLIAM DE CHASTIGNIER RAVENEL, retired head of the department of arts and industries, who died on October 8, 1933, at the age of 74.

May 23, for EDWARD WILLIAM NELSON, honorary associate in zoology and former chief of the Biological Survey, who died on May 19, 1934, at the age of 79.

May 29, for JOHN MERTON ALDRICH, curator of the division of insects and world famous dipterist, who died on May 27, 1934, at the age of 68.

Special exhibits.—The foyer of the Natural History Building was occupied almost continuously during the year for a series of 15 special exhibits sponsored by various educational agencies, as follows:

July 6 to August 4, 1933: Exhibit of photographs of California trees, sponsored by the Save the Redwoods League.

October 2–30, 1933: Exhibit of photographs of taxidermic work in Europe and America, sponsored by the American Association of Museums.

October 12–14, 1933: Exhibition of specimen roses entered in contest of Potomac Rose Society.

October 30 to November 12, 1933: Exhibition of Negro art, including oil paintings, drawings, water colors, wood sculptures, and photographs.

November 15 to December 10, 1933: Exhibit of photographs representing beauty in trees, brought together in competition from the various States by the American Forestry Association.

December 4–11, 1933: Exhibit of children's notebooks by public schools of the District of Columbia.

December 19, 1933, to February 27, 1934: Exhibit of African ethnological material, including the C. C. Roberts collection.

January 2 to February 2, 1934: Exhibit of Second Empire daguerreotypes from the collection of Mme. Therese Bonney, of New York and Paris. On January 4 was held an informal opening of this exhibit, with Ambassador André de Laboulaye of France as the guest of honor.

February 28 to April 2, 1934: The E. A. Osborne collection of Guatemalan ethnology, sponsored by the Center of Inter-American Studies of George Washington University. On March 15 a reception was held in connection with this exhibit, at which addresses were made by the Guatemalan minister, Dr. Don Adrian Recinos, and others.

April 5–26, 1934: Exhibition of Historic American Buildings Survey. This was opened formally on April 6 by a reception given under the auspices of the Department of the Interior and the American Institute of Architects.

April 28 to March 5, 1934: Third annual exhibit of the Association of Federal Architects, the following Federal agencies being represented in the work:

Department of War; Bureau of Yards and Docks, Department of the Navy; Veterans' Administration; Supervising Architect's Office, Treasury Department.

May 6–13, 1934: Exhibition of Public Works of Art projects, from the region including Maryland, Virginia, and the District of Columbia.

May 14–23, 1934: Exhibit of model airplanes, made by boys of the District of Columbia and nearby Maryland and Virginia, sponsored by the Model Aircraft League of the Community Center Department.

May 14–30, 1934: Exhibit of water-color paintings of battleships, cruisers, and other naval scenes by Lt. Arthur Beaumont, United States Naval Reserve.

June 18 to July 5, 1934: Exhibit of the art work produced by pupils of the public schools of the District of Columbia.

CHANGES IN ORGANIZATION AND STAFF

Changes in the organization of the Museum were not extensive and came chiefly as the result of a general consolidation of Government activities in the disbursing of funds and the heating of buildings.

The establishment in the Treasury Department of a central disbursing agency for all Government establishments, and the consequent abolishment of the disbursing office of the Smithsonian Institution at the close of business on January 31, 1934, necessitated a reorganization of the accounting and disbursing work of the Museum. Nicholas W. Dorsey, who since April 1, 1924, had been disbursing agent of the Museum, as of other Government bureaus under the Smithsonian, was on February 1 given the title of accountant and auditor, and Thomas F. Clark, who had been deputy disbursing agent since 1924, was made assistant accountant and auditor. All disbursing work was transferred to the new division of disbursement of the Treasury Department on February 1, 1934, salary payments from that date being made by check instead of by cash.

The completion this year of the first units of the central heating plant, which has long been contemplated, resulted in the abandonment of the Museum's high-pressure heating boilers at the close of the 1933–34 heating season. The Museum will purchase heat hereafter from the central heating plant, instead of producing it itself. The changed method of heating necessitated the abolishment on June 30, 1934, of six permanent as well as of several seasonal positions in the power plant. With possibly one exception, the occupants of these positions will be cared for elsewhere in the Government service. The establishment in the Museum of one additional scientific position early in the year makes a net loss of five on the permanent force.

The Museum scientific staff changed but little during the year. Advantage was taken of the opportunity afforded by the discontinuance of the Regional Bureau of the International Catalogue of Scientific Literature to strengthen the Museum's staff by the appointment on July 1, 1933, of Leonard C. Gunnell, as an assistant librarian in

the Museum with the object of making readily available to the scientific staff two extensive groups of technical source material. The first project is the preparation of a bibliography of technical articles by scientists of the Institution in outside publications and the second concerns the cataloging and classifying of a large collection of unpublished manuscripts based in part on the national collections but prepared mostly by outside scientists.

In the department of biology, William B. Marshall, assistant curator of the division of mollusks, was retired at his own request on April 30, 1934, Harald A. Rehder, senior scientific aid, succeeding him as assistant curator on June 1. Mr. Marshall's association with the Museum was continued by an honorary appointment on May 1 as associate in zoology. Likewise, Dr. Theodore S. Palmer, who had long been connected with the scientific work of the Government, was given honorary appointment in the Museum as associate in zoology on August 1, 1933, when he was retired from active work with the United States Bureau of Biological Survey.

The operation of the Civil Service Retirement Act took 16 employees from active service with the Museum, 8 for age, 7 for disability, and 1 by optional retirement, as follows:

William B. Marshall, assistant curator, after 32 years' service; Mrs. Nida M. Browne, preparator, with 15 years' service; John F. Brazerol, Isador S. Dyer, and Joseph G. Adzema, senior mechanics, with 27, 22, and 9 years, respectively; Samuel McDowell, blacksmith, 17 years; August F. Broacker, Alexander M. Cole, James W. Cornell, and Charles A. Sparks, guards, with 23, 15, 15, and 4 years, respectively (Mr. Sparks had 35 years' service, the last 4 in the Museum); Mrs. Ella Coleman, Mrs. Roxie A. Burrell, Mrs. Fannie J. Smith, and Mrs. Margaret Hall, charwomen, with 24, 23, 21, and 5 years' service, respectively; Scott Ambler and John F. Pinkney, laborers, with 24 and 16 years, respectively.

The Museum lost through death 2 honorary and 6 active workers, as follows: Edward Johnson Brown, honorary collaborator in the division of birds, on February 14, long connected with the scientific work of the Museum; Edward William Nelson, honorary associate in zoology, on May 19, for many years associated with the Government's scientific work; John Merton Aldrich, associate curator of the division of insects, on May 27 (21 years in Government service, last 15 in Museum); Ruth Sherwood, stenographer and typist in the department of arts and industries, on September 13 (15 years in Government service, 13 in Museum); George L. Weber, guard, on February 22 (16 years' service); Mrs. Mary M. Lorance, charwoman, on January 28 (5 years); Mrs. Cassie Whiting, charwoman, on February 15 (10 years); and James P. Bourke, Sr., elevator conductor, on October 21 (15 years).

DETAILED REPORTS ON THE COLLECTIONS

DEPARTMENT OF ANTHROPOLOGY

(Walter Hough, *Head Curator*)

The work of the department of anthropology has proceeded favorably during the year when the general curtailment of the Museum's activities is considered. Work in the field included cooperation in exploring an ancient Indian village site at Marksville, La., under funds provided by Emergency Relief Administration of Louisiana. At the close of the year field researches were in progress on Kodiak Island, Alaska, and in the area to be flooded by the Bonneville Dam in the Columbia River Valley.

The department gained many valuable specimens from the archeological work carried on under the Bureau of American Ethnology through funds provided by the Civil Works Administration for employment of labor in California, Tennessee, South Carolina, Georgia, and Florida.

ACCESSIONS FOR THE YEAR

The division of ethnology recorded 53 accessions and 918 specimens, including a pictographic painting on muslin, the work of a Sioux Indian; 3 weavings from the Zuni; 2 twined baskets from the Tlingit; 2 large earthenware jars from the Rio Grande and Acoma; an assortment of ethnological material from the Rosebud Agency, S. Dak., collected by Col. E. A. Koerper; and specimens of silver work of the Navaho. A novel form of art expression executed by bitings on birch bark by the Chippewa of northern Minnesota was presented by Miss Frances Densmore.

From outside the United States came collections originating in Africa, Asia, Oceania, and Europe, among which may be mentioned the following: The C. C. Roberts collection from the Gold Coast, the Ivory Coast, the Cameroons, and Nigeria, including splendid examples of wood carving from the Ivory Coast, the Sobo of Nigeria, the Ashanti of the French West African Gold Coast, and the British Cameroons; carved wooden drums from the Haussa and Owarri of Nigeria, and upright and two-headed wooden drums from Calabar and the Kibbi group of the Nigerian Ashanti; splendid metal work as well as musical instruments from the Haussa of Nigeria; earthenware ink pots, stone bracelets, and dye pots from the Fulani; a dancing gourd from the Egba; iron gongs from the Ibibio; basketry armpit rattles from the Owarri of Nigeria; a Kroo dancing

belt from Liberia, Egun straw hats; Yoruba cloth; and goldsmith's weights from the Ashanti. One of the most interesting objects in this collection is an open-work mesh weave Juju suit of the Egba. The Roberts collection supplements previous material procured by him from the West African coast, from the Kingdom of Dahomey to Angola.

Important collections transferred from the Bureau of American Ethnology include Sumu and Miskito ethnologica from the Honduran and Nicaraguan coasts gathered by Dr. William D. Strong while a member of the Haskell-Smithsonian expedition. This is a valuable addition to the limited material previously received from that area. There was also added through the same bureau a collection of stone implements used in the daily life of Australian and Papuan tribes, originally assembled by Joel H. DuBose, who also presented to the Museum another small collection of stone implements from Australia.

A unique woven blanket of early Mexican provenience was received as a gift from Miss Clara Abercrombie. Woven into the design are pictographic symbols representing signatures of towns similar to those depicted on ancient Mexican codices. The lettered margin of the blanket dedicates the weaving to a Mexican apparently of the higher class.

Under the category of Americana came a miscellaneous lot of early weavings and weaving implements, pottery, metal work, embroidery, and jewelry. Two interesting terra cotta busts of Negro slaves once living near Savannah, Ga., were presented by Miss Flora F. Donnelly, who modeled them. Miscellaneous material from excavations made some years ago at Jamestown, Va., came as a gift from Martin L. Ehrmann. The 123 specimens included tell in a small way the story of the early Jamestown settlers and supply material for the study of various steps in the development of American glass, pottery, and metal work.

European objects include a peasant's pipe and tobacco pouch from Finland, a Dutch stoneware jug, a German meerschaum pipe and a miniature jointed wooden doll, the smallest on record, and a thimble case from Switzerland. A miscellaneous lot of objects of fine art, including jewelry, watches, silver, paintings on enamel, miniatures in ivory, and Meissen ware, from various European countries, principally Italy, France, England, and Germany, was presented by Miss Mary Maxwell. Intrinsically this collection is one of the most valuable received in recent years. It also includes excellent specimens of Hindu, Burmese, Chinese, and Japanese art, enamel, filigree silver, repoussé gold, and other media.

A Japanese embroidered screen presented by Mrs. Alexius McGlannan was collected by her father, the late Homer Lycurgus Law,

United States Navy. The bequests by Mrs. Charles A. Coolidge and Mrs. Virginia L. Schoonmaker include bronzes, porcelains, ivories, and other objects of high art from Chinese and Japanese sources. Intrinsically and artistically these collections rank with the best received in recent years from China and Japan. A tall metal spirit stand shod with repoussé copper and brass and studded with turquois insets, made by an inspired metal craftsman in Tibet, was received as a gift from Dr. Leo A. Lally.

A remarkable gift from the originator of the culture pearl industry of Japan, K. Mikimoto, is a miniature replica of Mount Vernon executed entirely in worked pieces of mother-of-pearl and studded and embellished with thousands of graduated pearls. This model has been estimated to have a value of $500,000, by far the most precious specimen received during the year. It was exhibited at the Century of Progress Exposition in Chicago during the 1933 season. The label for the exhibit reads as follows:

> This replica of Mount Vernon was presented to the Smithsonian Institution by the Japanese Ambassador Katsuji Debuchi, on behalf of K. Mikimoto, the originator of the cultured pearl industry in Japan. Prepared for exhibit in the National Museum under the supervision of J. Seo. This model of Mount Vernon rests on a base of lacquered wood and consists of 12,000 pieces of mother-of-pearl, 5,184 pearls in the mansion itself, 6,500 on the lawn, and 185 in the flag.

The division of archeology received 38 accessions totaling 8,337 specimens, contrasting with 64 accessions covering 2,737 specimens for last year.

The following are deemed worthy of special notice: 3,950 artifacts of ivory, bone, stone, and wood collected for the Museum by James A. Ford and Moreau B. Chambers during 1931 and 1932 in Alaska; 1,081 flint objects from Paleolithic deposits in 3 caves in the Wady al-Mughara (Valley of the Caves), 12 miles south of Haifa, Palestine, collected jointly by the 1932–33 expedition of the American School of Prehistoric Research and the British School of Archeology in Jerusalem and deposited by the Archaeological Society of Washington; 1,771 specimens of stone and pottery collected for the Bureau of American Ethnology by Frank M. Setzler from 3 mounds and 2 village sites within the Marksville Works, near Marksville, Avoyelles Parish, La., and received as a transfer from the Bureau; 647 artifacts of pottery, shell, bone, and stone from Basket Maker III and Pueblo, I, II, and III house sites 3½ miles south of Allantown, eastern Arizona, collected by Dr. F. H. H. Roberts, Jr., for the Bureau of American Ethnology in 1931–32 and transferred by the Bureau; part of an aboriginal Indian dugout canoe exhumed on Cumberland Island, Ga., and received as a gift from the Lucy Coleman Carnegie estate; a prehistoric Pueblo necklace of shale beads averaging 32 to

the inch, from Coconino County, Ariz., presented by Hoffman Birney; 5 earthenware vessels from Chimu ruins near Trujillo, Peru, presented by Mrs. H. A. Jaynes; 75 specimens from Alitak and Olga Bay, Alaska, collected and presented by Mr. and Mrs. Henry B. Looff, of Oak Harbor, Wash.

The division of physical anthropology received 20 accessions with 206 specimens, compared with the previous year's 18 accessions of 658 specimens. The following are the more important: 65 lots of bones from the secondary Indian burials at Port Tobacco, Md., collected by Judge William J. Graham with the aid of Assistant Curator Stewart; 49 skulls from St. Lawrence Island, Alaska, collected and presented by the Alaska Agricultural College and School of Mines; 37 skulls and skeletons from the Sacramento Valley, Calif., presented by Robert F. Heizer and the Sacramento Junior College; 16 skulls from the same region purchased and donated by Dr. Aleš Hrdlička; and cast of Locus E *Sinanthropus* skull and intracranial cavity.

Near the close of the year large collections of skeletal material were received from C. W. A. projects in Florida and California, but this has not yet been prepared for accessioning.

In the section of art textiles a number of cases exhibiting glass, jewelry, ceramic, and other articles of luxury of older periods were added. Mrs. Dorothy Elias presented nine collars, doilies, and handkerchiefs, and Miss Josephine Burket a " baby Irish lace " collar.

The section of ceramics received 128 specimens comprising 5 accessions, 4 of them gifts. Notable are 55 pieces of antique porcelain given by Mrs. Francis T. Redwood and 69 pieces of ceramics by the Misses Holliedt. A fine piece of wedgwood basalt of about 1765 was lent by Miss Louisa Green.

The collections of the Misses Long, displayed principally in art textiles and history, were, on the death of Edith Long, made a bequest.

INSTALLATION AND PRESERVATION OF COLLECTIONS

In the division of ethnology a number of minor exhibits were rearranged in anticipation of a general review of the public display next year. Two special exhibits were arranged in the foyer, the first being a comprehensive display of the arts and crafts of the peoples of West Africa, made possible by the unusually complete collections assembled and presented to the Museum by Theodore Roosevelt, Ellen I. Burk, C. C. Roberts, Heli Chatelain, S. P. Verner, W. P. Tisdel, George W. Ellis, Jr., and others. The second exhibit included weavings and miscellaneous ethnological objects from Guatemala, composed of material assembled by Mrs. E. A. Osborne,

of San Salvador, and brought to the Museum through the cooperation of the center of inter-American studies of the George Washington University. Most of the country population of Guatemala is still Indian, and weaving on hand looms and embroidered designs are extremely stylized and of great antiquity.

Progress has been made in the care and preservation of study collections in storage, through their arrangement in dust-proof quarter- and half-unit cases.

Most of the paintings of George Catlin and of the W. E. Safford collection were photographed, a project still under way at the close of the year, and it is planned to have all the paintings in the division photographed for record.

A comprehensive index and catalog of paintings in the division was made during the year by Miss Vendla M. Hendrickson. Other indexes and catalogs made include the beginning of a tribal and geographical index of the division's collections by three C. W. A. assistants. A catalog of Museum publications on anthropology in the section library also was prepared by Miss Hendrickson.

In the division of archeology the division staff, assisted for 3 months by 8 C. W. A. workers, made considerable progress in its program of reexamining and reclassifying the collections from the Western Hemisphere. All the archeological material from Florida, North Carolina, and South Carolina was reexamined and the corresponding records revised or completed. Thereafter new exhibits were prepared for these three States and the remaining material separated into geographic units for greater convenience in future studies.

The work of the C. W. A. employees may be summarized as follows: 1,950 man-hours devoted to checking and numbering specimens; 3,100 catalog cards typed, several hundred revised, and about 50 sheets of tabulated matter prepared; 2 articles, comprising 314 typewritten pages, in French with notations in Spanish and Portuguese, translated.

A plaster replica of the famous clay bison, carved by Upper Paleolithic sculptors on the floor of the Cave of Tuc d'Audoubert, Ariege, France, received as a gift from the Old World archeology fund, was installed in a specially prepared case. Presented by the Carnegie Institution of Washington, a model of pyramid E–VII *sub* at Uaxactun, northern Guatemala, the original of which is remarkable for its great antiquity, its beautiful proportions, and its surprising state of preservation, was placed on exhibition in the hall of Latin American antiquities. To help illustrate the cultural relationship between our historic tribes and those of the pre-Conquest, or " prehistoric ", period there was completed during the year and placed on exhibit a

miniature model of an Acolapissa village of northern Mississippi. Representing the last important settlement of the Acolapissa, this model includes the temple and chief's house as drawn and described by A. Debatz, April 15, 1732, and, in addition, several characteristic dwellings with their storerooms. Men and women are shown engaged in various pursuits, and children are represented at play.

A portion of an aboriginal dugout canoe, exhumed on Cumberland Island, Ga, by Assistant Curator F. M. Setzler and received as a gift from the Lucy Coleman Carnegie estate, after prolonged treatment and partial restoration was placed on exhibition in the American hall.

The series of mummy cases and lids, a gift of the Egyptian Government in 1893, following minor repairs and treatments to insure permanent preservation, was reinstalled in the hall of Old World archeology. Here, also, new exhibits were prepared from the following material: (1) A collection of pottery vessels and bone and stone artifacts exhumed at the site of the ancient city of Troy by Dr. Henry Schliemann between 1870 and 1882 and received as a gift from Mrs. Schliemann; (2) a representative series of Phoenician glassware; (3) a collection of earthenware vessels from various ruins in Cyprus presented by Miss Olive Risley Seward; (4) pottery and bronze ornaments from ruins in Armenia.

Much labor was devoted to material accessioned many years ago but set aside without adequate attention at the time of receipt. Several exceptional carved wooden specimens recovered early in 1934 from the muck underlying a mound in Florida required special consideration, as they were received saturated with water, the largest was worm-eaten and otherwise damaged; and all were heavily coated with paraffin in the field to prevent warping in transit. A series of experiments designed to insure preservation of these noteworthy artifacts was performed in the department's laboratory.

The division of physical anthropology added to its exhibits five face masks of Comanche Indians procured in the field by M. S. Goldstein and prepared in the Museum laboratories by W. H. Egberts. With the aid of two C. W. A. workers the assistant curator transferred all the Huntington collection data to standard catalog cards and numbered all the femora that could be identified.

The anthropological laboratory, under W. H. Egberts, chief preparator, modeled and prepared a costume figure of Mrs. Herbert Hoover and readjusted the costume figure of Mrs. Calvin Coolidge. Ancient Indian wood carvings from bogs in Florida were put through a process to prevent losing their form by drying. Numerous casts, models, and repair jobs were completed for anthropology and other branches.

In the section of musical instruments an expert violin maker, Nicola Reale, was employed under C. W. A. and E. W. A. funds in the repair and restoration of stringed instruments, an assistance that has long been needed.

INVESTIGATION AND RESEARCH

In the division of ethnology the curator, H. W. Krieger, continued investigations of Arawak, Ciboney, and Carib artifacts collected by him and others in Cuba, Haiti, and elsewhere in the Greater Antilles. A subject of special study was the distribution of methods of stone working, particularly of stone chipping in the hidden deposits of Cuba, Haiti, and the Dominican Republic; also the distribution of painted designs on earthenware from Puerto Rico. Another study had to do with the diffusion of Amazonian culture traits within the Antillean area.

Current interest prompted a study of the Museum's resources in primitive money, and as a result a paper was written on the subject of early American money, and a representative collection of primitive money from various peoples was sent to the Century of Progress Exposition. The division continued its study of technical methods pertaining to the care and preservation of museum specimens, and notes on the subject were brought up to date and published. The Museum's resources in several fields—notably Navaho and Pueblo belt weavings, Indian headdresses, Japanese swords, rabbitskin and buffalo robes, and Indian pictographic designs—received special investigation. The head curator continued his studies of the rationale of the domestication of animals and the development of the fundamentals of education among uncivilized man. The assistant curator, H. B. Collins, Jr., continued his examinations of archeological collections obtained by him and others, notably J. A. Ford and M. B. Chambers, in western and northern Alaska. Eighteen lots of material were received for identification; material brought in person for immediate identification remains unrecorded.

In the division of archeology the unusual increase in routine activities throughout the year prevented the curator from resuming his report on the Pueblo Bonito explorations of the National Geographic Society. Likewise Assistant Curator Setzler was forced to defer researches previously undertaken. Soon after his return from field work in Louisiana, Mr. Setzler was assigned to assist the Institution's liaison officer with the Civil Works Administration in directing the archeological projects in the Southeast and in California. He prepared, however, two short articles, which he read before gatherings of archeologists, and studied, classified, and cataloged 1,771 specimens obtained at Marksville, La. During the

year 38 lots of archeological material were received for identification and report and subsequently returned to the owners.

At the beginning of the year, Dr. Hrdlička, curator of physical anthropology, was engaged in completing for publication his work on the "Anthropology of the Pueblos." During the rest of the year most of his time was devoted to an exhaustive study of the human femur, the results in part already being published. In addition he prepared for publication his measurements and observations on the Kuskokwim Eskimos. The assistant curator, Dr. T. D. Stewart, finished his testing of the machine for measuring skull capacity and prepared for publication a general report on these measurements. During the winter he supervised two C. W. A. workers engaged in cataloging the Huntington femora, and thereafter worked up his observations on primate hair arrangement. Four lots of material were received through official channels for identification and report.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

In the division of ethnology only one gift collection was sent out during the year. This consisted of 16 Eskimo and Pueblo ethnological specimens sent to the St. Ignatius School at Hicksville, Long Island, N. Y.

During the year 8 lots of archeological material (102 specimens) were sent out in exchange for other specimens or in return for the privilege of making casts desired in the national collections, as follows: 98 projectile points to Dr. Stuart C. Way, San Francisco, Calif., in exchange for shell and porcelain beads from Indian graves in California; 3 separate lots of uncataloged casts of Oriental seals to Prof. Louis Speleers, Musées Royaux d'Art et d'Histoire, Brussels, Belgium, in exchange for publications; one cast of a sandstone figurine to Burnham S. Colburn, Biltmore Forest, N. C., in return for the privilege of reproducing the original; cast of an Eskimo lamp each to Miss Mary L. Heller, Newcastle, Ind., Adolph Muller, Kaltag, Alaska, and the Alaska Historical Library and Museum, Juneau, Alaska, in return for the privilege of reproducing the original, borrowed from the Alaska Agricultural College and School of Mines.

Fifteen lots (1,511 specimens) were sent as gifts to educational institutions, as follows: 46 projectile points, pottery fragments, and a stone celt to the Children's Museum, Duluth, Minn.; 100 specimens, consisting of stone projectile points, knives, drills, and rejects to the University of Toulouse, Toulouse, France; 70 examples of knives, drills, projectile points, etc., to the Kelley Laboratory of Archeology, Paris, France; 173 cleavers, scrapers, and hammerstones to Elmira College, Elmira, N. Y.; 19 specimens, including a celt, 2 axes, and 16 projectile points, to the Historical Museum of Duke Uni-

versity, Durham, N. C.; 122 miscellaneous specimens to the Superintendent of Schools, Balboa Heights, Canal Zone; 120 stone artifacts to the Fort Necessity Memorial Association, Fort Necessity, Pa.; 149 specimens to the Destrehan High School Museum, Destrehan, La.; 129 artifacts to the Norfolk Museum of Arts and Sciences, Norfolk, Va.; 96 miscellaneous specimens to the Museum of St. Peter's College, Muenster, Canada; two sendings totaling 209 specimens to the University of North Carolina, Chapel Hill, N. C.; 104 miscellaneous specimens to the Hershey Indian Museum, Hershey, Pa.; 81 casts and 93 specimens of stone artifacts to Waynesburg College, Waynesburg, Pa.

NUMBER OF SPECIMENS UNDER DEPARTMENT

During the year the department received 112 accessions covering 9,599 specimens. Of these, only one accession (one specimen) was a loan. The material was distributed as follows: Ethnology, 53 accessions (918 specimens); archeology, 38 accessions (8,337 specimens); physical anthropology, 20 accessions (206 specimens); ceramics, 5 accessions (128 specimens); and art textiles, 2 accessions (10 specimens).

On June 30, 1934, the total number of specimens in the department of anthropology, including material previously accessioned and subsequently transferred to other divisions, was as follows:

Ethnology	188,775
Archeology	445,788
Physical anthropology	33,709
Musical instruments	2,074
Ceramics	6,306
Art textiles	1,531
Anthropology (not assigned)	9
Total	678,192

DEPARTMENT OF BIOLOGY

(Leonhard Stejneger, *Head Curator*)

Though scientific activity was handicapped and retarded during the year because of suspended publication, on the other hand much needed work of a routine character in registering, labeling, cataloging, and caring for the collection was promoted by the assistance rendered by C. W. A. employees from December to February. Considered as a whole the progress of the department has been satisfactory.

Field work undertaken by members of the staff was confined to participation by Dr. Waldo L. Schmitt, curator of marine invertebrates, in a second Galapagos expedition on the *Velero III*, by invitation of Capt. G. Allan Hancock, owner of the yacht and director of the expedition.

The number of accessions, 1,157, with a total of 282,441 specimens, compares favorably with the slightly larger numbers of the previous year. The scientific value of the material received likewise bears comparison with last year, though the relative importance of the increase is shifted from marine invertebrate material to mammalian and insect collections.

Mammals.—By far the most important accessions for the year were several sendings containing 229 specimens from Dr. D. C. Graham, Szechwan, China. They consist mainly of the larger mammals of China, many of which have been but poorly represented in our collection or not at all. Among the more interesting specimens were giant pandas, blue sheep, takins, bears, and serows, all rare and unusual in museums. A welcome addition to Dr. Hugh M. Smith's fine collections from Siam included 44 mammals. A small but highly important collection, connecting geographically the valuable collections of Drs. Graham and Smith, was obtained from M. Poilane in Indo-China, a country but poorly represented in the Museum. Dr. W. Gardner Lynn, of Johns Hopkins University, collected 31 bats and 1 rat in Jamaica which he presented to the Museum, the bats of the genus *Eptesicus*, hitherto not reported from Jamaica. From the National Zoological Park 89 mammals were received by transfer during the year.

Birds.—The genera of birds lacking in our collections were reduced by 5, with 50 species and subspecies hitherto unrepresented in the Museum added during the year. Among the most important and valuable accessions were the following: From Dr. Hugh M. Smith, 444 skins, 2 skeletons, 7 eggs, and 2 nests of Siamese birds; from Dr. David C. Graham 95 skins and 31 skeletons from Szechwan, China, including a series of the rare passeriform bird *Cholornis*, new

to the Museum; W. N. Beach donated 1,994 eggs of South African birds, a highly important series adding more than 200 forms not previously represented in our collection; Dr. Vesey-Fitzgerald presented a small collection from Trinidad and Venezuela, important as including a genus (*Antiurus*) new to the Museum; Dr. W. L. Abbott donated 51 Indian bird skins, all of species new to us, and the Roerich Museum 14 from the same country; the National Zoological Park transferred 193 birds; and 7 skins of birds new to the Museum were obtained in exchange from H. B. Conover.

Reptiles and amphibians.—Dr. C. E. Burt made a large collection in the Southeastern States for the Museum, an important portion consisting of turtles of the genera *Amyda*, *Pseudemys*, and *Terrapene*, the study of which has already cleared up some puzzling problems of long standing. Berry Campbell presented the Museum with the remainder of his *Batrachoseps* material, and Dr. G. S. Myers donated a good California collection. Interesting additions from Siam and western China were received from Drs. Smith and Graham, respectively.

Fishes.—Despite the relatively small number of fishes accessioned, 1,308, several were of considerable interest. A fine, large, mounted muskellunge from Rice Lake, Wis., was donated by E. K. Love, of St. Louis. The fish when caught weighed 44 pounds. A collection of 45 specimens received by exchange from the Albany Museum, Grahamstown, South Africa, including paratypes of 4 recently described species, is especially welcome since our representation of fishes from that area is small. The Museum of Zoology of the University of Michigan, through Dr. Carl L. Hubbs, presented paratypes of eight recently described North American minnows. Other interesting gifts were a paratype of a new genus of Alaskan lumpfishes from Dr. L. P. Schultz, of the University of Washington; a series of 45 fishes from Corpus Christi, Tex., from the Texas College of Arts and Industries, Kingsville, through Prof. C. T. Reed; 31 fishes from Baffin Land and other northern waters collected by the Norcross-Bartlett expedition, from Capt. R. A. Bartlett, of New York; a specimen of *Gephyroberyx darwinii*, the first example of this rare fish ever taken on the American coast, obtained off Chesapeake Lightship, Virginia, from F. E. Firth of Boston; and 3 rare scabbardfishes, *Lepidopus xantusi*, from the Scripps Institution of Oceanography, La Jolla, Calif. The Bureau of Fisheries transferred the type of a new fish, *Anthias nicholsi*, from off the Virginia coast. From the Museo Civico di Storia Naturale, Milan, Italy, through Prof. Luisa Gianferrari, paratypes of 4 species were obtained by exchange, 1 of them the remarkable blind African catfish *Uegitglanis zammaranoi* Gianferrari.

Insects.—The total number of insect accessions for the year was 263, an increase of 31 over the previous year, while the total number of specimens was 210,523, as compared with 77,622 for 1932–33.

By far the most important of the year's accessions was the H. F. Wickham collection presented by Mrs. Wickham, comprising about 69,000 insects (about 51,000 named beetles, including 50 species represented by types, and 18,000 miscellaneous specimens in other orders), as well as about 3,200 fossil insects. This material was collected largely by Professor Wickham himself and contains many series of specimens heretofore poorly represented in the Museum. It was one of the largest beetle collections in private hands in this country and represents the life work of an entomologist of recognized standing. Another outstanding accession was 61,693 miscellaneous insects received from J. C. Bridwell, with additional mounted material. This collection was made by Mr. Bridwell during extensive travels in Africa, Australia, North America, and Hawaii, and includes many species, with a number of types. Dr. David C. Graham again forwarded important sendings from western China, including nearly 20,000 specimens. An outstanding accession in point of size was the transfer of 35,000 insects from the Bureau of Entomology covering all orders, many of them rare and desirable. Frank Johnson, through the good offices of Dr. William Schaus, made a generous donation of 2,000 *Lepidoptera*, including many rarities. Other accessions deserving special mention are those of M. Poilane, French Indo-China, about 1,800 specimens; Dr. Hugh M. Smith, Siam, whose sendings aggregated 2,387 insects; C. A. Frost, 596 beetles; and B. Guevara Amortegui, Bogota, Colombia, 1,342 specimens.

Marine invertebrates.—Three accessions of marine invertebrates are of outstanding importance and deserve special notice. The first is the valuable collection of earthworms given the Museum by Dr. Frank Smith, representing his lifetime gathering of specimens from many parts of the world, particularly in America. Many types are included, and the collection is accompanied by a comprehensive series of histologic slides and a detailed catalog of the slides and specimens. The University of Iowa, through Homer R. Dill, deposited with the Museum the valuable collection of Crustacea brought together by the late Charles C. Nutting, an important adjunct to the study series of these forms. An excellent collection of Crustacea from the 1934 Hancock Galapagos expedition came through participation of the curator, Dr. W. L. Schmitt, in that expedition. The additional facilities for dredging provided by Captain Hancock this year assisted materially in this work. In the course of preliminary examination of the oxystome and allied crabs by Dr. Mary J. Rathbun, six new species came to light, including two representing the first appearance of the genus *Iliacantha* on the west coast of America.

Other important collections, many of them including new forms, are as follows: Capt. Robert A. Bartlett, a large collection of marine invertebrates from Baffin Land and the region of Fury and Hecla Straits; Harry A. Beatty, Christiansted, St. Croix, two collections of Crustacea from the Virgin Islands; Dr. R. E. Coker, University of North Carolina, a collection of fresh-water copepods, including type and paratypes of a new species; Dr. Edwin P. Creaser, 23 crayfishes, paratypes of new species and subspecies described by him; Miss Norma C. Furtos, Western Reserve University, two collections of ostracods, including types and paratypes of many new species from Ohio and from Yucatan; Steve A. Glassell, Beverly Hills, Calif., two collections of Crustacea, including types and paratypes of five new species of crabs; and G. H. Wailes, Vancouver, British Columbia, cotype of a new species of protozoan.

Mollusks.—Among the most important accessions of mollusks, 23 specimens from Japan and Cuba were obtained through the Frances Lea Chamberlain fund. Dr. Hugh M. Smith contributed 409 specimens from Siam; the Academy of Natural Sciences of Philadelphia, through Dr. H. Burrington Baker, 99 mollusks from Jamaica; Miss Elva May Smith and the Rev. William H. Fluck, Utica, N. Y., a type specimen from Nicaragua; Walter F. Webb, Rochester, N. Y.; 14 specimens, including 2 types, from the Philippine Islands; Mrs. H. F. Wickham, Iowa City, about 1,571 specimens, chiefly from North America from collections made by the late H. F. Wickham; J. C. Bridwell, about 1,680 mollusks from the Hawaiian Islands; George S. Barnes, 500 specimens from the west coast of Florida; Capt. R. A. Bartlett, 470 specimens obtained during the Norcross-Bartlett expedition to Baffin Land and Fury and Hecla Straits; Dr. James Zetek, about 2,125 specimens from Panama; Dr. Berlin H. Wright, Penn Yan, N. Y., 18 mollusks from Florida, including a type and paratype; Dr. F. Felippone, Montevideo, Uruguay, 123 specimens from Uruguay and Brazil; Dr. D. C. Graham, 229 mollusks from China; and José A. Gallardo, 1,200 specimens from Puerto Rico.

Corals.—Twenty-one corals were received during the year, 19 from Mrs. Neilson, West Palm Beach, Fla., and one each from the National Museum of Panama and Edwin J. Shadle.

Helminths.—The total number of helminths accessioned is 105, contained in 18 sendings.

Echinoderms.—The most important echinoderm accession received during the year was a collection of 221 crinoids from the Zoological Museum at Copenhagen, Denmark, being part of a collection made by Dr. Th. Mortensen in the East Indies, mainly in the Kei Islands, and in the western Pacific. Cotypes of a number of new species are included, and also specimens of several species not previously represented in the Museum. Another important accession was a collec-

tion of 38 crinoids from the Zoological Survey of India, mostly collected by the Royal Indian Marine Surveying steamer *Investigator* in the Bay of Bengal and the Arabian Sea. The Raffles Museum at Singapore presented 17 crinoids largely from deep water in the China Sea, where they had been collected by the cable repair ship *The Cable* of the Eastern and Associated Telegraph Co. Among these were two species described recently by the curator, A. H. Clark, viz: four specimens of a large and handsome stalked crinoid, named in 1908 from specimens dredged by the *Albatross* in the China Sea, and a specimen of a rare deep sea crinoid described recently. P. Powers, of the University of Pennsylvania, gave the Museum four specimens of a remarkable new sea urchin collected at Dry Tortugas, Fla., representing a genus, *Astropyga*, not previously known from the Atlantic. From the Buitenzorg Museum, Java, the Museum received seven crinoids, which are of much interest in rounding out its collection of East Indian species. The States Institute of Hydrology, at Leningrad, U. S. S. R., presented representatives of two species of crinoids from the Sea of Okhotsk described by the curator in 1907 and not since reported.

Plants.—Herbarium accessions for the year comprised 31,875 specimens, the most important of which are as follows: 4,593 plants transferred by the United States Department of Agriculture, 4,346 of this number received through the Bureau of Plant Industry, about 2,700 being grasses; Dr. A. F. Skutch, Baltimore, presented 712 specimens, chiefly from Guatemala, and G. Klug, of Iquitos, 647 specimens from eastern Peru; the University of Vermont donated 632 Mexican plants collected by C. G. Pringle; Dr. E. W. Berry, Johns Hopkins University, presented 387 specimens from Argentina; Bro. G. Arsène, Santa Fe, 598 specimens from New Mexico; and Otto Degener, Bronx Park, New York, 261 specimens from the Hawaiian Islands. From E. C. Leonard, 1,260 specimens, mostly lower cryptogams from the Eastern United States, were received, partly a gift and partly collected for the Museum. Some of the larger accessions received in exchange are as follows: 1,012 specimens, collected in Brazil by Riedel and Langsdorf, received from the Botanical Institute of the U. S. S. R. Academy of Sciences, Leningrad; 825 specimens, chiefly from tropical America, received from the Natural History Riksmuseum in Stockholm; 883 specimens, chiefly from the Yucatan Peninsula, from the University of Michigan; 735 specimens from China from the Science Society of China, Nanking; 855 specimens, mostly from Labrador, from the Gray Herbarium; 659 specimens, mainly from Mexico, from Stanford University; 717 specimens from various sources, from the Arnold Arboretum; 334 miscellaneous specimens from Rudolf Gross, Berlin, Germany; 365 specimens from

California and Mexico from the California Academy of Sciences; 500 specimens from China, from the University of Nanking; 300 specimens from Poland from the Physiographic Museum at Krakow; 267 specimens from the Hawaiian Islands, from the Bernice P. Bishop Museum; 487 specimens from Washington, from J. William Thompson, Seattle; 461 specimens from Colombia, received from the Ministry of Industry, Bogota; 230 specimens from French Indo-China from Prof. A. Petelogt, Hanoi, Tonkin; 4,255 specimens mostly from Brazil, from the Catholic University of America; 3,009 miscellaneous specimens and 791 plant photographs from the New York Botanical Garden; 350 specimens from the Hawaiian Islands, from DePauw University; 314 specimens, mainly from Peru, from the Field Museum of Natural History; 271 lower cryptogams from the Farlow Herbarium of Harvard University; and 310 specimens of European plants from the Government Botanical Garden, Brussels, Belgium.

INSTALLATION AND PRESERVATION OF COLLECTIONS

The exhibition series received a considerable number of additions and underwent some changes that materially improved its appearance. An imposing mount of the hippopotamus was placed on exhibition early in the year, testifying to the skill of the chief taxidermist, W. L. Brown. The preparation of the skin was specially designed to avoid the cracking usual in this type of animal.

A group of ground iguanas from Haiti, mounted and arranged by W. M. Perrygo, was placed in the reptile hall as a memorial to Lee H. Parish in recognition of his interest in the National Museum. Part of the material was collected during the Smithsonian-Parish expedition to Haiti under Lee Parish, additional accessions and specimens being obtained by Faustin Wirkus through the interest of Mr. and Mrs. S. W. Parish.

The group of horsetail monkeys in the African mammal hall was reinstalled in one of the wall cases. Several new mounts were added, including a chimpanzee, a black leopard, a springbok, and an albino Virginia deer. The last, a beautiful buck from Warren County, Pa., was presented by Thomas J. Evans, of New Castle, Pa. Seven birds were mounted for the exhibition series. The large sulphur-bottom whale underwent a complete renovation at the hands of J. S. Warmbath.

Quarter-unit cases furnished the division of mammals were utilized in storing the smaller cetacean skulls and skeletons, and rearrangement of the smaller and medium-sized material in the basement was completed. Other cases were placed in the attic for storage of large skulls and skeletons, and on the ground floors and galleries for stor-

ing the skin, small skull, and skeleton collections, especially for the rearrangement of the primate skins. Considerable time was spent in identifying, labeling, and rearranging this large and important group of mammals. In addition, the Lemuridae and Procyonidae and the marmots and beavers, all of which have been crowded, were rearranged. The skeletal material cleaned by the regular Museum force amounted to 22 large and medium skeletons, 164 skulls, and 48 sets of mostly large leg bones. C. W. A. workers cleaned 38 large and medium-sized skeletons, 74 large and medium-sized skulls, and 22 sets of leg bones, and numbered or renumbered 200 large and medium skeletons. The alcoholic collection underwent considerable rearrangement, transferring of material, and identification. The taxidermists prepared as study specimens 52 skins, degreased 16 skins, and skinned or prepared for skeletons 23 mammals; a C. W. A. worker made up, made over, or repaired about 100 small skins. Contract work on small and sedium-sized skulls and skeletons resulted in cleaning 601 skulls and 149 skeletons.

About two-thirds of the birds received during the year were distributed in the study series, in addition to about one-third of the remaining Siamese collection. A large collection of birds in alcohol was examined, identified, cleaned, and incorporated in the study series. A thorough overhauling of 18 families of the larger birds, including critical identification, correction, and completion of renewal of labels, was accomplished with the assistance of the ornithologist W. W. Bowen, a C. W. A. appointee. In all, nearly 10,000 specimens were identified and labeled. A collection of 1,994 eggs of South African birds was cataloged and labeled; also a C. W. A. worker numbered over two-thirds of the eggs in the Bent collection. The work of the preparators including skinning, degreasing, and making up 193 bird skins, skeletonizing 5 birds, cleaning 398 skeletons, and roughing out 342 others. A C. W. A. employee cleaned, repaired, and made up about 160 bird skins.

Over 3,400 newly identified specimens of reptiles and amphibians were incorporated in the study collection, and the card cataloging was brought nearly up to date. The alcoholic containers were carefully washed and refilled, and labels were restored whenever needed. Dry preparations were added to the turtle collection as follows: 91 made-up study skins, 165 shells, 189 skulls, and 2 skeletons.

The alcoholic fish collection was examined thoroughly, and the strength of the alcohol, in all large containers, was actually tested, and restored when necessary to 75 percent. Worn-out cork-stopper jars were replaced with glass-stopper jars and glass-top mason jars. With the assistance of C. W. A. workers, all the large stone crocks were opened and their contents checked against the index. Simi-

larly, the collection of type specimens was checked, as many hitherto unrecognized type specimens had been found in the general overhauling. All accessions were promptly identified and installed in the main collection. The large Chesapeake Bay collection also was labeled and installed.

Though increased demands for identifications interfered with the arrangement of the Museum insect collections, some progress was made. The late Dr. J. M. Aldrich, curator of insects, continued the rearrangement of the families of Diptera, incorporating a large proportion of the collection that he donated to the Museum in 1923. Dr. Alan Stone has now reorganized the entire collection of mosquitoes to conform with the systematic sequence in Dr. F. W. Edwards' catalog, a work that required much labor in checking the accuracy of previous identifications. In addition, he rearranged the specimens of the subfamily Tabaninae. In Coleoptera, H. S. Barber revised the arrangement of certain genera of Histeridae, Dryopidae, and Chrysomelidae. Dr. M. W. Blackman continued work on the Scolytidae. The task of transferring specimens of coleopterous larvae from small vials to tubes in alcohol-filled jars under supervision of Dr. A. G. Böving was completed. A number of accurately identified larvae that were not previously represented in the Museum were added. L. L. Buchanan transferred the Cicindelidae and *Rhyncophora* of the Wickham collection and all the *Rhyncophora* of the Bridwell collection into Museum trays and drawers and placed them in the systematic collection. The collection of Cicindelidae has now been worked over to represent the entire world. The Carabidae from the West Indies were worked over by Dr. P. J. Darlington, of the Museum of Comparative Zoology, and the specimens arranged in the Museum series. In addition, the curculionid group Belinae was rearranged and expanded. Dr. E. A. Chapin continued work on the family Scarabaeidae from the Philippine Islands and the West Indies and undertook further arrangement of the Coccinellidae. W. S. Fisher continued the rearrangement of genera and groups in the families assigned to him in connection with identification work.

In Lepidoptera, Foster H. Benjamin transferred most of the North American specimens of the Owen collection into the general systematic series, a task involving a great deal of label writing. He also completed the rearrangement of the entire collection of North American Catocalinae into one series, which now occupies 156 drawers. Additional arrangement was undertaken in the noctuid subfamilies Agrotinae and Hadeninae and in the genus *Olene*. A large number of genitalia slides were made. August Busck incorporated into the collection the large quantity of material in exotic Microlepidoptera that he obtained during his European trip in 1932.

Carl Heinrich transferred the American moths of the subfamily Crambinae into trays and rearranged all the material of this subfamily, including that from the Barnes collection, in one systematic series. Dr. William Schaus continued expanding and reorganizing the collection of Macrolepidoptera in his charge, adding 100 new drawers to the series containing the Palearctic, African, and Oriental Noctuidae.

In Hymenoptera, R. A. Cushman sorted out the Neotropical species of the genus *Polyaenus* and undertook miscellaneous rearrangement of groups of Ichneumonidae as definite need arose. A. B. Gahan, in working over critically the genera *Hunterellus*, *Izodiphagus*, and *Arachnophaga*, rearranged the collections in these groups. C. F. W. Muesebeck sorted a considerable quantity of miscellaneous Braconidae, making them available for study, and also arranged the specimens in the subfamilies Alysiinae and Pambolinae. The Bridwell collection contained 145 boxes of aculeates and 7 boxes of sawflies and relatives, of which Miss Grace Sandhouse worked over and incorporated in the general series the specimens of the genera *Augochlora*, *Agapostemon*, *Osmia*, and *Vespula*. She also rearranged the general collection of the bee genus *Megachile* to accord with Mitchell's classification, and the American specimens of *Sphex* in accordance with Fernald's classification, identifying a considerable accumulation of unnamed material. The Mutillidae from Formosa were named and arranged according to a recent paper by Mickel. The wasps of the genera *Cerceris*, *Eucerceris*, and *Philanthus* of the Bridwell collection were incorporated in the general series, as were the Oriental and Australian specimens of Scoliidae of the Baker collection, and arranged according to the classification of Betrem. The Thynnidae of the Australian region were similarly arranged.

In orthopteroids and neuropteroids, A. N. Caudell assembled a local collection of Orthoptera and reports progress in arranging the general collection under his care. In Hemiptera, H. G. Barber did considerable work in arranging the collection into trays. P. W. Oman, in working over the material in the family Cicadellidae, named and arranged several hundred species.

The myriapods, which have for some time been housed in the office of Dr. O. F. Cook, custodian of the section, in the United States Department of Agriculture, have been removed to the Natural History Building.

In the division of marine invertebrates there was the usual inspection, cleaning, and refilling the alcoholic collections in the stacks. The arrearage of cataloging in the collection of mollusks was materially reduced with the temporary assistance rendered by C. W. A. workers. Through this same source a thorough rearrangement of

the office and storage of the division of echinoderms was effected. The alcoholic collections were rearranged with the exception of the holothurians, as were also the dried starfishes. The entire collection of dried sea-urchins was moved into new cases and rearranged by the curator.

In the division of plants the curatorial work received material assistance through the assignment of 30 C. W. A. workers, including 1 botanist, 1 translator, 1 stenographer-typist, 8 typists, 7 cataloguers, and 12 mounters. The work proceeded satisfactorily and resulted in the completion of much of permanent value. Some 12,000 mosses were incorporated in the cryptogamic herbarium, and similar work was begun on the collection of algae, which unavoidably had received little attention for many years. Of special importance, as making for greater utility of the herbarium, was the typing of original descriptions and the mounting of original printed descriptions and illustrations of new species upon herbarium sheets for incorporation in the herbarium. In all about 6,000 species were thus treated. Thousands of specimens were prepared for mounting, many more thousands of mounted specimens were recorded, and a great quantity of duplicate material for distribution to other institutions was labeled. With the extra C. W. A. assistance mentioned, 37,380 mounted specimens were stamped and recorded during the year. A portion of these, together with mounted specimens remaining from last year, in all about 40,000 specimens, were distributed into the herbarium. During the year 34,448 specimens were mounted. In addition, 18,500 sheets in the general herbarium were repaired.

The segregation of type specimens of American phanerogams was continued by E. P. Killip and E. H. Walker, and 19,171 types of new species and varieties have now been labeled, cataloged, and placed in heavy individual covers. During the year 403 specimens were added. The safeguarding of this exceedingly valuable material in this way is of prime importance. All moss material on hand has now been arranged, and similar work upon the hepatic collection was completed by E. C. Leonard. Under the direction of J. A. Stevenson the fungus collection was completely rearranged and cataloged, a great deal of miscellaneous material being identified. The general index to the mycological writings of C. G. Lloyd, prepared by the custodian of the collections, John A. Stevenson, has recently been published by the Lloyd Library, Cincinnati, making available the greatly scattered mycological notes of Mr. Lloyd. A critical résumé of Lloyd's new fungus species is in manuscript awaiting publication. New quarters were assigned that will bring together all the materials comprising the Lloyd collection and will provide suitable facilities for students.

RESEARCH BY MEMBERS OF THE STAFF

G. S. Miller, Jr., curator of mammals, devoted considerable time to studying Asiatic and African primates, two papers on Malayan langurs resulting from this work. He spent 3 weeks bringing up to date his List of North American Recent Mammals, the latest edition of which was published in 1923. Dr. Remington Kellogg, assistant curator, continued investigations into the taxonomy and nomenclature of the hair seals and inquiry into the origin and relations of the Cetacea. Arthur J. Poole, aid, continued work on the catalog of mammalian types. The old type catalog was completely revised, and 1,153 new species and subspecies were carded.

Dr. Herbert Friedmann, curator of birds, continued work on the remaining parts of Ridgway's Birds of North and Middle America, left unfinished at the author's death, and completed more than half of the Falconiformes, in addition to the compilation of synonyms of other groups through 1932. In the course of this work three papers describing new forms were prepared. He also published papers on parasitic birds and their victims, on bird bones from Alaskan Eskimo ruins, on Alaskan birds, a review of the progress in life-history work on North American birds, and on early historical observations. A critical paper on instincts and emotions in birds and another on social life and behavior of birds were prepared but unpublished at the close of the year. His experimental studies carried out at the National Zoological Park were continued. The associate curator, J. H. Riley, continued studies of the large collections of Siamese birds received from Dr. Hugh M. Smith and published three papers. Dr. Alexander Wetmore published a number of papers on fossil birds, on Haitian birds, and a new revised edition of his classification of the birds of the world, as well as two popular articles on North American birds in the National Geographic Magazine.

The curator of reptiles and batrachians, Dr. L. Stejneger, continued work on the Testudinata of North and Middle America. Dr. Doris M. Cochran, assistant curator, continued studies of West Indian reptiles and added descriptions of several new forms to the complete herpetology of Hispaniola. She also completed and submitted for publication a report on the West Indian reptiles and amphibians collected by Dr. Paul Bartsch between 1928 and 1930.

The research work of Dr. G. S. Myers, assistant curator of fishes, was confined almost entirely to the material obtained by the Johnson-Smithsonian deep-sea expedition, with the publication of one paper describing three new forms, and revision of the genera of Triacanthidae. He also published a short paper on cyprinodonts.

A paper describing two new eels and a new flatfish from the Johnson-Smithsonian expedition was prepared by E. D. Reid, aid.

The late Dr. J. M. Aldrich, curator of insects, up to the time of his last illness, continued research on the Diptera, especially the family Tachinidae, extending his study into certain groups not represented in North America. Two short papers were published on such exotic material. Foster H. Benjamin published a paper on the classification and biology of the Trypetidae of Florida. C. T. Greene nearly completed a revision of the species of the genus *Anastrepha* and published another paper on a number of tachinid flies. Dr. Alan Stone continued critical study of *Tabanus* and in collaboration with Dr. Robert Matheson started revisionary work on the calicid genus *Psorophora*. In the section of Coleoptera, Dr. A. G. Böving continued studies on various coleopterous larvae, especially the elaterid *Tetrigus fleutiausi* and the scarabaeid *Plectris aliena* Chapin, a new and apparently injurious species. L. L. Buchanan began systematic investigation of the North American species of *Magdalis*, *Hylobius*, and an unnamed genus of weevils infesting orchids. Dr. E. A. Chapin finished the revision of the scarabaeid genus *Chlaenobia* and began revision of the genera *Listrochelus* and *Phytelus*. W. S. Fisher completed several papers dealing with the Cerambycidae and Buprestidae.

In the section of Lepidoptera, Dr. W. Schaus prepared for publication descriptions of new species of moths. Foster H. Benjamin continued studies in the North American Noctuidae, as well as investigations on species of Geometridae and Liparidae. August Busck continued work on the Tortricidae and various groups of Gelechiidae. Carl Heinrich in his studies on the American Phycitinae concentrated on the species from Puerto Rico in order to complete a report for the "Scientific Survey of Puerto Rico and the Virgin Islands." In the section of Hymenoptera, R. A. Cushman worked principally with the Neotropical Cryptinae and the Oriental Joppinae. He also worked out in some detail three local new species of the genus *Lysiognatha*. A. B. Gahan published a paper discussing two species of parasites known to occur on ticks, and in cooperation with H. Compere worked on a revision of the genus *Aphytis*. C. F. W. Muesebeck continued studies in the Rogadinae, completing a paper on certain genera, and began a revision of the two braconid genera *Orgilus* and *Coeloides*. Miss Grace Sandhouse completed revision of the bees of the genus *Agapostemon* occurring in the United States.

In the section of orthopteroids and neuropteroids, A. N. Caudell completed a paper on western Tettigoniinae and published on a new siatid from California. He has also worked on a revision of the order Zoraptera.

Dr. H. E. Ewing undertook special investigations on tarsonemid mites, feather mites, mammal-infesting Mallophaga, and sucking lice.

In Hemiptera, H. G. Barber worked on the Neotropical and exotic Coreidae, completed a study of the Graphosomatinae, and the Geocorinae occurring in the United States, and continued his work on the Heteroptera of Puerto Rico. Dr. P. W. Mason continued work on the Macrosiphini.

In the division of marine invertebrates, Dr. Mary J. Rathbun, associate in zoology, added to her manuscript on the oxystomatous and allied crabs of America considerable additional material that came to hand during the year. In addition, she published a number of papers on various groups of recent and fossil crabs. Dr. Waldo L. Schmitt, curator, prepared a report on the stomatopods of the 1933 Hancock expedition and began a revision of the West American species of *Penaeus* and a study of the Galapagos Macrura collected by him during the Hancock expeditions in 1933 and 1934. He revised a manuscript on Puerto Rican Macrura and Anoneura and published four papers. Clarence R. Shoemaker, assistant curator, studied the amphipods collected by Dr. William Beebe in the deep waters off Bermuda and amphipod material from the Tortugas, Fla., completing several papers describing new species taken there and by the Johnson-Smithsonian deep-sea expedition. His revision of the amphipod genus *Corophium* on the east coast of America was also published. J. O. Maloney, aid, studied the Arctic isopods collected by Capt. R. A. Bartlett. Dr. J. A. Cushman, honorary collaborator, brought out a revision of his textbook on the Foraminifera, invaluable to all students of the group, enhanced as it is by a supplementary volume embodying an illustrated key to the genera of the Foraminifera, including 40 plates figuring over 800 species. Dr. C. B. Wilson is finishing a report on the copepods of the last cruise of the *Carnegie* and beginning another on the parasitic copepods of the Tortugas region.

In the division of mollusks, Dr. Paul Bartsch, curator, devoted considerable time to overhauling the material obtained by the Johnson-Smithsonian deep-sea expedition, and several papers were published on the mollusks procured. H. A. Rehder, assistant curator, completed his research on the North American Succineas.

Austin H. Clark, curator of echinoderms, continued work on parts 4 and 5 of his monograph of the existing crinoids and on the material collected by the Johnson-Smithsonian deep-sea expedition.

In the division of plants, Dr. F. V. Coville, curator, devoted some time to the flora of the Death Valley region. Dr. W. R. Maxon, associate curator, continued, as opportunity offered, studies of tropical American ferns. E. P. Killip, associate curator, continued study

of the historic Mutis collection of Colombian plants and in addition completed a monographic study of the genus *Bomarea*, besides preparing manuscript on several families for the "Flora of Colombia." E. C. Leonard, assistant curator, continued study of the Acanthaceae. C. V. Morton, aid, examined several important collections from Mexico and Guatemala, and continued his study of certain tropical American families, and E. H. Walker, aid, practically completed a botanical bibliography of China and adjacent regions undertaken in collaboration with Dr. E. D. Merrill, director of the New York Botanical Garden.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Duplicate specimens distributed to museums, high schools, colleges, and similar institutions aggregated 3,226 specimens; and 13,244 exchanges were sent out, of which 1,611 were zoological specimens. The 11,633 plants distributed went to 85 institutions and correspondents, of which 45 were in the United States and 40 in 23 countries abroad.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The number of specimens under the department of biology, so far as has been ascertained by count and estimate, is now more than 11,000,000. The number is not entirely definite, since several collections, as the corals, have not been included, nor does the number of plants given below include duplicates and unmounted material of lower cryptogams. In several of the divisions, such as marine invertebrates and mollusks, lots consisting of minute organisms are frequently counted as single specimens though they may contain hundreds or even thousands of individuals, the enumeration of which would serve no useful purpose.

Mammals		222,663
Birds:		
Skins	256,617	
Alcoholics	9,658	
Skeletons	13,833	
Eggs	89,695	
		369,803
Reptiles and amphibians		104,263
Fishes		742,649
Insects		4,348,584
Marine invertebrates		914,933
Mollusks		2,507,401
Helminths		144,360
Echinoderms		159,338
Plants		1,590,844
Total		11,104,838

DEPARTMENT OF GEOLOGY

(Ray S. Bassler, *Head Curator*)

The unusual conditions of the past year are reflected in the advance made in the care of the collections in the department of geology. In increase the year was one of normal progress, characterized by the addition of fewer fine exhibition specimens than last year but by a greater quantity of study material. Low market prices made possible the purchase of many excellent mineral specimens, and explorations carried on by the assistant curators in the paleontological divisions resulted in the receipt of other desirable material. The outstanding collection of analyzed rocks presented by the late Henry S. Washington comprises the most valuable addition to the petrological series received since the transfer from the Geological Survey of the petrographic reference collection a few years ago.

The assistance furnished by the Government's unemployment agencies was of such high grade that it was found possible, under the supervision of the regular staff, to bring up to date much work that had, because of insufficient help, fallen into arrears. As a consequence, little time of the scientific staff could be spent in research work, but with the present excellent condition of the collections this should be actively advanced during the coming year.

ACCESSIONS

The number of accessions—291, with an estimated total of 30,737 specimens—was greater than that for the previous year. By divisions these are divided as follows: Mineralogy and petrology, 145 accessions (3,628 specimens); geology, systematic and applied, 27 (426 specimens); stratigraphic paleontology, 90 (26,515 specimens); vertebrate paleontology, 29 (168 specimens).

The scientific value of the accessions in mineralogy and petrology was much above the average, owing to the acquisition of the Tellef Dahll collection of minerals and the Henry S. Washington collection of rocks, both of which are hereinafter dealt with more specifically. The following minerals new to the collection were added: Alumo-chalcosiderite (part of type lot), burkeite (type), davynocavolinite, enalite, ferruccite, helenite, α-kertschenite, β-kertschenite, leonite, lucianite (described lot), lyndochite, selenium (part of described lot), soretite, stainerite, steigerite (type), tilleyite (part of type lot), and vandenbrandeite.

Through the income of the Roebling fund, 955 minerals, 16 gems, and 28 meteorites were added. Of these, the most important ac-

cession was the Tellef Dahll collection, largely of minerals from the pegmatites of southern Norway, collected before 1872, and including fine suites of enstatite, ilmenite, thorite, zircon, and the columbates and tantalates. The outstanding specimen of this collection is a prismatic crystal of thorite weighing 1½ pounds.

Other fine specimens acquired for the Roebling collection include a group of emerald crystals in the matrix from the Chivor mine, Somondoco, Colombia; a fine crystallized stibnite from Manhattan, Nev.; a series of brilliant and complex pyrite crystals from Elba, and additional fine cerussites and azurites from Tsumeb, Africa. The gem stones comprise 7 tourmalines from Brazil, ranging in weight from 14 to 60 carats and with a wide variety in color; a fine golden-brown zircon from Siam, 60 carats; a deep blue aquamarine from Brazil, 59 carats; a pear-shaped, 30-carat, black opal, and a red fire opal from Australia; and 2 clear brown andalusites of 12 carats each, from India.

The Canfield collection, through its fund, was enriched by a series of diamond crystals from the Belgian Congo, varying in weight from 4 to 19 carats and showing range in crystal form. Exhibition specimens added to this collection include a block of calcite carrying a number of dodecahedral lazurite (lapis lazuli) crystals, the largest measuring more than an inch across; a large benitoite with numerous fine crystals, from California; fine reticulated twins of cerussite, malachite after azurite, and azurite crystals, from Tsumeb, Africa; a group of large trigonal crystals of cronstedtite from Rumania; an unusually large twin crystal of chrysoberyl in quartz from Maine; a huge specimen of crystallized galena from Oklahoma; a rich mass of crystallized argentite from Freiburg, Saxony; and a series of sychnodymite specimens from Germany.

Through the Chamberlain fund the following were added to the Isaac Lea collection: A fine Ceylon ruby spinel, 10 carats; a Ceylon pink sapphire, 18 carats; a green tourmaline from Brazil, 18 carats; a wine-red tourmaline from Madagascar, 16 carats; and a garnet from Madagascar, 40 carats.

The American Gem & Pearl Co. donated an unusually large and brilliant Arizona garnet and a small brown beryl from North Carolina. Through the courtesy of the same firm, a 19-carat wine-red tourmaline from Brazil was cut from Museum material. Stephen Varni presented a series of rock crystals showing steps in the manufacture of his "Varnistar" from the rough material to the finished gem.

Thirteen meteorites, new to the Museum, were obtained by purchase and exchange, as follows: Boerne, Tex., 800 grams; Blanket, Tex., complete stone, 1,815 grams; Cherokee Springs, S. C. (fell July

1, 1933), fragments; Grady, N. Mex., half of the stone (2,095 grams); Hobbs, N. Mex., 300 grams; Harrisonville, Mo., 127 grams; Logan, Okla., 325 grams; Marsland, Nebr., 243 grams; Nashville, N. C., iron, 2,555 grams; Quinn Canyon, Nev., iron, 11 grams; Pasamonte, N. Mex. (fell Mar. 24, 1933), one almost complete stone, 68 grams; Roy, N. Mex., 30 pounds; Sioux County, Nebr. (fell Aug. 8, 1933), complete stone, 130 grams. There were also added a complete individual of the Tulia, Tex., stone, 7 pounds; a series of the Henbury, Australia, iron; and a large slab of the Brenham, Kans., pallasite, made up almost entirely of the iron portion. In the Museum's collection are now represented 567 distinct falls.

Many friends of the Museum continued their interest by donations. Among these should be mentioned the following: The American Potash & Chemical Corporation presented a number of crystals of the rare mineral sulphohalite and the drill core of a well sunk in the salt crust on their property at Searles Lake, Calif., which yielded rich specimens of the very rare mineral tychite, as well as of borax, glaserite, and trona; Gilbert LaBine, through F. L. Hess, presented six specimens of native silver and of native silver in pitchblende from the rich deposits discovered by him on the shores of Great Bear Lake, Canada; Silas Morefield, through the American Gem & Pearl Co., gave a huge topaz crystal weighing over 100 pounds, from his mine near Amelia, Va.; Samuel Sokobin, American consul at Saltillo, Mexico, donated 4 crystal groups of azurite from Aranzazu, Mexico; 2 diamond crystals from the Gold Coast of Africa were presented by W. von Bernewitz; Prof. A. O. Woodford collected for the Museum a quantity of the unusual clay mineral lucianite from Hector, Calif.; Burnham S. Colburn, as on many occasions in the past, shared his new finds of North Carolina minerals, adding ruby corundum in smaragdite, fluorescent hyalite, and other specimens; W. E. Lockhart also continued his interest, donating a large group of smoky quartz crystals from Colorado. Four polished specimens of red serpentine from New York were presented by W. H. McClelland.

Other donations of special interest include three specimens of stichtite from Africa, by Hugh A. Ford, British consul general at Boston; a large specimen of fibrous boulangerite, by Charles Fernquist; crystallized jarosite from Arizona, by F. W. Libbey; wolframite from Portugal, by V. R. Lansingh; blue corundum from North Carolina, by Philip Hoyt; and allanite from Canada, by David Hall. President Franklin D. Roosevelt deposited in the Museum 38 specimens of marbles cut into various ornamental forms.

The petrological series received its most important accession in years—the collection of rocks assembled by Dr. Henry S. Washington, one of the world's leading petrologists, consisting of about 2,500

specimens and forming the basis of many of the donor's published researches. Included are sets from all the Mediterranean volcanic areas, Indian basalts, and rocks from many American and other regions. A carefully collected set of rocks from Magnet Cove, Ark., gathered by Dr. F. C. Calkins and transferred by the United States Geological Survey, and a series of iridescent obsidians received from P. L. Forbes, Stauffer, Oreg., were other noteworthy additions.

Excellent exhibition material characterized the accessions in economic geology, among which are a large slab of zinc ore illustrating the occurrence of some of the zinc minerals in the metamorphosed limestone, gift of the New Jersey Zinc Co.; an exhibition specimen of rock salt and a series of saline minerals from the Malagash Salt Co., New Glasgow, Nova Scotia; a large specimen of zinc ore in breccia from Mascot, Tenn., gift of the American Zinc, Lead & Smelting Co.; and a series of rich gold and silver ore from Maguarachic, Mexico, gift of C. B. Valle.

In the division of stratigraphic paleontology, exchanges arranged by Assistant Curator G. A. Cooper again brought in valuable material. A lot of excellent echinoids and starfishes from the Mississippian rocks at Gilmore City, Iowa, received from Dr. L. R. Loudon, Tulsa, Okla., is perhaps the most outstanding. Others comprise Tertiary brachiopods from New Zealand from Dr. R. S. Allan, Christchurch, New Zealand; over 400 Russian brachiopods from the Central Geological Museum, Leningrad; and 132 especially fine Permian brachiopods from the Salt Range, India, from Prof. Charles Schuchert's collection at Yale University.

Outstanding among gifts is the private collection of fossil insects and plants of the late H. F. Wickham presented by Mrs. Wickham, comprising 3,200 specimens from the celebrated beds at Florissant, Colo., and including many types. Other gifts containing type specimens include a crinoid collection from the Tully formation of eastern New York, donated by Dr. G. A. Cooper; Cretaceous corals presented by Dr. Gayle Scott, Fort Worth, Tex., and by Dr. John W. Wells, Homer, N. Y.; a cephalopod from Dr. Lawrence Whitcomb, Lehigh University; Devonian and Pennsylvanian ostracod paratypes from Dr. A. S. Warthin, Jr., Poughkeepsie, N. Y.; types of 10 Turritidae from Prof. H. B. Stenzel, College Station, Tex.; and types of Silurian ostracods from Prof. F. M. Swartz, State College, Pa., and Upper Paleozoic ostracods from Miss Betty Kellett, Wichita, Kans. In addition, metatypes of recently described Cambrian graptolites were received from Dr. E. M. Kindle, Geological Survey of Canada, and Prof. C. R. Stauffer, University of Minnesota. Also many casts of types as well as metatypes were left by Dr. T. Kobayashi, who studied in the Museum during the past 2½ years.

Another important addition consisted of about 10,000 Paleozoic and Cretaceous invertebrate fossils collected and presented by Dr. G. A. Cooper, of the Museum staff, and H. D. Miser and R. D. Mesler, of the United States Geological Survey, who selected much needed material from localities poorly represented in the Museum. A large exhibition slab of brachiopod limestone from the Devonian of Wisconsin is a valued gift from the Milwaukee Public Museum.

Among other gifts is a large collection of Tertiary mollusks from Mexico given by the Huasteca Petroleum Co. at Tampico; 851 fossil shells presented by the Jardin Zoologique de Sfax; 200 Ozarkian fossils from northern Argentina, from J. S. Brown, Edwards, N. Y.; a series of invertebrates from Chuqui, Chile, from Walter Watson, Jr., Whitewater, Wis.; a fine Miocene echinoid from the Calvert Cliffs, Md., presented by Richard Taylor, Bethesda, Md.; a fine collection of American Permian brachiopods from F. E. Turner, University of California; a large collection of Tully limestone fossils collected and presented by Drs. G. A. Cooper and J. S. Williams; a lot of Cambrian brachiopods from Leon, Spain, from Dr. P. H. Sampelayo, of the Spanish Geological Survey; and a collection of fossil wood from Antigua, British West Indies, from W. R. Forrest.

Among transfers from the United States Geological Survey were about 2,500 specimens of Tertiary invertebrates from Italy, France, and the Balearic Islands collected by Dr. Julia Gardner; about 250 Mesozoic coral types studied by Dr. J. W. Wells; and 60 Miocene plants and insects illustrating a paper by Dr. R. W. Brown.

Dr. W. L. Schmitt in his expedition to the Galapagos Islands discovered a long-lost Tertiary locality and brought back an interesting set of fossils.

During recent years the chief acquisitions to the vertebrate fossil collections have been through field expeditions by members of the staff. The necessary curtailment of this activity during the past year considerably reduced both the quantity of material received and its scientific importance. The year was by no means barren of acquisitions, however, and the following are of special note:

Among mammals, a skull and mandible of *Equus andium* and a skull, mandible, and vertebrae of *Nesodon imbricatus*, received in exchange from the Field Museum of Natural History; a skull and other bones of *Oxydactylus gibbi*, a Miocene camel previously unrepresented in the Museum, received in exchange from Amherst College; and a small collection of Oligocene mammal material presented by the University of Wyoming. The marine mammal collection was enriched by the addition of several cetacean skulls, collected by Dr. C. L. Gazin, Dr. Remington Kellogg, and R. Gilmore from the Miocene deposits along Chesapeake Bay; Perez Simmons, of Fresno,

Calif., presented seven beautifully preserved teeth of the rare *Desmostylus* from the Miocene of California.

To the collection of fossil birds were added a partial skeleton of *Hesperornis*, a toothed bird from the Upper Cretaceous of Kansas, acquired from G. F. Sternberg; limb bones of *Eogrus aeola* from Mongolia received as a gift from the American Museum of Natural History; and various representative parts of the skeleton of *Bathornis celeripes* from the Oligocene of Wyoming, a gift from the Museum of Comparative Zoology.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Retrenchment in field work made necessary by financial conditions, together with the additional help supplied by the C. W. A., permitted an opportunity for intensive work on both exhibition and study collections.

In mineralogy an upright case devoted entirely to an exhibit of quartz in nature was reinstalled, with new bases on either side, one holding a trunk and the other a slab of Arizona silicified wood. Nearby in the mineral hall a new exhibit contains the carved marbles deposited by President Franklin D. Roosevelt.

In the hall of physical geology recently acquired meteorites were added to the exhibit, and a large base displaying specimens of polished gneiss, folded igneous rocks, tillite, and other geological phenomena was installed. Many of the larger exhibits, both inside and outside of the building, were provided with new labels.

In the halls of stratigraphic paleontology the unique Middle Cambrian fossil exhibit was made more effective by the introduction of choicer specimens, illustrations, and diagrams, and additional examples of rare fossil fruits and flowers form an instructive addition to the paleobotanical exhibit.

A large slab of very fossiliferous Miocene sandstone, collected at Calvert Cliffs, Md., was prepared and installed in the exhibition series, and several logs of lignitized wood from the Potomac formation near Washington added new material to the paleobotanical exhibit. The collecting and preparation of these were largely due to the efforts of James H. Benn, who also prepared and installed the large slab of Devonian brachiopods presented by the Milwaukee Public Museum.

The exhibits in vertebrate paleontology, although much crowded at present, were so rearranged that three exceptionally well preserved specimens could be added. These are the rhinoceroslike *Hyrachyus eximius* from the Bridger formation of Wyoming, the most perfect skeleton of its kind yet discovered, which was mounted by Norman Boss; a composite skeleton of *Trigonias osborni* from the

Oligocene of Colorado; and a skeleton of a large carnivorous dinosaur from the Upper Cretaceous of Canada, both mounted by Thomas Horne.

It was, however, in the study of reserve collections that the most noticeable advances were made. Usually the number of specimens received annually far exceeds the ability of the regular staff to prepare them for permanent preservation, and it was here that the 14 C. W. A. workers assigned to the department were of valuable assistance. It was found possible to unpack, arrange, and file away most of the accumulations of past years, so that all specimens are now readily available.

Work begun last year on the study collections of minerals was appreciably forwarded, and the arranging and numbering of many sets of described rocks were much advanced. Overhauling of the study collection of ores, a task always difficult to handle systematically on account of the weight and irregularity of the specimens, materially improved this series. Many boxes of building-stone cubes from various parts of the world, too large to be incorporated in the regular set, were cut to standard size and placed in the regular rock or building-stone series. Work on the Tellef Dahll collection of minerals and the Henry S. Washington collection of rocks occupied Dr. W. F. Foshag and his assistants for some time. The preparation of descriptive petrographic reference cards for the analyzed specimens was about half completed.

Early in the year it was decided to replace the brief labels accompanying the systematic mineral exhibition series with a new set giving more detailed information of interest to the general public. This work was carried on actively, but the thousands of new labels necessary to be printed will delay its completion until next year. The extra help available made it possible to rearrange the sectional libraries in all divisions, so that thousands of pamphlets on geological subjects are now readily available. This work was greatly aided by the introduction of cupboards above the 6-foot storage cases in some of the offices where many series of reports and other volumes are filed. The arrangement of the pamphlets and volumes in the library of mineralogy and petrology is still in progress.

The head curator continued his work of previous years in building up the lantern-slide collection of geological and paleontological subjects for use in the exhibition series, and the classification and upbuilding of the various collections of micro-organisms. By exchange, gift, and research work many hundreds of species, including types, have in this way been added to the fossil and recent Bryozoa, the fossil and recent Ostracoda, and the conodonts. As space became available he assembled and arranged all the stratigraphic series of rocks, a study set different from the usual rock series in that the

specimens represent the lithologic features of sedimentary formation. He likewise assembled the material for a new exhibit of stylolites, unconformities, and other features in structural geology.

Work on the Springer collection of fossil echinoderms progressed actively under the care of Miss Margaret Moodey, who at the end of the year had completed checking and cataloging all the fossil Crinoidea in the study collection.

Continued work by Assistant Curator G. A. Cooper on the brachiopod series brought its rearrangement to the point where only two groups remain to be done, except for the incorporation of the Cambrian brachiopods into the regular series. A rearrangement of the Paleozoic corals was practically completed.

Rearrangement, expansion, and labeling of the trilobite series were completed after many weeks of work. In accomplishing this, hundreds of types were checked with their original descriptions and illustrations, and, where necessary, generic names were brought up to date.

Members of the Geological Survey staff assisted in arranging some collections. Dr. J. B. Reeside had the European Mesozoic material cleaned up and properly labeled. Dr. Edwin Kirk overhauled most of the western North American Ordovician and Devonian collections, rearranging them and selecting brachiopods for the biologic series, a work that reduced these collections about 10 percent. Dr. Lloyd G. Henbest went through about half of the foraminiferal collections, assembling the types in accord with Cushman's scheme of classification, a task that necessitated considerable remounting. Dr. W. P. Woodring and his associates arranged by geologic horizons and geographic provinces the entire Pacific coast study collection. In paleobotany, Dr. R. W. Brown rearranged some of the Fort Union plants and, in the earlier collections, certain Lacoe material.

In the laboratory of vertebrate paleontology, the preparation of the 1930 Bridger collection was finished, and the rest of the 1929 San Juan Basin collections were put in museum form. Good progress was made in the preparation of the 1932 Oligocene collection, a work to be continued during the coming year. With the addition of 10 standard storage cases to the balcony, it was possible to place the study collections in the best form for use. The further addition of a row of cupboards on top of the steel cases lining the entire length of the east corridor made it possible to store large, unwieldy specimens, and also greatly improved the appearance of the hall. Dr. C. L. Gazin, during his rearrangement of the mammal collection, identified several hundred specimens from the Bridger formation, in addition to assorting and arranging the collections made by the late Dr. J. W. Gidley in Florida and by Elmer Cook in Idaho.

INVESTIGATION AND RESEARCH

By members of the staff.—The unusual opportunities for work on the collections and increased routine duties diminished the time available for research work, but nevertheless various studies in hand were forwarded and some completed. The head curator continued his studies on early Paleozoic corals, on a new suborder of fossil Bryozoa, and on the Recent Bryozoa resulting from the Johnson-Smithsonian expedition. He completed the volume of the Fossilium Catalogus dealing with fossil and Recent Bryozoa.

Dr. W. F. Foshag continued his work on borax deposits and made investigations on the new mineral berkeite and the unusual clay mineral lucianite. Manuscripts on berkeite and the mineral searlesite, as well as on the ore deposits at Los Lamentos, were completed and submitted for publication. E. P. Henderson investigated several new and other recently acquired rare minerals and analyzed a number of complex phosphates. Many partial analyses were required for identification of materials submitted to the department.

Dr. E. O. Ulrich, in continuing his studies on Ozarkian and Canadian faunas in the field and in the office, extended the knowledge of these systems in Maryland and northward. Identification of materials in the Museum's collections from various parts of the world resulted from his broad studies of these early Paleozoic strata. Dr. A. F. Foerste spent the entire year studying the large collection of Canadian and Ozarkian cephalopods and in preparing manuscript and illustrations for his joint monograph with Dr. Ulrich.

Dr. C. E. Resser brought his Cambrian summary, a résumé of all paleontologic and stratigraphic information on this system, practically up to date, so that its publication can soon be arranged. Likewise, in collaboration with Prof. B. F. Howell, he brought near completion a manuscript on the fauna of the *Olenellus* zone. Dr. G. A. Cooper continued studies on Ozarkian and Canadian brachiopods and on the recent brachiopods obtained by the Johnson-Smithsonian expedition. He is also engaged in a description of the stratigraphy of the Tully formation.

C. W. Gilmore completed a manuscript descriptive of fossil turtles from Inner Mongolia, prepared in cooperation with and published by the American Museum of Natural History. A paper descriptive of turtles and dinosaurian specimens from the San Juan Basin in New Mexico is nearing completion, and a beginning was made on a monographic revision of the fossil snakes of North America, for which a grant from the Geological Society of America will cover the necessary expenses. Through cooperation with the Carnegie Mu-

seum, he spent a month in Pittsburgh studying the type skeleton of *Apatosaurus louisae*, and manuscript on it is now well toward completion. Dr. C. L. Gazin completed and published a manuscript on the "Upper Pliocene Mustelids from the Snake River Basin of Idaho" and submitted for publication two papers, one on the "Gravigrade Sloth Remains from the Late Pliocene and Pleistocene of Idaho" and the other on the "Fossil Hares from the Late Pliocene of Southern Idaho." Dr. Remington Kellogg continued his researches on the cetacean collection.

Research by outside investigators aided by Museum collections.—Dr. Edwin Kirk completed a paper on the Ellenberger limestone of Texas and another on a new Devonian crinoid genus. Dr. David White continued his studies of the plant remains of the Pottsville rocks of Illinois and prepared a paper on the Hermit shale of the Grand Canyon. Dr. R. W. Brown completed his paper on the Green River flora and sent it to press. Dr. and Mrs. Teiichi Kobayashi finished their studies on the early Paleozoic rocks of Korea and published various papers on them in Japan. They sailed for home by way of Europe late in May. Dr. Charles Butts spent the entire year studying the abundant collections from the Paleozoic rocks of Virginia and bordering States in preparation for a volume on the geology of western Virginia.

Leslie Wilson, of the Peabody Museum of Natural History, was occupied for several weeks in the study of the Museum's cetacean collections in connection with a paper on the fossil Cetacea of California. Dr. R. S. Lull, director of the Peabody Museum, made special studies of the predentate dinosaur collections in furtherance of his monograph on that group. Dr. Barnum Brown, of the American Museum of Natural History, likewise was engaged in a study of the dinosaur collection with especial reference to *Camptosaurus*. Dr. W. G. Lynn, of Johns Hopkins University, made use of the reptile collections in connection with his description of certain recently found snake and turtle collections.

Dr. Carl Branson, of Brown University, studied the conodont and other collections. Dr. Frank M. Swartz, of Pennsylvania State College, was occupied at various times with the Paleozoic ostracod collection. Dr. Rudolf Richter, of the Senckenberg Institution, Frankfurt, Germany, and Dr. H. A. Brouwer, director of the Amsterdam Museum, Dr. Victor Van Straelen, director of the Natural History Museum of Brussels, Dr. Radim Kettner, of the Karlovy University at Prague, Dr. J. J. Sederholm, Helsingsfors, Finland, and Prof. O. T. Jones, of Cambridge University, were among the scientists who in connection with their attendance at the International Geological Congress spent some time before and after the meetings in studying the Museum collections in their respective

fields. The fossil plant collections were utilized for study by M. K. Elias, of the Geological Survey of Kansas, Prof. Ralph Chaney, of the University of California, Dr. Erling Dorf, of Princeton University, Dean E. W. Berry, of Johns Hopkins University, and the distinguished European paleobotanists Dr. W. J. Jongmons and Dr. Paul Bertrand.

The collections of invertebrate fossils were subjects of special study by Sharat K. Roy, of the Field Museum of Natural History, with reference to Arctic fossils, Dr. J. A. Cushman for the Foraminifera, Dr. Hubert G. Schenck, of the University of California, for Tertiary Mollusca, and Louis B. Kellum for Mesozoic paleontology. Dr. Cecil Kindle, of the College of the City of New York, made special studies of Ordovician-Silurian fossils, Dr. Bradford Willard, of the Pennsylvania Geological Survey, of the Devonian, and Dr. Merrill Stainbrook, of Texas Technical College, of Paleozoic brachiopods.

Dr. Julia A. Gardner continued her studies of Eocene invertebrates of Texas, Dr. C. Wythe Cooke of the Tertiary echinoids of the Coastal Plain, Dr. W. C. Mansfield of the Tampa limestone of Florida and other Coastal Plain researches, and Dr. W. P. Woodring of the Pliocene invertebrates of Kettleman Hills, Calif. These investigators from the United States Geological Survey spend a large portion of their time in researches on the Museum collections. Miss Helen I. Tucker, of Cornell University, and Jiro Makiyama, of Kayoto, Japan, have also studied the Cenozoic collections.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The following distribution of geological specimens was made: Gifts, 2,399 specimens; exchanges, 2,186 specimens; loans for study, 722 specimens. As transfers to other Government bureaus, 52 specimens were sent.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The estimated total of specimens in the department is as follows:

Mineralogy and petrology	144,364
Geology, systematic and applied	95,919
Stratigraphic paleontology	1,890,682
Vertebrate paleontology	27,490
Total	2,158,455

DEPARTMENT OF ARTS AND INDUSTRIES

(Carl W. Mitman, *Head Curator*)

As a result of the uncertain business conditions prevailing during the year, there was a falling off in the cooperation extended to the department by outside organizations in furnishing industrial exhibits. Furthermore, there was noted more of a tendency by individuals to ask compensation for specimens that otherwise they might have donated to the Museum. The activities of the department, therefore, were concerned principally with routine work involved in the preservation of collections and the improvement of existing exhibits. These tasks continue to be rendered difficult by the acute shortage of both exhibition and storage space, as well as by an undermanned staff. The latter problem, however, was alleviated temporarily by the employment of 20 C. W. A. workers, who were of material help in many branches of the department's business.

Death and retirement robbed the department of two faithful members of the staff. On September 13, 1933, Ruth Sherwood succumbed to an illness of several years' duration. Her 12 years' service with the division of engineering was marked by her enthusiasm and interest in the work and by her extreme loyalty. Her death is here recorded with a deep feeling of loss. On December 31, 1933, Mrs. Nida M. Browne was retired, as preparator in the division of textiles, after 15 years' service, during which she rendered valuable assistance in the installation of exhibits and recorded and abstracted large numbers of pertinent articles from periodicals assigned to the division's library.

ACCESSIONS

Specimens added to the collections this year totaled 5,832, a little over one-third more than in 1933, a single bequest to the section of photography accounting for about half this total. Distribution among the divisions and sections was as follows: Engineering, 385; textiles, 131; organic chemistry, 627; wood technology, 962; foods, 5; history of agriculture, 5; medicine, 658; graphic arts, including photography, 3,059.

Engineering.—The 385 specimens included in the 77 accessions received in engineering were distributed as follows: Aeronautics, 80; mechanical technology, 292; mineral technology, 13.

In aeronautics the most important accession was the Wright airplane *Type E–X* (reconstructed with available original parts) in which Calbraith Perry Rodgers completed the first coast-to-coast

flight across the United States in 1911. It was presented, with the sanction of Rodgers' family, by the Carnegie Museum of Pittsburgh, where the plane had been exhibited since 1917. Rodgers started this historic flight at Sheepshead Bay, Long Island, September 17, 1911, and after many accidents landed at Pasadena, Calif., November 5. The distance covered was 4,231 miles; number of landings, 69; elapsed time, 49 days; time in the air, 3 days 10 hours 4 minutes. (The present transcontinental record is a trifle over 10 hours.) Of the original machine that left the Atlantic coast, only the rudder and one or two struts were left; all other parts had been replaced. A fragment of another Wright brothers' aircraft was received as a loan from the Rev. F. B. Drane, Edenton, N. C., who, in 1908, while at Kitty Hawk, N. C., uncovered a wing of one of the Wright gliders buried in the sand. By measurement it was identified as from the 1902 glider.

A number of models illustrating famous or otherwise interesting aircraft were added, among which were the original wind-tunnel model of the Wilford gyroplane presented by the Pennsylvania Aircraft Syndicate, of Philadelphia; a Stinson "Reliant" 4-place cabin monoplane made and presented by R. Bruce Hamilton, Catonsville, Md.; a Fairchild "22" sporting two-place monoplane from George Spaargaren, Babylon, N. Y.; and a low-wing Northrop "Gamma", made famous by the flights of Frank Hawks, presented by the Texas Co. Two World War types were received: A 1/16 reproduction of the Bristol fighter, presented by the Bristol Aeroplane Co., Ltd., Bristol, England, and a Sopwith "Camel", modeled to the same scale and donated by Vaughan M. Bilson, Richmond, Va. The Italian Air Ministry presented a 1/30-scale model of the Savoia-Marchetti *S–55X*, the type used in the mass flight of 24 similar seaplanes from Rome to Chicago and return, July 1 to August 12, 1933, and a propeller from one of the machines.

The collection of aircraft details and parts was materially enhanced by 10 propellers new to the series received by transfer from the Department of War; by a wing-end frame showing riveted structure, donated by the American Airplane & Engine Corporation, Chicago; an aileron of a Boeing airplane, type 95, showing the use of a corrugated metal surface, the gift of National Air Transport, Inc., Chicago; an exhibit of steel tierods presented by the Stewart-Hartshorn Co., New York City; and a group of structure members used in the Sikorsky *S–39*, *S–41*, and *S–42* amphibian machines, the gift of the Sikorsky Co., Bridgeport, Conn. The Pratt & Whitney Aircraft Co., Hartford, Conn., supplemented its previous gift of a "Wasp" engine with a machined main crankcase assembly and a forged nose section.

Of the accessions acquired by the section of mechanical technology, the one that will undoubtedly enjoy the most popularity is the excellent model of the Appian Way, prepared and transferred to the Museum by the Bureau of Public Roads, Department of Agriculture. The model illustrates the method and materials employed in the construction of the Via Appia, the most important of the Roman roads, built in 312 B. C., as part of the most extensive and durable system of highways known to the ancient world. The model includes in its scope the preliminary survey for the road, vehicles and traffic upon the finished pavement, and all intermediate steps of construction.

Another interesting addition to land transportation was a Humber (Beeston) racing bicycle of 1886, perfectly restored and presented by A. E. Schaaf, Cleveland, Ohio. The machine is a 53-inch, high-wheel, ordinary, representing the best of bicycle design and construction of its date. Mr. Schaaf was associated with the early development of the bicycle, both as a rider and a manufacturer, and is now much interested in having the excellence of the construction and finish of the early machines correctly represented in order that they may be properly appreciated by coming generations. Accordingly, this original old bicycle has been accurately and completely restored to its new condition.

The Vincent G. Apple Laboratories, Inc., Dayton, Ohio, presented, through Edward M. Apple, Detroit, Mich., a collection of early automotive electrical relics illustrating the work of the late Vincent G. Apple and the old Dayton Electrical Manufacturing Co. The collection includes several early forms of ignition dynamos for stationary and mobile internal combustion engines; a very early combination automobile generator and electric starter; several rubber-flask storage batteries; and examples of the first form of tungsten filament lamps for automobile lighting.

In water transportation, the models of the sloop yacht *Ariel* and its power dinghy, together with seven paintings of marine subjects and several early ship's instruments and tools constituted a noteworthy accession from John W. Loveland, Washington, D. C. The models and paintings are the work of Major Loveland, the former being accurately constructed to a scale of ¾ inch=1 foot and mounted in a marine setting with glass waterline and buoy, anchor, and marine life. Another interesting addition to the watercraft collection was a sailmaker's kit of tools presented by Mrs. A. J. DePue, of the Museum staff, and her sister, Mrs. Mary K. Roberts, Chevy Chase, Md. The kit was originally the property of the donors' father, Philip H. Branson (1840–1923), who learned the craft of sailmaking as a very young man.

To the collection of tools was added a group of wood and metal working hand tools presented by Paul Edward Garber, of the Museum staff. The Sebastian Lathe Co., Cincinnati, Ohio, presented, through E. E. Stokes, president, a nicely made, completely operating model of the Sebastian geared-head, motor-driven lathe, scale approximately ⅓ size.

The most interesting typewriter received was the Gorin tabulating typewriter of 1886, presented by the inventor, Frederick P. Gorin, Seattle, Wash. Before the introduction of the tabulator the typewriter was not so fast as handwriting in the preparation of bills and accounts and was not used generally for that work. The Gorin tabulator changed this and opened up such an extensive new field for its use that a large increase in the sale of typewriters has been traced directly to its introduction. To the calculating machine collection was added a group of six machines invented and constructed by George B. Grant and presented by Edwin A. Bayley, Boston, Mass. Included is the model exhibited by Grant at the Centennial Exhibition in 1876.

The hand-pump fire engine, which years ago played such an active and versatile part in American community life, is now represented in the Museum by a 2-cylinder, handlebar, and walking-beam type built by Hunneman & Co., Boston, Mass., in 1854. Charles T. Nehf, secretary-treasurer of the Volunteer Fireman's Association, Terre Haute, Ind., acquired the last one used in that city and after preserving it for many years presented it to the Museum.

The Winslow-Baker-Meyering Corporation, Detroit, presented a small automatic electric refrigerating unit of a type successfully used for domestic refrigeration in 1918. It consists of a 2-cylinder, aircooled compressor, a copper-tube condenser, and a freezing chamber containing the expansion coils and ice trays. The unit is belt driven from an electric motor and has a thermostatic control. It is nicely preserved and represents an early form of the mechanical unit of the household electric refrigerator.

Henry B. Douglas, Newton, N. J., a descendant of Andrew Ellicott, prominent American surveyor and engineer of the eighteenth and early nineteenth centuries, presented a surveyor's compass marked "A. Ellicott" and "B. Rittenhouse." This is an attractive addition to the collection of instruments used by Ellicott, who is a particularly interesting figure in American history, as he first located the northeastern and southeastern boundaries of the United States and also made the first survey of the city of Washington.

To a slowly growing collection of early house heaters was added as a gift of the trustees of the Sandy Spring Meeting of Friends, Sandy Spring, Md., a so-called "seven-plate" cast-iron heating

stove, which was used in the meeting house from 1817 to 1932. The stove is one of two of its kind made by the foundry of Wm. Baer & Co., Baltimore, Md. With the stove are six of the soapstone bricks that were heated on the top of the stove and distributed to the members of the meeting to be used as individual foot warmers.

The principal additions to the electrical collections were two electric meters. The West Penn Power Co., Connellsville, Pa., through D. K. McIlvaine, superintendent, presented six meters not heretofore represented in the collection. The Sangamo Electric Co., Springfield, Ill., was the donor of a greatly enlarged operating model of the Sangamo electric house meter. This model shows plainly the construction and operation of the most common type of consumers' meters and should prove instructive on a subject about which most current users are curious.

In the section of mineral technology, 2 accessions of interest were a group of 4 early mine lamps and a small exhibit of the first seamless-steel tubing produced in the United States. The mine lamps are the gift of W. R. Crane, Washington, D. C., and include a sheet-metal "betty" lamp; a cast-iron lamp with long wrought-iron bail and flat canteen-shaped reservoir, believed to have come from a Cornish mine; and a hard-rock mine-candle spike. The steel tubing is the gift of Ellwood Ivins, Philadelphia, Pa.

Textiles, organic chemistry, wood technology, foods, history of agriculture, and medicine.—The 2,388 specimens added to the collections of these six divisions and sections were contained in 88 accessions.

The popular collection of early American coverlets was materially enhanced by a number of accessions. One of these was a candlewick bedspread, embroidered in fruit and floral designs on a cotton-twill foundation, made about 100 years ago by Jemima Ann Beall-Hammond and presented by her granddaughter, Mrs. Robert S. Hart, Baltimore, Md. Mrs. William Stephen Corby, Chevy Chase, Md., continued her cooperation by the loan of two double-woven, Jacquard type, hand-woven coverlets, and another coverlet having a naturalistic grape pattern with quaint giraffe border was received as a loan from Mrs. Byron Hunter, Washington, D. C. Two examples of the coverlet weave, known as "double face" or "summer and winter", were also received. The first of these is made of homespun cotton and wool yarns in "pine bloom" pattern and was woven by Elizabeth Franklin, Montross, Va., before 1825, and presented to the donor, George J. Hassett, Washington, D. C., by the weaver's great-granddaughter; the second, a portion of a coverlet developed in a variation of the pattern designated as "leopard skin", was received as a gift from Mrs. Julia Brenner, San Francisco, Calif. An outstanding historic specimen acquired was a century-

old quilting frame. This unique frame not only supplements the coverlet collection but also is a pertinent illustration of the quilt-making adjuncts of colonial and pioneer days. It was presented by Mrs. Sarah Vickers and the Clay County Historical Society, Brazil, Ind.

The collection illustrating early household textiles, which has been built up during the past 10 years through the cooperation of Mrs. Laura M. Allen, Rochester, N. Y., was increased by additional interesting specimens received as gifts from her. The exhibit of hand-woven tapestries, made according to the Norwegian system, was augmented by 7 pieces of tapestry and 6 charts, showing methods of dyeing and blending wool for the yarns used in weaving the tapestries, deposited by E. D. McAlister, Friendship Heights, Md. These specimens were dyed, spun, and woven by his sisters, the Misses Katharine and Cecile McAlister.

Seventy-nine specimens of new textiles of American manufacture were added. The Cotton-Textile Institute, New York City, continued its cooperation by contributing a selected series of new fabrics for the fall and winter trade of 1933–34, and for the spring and summer of 1934. The Lyons Piece Dye Works, Paterson, N. J., contributed a sample of ripple-surface taffeta; H. R. Mallinson & Co., New York City, a specimen of printed warp taffeta; and William Skinner & Sons, New York City, specimens of silk dress goods, showing the latest developments in these materials.

To the collection of models and specimens illustrating the development of the sewing machine, four specimens were added. One, a hand-operated machine of 1858, was given by Riley D. Moore, Washington, D. C.; a Singer machine of 1874 was presented by the Misses Wright, Washington, D. C.; and two lockstitch machines not represented in the collection were obtained near Hagerstown, Md.

The section of agricultural history received as a loan from Miss Melchora Garver, Hagerstown, Md., a working model of a grain separator for threshing machines, made by Daniel Garver, uncle of the lender. The model represents inventions covered by three patents issued to Daniel and Cyrus Garver between 1871 and 1875. Sydney S. Stabler, Washington, D. C., presented a Waldron blade for a grain cradle, a snead for mounting the same, and a "Coolie can" for separating cream from milk. The last-named specimen was made at Sandy Spring, Md.

The study collection of woods was increased by the receipt as exchange material from the New York State College of Forestry, Syracuse, N. Y., of 289 woods collected in Queensland, Sumatra, and Africa; by 281 woods collected in Sumatra in 1932 by Boris A. Krukoff; and 374 samples of commercial woods assembled by the

Lumber Division of the Bureau of Foreign and Domestic Commerce and in many cases collected by the forestry departments or officials of the country where the timbers were grown. The most interesting single wood specimen was a sample of a tropical liana collected in the Dominican Republic by E. J. Valeur and identified as belonging to the genus *Tanaecium* (family Bignoniaceae). This genus was not only unrepresented heretofore, but its anomalous structure is unique in the wood collection. Trade samples of four commercial pines, a trunk section of the Belmore palm, and pieces of wood of the giant cactus were given by William F. Bucher, Washington, D. C.

The outstanding accession in the section of organic chemistry was an attractive exhibit made up of a continuous series of 12 dioramas, picturing the manufacture of rubber automobile tires, presented by the B. F. Goodrich Rubber Co., Akron, Ohio. The series begins with the gathering of latex and ends with the road tests of finished tires and quite realistically portrays the main stages of intermediate manufacture. The leather exhibits were augmented by examples of dyed reptile skins for women's shoes and pocketbooks; of kangaroo, seal, cabretta, pigskin, and shark leathers, pocketbooks, bags, shoes, and gloves; all as gifts from 14 American firms. The Fouke Fur Co., St. Louis, presented four Alaska sealskins, showing the unhairing, dressing, and dyeing of the fur. Series of specimens to illustrate the production of synthetic fibers and molded plastics from cellulose were presented by the American Bemberg Corporation, Tubize Chatillon Corporation, and the Celluloid Corporation, all of New York City. The Burton-Dixie Corporation, Chicago, Ill., presented a large painted chart on which are mounted specimens showing stages in their process of cleaning feathers.

The most valuable accession in the division of medicine was a model and a series of specimens illustrating the history, use, and behavior of surgical sutures presented by Davis & Geck, Brooklyn, N. Y. The model consists of three sections: One illustrating suturing by the ancient Egyptians, Greeks, and Romans and by the Americans at Valley Forge; the second portraying modern manufacturing methods and tests; and the third the use of sutures in a modern hospital. With the model are shown types of sutures—horsehair, kangaroo tendon, silkworm gut, twisted silk, braided silk, celluloid-linen, and catgut, as well as the many classes of sutures for specific purposes. Sharp & Dohme, Philadelphia, Pa., donated four complete exhibits demonstrating the purpose of antitoxins, serums, vaccines, bacterins, serobacterins, and pollen extracts; and Parke, Davis & Co., Detroit, Mich., presented an interesting collection outlining the standardization of official tinctures and fluid extracts. Other additions to the section of pharmacy were

a series of specimens pertaining to official vitamin and hormone tests, given by the United States Pharmacopoeial Convention, through Dr. E. Fullerton Cook, Philadelphia, Pa.; a pair of drug-store show bottles, used in Harrisburg, Pa., about the middle of the nineteenth century, presented by L. P. Aardrup, Lancaster, Pa.; a mortar and pestle, a Michael's powder divider, and two of the earliest types of suppository molds, donated by Gordon Leech, through J. B. Magnus, New York City; and miscellaneous historical papers pertaining to early American pharmacy, a gift from Dr. Francis E. Stewart, Englewood, N. J.

The principal addition to the medical history section was a loan by Miss Emma M. Long, Athens, Ga., of personal relics of her father, Dr. Crawford W. Long, said to have been the first physician intentionally to produce anesthesia for a surgical operation by the inhalation of sulphuric ether. Specimens of historical interest relating to the careers of Surg. Lewis Wolfley, United States Navy, and Lt. Col. William Irvin Wolfley, United States Army, were received as gifts from the daughters of the latter, through Thomas J. Shannon, Washington, D. C., and a collection showing the development of clinical thermometers was presented by the Nurnberg Thermometer Co., Brooklyn, N. Y.

The Metropolitan Life Insurance Co. continued its cooperation by presenting for the section of public health a series of tinted placards pictorially comparing and describing ancient and modern methods of safeguarding the health of individuals and communities. This company also presented a film on the life of Robert Koch, the pioneer bacteriologist, for use in the division's delineascope. The American Hospital Association, through Richard P. Borden, Fall River, Mass., completed its exhibit by the contribution of additional colored transparencies, which tell the story of hospitalization.

In the section of materia medica the essential oil and insulin exhibits were improved by the addition of specimens given by Dodge & Olcott Co., New York City, and Eli Lilly & Co., Indianapolis, Ind.

Graphic arts.—Of the 58 accessions recorded during the year in the division of graphic arts the most important were those relating to printing in water color from rubber blocks. This comparatively recent invention of Bert C. Chambers is being used to a large extent commercially, but artistic examples have been rare. An excellent print, however, is now in the collection obtained by the curator, and nine additional specimens were obtained through the inventor.

Important additions made to the wax-plate engraving exhibit are the work of J. W. Clement Co., Buffalo. Wax-plate engraving is

used in the manufacture of maps but is near extinction because of the much less expensive lithographic processes. Eight beautiful prints of the construction of the Cincinnati Terminal by Louis C. Rosenberg were received as a gift of the Cincinnati Terminal Co. Mr. Rosenberg is one of America's foremost etchers, and these are among the most impressive plates he has made. Artistic prints were received from Miss Elizabeth Norton, Palo Alto, Calif. (2 etchings and 4 wood-block prints in color), an etching by Donald Shaw MacLaughlin was deposited by the Smithsonian Institution, and 4 lithographs by Theo B. White of interesting buildings of Williamsburg, Va., were transferred from the Public Works of Art project. A lithograph, "Black Canyon", by Conrad Buff, was the gift of Dr. Harry A. Comeau, Monterey Park, Calif. This print shows about the limits of the lithographic process, from extreme black to brilliant white, a remarkable scale. Fifteen examples of the work of the Laboratory Press of the Carnegie Institution of Technology, a postgraduate school of printing, were received as a gift.

An interesting sample of gold-leaf paper made in China from bamboo, together with Chinese gold leaf, was the gift of Prof. F. A. McClure.

The bequest of Rudolf Eickemeyer, mentioned in the report for 1933, was the largest and most important accession recorded in the section of photography. It consists of 2,729 specimens including negatives, cameras, lenses, lantern slides, field and studio equipment, and a kit for lecture purposes. Dr. John B. Garrison, Hopewell, N. J., presented 62 Hillotypes, the work of L. L. Hill, who spent much time in experimenting with color photography in the early days of daguerreotypes; also a portrait of Hill and a copy of his last book, "Treatise on Heliochromy."

A. M. Venditti, Washington, D. C., presented three old cameras and three old shutters, which are valuable additions to the photographic equipment collections, the three shutters being new to the collection while two of the cameras used for taking tintypes were heretofore unrepresented. Other additions to photographic equipment were an Eastman pocket kodak of 1896, presented by C. H. Brown, Edgewood, Md., and an Eastman No. 5 panorama kodak donated by Miss Susan H. Kitchen, Mount Airy, Pa.

Among a number of interesting examples of photographic work added during the year were two beautiful specimens of 3-color photography by the Carbro process, made and presented by Adolf Fassbender, New York City; three pictorial photographs made and presented by Dr. George C. Poundstone, Chicago; and a number of ambrotypes, daguerreotypes, and tintypes from Miss Ella J. Mor-

rison, Austin B. J. Clark, and Mrs. Edwin B. Hesse, all of Washington, D. C.

The collection of motion-picture equipment was augmented by a number of pieces of apparatus and film, including a Knego camera and tripod and a Williamson perforator loaned by Mrs. B. B. Heal, Washington, D. C.; and a 6-inch strip of 35 mm. motion-picture film with the perforated edges bound in flexible metal, presented by Francis Marsten, Washington, D. C.

Loeb collection of chemical types.—During the year Miss Aida M. Doyle, of the section of organic chemistry, with the assistance of one C. W. A. worker placed the Loeb collection in excellent order. There is now available a complete card index of accessions and a complete card catalog of the collection referring to specimens and to the pertinent correspondence. The collection includes 137 accessions and 1,313 cataloged specimens.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Engineering.—With help afforded by C. W. A. workers as well as by the Museum shops, many improvements were made both in the installation and preservation of collections. The entire collections of watercraft, glass, abrasives, alloys, and white lead were reconditioned and reinstalled in freshly painted exhibition halls; a good start was made on a complete inventory of specimens in storage; the collection of aircraft engines was thoroughly renovated and properly prepared for exhibition; exhibition improvements in the aircraft building, long contemplated, such as raising the full-size airplane *Bremen*, were carried out; and the division's large catalog and correspondence files were materially improved and brought up to date.

An interesting new installation made was that of the model of the Appian Way. Under the direction of the head curator, an old museum case was remodeled with an overhead light box of a pattern suggested by similar case changes in other museums. A popular trend in exhibition method has been to confine the illumination of specimens to lights within the cases, disregarding the normal room illumination. The problem involved in developing this technique in most museums has been to utilize existing cases without rendering them unsightly. The method adopted in the experiment here was to install a shallow light box in the entire top of the case, concealing it where it projects below the line of the glass by means of a curtain of a rich material of the color of the case interior. This curtain is long enough to extend below the box to break the hard line of the box edge and to shield the eye in approaching the case from the glass under surface of the light box until the eye is drawn

naturally to the exhibit. The glass used in the under side of the light box is a diffusing glass that casts a soft light without shadows. The result in this one case has been satisfactory.

Textiles, organic chemistry, wood technology, foods, and medicine.—A total of 14 installations of new material and 45 rearrangements or reinstallations of specimens received in previous years were made in the textile halls during the year. These included new cotton fabrics for 1934; Norwegian tapestries and materials dyed with natural dyestuffs; new "celanese" fabrics; and a number of early American hand-woven coverlets.

In the section of organic chemistry, 28 separate installations were made. The most complicated of these was the rearrangement of a large portion of the rubber collections to provide suitable space for the exhibition of 12 dioramas totaling over 30 feet in length and visualizing the technical story of the automobile tire. Another involved exhibition problem was the rearrangement of the leather collections to provide for the large increment of new specimens.

In wood technology five new installations of new exhibition materials were made. Over 900 specimens were received, identified, and prepared for addition to the study collections, and, in addition, nearly 500 specimens were prepared for this collection from material received in previous years. Lastly, 1,661 samples of wood were prepared for exchange purposes.

The division of medicine installed 18 new and rearranged 15 exhibitions of collections.

The division of textiles and its sections accomplished much back work with the help of 12 C. W. A. workers, whose duties included copying documents and records, typing cards, checking and listing specimens, repairing models, preparing wood specimens, and translating foreign scientific literature.

Graphic arts.—With the added assistance of one C. W. A. worker, the photomechanical and substitute processes exhibits in the division of graphic arts were entirely completed, and many minor improvements were made in the collections as a whole. Considerable work was required in the preparation of 21 special exhibits, held as follows:

GRAPHIC ARTS

John Groth.—Fifty-one drypoints, etchings, aquatints, and lithographs, October 2 to 29, 1933.

Louis C. Rosenberg.—Forty-nine etchings and drypoints, October 30 to November 26, 1933.

Theo B. White.—Forty-four lithographs, November 27, 1933, to January 2, 1934.

F. Morley Fletcher.—Thirteen block prints in color by Mr. Fletcher, and 40 block prints by his students, January 2 to 29, 1934.

Cadwallader Washburn.—Fifty drypoints, January 29 to February 25, 1934.

Samuel Chamberlain.—Forty-two etchings and drypoints, February 26 to March 25, 1934.

Howard Simon.—Fifty-two etchings and wood-block prints, March 26 to April 22, 1934.

Woodcut Society.—One hundred and fifteen woodcut prints, April 23 to May 20, 1934.

PHOTOGRAPHY

Save the Redwoods League.—One hundred and sixty-six photographs of California trees, July 1933.

The Camera Club, Vienna, Austria.—One hundred and one pictorial prints, July 1933.

British Arctic Air Route.—Shown under the auspices of the Photographic Society of Philadelphia, 52 photographs, August 1933.

F. J. Mortimer.—Eighty-four marine photographs, September 1933. Shown under the auspices of the Chicago Camera Club.

Photographic Society of Philadelphia.—Eighty pictorial prints, October 1933.

The International Exhibit of Taxidermy.—Four hundred and seventy-three photographs—under the auspices of the American Association of Museums, October 1933.

Dr. George C. Poundstone.—Fifty pictorial photographs, November 1933.

W. E. Dassonville.—Thirty-three pictorial prints of California, December 1, 1933, to January 15, 1934.

Mme. Therese Bonney.—French collection of 146 daguerreotypes, 16 ambrotypes, 1 oilcloth print, and 2 albums, January 4 to 31, 1934.

Washington Photographic Society.—Fifty-two pictorial prints, February 1934. The Society's first exhibition.

One hundred and fifty-five pictorial prints of England, April 1 to 22, 1934. Collected by the London Times and shown under the auspices of the Brooklyn Institute of Arts and Sciences.

One hundred pictorial photographs made by Japanese residents of Manchuria, assembled by the South Manchuria Railway, May 1934.

W. P. Herron.—Forty-five pictorial photographs, June 1934.

INVESTIGATION AND RESEARCH

In the normal pursuit of the department's work, the staff members are constantly engaged in investigations bearing on industrial and engineering history, and little opportunity is left for selected research. Nevertheless, during the past year Dr. F. E. Lewton made botanical studies of certain undescribed plants in the family Malvaceae; W. N. Watkins continued his studies of the anatomy of unidentified wood specimens in the collection, particularly those from Jamaica, Salvador, and Egypt; while Dr. Charles Whitebread and Paul E. Garber pursued their investigations in medical and aeronautical history, respectively.

The exhibition and study collections of the department are in constant use by outside investigators as aids in a variety of studies. For example, the wood collection was studied to determine what woods

are suitable for bentwood furniture to be used with the bark in place; types of cloth structure and fabric design were investigated; and general studies were made by several investigators in connection with the establishment of private museums of watercraft, textiles, pharmacy, medicine, and public health.

Hundreds of requests for help and information were received during the year from other Federal bureaus, as well as from private individuals. The Department of Justice was assisted in establishing the priority of certain aircraft features. The Department of the Navy was aided in ascertaining priority in types of navigation lights used on aircraft. Special instruction on textile manufactures was furnished the Bureau of Internal Revenue in connection with the collection of the process tax on cotton manufactures. Seeds were identified for the Department of Agriculture and woods for the Department of Commerce, United States Tariff Commission, and Government Printing Office. For private individuals, many lots of material, such as paintings, prints, tools, machinery, electrical equipment, clocks, textile fabrics, woods, and scientific apparatus, were identified.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The distributions from the department during the year totaled 3,689 specimens, of which 2,941 were lent for educational or research purposes; 673 were exchanged for similar material; and 73 were returned to owners. The largest single loan was that of 2,560 specimens distributed among 6 traveling exhibits of graphic arts, which were shown during the year in 19 States.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The number of specimens in the department was 121,199, assigned as follows:

Engineering	15,407
Textiles	13,834
Wood technology	9,256
Organic chemistry and animal products	20,731
Foods	1,097
Agricultural history (estimated)	1,207
Medicine	17,261
Graphic arts, including photography	41,093
Loeb collection of chemical types	1,313
Total	121,199

DIVISION OF HISTORY

(THEODORE T. BELOTE, *Curator*)

The work of the division of history during the past year was concerned largely with the rearrangement of the historical specimens transferred to the Arts and Industries Building from the Natural History Building and with the placing of both study and exhibition specimens in their proper units, a process that required much time and labor, as it was necessary to concentrate this material in a smaller space than it had previously occupied. Limitation of space rendered installation a problem that could be solved only after a period of experimentation, and the work involved was much more difficult and extended than the actual process of moving from one building to the other. These collections have now been arranged in various units in accordance with their intrinsic character.

ACCESSIONS FOR THE YEAR

Specimens received totaled 5,255, or 282 less than for the previous year.

The antiquarian collections were increased by the addition of a silver tray and loving cup presented by the women of Seneca Falls, N. Y., to Elizabeth Cady Stanton in 1895 on the occasion of her eightieth birthday. These two pieces of silver were presented to the Museum by Mrs. Harriet Stanton Blatch. Through the decease of Edith Long, a large collection of objects of antiquarian and historical interest, lent to the Museum several years ago by Miss Long and her sister, Miss Anita Long, became the property of the Museum as a bequest from them. This collection consisted of a wide variety of objects, including chinaware, silverware, glassware, furniture, and some interesting examples of the jewelry and costume accessories of the type worn by American women during the early part of the nineteenth century.

The most important addition to the costumes collection was a green satin dress, a pair of white kid gloves, a pair of satin slippers, and a silver lorgnette and necklace worn by Mrs. Herbert Hoover at the White House during the administration of her husband, Herbert Hoover. These objects were presented to the National Museum by Mrs. Hoover. To the costumes collection was also added a gold locket once owned by Mrs. Jane Irwin Findlay, the wife of Gen. James Findlay and one of the hostesses of the White House during the administration of President William Henry Harrison in 1841. This locket was presented to the Museum by Mrs. Roy Arthur Hunt. A handsome black silk dolman, made about 1850, was presented by Mr. and Mrs. Oliver A. Phelps.

The military collections were increased by a medical officer's sword carried during the Civil War by Dr. Daniel McNeil, Twenty-first New Jersey Regiment. It was presented by Mrs. Edward Savoye.

The naval collections were increased by the transfer of two interesting ship models from the division of engineering, one of the U. S. S. *Dunderberg* and the other of the U. S. S. *Miantnomoh*. The originals of both of these vessels had a very interesting history; the former was built in 1866, designed along the lines of the Confederate ram *Virginia*, and the latter was a double-turreted monitor launched at the New York Navy Yard in 1863.

The numismatic collections received 16 specimens of nickel coins from the International Nickel Co. The American Numismatic Association added 78 specimens to its already large and interesting loan collection of recent coins of the world. A number of specimens of local scrip or emergency paper currency were added. These included examples of various types of such currency issued during the recent financial depression by banks, business firms, municipalities, chambers of commerce, and other organizations in 27 States. Some of the notes are of little artistic interest, but others are well engraved on good quality paper and as such are fine examples of the art of the engraver. Some are printed on unusual materials, as those of the Chamber of Commerce of Tenino, Wash., which are on thin strips of wood. The collection included 266 specimens, nearly all of which were presented by the issuing authorities.

The collection of medals and decorations was increased by an unusually large and interesting group of objects at one time the property of the distinguished Danish scientist and explorer, Fritz Holm. These were bequeathed to the Museum by Marie L. Weldon.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Some improvement was made in the arrangement of the costumes material in the west hall by increasing the number of wall cases. As a result, the Richard Mansfield collection of historical theatrical costumes was reinstalled along the west end of this hall in a manner more satisfactory than was formerly possible.

Progress was made toward the permanent arrangement of the numismatic collection. The United States coins have now been rearranged and reclassified. A special case was assigned for the exhibition of proofs and patterns, and the tokens and local coins were placed on permanent exhibition. The United States medals, shown during the past few years in the rotunda, were transferred to the numismatic hall. This transfer made it necessary to retire from exhibition in the coin hall the collection of scrip and emergency currency that had been shown there during the past year. The space released in the rotunda was utilized for the exhibition of

the United States military and naval decorations, in place of which in the west hall were installed a large and valuable series of foreign, civil, and military decorations.

In addition to the work on the exhibitions described above, two special exhibits were placed by the division during the year. One of these was a series of antique jewelry for exhibition at the Century of Progress Exposition, and the other was a small costume unit for exhibition by the department of home economics of the University of Maryland in connection with the Maryland tercentenary celebration. The storage facilities of the division were distinctly improved by the addition of two new series of standard storage units. One of these includes a number of cases of the open type but supplied with locks, and the second consists of 30 quarter-size standard closed storage units with locked doors and is being utilized for the storage of textiles and allied objects of a perishable character.

RESEARCH BY MEMBERS OF STAFF

The assistant curator, Charles Carey, and the philatelist, Mrs. C. L. Manning, accomplished much work in the two fields of military and philatelic research, and a considerable quantity of material of distinct value in these two fields was gathered. Many inquiries of more than usual importance were handled by the staff, and the work of obtaining satisfactory answers to many of these questions involved extensive research.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The distribution of material from the division during the year aggregated 178 specimens, of which 33 were gifts in aid of education and 129 were loans for educational or research purposes. In addition, 16 specimens that had been temporarily here on loan were returned to their owners.

NUMBER OF SPECIMENS UNDER DIVISION

The number of specimens in the division was 494,027, assigned as follows:

Art	4,564
Antiquarian	11,003
Costumes	4,089
Library	2,225
Military	27,505
Naval	2,513
Numismatic	46,249
Philatelic	395,879
Total	494,027

ACCESSIONS DURING THE FISCAL YEAR 1933–34

[EXCEPT WHEN OTHERWISE INDICATED THE SPECIMENS WERE PRESENTED, OR WERE TRANSFERRED IN ACCORDANCE WITH LAW BY BUREAUS OF THE GOVERNMENT]

AARDRUP, L. P., Lancaster, Pa.: Pair of drug-store show bottles used in Harrisburg, Pa., about the middle of nineteenth century (126684).

ABBOTT, Dr. W. L., North East, Md.: 51 birds (125051).

ABERCROMBIE, CLARA DE N., Washington, D. C.: A Sioux Indian painting on muslin and a Mexican wool blanket (127858).

ABERDEEN CHAMBER OF COMMERCE, Aberdeen, Wash.: 2 commemorative wooden quarters issued by the Aberdeen Chamber of Commerce in 1933 (126916).

ABRAHAM, STUART, Alexandria, Va.: A narrow-mouthed toad and a salamander from Pamplin, Va. (127209).

ACADEMY OF NATURAL SCIENCES, Philadephia, Pa.: A wren and a sparrow from Peru (129759, exchange); a black-and-white tanager (129128, exchange); 99 mollusks from Jamaica (129047); 57 land shells (paratypes or topotypes of 8 species or subspecies) from Arizona, New Mexico, and Texas (126630).

ACKERMANN, FRITZ, Bahia, Brazil: 2 specimens of phantom quartz from Brazil (126653).

ADAMS, ERNEST, and EDNA BANTA, North Madison, Ind.: (Through Dr. M. W. Lyon) Skin of a red squirrel (128069).

AGRICULTURE, UNITED STATES DEPARTMENT OF:

Bureau of Biological Survey: 241 plants from United States and Alaska (124656, 125997, 126100, 126466); a mountain beaver collected by T. H. Scheffer at Puyallup, Wash. (125273); 325 specimens of Thyreocorinae (125499); 4 limpkin eggs (125979); 1 skeleton of king rail (126817); 2 heads of female mallards (127889); (through Dr. E. W. Nelson) 4 quail from T. B. Murray, Boise, Idaho (128239); 616 mammals transferred and entered in Museum catalog (nos. 250728–250852, 250854–251374, new series) (129840). (See also under Mrs. C. H. Popenoe.)

Bureau of Entomology: 90 flies, representing 4 species, one of which is new to collection (125138); 6 flies (126852); 1 land snail from New Orleans (127659); (through D. H. Shirck) 18 weevils from Idaho (127774); about 35,000 miscellaneous insects (129965).

Forest Service: 1 specimen and 2 photographs of plants from Western United States (126100, 129782).

Bureau of Plant Industry: 1 plant from Oregon (126111); 20 plants (127024); 36 plants from Greenland (127044); 283 plants from Alaska collected by J. P. Anderson (127223); 1 plant from Wisconsin (127456); 173 plants (128067); 93 plants from Arizona (128421, 129054); 3 plants (129713); 2 plants from Michigan (129755); 168 plants from Death Valley region collected by M. F. Gilman (129770); 50 plants collected in Yucatan by W. C. Steere (124976); (through Dr. S. F. Blake) 1 plant from Florida (127060); (through Dr. F. V. Coville) 1 plant from Oregon, type specimen of plant from Georgia, photograph of seeds of cultivated iris, 39 specimens and 46 photographs of plants collected by T. V. Munson (125721, 125967, 126877, 127985); (through G. F. Gravatt) wood samples of 2 species of plants from Coconut Grove, Fla. (127877); (through Dr. A. S. Hitchcock) 2,677 specimens of grasses, 62 specimens of grasses chiefly from Canada and Alaska (125612, 128816, 127757, 128189); (through Dr. T. H. Kearney) 238 plants from Western United States, 225 plants from Southwestern United States, 1 plant from Lower California, 1 plant from the Bahamas (124948, 125131, 125628, 127099, 128373, 129915, 127348, 128611); (through R. D. Rands) 6 snails from Arlington County, Va. (129692); (through Paul Russell) 4 cultivated plants, 1 plant from Maryland, 1 plant from Haiti

(124977, 127098, 128913, 125626, 129914); (through Dr. C. L. Shear) 8 algae from Western United States, 1 plant from Georgia (128191, 129602); (through J. A. Stevenson) 10 plants and 38 mosses from Western United States, 3 plants from Eastern United States (128096, 128372, 128922); (through Ivar Tidestrom) 222 plants (128586).

Bureau of Plant Quarantine: 4 slugs (of 2 species) from England and Portugal (124638); 3 land mollusks (3 species) from Costa Rica and Italy and 10 isopods (124653, 124806, 126652); 13 isopods and 1 fresh-water snail from the Philippines, Cuba, and Fiji Islands (125008); 10 land shells (2 species) from Brazil and Puerto Rico and 1 isopod from Mexico (125283); 11 land snails from El Salvador and 5 isopods (125577); 15 isopods from France and 12 land mollusks from Cuba, France, Guatemala, and Japan (125991, 126652, 127028); 1 young emperor boa taken on bananas from Guatemala (126143); 9 isopods from China, England, East Africa, and Mexico and 8 mollusks (5 species) from the West Indies, Mexico, and Venezuela (126447); 1 slug from Scotland and 5 isopods (127236); 10 isopods from Brazil and India, 3 land mollusks (2 species) from the Philippines and Ireland, 1 spider from Japan (127437); 5 snails from Guatemala and Cuba and 11 isopods (127969, 129042); 3 land shells (3 species) from Guatemala, Cuba, and Japan and 5 isopods (128103); 16 land shells from Italy and Mexico, 9 isopods, and 1 crab (128389); 39 land shells, 6 isopods, 1 insect, and 3 crabs (129195, 129472); 12 isopods, 1 planarian, and 23 land shells from Cuba and Honduras (129670).

Bureau of Public Roads: Model of the Appian Way, 312 B. C., showing the manner and methods of construction and the nature of the travel over the finished road (119960).

AINSLIE, C. N., Sioux City, Iowa: 100 flies and 149 miscellaneous insects from the Mojave Desert area (125782, 127447, 127770).

ALASKA AGRICULTURAL COLLEGE AND SCHOOL OF MINES, College, Alaska: Ancient and recent skeletal material found on St. Lawrence Island by Otto W. Geist (127885).

ALBANY MUSEUM, Grahamstown, South Africa: (Through J. L. B. Smith) 45 fishes from South Africa (127191).

ALDERMAN, A. L., Berkeley, Calif.: 24 amphipods, including types of 7 new species, from California (128001).

ALEXANDER, Dr. C. I., Shreveport, La.: 15 species of Cretaceous ostracods from Texas (128099).

ALFARO, Prof. A., San Jose, Costa Rica: 14 plants from Costa Rica (126300, 127221, 127336, 127851, 128227, 129177, 129596).

ALLAN, Dr. R. S. (See under Canterbury College, Christchurch, New Zealand.)

ALLEN, E. R., Silversprings, Fla.: 2 mollusks (127597).

ALLEN, Mrs. LAURA M., Rochester, N. Y.: 9 specimens of hand-woven textiles, 2 of raw silk, and 1 of thrown silk (125632, 129580).

AMERICAN AIRPLANE & ENGINE CORPORATION, Chicago, Ill.: An airplane wing-end frame made of steel tubing (124830).

AMERICAN ASSOCIATION OF MUSEUMS, Washington, D. C.: (Through Louis Jonas) The international exhibit of taxidermy, illustrated by 473 photographs (126159).

AMERICAN BEMBERG CORPORATION, New York, N. Y.: 7 specimens showing stages in manufacture of Bemberg cuprammonium fibers and 5 charts (127754).

AMERICAN GEM & PEARL CO., New York, N. Y.: Specimen of brown beryl from North Carolina and 1 Arizona garnet (125571, 127650). (See also under S. V. Morefield.)

AMERICAN HOSPITAL ASSOCIATION, Chicago, Ill.: (Through R. P. Borden) 2 colored transparencies illustrating hospitalization (125143).

AMERICAN MEDICAL ASSOCIATION, Chicago, Ill.: Framed copy of "The Oath of Hippocrates" (128086).

AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y.: 1 fly (129165); 4 paratypes (3 species) of flies (128399); 10 paratypes of flies (126851); 1 metatarsus and 1 tibiotarsus of an Eocene bird from Mongolia (127954); 3 mollusks collected off Louisiana by M. D. Burkenroad (124928).

AMERICAN NUMISMATIC ASSOCIATION, New York, N. Y.: 60 coins of Asia, Africa, Europe, and Central and

South America struck during 1921–1932 and 18 coins of Belgium, China, Czechoslovakia, France, Germany, Honduras, Japan, New Zealand, Persia, and Poland struck during 1931–1933 (125454, 129055). Loan.

AMERICAN POTASH & CHEMICAL CORPORATION, Trona, Calif.: Portion of a core from well O, Searles Lake, Calif. (127627).

AMERICAN ZINC, LEAD & SMELTING CO., Mascot, Tenn.: Specimen of brecciated zinc ore from Mascot (125540).

AMHERST COLLEGE, Amherst, Mass.: Skull, lower jaws, neck, and feet of fossil reptile (126798). Exchange.

AMORTEGUI, B. G., Bogota, Colombia: Collection of plants, 1,364 insects, 1 lizard, and 1 frog (123086, 125000, 125741, 126116, 127476).

ANDERSON, C. C. (See under J. W. Clement Co.)

ANDREWS, H. L., Fresno, Calif.: 139 marine mammal teeth and tooth fragments from the Miocene of Fresno, Calif. (129967).

APOLLINAIRE MARIE, Rev. Brother, Bogota, Colombia: 86 plants from Colombia (124949, 126222).

APPLE, E. M. (See under Vincent G. Apple Laboratories.)

APPLE LABORATORIES, VINCENT G., Dayton, Ohio: (Through E. M. Apple) Automotive electrical equipment, 1895–1913, and examples of di-insulated motors, the work of the late Vincent G. Apple, and a complete lamp-socket motor (127611).

ARCHEOLOGICAL SOCIETY OF WASHINGTON, D. C.: Archeological material from three caves in the Wady al-Mughara in Palestine (126298). Deposit.

ARCHER, ALLEN, Ann Arbor, Mich.: 17 mollusks (127448).

ARKANSAS, UNIVERSITY OF, Fayetteville, Ark.: (Through Prof. D. M. Moore) Specimen of clover from Oklahoma (129482).

ARKIN, MORRIS, Washington, D. C.: Model of the Curtiss *Goshawk* airplane, a modern pursuit type used by the United States Navy, and a model, $\frac{1}{16}$ size, of the Curtiss army pursuit airplane *P–6–E*, 1931 (126233, 129845). Loan.

ARMSTRONG, J. C., Washington, D. C.: An early 12-inch ivory plane scale (127352).

ARSÈNE, Rev. Brother G., Santa Fe, N. Mex.: 598 plants from New Mexico (129062).

ARUP, INC., South Bend, Ind.: Model, $\frac{1}{16}$ size, of the Arup *S. 35*, a radical design of heavier-than-air craft of the flying-wing type, which has flown successfully (128090).

ASBURY PARK PRESS, Asbury Park, N. J.: 16 specimens of scrip issued by donor in 1933 (127206).

ASCHEMEIER, C. R., Washington, D. C.: 1 robin and 1 bat (124974, 128425).

ASHLEY, T. F., Berkeley, Calif.: 2 plants from California (127600).

ASSOCIATED CAMERA CLUBS OF AMERICA, Chicago, Ill.: 100 pictorial photographs made by Japanese residents of Manchuria and assembled by the South Manchuria Railway for exhibition during May 1934 (129485). Loan.

ATLANTA, GA., CITY OF: 2 specimens of scrip issued 1932–33 (126668).

AUSTRALIAN MUSEUM, Sydney, New South Wales: (Through J. G. Wells) 1 crab from Corner Inlet, Victoria (127372).

AVINOFF, Dr. A., Pittsburgh, Pa.: 40 specimens of Lepidoptera (126304).

BABB, O. W., Lakeland, Fla.: Skull of a male Indian about 45 years old of the Caloosa, or southern, type (121671).

BABCOCK, Prof. E. B., Berkeley, Calif.: 27 plants (125303).

BABEK, Brother STEPHEN, Subiaco, Ark.: 1 crested flycatcher (129826).

BACON, WILLIAM, Shelburne, Vt.: (Through F. W. Young) Photograph of revolving harrow, or circular drag (125423).

BAILEY, H. H., Miami, Fla.: 1 ocelot skull (128423).

BAILEY, Dr. J. W., Richmond, Va.: 2 fresh-water jellyfishes from Richmond (126101).

BAILEY, Dr. R. J., Washington, D. C.: 9 sandbugs from Peru (126334).

BAILEY, VERNON, Washington, D. C.: 8 habitat photographs of Sonora plants (126012).

BAIN, Mrs. R. E. M., St. Louis, Mo.: 6 incomplete scale models of steam engine, boat, locomotive, and railroad cars (129976).

BAKER, Dr. C. F., Los Banos, Philippine Islands: 706 wasps (Mutillidae) (126474). Bequest.

BALL, J. D., Washington, D. C.: An old contractor's pick with hooks and ring to hold it on the handle (125287).

BALL, L. C., Byron Center, Mich.: Bone harpoon found in Grand River between Ada and Lowell, Mich. (126882).

BALL, R. A., Washington, D. C.: An old-style eyeless pick (125289).

BALL, W. H., Washington, D. C.: 3 birds (127041, 127108, 127608); 9

amphipods from Kenilworth, D. C., and Plum Point, Md. (128849); 100 ascidians, 100 marine annelids, and 2 amphipods from Point Lookout, Md. (127655); 1 crayfish, 1 amphipod, and 50 isopods (129844).

BANCROFT, Mrs. M. C. (See under Sandy Spring Meeting of Friends.)

BANTA, EDNA. (See under Ernest Adams.)

BARBER, H. G., Washington, D. C.: 1 insect (128178). (See also under S. C. Bruner.)

BARBER, H. S., Washington, D. C.: 100 cladocerans, 10 copepods, 5 amphipods, 25 phyllopods, and 2 isopods from a pool at Great Falls, Va. (129189).

BARKENBUS, CHARLES, Lexington, Ky.: 4 chemicals for the Loeb collection of chemical types (126542).

BARNES, G. S., Washington, D. C.: 500 mollusks (28 species) from west coast of Florida (126863).

BARNES, R. M., Lacon, Ill.: 10 Lepidoptera (123947, 127617).

BARNHART, P. S. (See under Scripps Institution of Oceanography.)

BARRET, Dr. H. P., Charlotte, N. C.: 1 specimen of torbernite from Spruce Pine, N. C., and a collection of zircon, epidote, and garnet from North Carolina (129329, 129787).

BARRY, JAMES, Washington, D. C.: Models of 2 current types of naval airplanes—*P–M–1* and *T–G–1*—used for patrol duty and torpedo carrying, respectively (126240). Loan.

BARRY, J. N., Portland, Oreg.: Old tobacco pipe (127709). Exchange. (See also under Ann Jubitz.)

BARTLETT, Capt. R. A., New York, N. Y.: Collection of marine invertebrates from Baffin Land and from Fury and Hecla Strait taken by Norcross-Bartlett expedition, 1933, comprising 7 bottles of bryozoans, 6 bottles of hydroids, 25 ascidians, 8 anemones, 4 bottles of sponges, 1 Sagitta, 100 annelids, 30 bottles of bottom samples, 75 stomachs (birds, mammals, fishes), 200 barnacles, 22 isopods, 600 amphipods, 100 shrimps, 1 crab, 1 hermit, 3 pycnogonids, 3 cumaceans, 50 bottles of townet samples, 15 alcoholic birds, 3 mammals, 470 mollusks, 92 plants, 31 fishes, and echinoderms (124761).

BARTLETT TREE RESEARCH LABORATORIES, Stamford, Conn.: 5 flies, comprising type, allotype, and 3 paratypes of gall midges reared from fig (129555).

BARTRAM, E. B., Bushkill, Pa.: 90 mosses from Costa Rica (129061). Exchange.

BARTSCH, Dr. PAUL, Washington, D. C.: 1 water-snake and 3 lots of young amphibians from Maryland and 101 fishes from Virginia (126016, 127054). (See also under Smithsonian Institution, National Museum.)

BASSETT, H. C. (See under E. P. St. John.)

BATES, MARSTON, Cambridge, Mass.: 5 insects (127323). Exchange.

BAYER-ROBERTSON LEATHER CORPORATION, New York, N. Y.: 17 specimens of reptile leathers, whole skins, 4 pairs of women's shoes, and 2 handbags made of reptile leathers (128220).

BAYLEY, E. A., Boston, Mass.: 6 experimental and commercial models of calculating machines developed and manufactured by George B. Grant (118852).

BEACH, W. N., New York, N. Y.: 1,994 eggs of South African birds (127034).

BEATTY, H. A., Christiansted, St. Croix, Virgin Islands: Collection of Crustacea from Virgin Islands (125802, 127457, 129468).

BECKHAM, W. P., Salisbury, N. C.: 7 mosquitoes from North Carolina (125701).

BEDE, Dr. PAUL. (See under Jardin Zoologique de Sfax.)

BEISTLE, M. L., Shippensburg, Pa.: 1 tubular limonite concretion from near St. Leonard, Md. (129968).

BELLOWS, H. A., Washington, D. C. (See under Columbia Broadcasting System.)

BELLUE, Mrs. M. K. (See under California State Department of Agriculture.)

BENEDICT, J. E., Washington, D. C.: 1 fern from Hawaiian Islands (129040). Exchange.

BENEDICT, J. E., Jr., Woodside, Md.: 1 water-snake from Maryland (127210).

BENESH, BERNARD, North Chicago, Ill.: 51 beetles (10 species) (128912). Exchange.

BENJAMIN, F. H., Washington, D. C.: 1 slimy salamander from Fairfax, Va. (129306). (See also under C. H. Ingham, C. M. Dammers, and Otto Buchholz.)

BENJAMIN, Mrs. MARCUS, Washington, D. C.: 2 cases showing various styles of tobacco pipes (129711).

BENN, J. H. (See under Smithsonian Institution, National Museum.)

BENSON, LYMAN, Bakersfield, Calif.: 400 plants from California (126641, 128374). Exchange.

BEQUAERT, Dr. JOSEPH, Boston, Mass.: 3 Hymenoptera (125987).

BERGDOLT, Dr. E. (See under Botanisches Institut.)

BERKOWITZ, Dr. M. E., Key West, Fla. (See under U. S. Treasury Department, Public Health Service.)

BERNARD, FERNANDO, Habana, Cuba: 1 snake and 2 bats from Cuba (129446).

BERRY, Dr. E. W., Baltimore, Md.: 387 plants from Argentina (128935); 1 plant (129916).

BESSON, E. J., Washington, D .C.: 1 young nighthawk (125463).

BETTS, Prof. E. M., Charlottesville, Va.: 8 plants from Virginia (129624).

BILES-COLEMAN LUMBER CO., INC., Omak, Wash.: $1 note issued by donor March 10, 1933 (128073).

BILSON, V. M., Richmond, Va.: Model $\frac{1}{16}$ size, of a Sopwith "Camel" English World War pursuit airplane (127656).

BIOLOGICAL LABORATORY OF THE SCIENCE SOCIETY OF CHINA, Nanking, China: (Through S. S. Chien) 735 plants (129471). Exchange.

BIRNEY, HOFFMAN, Philadelphia, Pa.: Prehistoric Pueblo necklace (reconstructed) of shale beads (129568).

BISELL, Mrs. ELEANOR WOLFLEY, Mrs. CAROLINE WOLFLEY SHANNON, and Mrs. ELIZABETH WOLFLEY HARMAN, Washington, D. C.: (Through T. J. Shannon) "The Dramatic Works of Shakespeare" from the text of Johnson and Steevens, 1847, complete in one volume; and 3 specimens of historical interest relating to the career of Surgeon Lewis Wolfley, United States Navy, and of Lt. Col. William I. Wolfley, United States Army (124997, 127591).

BISHOP MUSEUM, BERNICE P., Honolulu, Hawaii: 267 plants from Hawaiian Islands (125171); (through E. H. Bryan, Jr.) 26 fresh-water decapods from the Marquesas Islands and Tahiti (127879). Exchange.

BIXLER, CHARLES, Cumberland, Md.: 10 Devonian brachiopods from Maryland (129562).

BLACKMER, R. P., Nashville, Tenn.: Fragments of a large salt-evaporating vessel used as grave slabs, found in a child's grave in Davidson County, Tenn. (123966).

BLAKE, Mrs. DORIS H. (See under F. S. Carr.)

BLAKE, Dr. S. F., Washington, D. C.: Humerus of white-winged scoter (127580); 64 plants, including 14 from Hawaiian Islands (127860, 129170, exchanges). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)

BLANKENSHIP, M. W. (See under W. L. Gibson.)

BLANTON, F. S., Babylon, L. I., N. Y.: 24 flies (128826).

BLATCH, Mrs. HARRIET STANTON, New York, N. Y.: Silver tray and loving cup presented to Elizabeth Cady Stanton in 1895 at celebration of her eightieth birthday at Metropolitan Opera House (127776).

BLOOMER, ALICE, Charleston, R. I.: 1 milkweed butterfly (125729).

BLYSTONE, E. L., Ardara, Pa.: Grain of rice on which the Lord's Prayer was written by the donor (127797).

BOGUSH, E. R., Pullman, Wash.: 2 insects from Washington (127219).

BONNEY, M. THERESE, New York, N. Y.: 146 daguerreotypes, 16 ambrotypes, 1 oilcloth print, 2 albums (127461). Loan.

BORDEN, R. P. (See under American Hospital Association.)

BORODIN, D. N., Washington, D. C.: Specimen of lacquered spoon from Novgorod, U. S. S. R. (127326).

BOSTON SOCIETY OF NATURAL HISTORY, Boston, Mass.: (Through C. V. MacCoy) 14 fishes (124805). Exchange.

BOTANIC GARDENS, Singapore, Straits Settlements: (Through M. R. Henderson) 118 ferns from Borneo and Malaya (129350). Exchange.

BOTANISCH MUSEUM EN HERBARIUM, Utrecht, Netherlands: 70 plants from Surinam (125133). Exchange.

BOTANISCHES INSTITUT, Munchen-Nymphenburg, Germany: (Through Dr. E. Bergdolt) 1 fragmentary fern (129804). Exchange.

BOTANISCHES MUSEUM, Berlin-Dahlem, Germany: 1 plant (127328); 1 photograph of type specimen of plant and 1 photograph of plant (127984, 127367); 2 fragmentary Chinese plants (128941); 2 plants (126011). Exchange.

BOTELER, J. M. (See under Miss Ellen Abert Byrne.)

BÖVING, Dr. A. G. (See under E. C. Rosenberg.)

BOWMAN, MARY Q., Washington, D. C.: 1 great blue heron (127042).

BOX, H. E., Antigua, British West Indies: 62 plants (124490, 127760).

BOYD, JAMES, Sugar Loaf, Colo. (See under E. B. Eckel.)

BOYDEN, Dr. A. A., New Brunswick, N. J.: 4 barnacles and 3 sipunculid worms from Tortugas (123103).

BRADY, M. K., Washington, D. C.: 1 gecko and 1 lot of tadpoles (127622); 2 blacksnakes and 2 cornsnakes from Lower Matacumbe Key, Fla., collected by R. F. Deckert (125723). (See also under Hans Geyer.)

BRANDT, B. B., Washington, N. C.: 6 tree frogs from Washington, N. C. (123693). Exchange.

BRANSON, Dr. C. C., Providence, R. I.: 1 plastocene cast of a Devonian starfish with six rays (129586); collection of Devonian conodonts from Eighteen Mile Creek, N. Y. (129012).

BRENNAN, J. M., Lawrence, Kans.: (Through Dr. Alan Stone) 26 flies (125932).

BRENNER, Mrs. JULIA, San Francisco, Calif.: Portion of a handwoven "summer and winter" weave coverlet in a variation of leopard-skin pattern (129301).

BRIDWELL, J. C., Washington, D. C.: 61,693 mounted and a large number of unmounted miscellaneous insects, and a collection of mollusks from the Hawaiian Islands (123208); a Dutch stoneware jug and a lot of pottery and stoneware fragments found in Rock Creek Park at M Street, D. C., and 1 red salamander from Dyke, Va. (127241, 129796).

BRIGHT, JOHN, Pittsburgh, Pa.: 131 plants from California (125832); 18 plants mostly from England (129020).

BRISTOL AEROPLANE CO., LTD., Bristol, England: Model, $\frac{1}{16}$ size, of the *Bristol Mark IV Fighter*, World War airplane (126606).

BRITISH GOVERNMENT:

British Museum (Natural History), London, England: 1 fly (124756); 57 species of recent Bryozoa from Galapagos region and Suez Canal (128049); 3 flies from Greenland and 1 paratype of fly from Ceylon, India (128382); 1 crinoid (129807).

Imperial Institute of Entomology, London, England: 4 flies (124801).

Royal Botanic Gardens, Kew, England: 116 plants from Chile and Mexico (127899). Exchange.

BRITTON, Dr. N. L., New York, N. Y.: 10 plants from Colombia (126358).

BRONAUGH, C. B., Afton, Okla.: 3 invertebrate fossils, a small collection of fossil crinoids, and about 200 fossil brachiopods (126129, 126453, 129316). (See also under Mrs. Nettie Odessa Collins.)

BROOKLYN BOTANIC GARDEN, Brooklyn, N. Y.: 1 fern from Galapagos Islands (126347). Exchange.

BROOKLYN MUSEUM, Brooklyn, N. Y.: 150 pictorial prints, 3 portfolios, and 2 calendars (128317). Loan.

BROOKS SHOE MANUFACTURING CO., Philadelphia, Pa.: 1 pair of men's football shoes made with genuine Australian yellow-back kangaroo-leather uppers (128022).

BROOKS, Dr. S. T., Pittsburgh, Pa.: 2 shrimps (127087). (See also under Carnegie Museum.)

BROUWER, Prof. H. A. (See under Geologisch Instituut der Universiteit Van Amsterdam.)

BROWN, Dr. C. J. D., Ann Arbor, Mich.: 1 jar of Polyzoa from Michigan (125819).

BROWN, C. H., Edgewood, Md.: 1 model pocket kodak (1896) and 1 optical "Wheel of Life" (125700).

BROWN, J. S., Edwards, N. Y.: 200 Ozarkian fossils from northern Argentina (126231).

BROWN, Dr. R. W., Washington, D. C.: 20 mollusks from Lehighton, Pa. (127765).

BROWN & BIGELOW, St. Paul, Minn.: (Through Orion Winford) 12 halftone reproductions in color of paintings and lithograph copies of paintings by J. L. G. Ferris (125465, 125797).

BROWNBACK, H. L., Norristown, Pa.: A 3-throw crank-rod assembly from a Brownback C–400 6-cylinder radial airplane engine, 1929 (123372).

BRUCH, Dr. C., Buenos Aires, Argentina: 50 flies from Argentina (126168).

BRUCH, FRED, Waterloo, N. Y.: 100 invertebrate fossils from the Tully formation of central New York (125601).

BRUNER, S. C., Santiago de las Vegas, Cuba: (Through H. G. Barber) 22 insects (127792).

BRYAN, E. H., Jr. (See under Bishop Museum.)

BUCHER, W. F., Washington, D. C.: 1 wood sample each of northern white pine, western white pine, sugar pine, western yellow pine, Belmore palm, and giant cactus (129922).

BUCHER, W. H., Cincinnati, Ohio: 1 sponge from Florida (129708).

BUCHHOLZ, OTTO, Westfield, N. J.: (Through F. H. Benjamin) 27 Lepidoptera (125933).

BUFFALO MUSEUM OF SCIENCE, Buffalo, N. Y.: (Through Mrs. Imogene C. Robertson) 42 fresh-water shells (4 lots) from near Buffalo and 11 shrimps from old Erie Canal at Tonawanda, N. Y. (125984, 129575).

BUGG, J. O., Mayfield, Ky.: (Through Dr. E. W. Nelson) 4 quail (127643).

BULL, D. B., Goodnews Bay, Alaska: 11 birds and 2 eggs from Alaska (125492, 127017).

BULL, O. B., Basutoland, South Africa: 7 photographs of Zulu huts and hut interiors (129827).

BULLOCK, Prof. D. S., El Vergel, Angol, Chile: 176 miscellaneous insects from Chile (124802).

BURK, ELLEN I., Shabunda, Belgian Congo: 18 ethnological specimens and 2 water-snake skins from the Belgian Congo (124136).

BURKET, JOSEPHINE, Baltimore, Md.: Collar of "baby Irish lace" made by Mrs. Etta Marie Burket in 1899 of no. 100 thread (125778).

BURNHAM, JOHN B., Gastonburg, Ala.: (Through Dr. E. W. Nelson) 9 quail (127982).

BURT, Dr. C. E., Winfield, Kans.: Collection of reptiles, amphibians, fishes, insects, crustaceans, mollusks, and 1 leech from Southwestern United States (123752, collected for Museum); collection of reptiles, amphibians, and fishes from Middle and Southwestern United States made by Luther Hoyle (125696); a South American collection of lizards made by Brother N. Maria (125698); 1 opposum and 2 bats from Winfield, Kans. (126822, 127319); golden eagle collected by Cornelius Rogers (127634); 24 reptiles and amphibians and 1 fish from the Midwestern States (128961); a collection of isopods, centipedes, millipedes, snails, fishes, arachnids, insects, reptiles, crustaceans, and amphibians from Texas, Oklahoma, and Kansas (125697, 128235, 128850, 129141, 129842). (See also under Albert Heinze.)

BURTON-DIXIE CORPORATION, Chicago, Ill.: Large painted chart showing stages in process of cleaning feathers, with 25 inset specimens illustrating these stages (127468).

BURTON-LEWIS, Mrs. HARRY, Emigsville, Pa.: 1 otter skin from Panama (125476).

BUSCK, AUGUST, Washington, D. C.: 2 skulls from Panama (128426).

BUSWELL, W. M., Fort Myers, Fla.: 3 ferns from Florida (129452, 129959).

BUZZETT, J. J., Apalachicola, Fla.: Paper currency of Florida issued during Civil War (4 specimens) (125129).

BYRNE, ELLEN A., Washington, D. C.: (Through J. M. Boteler) 2 martingales, 1 lariat, 1 bridle, bit, and bridle reins, and 2 quirts of braided leather (124992).

BYROADE, Col. G. L., San Juan, Puerto Rico: Insignia of the 65th Infantry, United States Army (128296).

CABLE, LOUELLA E. (See under U. S. Department of Commerce, Bureau of Fisheries.)

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: 348 plants (127327, 127377); (through J. T. Howell) 17 plants from Western United States (126149). Exchange.

CALIFORNIA DEPARTMENT OF AGRICULTURE, Sacramento, Calif.: 2 flies from California (124813, 125187); (through Mrs. M. K. Bellue) 8 plants from California (125180); (through H. H. Keifer) 30 moths, all paratypes of new species (127074); 2 flies with their puparia, reared from willow wounds, from California (127438).

CALIFORNIA, UNIVERSITY OF, Berkeley, Calif.: Fragmentary plant from Formosa (128366); 174 plants mainly from Western United States (128924). Exchange.

CALIFORNIA, UNIVERSITY OF, SOUTHERN BRANCH, Los Angeles, Calif.: 199 plants from California (125294). Exchange.

CAMDEN, N. J., COUNTY OF: 3 specimens of scrip of Camden County issued in 1933 (126905).

CAMERA CLUB, New York, N. Y.: 101 pictorial prints from the Vienna Camera Club for exhibition during July 1933 (124829). Loan.

CAMPBELL, Dr. A. D., Philadelphia, Pa.: (Through Dr. R. D. Moore) 1 copy each of "Practice of Osteopathy", by McConnell and Teall, and "The Science of Osteopathy", by Littlejohn (129921).

CAMPBELL, BERRY, Baltimore, Md.: 475 reptiles and amphibians and 1 tarantula from Western United States (124640).

CAMPBELL, GUY, New Albany, Ind.: 750 Devonian fossils from the Falls of the Ohio and 32 brachiopods from southern Indiana (127573); 48 brachiopods and other fossils from the Devonian and Mississippian black shales of New Albany, Ind. (129823). Exchange.

CAMPOS R., Prof. F., Guayaquil, Ecuador: 21 flies from Ecuador (126161).

CANADIAN GOVERNMENT, Ottawa, Canada:

Department of Agriculture: 1 paratype of moth (126739).

Geological Survey: (Through Dr. E. M. Kindle) 3 brachiopods from Mackenzie River (126667,

exchange); 1 metatype of a graptolite from Gaspe, Canada (129289).

Department of Mines: (Through Dr. H. S. Spence) 2 specimens of tengerite from West Portland Township, Papineau County, Quebec, and 2 specimens of supposed lanthanite on allanite from Cardiff Township, Haliburton County, Ontario (128412).

CANAL ZONE EXPERIMENT GARDENS, Summit, Canal Zone: 15 plants (129473).

CANFIELD FUND, Smithsonian Institution: 1 group of quartz crystals from Colorado (124445); 1 specimen of azurite from Mexico (124515); 1 vanadium mineral (124936); 7 specimens of minerals (124937); 1 lot of minerals from Franklin, N. J. (125691); 1 specimen of gold in quartz from near Washington, D. C. (126024); 1 specimen of chrysoberyl from Maine (126401); 1 tourmaline from Brazil, 1 calcite and quartz from Switzerland, and 1 quartz specimen from France (126432); 1 azurite and 2 cerussite specimens from Germany (126440); 1 malachite crystal from Usakos, Southwest Africa, and 1 dioptase specimen (126893); 1 tetrahedrite and 2 pyrite specimens from Bingham Canyon (127011); 1 boulangerite specimen (127014); 1 quartz crystal from Arkansas (127313); series of diamond crystals from Bas Congo, Katanga District (127602); 3 mineral specimens (lapis lazuli, zinnkies, uwarowite) from Germany (127782); 1 nitrocalcite specimen from Sierra County N. Mex. (127965); 1 quartz specimen from Greenwood, Maine (128048); 1 tourmaline and quartz specimen (128228); 1 specimen of moldavite (128377); 1 diamond from the Congo (128402); 1 ferruccite specimen from Italy (128570); 2 specimens of galena from Kansas (128582); 2 specimens of rogueite and medfordite (128640); collection of minerals (calaverite, bleiglanz, etc.) from Australia, Germany, and Africa (128799); 3 mineral specimens from Texas (128813); 1 stibnite and 1 cronstedtite specimen from Kisbanya (128814); 2 specimens of gold from Colorado (128827); 1 benitoite specimen (129039); 1 tourmaline specimen from Mesa Grande, Calif. (129049); 4 sychnodymit specimens from Germany (129694); 1 specimen of willemite from Franklin, N. J. (129824); 1 dioptase specimen from the French Congo (129853).

CANTERBURY COLLEGE, UNIVERSITY OF NEW ZEALAND, Christchurch, New Zealand: (Through Dr. R. S. Allan) 183 Tertiary brachiopods from New Zealand (125637). Exchange.

CARDENAS, Prof. M., Potosi, Bolivia: 75 ferns from Bolivia (127624).

CARIBBEAN BIOLOGICAL LABORATORIES, Biloxi, Miss.: (Through Stewart Springer) 4 shrimps and 19 amphipods from Mississippi and 2 tapeworms (124575).

CARNEGIE INSTITUTE OF TECHNOLOGY, Pittsburgh, Pa.: 15 specimens of fine printing, the work of the students of the Laboratory Press (125194).

CARNEGIE, LUCY COLEMAN, ESTATE OF, Fernandina, Fla.: (Through T. M. Carnegie) Section of dugout canoe exhumed on Cumberland Island, Ga., in 1932 (116113).

CARNEGIE MUSEUM, Pittsburgh, Pa.: (Through Dr. S. T. Brooks) 76 amphipods and 3 mysids (123177); Wright brothers' airplane, *Type E. X.* (reconstructed with available original parts), in which Calbraith P. Rodgers completed the first transcontinental flight across North America, 1911 (127683).

CARNEGIE, T. M. (See under Lucy Coleman Carnegie.)

CARNEY, Dr. C. T., Shelbyville, Tenn.: 1 mounted albino crow (125485).

CARR, A. F., Jr., Gainesville, Fla.: 6 turtles from Florida (126838).

CARR, F. S., Medicine Hat, Alberta: (Through Mrs. Doris H. Blake) 4 beetles (2 type specimens) (127238).

CARRUTH, F. E., Raleigh, N. C.: 5 chemical specimens for the Loeb collection of chemical types (126545).

CARTER, H. T., Round Hill, Va.: An arrowhead and a probable pendant found in southwestern Yuma County, Ariz. (127976).

CASE, R. C., Troy, Pa.: (Through Dr. E. W. Nelson) 3 quail (126862).

CASE, R. E. (See under International Nickel Co.)

CATHOLIC UNIVERSITY OF AMERICA, Washington, D. C.: (Through Rev. Father Hugh O'Neill) 32 plants from Manchuria (128836); 73 plants from Brazil (129569). Exchange.

CAUDELL, A. N., Washington, D. C.: 1 slug from Long Island (126366).

CELLULOID CORPORATION, New York, N. Y.: 172 specimens illustrating manufacture and application of cellulose acetate plastics (125798).

CHADWICK, L. E., Colorado Springs, Colo.: 125 beetles from near Roseau, Dominica, British West Indies (129819).

CHAMBERLAIN, E. B., Charleston, S. C.: 1 annelid from the Isle of Palms (119212).

CHAMBERLAIN FUND, FRANCES LEA, Smithsonian Institution: 1 cut stone of garnet, 1 tourmaline from Switzerland, 1 spinel and 1 pink sapphire from Ceylon, 1 tourmaline from Madagascar, 1 ruby spinel from Burma, 23 shells from Japan and Cuba (124474, 125011, 125167, 125168, 125611, 127010).

CHAMBERLAIN, SAMUEL, Senlis, France: (Through Goodspeed's Book Shop, Boston, Mass.) 42 etchings and drypoints for exhibition February 26 to March 25, 1934 (128383). Loan.

CHAMBERS, BERT C., INC., New York, N. Y.: 24 specimens of water-color printing, some with offset lithography, halftone, and key-plate processes combined (127331). (See also under Rudolph Ruzicka.)

CHAMBERS, F. V. (See under Susan H. Kitchen.)

CHAMBERS, M. B., and J. A. FORD, Clinton, Miss.: Archeological material collected for the Museum in Alaska in 1931 (113610).

CHANDLER, Dr. A. C., Houston, Tex.: 8 marine shells from Galveston Bay (125716). (See also under Hans Nagel.)

CHAPELLE, H. I., Wollaston, Mass.: Hull plans of 4 fishing schooners, 1904–1919 (129989).

CHARLESTON MUSEUM, Charleston, S. C.: 4 box turtles from North Carolina and South Carolina (125998); 4 shrimps, 1 isopod, and 5 crabs (129848).

CHASE NATIONAL BANK, New York, N. Y.: (Through Farran Zerbe) 2 Salmon P. Chase bronze tokens issued by the bank (129579).

CHASE, W. E., Mansfield, Mass.: (Through Dr. E. W. Nelson) 2 quail (127079).

CHEKIANG PROVINCE BUREAU OF ENTOMOLOGY, Hangchow, China: 12 flies from China (125191).

CHEN, Prof. T. Y., Amoy, China: 28 medusae, 2 sagittae, 7 sipunculids, 11 compound ascidians, 6 ascidians, 1 ascidian with barnacles, 10 egg cases, 29 marine annelids, 5 hydroids, 1 lot of cephalopods (121354). (See also under University of Pennsylvania.)

CHERMOCK, F. H., Indiana, Pa.: 20 Lepidoptera (126005). Exchange.

CHERRY & Co., INC., New Bedford, Mass.: 3 specimens of scrip issued by donor in 1933 (126899).

CHIAO, C. Y. (See under College of Agriculture and Forestry, Nanking.)

CHICAGO CAMERA CLUB, Chicago, Ill.: 84 marine photographs by F. J. Mortimer for exhibition during September 1933 (125325). Loan.

CHIEN, S. S. (See under Biological Laboratory of Science Society of China.)

CHING, Prof. R. C. (See under Fan Memorial Institute of Biology.)

CHIPMAN, W. A., Columbia, Mo.: 2 vials of amphipods and 1 vial of Cladocera (129298).

CHOUTEAU, PIERRE, JR., Middleboro, Mass.: (Through Dr. E. W. Nelson) 2 quail (127644).

CHRIST, J. H., Sandpoint, Idaho: 6 plants from Idaho (128937). (See also under University of Idaho Agricultural Experiment Station.)

CHRISTIE, CHRISTIANA, Corsicana, Tex.: 2 pottery heads (decorative handles of jars) from the Peru-Brazil border (125576).

CINCINNATI UNION TERMINAL CO., Cincinnati, Ohio: 8 etchings of the construction of the Cincinnati terminal, by Louis C. Rosenberg (125816).

CITIZENS' COMMERCIAL BUREAU, Homestead, Pa.: 4 specimens of scrip issued by the bureau in 1933 (126815).

CITIZENS' SERVICE EXCHANGE, Richmond, Va.: 4 specimens of scrip issued by donor in 1933 (126759).

CITIZENS' STATE BANK, New Castle, Ind.: 4 specimens of scrip issued by bank in 1933 (126758).

CLAPP & SON, INC., EDWIN, East Weymouth, Mass.: 2 pairs of men's shoes made from kangaroo leather (128419).

CLARK, ANNE B., Washington, D. C.: 2 turkey-vulture eggs (129291).

CLARK, A. B. J., Washington, D. C.: 8 daguerreotypes and 7 ambrotypes (128387). Loan.

CLARK, A. H., Washington, D. C.: 1 crayfish from Rapidan River, Va. (125277); 1 Florida barred owl (126344); 1 nest and 5 eggs of phoebe (129466); 2 butterflies for exhibit on natural flight (129484).

CLARK EQUIPMENT CO., Buchanan, Mich.: Large framed photograph of a phantom view of present type of Clark bevel-gear axle for trucks (125052).

CLARK, Prof. F. E., and C. E. GARLAND, Morgantown, W. Va.: 13 chemical specimens for Loeb collection of chemical types (126546).

CLARK, Dr. H. L. (See under Harvard University, Museum of Comparative Zoology.)

CLARK, MARTHA L., Washington, D. C.: About 25 amphipods from canal at Cabin John, Md. (128818).

CLARK, Mrs. W. F., Washington, D. C.: Pair of spectacles of about 1800 (128255).

CLARKE, J. F. G., Pullman, Wash.: 100 moths (126122, 127039).

CLARKSDALE AND COAHOMA CHAMBER OF COMMERCE, Clarksdale, Miss.: 10 specimens of scrip issued by donor in 1933 (126895).

CLAUSSEN, C. D., Fort Crook, Nebr.: Insignia of 17th Infantry, United States Army (127375).

CLAUSSEN, Mrs. ELLA BURT, New York, N. Y.: Diamond used by George A. Burt, superintendent of the Panama Canal Railroad, in a diamond drill in 1883 when testing the soil along the route of the proposed canal (128371).

CLAY COUNTY (IND.) HISTORICAL SOCIETY. (See under Mrs. Sarah Vickers.)

CLEMENT CO., J. W., Buffalo, N. Y.: (Through C. C. Anderson) 5 maps, 1 sample of wax used for coating the plate, and 1 unfinished wax plate—all specimens of the wax-plate process (125728).

CLIFFORD, Lt. Comdr. L. E., Annapolis, Md.: 3 weapons with sheaths from the Moro of Lake Lanao, northern Mindanao, Philippines (129227).

CLINTON, H. G., Manhattan, Nev.: 1 specimen of partially altered stibnite, 1 stibnite with calcite, and 1 realgar from Manhattan, Nev. (126522); 1 specimen of perlite from near Hunts Canyon, southeast of Manhattan, Nev. (128101).

CLUJ, UNIVERSITY OF, Cluj, Rumania: 100 plants from Rumania (125695). Exchange.

COCHRANE CORPORATION, Philadelphia, Pa.: Miniature vacuum vapor power plant that operates on the difference between wet-bulb and dry-bulb thermometer temperatures (124403).

COCKERELL, Prof. T. D. A., Boulder, Colo.: 91 identified bees (125610).

CODE, G. H. (See under Public Works of Art Project.)

COE, Capt. C. H., Washington, D. C.: 2 male human skulls excavated from a mound on Banana River, Fla. (126009).

COE, E. F. (See under Mrs. Ella Hamilton Weeks.)

COEN, FRANK, New Castle, Pa.: (Through Dr. E. W. Nelson) 4 quail (129169).

COKER, Dr. R. E., Chapel Hill, N. C.: 31 slides of fresh-water copepods, including type and 3 paratypes of new species described by donor (125134).

COLBURN, B. S., Biltmore, N. C.: Small lot of potsherds from the surface of a mound identified by Dr. John R. Swanton as Guasili, a Cherokee settlement visited by De Soto in 1540 (126462); 3 specimens of corundum from west of Clarkesville, Ga. (127449); 1 specimen of opal (hyalite) from Spruce Pine, N. C., and 1 lot of 13 specimens of corundum (ruby) from Georgia (128029); 2 specimens of corundum and smaragite and 1 specimen of corundum and zoisite from Buck Creek, Clay County, N. C., and 4 rutile specimens from North Carolina (129199).

COLE, Dr. F. R., Whittier, Calif.: 2 flies (121379). Exchange.

COLGATE UNIVERSITY, Hamilton, N. Y.: (Through Prof. H. O. Whitnall) 30 Devonian (Hamilton) crinoids (129825). Exchange.

COLLEGE OF AGRICULTURE AND FORESTRY, Nanking, China: (Through C. Y. Chiao) 500 plants from China (129960). Exchange.

COLLINS, Dr. R. L., Baltimore, Md.: 1 small lot of skin vesicles from Bogota, Colombia (126740).

COLLINS, Mrs. NETTIE ODESSA, Afton, Okla.: (Through C. B. Bronaugh) 4 fossil horse teeth, 1 camel tooth, and a portion of an extinct elephant tooth (125461).

COLLOM, Mrs. ROSE E., Payson, Ariz.: 278 plants and 1 living plant from Arizona (119689, 129611).

COLOMBIA MINISTRY OF INDUSTRIES, Bogota, Colombia: 100 butterflies from Colombia (124971). Exchange.

COLORADO MUSEUM OF NATURAL HISTORY, Denver, Colo.: 6 specimens of rhodochrosite and riebeckite from Colorado (125126).

COLORADO, STATE OF: *Board of Immigration*, Denver, Colo.: 4 silver tokens issued by State in commemoration of the Century of Progress Exposition, 1933 (127231).

COLORADO, UNIVERSITY OF, MUSEUM, Boulder, Colo.: (Through Prof. H. G. Rodeck) 1 fresh-water mollusk from Venezuela (124639).

COLUMBIA BROADCASTING SYSTEM, INC., New York, N. Y.: (Through H. A. Bellows) Radio broadcast microphone (British) used by Amelia Earhart at the end of her solo trans-Atlantic flight (121176).

COMEAU, Dr. H. A., Monterey Park, Calif.: 1 lithograph, "Black Canyon", by Conrad Buff (129151).

COMMERCE, UNITED STATES DEPARTMENT OF:

Bureau of Fisheries: (Through Louella E. Cable) 5 cumaceans, 10 foraminifera, 50 amphipods, 25 copepods, 25 ostracods, 50 marine annelids, 4 mysids (123271); (through M. J. Lindner) 100 shrimps from Louisiana (125820); a collection of leeches, crustaceans, mollusks, reptiles, and amphibians from Mississippi (126128); 1 type of new species of fish (127592); 36 lots of crustaceans, 12 lots of aquatic insects, 1 lot of mosquitoes, 4 lots of mollusks, 3 lots of reptiles, and 2 lots of amphibians from Puerto Rico collected by Dr. S. F. Hildebrand (129043); 4 fishes that died in the aquarium (129843).

Bureau of Foreign and Domestic Commerce: Samples of miscellaneous woods from various foreign countries (125148).

COMMUNITY SERVICE BUREAU, INC., Tacoma, Wash.: Scrip issued by bureau in 1933 (2 specimens) (127362).

COMSTOCK, Dr. JOHN, Los Angeles, Calif.; and C. HENNE, South Pasadena, Calif.: 7 Lepidoptera (126356).

CONOVER, H. B., Chicago, Ill.: 7 birds (129267).

COOK, Dr. E. F. (See under United States Pharmacopoeial Convention, Inc.)

COOLIDGE, Mrs. C. A., Washington, D. C.: (Through Mrs. P. W. Hood) 32 objects of Chinese art (119621). Bequest.

COOPER, Dr. G. A., Washington, D. C.: 30 crinoids, nearly all types, from Tully formation of eastern New York, collected by donor in 1927–28 (127090); 5 land shells (3 species) from Tennessee (126892); 60 Cambrian brachiopods from Wisconsin (126230). (See also under H. D. Miser, J. S. Williams, and Smithsonian Institution, National Museum.)

COPLEY, HUGH, Nairobi, Kenya Colony: 70 fishes from Lake Magadi (127458).

CORBY, Mrs. W. S., Chevy Chase, Md.: 1 double-woven Jacquard coverlet in blue, red, and white, woven in 1858, and 1 hand-woven, double-weave Jacquard coverlet, "Boston Town" (127021, 127993). Loan.

CORNELL UNIVERSITY, Ithaca, N. Y.: (Through Dr. Robert Matheson) 4 mosquitoes, including holotype and 2 paratypes (all males) and 1 slide of *Psorophoro funiculus* Dyar (128812, exchange); 1 fly (127626); (through Dr. Alan Stone) 4 slides of mosquito larvae (129070, exchange).

COTTON TEXTILE INSTITUTE, New York, N. Y.: 33 cotton fabrics produced by American manufacturers for fall and winter of 1933, and 41 cotton textiles made for spring and summer of 1934 (127020, 129302).

COVILLE, FREDERICK, Atkinson, N. C.: 6 plants from North Carolina (127092).

COVILLE, Dr. F. V. (See under U. S. Department of Agriculture, Bureau of Plant Industry; F. J. Hermann; and E. D. Morton.)

CRAMER, W. S., Harrisburg, Pa.: 1 Allegheny salamander from Harrisburg (129138).

CRANE, W. R., Washington, D. C.: 4 old mine-lighting devices, including 2 early Cornish mine lamps, a "coffee-pot" spout lamp, and a hardrock candlestick (125257).

CREASER, Dr. E. P., Ann Arbor, Mich.: 39 crayfishes, 15 shrimps, 25 mysids, 1 amphipod, and 6 isopods (127796, 129305).

CRYSTAL CORPORATION, New York, N. Y.: Model, $\frac{1}{16}$ size, of Curtiss "Thrush" airplane *Outdoor Girl* in which at Miami, Fla., December 20–30, 1933, the Misses Harrell and Richey established a women's endurance record for refueled airplane flight of 237 hours 42 minutes (129454).

CUMBERLAND, COUNTY OF, Fayetteville, N. C.: 4 specimens of scrip issued by the county in 1933 (126751).

CUNEO PRESS, INC., Chicago, Ill.: Facsimile page of Fust and Schoeffer's Psalter (1456) and of Gutenberg's 42-line Bible (1453–55), both printed on the Gutenberg Press at the Century of Progress Exposition, 1933; 2 photographs of the press, one at Mainz and one as it is in Chicago; 3 pieces of Gutenberg type, one as it came from the mold, one tail broken off, and one finished (125725).

CUNNINGHAM, HYBERT U., Washington, D. C.: Pair of wool cards of about 1800 and 3 Sioux arrows (128610); a Smith & Wesson revolver, period of Civil War (129480).

CURTIS, PARKINSON, Bournemouth, England: 20 Lepidoptera (128940).

CUTLER, HELEN E., New York, N. Y.: 1 specimen of lava from Albemarle Island, Galapagos (129584).

CYR, H. M., Palmerton, N. J.: 2 chemical specimens for Loeb collection of chemical types (126541).

DAILY PRINCETONIAN, Princeton, N. J.: 4 specimens of scrip issued by donor in 1933 (126904).

DALY FUND, Smithsonian Institution: 4 skins of African birds new to collection (124975).

DAMMERS, Commander C. M., Riverside, Calif.: 233 insects (3 rare wasps, 180 Macrolepidoptera, 150 Microlepidoptera (127038); (through F. H. Benjamin) 176 insects (127764).

DAMPF, Dr. A., San Jacinto, D. F., Mexico: 34 flies from Mexico (126157).

DANFORTH, Dr. S. T., Mayaguez, Puerto Rico: 7 beetles (4 species) from Puerto Rico (127057).

DANIEL, Brother, Medellin, Colombia: 27 miscellaneous insects and 1 land shell from Colombia (125817); 75 plants from Colombia (128622).

DANSKE ARKTISKE STATION, Den, Disko, Greenland: (Through Dr. M. P. Porsild) 155 plants from Greenland (125285).

DARBY, Dr. H. H., Swarthmore, Pa.: 6 shrimps from Tortugas (124812); 3 shrimps and many larvae (125195).

DARNALL, B. F., Washington, D. C.: German 10,000-mark note issued January 10, 1932 (126632).

DA ROCHA, Prof. DIAS, Ceara, Brazil: 208 insects from Brazil (126443, 126654, 126860).

DASSONVILLE, W. E., San Francisco, Calif.: 33 pictorial prints of California landscapes for exhibition December 1, 1933, to January 15, 1934 (127482). Loan.

DAVERON, Dr. S. A., Baltimore, Md.: Skin and part of skull of a maned wolf from Matto Grasso, Brazil (128590).

DAVIS, H. T., Raleigh, N. C.: Specimen of lepidolite from Warren County, N. C. (126343).

DAVIS, J. J. (See under Indiana Agricultural Experiment Station.)

DAVIS, Dr. J. S., Baltimore, Md.: Beaded pouch and pair of child's beaded moccasins (129619).

DAVIS, O. N., Liberal, Kans.: Demonstrating model of an element of the static pressure turbine invented by donor (129483).

DAVIS, W. T., Staten Island, N. Y.: 9 insects, representing 7 species, all but 2 being paratypes (129465).

DAVIS & GECK, INC., Brooklyn, N. Y.: Model and 71 specimens illustrating history, manufacture, use, and behavior of surgical sutures (125284).

DAWSON, T. H., Washington, D. C.: Blickensderfer no. 6 portable typewriter and carrying case of about 1900 (125450).

DEAM, C. C., Bluffton, Ind.: 5 plants from Indiana (127043). Exchange.

DEANE, Dr. F. G. W., Barbados, British West Indies: 1 clay ironstone septarian nodule from Barbados (129834).

DEGENER, OTTO, New York, N. Y.: 261 plants from Hawaiian Islands (126450, 127654, 128082, 128174, 128612, 129303).

DEIGMAN, H. G., Washington, D. C.: 1 squirrel (125936).

DEMAREE, DELZIE, Stanford University, Calif.: 270 plants from California (125970, 127096).

DEMING, M. F., Tappan, N. Y.: 12 specimens of sand concretions from mouth of Croton River, N. Y. (125624); a collection of fossil algal growths from Saratoga Springs, N. Y. (127059); about 700 concretions from Croton Point, N. Y. (125251). (See also under W. W. Wiles.)

DENLEY, C. F., Silver Spring, Md.: 1 pheasant (125572).

DENMEAD, TALBOTT, Baltimore, Md.: (Through Dr. E. W. Nelson) 4 quail (127637).

DENSMORE, FRANCES, Red Wing, Minn.: 25 birch-bark transparencies made by Chippewa Indians (125130).

DEPAUW UNIVERSITY, Greencastle, Ind.: 350 plants from Hawaiian Islands (129479). Exchange.

DEPUE, Mrs. ANNE J. B. (See under Mrs. Mary R. Roberts.)

DESSELLE, LEON, Marksville, La.: Earthenware bowl and 2 discoidal stones exhumed by donor in his front yard (125988).

DEVORE, P. W., Spartanburg, S. C.: (Through Dr. E. W. Nelson) 3 quail (128240).

DICKERSON, Dr. R. E., Philadelphia, Pa.: 115 invertebrate fossils (mostly brachiopods) from Yarbi Chambi, Bolivia (125795).

DILL, HOMER R. (See under State University of Iowa.)

DOBBIN, FRANK, Shushan, N. Y.: 54 plants from Northeastern United States (126156).

DODGE & OLCOTT CO., New York, N. Y.: 10 specimens of essential oils used in medicine (127605).

DONNELLY, FLORA F., Atlanta, Ga.: 2 busts of Negroes of the ex-slave type (127315).

DONNELLY, R. R., & SONS CO., Chicago, Ill.: "In the Dressing Room of an Actress", after Ito Shinsui, a reproduction made by combining the watercolor and deeptone processes (125727); 1 book, "Wau-Bun the 'Early Day' in the Northwest", by

Mrs. John H. Kinzie, an example of fine printing (127112).

DOUGLAS, H. B., Newton, N. J.: Surveyor's compass made by Benjamin Rittenhouse and used by Andrew Ellicott (128427).

DOWIS, D. H., Sterling, Colo.: 6 specimens of scrip issued in Sterling in 1933 (127051).

DRAKE, J. C., Washington, D. C.: 2 ruddy ducks (127454).

DRANE, Rev. F. B., Edenton, N. C.: Wing tip of Wright brothers' glider, probably 1902 (125580). Loan.

DRUSHEL, Dr. J. A., Westfield, N. J.: 83 plants (127199, 128246).

DUANE, J. A., Waldoboro, Maine: (Through T. L. Jackson) Pair of old wooden hames complete with trace straps (125312).

DUBOSE, J. H., Atlanta, Ga.: 7 stone implements from Australia, Saigon, etc., and 7 birds' eggs (128484); a Zulu boy's shield (129323).

DUCKE, Dr. A., Rio de Janeiro, Brazil: 3 plants from Brazil (126013). (See also under Instituto Biologico Federal.)

DUGAND G., Dr. ARMANDO, Barranquilla, Colombia: 22 plants from Colombia (127861, 129838).

DUNCAN, D. K., Globe, Ariz.: 8 butterflies and 4 beetles (125929, 128177).

DUNN, Dr. E. R., Haverford, Pa.: Type specimen of a salamander (125605).

DUTRA, Dr. J., Sao Leopoldo, Brazil: Fern from Brazil (125613).

DUVAL, H. H., Bastrop, Tex.: 3 beetle larvae and 8 termites from Texas (124803, 126813).

DUVALL, A. J., Washington, D. C.: Portion of fossil elephant jaw, containing 1 tooth, from near Woodward, Okla. (127649).

EAGLE-OTTAWA LEATHER CO., Grand Haven, Mich.: 1 piece of green salted hide, 1 piece of unhaired hide ready for tanning, 1 specimen of linseed-oil finishing mixture, and 2 pieces of hemlock bark used for tanning (129803).

EASLEY, TILDON, State College, Miss.: 1 plant from Mississippi (129273).

ECKEL, E. B., and JAMES BOYD, Sugar Loaf, Colo.: 1 supposed fulgurite from near Boulder Falls, Colo. (126244).

EDES MANUFACTURING CO., Plymouth, Mass.: 3 specimens of scrip issued by donor in 1933 (126901).

EGG HARBOR CITY, N. J.: 3 specimens of scrip issued by city in 1933 (126757).

EHRMANN, M. L., New York N. Y.: Miscellaneous wrought-iron implements, clay pipes, bullet molds, glass bottle necks, etc., from Jamestown, Va. (126673).

EICKEMEYER, RUDOLF, Yonkers, N. Y.: 2,729 specimens, consisting of photographic negatives, lantern slides, lenses, cameras, 15 portfolios, and miscellaneous photographic material (128483). Bequest.

EIDMANN, Dr. H. A., Münden, Germany: About 20 specimens (alcoholic and pinned material, larvae, pupae, and cases) of an attophile moth collected in nests of leaf-cutting ants in Mendes, Brazil (128375).

ELIAS, Rev. Brother, Barranquilla, Colombia: 174 plants from Colombia (125779, 128587); 46 specimens (31 lots) of land, fresh-water, and marine shells, 1 sea-fan, 2 clusters of barnacles, and 1 alcyonarian from Puerto Colombia, Colombia (123274).

ELIAS, Mrs. DOROTHY, New York, N. Y.: 4 bobbin and needle collars, 2 doilies, and 3 handkerchiefs (125682). Bequest.

ELROD, H. E., Houston, Tex.: 2 fossil plants from Texas (128294).

EMERY, Dr. W. O., Washington, D. C.: 2 salamanders from Europe (127211).

EMSHWILLER, Mrs. M. A., Montpelier, Ind.: A United States flag and a Red Cross flag flown over United States Army base hospital no. 204 at Hursley, England, during World War (128828).

EMSHWILLER, WILLIAM, Hyattsville, Md.: Model (scale 1:12) of the Curtiss naval airplane, type *F9C–2*, designed for service with the airship *Akron* (126526).

ENGLISH, P. H. (See under New Haven Clock Co.)

ENTERPRISE (OREG.) CHAMBER OF COMMERCE: 4 specimens of scrip issued by donor in 1933 (126760).

EVANS, Mrs. M. HANDY, Washington, D. C.: An enlarged portrait of M. B. Brady (128032).

EVANS, T. J., New Castle, Pa.: (Through G. E. Montgomery) 1 white Virginia deer from Warren County, Pa. (127317).

EWALD, Commander J. B., Washington, D. C.: 1 Indian elephant tooth from China (125743).

EWING, Dr. H. E., Washington, D. C.: 1 pickerel frog from Great Falls, Md., 1 ground skink and 2 Pickering's tree toads from Maryland (126017).

EYERDAM, W. J., Seattle, Wash.: 3 plants from Washington (118229).

FAN MEMORIAL INSTITUTE OF BIOLOGY, Peiping, China: (Through Prof. R. C. Ching) 159 Chinese plants (127582). Exchange.

FASSBENDER, ADOLPH, New York, N. Y.: 2 three-color carbro framed pictures, "Abundance" and "Jack-o'-Lanterns" (125574).

FEDERATION NACIONAL DE CAFETEROS, La Esperanza, Colombia: 15 insects from Colombia (127761); 19 miscellaneous insects (128580).

FEIGL, Mrs. JANE M., New York, N. Y.: Winchester repeating rifle, model 1873, owned by Col. William F. Cody (Buffalo Bill) and presented by him to Ralph Jefferson Feigl at Madison Square Garden, New York City, May 11, 1907 (128195).

FELIPPONE, Dr. F., Montevideo, Uruguay: 106 mollusks mostly from Brazil and Uruguay and 2 insects (127248, 127787); 17 (5 lots) freshwater shells and 6 miscellaneous insects from Uruguay (124261).

FELT, E. P., Stamford, Conn.: Block of wood containing mollusks (124932).

FERNQUIST, C. O., Spokane, Wash.: 1 specimen of boulangerite (126854).

FIDUCCIA, C. S., New Orleans, La.: 17 marine shells from Louisiana and 3 hermit crabs (125971, 127872, 128577); 1 gall and 1 egg case (128601); 1 spider-wasp (128398).

FIELD MUSEUM OF NATURAL HISTORY, Chicago, Ill.: 4 horseflies (125020); 282 plants, chiefly from South America (125799); 1 plant from Bolivia (125995); 3 plants from Colombia (126166); 1 plant (*Cordia*) from Ecuador (126662); fossil mammals, including a skull and mandible of one species and a skull, mandible, and vertebrae of another (126795); specimen of grass from Texas (127202); 26 plants from Hawaiian Islands (129149). Exchange.

FIRST NATIONAL BANK, Ada, Ohio: 2 specimens of scrip of the bank (126669).

FIRTH, F. E., Boston, Mass.: 1 fish collected off Chesapeake Lightship, Va., by Capt. Favaloro of fishing boat *Grace F.* (129758).

FISHER, Dr. A. K., Washington, D. C.: 1 moss from Virginia (129559).

FISHER, G. L., Houston, Tex.: 118 plants from Texas and Mexico (125760).

FISHER BROTHERS Co., Cleveland, Ohio: 2 specimens of scrip issued by donors in 1933 (126816).

FITZMAURICE, JACK, Washington, D. C.: 1 specimen of chrysocolla from northeast Washington, D. C. (128076).

FLETCHER, F. M., Los Angeles, Calif.: 13 block prints in color for exhibition January 2 to 28, 1934, and 40 prints by his pupils (127583). Loan.

FLETCHER, LILLIAN, Los Angeles, Calif.: (Through Ransom Matthews) 4 lenses and 2 paper negatives made by Abel Fletcher (129571).

FLORIDA, UNIVERSITY OF, Gainesville, Fla.:

Agricultural Experiment Station: 2 moths (127594); 2 moths from Florida (128041); (through Prof. Erdman West) 1 plant from Florida (129779).

State Museum: (Through Dr. T. Van Hyning) 100 fishes from Florida (129492).

FLORIDA REPTILE INSTITUTE, Silversprings, Fla.: 2 snails from Florida (128172).

FLUCK, Rev. W. H., Utica, N. Y.: 2 marine shells from Japan (128236). (See also under Elva May Smith.)

FOERSTE, Dr. A. F. (See under Dr. Lawrence Whitcomb.)

FORBES, P. L., Stauffer, Oreg.: 3 pieces of obsidian from Oregon (126471).

FORD, H. A., Boston, Mass.: 3 specimens of stichtite from the New Amianthus Mine at Kaapsche Hoop, South Africa (128585).

FORD, J. A. (See under M. B. Chambers.)

FORDYCE, Col. J. R. (See under Phillips County (Ark.) Museum.)

FORQUITES, Mrs. CLAYTON, Rutland, Vt.: 1 concretion from Vermont (128578).

FORREST, W. R., Antigua, British West Indies: A collection of fossil woods and invertebrates from Antigua (129578).

FORSYTH, Mrs. L. E., Florida City, Fla.: 17 Lepidoptera from Florida (127249).

FOSTER, M. B., Orlando, Fla.: 2 ferns (128939, 129763).

FOUKE FUR Co., St. Louis, Mo.: 4 Alaska sealskins; 1 four-condition exhibition skin showing steps in process of unhairing, dressing, and dyeing the fur; 2 finished brown-dyed skins; and 1 finished black-dyed skin (128244).

FOX, J. M. Trona, Calif.: 10 lots of miscellaneous minerals from Searles Lake, San Bernardino County, Calif. (128972). Exchange.

FRANKLIN, Maj. G. H. C., Washington, D. C.: 10 mosquitoes with mounted larval skins of each from Philippines (125931).

FRANKLIN, L. W., Amoy, China: 1 Chinese partridge (128053).

FREER, Prof. R. S., Lynchburg, Va.: 5 plants from Virginia (125165, 125275, 126351).

FRIEDMANN, Dr. HERBERT, Washington, D. C.: 91 negatives of African tribes (129349).

FROST, C. A., Framingham, Mass.: 15 miscellaneous insects, including a fly only recently found in this country (129966); 300 unmounted Microcoleoptera (127648); 296 beetles, representing 164 species (127446).

FULLER, H. S., Sagamore Beach, Mass.: 3 insects (125755).

FULLER, Mrs. NETTIE, Breedsville, Mich.: 1 mantis from Michigan (125587).

FURMAN, E. H., Los Angeles, Calif. (See under Cadwallader Washburn.)

FURTOS, NORMA C., Woods Hole, Mass.: 71 slides of ostracods, including 27 types and 47 vials containing about 500 specimens in alcohol (including the type of a new variety) (124811); 77 ostracods from Yucatan, representing types and paratypes of 13 new species upon which donor has based a report on "Ostracods from Yucatan" (125771).

GABRIELSON, I. N., Portland, Oreg.: Skeleton of Swainson's hawk (129710).

GAIGE, Mrs. H. T. (See under University of Michigan, Museum of Zoology.)

GALLARDO, J. A., Washington, D. C.: About 1,200 land and marine shells from Puerto Rico (126098).

GAMBLE, Mrs. BETSY O'REILLY, Las Vegas, Nev.: Embroidered white mull collar owned by Mrs. Julia Gardner Tyler, wife of President John Tyler (128005).

GAND, UNIVERSITY OF, Gand, Belgium: (Through Prof. Dr. Alfred Schoep) 1 specimen of vandenbrandeite, 1 of stainierite, and 1 of altered pitchblende from Belgian Congo (127737). Exchange.

GARBER, PAUL E., Washington, D. C.: Pack of playing cards made in England during reign of Queen Victoria (124993); 2 old hand woodworking tools: A spoke shave and a double marking gauge, probably of middle nineteenth century (127353); an old English hack saw and frame of about 1860 (127994); a metal-cutting die stock, English, about 1870 (129615).

GARDENER, Mrs. CORNELIUS, Santa Barbara, Calif.: 3 Zuni Indian rugs presented to donor's husband, the late Col. Cornelius Gardener, early in the 1870's (126487).

GARDNER, Dr. JULIA, Washington, D. C.: 6 land shells from Italy (126367).

GARLAND, C. E. (See under Prof. F. E. Clark.)

GARRISON, Dr. J. B., Hopewell, N. J.: 62 daguerreotypes in color by L. L. Hill, 1 book by L. L. Hill ("Treatise on Helichromy"), and 1 portrait of L. L. Hill in a case (125759).

GARVER, MELCHORA, Hagerstown, Md.: Working model of grain separator for threshing machines made by Daniel Garver, uncle of donor, representing inventions covering three patents issued to Daniel and Cyrus Garver: No. 114546, May 9, 1871, grain separator; no. 114547, May 9, 1871, fan blast regulator; and no. 161501, March 30, 1875, bag-holding device (129836). Loan.

GARVIN, G. L., Niles, Mich.: (Through G. W. Garvin) Powderhorn made by Daniel Clark in camp near New York City during War of the Revolution (126333).

GARVIN, G. W. (See under G. L. Garvin.)

GATES, HOWARD, Stanford University, Calif.: 4 isotype specimens of cacti (127983).

GATES, Rev. SEBASTIAN, Grenada, British West Indies: 1 insect (127777).

GEIGAN, EDWIN, Washington, D. C.: Model of a Falcon airplane, type *O–39*, in current use by United States Army Air Corps for observation (126232). Loan.

GEOLOGISCH INSTITUUT DER UNIVERSITEIT VAN AMSTERDAM, Amsterdam, Netherlands: (Through Prof. Dr. H. A. Brouwer) Bronze medal commemorating opening of Geological Institute, Amsterdam, May 1934 (129833).

GEORGE, J. S., Washington, D. C.: Stoneware cream pitcher with cobalt blue decoration, made in Columbiana County, Ohio, about 1860 (127766).

GEORGE, NORWOOD, Kenmore, N. Y.: 1 parasitic worm (128004).

GERMANN, F. E. E. (See under R. N. Traxler.)

GEYER, HANS, Regensburg, Germany: (Through M. K. Brady) 12 salamanders (127630).

GIANFERRARI, Dr. LOUISA. (See under Museo Civico di Storia Naturale.)

GIBSON, W. L., Lynchburg, Va.: (Through M. W. Blankenship) Stone ax found in Campbell County, Va. (126435).

GILES, H. T., Parkside, Hallow, England: 21 bookplates (127987).

GILLON, Lt. J. F., Washington, D. C.: A piece, about 7 inches square, of one of the maps carried by Wiley Post on his solo flight around world (127045).

GLASS, JEWELL, Washington, D. C.: 1 specimen of quartz from feldspar mine at Moneta, Va. (125125).

GLASSELL, S. A., Beverly Hills, Calif.: 4 crabs, types and paratypes of 3 new species, 2 described by the donor and 1 by Dr. Mary Rathbun (124804); 10 crabs (125711); 3 plaster casts of a fossil crustacean (127204); 5 fossil crabs (127955).

GLENN, M. O., Magnolia, Ill.: 59 moths (123851, 126840).

GLUCK, Prof. Dr. HUGO, Heidelberg, Germany: 47 plants (127866). Exchange.

GOLLOWAY, HELEN, North Canton, Ohio: 5 larvae of 2-spotted ladybeetle (124536).

GOMME, WILLIAM. (See under Dr. R. L. McMullen.)

GOODRICH RUBBER CO., B. F., Akron, Ohio: Series of 12 electrically lighted dioramas illustrating manufacture of automobile tires, together with base installation fixtures (129979).

GOODSPEED'S BOOK SHOP, Boston, Mass. (See under Samuel Chamberlain.)

GORDON, SETH, Washington, D. C.: (Through Dr. E. W. Nelson) 3 quail (127078).

GORGAS MEMORIAL LABORATORY, Ancon, Canal Zone: (Through Dr. L. H. Dunn) 4 mites (type and allotype of 2 new species) (126378).

GORIN, F. P., Seattle, Wash.: Earliest model of the Gorin tabulating typewriter of 1885 (122901).

GORZ, RUDOLF, Brandenburg, Germany: 50 plants (128923). Exchange.

GOSLIN, ROBERT, Lancaster, Ohio: 1 wood rat, skin and skull, and 2 ground squirrels from Fairfield County, Ohio (124649, 125718).

GOSNOLD MILLS CORPORATION, New Bedford, Mass.: 3 specimens of scrip issued by donors in 1933 (126745).

GOSSWEILER, JOHN, Belem, Lisbon, Portugal: 228 plants from Angola (125619).

GRABO, Mrs. ANTONIA M., Chicago, Ill.: (Through the White House) United States flag made about 1876 (124969).

GRAHAM, Dr. D. C., Chengtu, China: 8,825 insects, 62 mammals, 25 shrimps, 13 bird skins, 38 reptiles and amphibians from China (126245); large collection of insects, 68 birds, 127 reptiles and amphibians, 229 mollusks, and 56 mammals from China (127235); 5,262 miscellaneous insects and 11 frogs from China (128182); 91 mammals, 1,292 insects, 7 bird skins, 2 snakes, and 1 lizard (129033); 14 mammals from Szechwan, China (129590); 4 mammals, 25 bird skins, 14 bird skeletons, 1,892 insects, and 1 snake (129765).

GRAHAM, Judge W. J., Washington, D. C.: Skeletal material collected at Port Tobacco, Md., by donor and Dr. T. D. Stewart (125487).

GRALUND, Maj. O. W., San Pedro, Calif.: Peasant's pipe and tobacco pouch purchased at Nyslott, eastern Finland, not far from Russian border, about 1926 (127961).

GRAND JUNCTION CHAMBER OF COMMERCE, Grand Junction, Colo.: (Through W. M. Wood) Fragmentary male human skeleton excavated near Grand Junction (116854).

GRAND UNION CO., New York., N. Y.: 3 specimens of scrip issued by donors in 1933 (126747).

GRANT, GERTRUDE M., Detroit, Mich.: 2 flies (129153).

GRAVATT, G. F. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

GREELY, J. R., Ann Arbor, Mich.: (Through Dr. E. W. Nelson) 4 quail (127639).

GREEN, LOUISE, Washington, D. C.: A wedgwood jar of about 1765 (129612). Loan.

GREENFIELD, RAY, Takoma Park, Md.: About 200 amphipods and 2 isopods from Cape Ann, Mass. (126015); marine invertebrates from near Key West, Fla., as follows: 50 shrimps, 2 *Nebalia*, 1 crab, 8 isopods, 100 amphipods, 3 marine worms (125158); 10 amphipods from piles at Brentwood wharf, Port Tobacco River, Md. (125614); 50 amphipods, 3 isopods, 2 crayfishes from near mouth of Patuxent River, Md. (125604).

GREENFIELD, RAY, and ANDREW PIZZINI, Washington, D. C.: 300 amphipods, 15 isopods, and 8 crabs from near Chesapeake Beach, Md. (125276).

GREER, R. L., Washington, D.C.: Pelvis of large horse dredged in Lake Michigan (127350).

GREGORY & READ, Lynn, Mass.: 1 pair of women's shoes made of seal leather (128293).

GRENADA DEPARTMENT OF AGRICULTURE, Grenada, British West Indies: 2 samples of nutmegs (129059).

GRINNAN, NINA S., Woodberry Forest, Va.: Arrowheads, blades, stone implements, and potsherds collected by donor on her farm (128328).

GRISSETT, J. L., Stanford University, Calif.: 8 beetles (of 8 species, 1 a paratype) (126461); 3 beetles, holotypes of 3 new species (129917).

GROSS, RUDOLF, Berlin, Germany: 218 plants mostly from the Tyrol (128176); 116 plants mainly from Brazil and Bolivia (125304). Exchange.

GROTH, JOHN, Chicago, Ill.: 1 drypoint entitled "Me, I Was a Financial Expert" (125699); 51 drypoints, etchings, aquatints, and lithographs for exhibition October 2 to 29, 1933 (126154). Loan.

GROW, Dr. O. P., Queen City, Mo.: 1 copy of his book "Osteopathic Obstetrics" (126345).

GRUNEBERG, E. L., Lehighton, Pa.: 1 vial of beetle larvae (125714).

GUNDER, J. D., Pasadena, Calif.: 28 butterflies (126473). Exchange.

GUNNELL, B. G., Alexandria, Va.: 1 red-tailed hawk and 1 red-shouldered hawk (127109).

GUNNELL, L. C., Alexandria, Va.: 1 weasel from Fairfax County, Va. (126124); 1 skeleton of opossum from Fairfax County (128071); 1 woodchuck and 1 opossum from Fairfax County (129793).

GUSTAFSSON, C. E., Trälleborg, Sweden: 41 mosses (127767). Exchange.

GUTHRIE, C. P., Des Moines, Iowa: 1 harbor porpoise beak from Point Mugu, Calif. (128012).

HALE, W. J., Midland, Mich.: 1 chemical specimen for Loeb collection of chemical types (126529).

HALL, DAVID, Sequin Falls, Ontario: 1 specimen of allanite in granite rock (124380).

HALL, Prof. G. M., Knoxville, Tenn.: 303 Upper Cambrian fossils from Thorn Hill, Tenn. (124929); 1 Ordovician coral (129048).

HALLER, G. N., Washington, D. C.: Carved wooden image (129704).

HAMEL, C. C., Balboa Heights, Canal Zone: 3 photographs of trees (125149).

HAMILTON NATIONAL BANK, Chattanooga, Tenn.: 3 specimens of scrip issued by the bank in 1933 (126753).

HAMILTON, R. B., Jr., Catonsville, Md.: Model 1/19 size, of a Stinson *Reliant* 4-place cabin airplane, 1932 (129570).

HANDY STUDIOS, L. C., Washington, D. C.: 6 daguerreotypes for exhibition with Bonney collection, January 4 to 31, 1934 (127758). Loan.

HARMAN, Mrs. ELIZABETH WOLFLEY. (See under Mrs. Eleanor Wolfley Bisell.)

HARMS, Dr. H. (Sec. under Botanisches Museum.)

HARPER, Dr. R. M., Tuscaloosa, Ala.: 176 plants from Alabama and Florida (127455, 129701, 129762).

HARRAMAN, J. C., Washington, D. C.: 2 sponges (126890).

HARRISON, C. H., Ketchikan, Alaska: 3 Lepidoptera from Alaska (121809).

HARRISON, J. F., Stamford, Conn.: Paperweight, consisting of sleighbell mounted in wood (126437).

HARVARD UNIVERSITY, Cambridge, Mass.:

Arnold Arboretum: 5 ferns from Cuba (125173); 589 plants (128588); 6 plants from Asia (126649); (through Dr. Alfred Rehder) 117 plants from New Caledonia collected by I. Franc (127091).

Farlow Herbarium: (Through Mrs. L. W. Riddle) 271 plants (lower cryptogams) (127100).

Gray Herbarium: 368 plants from the Walter Deane Herbarium (125722); 162 plants from Labrador (125800); 18 photographs of plants (126014); 1 fern from Chile (127224); 5 ferns from Bolivia (128066); 1 fern from Barro Colorado Island, Panama (129312). Exchange.

Department of Mineralogy and Petrography: 1 large slab of porphyritic gneiss from near Meredith, N. H. (126332, exchange); 1 selenium specimen from Arizona and 2 pralaurionite specimens from Laurion, Greece (128081); 1 specimen of tilleyite from Crestmore, Calif. (128418).

Museum of Comparative Zoology: 2 distal and 1 proximal portion of tibiotarsus, 2 distal portions of metatarsus, 1 metacarpus, 8 phalangials, and 3 claws of a new species of fossil bird (116737); (through Dr. H. L. Clark) 9 crinoids (124652); 285 birds (125845); 3 crabs (126104); 44 carabid beetles from West Indies (35 species), of which 21 are represented by paratypes (126593, exchange).

HASSETT, G. J., Washington, D. C.: Early American hand-woven coverlet, "Pine Bloom" pattern in "summer and winter" weave, made of homespun cotton and wool yarns by Elizabeth Franklin, of Montross, Va., and presented to donor by Mrs. Evelyn Balderson Riley, great-granddaughter of the weaver (129754).

HAWEIS, STEPHEN, Mount Joy, Dominica, British West Indies: 2 parrot skeletons (128620).

HAYNES, CAROLINE C., Highland, N. J. 357 plants (126639).

HAYS CO., INC., DANIEL, Gloversville, N. Y.: Series of cut-outs showing manufacturing process for pigskin gloves and 2 pairs of them (129987).

HAYWARD, C. L., Provost, Utah: 3 wasps (127752). Exchange.

HAYWARD, WYNDHAM, Winter Park, Fla.: 3 plants from Florida (128196, 129784).

HAZZARD, J. C., Berkeley, Calif.: 87 fossils from Lower and Middle Cambrian of Marble and Providence Mountains, Calif. (125600).

HEAL, Mrs. BETTY B., Washington, D. C.: 1 Knego motion-picture camera, 1 tripod, 1 Williamson perforator, 1 can containing 15 short pieces of motion-picture film (126197). Loan.

HEBARD, F. V., Philadelphia, Pa.: (Through Dr. E. W. Nelson) 6 quail (128258).

HECKNER, J. H., Brownsboro, Oreg.: 2 cultivated plants from California (125172).

HEINZE, ALBERT, St. Louis, Mo.: (Through Dr. C. E. Burt) Collection of turtles mostly from Midwestern States (125687); collection of reptiles, amphibians, fishes, 1 hairsnake, 1 spider, and 58 crayfishes from Missouri (126846).

HEIZER, ROBERT, Sacramento, Calif.: Archeological and human skeletal material from California (128934).

HEIZER, ROBERT, and SACRAMENTO JUNIOR COLLEGE: Skeletal material from Sacramento Valley, Calif., and Lovelock, Nev. (129607).

HENBEST, O. J., Fayetteville, Ark.: 1 lot of Carboniferous invertebrate fossils from near Fayetteville (127252).

HENDEL, Prof. Dr. F., Wien, Austria: 35 flies (127620). Exchange.

HENDERSON, M. R. (See under Botanic Gardens, Singapore.)

HENNE, C. (See under Dr. John Comstock.)

HERMANN, F. J., Philadelphia, Pa.: (Through Dr. F. V. Coville) 41 plants (125693).

HERRON, H. P., Akron, Ohio: 45 pictorial photographs made by donor (129705). Loan.

HESS, Dr. F. L., Washington, D. C.: Specimens of diamond-bearing rock from Minas Geraes, Brazil (120890); 2 specimens of molybdenite from Zurich, Switzerland (127040); 1 specimen of wolframite from Boriana Mine, Yucca, Ariz., 1 specimen of amygdaloidal rhyolite from Lesterville, Mo., and 10 specimens of chalcedony nodules from West Side, Oreg. (129011). (See also under G. A. LaBine, Van Rensselaer Lansingh, and Lou Pettit.)

HESSE, Mrs. E. B., Washington, D. C.: 3 daguerreotypes and 5 ambrotypes (128925).

HEVESY, G., Copenhagen, Denmark: 1 specimen of a type chemical, hafnium phosphate, and 2 samples of raw material, zircon and alvit, from which hafnium may be extracted (128591).

HIBBARD, R. R., Buffalo, N. Y.: 35 slabs of Devonian conodonts from Erie County, N. Y. (129970).

HIGGINS, J. E., Summit, Canal Zone: 1 plant from Canal Zone (128054). (See also under Canal Zone Experiment Gardens.)

HINDWOOD, K. A., Sydney, New South Wales: 13 nestlings of Australian birds (125501).

HINTON, H. E., Berkeley, Calif.: 62 beetles (127178, 129820); 114 beetles, representing 35 species of which 6 are new to collection (128400, exchange); 48 beetles, including holotypes of 4 new species (129964).

HIRSCHKIND, WILLIAM, Pittsburg, Calif.: 2 specimens of chemicals for Loeb collection (126532).

HITCHCOCK, Dr. A. S. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

HOFFMAN, W. A., San Juan, Puerto Rico: 6 isopods from Puerto Rico (127116).

HOLLIEDT, DOROTHEA, Washington, D. C.; and MATHILDE HOLLIEDT (deceased): Collection of ceramics (129587).

HOLLINS COLLEGE, Hollins, Va.: (Through Ida Sitler) 2 lots of parasitic worms, 2 insects, and 1 leech from Virginia (127625).

HOLLISTER, Mrs. MABEL P., Washington, D. C.: 1 cultivated plant (129188).

HOLT, W. P., Bowling Green, Ohio: 3 specimens of fluorite and 1 of celestite from Clay Center, Ohio (128078). Exchange.

HOMBERSLEY, Ven. Archdeacon A., Port-of-Spain, Trinidad, British West Indies: 4 ferns from Trinidad (124632).

HOOD, Prof. J. D., Rochester, N. Y.: 7 flies from Barro Colorado Island, Panama (129045).

HOOD, Mrs. P. W. (See under Mrs. Charles A. Coolidge.)

HOOPER, FAYE, Houston, Tex.: 1 beetle (124508).

HOOPER, RICHARD, Washington, D. C.: 2 models of naval airplanes, the *N–C–4*, first transatlantic flyer, 1919,

and a Curtiss "Hell Diver", command type, 1932 (126239).

HOOVER, Mrs. HERBERT, Stanford University, Calif.: Green satin dress, pair of white kid gloves, pair of satin slippers, lorgnette, and a silver necklace worn at the White House by Mrs. Hoover during the Presidential administration of her husband, 1929–33 (129186).

HOQUIAM CHAMBER OF COMMERCE, Hoquiam, Wash.: 1 commemorative wooden dollar issued by donor in 1933 (126912).

HORI, Dr. JUZO, Watanoha-machi, Miyagi-ken, Japan: 15 oysters from Japan (128384).

HORNE, I. S., Altadena, Calif.: 1 babiroussa in the flesh (125445).

HORSFALL, Dr. MARGERY W., Urbana, Ill.: 5 slides of trematodes (129776).

HORSFALL, R. BRUCE, Washington, D. C.: 2 flies taken from a hawk in District of Columbia (128386).

HORTON, F. W., Washington, D. C.: 5 specimens of spalerite and 1 of kyanite from North Carolina, 1 of kyanite from South Carolina, and 9 of kyanite from Virginia (125493); 3 specimens of gold from North Carolina (125690). Exchange.

HOTTES, F. C., Decatur, Ill.: 11 slides of aphids, 5 being types of new species (128618).

HOUCK, Dr. G. E., Roseburg, Oreg.: Indian pestle found at Mitchell, Oreg., in 1893 (128532).

HOWELL, A. H., Washington, D. C.: 1 nest of Bicknell's thrush from Vermont (127453); 1 plant from Georgia (127242).

HOWELL, J. T. (See under California Academy of Sciences.)

HOYT, P. S., Franklin, N. C.: 1 corundum specimen from Franklin (125146).

HRDLIČKA, Dr. ALEŠ, Washington, D. C.: 1 chipmunk and 1 opossum from Cleveland Park, D. C. (126125, 129791); 16 specimens of skeletal material from Sacramento Valley, Calif. (129957).

HUASTECA PETROLEUM CO., Tampico, Mexico: Collection of Tertiary mollusks from Mexico (125768).

HUBBS, Dr. C. L. (See under University of Michigan, Museum of Zoology.)

HUGHES, E. S., Highway Highlands, Calif.: Tooth of an extinct shark (127572).

HUIDEKOPER, Col. F. L., Washington, D. C.: Spanish dagger, oriental pistol, English pistol, European flail, and Ghurka sacrificial ax (129956).

HUNT, Mrs. R. A., Pittsburgh, Pa.: Gold locket worn by Mrs. Jane Irwin Findlay, wife of Gen. James Findlay and one of the mistresses of the White House, during the administration of President William Henry Harrison, 1841 (126631).

HUNTER, Mrs. BYRON, Washington, D. C.: 1 hand-woven, double-weave, Jacquard coverlet — grape pattern with giraffe border (128381). Loan.

HUSBAND, LOUISE M., New Harmony, Ind.: 1 turkey vulture (126247).

IDAHO, UNIVERSITY OF, AGRICULTURAL EXPERIMENT STATION, Sandpoint, Idaho: (Through J. H. Christ) 34 plants from Idaho (125455, 126318).

IMPERIAL COLLEGE OF TROPICAL AGRICULTURE, Trinidad, British West Indies: 1 fly from Trinidad (126248); 2 parasitic flies (125566).

INDEPENDENT BIOLOGICAL LABORATORIES, Tel-Aviv, Palestine: 102 insects, 7 land shells, and 1 fungus from Palestine (126770).

INDIANA AGRICULTURAL EXPERIMENT STATION, Lafayette, Ind.: (Through J. J. Davis) 3 flies (118375).

INGHAM, C. H., Los Angeles, Calif.: (Through F. H. Benjamin) 2 Lepidoptera (125930).

INGLES, Dr. L. G., Chico, Calif.: 2 parasitic worms (1 the type) and 5 slides of trematodes (119456, 126330).

INSTITUTO BACTERIOLOGICO, Buenos Aires, Argentina: (Through Dr. L. Uriarte) 25 beetles from Argentina (128394).

INSTITUTO BIOLOGICO FEDERAL, Rio de Janeiro, Brazil: (Through Dr. A. Ducke) 160 plants from Brazil (128190, 129178). Exchange.

INTERIOR, UNITED STATES DEPARTMENT OF THE:

Geological Survey: 60 Miocene plants illustrating a paper by Dr. R. W. Brown (124637); 3 boxes of material collected by Prof. J. W. Eggleston for the study of the eruptive rocks at Cuttingsville, Vt. (124978); 10 specimens of iron and manganese ore from Waynesboro quadrangle, Tenn., and 10 of antimony ore from the DeQueen quadrangle, described by H. D. Miser (124980); 125 lithologic specimens collected by Dr. M. I. Goldman in the Pawhuska quadrangle, Okla. (125437); a small collection of vertebrate fossils from Cajon Pass and Palmdale, Calif., collected by Dr. C. L. Gazin (125451); about 2,500 fossil invertebrates from the Miocene and Pliocene of Italy, the Eocene

of the Paris Basin, and the Balearic Islands, collected by Dr. Julia A. Gardner (125495); 500 Mesozoic corals (about 250 types) studied by Dr. J. W. Wells (125496); 1 lot of 16 teeth collected by Dr. R. B. Stewart in the Kettleman Hills, Calif. (125738); collection of representative rocks from Paleozoic formations of Marathon Basin, Tex. (125973); miscellaneous collection of rocks, ores, minerals, and building stones from Cuba, Arizona, Tennessee, etc. (126335); 4 specimens of Yellowstone travertine from Gardiner, Mont., and 2 of Montana geyser onyx from Manhattan, Mont., described by Dr. G. R. Mansfield (126660); 1 partial skull of Pleistocene horse from Yukon Valley, Alaska, collected by Dr. J. B. Mertie, Jr. (127083); rock sets from North Carolina and Tennessee described by Arthur Keith and sets of rocks and ores from Louisiana, Arizona, and other Western States (127576); 30 vertebrate fossils from Upper Pliocene deposits in valley of Gila and San Simon Rivers, Ariz., collected by Dr. M. M. Knechtel (127632); 25 lots (150 specimens) of Cambrian invertebrates from the Randolph quadrangle, Utah, collected by Dr. G. B. Richardson, Dr. Edwin Kirk, and others (128058); 100 Carboniferous brachiopods collected by J. S. Williams at Burlington, Iowa (128616); 25 vertebrate fossils from Kettleman Hills, Calif. (129073); 182 Ordovician fossils from Lenoir limestone in quarries at Marion, Va., presented by Benjamin Gildersleeve (129487); 9 Tertiary vertebrates from Kettleman Hills, Calif., collected by Dr. W. P. Woodring (129622).

National Park Service: (Through P. P. Patraw) 195 plants from Bryce Canyon National Park, Utah (121151); (through W. B. Lang) exhibition slab of Mesa Verde sandstone containing "sun symbol" marking (125739); (through D. S. Libbey) 4 samples of carbonized wood from near Crater Lake, Oreg. (127058); 1 downy black swift (127786); (through Dr. T. E. Snyder) 1 piece of pine truss, damaged by "powder post" beetle, placed on roof of the White House in 1813 and removed in May 1927 (129464).

INTERNATIONAL NICKEL CO., INC., New York, N. Y.: (Through R. E. Case) Nickel coins of Angola, Belgium, Canada, Danzig, France, Greece, Ireland, Latvia, Mexico, and Poland struck 1903–33 (126671).

IOWA, STATE UNIVERSITY OF, Iowa City, Iowa: (Through Prof. G. W. Martin) 24 plants (128179, exchange); (through Homer R. Dill) a collection of Crustacea made and studied by Dr. C. C. Nutting (125144, deposit).

IRVINE, Mrs. ELIZA HAMMOND, Santa Barbara, Calif.: (Through the White House) A white satin vest of latter part of eighteenth century (127856).

ITALIAN AIR MINISTRY, Rome, Italy: Propeller from one of the Savoiia-Marchetti *S.55.X* seaplanes that participated in the mass formation cruise of 24 machines led by Gen. Italo Balbo from Rome to Chicago and return, July 1 to August 12, 1933; also a model, 1/30 size, of this plane (125552).

IVINS, ELLWOOD, Philadelphia, Pa.: Display panel containing 9 specimens of the first seamless steel tubing made in America, 1888 (123896).

JACKSON, R. W., Cambridge, Md.: 1 tree frog and 312 mollusks from Maryland (125985, 129046).

JACKSON, T. L. (See under J. A. Duane.)

JACOT, A. P., Monroe, Conn.: 60 miscellaneous insects, some being new to the collection (119824).

JARDIN BOTANICO, Madrid, Spain: 2 plants collected in Colombia by Jose Cuatracasas (127773). Exchange.

JARDIN BOTANIQUE DE L'ETAT, Brussels, Belgium: 310 plants (126113). Exchange.

JARDIN ZOOLOGIQUE DE SFAX, Sfax, Tunis: (Through Dr. Paul Bede) 856 fossil shells from Tunis (125145). Exchange.

JAUME, M. L., Vedado-Habana, Cuba: 89 specimens of about 54 species (at least 2 new to the collection) of Cuban and Puerto Rican weevils (127345).

JAY, D. K., Westbury, L. I., N. Y.: Court robe worn by John Jay, first Chief Justice of the United States Supreme Court, 1789–1795, and a pair of silver candlesticks of Revolutionary period owned by him (127345). Loan.

JAYNES, Mrs. H. A., Jeanerette, La.: 5 earthenware vessels purchased from native vendors in Trujillo, Peru (129467).

JEFFERSON BANKING Co., Jefferson, Ohio: 5 specimens of scrip issued by donors in 1933 (126756).

JEWETT, S. G., Portland, Oreg.: (Through Dr. E. W. Nelson) 12 quail (127642).

JEX, G. W., Washington, D. C.: 1 oil painting of a *Triceratops* head (125193).

JOHNS HOPKINS UNIVERSITY, Baltimore, Md.: 2 cultivated plants (125947); 2 ferns collected in Jamaica by D. B. Lawrence (125188). Exchange.

JOHNSON, A. W., Santiago, Chile: 6 birds' eggs—3 of the coot and 3 of the black-headed duck (129164).

JOHNSON, B. L., Washington, D. C.: 2 Tlinglit baskets collected in Alaska in 1909–10 (124996).

JOHNSON, FRANK, New York, N. Y.: (Through Dr. William Schaus) 2,000 Lepidoptera from Peru (128911).

JOHNSON, JANE BEALL (Mrs. R. S. Hart), Baltimore, Md.: A candlewick bedspread embroidered in fruit and floral designs on a homespun cotton-twill foundation, made about 100 years ago at Forest Range, near Frederick, Md., by the donor's grandmother, Jemima Ann Beall-Hammond, a great-granddaughter of Col. Ninian Beall, of the "Rock of Dumbarton" (129712).

JOHNSON, Mrs. PEARL M., Washington, D. C.: A beaded bag, mother-of-pearl case, and hair jewelry made or owned by Julia Caroline Bontz, of Alexandria, Va., about 1831, and a hippopotamus tusk (129292).

JOHNSON & JOHNSON, New Brunswick, N. J.: 2 mounted herbarium specimens for use in the medicated plaster exhibit (125751).

JOHNSTON, Miss M. S., Kew, England: 43 fossils and mollusks from England (126741).

JOHNSTON, R. W., Washington, D. C.: Specimen of Texas limestone (125302).

JONAS, LOUIS. (See under American Association of Museums.)

JUBITZ, ANNE, Portland, Oreg.: (Through J. N. Barry) Specimen of ancient beeswax washed up on Nehalem Beach near mouth of Nehalem River, Oreg. (128093).

KANSAS STATE AGRICULTURAL COLLEGE, Manhattan, Kans.: 184 plants (129077, 129769). Exchange.

KANSAS, UNIVERSITY OF, Lawrence, Kans.: 1 fly (129166, exchange); 3 flies from Florida (128416).

KARLOVY UNIVERSITY, Prague, Czechoslovakia: 38 lots of fossils from Cretaceous rocks of Czechoslovakia (129200). Exchange.

KEADLE, EMMETT, Williamson, W. Va.: 1 plant from West Virginia (125694).

KEARNEY, Dr. T. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

KEIFER, H. H., Sacramento, Calif.: 51 Microlepidoptera (12 species) from San Francisco (128175, 128811). (See also under California State Department of Agriculture.)

KELLER, F. J., Antioch, Nebr.: (Through F. C. Lincoln) 12 mallard eggs (125484).

KELLETT, BETTY, Wichita, Kans.: 57 slides of types of Pennsylvanian and Permian Ostracoda from Kansas (129973).

KENNEDY, MARY, Washington, D. C.: 1 large echinoderm from the Miocene of Calvert Cliffs, Md. (126865).

KENT'S RESTAURANT & BAKING Co., Atlantic City, N. J.: 4 specimens of scrip issued by donors in 1933 (126672).

KEYSER, JULIUS. (See under Dr. H. J. Roddy.)

KINDLE, Dr. E. M., Ottawa, Ontario: 4 manganiferous concretions from Concretion Cove, Ship Harbor Lake, Nova Scotia (127344). (See also under Canadian Government, Geological Survey.)

KING, Mrs. HARRY, Washington, D. C.: 2 Pueblo earthenware jars (124994).

KIRK, HUGH, Toledo, Ohio: 10 Devonian brachiopods from silica shale of Ohio (124935).

KISER, BERT, Olive Hill, Ky.: (Through Dr. E. W. Nelson) 1 quail (127634).

KITCHEN, SUSAN H., Philadelphia, Pa.: (Through F. V. Chambers) 1 Eastman no. 4 panorama kodak (124999).

KLAUBER, L. M., San Diego, Calif.: 3 toads from Arizona (126464).

KLINCK, W. J., Takoma Park, D. C.: 1 cane made from a piece of diamond willow having 10 "diamonds" (128243). Loan.

KLOTS, A. B. (See under Ward's Natural Science Establishment.)

KLUG, GUILLERMO, Iquitos, Peru: 647 plants from northern Peru (119358, 125207, 128712).

KNAPPEN, PHOEBE, Washington, D. C.: 1 yellow-breasted chat (126308).

KNIGHT, O., and R. H. SANFORD, Shelbyville, Ky.: (Through Dr. E. W. Nelson) 2 quail (127638).

KNIGHT, Dr. S. H. (See under University of Wyoming.)

KNORR, FLORA V., Chevy Chase, D. C.: Miniature doll, thimble case, comb, fan, and a child's Testament (124995).

KNOWLES, W. A., Washington, D. C.: 15 mollusks from Potomac River near Harpers Ferry (129449).

KNULL, J. N., Columbus, Ohio: 1 beetle, paratype (128910); 6 beetles (3 species), 1 a paratype (127980).

KOBAYASHI, Dr. TEIICHI, Tokyo, Japan: 650 specimens and 235 casts of early Paleozoic fossils from Chosen (129971); miniature models of ancient and modern hairdressing in Japan (127366).

KOCH, G. T., Utica, Ohio: 1 chemical specimen for Loeb collection of chemical types (126530).

KOERPER, ANNA C., Washington, D. C. (See under Mrs. Thomas Snowden.)

KOMEDAL, A., Seabold, Wash.: Small collection of archeological material excavated by donor in 1911 at site of old Eskimo village in Port Moller Bay on north coast of Alaska Peninsula (127346).

KRAMER, C. F., Baltimore, Md.: (Through E. P. Kramer) 2 antique silver watches and 6 old watch movements without cases (126659).

KRAMER, E. P. (See under C. F. Kramer.)

KRAUSS, N. H., Honolulu, Hawaii: 2 beetles from Honolulu (128840).

KREMERS, R. E., Madison, Wis.: 1 chemical specimen for Loeb collection of chemical types (126539).

KRIEGER, H. W., Alexandria, Va.: Recently manufactured clay figurine of the type sold to tourists in Habana, Cuba, as authentic Carib idols (129913).

KRIEGER, Prof. PHILIP, New York City, N. Y.: 1 specimen of strontianite and 1 of celestite from Suiza Mine, Sierra Mojada, Mexico (129010).

KRUKOFF, B. A., New York, N. Y.: 4 plants from Brazil (129281).

KUNKEL, K. M., Indianapolis, Ind.: (Through Dr. E. W. Nelson) 10 quail (127578).

KUNZ, Dr. GEORGE F., ESTATE OF, New York, N. Y.: 16 microscope slides of embryonic shells of pearly freshwater mussels of United States (128014).

KYANCUTTA MUSEUM, Kyancutta, South Australia: 14 pounds of Henbury meteorite from Central Australia (122905).

LABINE, G. A., Toronto, Ontario: (Through Dr. F. L. Hess) 6 samples of native silver and 1 silver and pitchblende specimen (127628).

LALLY, Dr. L. A., Baltimore, Md.: Tibetan spirit stand presented in memory of donor's father, P. J. Lally, of Scranton, Pa. (126096); reproduction of key to lock on main door at Mount Vernon (126621).

LANDBOUW-PROEFSTATION, Paramaribo, Dutch Guiana: 25 insects from Dutch Guiana (126227).

LANE, M. C., Walla Walla, Wash.: About 1,000 miscellaneous beetles from Western United States (129918).

LANG, W. B. (See under U. S. Department of the Interior, National Park Service.)

LANG-SCHOFIELD, W. A., Colombo, Ceylon: Skin and skull of bamboo rat from Ceylon (124957).

LANSBURGH, Mrs. ANNA L., Washington, D. C.: 1 porpoise from 150 miles off Cape Hatteras (129792).

LANSINGH, VAN RENSSELAER, New York, N. Y.: (Through Dr. F. L. Hess) 1 specimen of wolframite from Guarda, Portugal (128385).

LARUE, Dr. G. R., Ann Arbor, Mich.: 10 slides of parasitic worms (124930).

LATHAM, ROY, Orient, Long Island, N. Y.: 4 isopods (129282).

LAUDON, L. R., Tulsa, Okla.: 31 Mississippian echinoids and starfishes from Gilmore City, Iowa (127343). Exchange.

LAW, Dr. and Mrs. C. R., Berlin, Md.: Iroquois stone pipe found on shore of "Bisco" Lake, Ontario (127196).

LAWRENCE LEATHER Co., A. C., Peabody, Mass.: 2 leather bags, one a Gladstone made from vegetable-tanned full-grain cowhide and the other a Zipper of chrome-tanned cowhide (129601).

LEE, E. J., Minneapolis, Minn.: Sample of yellow poplar wood with purple, brown, and black heartwood (125740). Exchange.

LEECH, GORDON, Philadelphia, Pa.: (Through J. B. Magnus) 1 mortar with pestle, 2 suppository devices with molds, and 1 Michael's powder divider (129300).

LEEDS, UNIVERSITY OF, Leeds, England: 3 mosses (128051). Exchange.

LEES, FLORENCE, Washington, D. C.: German paper currency issued 1922–23 (126007).

LEMMER, FRED, Irvington, N. J.: 25 lepidopterous larvae (125964); 8 moths (126147); 77 adult Lepidoptera and 3 vials of alcoholic larvae (126637, exchange).

LENINGRAD, U. S. S. R., ACADEMY OF SCIENCES:

Botanical Institute: 504 plants collected in Brazil by Riedel

(125906); 508 plants from Brazil (128033); 4 palearctic bees (3 species) (129069). Exchange.

Central Geological and Prospecting Scientific-Research Museum: 417 brachiopods (205 species) from U. S. S. R. (126837). Exchange.

LEONARD, E. C., Washington, D. C.: 24 plants (126309); 302 plants from Maryland, Virginia, and Washington, D. C. (126869, 127653, 128589, 129839); 32 plants from Ohio (129201); 8 plants from Eastern United States (129757). (See also under Smithsonian Institution, National Museum.)

LEVOR & CO., INC., G., New York, N. Y.: 1 whole skin of white cabretta leather (127900).

LEVY, B., Wankie, Southern Rhodesia: 25 specimens of Permo-Carboniferous Glossopteris flora (125013). Exchange.

LIBBEY, D. S. (See under U. S. Department of the Interior, National Park Service.)

LIBBEY, F. W., Phoenix, Ariz.: 1 specimen of jarosite crystals from north of Aguila, Ariz. (128074).

LIGHT, Dr. S. F., Berkeley, Calif.: 5 hermit crabs (129311).

LILLY & CO., ELI, Indianapolis, Ind.: 7 specimens illustrating progressive steps in manufacture of insulin (126881).

LINCOLN, F. C. (See under F. J. Keller.)

LINDEN, GRACE. (See under Save the Redwoods League.)

LINDNER, M. J. (See under U. S. Department of Commerce, Bureau of Fisheries.)

LINT, F. S., Hollywood, Calif.: Gavel made from a fallen limb of the big tree "General Sherman" (127288).

LIST, G. M., Fort Collins, Colo.: 3 beetles (127945). Exchange.

LIVERPOOL BUSINESS MEN'S ASSOCIATION, Liverpool, N. Y.: 3 specimens of scrip issued by the association in 1933 (126897).

LOCKHART, W. E., Ashland, Ky.: 1 large smoky quartz crystal from Colorado (125192); 3 pieces of peridotite from the peridotite dike in Elliott County, Ky. (126383); specimen of molybdenum ore from Big Molybdenum Mine at Climax, Colo. (127239); 1 large septarian nodule from Kentucky (128068); 1 specimen of fossil wood from Florissant, Colo. (129168).

LOEWEN, Prof. S. L., Sterling, Kans.: 2 type specimens of trematodes (127102); 1 type specimen of cestode from a bat (129327).

LONG, ANITA and EDITH, Washington, D. C.: (Through Union Trust Co.) Miscellaneous collection of antiquarian, historical, and ethnological material (497 specimens) (113420). Bequest.

LONG, EMMA M., Athens, Ga.: 7 personal relics of the Dr. Crawford W. Long family (128970). Loan.

LONGBINE, JOHN, Washington, D. C.: A walrus cribbage board and a model of a kayak collected at Fort St. Michael, Alaska, in 1901 (129613).

LOOFF, H. B., Oak Harbor, Wash.: Archeological material from Alitak Bay and Olga Bay, Alaska, collected by Mr. and Mrs. Looff (128252).

LORD, MARY PATTERSON, Kennebunkport, Maine: Hand-embroidered lamp mat made by donor's mother, Lydia Patterson, about 1850 (126381).

LOS ANGELES MUSEUM OF HISTORY, SCIENCE, AND ART, Los Angeles, Calif.: Cast of type specimen of a fossil bird (128221). Exchange.

LOUISIANA STATE UNIVERSITY, New Orleans, La.: 6 slides of mosquito material (126075).

LOVE, E. K., St. Louis, Mo.: 1 mounted skin of a 44-pound muskalonge from Rice Lake, Wis. (127809).

LOVELAND, Maj. J. W., Washington, D. C.: Built-up scale models of the yacht *Ariel* and power dinghy with habitat sea bottom and marine life, 7 paintings of marine subjects, an old whaleman's spyglass, serving mallet, chip log, and 8 examples of splices and knots (129633). Loan.

LOVETT, H. B., Washington, D. C.: A star-nosed mole from Patuxent River marsh, Md. (128422).

LOWE, H. N., Long Beach, Calif.: 86 crabs from San Felipe, Gulf of California (124440); 12 marine shells (2 species) from Pacific coast of Panama and Mexico (127101); 34 crabs, 1 stomatopod, fragments of shrimps (127471).

LOWVILLE, N. Y., VILLAGE OF: 5 specimens of scrip issued by village in 1933 (126743).

LUNZ, G. R., Jr., Charleston, S. C.: 5 crayfishes, 1 crab, 1 stomatopod (129604).

LURYE, EDWARD, Superior, Wis.: 3 insects from Wisconsin (127086).

LYNN, Dr. W. G., Baltimore, Md.: 30 bats and 1 rat from Jamaica (126844); collection of fish remains from Calvert formation, Plum Point, Md. (128584).

LYON, Dr. M. W., JR., South Bend, Ind.: 1 shrew, 1 ground squirrel, and 1 brown bat from Indiana (125157). (See also under Ernest Adams and Edna Banta.)

LYONS PIECE DYE WORKS, Paterson, N. J.: Sample of rippled surface taffeta (123192).

MACCOY, C. V. (See under Boston Society of Natural History.)

MACFADDEN, Mrs. FAY A., Roscoe, Calif.: 18 plants from California (125582).

MACGINITIE, G. E., Corona Del Mar, Calif.: Collection of amphipods from vicinity of Corona Del Mar (125734).

MACKAY, C. H., New York, N. Y.: (Through Dr. E. W. Nelson) 12 quail (128256).

MACLAREN, Dr. W. S., Princeton, N. J.: About 100 worm shells from Sanibel Island, Fla. (125019).

MAGNUS, J. B. (See under Gordon Leech.)

MALAGASH SALT CO., LTD., Malagash, Nova Scotia: Exhibition sample of halite and 5 hand samples for study series from Malagash (126891).

MALLINSON, H. R., & Co., INC., New York, N. Y.: 1 specimen of printed warp taffeta (127992).

MALLOCH, J. R., Washington, D. C.: 1 type specimen of a fly (125622); 1 fly from the Philippines (126431).

MANK, EDITH W., Lawrence, Mass.: 1 beetle from Glacier National Park, Mont. (129475).

MANN, Dr. W. M., Washington, D. C.: 3 African antelope skulls from Tanganyika Territory (129841).

MANTER, Dr. H. W., Lincoln, Nebr.: 6 slides of trematodes from marine fishes at Tortugas, Fla., including types of 5 species and 2 genera, and 1 fairy shrimp (124794, 125274).

MAPES, LUCILLE, Cambridge, Ohio: Collection of fossil crinoids and shells from Carboniferous rocks of Guernsey County, Ohio (128064).

MARBURG, GUIDO, New York, N. Y.: Printed poster entitled "The Flag of World Liberty" (125443).

MARELLI, Dr. C. A., La Plata, Argentina: 9 insects from Argentina (126135).

MARSH, Dr. C. DWIGHT, ESTATE OF, Washington, D. C.: 16 small lots of copepods (129150). Deposit.

MARSHALL, B. C., Imboden, Ark.: 1 annelid from Panacea, Fla. (118370); 100 insects and a mass of cocoons (125633, 125999, 126162, 126472, 127075, 128224).

MARSHALL, E. B., Laurel, Md.: 19 fishes from Crows Branch, Laurel, Md. (125446).

MARSHALL, Prof. PATRICK, Wellington, New Zealand: 3 specimens of comendite with tuhualite from Mayor Island, New Zealand (128065). Exchange.

MARSTEN, FRANCIS, Washington, D. C.: one 6-inch strip of 35 mm motion-picture film with perforation bound in flexible metal (127113).

MARTIN, Prof. G. W. (See under State University of Iowa.)

MARTIN, LESTER, Washington, D. C.: 1 red-tailed hawk (127018).

MARTIN, R. J., Washington, D. C.: (Through M. Frances Willoughby) Potsherds and a stone celt from Spanish Honduras (124991).

MARTORELL, L. F., Columbus, Ohio: 10 flies from Venezuela (127618); 65 beetles (55 species) (127972).

MASLOWSKI, KARL, Cincinnati, Ohio: (Through Dr. E. W. Nelson) 7 quail (128241).

MATHESON, Dr. ROBERT. (See under Cornell University.)

MATTHEWS, RANSOM. (See under Lillian Fletcher.)

MAXON, Dr. W. R., Washington, D. C.: 46 plants from Washington, D. C., Virginia, and vicinity (125132, 125720, 129805).

MAXWELL, MARY, Washington, D. C.: Collection of jewelry, watches, paintings, silver, china, bronze vases, etc. (107929).

MAY, RUSSELL, Washington, D. C.: German helmet of World War period (126006).

MCALISTER, Dr. E. D., Friendship Heights, Md.: 7 pieces of tapestry woven on a Norwegian loom and 6 charts illustrating methods of dyeing and blending wool for the yarns used by Misses Katharine and Cecile McAlister in weaving the tapestries (129835). Deposit.

MCCALL, W. R., Washington, D. C.: 36 watch movements principally by English makers of Liverpool and London, early nineteenth century (128429).

MCCARTNEY, H. G., Alexandria, Va.: Specimen of Pleistocene wood with iron pyrites (125796).

MCCLELLAND, W. H., Tuckahoe, N. Y.: 4 specimens of polished serpentine (129198).

MCCLURE, Prof. F. A., Washington, D. C.: 1 sample of Chinese gold-leaf paper as it came from mold and 14 small samples (containing gold leaf) of same paper after being prepared to pack gold leaf in, a pamphlet describing process of making this paper, a bamboo brush, and a pamphlet describing the making of a

Chinese vegetable dye (both pamphlets written by donor) (129486).

McCORMICK-GOODHART, L., Silver Spring, Md.: 1 large bath sponge from Nassau, Bahamas (125812).

McCRARY, O. F., Raleigh, N. C.: Specimen of grass from North Carolina (126130).

McCUNE, RALPH. (See under S. J. Schlappich.)

McDOWELL, J. P., Washington, D. C.: A basque estimated to be at least 90 years old (125744).

McFARLIN, J. B., Ann Arbor, Mich.: 2 plants from Florida (128044, 128045).

McGLANNAN, Mrs. ALEXIUS, Baltimore, Md.: Japanese embroidered 6-panel screen collected by Homer Lycurgus Law in 1876 (124645).

McGREGOR, R. C., Manila, Philippine Islands: 1,185 miscellaneous insects from the Philippines (127445).

McILVAINE, D. K. (See under West Penn Power Co.)

McILWAINE, Rev. W. B., Jr., Alexandria, Va.: 5 fresh-water jelly fishes from goldfish pond (124998).

McINTOSH, ALLEN, Washington, D. C.: 1 woodcock (127981).

McKEE, Prof. J. C., State College, Miss.: 1 cultivated plant from Mississippi (126141).

McKESSON, DONALD, Brooklyn, N. Y.: 1 chemical specimen for Loeb collection of chemical types (126540).

McKINNEY, J. R., Nacogdoches, Tex.: 1 giant water bug from Texas (129193).

McLEAN, Mrs. LUCILLE S., Shrub Oak, N. Y.: 62 lots (232 specimens) of marine shells from Jamaica (124608).

McMILLAN, A. M., Riverdale, Md.: Inventor's model of a compressed-air automobile starter (129847).

McMULLEN, Dr. R. L., Largo, Fla.: (Through William Gomme) 2 specimens of sweet cassava root to illustrate raw materials used for vegetable glues (128037).

McPHAIL, E. I., Buffalo, N. Y.: 1 carbon print, "In Memoriam", McKinley Monument, Buffalo (129698).

MELHASE, Dr. JOHN, Berkeley, Calif.: 1 specimen of elaterite (126855); 1 specimen of boussingaultite from South Mountain, Ventura County, Calif. (127342, exchange).

MELL, Dr. C. D., New York, N. Y.: 205 plants from Mexico (126843, 127322, 128038, 129021); 2 living cacti from Mexico (129343); 66 plants chiefly from British Guiana (125095).

MERCED COUNTY CHAMBER OF COMMERCE, Merced, Calif.: 2 specimens of merchants' scrip issued by donor in 1932 (126906).

MERRILL, Dr. E. D. (See under New York Botanical Garden.)

MERRITT, ETHEL, Coconut Grove, Fla.: 1 mollusk (128056).

MERRITT, M. L., Juneau, Alaska: 1 specimen of peat from Mendenhall Glacier, Alaska (127646).

MERSHON, W. B., Saginaw, Mich.: (Through Dr. E. W. Nelson) 12 quail (126765, 127080, 127365).

MESLER, R. D., Washington, D. C. (See under H. D. Miser.)

METROPOLITAN LIFE INSURANCE CO., New York, N. Y.: A strip film on the life of Robert Koch to supplement the health exhibits (124943); 37 health placards illustrating personal hygiene, dangerous diseases, and vital statistics (126874); 2 health placards for completion of a set of 33 illustrating dangerous diseases and vital statistics (127990); set of 33 placards illustrating the "History of Health" (128291).

MEYER, F. G., New York, N. Y.: Compass used by Frederick Meyer when meteorologist with the Polaris Arctic expedition, 1871–73, and a copy of a map drawn by him from surveys made during the expedition (129187).

MICHIGAN, UNIVERSITY OF, Ann Arbor, Mich.: 6 moths (127119).

Museum of Zoology: (Through Mrs. Helen T. Gaige) 17 Bolivian frogs and 1 lizard (127111); (through Dr. C. L. Hubbs), 8 fishes (128391); (through Mrs. Helen T. Gaige), 6 lizards (5 species) and 2 frogs (2 species) (129016, exchange); 2 tree toads from Guatemala (129988).

Department of Botany: 157 plants from Sumatra (125142); 27 plants from Peten, Guatemala (125946); 8 plants from Yucatan Peninsula (126139); 60 plants from Guatemala and British Honduras (126235); 175 plants from Peten, Guatemala (127215); 25 plants from Central America (128043); 36 plants collected in Yucatan Peninsula by C. L. Lundell (129345); 85 ferns collected in Panama and South America by Dr. W. R. Taylor (129495); 310 plants from Central America (129961). Exchange.

MIKIMOTO, KOKICHI, New York, N. Y.: Model of Mount Vernon done in pearls and mother-of-pearl, containing 12,000 pieces of mother-of-pearl, 5,184 pearls in the mansion itself,

6,500 on the lawn, and 185 in the flag, presented by the originator of the culture pearl industry in Japan (127082).

MILES, Dr. H. W., Manchester, England: 11 Hymenoptera (124179). Exchange.

MILLE, Rev. LUIS, Guayaquil, Ecuador: 1 plant from Ecuador (128914).

MILLER, G. E., Bristol, Tenn.: School warrants of city of Bristol issued in 1933 (128933).

MILLER, G. S., Jr., Washington, D. C.: 1 red squirrel from Peterboro, N. Y. (129790).

MILLER, WALTER, Tucapau, S. C.: 16 land shells (11 species) from the Carolinas (126365).

MILLS, Mrs. EMMA E. (See under J. H. Mills.)

MILLS, J. H. Takoma Park, Md.: (Through Mrs. Emma E. Mills) A sawset of the "plier" type with an adjustable sector that controls the depth of bend (128624).

MILLS, Capt. J. W., Miami, Fla.: Collection of Crustacea from Tortugas, Fla. (125814).

MILWAUKEE CLEARING HOUSE ASSOCIATION, Milwaukee, Wis.: 4 specimens of scrip issued by association in 1933 (126742).

MILWAUKEE PUBLIC MUSEUM, Milwaukee, Wis.: 1 specimen of barite from Hurley, Wis. (128609, exchange); a large exhibition slab of Middle Devonian fossils from Wisconsin (129277).

MINISTERIO DE AGRICULTURA DE LA NACION, Buenos Aires, Argentina: 6 flies from South America (126097). Exchange.

MINISTERIO DE INDUSTRIAS, Bogota, Colombia: 461 plants from Colombia (129144). Exchange.

MINNESOTA, UNIVERSITY OF, Minneapolis, Minn.: (Through C. R. Stauffer) 31 Cambrian graptolites from Lodi shale, Afton, Minn. (129476).

MIRGUET, J. A., Washington, D. C.: 1 box camera for use with dry plates 2½ by 2½ inches (127114).

MISER, H. D., Washington, D. C.: 1 large exhibition slab of Ordovician limestone from Ouachita Mountains, Okla. (126305).

MISER, H. D., R. D. MESLER, and Dr. G. A. COOPER, Washington, D. C.: About 10,000 Ordovician, Silurian, Devonian, Mississippian, and Cretaceous invertebrate fossils and specimens of minerals from Tennessee and Arkansas (126875). Collected for the Museum.

MISSOULA COUNTY PEOPLE'S EXCHANGE, Missoula, Mont.: 7 specimens of scrip issued by the exchange. (127016).

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 163 plants (124945); 162 plants chiefly from Cornwall, England (128257); 33 lower cryptogams (125770). Exchange.

MOHAWK CARPET MILLS, INC., New York, N. Y.: 8 photographs illustrating manufacture of carpets and rugs (129828).

MOHR, C. O., Urbana, Ill.: 15 flies (122722, 127069).

MONEYMAKER, B. C., Knoxville, Tenn.: 8 Ordovician fossils from Tennessee (126099).

MONTGOMERY, G. E. (See under T. J. Evans.)

MONTREAL, UNIVERSITY OF, Montreal, Quebec (through Dr. H. Prat): 5 lots, 17 specimens, of marine shells and 3 pycnogonids from Bermuda (127762).

MOORE, Prof. D. M. (See under University of Arkansas.)

MOORE, J. A., New York, N. Y.: 15 flatworms, 1 leech, about 25 ostracods, 15 amphipods, 3 crayfishes, 27 reptiles and amphibians, and 8 lots, 19 specimens, of land and freshwater mollusks from West Virginia (117535).

MOORE, O. G., Brownsboro, Ala.: A wood sample of the American smoketree (126733).

MOORE, Dr. R. D., Washington, D. C.: 1 hand sewing machine made about 1858 (126918). (See also under Dr. A. D. Campbell and Still Research Institute.)

MOORE, R. T., Pasadena, Calif.: 1 humming bird (128917).

MOORE, Dr. R. W., Schenectady, N. Y.: 1 chemical specimen for Loeb collection (126534).

MOREFIELD, S. V., Amelia, Va.: (Through American Gem & Pearl Co.) 1 topaz from near Winterham Station, Va. (126866).

MORGAN, BRENT, Washington, D. C.: 4 pileated woodpeckers (129920).

MORRISON, ELLA J., Washington, D. C.: 2 albums, 5 tintypes, 10 daguerreotypes, 10 ambrotypes (127988, 129925).

MORTENSEN, Dr. TH., Copenhagen, Denmark: 1 rare brachiopod from Sunosaki, Japan (126853). (See also under Zoologisk Museum.)

MORTON, E. D., Ruby, Ariz.: (Through Dr. F. V. Coville) 99 plants collected in Arizona by Mrs. Annie F. Morton (125719).

MOTOR SALES CO. OF NEW BEDFORD, New Bedford, Mass.: 3 specimens of scrip issued by company in 1933 (126761).

MOUND CITY, MO.: 2 specimens of scrip issued by city (127207).

MOUNT CLEMENS, MICH., BOARD OF EDUCATION: 1 specimen of scrip issued by board in 1933 (127452).

MOUSLEY, L. B., Pleasant Valley, N. Y.: 1 land shell from Canary Islands (128230).

MOZLEY, ALAN, London, England: 7 mammal skulls, 1 frog, and 1 lizard from Siberia (129772).

MUELLER, C. H., Cuero, Tex.: 15 ferns from Mexico (126146).

MUIR, RAYMOND. (See under Franklin D. Roosevelt.)

MURBARGER, W. B., Nevada City, Calif.: 1 beetle from California (129326); 2 glowworms (the adult female of the "firefly" beetle) (124798).

MURILLO, L. M., Bogota, Colombia: 3 bark beetles (125757).

MURRAY, J. J., Lexington, Va.: 1 Carolina junco (127363).

MURRAY, W. A., Washington, D. C.: 1 robin (129014).

MUSÉE PHYSIOGRAPHIQUE, Krakow, Poland: 200 plants from Poland (126776, 129695).

MUSEO CIVICO DI STORIA NATURALE, Milano, Italy: (Through Dr. Louisa Gianferrari) 4 fishes from Africa (126127). Exchange.

MUSEO NACIONAL, San Jose, Costa Rica: 11 plants from Costa Rica (125811, 127439); 15 ferns from Costa Rica and 1 nematode (125590, 126115, 129563); 1 marine shell from west coast of Costa Rica (127788).

MUSEO NACIONAL DE PANAMA, Panama City, Panama: 5 alcyonarians, 1 millipore, 1 sponge, 50 marine shells, and 1 coral, all from Panama (124083).

MUSGRAVE, Prof. P. N., Fairmont, W. Va.: Small collection of beetle larvae from West Virginia (126839, 127123).

MYERS, Dr. G. S., Washington, D. C.: 48 fishes from British Guiana collected by Albert Pinkus (128830); 20 crustaceans from California (4 phyllopods and 16 parasitic copepods) (125807); 1 fossil fish from Celite quarry, Lompoc, Calif. (125170); 25 fishes and several crustaceans, salamanders, and insects from Hunting Creek, Va. (125464, 127110).

MYERS, J. G., Trinidad, British West Indies: 1 plant from British Guiana (129458).

NAGEL, HANS, Houston, Tex.: (Through Dr. A. C. Chandler) 2 large softshelled turtles from vicinity of Houston (129275).

NATIONAL AIR TRANSPORT, INC., Chicago, Ill.: Aileron of a Boeing airplane, type 95, showing use of corrugated metal surface (126151).

NATIONAL BANK NOTE CO., Cleveland, Ohio: 15 specimens of scrip issued in 1933–34 by city of Cleveland and Cuyahoga County, Ohio (129902).

NATIONAL HERBARIUM OF VICTORIA, Melbourne, Victoria: 50 plants from Victoria (129756). Exchange.

NATURHISTORISCHES MUSEUM, Wien, Austria: 146 Chinese plants (125174, 126133); 100 plants (127898). Exchange.

NATURHISTORISKA RIKSMUSEET, Stockholm, Sweden: 825 plants chiefly from South America (126132, 127369, 128097, 128621, exchange); 1 beetle (127237).

NAVY, UNITED STATES DEPARTMENT OF THE: *Bureau of Yards and Docks:* Section of wood containing shipworms (128106).

NEBRASKA, UNIVERSITY OF, Lincoln, Nebr.: 4 plants from Nebraska (125163, 125489); 39 lots of helminth material, containing the types of many new genera and species (127462).

NEEDHAM, P. R., Stanford University, Calif.: 9 amphipods (128415).

NEFF, Prof. A. H., Weatherford, Okla.: (Through Prof. A. I. Ortenburger) 7 quail (127859).

NEHF, C. T., Terre Haute, Ind.: A hand-pump fire engine made by Hunnesman & Co., Boston, 1854, and used by Volunteer Fireman's Association at Terre Haute, 1855–59 (127338).

NEILD, E. F., Shreveport, La.: Skeletal material dug from Moncla Mound near Marksville, La. (125573).

NEILSON, Mrs., West Palm Beach, Fla.: 89 marine shells and 19 corals from Florida (126336).

NELSON, Dr. E. W. (See under J. O. Bugg, John B. Burnham, R. C. Case, W. E. Chase, Pierre Chouteau, Jr., Frank Coen, Talbott Denmead, P. W. Devore, Seth Gordon, J. R. Greeley, F. V. Hebard, S. G. Jewett, Bert Kiser, O. Knight, K. M. Kunkel, C. H. MacKay, Karl Maslowski, W. B. Mershon, Dr. J. C. Phillips, Dr. M. D. Pirnie, A. R. Pitser, H. S. Pointon, A. A. Richardson, G. E. Spoffard, H. L. Stoddard, M. B. Trautman, Wisconsin State Conservation Department, and U. S. Department of Agriculture, Biological Survey.)

NELSON, Prof. NELSON. (See under University of Wyoming.)

NEON, Rev. Brother, Lafayette, La.: 408 plants from Louisiana (126524).

NEUMANN, R., & Co., Hoboken, N. J.: 3 tanned sealskins, 1 undressed and 2 in different grain finish; 1 woman's shoe of "White Bering grain" genuine seal leather; and 19 swatches of seal leather showing various styles in color and finish (128011).

NEVADA, IOWA, CITY OF: 2 specimens of scrip issued by city in 1933 (126755).

NEVEL, W. D., Andover, Maine: 1 specimen of petalite from Greenwood, Maine (128031).

NEWARK MUSEUM, Newark, N. J.: Panel of airplane propeller blade divisions (126142). Loan.

NEW HAVEN CLOCK CO., New Haven, Conn.: (Through P. H. English) 5 modern watches to replace similar ones in the modern-clock collection (125448).

NEW JERSEY AGRICULTURAL EXPERIMENT STATION, New Brunswick, N. J.: 12 flies reared from a hollow tree trunk in New Jersey and 9 flies reared by Carl Ilg (128181, 128583).

NEW JERSEY ZINC CO., Franklin, N. J.: 1 large slab of zinc ore (125840).

NEW YORK BOTANICAL GARDEN, New York, N. Y.: 38 plants from Puerto Rico (124944, 128016); 820 photographs and fragments of plant specimens, largely type material (124950, 126114, 126438, 126878, 127891); 571 plants from China (125627, 125989, 126310, 126317, 129453); 2 ferns from Michigan (125785); (through Dr. E. D. Merrill) 1,977 plants from various sources (127093, 126359, 128015, 128817, 128832, 129018); 1 plant from Jamaica (127097); 1 plant from Mexico (127213); 12 plants from Colombia (126818); 2 ferns from Panama (128824); 24 ferns chiefly from Dominica (128854); 343 plants collected in southern California by I. M. Clokey (129478). Exchange.

NEW YORK STATE COLLEGE OF FORESTRY, Syracuse, N. Y.: 289 samples of West African, Sumatran, and Queensland woods collected with botanical material (128822). Exchange.

NEW YORK STATE MUSEUM, Albany, N. Y.: (Through Dr. Dayton Stoner) 3 amphipods (125452); 43 plants from New York (126674, exchange).

NICHOLS, M. L., Ithaca, N. Y.: 1 chemical specimen for Loeb collection of chemical types (126543).

NICOLAY, A. S., Montclair, N. J.: 17 beetles (6 types of new species and 11 paratypes) (129185). Exchange.

NIEMEYER, ERNESTINE, Washington, D. C.: 42 plants from Colombia (127747).

NININGER, H. H., Denver, Colo.: 12 oxidized meteorites from Kiowa County, Kans. (125135); 180 grams of the Hobbs, N. Mex., meteorite and 1 meteorite from Roy, N. Mex. (126864, 129972, exchange).

NORTH DAKOTA, UNIVERSITY OF, Grand Forks, N. Dak.: 1 larval salamander from North Dakota (125190); 5 insects (126551).

NORTH TEXAS STATE TEACHERS' COLLEGE, Denton, Tex.: About 200 specimens (8 species) of pearly freshwater mussels from Texas (126861).

NORTON, ELIZABETH, Palo Alto, Calif.: 2 etchings, "Lion Cub" and "In the Pasture", and 4 wood-block prints, "Squirrel", "Triangle", "Blue Macaw", and "Goldfish No. 2" (127658).

NURNBERG THERMOMETER CO., INC., Brooklyn, N. Y.: 30 specimens showing steps in manufacture of clinical thermometers (126683).

O'BYRNE, H. I., Webster Groves, Mo.: 2 male butterflies (128932).

OCEAN CITY, N. J., DEPARTMENT OF REVENUE AND FINANCE: 6 specimens of scrip issued by city in 1933 (126914).

OCEAN LEATHER CORPORATION, Newark, N.J.: 9 specimens of shark leather and 6 articles made from it, 100 perforated shark teeth, 1 sawfish saw, and 8 small photographs (129443).

OCHOA, Dr. M. M., Guatemala City, Guatemala: 4 flies from Guatemala representing 2 species (129284).

OHIO LEATHER CO., Girard, Ohio: 19 samples of finished leather and 111 small samples of calf leather (129051).

OHIO STATE MUSEUM, Columbus, Ohio: 1 fly from Louisiana (129781). Exchange.

OJUA, MORRIS, Wilmington, Calif.: 1 fly pupa (128187).

OKLAHOMA CITY UNIVERSITY, Oklahoma City, Okla.: 6 beetles from Oklahoma City (129594).

O'LEARY, A. L., Washington, D. C.: Catbird, robin, English sparrow, and a bald eagle (124938, 124941, 129919).

OLIVER, Dr. N. E., Thornton, Ill.: 1 insect (127218).

O'NEILL, Rev. Father HUGH, Washington, D. C.: 320 plants chiefly from tropical America (127609). Exchange. (See also under Catholic University of America.)

OPELIKA, ALA., CITY OF: 8 specimens of scrip and scrip stamps issued by city (126748).

OREGON STATE AGRICULTURAL COLLEGE, Corvallis, Oreg.: (Through G. M. Powell) 1 plant from Oregon (129591).

OREGON TRAIL MEMORIAL ASSOCIATION, Washington, D. C.: (Through U. S. Treasury Department, Bureau of the Mint) 4 Oregon Trail half-dollars, 2 struck in 1926, 1 in 1928, and 1 in 1933 (126301, 129050).

ORGANIZED UNEMPLOYED, INC., Minneapolis, Minn.: 13 specimens of scrip issued by donors in 1933 (126915).

ORTENBURGER, Prof. A. I. (See under A. H. Neff.)

OSAKA IMPERIAL UNIVERSITY, Osaka, Japan: (Through Dr. I. Watanabe) 1 specimen each of minerals enalite and scorodite from Japan (129481).

OSBORN, Prof. HERBERT, Columbus, Ohio: 1 fly from Bermuda (128853).

OTIS, I. C., Seattle, Wash.: 68 plants from Washington (125960, 126848).

OVER, EDWIN, Jr., Colorado Springs, Colo.: 1 specimen of pseudomorph of quartz and 1 of fergusonite from Cookstove Mountain, El Paso County, Colo. (126369).

OZMER, R. R., Dahlonega, Ga.: 1 bobcat skull from Lumpkin County, Ga. (120231).

PACIFIC BIOLOGICAL LABORATORIES, Pacific Grove, Calif.: 4 shrimps from California (129030).

PACIFIC ENTOMOLOGICAL SURVEY, Honolulu, Hawaii: 50 ostracods, 1 lot of Bryozoa, and a collection of lungworms (124593).

PADUCAH INDUSTRIES COMMITTEE, INC., Paducah, Ky.: 3 specimens of scrip issued by committee in 1933 (126903).

PAINTER, H. R., Lafayette, Ind.: 1 fly (127359).

PALAIS ROYAL, INC., Washington, D. C.: A mounted Lapland reindeer from Alaska (125310).

PALMER, Dr. E. J., Jamaica Plain, Mass.: 140 land shells from Missouri, Iowa, Michigan, and Indiana (125935).

PALMER, Dr. R. H., Matanzas, Cuba: 11 bird skins (125182).

PANAMA CANAL, Balboa Heights, Canal Zone: Specimen of alga from Gatun Lake, Canal Zone (124807).

PARCHER, Dr. A. H., Ellsworth, Maine: Stone artifacts of the "red paint people", found about 1915 at Ellsworth by L. F. Poors (129056).

PARKE, DAVIS & Co., Detroit, Mich.: Series of specimens, drawings, and pictures illustrating manufacture and use of tinctures and fluid extracts (126329).

PARRIS, W. G., Wirmingham, Tenn.: 2 phyllopods (125589).

PATRAW, P. P. (See under U. S. Department of the Interior, National Park Service.)

PATRICK, Dr. LEON, Orange, Calif.: 1 peach-faced lovebird, 1 blue-winged grass parrakeet, and 1 pale-headed paroquet (126634, 128075).

PATTEN, ANNA B., Washington, D. C.: 2 scrapbooks compiled from periodicals containing descriptions and illustrations of Col. Charles A. Lindbergh's life and exploits (129017).

PATTEN, JULIET C., Washington, D. C.: 3 detailed drawings of plants (125968).

PATTERSON, H. V., Hines, Ala.: 1 blindfish from Hines (129192).

PAUL, Brother, Panama City, Panama: 92 plants from Panama (127960, 129457).

PEABODY MUSEUM OF NATURAL HISTORY, New Haven, Conn.: 9 casts of Siwalik anthropoids (128846). Exchange.

PEARSE, Dr. A. S., Durham, N. C.: 9 crabs from Beaufort, N. C. (129981).

PELLA, IOWA, CHAMBER OF COMMERCE: 7 specimens of scrip issued by donors in 1933 (127651).

PENNSYLVANIA AIRCRAFT SYNDICATE, Philadelphia, Pa.: (Through E. B. Wilford) Original wind-tunnel model of the Wilford Gyroplane, 1929 (118068).

PENNSYLVANIA, UNIVERSITY OF, Philadelphia, Pa.: 1 plant (124810, exchange); (through T. Y. Chen) 2 marine toads from Trinidad, British West Indies (125177).

PERKINS, C. B., San Diego, Calif.: 5 insects from California (124075); 70 isopods (129171).

PERRYGO, W. M., Oxon Hill, Md.: 5 slugs from Oxon Hill (125934); 1 gray-fox skeleton from La Plata, Md. (128424); 13 small mammal skins (129980).

PETELOT, Prof. A., Tonkin, French Indo-China: 230 plants from French Indo-China (127878). Exchange.

PETTIT, LOU, Hill City, S. Dak.: (Through Dr. F. L. Hess) 1 lot of andalusite (124934).

PETTIT, Mrs. MARTHA F., Washington, D. C.: 2 pierced chinaware fruit stands made in Liverpool, England, about 1800 (125717).

PFORDTE, O. F., Cairo, N. Y.: Collection of minerals and rocks from Peru and New Jersey (125803). Exchange.

PHARMACOPOEIAL CONVENTION, INC., UNITED STATES, Philadelphia, Pa.: (Through Dr. E. F. Cook) 8 specimens and documents pertaining to official vitamin and hormone tests (129958).

PHELPS, Mr. and Mrs. O. A., Washington, D. C.: Black silk velvet dolman made about 1850 (125147).

PHENIX CITY, ALA.: 2 specimens of scrip issued by city in 1933 (126752).

PHILLIPS COUNTY MUSEUM, Helena: Ark.: (Through Col. J. R. Fordyce) Lot of potsherds from an Indian village site about 14 miles south of Helena (127398).

PHILLIPS, Dr. J. C., Wenham, Mass.: (Through Dr. E. W. Nelson) 1 quail (128388).

PHOTOGRAPHIC SOCIETY OF PHILADELPHIA, Philadelphia, Pa.: 52 photographs, "British Arctic Air Route", for exhibition during August 1933 (125152); 80 pictorial prints, members' show, for exhibition during October 1933 (126153). Loan.

PICCINELLI, Dr. PIERO, Bergamo, Italy: 10 mineral specimens from Italy 122363). Exchange.

PICKEL, Prof. D. B., Pernambuco, Brazil: 90 plants from Brazil (125159, 126648, 128035, 129013).

PICKENS, A. L., Greenville, N. C.: 2 salamanders (128852).

PIERCE, Dr. W. D., Philadelphia, Pa.: 59 plants from Philippines (128087).

PIERCE, MARY M., Washington, D. C.: 1 plant from Cabin John Bridge, Md. (129202).

PIRNIE, Dr. M. D., Battle Creek, Mich.: (Through Dr. E. W. Nelson) 7 quail (127076, 127636).

PITSER, A. R., Huntington, W. Va.: (Through Dr. E. W. Nelson) 7 quail (127481, 127641).

PITTS, W. B., Sunnyvale, Calif.: 5 polished slabs of minerals (125474).

PIZZINI, ANDREW, Washington, D. C.: 34 amphipods, 3 isopods, 1 bryozoan from Camp Roosevelt, Chesapeake Bay, Md. (125603); 3,000 amphipods, 2 isopods, 1 shrimp, 2 marine annelids, and 2 ophiurans from St. Simons Island, Ga. (129041); 75 amphipods from spring just west of Georgetown, D. C. (129614). (See also under Ray Greenfield.)

PLADECK, MILDRED, Washington, D. C.: 1 plant from Maryland (127094).

PLITT, Mrs. C. C., Baltimore, Md.: 27 orchids from Maryland (127795).

POE, E. R., Marion, Ill.: Manuscript copy of Koran from Moro of Mount Apo, Mindanao, Philippines (127584).

POINTON, H. S., Vurrillville, R. I.: (Through Dr. E. W. Nelson) 2 quail (128242).

POMEROY, LIVINGSTON, Washington, D. C.: Collection of fossil shells (about 45 specimens) and 4 fossil teeth from Monte Maria (tile quarry), Rome, Italy (129585).

PONCA CITY, OKLA., CHAMBER OF COMMERCE: 6 specimens of scrip issued by city, 1931–33 (126681).

POPENOE, C. H., Silver Spring, Md.: 1 lovebird and 1 egg of white cockatoo (124939); 1 red-tailed hawk from Virginia and 1 parrot (126633); 1 grass parrakeet (129767).

POPENOE, Mrs. C. H., Silver Spring, Md.: (Through U. S. Department of Agriculture, Biological Survey) 1 red-fronted parrakeet (129477).

PORSILD, Dr. M. P. (See under Danske Arktiske Station.)

PORTER, Prof. Dr. C. E., Santiago, Chile: Collection of insects from Chile (126374, 126618, 129009).

PORTLAND, MAINE, CITY OF: 6 specimens of scrip issued by city in 1933 (126749).

POST OFFICE DEPARTMENT, UNITED STATES, Washington, D. C.: 14 sets of specimen stamps in triplicate, 4,729 specimens received by department from International Bureau of the Universal Postal Union, Berne, Switzerland (124678, 124960, 125298, 125974, 126299, 126908, 127246, 127769, 127884, 128085, 128592, 128915, 129606, 129903); 3 specimens each of the 3-cent Newburgh commemorative, 1-cent Century of Progress, and 3-cent Century of Progress stamps (124953); 12 specimens of United States commemorative stamps of 1933 (126679).

POTOMSKA MILLS CORPORATION, New Bedford, Mass.: 3 specimens of scrip issued by donors in 1933 (126754).

POTTS, R. C., Takoma Park, Md.: Sample of boxelder wood from Stillwater, Okla. (128267).

POUNDSTONE, Dr. G. C., Chicago, Ill.: 50 pictorial photographs for exhibition during November 1933 (126676, loan); 3 pictorial photographs (127593).

POWELL, G. M. (See under Oregon State Agricultural College.)

POWERS, P., Philadelphia, Pa.: 4 specimens (including type) of a new species of sea-urchin collected by donor at Dry Tortugas, Fla. (125715).

PRAT, Dr. H. (See under University of Montreal.)

PRATT & WHITNEY AIRCRAFT Co., Hartford, Conn.: A machined main crankcase assembly and a machined forged nose section of a "Wasp" engine (126152).

PRICE, JOHN. (See under Dr. H. J. Roddy.)

PROSPECT AUTO TOP & PAINTING Co., Cleveland, Ohio: 2 specimens of scrip issued by donors in 1933 (126896).

PUBLIC WORKS OF ART PROJECT, Washington, D. C.: (Through G. H. Code) 4 lithographs by T. B. White of buildings at Williamsburg, Va. (129603).

PURER, Dr. EDITH A., San Diego, Calif.: 148 dune plants mostly from California (126847, 128036).

PUT CLEVELAND TO WORK SOCIETY, INC., Cleveland, Ohio: 7 specimens of scrip issued by donors in 1933 (127015).

QUEENEY, J. J., Forestville, Md.: 1 molesnake from Forestville (129806).

QUEENSLAND, AUSTRALIA, DEPARTMENT OF AGRICULTURE AND STOCK, Brisbane, Queensland: 1 insect from Australia (127979).

RAASCH, G. O., Madison, Wis.: 40 Upper Cambrian brachiopods from Wisconsin (127361).

RAFFLES MUSEUM AND LIBRARY, Singapore, Straits Settlements: 15 crinoids (125775).

RANDS, R. D. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

RANSON, ROBERT, St. Augustine, Fla.: 1 beetle larva (126105).

RANSON, Mrs. W. L. (See under Mrs. D. C. Yates.)

RAWLINSON, ELIZABETH S., Staunton, Va.: 57 plants from Virginia (124827, 126550, 126647, 129837).

RAYMOND CHAMBER OF COMMERCE, Raymond, Wash.: 4 specimens of scrip issued by donors in 1932 (126900).

READING, UNIVERSITY OF, Reading, England: 87 Jurassic and Cretaceous brachiopods from England (124972). Exchange.

RECORD, Prof. S. J. (See under Yale University School of Forestry.)

REDWOOD, Mrs. F. T., Baltimore, Md.: 55 pieces of antique chinaware (128367).

REED, C. T., Kingsville, Tex.: 65 fishes, 1 lizard, and a small collection of crustaceans from vicinity of Corpus Christi, Tex. (128413).

REED, Dr. E. P., Valparaiso, Chile: 17 beetles from Magellan (125629); 9 insects, representing a species and 2 orders (127244, exchange).

REESE, Prof. A. M., Morgantown, W. Va.: 8 bats in alcohol, from West Virginia (127975).

REHDER, ALFRED. (See under Harvard University, Arnold Arboretum.)

REHDER, H. A., Washington, D. C.: 180 marine shells from Brewster, Mass. (125748).

REID, E. D., Washington, D. C.: 60 crustaceans and 151 fishes from Potomac River at Cobb Island, Md. (125286, 125815, 127053); 1 robin (124940).

REID, WALTER, Washington, D. C.: 1 specimen of the Quinn Canyon, Nev., meteorite (129290).

REIMANN, I. G., Buffalo, N. Y.: A rare Devonian bryozoan from New York (125155); 3 fossil crinoids (3 species) from New York (127324); 16 brachiopods from Devonian rocks of Erie County, N. Y. (128095, exchange).

REIMER, MARIE, and GRACE P. RICE, New York, N. Y.: 16 chemical specimens for Loeb collection (126536).

REINHARD, H. J., College Station, Tex.: 13 flies (types and paratypes of 3 species) (126628); 4 type specimens of flies (128390).

REPETEK SAND DESERT STATION, Turkmenistan, St. Repetek, Middle Asia Railway, U. S. S. R.: 64 plants from Turkmenistan (126112). Exchange.

RESNER, ERNEST, Washington, D. C.: 1 insect (127371).

RHODE ISLAND DEPARTMENT OF AGRICULTURE (INSECTARY), Kingston, R. I.: 10 insects (124684); 2 beetles from Rhode Island (127871); 3 slides and 1 vial of insects from Rhode Island (129353).

RICE, GRACE P. (See under Marie Reimer.)

RICHARDS, Dr. H. G., Trenton, N. J.: 8 vials of crustaceans (129610).

RICHARDS, O. W., London, England: 6 bees (127978).

RICHARDSON, A. A., Eastover, S. C.: (Through Dr. E. W. Nelson) 2 quail (127640).

RIDDLE, Mrs. L. W. (See under Harvard University, Farlow Herbarium.)

RIGHTS, Dr. D. L., Winston-Salem, N. C.: Steatite imitation of a platform pipe (126436).

RIJKS HERBARIUM, Leiden, Netherlands: 32 East Indian ferns (127023). Exchange.

RILEY, J. H., Falls Church, Va.: 2 skins of brant (125486).

RITCHIE, W. A. (See under Rochester Museum of Arts and Sciences.)

RIVERTON LIONS CLUB, Riverton, Wyo.: 10 specimens of scrip issued by club in 1933 (126898).

ROADS, KATIE M., Hillsboro, Ohio: 3 plants from Ohio (124954).

ROBERTS, C. C., Belmont, Mass.: 62 ethnological specimens from Gold Coast, Ivory Coast, Cameroons, and Nigeria (126102).

ROBERTS, C. F., Washington, D. C.: Pair of silver cuff buttons from the Blackfeet Indian Agency collected by the donor's father, Palmer N. Roberts, about 1884 (127019).

ROBERTS, J. H., Baton Rouge, La.: 41 caddis-flies (14 species) (127049).

ROBERTS, MRS. MARY R., and MRS. ANNE J. B. DEPUE, Chevy Chase, Md.: A sailmaker's tool kit, including tools, fittings, drawing instruments, and patterns, dating from 1860; 1 Colt revolver and powderhorn; and 1 stiletto (127225).

ROBERTSON, MRS. IMOGENE C. (See under Buffalo Museum of Science.)

ROBINSON, H. W., New Orleans, La.: Collection of skeletal material excavated about 7 miles east of Ponchatoula, La. (127347).

ROCHESTER MUSEUM OF ARTS AND SCIENCES, Rochester, N. Y.: (Through W. A. Ritchie) A female skull dug up near Manchester, N. Y. (128405).

ROCHESTER TRUST & SAFE DEPOSIT CO., Rochester, N. Y.: 4 specimens of scrip issued by Rochester Clearing House Association in 1933 (126762).

ROCK, Dr. J. F., Honolulu, Hawaii: 16 mosses from Hawaiian Islands (129053).

ROCK RAPIDS, IOWA, CITY OF: 2 specimens of scrip issued by city in 1932 (126750).

RODDY, Dr. H. J., JOHN PRICE, and JULIUS KEYSER, Lancaster, Pa.: 12 starfishes and other fossils from Martinsburg shale, Swatara Gap, Pa. (128254). Exchange.

RODECK, Prof. H. G. (See under University of Colorado Museum.)

RODOCK, R. E., Lewiston, Maine: 152 bugs (122888).

ROEBLING FUND, Smithsonian Institution: Series of pyrite crystals and other minerals from Italy (123432); about 500 grams of the Lanton, Mo., meteorite (124329); 1 specimen of the Tulia, Tex., meteorite (124408); 2 sections of stony meteorites, 1 from Missouri and 1 from Oklahoma (124826); 1 pear-shaped black opal from Lightning Ridge mine, Australia (124970); 1 specimen showing emerald crystals in the matrix (124989); 1 Siam zircon, 1 gem aquamarine, and 3 tourmalines from Brazil (125169); 7 specimens of scapolites from Switzerland (125268); 2 slabs of the Hobbs, N. Mex., meteorite (125316); the Tellef Dahll collection of Norwegian minerals (125549); 2 specimens of cerussite and 1 of azurite from Tsumeb (125756); 6 tourmalines (125764, 125813); 4 crystals of zircon from Oklahoma (125959); 5 mineral specimens (126278); 1 blue tourmaline (126306); 1 stibnite specimen (126549); 2 specimens of andalusite from British India (126909); 1 specimen of petalite (127013); 3 specimens of alumo-chalkosiderite from Schneckenstein (127085); 5 mineral specimens from Maine (127479); 1 citrine quartz from Spain and 1 tourmaline from Brazil (127599); 3 fluorites from Southwest Africa and 2 cerorthites from Finland (127783); 3 specimens of Maxix aquamarines (127793); 1 slice of the Marsland meteorite (127888); 1 opal from Stuart Range, Australia (128026); one-half of the Grady, N. Mex., meteorite (128046); 1 slab of the Brenham meteorite (128229); specimen of the Blanket, Tex., meteorite (128603); 1 specimen of meteorite from Texas (129322); 1 meteorite specimen from North Carolina (129451); 1 meteorite from Sioux County, Nebr. (129463); 1 specimen of the Pasamonte, N. Mex., meteorite (129802); 1 meteorite from Roy, N. Mex. (129972).

ROGICK, MARY D., Columbus, Ohio: 3 fresh-water bryozoans (128395).

ROJAS, R. T., Cartago, Costa Rica: 1 spider and 1 coccid from Costa Rica (124985).

ROOSEVELT, Pres. FRANKLIN D., Washington, D. C.: (Through Raymond Muir) 38 specimens of cut and polished marble and Mexican onyx (128403).

ROSENBERG, E. C., Copenhagen, Denmark: (Through Dr. A. G. Böving) 1 egg and 10 beetle larvae (11 species, 3 being new to the collections) (129600).

ROSENBERG, L. C., Fairfield, Conn.: 49 etchings and drypoints for exhibition October 30 to November 26, 1933 (126636). Loan.

ROSENWALD MUSEUM OF SCIENCE AND INDUSTRY, Chicago, Ill.: 2 line cuts, "Rosenwald Museum" and "Coal Mine", both by Ralph Fletcher, printed on the Seth Adams Hand Press no. 224 (125726).

ROSS, Dr. H. H., Urbana, Ill.: 10 Hymenoptera (6 species), all paratypes (129801). Exchange.

ROTH, W. J., Clarendon, Va.: 1 woodcock (129558).

ROYAL BOTANIC GARDEN, Edinburgh, Scotland: 23 Chinese plants (125139). Exchange.

ROYAL ONTARIO MUSEUM OF MINERALOGY, Toronto, Ontario: 17 gems and minerals (127115); 1 specimen of ferrothorite from Befaritra, Madagascar, and 1 of leonite from Strassfurt, Prussia (129450). Exchange.

ROYCE, S. W., Pasadena, Calif.: 4 specimens of scrip issued by Huntington Hotel Co., Pasadena, in 1933 (126902).

RUMPP, C. F., & SONS, Philadelphia, Pa.: 11 small leather articles (129052).

RUNYON, ROBERT, Matamoros, Mexico: 23 plants from Texas (125591).

RUSBY, HELEN B., La Paz, Bolivia: 1 plant from Bolivia (124947).

RUSSELL, PAUL. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

RUST, H. J., Coeur d'Alene, Idaho: (Through Dr. F. V. Coville) 123 plants from Idaho (129024).

RUZICKA, RUDOLPH, Dobbs Ferry, N. Y.: (Through B. C. Chambers) 9 examples of water-color printing comprising a finished proof in 5 colors and a separate proof from each color block and 3 finished proofs (127657).

SACRAMENTO JUNIOR COLLEGE, Sacramento, Calif.: 400 archeological specimens from along Sacramento River in Sacramento, Solano, and Yolo Counties, Calif. (127794, exchange). (See also under R. F. Heizer.)

ST. JOHN, E. P., and H. C. BASSETT, Floral City, Fla.: 2 coral snakes (129697).

ST. JOHN, R. P., Bluff Point, N. Y.: 8 ferns from Florida (129304).

SAMPELAYO, P. H., Madrid, Spain: 7 Cambrian brachiopods from Leon, Spain (129822).

SANDY SPRING MEETING OF FRIENDS, TRUSTEES OF, Sandy Spring, Md.: (Through Mrs. M. C. Bancroft) A large 7-plate heating stove made in 1817 and used until 1933, including poker and 6 soapstone foot warmers and rack (128070).

SANFORD, R. H. (See under O. Knight.)

SANGAMO ELECTRIC CO., Springfield, Ill.: 1 enlarged model of the type H electric house meter (129851).

SARGENT, F. H., Farner, Tenn.: 14 plants (126624).

SARGENTICH, Dr. SPIRO, Washington, D. C.: Large multiple-case English watch with Turkish numerals (about 1800), brought by donor from his home in Dalmatia (125447).

SAUNDERS, L. G., Nanaimo, British Columbia: 31 amphipods (125272).

SAVE THE REDWOODS LEAGUE, San Francisco, Calif.: (Through Grace Linden) 166 photographs of California trees (124390). Loan.

SAVOYE, Mrs. EDWARD, Brooklyn, N. Y.: Medical officer's sword carried during Civil War by Dr. Daniel McNeil, 21st New Jersey Regiment, and a small photograph of Dr. McNeil (125538).

SAYLOR, L. W., Berkeley, Calif.: 2 paratypes of beetles (126911); 13 scarabaeid beetles (12 named species) (129071, exchange); 22 beetles, including 2 paratypes (129821).

SCANLON, J. F., Washington, D. C.: 1 kinkajou from San Jose, Costa Rica (125307).

SCARBOROUGH, Mr. and Mrs. R. G., Evergreen, La.: (Through F. M. Setzler) 3 potsherds (legs of tripod vessels) from Aguan Valley, Spanish Honduras (127052).

SCHAAF, A. E., Cleveland, Ohio: A 53-inch Humber (Beeston) racing ordinary bicycle of 1886 (128831).

SCHAEFER, F. G., Philadelphia, Pa.: 1 fish (127025).

SCHALLER, Dr. W. T., Washington, D. C.: 25 specimens of kernite and 7 of ulexite from Kramer, Kern County, Calif. (129079). Collected for the Museum.

SCHALLERT, Dr. P. O., Winston-Salem, N. C.: 8 plants from North Carolina (127341).

SCHAUS, Dr. WILLIAM, Washington, D. C.: 570 Lepidoptera and 12 Coleoptera (125185, 125570). (See also under Frank Johnson.)

SCHEER, A. F., Washington, D. C.: 3 cetiothere jawbones from old Governors Run, now Kenwood Beach, Md. (126666).

SCHLAPPICH, S. J., and RALPH MCCUNE, Lake Worth, Fla.: Shell dipper and potsherds and 2 Indian skulls with some fragments of bone, found near Lake Worth (124579).

SCHMID, E. S., Washington, D. C.: 1 monkey and 1 parrot (126123, 126370).

SCHMITT, Dr. W. L., Washington, D. C. (See under Smithsonian Institution, National Museum.)

SCHNEIDER, RUDOLPH, Washington, D. C.: A tetrahedral kite section made by lender in 1903 for Alexander Graham Bell in connection with Dr. Bell's research in aeronautics, and an original letter from Dr. Bell to lender ordering parts for kites (128428). Loan.

SCHOEP, Prof. Dr. ALFRED. (See under University of Gand.)

SCHOFF, H. L., Hamlin, N. Y.: (Through Bureau of American Ethnology) 16 archeological specimens collected by donor near Pool Hammock, Sarasota County, Fla. (126603).

SCHOONMAKER, VIRGINIA L., New York, N. Y.: Japanese bronzes and carved ivory, and a bronze and marble clock (125831). Bequest.

SCHOR, I, M., University, Va.: 13 snails from Virginia (129347).

SCHUCHERT, Prof. CHARLES, New Haven, Conn.: 132 Permian brachiopods from Salt Range of India (124973). Exchange.

SCHUH, Dr. R. E., Weaverville, N. C.: 17 microscope mounts and 28 algae (127610, 129696).

SCHULTZ, Dr. A. H., Baltimore, Md.: 4 mammal skulls and 1 skeleton (126311); 1 howling monkey skin (126312); 1 monkey skin from Efulen, Cameroons (126870); 3 seal skulls (127330, exchange).

SCHULTZ, Dr. L. P., Seattle, Wash.: 1 fish (125944).

SCHWARTZ, H. A., Cleveland, Ohio: 1 chemical specimen for Loeb collection of chemical types (126535).

SCHWARZBACH, Dr. M., Breslau, Germany: 10 casts and 5 specimens of Cambrian fossils from eastern Germany and Poland (128192). Exchange.

SCOTT, Dr. GAYLE, Fort Worth, Tex.: 23 American Cretaceous corals (types of 17 species) (125127); 1 fossil fish skull from Glen Rose formation of Texas (128929).

SCOVILLE MANUFACTURING Co., Waterbury, Conn.: 6 specimens of scrip issued by company in 1933 (126744).

SEBASTIAN LATHE Co., Cincinnati, Ohio: (Through E. E. Stokes) A ⅓ size, fully operating model of a geared head motor-drive machine lathe (125296).

SCRIPPS INSTITUTION OF OCEANOGRAPHY, La Jolla, Calif.: (Through Dr. T. W. Vaughan) Collection of Foraminifera from bottom samples from Tongue of the Ocean, Bahamas (110789); (through P. S. Barnhart) 3 "scabbard" fishes (127477).

SEIFRIZ, Dr. WILLIAM, Philadelphia, Pa.: 1 plant from Colombia (126451).

SELBY SHOE Co., Portsmouth, Ohio: 5 specimens of scrip issued by company in 1933 (127208).

SELMA, ALA., CITY OF: 1 specimen of scrip issued by city in 1933 (126763).

SETZLER, F. M. (See under Mr. and Mrs. R. G. Scarborough and V. J. Smith.)

SHADLE, E. J., Washington, D. C.: Specimen of coral, specimens of sawfish blades, and echinoderms from Tarpon Springs, Fla. (129060).

SHANNON, Mrs. CAROLINE WOLFLEY. (See under Mrs. Eleanor Wolfley Bisell.)

SHANNON, T. J. (See under Mrs. Eleanor Wolfley Bisell.)

SHARP, A. J. (See under University of Tennessee.)

SHARP & DOHME, INC., Philadelphia, Pa.: A panel of 13 mounted charts and 54 specimens illustrating the cause, diagnosis, and treatment of hay fever (125954); an exhibit illustrating manufacture and use of antitoxins and serums (127055); 2 collections of drawings, pictures, and specimens illustrating manufacture and use of vaccines, bacterins, and serobacterins (129285).

SHAVER, J. M., Nashville, Tenn.: Specimen of fern from Tennessee (126857).

SHEAR, Dr. C. L. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

SHEEHAN, W. F., Washington, D. C.: A model of a Fokker *F–10–A* transport airplane, 1929 (126241). Loan.

SHELFORD, Dr. V. E., Urbana, Ill.: 6 amphipods from Churchill, Hudson Bay (125617).

SHERMAN, A. A., New York, N. Y.: Autographed photograph of Hugo de Vries, Dutch botanist and geneticist (129911).

SHIPMAN, F., Bowie, Md.: Tinker's firepot (129415).

SHIRCK, F. H. (See under U. S. Department of Agriculture, Bureau of Entomology.)

SHOEMAKER, C. R., Washington, D. C.: 12 isopods from spring near Kensington, Md. (126313).

SHOUP, Dr. JESSE, Washington, D. C.: 1 whistling swan (127579).

SHREVE, Dr. FORREST, Tucson, Ariz.: 1 plant from Mexico (126910). Exchange.

SIKORSKY AVIATION CORPORATION, Bridgeport, Conn.: Group of 6 typical airplane structure sections employed by donors in their *S–39*, *S–41*, and *S–42* amphibians (129983).

SIMMONS, PEREZ, Fresno, Calif.: 7 teeth of an extinct marine mammal from Fresno County (129557).

SIMON, HOWARD, Little Rock, Ark.: 52 etchings and wood-block prints for exhibition March 26 to April 22, 1934 (128820). Loan.

SITLER, IDA. (See under Hollins College.)

SKEELS, H. C., Washington, D. C.: 1 cultivated plant (125692).

SKINNER, WILLIAM, & SONS, New York, N. Y.: 2 specimens of silk dress goods, 1 of shoe satin, and a pair of opera pumps (127991).

SKUTCH, Dr. A. F., Turrialba, Costa Rica: 712 plants from Guatemala (126303, 127615, 127660).

SLOAN, A. K., Washington, D. C.: Earthenware vessel found in 1922 on ranch bordering Packuca River, Honduras (129015).

SMITH, ELVA MAY, and Rev. W. H. FLUCK, Utica, N. Y: 1 mollusk from Nicaragua (128845).

SMITH, Prof. FRANK, Hillsdale, Mich.: Comprehensive collection of American and foreign earthworms, accompanied by microscope slides of histologic sections and detailed catalogs of the materials (125921).

SMITH, Mrs. G. R., Washington, D. C.: 1 hooded warbler (125181).

SMITH, HOBART, Lawrence, Kans. (See under Dr. E. H. Taylor.)

SMITH, Dr. HUGH M., Bangkok, Siam: 9 mollusks from Siam (122125); 3 insects (122665); natural-history material comprising 2,387 insects, 400 land and fresh-water shells, 5 mosses, 1 turtle and eggs, 44 mammals, 446 bird skins, 2 bird skeletons, 2 nests, 7 eggs, 1 specimen of resin, 4 archeological objects, 1 parasitic worm, and 1 isopod, all from Siam (124966); 195 fishes from Siam (128843).

SMITH, Dr. J. L. B. (See under Albany Museum.)

SMITH, L. C., Glade Hill, Va.: 1 young pilot snake from Glade Hill (126446).

SMITH, Dr. MALCOLM, London, England: 1 lizard from Langbian Plateau, south Annam (127370).

SMITH, R. C., Washington, D. C.: 1 "pecky" cypress board and 1 small slab of beefwood (128420). Exchange.

SMITH, V. J., Alpine, Tex.: (Through F. M. Setzler) Child's skeleton excavated from Hord Cave, Brewster County, Tex. (129148).

SMITHSONIAN INSTITUTION: 1 etching, "Pastoral", by Donald Shaw MacLaughlan, the associate member's print of the Society of American Etchers for 1933 (126314); 11 photographs of type specimens of plants (128942); an old belt-driven jigsaw made by Seneca Falls (N. Y.) Manufacturing Co. (129982).

Smithsonian African Expedition, 1919: 330 plants collected in Africa by Dr. H. L. Shantz (126868). Deposit.

Bureau of American Ethnology: Skeletal material from a burial site near Sarasota, Fla. (123372); archeological material from sites in Louisiana, Georgia, and Mississippi collected by W. M. Walker in 1932 (125140); archeological and human remains, some bird bones, and 4 incomplete dog skeletons collected in Arizona by Dr. F. H. H. Roberts, Jr., in 1931 and 1932 (125392); ethnological material from the Sumu and Miskito Indians; 1 manatee skull, a strip of manatee skin, and 1 rodent skull collected by Dr. W. D. Strong in Honduras (126434); ethnological specimens from Australia and Papua presented to the bureau by Joel H. DuBose (128084); (through Dr. W. D. Strong) 1 mountain plover (129912); archeological and skeletal material collected by F. M. Setzler in 1933 from mounds and village sites at Marksville Works, near Marksville, La. (129974). (See also under H. S. Schoff.)

National Museum, collected by members of staff: Bartsch, Dr. Paul: 274 birds and a collection of mollusks from the Tortugas (125794). Benn, J. H.: 5 specimens of carbonized wood from near Takoma Park, Md. (128077). Foshag, Dr. W. F., Dr. G. A. Cooper, and J. H. Benn: 3 exhibition slabs of Miocene invertebrate fossils from Calvert County, Md. (126341). Foshag, Dr. W. F.: Collection of rocks and associated minerals from Goose Creek quarry, near Leesburg, Va. (129328). Gazin, Dr. C. L., and Dr. Remington Kellogg: Collection of fossil cetacean specimens from Chesapeake Bay region (125769). Killip, E. P.: 103 plants from Virginia (125306); 68 plants from United States (126820). Leonard, E. C.: 894 plants from Virginia, North Carolina, Tennessee, and West Virginia (126764). Lewton, Dr. F. L.: 2 old lock-stitch sewing machines from near Hagerstown, Md. (127022). Schmitt, Dr. W. L.: Collection of marine invertebrates from Chesapeake Bay—1 ascidian, 6 sponges, 2 hippas, 8 crabs, 100 shrimps, 300 mysids, 25 isopods, 250 amphipods, and mollusks (126525); a large collection of

Crustacea, mammals, birds (alcoholic), roundfishes, and tortoises, fossils, and rock specimens collected for the Museum while guest of Capt. G. Allan Hancock on cruise of yacht *Velero III* to Galapagos Islands, 1934 (128938).

National Museum, obtained by purchase: 281 specimens of woods collected in Sumatra in 1932 by B. A. Krukoff (124400); 1,668 natural-history specimens—45 reptiles, 18 mammals, 5 birds and 2 nests, 1,789 insects, and 2 mollusks from Indo-China (124459); a model, $\frac{1}{16}$ size, of the Wright brothers' airplane of 1903 (125288); exhibition specimen of Miocene coral from Rumford, Va. (125839); collection of water turtles from South Carolina (126037); 1 lizard from Spain (126242); 5 bird skins from St. Lawrence Island, Alaska (126433); 2 fossil birds (128625); 2 casts (internal and external) of a skull (129978); 15 skeletons of Chilean birds (126371).

National Museum, made in Museum laboratories: 5 plaster replicas of a stone lamp from Alaska owned by Agricultural College and School of Mines, College, Alaska (125399); 2 casts of a sandstone human figurine found in an Indian village site near Mulberry, Lincoln County, Tenn. (126160); model, $\frac{1}{16}$ size, of an Henri Farman airplane of 1909 (127995); 55 casts of Wisconsin Cambrian invertebrate types (127472).

National Zoological Park: 193 birds and 9 eggs (125141, 125742, 127325, 128083, 129567); 89 mammals (125477, 126126, 126348, 127329, 127621, 127768, 128623, 128795); 1 electric eel (129771); 12 fishes (125323); 70 reptiles and amphibians (129975).

SNEED, Mrs. J. W. (See under Priscilla W. Sneed.)

SNEED, PRISCILLA W., Gulfport, Miss.: (Through Mrs. J. W. Sneed) Velvet dress worn by Mrs. Jane Irwin Findlay, wife of Gen. James Findlay and one of the mistresses of the White House, during the administration of President William Henry Harrison, 1841 (126475).

SNOWDEN, Mrs. THOMAS, and ANNA C. KOERPER, Washington, D. C.: Ethnological specimens from the Rosebud Indian Agency collected about 60 years ago by the late Col. E. A. Koerper, United States Army (125625).

SNYDER, Dr. T. E., Washington, D. C. (See under U. S. Department of the Interior, National Park Service.)

SOCIETY OF AUTOMOTIVE ENGINEERS, INC., New York, N. Y.: Bronze copies of the Wright brothers' medal and the Manly Memorial medal, awarded annually to donors for meritorious contributions to aeronautic engineering (125449).

SOKOBIN, SAMUEL, Saltillo, Mexico: 4 specimens of azurite from Mexico (128602).

SOUTH BEND, IND., FIRST BANK & TRUST CO.: 2 specimens of scrip issued by bank in 1932 (126867).

SOUTH DAKOTA STATE COLLEGE, Brookings, S. Dak.: 2 vials of insects, the "tomato psyllid" (129175).

SOUTHWESTERN UNIVERSITY, Georgetown, Tex.: (Through Prof. R. W. Tinsley) 1 sun spider from Texas (129564).

SPAARGAREN, GEORGE, Babylon, N. Y.: Model, $\frac{1}{16}$ size, of the Fairchild "22" sport airplane (128659).

SPAULDING, T. M., Washington, D. C.: Bookplate of the Stephen Spaulding collection in the library of the University of Michigan, designed and etched by W. H. W. Bicknell (127354).

SPENCE, Dr. H. S. (See under Canadian Government, Department of Mines.)

SPENCER, G. S., Palmyra, N. J.: 2 specimens of scrip issued by borough of Palmyra, Burlington County, N. J., in 1933 (127450).

SPOFFARD, G. E., Tisbury, Mass.: (Through Dr. E. W. Nelson) 2 quail (127077).

SPRINGER, STEWART, Biloxi, Miss. (See under Caribbean Biological Laboratories.)

SPRINGFIELD REPUBLICAN, Springfield, Mass.: 1 specimen of scrip issued by donor in 1933 (126746).

STABLER, S. S., Washington, D. C.: A Waldron cradle blade and snead and a "Coolie can" for separating cream from milk (129789).

STACY, J. K., Wynne, Ark.: Prehistoric earthenware bottle from a mound near Parkin, Cross County, Ark. (126523).

STANFORD UNIVERSITY, Stanford University, Calif.: 14 Tertiary fossils from California and 8 from Oregon (125124); 46 plants from Mexico (127886, exchange); 394 plants chiefly from Lower California (127890, exchange); 219 plants from Southwestern United States and northern Mexico (129768, exchange).

STATE'S INSTITUTE OF HYDROLOGY, Leningrad, U. S. S. R.: 3 crinoids from Okhotsk and Japan Seas (125822).

STAUFFER, C. R. (See under University of Minnesota.)

STEBBINS, G. L., Jr., Hamilton, N. Y.: 5 plants from Southeastern United States (128943).

STELLMAN, A. M., Montvale, N. J.: 1 bird (128180).

STENZEL, Prof. H. B., College Station, Tex.: 10 fossil gastropods from Texas (126342).

STEPHENSEN, Dr. K. (See under Zoologisk Museum.)

STEPHENSON, Dr. N. W., Silver Spring, Md.: 1 yellow-naped parrot (125965).

STEPHENSON, Mrs. J. P., Dallas, Tex.: 5 plants from Texas (124566).

STEVENSON, J. A. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

STEWART HARTSHORN Co., New York, N. Y.: Frame-case of square and streamline tie rods, used for guying aircraft (123621).

STEWART, Dr. F. E., Englewood, N. J.: 9 historical papers concerning the Blair drug stores founded in Philadelphia in 1829 (125749); 1 copy of the 1908 Era Album of pictures of Philadelphia physicians, pharmacists, drug stores, manufacturing plants, and colleges (126346).

STEWART, Dr. T. D. (See under Judge W. J. Graham.)

STILL RESEARCH INSTITUTE, A. T., Chicago, Ill.: (Through Dr. R. D. Moore) 3 books, "Cells of the Body", "Changes in Body Fluids", and "Growth Changes", for osteopathic exhibit (126894).

STODDARD, H. L., Thomasville, Ga.: (Through Dr. E. W. Nelson) 25 quail (127756).

STOKES, E. E. (See under Sebastian Lathe Co.)

STONE, Dr. ALAN. (See under J. M. Brennan and Cornell University.)

STROBEL, FREDERICK, JR., Washington, D. C.: A "Simmons" airplane propeller of 1913 (125256).

STRONG, P. G., Hinckley, Calif.: 12 specimens of howlite from California (129910). Exchange.

STRONG, Dr. W. D. (See under Smithsonian Institution, Bureau of American Ethnology.)

STUARDO, O, Prof. CARLOS, Santiago, Chile: 18 flies (9 species, one new to the collection) (128456). Exchange.

STURGEON, SAM, Challenge, Calif.: 1 insect from California (124650).

SURPASS LEATHER Co., Philadelphia, Pa.: 1 whole skin of black glazed kangaroo leather and photograph of a kangaroo (128047).

SUTTON, Dr. G. M., Ithaca, N. Y.: 1 Nice's wren (128815).

SVERIGES GEOLOGISKA UNDERSOKNING, Stockholm, Sweden (through A. H. Westergard): 11 samples of rock from Cambrian alum shale of Sweden (125575).

SWAN-MYERS Co., Indianapolis, Ind.: (Through E. B. Carter) 1 specimen of chemical for Loeb collection of chemical types (90805).

SWANTON, Dr. J. R., Washington, D. C.: Perforated horn implement picked up on beach on east coast of Westport Island, Maine (129788). (See also under M. K. Weil.)

SWARTZ, Dr. F. M., State College, Pa.: 90 Silurian ostracods (including types) from Pennsylvania (129986).

SWEADNER, W. R., Pittsburgh, Pa.: 35 Lepidoptera, 10 of which represent 6 species, and 25 other noctuids (126664); 13 moths (126629). Exchange.

SWETT, W. C., Hollywood, Calif.: 1 crab taken between San Pedro and Catalina (126441).

SWINGLE, Dr. W. T., Washington, D. C.: 73 algae from Western United States (128376).

SYMONS, Mrs. HELEN D., Washington, D. C.: 4 models of cargo boats and equipment and a model of an ox cart, from the Royal Siamese Commission, Louisiana Purchase Exposition (125595). Deposit.

SZAMATOLSKI, Dr. M., Delawanna, N. J.: 1 cultivated plant (126243).

TAFT, H. H., El Paso, Tex.: 1 specimen of tellurium from Silver City, N. Mex. (128028).

TAIHOKU IMPERIAL UNIVERSITY, Taihoku, Taiwan, Japan: (Through Prof. Tyozaburo Tanaka) 200 plants from Taiwan (126635). Exchange.

TANAKA, Prof. TYOZABURO. (See under Taihoku Imperial University.)

TANGER, Mrs. C. Y., Lancaster, Pa.: 1 fern from Pennsylvania (125966).

TARTU UNIVERSITY BOTANICAL MUSEUM, Tartu, Estonia: 50 plants from Estonia (128829). Exchange.

TAYLOR, B. F., Columbia, S. C.: 13 turtles from Columbia (129299).

TAYLOR, Dr. E. H., and HOBART SMITH, Lawrence, Kans.: Paratypes of 3 new species of skinks from Mexico (125990).

TAYLOR, RICHARD, Bethesda, Md.: Exhibition specimen of Miocene echinoid from Calvert Cliffs, Md. (127107).

TEISSEIRE, Prof. A., Colonia, Uruguay: 79 specimens, 33 lots, of land, freshwater, and marine shells and 6 fossil shells from Uruguay (113822).

TENINO, WASH., CHAMBER OF COMMERCE, INC.: 6 specimens of scrip issued by donors in 1931 and 1933 (126917).

TENNESSEE, UNIVERSITY OF, Knoxville, Tenn.: 6 plants from Tennessee (125305, 125780, 127581). Exchange.

TEXAS CO., New York, N. Y.: Model of the Northrup low-winged monoplane *Sky Chief* operated by Texas Co. and flown by Lt. Commander Frank Hawks (125986).

THOMAS, C. A., Kennett Square, Pa.: 7 beetles (129909). Exchange.

THOMAS, H. D., Laramie, Wyo.: Collection of Cretaceous Bryozoa from Wyoming (128619).

THOMPASON, Mrs. F. M., Jamestown, N. Y.: A velvet and ribbon bonnet worn during latter part of nineteenth century (127240).

THOMPSON, J. W., Seattle, Wash.: 487 plants from Washington and a package of clover seed (125801, 127105, 128847, 129494). Exchange.

THOMSON, R. C., McLean, Va.: 1 bald eagle (126008).

THOREAU, Prof. Dr. J., Louvain, Belgium: 4 specimens of radioactive minerals from Belgium (127633). Exchange.

THORNTON, B. J., Fort Collins, Colo.: 3 plants from Colorado (126678).

THORNTON, Hon. C. W., Nome, Alaska: 20 plants from Alaska (126829).

TIDESTROM, IVAR. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

TIMBERLAKE, P. H., Riverside, Calif.: 37 beetles (123520).

TODAHL, Mrs. MARGERY A., New York, N. Y.: 3 World War paintings by John O. Todahl (125475). Loan.

TOLEDO ZOOLOGICAL SOCIETY, Toledo, Ohio: 2 fox-snakes from Lucas County, Ohio (125958).

TOMKINS, I. R., Savannah, Ga.: 1 turtle, 3 shrimps, and tooth root of an extinct sperm whale from Georgia (125631, 126625, 128247).

TORRENS, Rev. C., Bahia, Brazil: 1 plant (127376).

TOWNES, C. H., Greenville, S. C.: 13 fishes from South Carolina (125609).

TOWNS, M. C., New York, N. Y.: 3 rough emerald crystals from Muso, Colombia (129330).

TOWNSEND, ROBERT, Damariscotta, Maine: Meerschaum pipe bowl with cherrywood stem, silver-case English watch of about 1760; Belgian revolver of 20th century, and 3 pieces of American paper currency of late 18th century (126238).

TRAIN, PERCY, Denio, Oreg.: 130 western plants (125767, 126316, 126552).

TRAUTMAN, M. B., Columbus, Ohio: (Through Dr. E. W. Nelson) 15 quail (127364, 127635).

TRAXLER, R. N., and F. E. E. GERMANN, Boulder, Colo.: 2 specimens of chemicals for Loeb collection of chemical types (126544).

TREASURY DEPARTMENT, U. S.:

Bureau of the Mint: 2 bronze copies of the Lindbergh medal awarded by Congress (126195); bronze medal commemorating the first year of the French Republic, 1792 (126322). (See also under Oregon Trail Memorial Association.)

Bureau of the Public Health Service: 1 fly from Montana (126888); 2 red-fox skeletons and 4 muskrat skulls from Kokadjo, Maine (128848); (through Dr. M. E. Berkowitz) 2 plants from Key West, Fla. (129190); 2 lizards from Orleans, Calif. (124651); 18 flies (9 species) from Montana (129004).

TREECE, Capt. J. D., Morrilton, Ark.: 12 fossil seeds from Arkansas (127228).

TRELEASE, Dr. WILLIAM, Urbana, Ill.: 1 plant (127349). Exchange.

TROTTER, Mrs. W. D., Dallas, Tex.: Specimen and water-color sketch of a plant from Texas (125150).

TUBIZE CHATILLON CORPORATION, New York, N. Y.: 28 specimens in a series showing materials used and steps in manufacture of nitrocellulose yarn, including finished yarn and sample of knit goods (129064).

TUCKER, G. W., Sarasota, Fla.: 1 starfish with an ingested sand dollar, or keyhole urchin (128936).

TURNER, F. E., Berkeley, Calif.: 250 brachiopods from Ordovician, Devonian, and Carboniferous formations of the Midcontinent region of the United States (127612).

ULKE, Dr. TITUS, Washington, D. C.: (Through Dr. S. F. Blake) 5 plants from Washington, D. C., and vicinity (125183); 2 specimens of beryl and apatite from Kensington mica mine, Montgomery County, Md. (128034).

UNEMPLOYED RELIEF CLUB, INC., Waterloo, Iowa: 4 specimens of scrip issued by club in 1933 (126670).

UNEMPLOYMENT RELIEF COMMISSION, Edmonton, Alberta: 3 specimens of scrip issued by commission in 1933 (127451).

UNION TRUST CO. (See under Anita and Edith Long.)

URIARTE, Dr. LEOPOLDO. (See under Instituto Bacteriologico.)

URUSVATI HIMALAYAN RESEARCH INSTITUTE OF THE ROERICH MUSEUM, New York, N. Y.: 14 bird skins from India (127862).

USINGER, R. L., Oakland, Calif.: 2 insects (paratypes of a new species of leafhopper) from Mount Diablo, Contra Costa County, Calif., collected by donor (128027).

UTAH STATE AGRICULTURAL COLLEGE, Logan, Utah: 108 beetles and 1 vial of fresh-water Bryozoa from Utah (117327, 127230, 127442, 128063); 53 insects—hymenopterous hosts and parasites (124287); 434 insects and 3 galls from Utah (124528, 125161, 125319, 125578, 125804, 126363, 126455, 127070, 127470, 127880, 128091, 128249, 129163).

UTLEY, H. M., Palomar Mountain, Calif.: 1 plant from California (125116).

VALENTINE, J. M., Chapel Hill, N. C.: 4 crayfishes and 12 amphipods from Higginbothams Cave, Frankford, W. Va. (113270); 25 beetles (2 from Java and 23 from Ceylon) (126229).

VALERIO, Prof. MANUEL, San Jose, Costa Rica: Collection of marine invertebrates—5 shrimps, 8 isopods, 1 stomatopod, 6 crabs, 2 hermit crabs, 4 marine annelids, 16 barnacles, and 12 land, fresh-water, and marine shells (123569).

VALLE, C. B., Claremont, Calif.: 10 specimens of gold and silver ore from the Sierra Madres (126368).

VANADIUM CORPORATION OF AMERICA, Bridgeville, Pa.: 1 specimen of melanovanadinite and 1 of oxidized vanadium sulphide ore from Peru (126680). Exchange.

VAN DER SCHALIE, HENRY, Ann Arbor, Mich.: 8 pearly fresh-water shells (2 species) from Connecticut River, Northampton, Mass. (124931).

VAN DER VECHT, Dr. J., The Hague, Netherlands: 16 Hymenoptera (10 species) (127943). Exchange.

VAN DUZEE, M. C., Buffalo, N. Y.: 1 fly from Quebec (128844).

VAN ESELTINE, G. P., Geneva, N. Y.: 1 moss from Argentina (124946).

VAN HYNING, Dr. T. (See under University of Florida, State Museum.)

VAN VLECK, PEIRCE, Washington, D. C.: An English flintlock pistol, a Levantine pistol, 2 knives, and a powder measure (125128).

VARNI, STEPHEN, New York, N. Y.: 1 set, "The Evolution of Varnistar", comprising 5 pieces of crystal from the rough material to the cut and polished gem (126665).

VAUGHAN, Dr. T. W. (See under Scripps Institution of Oceanography.)

VAUPEL, ERNEST, Cincinnati, Ohio: 4 Silurian corals from Ohio (127590).

VENDITTI, A. M., Washington, D. C.: 3 shutters, 1 camera (Southworth & Wing) with 9 lenses, 1 camera (E. & H. T. Anthony) with 4 lenses, 1 box camera (Eastman) with no lens (128819). Loan.

VERMONT, UNIVERSITY OF, Burlington, Vt.: 632 plants collected in Mexico by C. G. Pringle (125444).

VERNER, DUANE, Washburn, Mo.: An abnormal calf skull without lower jaw (124636).

VESEY-FITZGERALD, D. T., Trinidad, British West Indies: 17 bird skins (125792).

VICKERS, Mrs. SARAH, and CLAY COUNTY HISTORICAL SOCIETY, Brazil, Ind.: Quilting frame of yellow poplar used in Clay County, Ind., for over 100 years (128194).

VICTORIAS MILLING CO., Victorias, Philippine Islands: 26 miscellaneous insects (24 adults and 2 pupae), all from Occidental Negros (126364).

VILLENEUVE, Dr. J., Rambouillet, France: 7 flies (4 species, 3 new to the Museum) (129288).

VINES, R. A., Houston, Tex.: 38 plants from Mexico (126319).

VINSON, J., Reduit, Mauritius: 70 miscellaneous insects from Island of Mauritius (116003). Exchange.

VOLUNTEER FIREMAN'S ASSOCIATION, Terre Haute, Ind. (See under C. T. Nehf.)

VONBERNEWITZ, W., Washington, D. C.: 2 diamond crystals from the Gold Coast (124933).

VONSEN, M., Petaluma, Calif.: 2 specimens of pumpellyite from California (127629, exchange); 2 of pyromorphite from Darwin, Inyo County, Calif. (128030); 1 each of pumpellyite and garnet from California and sepiolite and colemanite from Nevada (129969).

VOSBURGH, W. C., Newport, R. I.: 1 chemical specimen for Loeb collection of chemical types (126538).

WACHOVIA HISTORICAL SOCIETY, Winston-Salem, N. C.: Adult male Indian skeleton from about 20 miles west of Winston-Salem (124599).

WAILES, G. H., Vancouver, British Columbia: 108 amphipods from Bermuda (124956, 127661); 1 vial of Protozoa (129337).

WALCOTT, Mrs. C. D., Washington, D. C.: 1 broom with handle and brush whittled from one piece of hickory wood, made about 1903 at

Gatlinburg, Tenn. (126876); 14 plants (127652).

WALKER, E. H., Washington, D. C.: 18 plant photographs (127368).

WALKER, R. S., Chattanooga, Tenn.: 2 spiders (125772).

WALLACE, F. G., St. Paul, Minn.: 6 slides of a trematode type and paratype from the mink (124979).

WALLIS, J. B., Winnipeg, Manitoba: 20 beetles (7 species, 4 of which are represented by 10 paratypes) (129565).

WAR, U. S. DEPARTMENT OF: *Office of the Chief of the Air Corps:* 11 airplane engines, 9 propellers, 1 target-glider, miscellaneous aircraft, and Curtiss *OX–5* engine parts (125184, 128734).

WARDLE, Prof. R. A., Winnipeg, Manitoba: 20 paratypes of trematodes (129613).

WARD'S NATURAL SCIENCE ESTABLISHMENT, INC., Rochester, N. Y.: (Through A. B. Klots) 284 exotic Coleoptera (125462).

WARMBATH, J. S., Washington, D. C.: 22 birds from Arctic America (122571). Exchange.

WARSAW, UNIVERSITY OF, Warsaw, Poland: (Through Dr. R. Kozlowski) 3 brachiopods from Poland (127360). Exchange.

WARTHIN, Prof. A. S., Jr., Poughkeepsie, N. Y.: Paratypes of 13 species of Devonian and Pennsylvanian Ostracoda and Bryozoa (128050).

WASHBURN, CADWALLADER, Lakewood, N. J.: (Through E. H. Furman) 20 drypoints and etchings by Mr. Washburn (127759). Loan.

WASHINGTON, Mrs. AUGUSTA K., Westport, Conn.: 1 oil portrait of Mary Ball Washington and 1 oil painting showing General Washington reviewing troops (126270). Loan.

WASHINGTON, Dr. HENRY S., Washington, D. C.: The Henry S. Washington collection of rocks (about 2,500 specimens, including types and analyzed specimens) (125005).

WASHINGTON PHOTOGRAPHIC SOCIETY, Washington, D. C.: 52 pictorial prints for exhibition during February 1934 (128072). Loan.

WATANABE, Dr. I. (See under Osaka Imperial University.)

WATERMAN CO., L. E., New York, N. Y.: 20 specimens showing stages in manufacture of ink (127989).

WATKINS, W. N., Washington, D. C.: 1 wood specimen each of California privet and hackberry (129924).

WATSON, WALTER, Jr., Whitewater, Wis.: 144 invertebrate fossils from Chuqui, Chile (125569).

WATT, L. A., St. Louis, Mo.: 2 specimens of chemicals for Loeb collection of chemical types (126531).

WAY, Dr. S. C., San Francisco, Calif.: Native shell beads and pendants and European trade beads from 4 Indian camp sites in California; a human skull from a mound 14 miles south of Marysville, Calif. (122821). Exchange.

WEAVER, GEORGE, Washington, D. C.: Model, $\frac{1}{16}$ size, of the Berliner-Joyce Navy Fighter *X–F–J–2*, 1931 (129846).

WEBB, IVY, Colorado, Tex.: Lower jaw of fossil bison (127120).

WEBB, T. W., Lake Placid, Fla.: 1 beetle pupa from Lake Placid (128225).

WEBB, W. F., Rochester, N. Y.: Type and 2 specimens of mollusk from Lubang Island and type and 10 specimens of mollusk from Cabras Island (128835).

WEBBER, F. S., Holyoke, Mass.: 8 shells from Lubang Island (128834).

WEEKS, Mrs. ELLEN H., Everglades City, Fla.: (Through E. F. Coe) 1 basket-star (127066).

WEEMS, Dr. M. A., East Columbia, Tex.: 1 fossil garfish (124968).

WEHR, E. E., Washington, D. C.: About 25 hydroids, 20 sagittae, 10 marine annelids, 25 shrimps, 50 crab larvae, 7 townet samples; mollusks (129203).

WEIL, M. K., Montgomery, Ala.: (Through Dr. J. R. Swanton) Potsherds, pipe fragments, etc., from Indian village sites near Montgomery (125258).

WEISZ, ROBERT, Washington, D. C.: 2 fossils (1 crinoid from Oriskany rocks of West Virginia and 1 coiled cephalopod from the Mississippian at Bedford, Ind.) (125689).

WELDON, MARIE L., New York, N. Y.: Badges, decorations, ribbons, and collar ornaments owned by the Danish explorer Fritz Holm (60 specimens in all) (123139). Bequest.

WELLCOME, Sir HENRY S., London, England: 4 links of the chain stretched across Hudson River at West Point in 1778 to prevent the British fleet from ascending the river beyond that point (127755).

WELLS, J. G. (See under Australian Museum.)

WELLS, Dr. J. W., Homer, N. Y.: Types of 18 species (28 specimens) of American Cretaceous corals (124990).

WESSON, LAURENCE, Nashville, Tenn.: 37 ants (122261, 126134).

WEST COAST CURIO CO., Oroville, Calif.: 1 salamander from California (129044). Exchange.

WEST, Prof. ERDMAN. (See under University of Florida.)

WEST, E. S., St. Louis, Mo.: 1 chemical specimen for Loeb collection of chemical types (126537).

WESTERGARD, A. H. (See under Sveriges Geologiska Undersokning.)

WEST PENN POWER CO., Connellsville, Pa.: (Through D. K. McIlvaine) 6 early electric meters, including a Westinghouse plunger-type ammeter, a Shellenberger ampere-hour meter, 3 Thomson watt-hour meters, and a Fort Wayne polyphase watt-hour meter (127444).

WETMORE, Dr. ALEXANDER, Washington, D. C.: 55 birds (124942, 125156, 126357, 126638, 127480, 128253, 128404): 1 cluster of ascidians found in a windrow on beach at Point Lookout, Md. (126879).

WHARTON, Mrs. E. B., Washington, D. C.: 1 mole from Cherrydale, Va. (129331).

WHERRY, Dr. E. T., Swarthmore, Pa.: About 75 amphipods from West Virginia (125494, 126821); 40 plants, including 1 cultivated specimen, chiefly from Eastern United States (126640, 126682, 126819, 127095); 3 specimens of thorite in serpentine from Easton, Pa. (129167).

WHITCOMB, Dr. LAWRENCE, Bethlehem, Pa.: (Through Dr. A. F. Foerste) Type specimen of a cephalopod (126148).

WHITE, T. B., Philadelphia, Pa.: 44 lithographs for exhibition November 27, 1933, to January 2, 1934 (127243). Loan.

WHITE Co., F. H., Philadelphia, Pa.: 1 woman's fitted overnight bag made from sealskin leather (128170).

WHITEHEAD, JACK, Kingman, Ariz.: 2 plants from Arizona (125453).

WHITE HOUSE, THE, Washington, D. C. (See under Mrs. Antonia M. Grabo and Mrs. Eliza H. Irvine.)

WHITNALL, Prof. H. O. (See under Colgate University.)

WHITTALL ASSOCIATES, LTD., M. J. Worcester, Mass.: 5 photographs showing manufacture of Wilton rugs (127351).

WICHMAN, Dr. F. W., Tenino, Wash.: 3 specimens of wooden scrip issued by Tenino Chamber of Commerce in 1932 (126913).

WICKHAM, Mrs. H. F., Iowa City, Iowa: About 69,000 insects, comprising about 51,000 named beetles (including 50 species represented by types) and 18,000 miscellaneous specimens in other orders; about 3,200 fossil insects and plants from Florissant, Colo. (127677); 1,571 specimens (237 lots) of land, freshwater, and marine shells mainly from North America (129310).

WIDRIG, R. B., St. Cloud, Fla.: 1 barnacle (124307).

WILES, W. W., Central Bridge, N. Y.: (Through M. F. Deming) 37 clay concretions from Schoharie Creek, near Central Bridge (125623).

WILFORD, E. B. (See under Pennsylvania Aircraft Syndicate.)

WILKINS, HANS, Reading, Pa.: 320 plants from New Mexico (126150, 126360, 126463, 126675, 126856). Exchange.

WILLIAMS, J. S., and Dr. G. A. COOPER, Washington, D. C.: 2,500 invertebrate fossils from Tully formation of New York and 100 Trenton fossils (125602, 126307).

WILLIAMS, Dr. S. R., Oxford, Ohio: 6 amphipods from a well at Shandon, Butler County, Ohio (129581).

WILLIAMSON, Mrs. D. R., Globe, Ariz.: 1 plant from Arizona (125136).

WILLIS, Mrs. A. C., Washington, D. C.: 1 insect taken on head of lettuce (127619).

WILLOUGHBY, M. FRANCES. (See under R. J. Martin.)

WINFORD, ORION. (See under Brown & Bigelow.)

WINSLOW-BAKER-MEYERING CORPORATION, Detroit, Mich.: An early automatic refrigerator unit made by Edmund J. Copeland, completed in January 1918 (126271).

WINTER, Mrs. ETTA F., Washington, D. C.: Collection of Philippine and miscellaneous ethnological objects (126010).

WISCONSIN STATE CONSERVATION DEPARTMENT, Madison, Wis.: (Through Dr. E. W. Nelson) 10 quail (129050).

WISCONSIN, UNIVERSITY OF, Madison, Wis.: 1 plant from Wisconsin (128251). Exchange.

WOLFE, Capt. L. R., Chicago, Ill.: 86 eggs (128370). Exchange.

WOOD, W. M. (See under Grand Junction Chamber of Commerce.)

WOODCUT SOCIETY, New York, N. Y.: 111 woodcut prints in 109 mats and 1 portfolio with 4 prints (129307). Loan.

WOODFORD, Prof. A. O., Claremont, Calif.: 1 lot of the mineral lucianite (129693).

WOODMAN, I. N., Chitina, Alaska: 5 stonefly larvae from Alaska (129460).

WOOLF, D. O., Washington, D. C.: A World War aviator's cape helmet (125724). Loan.

WRIGHT, Dr. and Mrs. A. H., Ithaca, N. Y.: 2 soft-shelled turtles from Orange, Tex. (129691).

WRIGHT, Dr. B. H., Penn Yan, N. Y.: 16 pearly fresh-water mussels (including 2 types) from Florida (125621, 125983); 2 specimens (type and paratype of a new pearly fresh-water mussel from Florida (128401).

WRIGHT, The Misses, Washington, D. C.: 1 Singer sewing machine on stand, purchased by George Wright in 1874 (127896).

WYOMING, UNIVERSITY OF, Laramie, Wyo.: (Through Prof. Nelson Nelson) 6 plants from Western United States (127226, exchange); (through Dr. S. H. Knight) small collection of Oligocene vertebrate fossils (127977).

YALE UNIVERSITY SCHOOL OF FORESTRY, New Haven, Conn.: 1 plant from Dominican Republic and (through Prof. S. J. Record) 83 plants mostly from South America (125295, 127986). Exchange.

YATES, Mrs. D. C., Roanoke, Va.: (Through Mrs. W. L. Ranson) Collection of buttons begun 75 years ago by the donor, then Bunnie Blondell, a child of 5 years, at Abingdon, Va. (129923).

YOUNG, F. W. (See under William Bacon.)

YUNCKER, Prof. T. G., Greencastle, Ind.: 16 plants from Hawaiian Islands (127222). Exchange.

ZEIMET, CARLO, Vienna, Va.: 2 queensnakes from Vienna (124951).

ZERBE, FARRAN. (See under Chase National Bank.)

ZETEK, Dr. JAMES, Balboa, Canal Zone: 2,125 land, fresh-water, and marine shells (392 lots) from Panama (128417).

ZIEGLER, P. F., Easton, Pa.: 1 chemical specimen for Loeb collection of chemical types (126533).

ZINGG, R. M., Chicago, Ill.: Beads from along Rio Fuerte in southern Chihuahua, Mexico (125598).

ZOELLER, LILLIAN, Solomons Island, Md.: 2 crabs from Chesapeake Bay (125761).

ZOOLOGISCHE ABTEILUNG, Naturhistorisches Museum, Wien, Austria: 6 flies (126296).

ZOOLOGICAL SURVEY OF INDIA, Calcutta, India: 38 recent crinoids (116740).

ZOOLOGISK MUSEUM, Copenhagen, Denmark: (Through Dr. Th. Mortensen) 221 unstalked crinoids (110203); (through Dr. K. Stephensen), 43 amphipods (115966, exchange).

ZOOLOGISK MUSEUM, Oslo, Norway: 5 lizards from Curaçao and the Galapagos Islands (114101).

ZOOLOGISKA INSTITUTIONEN, Lund, Sweden: 4 locusts from Sweden (122631). Exchange.

ZYBALA, EMIL, Torrington, Conn.: 1 plant from Connecticut (128579).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM DURING THE FISCAL YEAR 1933–34

REPORT

Report on the progress and condition of the United States National Museum for the year ended June 30, 1933: Part 2 of Report of the Secretary of the Smithsonian Institution for 1933.
8vo., pp. 69–187.

PROCEEDINGS

Proceedings of the United States National Museum. Volume 82.
8vo., arts. 1–30, xii+518 pp., 50 figs., 69 pls.

BULLETINS

No. 161, part 2. The foraminifera of the tropical Pacific collections of the *Albatross*, 1899–1900: Lagenidae to Alveolinellidae. By Joseph Augustine Cushman.
8vo., pp. 1–vii, 339–366.

No. 165. The bryozoan fauna of the Vincentown limesand. By Ferdinand Canu and Ray S. Bassler.
8vo., pp. i–v, 1–108, fig. 1, pls. 1–21.

PAPERS PUBLISHED IN SEPARATE FORM

FROM THE BULLETINS

From Volume 26 of the Contributions from the United States National Herbarium: Part 7, The Mexican and Central American species of *Viburnum*. By C. V. Morton.
8vo., pp. i–vii, 339–366.

FROM VOLUME 82 OF THE PROCEEDINGS

No. 2964. A new protozoan from the larva of the beetle *Osmoderma scabra*. By Clarke Courson Zeliff.
Art. 23, pp. 1–3, pls. 1, 2.

No. 2965. A new fresh-water sponge from South Carolina. By James T. Penney.
Art. 24, pp. 1–5, figs. 1–9.

No. 2966. Additional notes on the birds of Haiti and the Dominican Republic. By Alexander Wetmore and Frederick C. Lincoln.
Art. 25, pp. 1–68, pls. 1–6.

No. 2967. Review of the wasps of the subfamily Pseninae of North America (Hymenoptera: Aculeata). By J. R. Malloch.
Art. 26, pp. 1–60, pls. 1, 2.

No. 2968. New species of buprestid beetles from Mexico and Central America. By W. S. Fisher.
Art. 27, pp. 1–47.

No. 2969. Revision of the beetles of the genus *Disonycha* occurring in America north of Mexico. By Doris Holmes Blake.
Art. 28, pp. 1–66, pls. 1–8.

No. 2970. Three new chigger mites of the genus *Trombicula* from Panama, with a key to the known adults of *Trombicula* of the New World. By H. E. Ewing.
Art. 29, pp. 1–6, figs. 1–3.

No. 2971. New genera and species of parasitic mites of the superfamily Parasitoidea. By H. E. Ewing.
Art. 30, pp. 1–14, pls. 1–4.

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