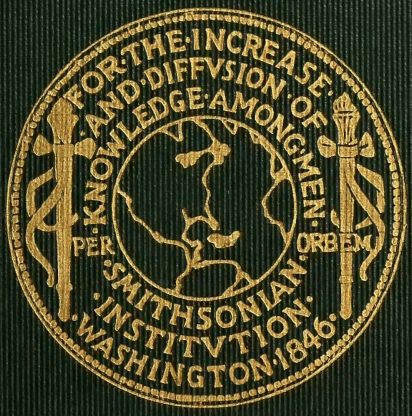

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SMITHSONIAN INSTITUTION

UNITED STATES NATIONAL MUSEUM

REPORT ON THE PROGRESS AND CONDITION OF THE UNITED STATES NATIONAL MUSEUM FOR THE YEAR ENDED JUNE 30, 1941

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1942

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United States National Museum,
Under Direction of the Smithsonian Institution,
Washington, D. C., October 15, 1941.

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, 1941.

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, 1941

By Alexander Wetmore

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

OPERATIONS FOR THE YEAR

APPROPRIATIONS

Funds available for the preservation of the collections of the United States National Museum for the fiscal year ended June 30, 1941, were provided by the appropriation "Preservation of Collections, Smithsonian Institution," in the Executive and Independent Offices Act approved April 18, 1940. This appropriation covers the salaries of the technical staff, the subprofessional service, the administrative, clerical, watch, labor, and char forces, as well as a smaller sum for miscellaneous expenditures. Funds for the maintenance and operation of the Museum buildings were provided by an allotment from the appropriation "General Expenses, Smithsonian Institution." The printing and binding activities of the Museum were provided for by an allotment from the appropriation "Printing and Binding, Smithsonian Institution." The appropriations and allotments for the work of the Museum are summarized as follows:

Preservation of collections (appropriation)	$626,720	
Administrative reserve	3,500	
Available for expenditure		$623,220
Maintenance and operation (allotment)	161,335	
Administrative reserve	3,000	
Available for expenditure		158,335
Printing and binding (allotment)		30,250
Total available for year		811,805

In addition to these normal expenditures of the Museum, funds were available from the Third Deficiency Appropriation approved August 9, 1939, for changing the electric current in the Smithsonian group of buildings from direct to alternating. Work under this

appropriation proceeded during the year under the supervision of the Public Buildings Administration.

The total regular funds available for expenditure covering the regular activities of the Museum were $6,580 more than those for the fiscal year 1940.

Changes in the various items are outlined as follows: In the appropriation for "Preservation of Collections" there was a decrease of $2,080 below the appropriation of the preceding year. This was due not to a decrease in the total appropriation but to an intradepartmental transfer of personnel in the Institution itself, which resulted in a decrease of funds charged against this item of $3,830 and a transfer of $750 to the Post Office Department in connection with the United States Official Mail and Messenger Service (Reorganization Plan IV), a total of $4,580. Additional funds of $2,500 were provided for increasing the hours of service of the char force, leaving a net decrease for the appropriation of $2,080. The added funds for increasing the hours of the char force, while insufficient to provide the cleaning service urgently required, have made it possible to increase the efficiency of char operations in the Natural History Building, as these helpers now work for an extra hour 2 days each week.

The allotment providing for the maintenance and operation of buildings was $13,260 more than that for the fiscal year 1940. Of this amount $12,500 was a nonrecurring item providing for a new sewer for the Smithsonian Building, and $1,260 provided for an increase of one laborer resulting from the intradepartmental transfer of personnel mentioned above, a step taken to draw a more clear-cut distinction between the activities under the appropriations "Preservation of Collections" and "General Expenses." The construction of the Smithsonian Building sewer was under the supervision of the Public Buildings Administration. This change resulted in placing a cast-iron sewer under the building with a terra-cotta sewer connecting with Independence Avenue. Previously the outlet was largely of badly eroded brick and crossed the Mall to Constitution Avenue.

The allotment for printing and binding, made from the appropriation "Printing and Binding, Smithsonian Institution," was $4,100 less than the amount available for the fiscal year 1940. This decrease, while small, is serious, since the Museum already has a large quantity of manuscript waiting publication.

Administrative reserves charged against Museum activities were increased from the preceding year as follows: "Preservation of Collections," from $3,000 to $3,500; "Maintenance and Operation," from $2,500 to $3,000. These reserves were not available for expenditure.

A request for additional funds for salary promotions to meet the formula established by the Bureau of the Budget failed of passage in the Congress in line with the adoption of a general policy covering the elimination of promotions in all Federal departments. The administrative officers continue to press for funds for merited promotions, so as to permit a continuing policy in this regard.

There is ever-pressing need for additional space for the great collections housed in the National Museum, a need that, as has been indicated in annual reports over a long period of time, can be met only by additional construction. The value of our collections is increasing continuously with each year that passes. Part of this increase comes from the steady stream of specimens incorporated annually in all divisions. Beyond this, in the past two years there has been an enormous increment in value over the usual annual appreciation from the passage of time through which many objects now in our possession become increasingly rarer. This really tremendous increase ensues from political conditions abroad through which many valuable collections in foreign museums have been injured or destroyed by various instrumentalities of war. The result of this is to make the great series in our National Museum one of the most important in the world at the present time. In view of this a valuation of $300,000,000 is now not considered too high, with the statement, well understood, that ten times this amount of actual money would not suffice to replace our Museum treasures should they for any reason be lost, since there are many tens of thousands of objects included that have no duplicates available for any sum of money.

Additional personnel is another major need of the organization that should be recognized and remedied, as soon as possible. The condition is aggravated by the increasingly crowded condition of the Museum buildings both in the exhibition halls and in the officers and laboratories. Under these conditions more time is required annually to adequately care for the millions of specimens under our charge. This loss of time is an important consideration in view of the valuable materials concerned.

COLLECTIONS

Additions to the great collections contained in the United States National Museum were many and varied during the past year and include highly valuable materials. The increases have come from expeditions arranged and financed principally through the Smithsonian Institution, through its private funds or through moneys secured by it, and through gifts of the many friends of the Museum who place in it their treasures. The total number of specimens

received is greater than in the previous year but is within the usual average range for recent fiscal periods.

New material was received in 1,518 separate accessions, with a total of 326,686 specimens distributed among the five departments as follows: Anthropology, 4,064; biology, 262,521; geology, 55,818; engineering and industries, 2,688; and history, 1,595.

For examination and report 1,510 lots of specimens were received, including a great variety of objects of diverse kinds. A part of these was returned by request to the senders when the examination was completed and the proper report made, a part was consumed and destroyed during the process of examination and analysis, and a part was presented by the senders to form additions to the Museum's permanent collections. Large numbers of plants, geological material, and insects were identified.

Gifts of duplicates to schools, museums, and other institutions numbered 3,122 specimens. Exchanges of duplicate materials with other institutions and individuals totaled 12,531 specimens, while 13 specimens were transferred to other governmental agencies. Loans for scientific study for the use of investigators outside Washington totaled 50,676, the handling of these requiring a vast amount of labor.

Following is a summary of the entries now included in the Museum catalogs in all departments:

Anthropology	706, 412
Biology	13, 318, 049
Geology	2, 644, 776
Engineering and industries	134, 722
History	509, 695
Total	17, 313, 654

EXPLORATIONS AND FIELD WORK

Field exploration on the part of the Museum's experienced staff and its collaborators continues as one of the most important sources for additions of new materials in the broad fields of anthropology, biology, and geology. As in previous years this work has been financed in the main through funds provided by the Smithsonian Institution or through interested friends of the Institution. The specimens obtained have filled many gaps in the study and exhibition series.

During August and September 1940, Dr. T. Dale Stewart, associate curator of physical anthropology, continued excavations at the historic Indian village site known as Patawomeke on Potomac Creek, in Stafford County, Va., completely exploring the ossuary discovered last year. The work this season yielded a number of facts that verify or supplement the meager historical records pertaining

to the burial ceremonies of the Virginia tidewater Indians. Of the approximately 100 skeletons found in the ossuary, the majority had become disarticulated, or were disarticulated before burial. A few, however—about a dozen adults—were observed to be fully articulated. These were found on the bottom or along the sides of the pit and hence may have been the first bodies received into the grave. Moreover, all these articulated skeletons are possibly males and had their arms extended along their sides as do the bodies shown in John White's picture of a death house, which was drawn during his visit to Roanoke Island in 1585. Also, all these skeletons had the lower legs flexed unnaturally forward; such flexing would have been a practicable way of shortening an extended body resting on its back. There is evidence, on the other hand, that the disarticulated skeletons were exposed for a considerable period before burial; in several cases mud-dauber nests were found in the skull or among the bundled bones. This finding indicates that the period in which these bodies were exposed in an open death house included at least one warm season.

On February 27, 1941, Dr. Stewart went to Peru in connection with the program sponsored by the State Department for cultural cooperation with other American Republics. In Lima, through the kindness of Dr. Julio C. Tello, director of the Museum of Anthropology, Magdalena Vieja, he had the privilege of studying two documented series of human skeletal remains, one from Paracas and the other from Malena. These are interesting for comparison because the series from Paracas is very early, whereas that from Malena is late coastal Inca. The Paracas people, although relatively ancient, were far from being primitive in the cultural sense. Their textiles are famous and among the finest produced anywhere. While in Lima Dr. Stewart visited many of the nearby ruins and ancient Indian sites. From these trips he brought back a small collection of the more interesting skeletal remains to supplement earlier accessions.

During the week of March 30 Dr. Stewart represented the Institution and the National Geographic Society at the Third Assembly of the Pan American Institute of Geography and History meeting in Lima. Following the Assembly he visited the Museo Arqueológico "Rafael Larco Herrera" at Chiclín, where, through the kindness of Rafael Larco Hoyle, he was able to study a documented series of Mochica and Cupianique skeletons. These remains are from the oldest cultural periods of the northern coast. From Chiclín Dr. Stewart went south to Mollendo, and thence by way of Arequipa to Cuzco. Here, besides visiting some of the famous ruins, he saw the fine collections of mummies and trephined skulls at the University of Cuzco and the Instituto Arqueológico.

Dr. Waldo R. Wedel, assistant curator of archeology, was in the field from June 1 to September 16, 1940, continuing the Institution's archeological survey of Kansas begun in 1937. The 1940 explorations were carried on at several locations in Rice and Cowley Counties. Preliminary excavations show that the sites investigated mark villages inhabited by semisedentary, partly horticultural Indians who did not live in earth-lodges. These people made pottery, wove basketry, had a wide variety of artifacts in stone, bone, horn, and shell, traded with the Pueblos on the Rio Grande for turquoise, pottery, and obsidian, and were in contact with white men. Fragments of glaze-paint pottery represent types made on the Rio Grande between 1525 and 1650, and bits of chain mail suggest a visit from some of the early Spanish explorers. It is tentatively suggested that these remains, widespread in central and southern Kansas, may be of Wichita origin and possibly represent some of the Quivira villages seen by Coronado, Humaña, Bonilla, and Oñate.

From December 5 to 12, 1940, and again in May 1941, Dr. Wedel made a brief reconnaissance in the Holston River drainage near Saltville, Va. A number of extremely promising prehistoric village sites and two apparently affiliated burial caves were visited, and a local collection was studied. No excavations were undertaken. The cultural materials indicate some relationships with Middle Mississippi remains in Tennessee and adjacent States, but pending more extended studies their exact position culturally remains uncertain.

Walter W. Taylor, Jr., collaborator in anthropology, inaugurated archeological excavations in the state of Coahuila, Mexico. From January 1941 to the close of the fiscal year, Mr. Taylor surveyed a wide area in the various mountain valleys around Cuatro Cienegas and excavated one large cave and several small ones. The principal purpose of this program was to determine the relationship between the prehistoric cave inhabitants in this northern section of Mexico and the inhabitants of similar sites in the Pecos River and Big Bend area of southwestern Texas. A superficial relationship seems evident from Mr. Taylor's field reports, but final conclusions must await a careful comparison of material in the Museum.

Under a cooperative arrangement with the United States Geological Survey, Dr. W. F. Foshag, curator of mineralogy and petrology, accompanied by Carl Fries, of the Geological Survey staff, made a three-month survey of the tin resources of Mexico. All the important mining districts of Mexico included within the States of Michoacán, Hidalgo, San Luis Potosí, Queretaro, Aguascalientes, Jalisco, Zacatecas, and Durango were visited and the deposits studied as to their geology, mineralogy, and commercial potentialities. The largest potential deposits are the placer sands derived from granite

intrusions in San Luis Potosí. The deposits in the rhyolitic rocks are, in most cases, small and of little importance.

Dr. C. E. Resser, curator of stratigraphic paleontology, spent three months in field work, chiefly in the Rocky Mountains, assisted by Charles H. Frey, 3d, of Lancaster, Pa. Dr. Resser left Washington on June 25, making first a brief stop in southwestern Virginia. His next objective was the Cambrian section in the Ozark Mountains, where several days' work enabled him to familiarize himself with these strata. Only indifferent fossils were found, as most of the Cambrian rock does not carry fossils. He continued then to examine Cambrian deposits in Colorado in the Front, Mosquito, and Sawatch Ranges and the Glenwood Springs Canyon. Ten days in the State permitted examination of several sections. Dr. T. S. Lovering, of Ohio State University, who was mapping the region about Gilman, assisted materially in showing the sections there. At the Grand Canyon National Park in Arizona Dr. Resser examined new localities under the guidance of Park Naturalist Edwin McKee during a three-day trip to Peach Springs and Meriwitica Canyons, 150 miles west of Grand Canyon Village. Some fossils were found and physical measurements made. In the Wasatch Mountains the party checked on the position of certain faunas and on the stratigraphy, which had been questioned. Fine collections were made at critical points. At the Green River lakes, one of the most beautiful spots in America, Dr. Resser's party found a section 850 to 1,000 feet thick, representing both Middle and Upper Cambrian, carrying a few fossils. Several sections were studied in Montana, notably on Squaw Creek in the Gallatin Range, Newland Creek, Little Birch Creek, and Deep Creek in the Belt Mountains, and several localities near Three Forks, Mont. Particularly fine material was obtained at several of these localities. Advantage was taken of the new road constituting the northeastern entrance to the Yellowstone to study the excellent section at Beartooth Butte. Here some good collections were made. On the return journey a new section across the Big Horn Mountains was seen along Shell Creek, and about a week was spent in the Black Hills. During an earlier trip from May 5 to 15 to southwestern Virginia and eastern Tennessee Dr. Resser examined outcrops in the belt west of Clinch Mountain to ascertain the faunal content of the Maryville formation. Fossils were scarce and very difficult to free from the matrix. A visit to Austinville, Va., furnished some nice fossils, and observations confirmed earlier interpretation of the stratigraphy. The exact stratigraphic position of a new brachiopod related to *Nisusia*—as yet undescribed—was discovered.

In August 1940 Dr. G. A. Cooper, assistant curator of stratigraphic paleontology, joined Mrs. J. H. Renfro and daughter in

Fort Worth and with the guidance of these expert collectors collected Pennsylvanian fossils in the region around Jacksboro and Graham in north-central Texas. An abundance of fine material for the biological series was obtained. Following 2 weeks in north-central Texas, Dr. Cooper went to the Glass Mountains in west Texas, where he spent another 2 weeks collecting limestone containing silicified specimens. About a ton of blocks was sent back to Washington, where almost half the material has since been etched with acid, yielding very beautiful, rare fossils that preserve the delicate spines and the peculiar features of the interior of the animal in a truly remarkable way. Proceeding to west Tennessee he collected Silurian and Lower Devonian fossils along the Tennessee River in localities that soon will be lost in the impoundment of water behind the Gilbertsville, Ky., dam. At places the Silurian in this part of Tennessee teems with fossils of many kinds, and fine collections were obtained, including new forms as well as many others not previously present in the collections. From there he went east to Murfreesboro, Tenn., where he joined Dr. Josiah Bridge, of the United States Geological Survey. They spent ten days in the Central Basin of Tennessee collecting the fossils and studying the rocks of the Stones River (Ordovician) group, as problems of correlation never satisfactorily solved exist in this area.

As the vertebrate paleontological field exploration under Dr. C. L. Gazin, assistant curator of vertebrate paleontology, extended into the present year, but brief mention was made of it in last year's report. The expedition, into central Utah and southwestern Wyoming, was a continuation of previous investigations. In the Upper Cretaceous several additional lizard skeletons were collected; and in the Paleocene a considerable number of fragmentary mammal specimens. Interesting new forms contribute information to the known fauna of the Dragon formation. The bulk of the season was spent in the Bridger formation of the Eocene in southwestern Wyoming, where 149 lots of fossil specimens were secured. A skeleton of *Uintatherium* complete enough to articulate for exhibition, probably the most complete skeleton of this animal yet discovered, was the outstanding specimen secured. Partial skeletons of *Palaeosyops* are also of high importance.

Short trips to the Miocene along Chesapeake Bay for cetacean remains were made by Dr. Remington Kellogg and other members of the staff. Many specimens from this unique fauna have been added to the collections.

During October and November Dr. Alexander Wetmore, Assistant Secretary of the Smithsonian Institution, visited Costa Rica as part of the program sponsored by the State Department for cultural coop-

eration with the other American Republics. He was received with every courtesy as the guest of the Costa Rican Government, and in San José, the capital city, he worked at the National Museum and visited and conferred with officials in various branches as well as with scientists in other services. Following this, accompanied by Dr. Juvenal Valerio Rodríguez, director of the National Museum, and Carlos Aguilar, in charge of the zoological collections in the Museum, he crossed by air to Liberia, the principal city of Guanacaste, the northwestern province of Costa Rica. From this base he collected birds in the surrounding country. Dr. Valerio returned to San José, while Mr. Aguilar remained for training in zoological field work. Guanacaste is devoted mainly to cattle raising with small cultivation. Liberia lies on a slightly elevated plain east of the swampy lowlands bordering the Río Tempísque. For more than two weeks Dr. Wetmore and Mr. Aguilar were located at a great hacienda on the southern slopes of the Volcán Rincón de la Vieja, where there was access to heavy rain forest on the mountain. Collections were obtained for the National Museum in San José as well as for our Institution. The several hundred birds that have come to Washington as a result of this work add measurably to our series, as our earlier investigations of the birds of Costa Rica did not cover Guanacaste. On his return north at the end of November Dr. Wetmore had opportunity to spend a day in Habana, Cuba, where he was received by representatives of the Cuban Government and conferred with prominent scientists of the country.

From March to May 1941, Dr. Wetmore visited Colombia in continuation of the program mentioned for closer personal contact and cooperation with scientists in our neighbor republics. In Bogotá he was received at the National University, where he worked particularly in the Instituto de Ciencias Naturales. He also conferred with scientists who had been in attendance at the Eighth American Scientific Congress in Washington the year previous, and visited scientific workers with whom the Smithsonian Institution has been in contact through correspondence for years. Following this, with M. A. Carriker, Jr., as assistant and accompanied by Dr. Carlos Lehmann and his assistant from the Instituto de Ciencias Naturales and by Lt. Alejandro Rubiano as a representative of the Colombian Government, Dr. Wetmore embarked from Santa Marta on a prolonged expedition through the Guajira Peninsula. The party traveled by truck to Riohacha, stopping en route for work in extensive forest areas near the Río Ariguaní and its tributaries. Here in 8 days' time specimens of 100 distinct species of birds were obtained, an indication of the richness of the fauna. In Riohacha the party obtained another truck and here entered the Guajira proper. The peninsula in the main is an arid, desert

country with extensive open savannas and broad stony plains, grown in places with heavy stands of mesquite and cacti that form veritable forests. In the eastern section there are low mountains with trails along their bases, passable for heavy trucks except during the period of rains. On the highest range where the trade winds build a cloud cap with consequent more or less regular precipitation in contrast to the desert below, there is an island of tropical rain forest with the species usual to such an environment, here isolated by long distances from other similar areas. Dr. Lehmann and Lieutenant Rubiano completed their work with the party in April, while the others continued to the forested region mentioned. On the return in mid-May because of irregular steamer schedules due to world war conditions, it was necessary for Dr. Wetmore to cross by schooner from Puerto Estrella, in the Guajira, to the Island of Aruba. Here after a 2 days' wait he secured plane passage to Curaçao, and from there sailed for New York. A stop enroute at La Guaira, Venezuela, gave opportunity to visit Caracas, where he was guest of honor at a luncheon given by W. H. Phelps to a group of Venezuelan scientists, and had opportunity to visit the new Museo Nacional and the Sociedad Venezolana de Ciencias Naturales.

Mr. Carriker, whose expenses for this work in Colombia were carried by the W. L. Abbott fund of the Smithsonian Institution, continued in the field in the Guajira until late in June to finish the investigations. At the end of the fiscal year he was located in the Sierra Negra in the northern section of the Perijá Mountains, a region previously unknown to naturalists.

The collecting expeditions by W. M. Perrygo, scientific aide, to obtain much-needed material for the study of the vertebrate fauna of the Appalachian region, were continued with good results. Accompanied by John S. Webb, of the division of birds, he left for South Carolina on September 14, 1940, working at first along the Catawba River and in the wooded regions of the Piedmont region, and later collecting in the swamps along the Pee Dee River. The middle of October he continued southward to Allendale to complete work begun in the spring months along the Savannah River. Two weeks were spent in collecting along the Lynches River, a tributary of the Pee Dee, and the final stay centered around McClellanville for work in the salt marshes near the Cape Romaine Wildlife Refuge. The expedition returned on December 3. This work also was financed through the W. L. Abbott fund of the Smithsonian.

Dr. Waldo L. Schmitt, curator of marine invertebrates, during the latter part of 1940 served as biologist and leader of the field party organized by the United States Fish and Wildlife Service for the purpose of investigating the biology of the king crab in

Alaska. He left Seattle on August 28 and on September 12 established headquarters at Canoe Bay, off the northwest corner of Pavlof Bay, where investigations were carried on successfully for 5 weeks. Later on operations were transferred to Alitak at the western end of Kodiak. Work at a final base on the north side of Shelikof Strait, east of Kukak Bay, from November 15 to 20 ended the investigations for the season, which in addition to observations on the distribution and biology of the crabs yielded an extensive collection of marine animals of interest to the Museum.

Clarence R. Shoemaker, assistant curator of marine invertebrates, in company with T. Kenneth Ellis, undertook a 2-week collecting trip for fresh-water amphipods through Virginia and the Carolinas, the particular object being to extend the study series of certain rare species from this region. The expedition returned with much interesting material to the Museum.

Austin H. Clark continued work on the survey of the butterfly fauna of Virginia, visiting various localities during the summer of 1940, paying special attention to the extreme southwestern section of the State.

The Smithsonian-Firestone Expedition to Liberia, under the leadership of Dr. W. M. Mann, director of the National Zoological Park, obtained for the Museum a large quantity of zoological and botanical material, including many novelties, from a region of the world hitherto poorly represented in our collections. Although started early in 1940, the expedition did not return until August 7 and is therefore properly referred to here, as the treasures secured were accessioned during the present year. The story of the expedition has been widely published, and a condensed account with illustations will be found in the Smithsonian Explorations Pamphlet for 1940, pp. 13–20.

As in past years, Capt. Robert A. Bartlett in his annual expedition to Greenland in the schooner *Morrissey* brought back valuable additions particularly to the invertebrate collections, secured with equipment supplied by the Museum.

Dr. Hobart M. Smith, under the Walter Rathbone Bacon Traveling Scholarship, finished his field work in Mexico in August 1940, bringing back to the Smithsonian Institution splendid collections comprising more than 20,000 specimens of reptiles and amphibians now deposited in the Museum. During July and August 1940 he was able to study the collection of the late Dr. Alfredo Dugès, which contains many type specimens of Mexican reptiles and amphibians.

Dr. E. A. Chapin, curator of insects, spent 5 weeks on the island of Jamaica during the months of April and May 1941. Arriving there on April 22, he was met at customs by C. B. Lewis, curator

of natural history of the Jamaica Institute, who during the entire period of work assisted in various ways. Special trips arranged by Mr. Lewis included a day on Goat Island, 1 on Portland Ridge, 2 at Cuna Cuna Pass, and a 4-day stay at Cinchona in the Blue Mountains. Except for 8 days spent in and around Savanna-la-Mar, headquarters were maintained near Kingston and short trips were made from that point. Because of the poor showing made in certain groups in 1937, it was decided to concentrate on the termite and ant faunas. The results of the trip are very satisfactory. In addition to various rare beetles, at least 13 species of termites, mostly of the type living in hard wood, were found, and at least 3 of them are additions to the Jamaica list. Other results of the work include the establishment of very pleasant relations with the Jamaica Institute and the Government Entomologist's Office.

The United States Antarctic Service expedition returned from a year's stay in the Antarctic with very valuable material, consisting of mammals and birds and a considerable collection of lower cryptogamic plants. The Museum was represented in this work by Herwil M. Bryant.

Local field work in nearby Maryland and Virginia by various members of the staff has included investigations of Dr. L. P. Schultz on fresh-water fishes. Botanists of our staff gathered material for a proposed new Flora of the District of Columbia, the object sought being a thorough knowledge of the Washington-Baltimore region.

EDUCATIONAL WORK

The National Museum during the year continued its long-established 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. Additions are made regularly to the displays, and as funds permit there is constant improvement in them.

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 frequently 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.

The staff of the National Museum has an important part in supplying material for the weekly broadcast, "The World Is Yours," which is sponsored by the Smithsonian Institution, in cooperation with the United States Office of Education and the National Broadcasting Co.

VISITORS

A total of 2,505,871 visitors at the various Museum buildings was recorded during the year, this being virtually the same as for the previous year. This year the high months were August 1940 and April 1941, when 369,942 and 320,594 visitors, respectively, were recorded. Table 1 shows the number of visitors during each month of the year.

TABLE 1.—*Visitors to the Museum buildings during the year ended June 30, 1941*

Year and month	Smithsonian Building [1]	Museum buildings			Total
		Arts and Industries Building	Natural History Building	Aircraft Building [2]	
1940					
July	2, 194	185, 558	94, 923	33, 601	316, 276
August	2, 367	212, 355	108, 730	46, 490	369, 942
September	2, 827	122, 559	84, 701	28, 605	238, 692
October	1, 353	78, 779	54, 628	15, 902	150, 662
November	1, 842	55, 727	42, 396	14, 655	114, 620
December	1, 813	39, 967	29, 740	11, 710	83, 230
1941					
January	8, 369	42, 789	39, 872	10, 539	101, 569
February	17, 484	44, 916	34, 706	13, 238	110, 344
March	23, 151	53, 223	45, 329	7, 372	129, 075
April	54, 593	171, 637	94, 364	--------	320, 594
May	47, 396	160, 006	95, 113	--------	302, 515
June	49, 075	140, 313	78, 964	--------	268, 352
Total	212, 464	1, 307, 829	[3] 803, 466	182, 112	2, 505, 871

[1] Main exhibition hall closed for redecoration from July 1, 1940, to Jan. 19, 1941.
[2] Closed to visitors from Mar. 17 to June 30, 1941, for repairs.
[3] Not including 5,761 persons attending meetings after 4:30 p. m.

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LIBRARY

Again, notwithstanding the great difficulty, and in many cases the impossibility, of obtaining foreign publications, owing to disturbed conditions abroad, the accessions to the library of the National Museum, during the year just closed, were notable. They numbered 11,783, or 1,979 volumes, 8,862 parts of volumes, 885 pamphlets, and 57 charts. These increased the library to 101,302 volumes and 118,458 pamphlets and charts—totals that do not, of course, include the hundreds of items waiting to be completed, bound, or cataloged. Some of the accessions were gifts from members and associates of the Museum staff and from friends outside; others were purchased, and many were received, as usual, in exchange. Quite a number, too—in fact, 206 volumes and 2,145 parts of volumes—were selected from the recently organized collection of duplicates at the Smithsonian. From this collection there were also taken 6,112 publications—not a few of them out of print and rare—to be added to the reserve library of the Institution, for the future use of the Museum.

Although severely handicapped much of the year by important changes and serious illness in its staff, the library attended to its regular routine and undertook one or two special projects. It continued checking the standard sets, noting missing numbers, and writing exchange letters, with the result that in response to 348 want cards considered it obtained 1,563 publications, in addition to the 2,351 already reported as having been found among the duplicates at the Institution, making a grand total of 3,914—a slight increase over the year before. In this connection it arranged 151 new exchanges for learned journals, issued chiefly in the Americas and in other countries where more or less normal political and economic conditions still prevailed. Among the exchange sendings received six were unusually large.

Its accomplishments also included the following: Recording 8,980 periodicals; cataloging 2,374 publications and adding 18,484 cards to the catalogs and shelf lists; making 9,846 loans to the scientific staff and their assistants and 236 to libraries not in the Smithsonian system; borrowing 1,546 volumes from the Library of Congress and 623 from other libraries, principally those of the Department of Agriculture, Geological Survey, and Army Medical Museum, and returning 2,225 to these libraries; assigning 3,860 publications to the section libraries; filing in the main library 280 cards of the Wistar Institute and forwarding a like number to the division of marine invertebrates; sending 800 volumes to the bindery; sorting 2,500 reprints according to subject, for the pamphlet files of the curators; making considerable progress in checking and rearranging the technological collection and in verifying its catalog and shelf

list; and keeping up with the requests for reference and bibliographical assistance on the part not only of the scientific staff but of many others both in the Government and outside.

Furthermore, the staff practically finished the work, begun the previous year, of checking the serial holdings of the library for inclusion in the forthcoming second edition of the Union List of Serials. This special task was not only exacting but time consuming, involving more than 6,000 titles belonging to the Museum, as well as, to some extent, 1,000 other titles in various branches of the Smithsonian. In addition to serving its primary purpose, it called attention once more to the completeness and worth of this outstanding collection of the library—one of the indispensable instruments in the work of the entire Institution, without which it would hardly be possible for the Museum or any other of the bureaus to make the significant contributions to knowledge that it is now making. But it did more. It furnished the library with data that will be of great assistance in building up the sets of peculiar value to the scientists and in transferring or exchanging those that have little or no relation to their interests. Thus it may come about that in the course of time the shelves will be freed of much unwanted material and more space be provided for publications daily called for by the patrons of the library.

This report in previous years has touched on two of the library's needs—additional shelf-room and additional help. These have become most acute, as has a third, additional funds for binding. In fact, these three needs are now hampering the efficiency and progress in the service that the library renders. These hindrances should be removed as soon as practicable.

The sectional libraries remained at 35, as follows:

Administration
Administrative assistant's office
Agricultural history
Anthropology
Archeology
Biology
Birds
Botany
Chemical industry
Echinoderms
Editor's office
Engineering
Ethnology
Fishes
Foods
Geology
Graphic arts
History
Insects
Invertebrate paleontology
Mammals
Marine invertebrates
Medicine and public health
Minerals
Mollusks
Paleobotany
Photography
Physical anthropology
Property clerk's office
Reptiles and amphibians
Superintendent's office
Taxidermy
Textiles
Vertebrate paleontology
Woods and wood technology

PUBLICATIONS AND PRINTING

A total of $30,250 was allotted for the publication requirements of the National Museum during the fiscal year 1940–41. Of this, $4,000 was reserved for the binding needs of the Library and $3,250 was used for the salary of the Museum printer, leaving $23,000 for the printing of the Annual Report, the Bulletins, and the Proceedings. This was $4,100 less than the amount available the previous year. Twenty-five publications were issued—the Annual Report, 2 Bulletins, 1 separate paper of Bulletin 100, 1 Contribution from the United States National Herbarium, and 20 separate Proceedings papers. These are listed at the end of this report.

The distribution of volumes and separates to libraries and individuals on the regular mailing lists aggregated 42,431 copies, while in addition 9,739 copies of publications issued during this and previous years were supplied in response to special requests. The mailing lists have been carefully revised to avoid loss in distribution.

During the year 500,358 forms, labels, and other items were printed, and 700 volumes were bound.

On January 24, 1941, the Museum editor, Paul H. Oehser, was appointed by the Department of State as editor-in-chief of the Proceedings of the Eighth American Scientific Congress, to be issued in several volumes.

Indexing.—Work on the comprehensive index of Museum publications, begun a few years ago, was continued as time permitted, especially by Miss Gladys O. Visel, editorial clerk, and Mrs. Marguerite W. Poole, information clerk. Miss Visel also prepared the index for volume 87 of the Proceedings and Mrs. Poole for volumes 88 and 89.

Attention is called to the growing need for the services of a full-time indexer in the editorial section. At the present time most of the details of the indexing work, which is vastly time-consuming, must be performed by the editor and his assistant, taking their time from work on manuscripts and proofs. Adequate indexes are so important a part of all scientific publications that it is fatal to allow the indexing work to get in arrears. The present volume of the Museum's publications (increased next year by a third) requires the full time of the present staff; indexing is extra, but because of its timely nature it must often take precedence over other important editorial duties.

Museum print shop.—The Museum print shop, a branch of the United States Government Printing Office, is maintained for the purpose of printing museum and herbarium labels and special forms. F. W. Bright is detailed from the Printing Office for the work, and his salary is paid from the Smithsonian appropriation for printing

and binding. The type of work produced in the shop, which often involves a large amount of composition and very short press runs, can be done more economically and promptly here than at the Government Printing Office. During the year 109 requisitions for labels and other printing were filled. For 2½ months the print shop was occupied exclusively in printing labels for the new Index Exhibit in the Smithsonian main hall. This resulted in a large accumulation of incompleted requisitions, but by the close of the fiscal year, the work of the shop was again nearly up to date.

PHOTOGRAPHIC LABORATORY

The photographic laboratory, though now seriously crowded for space, continued its highly varied activities under the direction of Dr. Arthur J. Olmsted, who in June completed his twenty-first year as the Museum's chief photographer. Through a cooperative arrangement the work of the laboratory embraces the photographic needs of the Smithsonian Institution proper, the Bureau of American Ethnology, and the National Collection of Fine Arts, as well as the National Museum. During the past year the laboratory made 2,922 negatives, 16,472 prints, 556 lantern slides (including 61 kodachromes), 862 enlargements, and 40 transparencies. It also developed 104 rolls of film, 30 film packs, and 84 cut films and mounted 45 prints on cloth.

BUILDINGS AND EQUIPMENT

Repairs and alterations.—In addition to the routine repairs and refurbishing continually necessary in a large museum plant, several alterations of a major nature were made during the year. Chief of these was the completion of the remodeling of the main hall of the Smithsonian Building in the form of an index exhibit embracing all the principal activities of the Institution. The new exhibit was opened to the public on Inauguration Day, January 20, 1941.

Work on the six new passenger elevators for the Natural History and Smithsonian Buildings, for which contract was let last year, progressed according to schedule, and at the close of the year the two elevators in the rotunda of the Natural History Building and the one in the north stair-hall of the Smithsonian Building were well along toward completion. At the north stair-hall of the Smithsonian Building a new platform was built connecting the east and west stair landings at the fourth-floor level. This construction was completed early in December, in time to be used in conjunction with the new elevator installation.

Another important improvement was the laying of a new sewer line for the Smithsonian Building to replace the ancient brick sewer,

which was, so far as is known, the original sewer for this building. Work on this long-needed project began on November 22, 1940, and was completed on February 7, 1941, funds being provided by a special Congressional appropriation.

The Aircraft Building received special attention during the year, both inside and outside, the work consisting chiefly of repairing and repainting of the roof, walls, and woodwork and the construction of two storage rooms at the east end. It was necessary to close the building to visitors during the progress of these repairs, from the middle of March until the end of the fiscal year.

Heat, light, and power.—The change from direct to alternating electric current for the Smithsonian group of buildings, begun in June 1940 and mentioned in last year's report, was virtually completed at the close of the fiscal year. The electric current used during the year amounted to 1,350,464 kilowatt-hours.

As usual, steam for heating the various buildings was furnished by the Government's Central Heating Plant. The amount used totaled 65,609,000 pounds, about 3,000,000 pounds more than last year.

Work was completed during the year in dismantling the boilers and boiler equipment rendered useless when the Central Heating Plant began operating in 1939. Four boilers and flue, a coal hoist and conveyer, and a supply of bituminous coal were disposed of through the Procurement Division of the Treasury Department, although all had not been removed from the Natural History Building at the end of the year.

Ice production.—The refrigerating machine for manufacturing ice for the Museum buildings produced 348 tons of ice during the year, at a cost of $2.01 a ton.

Fire protection.—All the fire-protection apparatus was periodically tested and inspected. Some new extinguishers, necessitated especially by the change to high-tension alternating current, were purchased.

Furniture and fixtures.—The furniture added during the year included 10 exhibition cases; 365 pieces of storage, laboratory, and other office furniture; and 947 drawers. Equipment condemned and disposed of consisted of 36 exhibition cases; 146 pieces of storage, laboratory, and office furniture; and 8 drawers. An inventory of furniture on hand on June 30, 1941, showed 3,622 exhibition cases; 19,575 pieces of storage, laboratory, and office furniture; and 113,541 drawers, boxes, and frames of various kinds.

MEETINGS AND SPECIAL EXHIBITS

As usual, the auditorium and lecture room of the Natural History Building were made available for meetings of educational, scientific, recreational, and governmental organizations and groups, and when-

ever possible the Museum assisted in carrying out their programs. During the year 126 such meetings were held, including, on the evening of February 25, 1941, the Tenth Arthur Lecture of the Smithsonian Institution, delivered by Prof. Brian O'Brien, of the University of Rochester, on the subject "Biological Effects of Solar Radiation on Higher Animals and Man."

The foyer and adjacent space of the Natural History Building were utilized almost continuously during the year by a series of 14 special exhibits shown under the sponsorship of various educational and scientific groups, as follows:

July 8 to August 10, 1940: W. P. A. exhibit, designed to portray the accomplishments of welfare projects of the Professional and Service Division of the Works Progress Administration.

August 12 to September 25: Exhibit of rugs and tapestries from the period-art and textiles collections of the Museum.

September 26 to 30: Eighth Annual Rose Show sponsored by the Potomac Rose Society.

October 8 to 25: Exhibit, entitled "Memories of the Orient," of pastels, drawings, and lithographs by Lily E. Smulders.

November 1 to 30: Sixth Annual Metropolitan State Art Contest, held under the auspices of the District of Columbia Federation of Women's Clubs.

December 1, 1940, to January 1, 1941: Exhibit of oils, pastels, water colors, wood engravings and intaglio and relief prints made by the Cresson method, with tools and materials used, by the late William Baxter Closson (1848–1926).

January 8 to 29: Exhibition of pastels by members of the National Society of Pastelists.

February 1 to 26: Exhibition of photographs of architectural subjects by John Bostrop and Thomas Waterman.

February 1 to 28: Exhibition of water colors and pastels by Ethel H. Hagen.

March 2 to 30: Fifth Annual Travel Salon of the Photographic Society of America and the Third Annual Members' Exhibit of the Arlington Camera Club.

April 1 to June 4: Exhibit of photographs by the Potomac Appalachian Trail Club.

May 15 to 20: Exhibition of paintings by Alejandro Pardinas, of Cuba, under the sponsorship of the Cuban Ambassador.

June 2 to 15: Exhibition of caricatures by Antonio Sotomayor, of Bolivia, under the sponsorship of the Bolivian Minister.

June 3 to 30: Memorial exhibit of color prints by Bertha E. Jaques (1863–1941).

CHANGES IN ORGANIZATION AND STAFF

In the department of anthropology, Dr. Joseph E. Weckler, Jr., was appointed assistant curator, division of ethnology, on March 1, 1941.

In the department of biology, on the retirement of Gerrit S. Miller, Jr., curator of the division of mammals, the duties of this office were, on January 1, 1941, assumed by Dr. Remington Kellogg, advanced from the position of assistant curator. To the division

of insects Dr. Richard E. Blackwelder was appointed as assistant curator on October 1, 1940; to the section of taxidermy Edgar G. Laybourne was appointed senior scientific aide on March 20, 1941, and to the division of birds John S. Webb was appointed scientific aide on August 1, 1940.

In the department of engineering and industries, to the division of graphic arts Irwin Lefcourt was appointed scientific aide on September 3, 1940.

Other changes in appointment on the staff were as follows: Elisabeth P. Hobbs to assistant librarian, on March 16, 1941; Ralph A. Silbaugh, foreman of laborers, on January 16, 1941; David L. Hubbs to acting foreman of laborers, on September 1, 1940; Ernest Desantis to lieutenant of guard, on July 1, 1940; and two principal guards (sergeants), James C. Clarke, on July 1, 1940, and Bascom F. Gordon, on March 16, 1941.

Honorary appointments in connection with the National Museum collections were made by the Smithsonian Institution as follows: On July 1, 1940, Walter W. Taylor, Jr., as collaborator in the department of anthropology; on January 1, 1941, Gerrit S. Miller, Jr., as associate in the department of biology.

The scientific staff lost the services of Miss Margaret W. Moodey, by resignation, on May 31, 1941.

Five employees were furloughed indefinitely for military service, namely: Robert E. Kirk, on October 4, 1940; John J. Queeney, on August 15, 1940; Charles E. Stousland, on November 27, 1940; Charles A. Bono, on May 21, 1941, and George V. Worthington, on August 21, 1940.

During the year 13 persons were retired, as follows: Through age: Gerrit S. Miller, Jr., curator, division of mammals, on December 31, 1940, with 40 years 10 months of service; Gertrude L. Woodin, assistant librarian, on January 31, 1941, with 34 years 11 months of service; Joseph T. Saylor, foreman of laborers, on December 31, 1940, with 30 years 8 months service; David H. Zirkle, guard, on June 30, 1941, with 15 years of service; Hattie L. Henson, charwoman, on March 31, 1941, with 19 years 6 months of service; and Emma D. Whitley, charwoman, on March 31, 1941, with 15 years of service.

Through optional retirement: Anne J. B. DePue, telephone operator, on November 30, 1940, with 40 years 5 months of service; and Donald MacDonald, guard, on September 30, 1940, with 33 years 9 months of service.

Through disability retirement: Trezzvant Anderson, guard, on March 31, 1941; Eugene Smith, guard, on June 18, 1941; Anna M. Bowie, laborer, on March 14, 1941; Charles Davis, laborer, on June 30, 1941, and Lish Myers, laborer, on April 30, 1941.

Through death, the Museum lost during the year two employees from its active roll, Clayton R. Denmark, engineer, on December 22, 1940, and William G. Shields, guard, on May 31, 1941. From its list of honorary workers, the Museum lost by death, on January 12, 1941, Charles W. Stiles, associate in zoology, division of marine invertebrates, since April 17, 1894, and on June 4, 1941, David I. Bushnell, Jr., who served temporarily from May to June, 1913, as archeologist and from July 27, 1932, to his death, as collaborator in anthropology.

DETAILED REPORTS ON THE COLLECTIONS

DEPARTMENT OF ANTHROPOLOGY

(Frank M. Setzler, *Head Curator*)

The steady increase in our anthropological collections has necessitated the elimination of nonanthropological specimens that have accumulated in our storage by transfer to other departments. By a regrouping of the various types of storage cases, the division of ethnology has gained additional space, which is essential for future accessions. Preliminary plans calling for a series of life-sized dioramas alternating with modern miniature dioramas have been made in order to modernize exhibitions in hall 11. Our purpose is to increase the interest of the visitor and to provide more information by illustrating a wider range of life activities.

In addition to the classification of 4,100 specimens and the preparation of replies to hundreds of letters requesting information, the staff completed several manuscripts relating to previous field explorations and to studies based on Museum collections.

The allotment of funds from the Smithsonian Institution enabled the staff to continue field work. Dr. T. D. Stewart, associate curator of physical anthropology, spent two and one-half months in Peru making a study of the skeletal collections in that part of South America. He also concluded his excavations at the historic Indian village site known as Patawomeke, in Stafford County, Va. Dr. Waldo R. Wedel, assistant curator of archeology, continued his archeological survey in Kansas. Excavations in Rice and Cowley Counties seem to verify the theory that these sites mark the location of Indian villages seen by Coronado in 1541 during his visit to Quivira. Dr. Wedel also made a brief reconnaissance of prehistoric caves and village sites near Saltville, in southwestern Virginia. Walter W. Taylor, Jr., collaborator, directed cave explorations around Cuatro Cienegas in northern Coahuila, Mexico. These investigations constitute a continuation of similar explorations in the Big Bend region of southwestern Texas undertaken in previous years by the head curator.

Through the Bruce Hughes fund the department cooperated with the American Schools of Oriental Research in their excavations of King Solomon's seaport Ezion-geber, located at the north end of

the Gulf of Aqaba, a branch of the Red Sea in Transjordania. These excavations were completed and the specimens placed on the last boat to leave Haifa, Palestine, before the Mediterranean was closed to commercial shipping.

David I. Bushnell, Jr., honorary collaborator in anthropology since July 1932, died on June 4, 1941. Mr. Bushnell was a well-known anthropologist whose researches covered a wide field. His scientific career began in 1901. From 1904 to 1907 he studied collections in European museums and participated in archeological explorations in Italy and Switzerland. He contributed to the series of publications of the Bureau of American Ethnology on the dwellings and burial customs of the Eastern and Plains Indians. He was an authority on the early history of Virginia, and on the early paintings and illustrators of Indian life.

ACCESSIONS

The department received 127 new accessions (4,064 specimens, an increase of 2,796 specimens over the previous year) during the fiscal year and cataloged several collections accessioned in previous years, making a total of 4,320 specimens. The new accessions were assigned as follows: Archeology, 39 (3,027 specimens); ethnology, 50 (804 specimens); physical anthropology, 16 (127 specimens); ceramics, 6 (29 specimens); musical instruments, 8 (30 specimens); period art and textiles, 8 (47 specimens). The 256 specimens previously accessioned but not included in our total number of specimens because they had not been cataloged were assigned as follows: Archeology, 198; ethnology, 50; physical anthropology, 8.

Archeology.—The division of archeology received 39 accessions, totaling 3,027 specimens, an increase of 2,513 over the previous fiscal year. Of these, 102 specimens were derived from the Old World. The following collections are regarded as most important among the newly acquired accessions: 95 Paleolithic, Neolithic, and Bronze Age implements and ornaments from Java, received in exchange from Dr. C. Franssen; 716 stone artifacts, mostly from western New York, recorded as a gift from the late John William Fenton, through Dr. W. N. Fenton; 446 archeological specimens from an Indian village site near Rileyville, Page County, Va., the gift of Howard A. MacCord and Carl Manson; 988 specimens, mostly potsherds and shell implements, from burial mounds near Belle Glade, Fla., transferred by the Smithsonian Institution, the Civil Works Administration, and the Bureau of American Ethnology.

Ethnology.—During the year the division of ethnology received 50 accessions totaling 804 specimens, as compared with 369 specimens received during the previous year. Numerous noteworthy accessions

were received. Two Navaho chiefs' blankets, originally purchased by the late Elwood Mead in 1882, were presented by his daughters, Mrs. Lucy Mead Marston and Mrs. Sue Mead Kaiser. A patterned blanket, woven in traditional style from hair of the Rocky Mountain goat and wool of the Rocky Mountain sheep by the Chilkat Indians of southeastern Alaska, was presented by the late Mrs. Charles D. Walcott, whose numerous gifts have been acknowledged in previous reports. A large collection from the home of Mrs. Walcott, consisting of baskets from several Indian tribes of the Pacific Coast States and Canadian plateau, a carved paddle from the Cook Islands, bead and quill decorated objects from the Plains Indians, pottery from Pueblo and other Southwestern tribes, and baskets and other objects from eastern Woodland Indians, was presented by her daughter, Mrs. Cole J. Younger. A collection of 195 ethnological specimens from the Alaskan Eskimos, Northwest Pacific Coast tribes, and northern Athapascans, consisting of baskets, boat models, hunting and fishing paraphernalia, pipes, objects of personal adornment, utensils, and other miscellaneous objects, was presented by Richard L. Henderson. An important series of 27 carved wooden masks and musical instruments, collected by the late J. N. B. Hewitt among the Iroquois Indians of the Six Nations Reserve, Grand River, Ontario, was received as a transfer from the Bureau of American Ethnology. Specimens of importance to the collections from peoples outside the Americas included 31 specimens from Malayan tribes of the Philippine Islands, presented by Mrs. J. E. Lewis; two baby carriers from the Grebo of Liberia, presented by Mrs. Ross Wilson, through the Smithsonian-Firestone Expedition; and a collection representative of the plastic art of the natives of Bali, consisting of two wooden masks and six figurine carvings, also a piece of Javanese batik, presented by Dr. S. Koperberg through Dr. A. Wetmore.

The section of ceramics received 6 accessions totaling 29 specimens, as compared with 146 specimens for the fiscal year 1939–40. The following are noteworthy: A blown black-glass rum bottle bearing the personal seal of Sidney Breese, 1765; a specimen of early Sandwich pressed glass; and an early nineteenth-century wine glass, gift of Mrs. Cole J. Younger. A collection of Japanese hibachi and koro, Satsuma vases, and other Japanese ceramics, bequeathed by John Herbert Corning. A pewter wine pitcher bearing an inscribed date of manufacture of 1670, gift of B. P. Fishburne.

The section of musical instruments received 8 accessions consisting of 30 specimens, as compared with 12 specimens received during the preceding year. Outstanding among these are 22 stringed instruments from European and Oriental sources presented by Miss Mary E. Maxwell; a square redwood piano made by André Stein

about 1830, donated by Miss Ellen Dennis; a two-stringed, bowed Moroccan rehab, gift of Allen R. Cozier; a one-keyed wooden flute, gift of Mrs. Marcus Andrew Hirschl; and an eight-keyed ivory flute bearing the maker's mark of L. Drouet, London, gift of Mr. and Mrs. Hyman Ratner.

The section of period art and textiles received 8 accessions totaling 47 specimens, as compared with 143 specimens for the previous year. Noteworthy collections include: 13 specimens of antique and modern jewelry from Japan, India, and Egypt, a large emerald intaglio personal seal from ancient Egypt, and an enamel and gold turban pendant worn by an Indian maharajah as a brooch, received as a gift from Miss Mary E. Maxwell; and a pina-cloth veil worn by Mrs. William Greenway on the occasion of her wedding, June 8, 1843, presented by Miss Elizabeth W. Greenway.

Physical anthropology.—In the division of physical anthropology the number of accessions for the year was 16, with a total of 127 specimens, as compared with 74 specimens in the previous year. Outstanding accessions were: Skeletal remains from Peru, partly collected by the associate curator, Dr. T. D. Stewart, and partly donated by Dr. Julio C. Tello; skeletal remains from southeast Alaska, transferred to the division by the Bureau of American Ethnology; reconstruction of the newly found remains of the fourth *Pithecanthropus*, gift of the Cenozoic Laboratory, Peiping; and four especially valuable skulls and an arm bone from Peru, donated by J. R. Wells.

INSTALLATION AND PRESERVATION OF COLLECTIONS

During the early part of the year the entire staff devoted considerable time to the selection and installation of material for the anthropological exhibits that have been established in the main hall of the Smithsonian Institution Building. These exhibits constitute an illustration, in part, of the methods used and results obtained in two of the main divisions—cultural anthropology and physical anthropology. The two anthropological alcoves, together with the other exhibits, serve as an illustrated index of the various branches within the Smithsonian Institution.

Archeology.—Minor changes were made in the archeological exhibits. The felt dust strips on exhibition and storage cases, having disintegrated, were replaced to prevent infestation by destructive beetles or moths. Laboratory tables were continuously occupied. Six large collections gathered by cooperative expeditions to Florida during 1933-34 under the Smithsonian Institution, Bureau of American Ethnology, and Civil Works Administration were among those classified and arranged for cataloging. An extensive series of stone

artifacts from Chautauqua and Cattaraugus Counties, N. Y., collected by the late John William Fenton, was prepared for cataloging. All minor accessions received during the fiscal year were completed, but the actual marking of specimens will not be finished, owing to lack of assistants, for several months. The total number of specimens considered worthy of a place in the national collections (3,225) represents but a small proportion of those specimens cleaned, sorted, and examined. Of the 11 uncataloged collections listed in the last annual report, 8 are still in arrears. In addition, material recovered by Dr. Wedel in Kansas during his 1939 and 1940 field seasons has not yet been unpacked. Laboratory space is so limited that only a small quantity of material can be processed at one time.

Ethnology.—Several minor ethnological displays were installed and a number of the older ones revised. The floor case containing Kingsmill and Marshall Island ethnography was revised, as was also the Hawaiian case. A new exhibit of South American silver of native manufacture was installed. A display of painted fur robes from southern South America was replaced by an exhibit of Araucanian and Aymará textiles from the same general region.

Two Kensington cases were installed in the heating and lighting exhibits in the Arts and Industries Building to provide for the exhibition of candelabra and silver and crystal girondoles. In this same hall a cast of a candlefish was installed in a synoptic display of the history of the torch. An eighteenth-century Irish harp and other musical instruments received from Miss Mary E. Maxwell were installed in the second-floor rotunda display of keyboard instruments.

The task begun in 1937 of insect-proofing exhibit cases by inserting felt strips between the bodies of cases and all removable panels, and by the further sealing by calking of the glass, was completed during the year. The figure of an Eskimo carver was reclothed after fumigation and reinstalled in the case.

The temporary assistant scientific aide planned and executed a major reorganization and reclassification of the study series housed in standard storage units in the attic and third-floor corridors assigned to ethnology. The major rearrangement of storage cases housed in the west, north, and east attic into a series of geographically and tribally identified alcoves was completed. Aisles and passageways between cases were uniformly narrowed to minimum widths. As a result the division obtained considerably more space for future accessions than could have been anticipated. The contents of these storage cases must be reclassified and rearranged. During these rearrangements the space under the eaves was thoroughly cleaned and all fire hazards were eliminated.

The collections are at present not so accessible as in previous years, owing to the removal of cases and individual specimens to newly assigned locations essentially to provide attic storage space. Much material consequently awaits reclassification and placement.

Physical anthropology.—Four of the division's cases of exhibition material were rearranged during the year, new specimens being added. The collections of the division are constantly expanding. The lack of storage space, however, is a serious and growing difficulty. It is hoped that some additional storage space may be found during the coming year so that the congestion may be somewhat relieved.

Anthropological laboratory.—The customary amount of restoration, repair, and casting was performed in the anthropological laboratory. Outstanding work projects included the restoration of 70 pieces of Southwestern pottery; the repair of a large section of a valuable Haida Indian totem pole; the repair of 11 pieces of Haida slate carvings; the renovation and reinstallation of an Eskimo figure; the preparation of a candlefish cast, which has since been installed in the hall of heating and lighting; the restoration and repair of a badly worm-eaten sculptured wooden medieval Christ figure; and of various other objects of minor art for the division of ethnology. Repairs and restorations were also effected on specimens belonging to the Bureau of American Ethnology, National Collection of Fine Arts, department of geology, and the division of history, as well as the customary repair and restorations to the statuary throughout the Natural History and Smithsonian Institution Buildings.

INVESTIGATION AND RESEARCH

During the year the head curator continued research on his publication covering the archeological explorations at Marksville, La. Page proof was read on a bulletin prepared in collaboration with Jesse D. Jennings on the "Peachtree Mound and Village Site, Cherokee County, North Carolina." From July 15 to August 15, 1940, he directed archeological explorations at the Kincaid site, a Middle Mississippi cultural manifestation in southern Illinois, in cooperation with the department of anthropology at the University of Chicago. He also examined a large prehistoric mound and village site locally known as the Watson Mounds, near Charleston, S. C. In May 1941 he made a brief reconnaissance of village sites in the vicinity of Saltville in southwestern Virginia. As secretary of the Advisory Board of the National Park Service, he attended several meetings and conferences devoted to the preservation and restoration of important archeological and historic sites along the eastern seaboard. In addition, he served as a consultant for the Federal Work Projects Administration on archeological projects throughout the country.

Archeology.—The curator of archeology, Neil M. Judd, continued his study of the prehistoric pottery collected at Pueblo Bonito, N. Mex., and selected specimens to be photographed for illustration purposes. Assistant Curator Waldo R. Wedel, as time permitted, continued preparation of a report on field investigations in Platte County, Mo., in 1937–38. Dr. Wedel submitted two short manuscripts for publication and completed a third.

Going to and returning from his 1940 field-work in Kansas, Assistant Curator Wedel studied collections at the Missouri Historical Society, St. Louis; at the University of Missouri, Columbia; at the University of Oklahoma, Norman; and at Evanston, Ind.; and participated in the sessions of the Fourth Conference on Plains Prehistory at Norman, Okla., September 9–11, 1940.

During the past year 58 lots of archeological material were received for examination and report, and subsequently returned to the senders.

Ethnology.—The curator of ethnology, H. W. Krieger, as time permitted, continued an analysis, with a view toward publication, of the Antillean and Northwest Pacific coast field collections made by him in previous years.

At the time of his appointment, the assistant curator, Dr. J. E. Weckler, Jr., was engaged in ethnological and social anthropological research in a rural Spanish-American community in New Mexico. Since his arrival at the Museum he has conducted preliminary research on problems of South American ethnology and geography in pursuance of plans for the modernization of the displays of South American ethnology.

As usual, considerable time was devoted by the staff during the year to small specific research problems necessitated in order to furnish data requested by professional anthropologists, students, and laymen. For example, a western anthropologist wanted to know the dimensions and characteristics of the Museum's extensive collection of Zuñi and Hopi rabbit sticks, and a Canadian anthropologist requested photographs of a large series of our superb collection of Haida argillite carvings and silverwork. Both of these requests and others of a similar nature required careful investigation extending over considerable periods of time.

Thirty-seven lots of material were received for identification.

A selected number of ethnological and archeological specimens that were lent to the Museum of Modern Art in New York City for its current exhibition of American art were delivered by the curator in person and were returned by him to the division at the close of the exhibition. While in New York City he visited the Metropolitan Museum of Art and consulted with the curators of glass and ceramics.

Physical anthropology.—The curator of physical anthropology, Dr. Aleš Hrdlička, completed his large Catalog of Alaskan and Siberian crania, which covers over 4,000 skulls, and submitted it to the Museum for publication. The rest of his time was devoted to additional studies of the northern peoples and materials and to the gradual preparation of his main work on the excavations on Kodiak Island, Alaska.

During the interval between completing his field work in Virginia and leaving for Peru, the associate curator, Dr. T. D. Stewart, spent considerable time in studying the skeletal remains from the ossuary at Patawomeke, Va. He also studied and prepared a report on the Museum's few examples of filed teeth.

Prof. C. J. Connolly, of the Catholic University of America, continued throughout the large part of the year his researches on the brain collection in the division.

Dr. Hrdlička made 15 identifications of skeletal remains for the Federal Bureau of Investigation. Nine lots of skeletal material were sent to the division for identification and subsequently returned to the senders.

In October 1940 the curator visited the Western Reserve University in Cleveland to take measurements of white adult materials and adult apes. He also visited the Field Museum of Natural History in Chicago for the purpose of measuring the lower jaws of their Melanesian materials. In May 1941 Dr. Hrdlička visited the American Museum of Natural History, New York City, for the purpose of selecting and obtaining prints of photographs made during his explorations in Mexico and the American Southwest.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The division of archeology distributed 146 specimens as gifts to various museums, and 159 objects were sent out in exchange. One ethnological specimen was presented to the Museum of the Red Cross Society; 892 specimens were transferred to other Government agencies and departments in the Museum; and 70 objects on loan were withdrawn by their owners. Physical anthropology sent out one specimen in exchange, and returned one to the Museum of the American Indian, Heye Foundation.

NUMBER OF SPECIMENS UNDER DEPARTMENT

On June 30, 1941, the department of anthropology had a total of 706,412 specimens, representing a net increase of 3,086. This figure is obtained by deducting all transfers and withdrawals from the

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department but does not include a large number of specimens received during the year but not yet cataloged.

The following summary indicates the number of specimens in each division and section within the department:

Archeology	475,913
Ethnology	182,222
Physical anthropology	36,793
Ceramics	7,206
Musical instruments	2,403
Period art and textiles	1,875
Total	706,412

DEPARTMENT OF BIOLOGY

(Leonhard Stejneger, *Head Curator*)

While the number of accessions received shows a falling off from previous years because of the continuation of the disturbed condition of the world, it is gratifying to note that the number and scientific value of the individual specimens have not diminished. Field work, while of necessity restricted almost exclusively to the Western Hemisphere, was conducted in regions hitherto rather poorly represented in the Museum collections. Excursions into the southern Appalachian region conducted to complement the vertebrate material in the Museum were continued by W. M. Perrygo and J. S. Webb in South Carolina during the fall of 1940, resulting in the collection of important specimens of mammals and of birds. During the summer W. L. Brown, the chief taxidermist, made a trip to Field, British Columbia, and Banff, Alberta, to select and study the setting for the accessories and backgrounds for biological groups of Rocky Mountain sheep and Rocky Mountain goats. The expedition of the United States Antarctic Service returned with highly desirable material of seals and birds from a region previously poorly represented in the Museum, as well as a considerable collection of lower cryptogams. Dr. E. A. Chapin spent five successful weeks on the island of Jamaica during April and May 1941 to supplement the collections made in 1937. Termites and ants as well as beetles received special attention. Dr. Waldo L. Schmitt was detailed for about 4 months to the Alaska king crab investigation of the United States Fish and Wildlife Service as biologist and leader of the field party conducted in the region south of the Alaska Peninsula from Ikatan Bay to Shelikof Strait. He also made a hurried trip to the Galápagos Islands accompanying a survey expedition. Dr. A. Wetmore undertook a trip of two months to northwestern Costa Rica in October and November, and later, from March to May, accompanied by M. A. Carriker, Jr., on a three-month expedition to the Guajira Peninsula of northeastern Colombia, for the purpose of collecting birds. Dr. Hobart M. Smith, incumbent of the Walter Rathbone Bacon Traveling Scholarship, returned from Mexico with large collections, concluding a successful study of the herpetological fauna. In addition several members of the curatorial staff undertook more or less extended collecting excursions in the parts of Maryland and Virginia accessible from Washington. Thus Dr. Remington Kellogg

collected fossil cetaceans on the western shore of Chesapeake Bay; Dr. L. P. Schultz and E. D. Reid did some collecting of fishes locally; numerous short collecting trips to points in nearby surroundings of Washington were made by the specialists employed by the Bureau of Entomology and Plant Quarantine; Clarence R. Shoemaker in company with T. Kenneth Ellis undertook a two-week collecting trip for fresh-water amphipods through Virginia and the Carolinas; and Austin H. Clark continued his studies of the butterflies of Virginia during excursions to various parts of the State.

ACCESSIONS

Accessions for the year aggregated 1,136, with a total of 262,521 specimens, a decrease in the lots received but a definite increase in the total of materials. The scientific value is fully equal to the usual high standard of previous years. Some of the more noteworthy accessions are listed under the various divisions as follows:

Mammals.—The most important mammalian accession was a complete skull and both sets of baleen of an adult humpback whale (*Megaptera novae-angliae*) and a fetal whalebone-whale skull, collected in the North Pacific Ocean in 1939, a gift from the American-Pacific Whaling Co. through Chief Boatswain A. Van De Venter, United States Coast Guard; 74 specimens of mammals collected in Liberia by the Smithsonian-Firestone Expedition in 1940; 102 specimens of mammals collected during 1940 in South Carolina by Watson M. Perrygo, J. S. Y. Hoyt, and John S. Webb for the Museum; one specimen of moose (*Alces americana*) collected during 1940 in Alberta by William N. Beach and presented by him to the Museum; 85 specimens of bats collected in caves by friends and members of the National Speleological Society and donated by them; 8 specimens of bats collected in Mexico and presented to the Museum by Dr. Luis Mazzotti, of Mexico City; 14 specimens of bats collected in the Virgin Islands, presented by Harry A. Beatty, of St. Croix; 13 specimens of mammals from Indo-China, collected for the Museum by Dr. Joseph F. Rock; 9 specimens of bats (*Eptesicus wetmorei*) from near Corozal, Puerto Rico, presented by Dr. Jarvis S. Morris; 11 specimens of bats and one weasel (*Mustela*) from Mexico, collected by Dr. Hobart M. Smith, presented by the Smithsonian Institution; 2 rodents (*Thomasomys paramorum* and *Thomasomys silvestris*) from Ecuador, both new to the collection, obtained in exchange; 2 fetuses of humpback whales (*Megaptera novae-angliae*), donated by Prof. Walter K. Fisher; a baby walrus skeleton (*Odobenus rosmarus*) collected in Smith Sound, Baffin Bay, by Capt. Robert A. Bartlett, and presented by him; specimens of the deer *Moschus moschiferus parvipes* and *Capreolus bedfordi bedfordi* col-

lected in Korea, presented by Joseph F. Wilson; frontlets and antlers of two deer (*Odocoileus*) from Costa Rica, collected by Dr. Alexander Wetmore; and 28 specimens of mammals collected in Bolivia and Brazil by Alexander Daveron, obtained by purchase. Of the 98 specimens received from the National Zoological Park, the most important was a gayal (*Bos frontalis*).

Birds.—Among the most important and valuable avian accessions were the following: From Dr. Joseph F. Rock, 762 bird skins from Indo-China; from Dr. A. Wetmore, 352 bird skins and 3 skeletons collected in Costa Rica; from Alexander Daveron, 424 skeletons of Brazilian birds, by purchase; from the United States Antarctic Service, 48 skins, 2 skeletons, and 21 sets of eggs from East Base, Palmer Land (transferred); from the Walter Rathbone Bacon Scholarship, Smithsonian Institution, collected by Dr. Hobart M. Smith, 101 birds from Mexico; from the Central National Museum of Manchukuo, Hsinking, Manchukuo, 23 skins of Manchukuoan birds, obtained in exchange; from the Museum of Comparative Zoology, the skin of a rufous owl, *Otus spilocephalus luciae*, new to the Museum, by exchange; from the National Zoological Park, 5 lots containing 145 skeletons, 18 skins, and 8 eggs, by transfer. The field work of W. M. Perrygo and associates in South Carolina brought 1,205 skins, 1 alcoholic specimen, and 1 skeleton.

Reptiles and amphibians.—The Mexican reptiles received from the Smithsonian Institution as the major part of the collections made by Dr. Hobart M. Smith, incorporated in the collection during the year, include 4,201 specimens, among them types of many new forms and representatives of species hitherto not in the Museum. The second installment of Dr. W. M. Mann's collection made in Liberia during the Smithsonian-Firestone Expedition consisted of 472 specimens, including representatives of several new forms and much valuable comparative material from territory hitherto unknown.

Fishes.—The specimens received from the Smithsonian-Firestone Expedition of 1940 collected by Dr. W. M. Mann in Liberia aggregated 1,944 fishes, an outstanding contribution from a region hitherto poorly represented in the Museum. J. L. Baughman donated 907 fishes from Texas and the Gulf of Mexico. Dr. Waldo L. Schmitt during his work in Alaska collected 421 specimens. Stewart Springer donated 60 sharks from Florida and Texas. Two paratypes of *Hadropterus palmaris* from Georgia were presented by Dr. Reeve M. Bailey. A large number of paratypes was received in exchange from six museums and scientific institutions. Michael Lerner donated two casts for the exhibition series, one of a mounted black marlin and the other of a thresher shark.

Insects.—The most important accession in entomology was the Nevermann collection of Costa Rican Coleoptera, obtained after the death of Mr. Nevermann and transferred by the Bureau of Entomology and Plant Quarantine. In all there were some 33,000 specimens of beetles, with more than 100 species represented by type material and many species new to the collection. Prof. T. D. A. Cockerell, of the University of Colorado, continued to deposit type material in the national collection, several sendings consisting of bees and comprising approximately 1,000 different species being received. More than 300 of these are represented by type material, and about a third of the others were not previously contained in the Museum collections. Prof. Alfred C. Kinsey, of the University of Indiana, donated 1,079 adults and galls in Cynipidae. This material was picked with full knowledge of the forms found in the Museum collection and represents largely species hitherto unrepresented in it. Dr. George F. Knowlton, Utah State Agricultural College, deposited considerable material in flies and Aphidae. Elwood C. Zimmerman of the Bishop Museum, Honolulu, donated his personal collection of North American beetles, together with a certain amount of material from the Hawaiian Islands. Dr. Anastasio Alfaro, San José, Costa Rica, added several hundred specimens of Lepidoptera. Dr. R. E. Blackwelder donated a series of nearly 3,000 beetles from Panama, which he collected some years ago. The Liberian insects collected by Dr. W. M. Mann while on the Smithsonian-Firestone Expedition include much new material. The Department of Agriculture transferred approximately 64,000 specimens of insects from material submitted to the Bureau of Entomology and Plant Quarantine for identification. Type material was deposited by the following: R. E. Blackwelder, Annette F. Braun, British Museum (National History), Bernard Brookman, Bureau of Entomology and Plant Quarantine, W. F. Buren, California Academy of Sciences, E. McC. Callan, Department of Agriculture of Canada, M. A. Cazier, T. D. A. Cockerell, W. S. Creighton, Richard Dahl, C. J. Drake, George P. Engelhardt, J. L. Gressitt, C. A. Hubbard, H. B. Hungerford, University of Kentucky, J. N. Knull, Los Angeles Museum, W. W. Middlekauff, H. B. Mills, National Institute of Health, C. T. Parsons, H. J. Reinhard, H. G. Rodeck, C. W. Sabrosky, M. W. Sanderson, C. F. Smith, John L. Sperry, George S. Stains, Utah Agricultural College, and Frank N. Young, Jr.

Marine invertebrates.—The leading accessions include the following: American Museum of Natural History, cotypes of a new species of isopod; Capt. Robert A. Bartlett, a collection of some 500 marine invertebrates from the west coast of Greenland; Dr. William A. Castle, holotype and paratype of a new species of turbellarian worm;

Dr. T. D. A. Cockerell, cotypes of a new species of isopod; Dr. A. A. Doolittle, a large collection of Entomostraca made by the donor in the Eastern United States, accompanied by collecting notes and other records; T. Kenneth Ellis, a collection of amphipods, including type and paratypes of a new species; H. Zanyin Gaw, National Wu-Han University, Kiating, Szechwan, China, paratypes of a new species of fresh-water jellyfish; University of Michigan Museum of Zoology, cotype of a new species of crab; Dr. Dora Priaulx Henry, a collection of barnacles upon which is based her paper on "The Cirripedia of Puget Sound"; Horton H. Hobbs, Jr., types and paratypes of 15 new species of crayfishes and neotypes of one new species of crayfish; Leslie Hubricht, cotypes of 16 new species of isopods and 8 new species of amphipods; Arthur G. Humes, holotype of a new species of copepod; Prof. E. Ruffin Jones, Jr., paratypes of a new species of turbellarian worm; Museum of Comparative Zoology, 247 specimens of Brachyura, many of which were not heretofere represented in the Museum; Dr. Grace E. Pickford, holotype of a new species of giant earthworm; Dr. Waldo L. Schmitt, a large collection of marine invertebrates and other specimens taken in the course of the Alaska king crab investigation by the United States Fish and Wildlife Service; W. M. Tidd, holotype of a new species of copepod; United States Fish and Wildlife Service, a large collection of nemertean worms collected by the *Albatross* and *Fish Hawk*, including types of two new species, also type and paratype of a new species of shrimp.

Mollusks.—Among the most outstanding contributions may be mentioned the collections made by Russell Hawkins, Jr., Portland, Oreg., during his cruise along the west coast of Lower California and the Gulf of California, being the largest contribution from the region that has come to the Museum since the *Albatross* Expedition in 1911. Next were the purchases made by the Frances Lea Chamberlain fund, representing 720 lots of 3,115 specimens, all of which were selections made to supplement the collections already in the Museum. Dr. James Zetek, Balboa, Canal Zone, donated the type and additional specimens of a new shipworm discovered by him in the Canal Zone, described by Dr. Bartsch. Dr. S. S. Berry sent in exchange 222 specimens of mollusks, including 10 paratypes and 27 topotypes of species described by him. Dr. Alberto Carcelles, Museo Argentino de Ciencias Naturales, Buenos Aires, presented three paratypes of *Odontostomus* from Argentina. From the University of Michigan there were received four specimens of Mexican land shells, including 2 paratypes of *Cyrtotoma walkeri* H. B. Baker; E. P. Chace, San Pedro, Calif., presented four paratypes of *Callistochiton connellyi* Willett. Dr. Wendell O. Gregg, Los Angeles, Calif., do-

nated 2 paratypes of *Oreohelix parawanensis* Gregg; Dr. B. R. Bales, Circleville, Ohio, a paratype of *Cancellaria reticulata adelae* Pilsbry; Dr. Myra Keen, Stanford University, a topotype of *Alvania keenae* Gordon. A remarkably fine collection of Samoan shells, embracing 3,084 specimens, was contributed by Mrs. A. W. Borsum, Annapolis, Md. A fine lot of specimens from Dominica, West Indies, was received from R. G. Fennah, Government Entomologist, St. Lucia, representing 318 specimens of land and marine shells. Dr. J. Bridge presented about 1,000 land and fresh-water shells from Texas. Mr. and Mrs. Sydney W. Lawrence contributed an exquisitely selected series of color forms of coquina shells (*Donax variabilis*) collected at St. Petersburg, Fla., now displayed in the biological exhibit in the Smithsonian Institution Building.

Helminths.—The following accessions of helminths, listed alphabetically, contain type material: Prof. John G. Arnold, Jr., Loyola University, New Orleans, La., type and paratypes of *Stunkardionema halla;* Prof. Eduardo Caballero y C., Institute of Biology, Laboratory of Helminthology, Chapultepec, Mexico, D. F., cotype of trematode, *Renifer brevicoecus*, and cotypes of *Diplotriaena rovegliai;* Seymour I. Feldman, University of Minnesota, three specimens of trematodes (collateral type); William C. Hill, Oklahoma Agricultural and Mechanical College, 7 slides and 1 vial of type material of helminths; Prof. H. W. Manter, University of Nebraska, 9 slides of type specimens of trematodes; L. Ormand Rodgers, Oklahoma Agricultural and Mechanical College, 12 slides of parasitic worms, including 2 types; L. Ormand Rodgers and Robert E. Kuntz, Oklahoma Agricultural and Mechanical College, 1 type slide of *Diplorchis americana* Rodgers and Kuntz; Fred Leus Schmidt, Oklahoma Agricultural and Mechanical College, 13 slides of type material of helminths; Fred Leus Schmidt and W. Eugene Hubbard, Oklahoma Agricultural and Mechanical College, 12 slides of type material of helminths; Hal Tucker, Los Angeles, Calif., type and 2 paratypes of *Nematodirus tortuosus* Tucker.

Corals.—Two lots of corals were accessioned: From Museo Nacional Panamá, 11 corals; and from Dr. J. W. Wells, Ohio State University, 17 specimens of corals from Florida, Japanese Islands, and East Africa.

Echinoderms.—The most noteworthy accessions were as follows: Through the kindness of Dr. Walter K. Fisher there was received a series of 104 starfishes representing 79 species collected by the *Discovery*, the *Discovery II*, and the *William Scoresby* during the years 1925–1936 in sub-Antarctic and Antarctic seas from the Falkland Island region to South Georgia, the South Sandwich Group, the South Orkneys, the Antarctic Archipelago, and Ross Sea under the direction

of the Discovery Committee, Colonial Office, London. A small but interesting collection of Antarctic brittle-stars, starfishes, and holothurians, together with a number of sea-urchins, was received from H. M. Bryant, of the United States Antarctic Service. A large and rich collection of echinoderms from Greenland came from Capt. Robert A. Bartlett. From Dr. Hubert Lyman Clark there was received a part of the collection of the Percy Sladen Trust Expedition to the Abrolhos Islands, Western Australia, under the leadership of Prof. W. J. Dakin, of Sydney. This collection was reported upon by Dr. Clark in 1923.

Plants.—The more important botanical accessions are as follows: 5,347 specimens collected in Mexico by George B. Hinton, of which more than one-third were presented, the remainder purchased; 2,672 specimens, mostly from Virginia and the Rocky Mountain region, from the Gray Herbarium of Harvard University as an exchange; 2,236 specimens from miscellaneous sources, from the Arnold Arboretum in exchange; 1,716 specimens transferred by the United States Department of Agriculture, Bureau of Plant Industry; 1,307 specimens from the Instituto de Ciencias Naturales, Bogotá, as an exchange; 1,560 specimens (including a considerable number of type photographs) from the Field Museum of Natural History in exchange; 1,652 specimens from Venezuela presented by Prof. H. Pittier; 1,254 specimens, mostly collected in Alaska by Dr. and Mrs. Aven Nelson, transferred by the Department of the Interior; 1,544 specimens from Virginia, presented by H. A. Allard; 818 grasses, mostly Old World species, from the Royal Botanic Gardens, Kew, England, in exchange; 756 specimens, mostly from Panama, from the Missouri Botanical Garden, in exchange; 988 specimens, mostly from California, from the University of California, in exchange; 1,039 specimens from California, presented by the Rancho Santa Ana Botanic Garden, Anaheim, Calif.; 525 specimens from Korea, purchased from A. M. Smith; 380 specimens collected in Costa Rica by Dr. A. F. Skutch, presented by the Museo Nacional, Costa Rica; 667 specimens from Ecuador, presented by Oscar Haught; 493 specimens from Iowa, received from Iowa State College, in exchange; 454 specimens from Mexico, presented by the University of Washington; 352 specimens collected in Alaska by A. E. Porsild, from the National Museum of Canada, in exchange; 386 specimens from Panama, presented by Paul H. Allen; 267 grasses, mostly from tropical America, presented by Mrs. Agnes Chase; 832 specimens from Florida, presented by Dr. W. A. Murrill; 407 specimens from Guadeloupe and St. Barts, presented by A. Questel, Pointe-a-Pitre, Guadeloupe; 274 miscellaneous specimens from the University of Michigan, in exchange; 300 specimens from Guatemala, presented by Harry John-

son; 237 specimens from South Africa, from the Natal Herbarium, Durban, in exchange; 266 specimens from the coast of western Greenland, presented by Capt. Robert A. Bartlett; 307 specimens, mostly from Virginia, presented by E. P. Killip; 200 specimens from Colombia, presented by Brother Daniel, Medellín, Colombia; and 184 Peruvian ferns, presented by C. Bües, Quillabamba, Peru.

INSTALLATION AND PRESERVATION OF COLLECTIONS

The work on three new exhibition groups of North American mammals occupied the preparatory branch of the department during the year. Their installation necessitated considerable rearrangements of the bird and mammal exhibits. The groups of Rocky Mountain sheep and goats in the main North American mammal hall had to be dismantled as several of the animals composing them were needed in the new groups. On the second floor the converting of one of the interior alcoves into an office room for the division of insects necessitated a rearrangement of the invertebrate exhibits on that floor, some of them being transferred to the northwest corner hall of that floor. Several improvements were made in the skeleton exhibits on the same floor, defects in the mounting of many of the old specimens, particularly the anthropoid apes, being corrected. The elephant skull was cleaned and placed in a glass floor case. A number of additions to the mounted exhibits of mammals and birds were made, and the cast of an electric eel was installed in the fish exhibit. A special case of Antarctic birds collected by the United States Antarctic Service was placed on temporary exhibition in the basement foyer.

In the division of mammals the main work was the routine addition of newly acquired specimens to the collection and the arrangement of certain groups on which systematic work was completed recently. Among the groups on which such work was done are the white-tailed deer and the flying squirrels of the genus *Petaurista*. The arrangement of the skin collection is for the most part satisfactory. For some time to come no spreading will be necessary except in a few groups. The storage of incoming large and small skulls presents a more difficult situation each year, since many of the cases are now crowded to capacity. The collection of large skeletons in the attic is in excellent shape, as regards arrangement, but is badly overcrowded in many places.

The men directed by the chief taxidermist made up 99 dried or salted skins as study specimens and skinned 77 mammals received in the flesh (chiefly from the National Zoological Park). They also cleaned 61 large and medium-sized skeletons and 275 skulls of various sizes. In addition the taxidermists removed the flippers from 7 Antarctic seal skins and skived 19 large mammal skins. Contract work

on cleaning 745 small- and medium-sized skulls and 44 skeletons was under the curator's observation in a small laboratory on the basement floor of the Natural History Building.

In the division of birds the rearrangement, identification, and labeling of the study series of bird skins were continued. The family Thraupidae, occupying six quarter-unit cases, was rearranged, and all the thousands of specimens were reidentified by the curator. The following families, occupying 10 half-unit cases and 26 quarter-unit cases, were rearranged and reidentified by the assistant curator, H. G. Deignan: Dicruridae, Campophagidae, Bucerotidae, Caprimulgidae, Micropodidae, Hemiprocnidae, Capitonidae, and the Old World part of the Picidae. The curator reidentified and rearranged seven half-unit and five quarter-unit cases of North American gallinaceous birds. The card catalog of the alcoholic collection was checked over with the specimens, correcting old errors and omissions, all the non-passerine groups being completed. Six half-unit cases, accommodating the bones of the ostriches, rheas, emus, cassowaries, kiwis, tinamous, and penguins, were placed in another room to relieve crowding. The entire alcoholic collection was gone over and alcohol added to jars where needed.

In the taxidermist laboratory 17 birds were mounted for the exhibition collection. Of birds received in the flesh (including some frozen ones from the United States Antarctic Service), 56 were skinned and made up; 46 specimens were degreased and made up; one large bird was skinned; 8 eggs were blown; 290 skeletons were cleaned and an additional 120 were roughed out.

In the division of reptiles and amphibians 4,142 specimens were card-cataloged and placed in the stacks. To accommodate the great number of specimens collected by Dr. Hobart M. Smith under grant by the Walter Rathbone Bacon Traveling Scholarship in Mexico, it became necessary to add several shelves to each stack.

In the division of fishes the regular routine of installation and preservation progressed satisfactorily. The numerous jars, crocks, and barrels were refilled with proper strength of alcohol, and considerable work was accomplished in identification, cataloging, and indexing. The condition of preservation of the study collection is very good, but the specimens are crowded on the shelves.

In the division of insects considerable rearrangement was made by the curator in the collections of Coccinellidae (New World Synonychini) and Scarabaeidae (Aphodiinae, Dynastinae, and Scarabaeinae), involving the redetermination of the species in the genera concerned. Mrs. Rhoda Mislove completed the mounting of the miscellaneous insects taken by Dr. W. M. Mann on the Smithsonian-Firestone Expedition to Liberia, a large collection of beetles, mostly

Staphylinidae, turned in by Dr. R. E. Blackwelder, and various smaller lots. In addition to this preparatorial work, Mrs. Mislove completed the rearrangement of the collection of Cleridae, incorporating all determined material and grouping all undetermined specimens in addenda drawers. Considerable progress was made by Dr. Blackwelder in the transfer of the main collections of Tenebrionidae and Staphylinidae from Schmitt boxes to standard museum drawers. Twenty-two drawers of *Eleodes* were arranged and the entire series of identified Staphylinidae was arranged geographically in preparation for gradual change into a strict taxonomic arrangement. The subfamily Osoriinae was completely rearranged and relabeled.

Essential care was given all the study collections, and at least some minor improvements in arrangement were made throughout. This was done principally in the course of identification work or other service activities. The situation with respect to the various orders may be summarized as follows: In Orthoptera and the neuropteroid groups the Museum collections of the family Hemerobiidae and closely related families in the Neuroptera were rearranged in accordance with recent revisions of these groups by F. M. Carpenter, who studied a considerable part of our material. The same was done for the collection of the American Embioptera, which was recently revised by Dr. E. S. Ross. The most important and most extensive rearrangements pertain to the grasshoppers, especially to the genus *Melanoplus*. The collection of approximately 200 vials of Chinese Plecoptera, which was studied and identified several years ago by the late Dr. P. W. Claassen, of Cornell University, was properly labeled, transferred to standard containers, and placed in the permanent collection. Collections of several important groups of Coleoptera were rearranged in accordance with revisional studies carried on by members of this division. Marked improvements are to be recorded for the collections of the tribe Chrysobothrini, in the family Buprestidae, and in the family Byturidae. Various genera of weevils are also included among the groups rearranged, special attention being given to *Epicaerus*, *Rhinoncus*, *Peritaxia*, and *Cercopeus*. Dr. M. W. Blackman continued to make progress with the organization of the bark beetles comprising the family Scolytidae, special attention being given to the genera *Hylastes*, *Xylechinus*, *Pseudohylexinus* and *Phloeosinus*. Although Dr. J. M. Valentine joined the division late in the fiscal year, he has already made notable progress in organizing the collections of certain families of Coleoptera that were much in need of attention. He has completely rearranged the families Anthicidae, Carabidae, and Cicindellidae, and these are now in excellent order. A beginning was also made on study and rearrangement of the family Elateridae.

In the collections of coleopterous larvae important improvements were made in the families Coccinellidae, Dermestidae, and Curculionidae. In Lepidoptera approximately 11,000 specimens were incorporated in the regular collections from special collections largely in the geometrids and the Microlepidoptera, extensive rearrangement of the Geometridae especially being done by H. W. Capps. Rearrangement of the Pyralidoidea was continued, with emphasis on the Pyraustidae, the Epipaschiidae, and the Chrysaugidae. More than 1,500 specimens were added to the alcoholic collections of lepidopterous larvae, and approximately 2,400 slide preparations of genitalia were made during the year and placed in the reference slide collection. In the Hemiptera the segregation and rearrangement of material belonging to the subfamily Megophthalminae were completed. The family Tingitidae was entirely rearranged and was greatly expanded through the incorporation of extensive newly acquired material. There was continued improvement with respect to the collection of Aleyrodidae. Many of the type specimens were remounted and a great deal of duplicate unmounted material was prepared and incorporated in the regular collection. Probably the most important improvement consists in the transfer of all the slide preparations to transparent cellulose holders. Altogether, the collections of the Hemiptera, including the Homoptera, are in comparatively good order; that of the Aphiidae is in especially good condition. In the Diptera, special attention was given to the family Calliphoridae, and a vast amount of material, principally exotic, was incorporated in the collection. The family was completely rearranged and reorganized in accordance with D. G. Hall's revision. Intensive rearrangement in several subdivisions of the Tachinidae, particularly in the subfamilies Proseniinae and Rutillinae, was also undertaken. The fruit flies of the genus *Anastrepha* are now in excellent order, having been arranged to conform with Dr. Alan Stone's revision. There also was conspicuous improvement in the condition of the slide and alcoholic collections of Diptera. The alcoholic material was given particular attention, and rearrangement and labeling are almost completed. In Hymenoptera the most important work on the collections was the incorporation of a large amount of valuable bee material. This includes several hundred species represented by types presented by Prof. T. D. A. Cockerell. Several groups of parasitic Hymenoptera were also given serious attention, especially the family Eurytomidae and the genus *Tetrastichus*, the species of the latter having been arranged in accordance with the revision by B. D. Burks. On the whole the collections of the Hymenoptera are in relatively good order. All the Thysanoptera were transferred to transparent holders in new cabinets, so that for the first time this

entire collection is in usable condition. Important improvements were effected through rearrangement and also through the incorporation of much new material. During the past three years the number of species contained in the collection has nearly doubled, badly mounted type material has been reprepared, and long series of numerous species that were formerly represented by wholly inadequate material have been added. At the present time this collection contains approximately half of the described North American species but only about one-tenth of the described exotic species. In ectoparasites and Acarina the family Japygidae, all of which was on slides, was expanded and rearranged, and some rearrangement is to be recorded also for various small groups of mites and lice. The collection of fleas was reorganized to conform with a reclassification of the group by Ewing and Fox. In general, the slide collections of the various orders making up the assignments of Dr. H. E. Ewing are in definitely better shape from the standpoint of organization than they were a year ago, although the slide cabinets are overcrowded. As working material, the national collection is in reasonably good order and relatively better than a year ago because of the additional space allotted to the division, although this only affected the section of Coleoptera directly. Similar relief, however, is urgently needed for the Lepidoptera and Diptera.

In the division of marine invertebrates the study collections were overhauled, and much material was added. The collection of recent Bryozoa in the care of Dr. R. S. Bassler has been condensed to a minimum, being arranged in biological order with the genera contained in stout pasteboard boxes. The specimens for the most part are contained in small glass vials or on slide containers easily available for study.

The entire general collection of mollusks was rearranged according to the most recent classification. All the material cataloged was incorporated in the collection.

In the division of echinoderms the identifying and cataloging of specimens and incorporating them in the collection continued. Various minor rearrangements and improvements were made in both the dry and the alcoholic collections.

In the division of plants 27,795 specimens of flowering plants and ferns were mounted, wholly by adhesive straps, 21,686 of these by contract and 6,109 by the assistant scientific aide. In addition, 10,883 mounted specimens were repaired. Of these and material mounted during the preceding year, 25,807 specimens were stamped and recorded, and thus made ready for the Herbarium. Of unmounted specimens there are more than 15,000, belonging mostly to recent accessions from tropical America, Virginia, and the Rocky

Mountain region. Of mounted, stamped, and recorded specimens there are on hand upward of 50,000 specimens awaiting incorporation in the Herbarium. The Herbarium was thoroughly fumigated twice, and special attention was given to fumigating at more frequent intervals specimens in temporary storage. The segregation of type specimens of flowering plants was continued by E. P. Killip and Dr. E. H. Walker. The number of types segregated and added to the type Herbarium was 739. This brings the total number of type specimens to 23,344, all of which are especially cataloged and kept in substantial individual covers. In addition about 100 Old World types were removed from the general Herbarium and will be incorporated in the type Herbarium as soon as cataloged. The lower cryptogams under the immediate charge of E. C. Leonard, were given special attention. John A. Stevenson, honorary curator of the C. G. Lloyd mycological collections, which are on deposit at the Department of Agriculture, found it necessary to rearrange completely the collections in the interest of space conservation, but this has not interfered with the accessibility of the specimens, the supporting indices, and records.

INVESTIGATION AND RESEARCH

The curator of mammals, Gerrit S. Miller, Jr., who on December 31, 1940, retired to become research associate of the Smithsonian Institution, continued his study of Sumatran mammals. In conjunction with Dr. Remington Kellogg, who succeeded him as curator of mammals, he critically revised 245 galleys of proof of the catalog of type specimens of mammals in the United States National Museum by Arthur J. Poole and Viola S. Schantz. The joint study of North and Central American deer by E. A. Goldman, of the Fish and Wildlife Service, and Dr. Kellogg was almost completed when the former was detailed to other duties, and the latter resumed his study of the North American pine mice of the genus *Pitymys*. Studies on recent and fossil cetaceans by Dr. Kellogg include the publication of descriptions of three fossil whalebone whales from Portugal; the completion of a report on the South American recent porpoise *Lagenorhynchus australis;* and the preparation of text and illustrations for an account of the fossil whalebone-whales of the family Cetotheriidae. As in former years Dr. Kellogg participated in a number of interdepartmental conferences related to the international agreement for the regulation of whaling.

The curator of birds, Dr. Herbert Friedmann, continued work on Ridgway's unfinished monograph, "The Birds of North and Middle America," volume 9 being in press. He prepared a considerable part of the manuscript of volume 10 in addition to compiling literature

references subsequent to 1932 for all the remaining parts of the work. He also wrote a report on a large collection of bird bones from old Eskimo habitations on Cape Prince of Wales, Alaska. With Malcolm Davis, of the National Zoological Park, he finished a paper on the behavior of the African black crake in captivity. Considerable time was given to the new A. O. U. Check-list of North American Birds. The associate curator, J. H. Riley, completed the study of a second installment of Indo-Chinese birds received from Dr. Joseph F. Rock and published two papers describing new forms. He added about 1,500 cards to the index of scientific names of birds. H. G. Deignan, assistant curator, continued his work on the birds of northern Siam and completed the account of all the non-Passeres and of the Passeres from the broadbills through the crows, publishing three papers dealing with new or misunderstood forms discovered in the course of his work. Dr. A. Wetmore, whose time available for research work was greatly limited by administrative duties, published a report on his collections from Guatemala and a new edition of his systematic classification for the birds of the world. He also wrote a popular account of his Costa Rican journey as well as some short notes on bird records of interest.

The curator of reptiles, Dr. Leonhard Stejneger, continued his turtle studies, devoting most of the time to the large collection brought to the Museum by Dr. Hobart M. Smith during his incumbency of the Walter Rathbone Bacon Traveling Scholarship. Dr. Doris M. Cochran, assistant curator, saw her "Herpetology of Hispaniola" through the press and devoted other time to a continuation of her studies of the South American frogs.

Dr. L. P. Schultz, curator of fishes, completed his study and report of the fishes collected by him in 1939 in the central South Pacific Ocean, including descriptions of 30 new species from among the 349 species collected. Several minor papers on Pacific Ocean fishes were published as well as one in conjunction with Carl L. Hubbs on some fishes of Alaska, including descriptions of two new species. A paper on the flatfish *Cyclopsetta chittendeni* from Texas was prepared and published by E. D. Reid, aide. Dr. Hugh M. Smith, Smithsonian associate curator of zoology, continued his work on the fishes of Thailand, describing a number of new species. In addition he prepared several short papers on fishes of the oriental fauna.

The curator of insects, Dr. E. A. Chapin, continued studies in the Coccinellidae and prepared two small papers. He also accomplished considerable work on the definition of genera of New World Aphodiinae, and commenced a restudy of the Cuban species of the genus *Anoplosiagum*, several new species of which have been collected

in recent years by S. C. Bruner, of the Cuban Agricultural Experiment Station. Dr. R. E. Blackwelder, assistant curator, brought to final completion an extensive monograph of the Staphylinidae of the West Indies, commenced in 1935 under the Walter Rathbone Bacon Scholarship, a large part of his time having been devoted to this work. In addition he prepared a generic revision of the staphylinid subfamily Osoriinae, a paper on the gender of scientific names, and a paper summarizing the entomological work of the late Adalbert Fenyes.

The research work by the staff members of the Bureau of Entomology and Plant Quarantine may be briefly summarized as follows: In Orthoptera and the neuropteroid groups the most important research work completed was a report on the Cuban roaches. The complex of species of grasshoppers centering about *Melanoplus imputicus* Scudder was intensively studied and a paper completed; another paper on the collection and study of Zoraptera was prepared and referred for publication; important preliminary work was also done on the book lice, or Corrodentia. A study was begun on the grasshoppers comprising the subfamily Cyrtacanthacridinae of the Middle West. In Coleoptera studies were carried on in a number of genera, most of them containing species of economic importance. H. S. Barber outlined in rough draft the results of taxonomic and nomenclatorial studies on the genera *Attagenus*, *Abbotia*, and *Zeugophora*, and completed a study of the raspberry fruitworms of the genus *Byturus*. W. S. Fisher completed a monographic treatment of the Buprestidae belonging to the subfamily Chrysobothrini. Jointly with M. C. Lane he also prepared for publication a paper treating the Schaeffer types of Elateridae. In the Curculionidae, L. L. Buchanan carried on intensive studies on the genera *Cylindrocopturus* and *Smicronyx*. Dr. J. M. Valentine began critical study of certain parts of the family Elateridae, emphasis being placed on the genera *Empedus* and *Melanotus*, both of which contain species of economic importance and have been so badly confused that specific identifications could not be made with safety; critical studies of several different genera of bark beetles were continued by Dr. M. W. Blackman. The genera *Pseudohylesinus*, *Phloeosinus*, and *Pityophthorus* received special attention and a paper on the first of these was submitted for publication. Dr. W. H. Anderson studied intensively the musculature of the head and mouthparts of certain species of Curculionidae in order to develop a practical terminology that can be used in larval descriptions for this group. Taxonomic studies, involving various subdivisions of the Curculionidae, were continued by Dr. Anderson, and Dr. Rees made beginnings on generic

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keys to the Coccinellidae and the Dermestidae, based on larvae. Dr. Rees also has nearing completion a study of the first instar larvae of certain species in the family Buprestidae. In Lepidoptera J. F. G. Clarke continued research in the Phalaenidae, which has for its object the reclassification of the family based on genitalia; late in the year he began a revision of the moths comprising the family Phaloniidae, and much important preliminary work was completed; he also continued work on the catalog of the Microlepidoptera of the State of Washington. In response to frequent requests for advice on the preparation of slide mounts of lepidopterous genitalia, he prepared a paper giving explicit directions and accompanied by helpful illustrations. H. W. Capps made good progress in his critical study on the moths comprising the family Geometridae and completed a paper covering the American species of the genus *Ellopia*. The illustrations for a paper by Carl Heinrich treating of the coccid-feeding species of Phycitinae are being completed. A study of the subfamily Lithosiinae of the family Arctiidae by W. D. Field was continued, and much of the preliminary work was completed, including the preparation of several hundred slide mounts of genitalia and the review of a vast amount of literature pertaining to the classification of this group.

In Hemiptera H. G. Barber continued his studies of the Lygaeidae of Cuba and the revision of the genus *Nysius*, the latter approaching completion. P. W. Oman, who for several years has been working toward a generic classification of the Cicadellidae, completed a preliminary draft of this work, which includes descriptions of the subfamilies, tribes, and genera, and keys to all superspecific categories. In the aphids, Dr. P. W. Mason continued work on a long-time project that involves the classification of the Macrosiphina and devoted special attention to the genus *Kakimia*. Preliminary research was carried on by Dr. Harold Morrison on the coccid genera *Antonina*, *Platylecanium*, *Kuwanaspis*, *Coccus*, *Lecanium*, and *Chrysomphalus*. Definite progress was made by Miss Louise Russell on the classification of the species belonging to the aleyrodid genus *Trialeurodes*, the North American species being reviewed.

In Diptera C. T. Greene continued his studies on dipterous larvae and is laying a foundation for a classification of the families of Diptera based on larvae. The vast improvement made during the year in the organization of the larval collection has been of appreciable assistance in furthering the studies of larval classifications. One of the largest taxonomic papers to be completed by the division in recent years is one by D. G. Hall on the blow flies of North America, which was finished near the end of the fiscal year and submitted for publication. It represents a monographic treatment

of the Calliphoridae, with descriptions of all known species and higher groups, as well as keys to assist in their identification, descriptions of the immature stages, and summaries of valuable data on economic importance. Dr. Alan Stone's revision of the fruit flies making up the genus *Anastrepha* was completed. He also completed an important nomenclatorial paper which considers the status of the generic names of Meigen's 1800 paper. A study of the black flies of the family Simuliidae was begun and will probably require at least two more years for completion. In the parasitic Hymenoptera A. B. Gahan studied especially the chalcidoid genera *Necremnus* and *Monodontomerus* and the family Eurytomidae. Revisions of the first two were completed. Some progress was made by R. A. Cushman on the revision of the large and difficult genus *Ophion* begun several years ago. C. F. W. Muesebeck recently undertook critical studies of the scelionid genera *Allotropa*, the species of which are important parasites of mealy bugs, and *Scelio*, which contains important parasites of grasshopper eggs. Research work in the Thysanoptera consisted almost wholly of studies in various species groups with the object of clearing up confusion in the organization of the collections and providing more definite identifications. A considerable part of Dr. H. E. Ewing's time available for research was devoted to the preparation of a generic classification of the fleas, in conjunction with Dr. Irving Fox, who has been in Washington during the greater part of the year. A taxonomic study of the chiggers begun by Dr. Ewing years ago was resumed. He also devoted some time to the study of interesting new material belonging to the Symphyla.

R. E. Snodgrass completed a large work on the male genitalia of the Hymenoptera and began similar study on the male genitalia of the Diptera. He has also nearing completion a manuscript on the skeletomuscular mechanisms of the honeybee. Eighty drawings to accompany this paper have been finished.

Dr. Waldo L. Schmitt, curator of marine invertebrates, concluded the revision of the genus *Aegla*, as well as a paper describing a new species of fresh-water crab from South America. A study of the genus of sandbugs, *Blepharipoda*, is almost complete. Clarence R. Shoemaker, assistant curator, brought to conclusion his study of the amphipods collected during the Presidential Cruise of 1938. A paper on *Gammarus minus* Say was published and another describing a new species of subterranean amphipod from Florida was finished. James O. Maloney, aide, nearly completed a paper on the isopods of the Presidential Cruise. Dr. R. S. Bassler reports on his studies on the bryozoan collections that identifications of various lots submitted for study were completed and a small number of unassorted Museum collections were separated by species and arranged in order

for detailed study. Dr. C. B. Wilson, collaborator in copepods, submitted for publication his report on the Copepoda gathered by the *Albatross* during the years 1899–1910, as well as a paper describing and figuring 16 new species of parasitic copepods found among the unidentified Museum material. Dr. J. A. Cushman, collaborator in Foraminifera, completed and submitted for publication the third part of "The Foraminifera of the Tropical Collections of the *Albatross*, 1899–1900." Considerable work was done on the fourth and final part.

The curator of mollusks, Dr. Paul Bartsch, in addition to various minor researches, part of which have been published, finished in collaboration with Dr. Carlos de la Torre and Dr. J. P. E. Morrison a monograph on the American Cyclophoridae, and likewise in collaboration with Dr. de la Torre subjected the Cuban Helicinidae to a critical overhauling. In collaboration with Dr. H. A. Rehder, assistant curator, he continued his studies on the Hawaiian marine gastropods. In addition to this work Dr. Rehder conducted other researches partly published. Dr. Morrison continued his studies on the American Amnicolidae.

Dr. T. Wayland Vaughan continued his studies of corals.

The curator of echinoderms, Austin H. Clark, made notable progress in the preparation of part 4, Bulletin 82, now nearing completion, devoting all his available time for research to this work.

Besides giving attention to tropical American ferns, Dr. W. R. Maxon, the curator of plants, prepared manuscript on the Pteridophyta for the Flora of Arizona, by Kearney and Peebles, now in press. E. P. Killip, associate curator, prepared a systematic treatment of several families of phanerogams as represented in Colombia. E. C. Leonard, assistant curator, continued his monographic study of American Acanthaceae, and in collaboration with H. A. Allard completed a systematic enumeration of the plants of the Bull Run Mountains, Va. C. V. Morton, assistant curator, undertook the revision of two large genera represented by recent large collections. Dr. E. H. Walker's "Revision of the Eastern Asiatic Myrsinaceae" appeared in October, and his paper entitled "Plants Collected by R. C. Ching in Southern Mongolia and Kansu Province, China," was in press at the close of the year. Local field work by the Conference on District of Columbia Flora mentioned in last year's report led to the preparation of a check-list of vascular plants of the Washington-Baltimore region, by Dr. F. J. Hermann, which will shortly appear in mimeographed form. A list of the vascular plants known from Shenandoah National Park, Va., was prepared also by Dr. F. R. Fosberg, of the United States Department of Agriculture, and Dr. Walker. Mrs. Agnes Chase continued her monographic study of the grasses of Brazil.

The increasing demand for identifications of specimens seriously interfered with other work in some of the divisions as the number of specimens with request for identification runs into the thousands, as in the division of plants (17,847) and division of marine invertebrates (3,828). Specifically the number of lots with request for identification was as follows: Mammals 43; birds 21; reptiles and amphibians, 6; fishes, 29; insects (apart from the bulk of insect material submitted through the Bureau of Entomology), 141; marine invertebrates, 85; mollusks, 117; helminths, 5; corals, 5; plants, 319.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Duplicate zoological specimens distributed to museums, colleges, high schools, and similar institutions aggregated 915 specimens, and 841 specimens were sent out in exchange. The 9,145 plants distributed were sent out as exchanges to 49 institutions and correspondents; of them 34 were in the United States and 15 in 11 other countries.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The summary of specimens given below is based on the numbers estimated for the previous fiscal year with the addition of the specimens accessioned during the present year and the deduction of specimens removed during the same period. The figures of the early estimates were approximate and have been revised from time to time. Several collections, such as the corals, of which no estimate has as yet been made, are not included, nor does the number of plants include the lower cryptogams and duplicates. In several of the divisions lots consisting of minute organisms are frequently counted as single specimens though they may contain hundreds and even thousands of individuals the enumeration of which could serve no useful purpose.

Mammals		242,457
Birds:		
Skins	277,292	
Alcoholics	10,016	
Skeletons	17,653	
Eggs	90,245	
		395,206
Reptiles and amphibians		122,866
Fishes		1,198,281
Insects		5,297,787
Marine invertebrates		1,017,877
Mollusks		2,925,477
Helminths		146,087
Echinoderms		168,329
Plants		1,803,682
Total		13,318,049

DEPARTMENT OF GEOLOGY

(R. S. Bassler, *Head Curator*)

Present world conditions have so reduced the available sources of geological material that the past year has been marked by a considerable decrease in the number of accessions, particularly in the division of mineralogy where various research problems have given way to defense work. The latter, inaugurated by field investigation of strategic minerals in Mexico by Curator W. F. Foshag was followed by a study of important occurrences of these minerals based upon our collections. Field work in stratigraphy, and in both invertebrate and vertebrate paleontology, by members of the staff continued actively and resulted in collections and scientific data sufficient to make this a normal year. Explorations in the Upper Cretaceous and early Tertiary deposits of Utah and Wyoming resulted in some excellent study and exhibition specimens of reptiles and mammals, while the study series of invertebrate paleontology were increased in value and usefulness by extensive sets of fossils secured in various Paleozoic formations of the Rocky Mountain region and other areas ranging from north Texas to west Tennessee.

Several large research projects in invertebrate paleontology were practically completed by staff members during the year, notably a monograph on Chazyan brachiopods, a correlation chart of the Devonian of North America, and a bibliographic index of Paleozoic Pelmatozoa, all technical works that when in print will embody much useful information.

More opportunity for exhibition work resulted in improvements, first, in the hall of invertebrate paleontology where the revision of the stratigraphic series of fossils was well advanced, and second, in vertebrate paleontology by the installation of a duck-billed dinosaur and a small camel from Nebraska. Relabeling of the mineral exhibits was furthered, and decided changes in the arrangement of the physical geology exhibits were inaugurated following completion of the necessary new cases.

ACCESSIONS

The number of accessions for the year totals 168, comprising approximately 55,818 specimens. These are listed by divisions as follows: Mineralogy and petrology, 55 accessions (3,761 specimens); physical and chemical geology, 19 accessions (204 specimens); strati-

graphic paleontology, 77 accessions (51,671 specimens); vertebrate paleontology, 20 accessions (182 specimens). Several accessions of the department overlap in the different divisions, thus accounting for the slight discrepancy in the sum total.

Mineralogy and petrology.—Minerals of especially high quality are contained in the nine accessions credited to the Canfield fund. The finest specimen is an 1,800-carat aquamarine crystal from Agua Preta, Brazil, showing the rare berylloid form. Another outstanding Brazilian specimen is a magnificent cluster of large, lustrous cassiterite (tin oxide) crystals from Ferraz, State of Minas Geraes. From Black Mountain, Rumford, Maine, came a group of eosphorite (manganese aluminum phosphate) with unusually large crystals 1½ inches in length, and from Mount Mica a fine, multicolored, gem-quality tourmaline. Two exhibition garnets were acquired—one, lustrous brown in color, of the variety grossularite, from Snohomish, Wash., and the other the emerald green form uvarovite from Jacksonville, Calif. From the collection of the late Prof. Philip Krieger were derived various rare minerals including especially good crystals of proustite, polybasite, stephanite, and other silver minerals from Chile and Mexico. Other valuable additions are specimens of the new and rare minerals sterretite, a hydrous aluminum phosphate, from Fairfield, Utah, and durdenite, an iron tellurate, from Mogollon, N. Mex., as well as aquamarine crystals of gem quality representing a new American gem locality at Centerville, Idaho.

Through the Roebling fund, ten accessions were recorded, most important of which is the extensive Diaz collection of Mexican cassiterites comprising several thousand specimens of both crystallized and botryoidal forms. A set of minerals from Bolivia, representing a portion of the collection of the late Jack Hyland, of La Paz, also contained good crystallized specimens of cassiterite and other tin minerals. A small collection of uranium minerals including large masses of uraninite crystals from Micaville, N. C., and crystals of the arsenic sulphides realgar and orpiment from Mercur, Utah, may also be mentioned.

Choice specimens deposited by Dr. Mark C. Bandy consisted of excellent crystals of unusually large and fine wurtzite, the first known cylindrite, and clear, glassy apatite, as well as specimens of brilliant blue vauxite, a rare phosphate, all obtained from Llallagua, Bolivia. In addition, Dr. Bandy presented 88 specimens of the rare Bolivian tin minerals teallite, franckeite, cylindrite, and stannite, and the mineral thioelaterite not previously represented. Fritz Mella, Buenos Aires, Argentina, continued his interest with the gift of a large beryl crystal from the La Toma district. Prof. Vincent P. Gianella, Mackay School of Mines, Reno, Nev., presented a fine

specimen of crystallized realgar from Nevada; C. F. Chatham, San Francisco, Calif., donated a synthetic emerald crystal synthesized by himself; while other gifts were specimens of nephrite jade from Fremont County, Wyo., from W. E. Lockhart, and a fine galena crystal from Joplin, Mo., from Dr. Sigmund Waldbott. Unusual specimens of Mexican cassiterite were presented by E. Mouret, Mexico City; Francisco Salazar, San Luis Potosí; and Rafael Solis, Tejamen, Mexico.

Prof. Duncan McConnell, University of Texas, donated described specimens of barrandite and carbonate-apatite, and the Department of Mineralogy and Petrography, Harvard University, an example of the new mineral bellingerite, a copper iodate, and whitlockite, an aluminum phosphate.

An exchange with Prof. S. Iimori, of Tokyo, brought a series of rare earth silicates from Japan, including abukumalite, a form new to the collections. An exchange with John M. Grieger, Pasadena, Calif., comprised a 25-pound topaz crystal from Brazil.

Gems added to the Isaac Lea collection through the Frances Lea Chamberlain fund were a brilliant cut purple spinel of 46 carats from Ceylon and a greenish-yellow euclase of 9 carats from Brazil. Two fine yellow apatite gems cut from crystals collected in Mexico were added to the general gem collection. Another important acquisition consisted of 620 Brazilian gem stones, including blue aquamarines up to 60 carats, chrysoberyls of 13 carats, pink and green tourmalines up to 30 carats, and a golden beryl of 11 carats, all received as a transfer from the United States Treasury Department, through the Procurement Division. An interesting exhibit of carved jades designed to show the various qualities of this gem stone was loaned by S. Kriger of Washington, D. C.

The outstanding accession to the meteorite series was the Sardis, Ga., iron, weighing 1,760 pounds. This specimen, secured through the Roebling fund, is the fifth largest single meteorite found in the United States. Dr. Stuart H. Perry, associate in mineralogy, presented the following specimens: the Central Missouri iron, 14½ pounds; the Cedartown, Ga., iron, 22 pounds; the large individual of the Odessa, Tex., iron, 46 pounds; and a complete individual of the Pitts, Ga., mesosiderite of 1,198 grams. A 714-gram slice of the Morito iron was the gift of the Instituto Geológico de México. Meteorites secured by exchange were the Boguslavka, 220 grams; Zovtnevyj, 734 grams; Boise City, Okla., 1,478 grams; and two slices of Reed City, Mich., 785 and 713 grams.

Dr. W. F. Foshag's investigation of the tin resources of Mexico for defense purposes resulted in a series of tin ores from the various districts of that country. Gifts to the ore collection included two speci-

mens of copper ore from the Barranca de Cobre, Mexico, from Irving Knobloch; six specimens of gold-nickel ore from Guizopa, Mexico, from Frank L. Hess; and a large exhibition mass of sulphur ore from Sulphur, Nev., from O. J. Streeter. The U. S. Bureau of Mines, through Dr. George T. Faust, transferred specimens of montmorillonite clay from southern States.

A series of rhyolites collected by Dr. Foshag for the rock series during field work in Mexico shows the processes of advancing crystallization in this type. Frank L. Hess presented two large polished slabs of spodumene bearing pegmatite figured by him in the description of the deposit at Kings Mountain, N. C.

Geodes and septaria from Indiana, an exchange from William Rhoades, and several lots of ventifacts (dreikanters), illustrating the phenomena of wind-blown sand upon boulders, form important accessions in physical geology. One of the latter, a transfer from the U. S. Geological Survey, is of special interest for exhibition purposes in showing the ventifacts embedded in Cambrian sandstone.

Stratigraphic paleontology.—The outstanding additions in this division resulted from field work by members of the staff. The researches of Dr. Charles E. Resser in the Cambrian formations of the Appalachian Valley, of Missouri, and of the Rocky Mountain region resulted in 8,000 or more fossils, mainly trilobites and brachiopods for the study series. Dr. G. A. Cooper's field explorations in the post-Cambrian formations of west Tennessee and Texas produced at least 20,000 specimens among which were many silicified fossils. The latter were etched out of limestone blocks in the laboratory in such complete condition that minute details not otherwise obtainable are perfectly preserved. Dr. and Mrs. Cooper, while on a vacation trip, collected for the study series about 15,000 specimens of invertebrate Devonian fossils from various counties in the geologically classic Lower Peninsula of Michigan.

Valuable type specimens of invertebrate fossils were contained in ten accessions, most of them gifts. The 31 types from the Upper Cambrian of Texas and 199 types and other fossils from the same rocks of southeastern Missouri, all received from Dr. Christina Lochman, are of special importance. To the Ordovician collections were added portions of the types of 40 bryozoan species from Oklahoma by Dr. Alfred R. Loeblich. Types of Upper Triassic ammonites from New Pass Range in Nevada, described and donated by F. N. Johnston, enriched the Mesozoic collections, to which was added also an excellent set of casts of types of cephalopods and pelecypods from Mexico donated by the Instituto de Geológico. Through transfer from the National Park Service, the type fossils from the Kaibab formation of the Grand Canyon region described by Edwin McKee were obtained.

Other noteworthy gifts consisted of 500 specimens of Middle Ordovician invertebrate fossils from the Arbuckle Mountain region of Oklahoma, from Dr. A. R. Loeblich; a collection of Ontario Middle Devonian corals and brachiopods from Charles Southworth; about 2,000 specimens of Upper Devonian fossils of Iowa from John Hidore; an equally large collection of brachiopods and other fossils from the early Permian rocks of Bolivia from Dr. Mark C. Bandy; and, finally, a set of rare minute crinoids from the Upper Paleozoic rocks of the United States and Europe by Dr. J. Marvin Weller.

The important purchases of the year were mainly of rare crinoids and cystids, which are seldom offered for sale and always prove valuable additions. Among these were specimens from the Rochester shale of western New York and a collection from the Upper Paleozoic of Oklahoma.

Exchanges for the year with two exceptions were confined to the United States. Here most important was a set of 1,800 invertebrates from the Paleozoic rocks of Texas, a continuation of the exchanges with Mrs. J. H. Renfro and daughter, of Fort Worth, Tex. Paleozoic and Mesozoic brachiopods were received in exchange from Yale University; Devonian invertebrate fossils from western New York from the Buffalo Museum of Science; and various Pennsylvania fossils from the Franklin and Marshall College Museum at Lancaster. A single foreign exchange of crinoids from the Permian of Australia received from the University of Western Australia, through Dr. Curt Teichert, may be noted.

The seven accessions recording additions to the foraminiferal collections consisted, first, of 2,400 lots of partly studied material from Mexico, Peru, New Zealand, and other areas outside the United States, the gift of Dr. T. Wayland Vaughan. Members of various oil companies were instrumental in donating described types of Foraminifera, among these being Pennsylvanian species from Oklahoma from James A. Waters, Cenozoic Foraminifera from Dr. L. W. LeRoy, and Mexican Cretaceous and larger Foraminifera from R. Wright Barker. Thirteen lots of the larger Foraminifera from Arabia, a gift from Ursel S. Armstrong, proved an interesting addition.

Casts of 256 type specimens of the fossil shell *Turritella* from the Tertiary rocks of the Pacific coast, presented by the Museum of Paleontology, University of California, were an outstanding addition to the Cenozoic collections. Paratypes of California fossil mollusks were included in exchange from Dr. S. S. Berry, and through gift 62 species were received from Mrs. Earl Pew. The Pleistocene collections received small but interesting additions of brachiopods from Manitoba, gift of Dr. Horace G. Richards; marine shells from Labrador from Dr. Charles W. Merriam; land and fresh-water

shells from New Mexico from Robert Ariss; and various Mollusca from Maine, gift of Olof O. Nylander.

Two additions to the fossil plant collections deserve mention, one from the Coal Measures of Oklahoma, through purchase, and the other the specimens included in an exchange from the Central National Museum of Manchukuo.

Vertebrate paleontology.—The field expedition of the past summer under Dr. C. L. Gazin brought the most important specimens of the year to this division. Several articulated lizard skeletons of the genus *Polyglyphanodon* from the Upper Cretaceous and fragmentary mammalian jaws and teeth from the Paleocene were obtained in central Utah, in addition to 149 lots of vertebrate fossils collected from the Bridger Eocene, of southwestern Wyoming. A specimen worthy of special mention is the greater part of the skeleton of the primitive mammal *Uintatherium*, which is probably the most complete example of this animal that has yet been found. A partial skeleton of another mammal *Palaeosyops* and a perfect skull and jaws of the doglike *Thinocyon velox*, are also of special interest. A mounted skeleton of the small camel *Stenomylus hitchcocki* was received from the Peabody Museum of Natural History in completion of a previous exchange.

The cetacean part of the fossil vertebrate collections was enriched by valuable specimens from the following sources: Drs. Remington Kellogg and W. F. Foshag collected skulls and parts of skeletons of the fossil whales *Mesocetus siphunculus*, *Siphonocetus priscus*, *Lophocetus calvertensis*, and *Megaptera expansa.* A posterior portion of the skull of a *Siphonocetus priscus* was presented by Prof. A. R. Barwick. Arlton Murray donated a skull and much of the skeleton of the porpoise *Eurhinodelphis;* and a second skull of the same genus was presented by Richard G. Slattery. A partial skeleton of an extinct sirenian was received in exchange with G. E. Marsh. All the above specimens are from the Miocene Calvert formation of the Chesapeake Bay area.

A small collection of Paleocene mammal remains collected by Dr. R. W. Brown in the Denver Basin, Colo., forms an important accession as it represents a new locality for these animals.

A slab containing sauropod dinosaur tracks from the Glen Rose formation of Texas was added to the ichnite collection, by transfer from the Works Progress Administration, through the University of Texas.

INSTALLATION AND PRESERVATION OF THE COLLECTIONS

For the division of mineralogy and petrology Curator W. F. Foshag reports that in accordance with plans of last year the western half of the physical geology hall devoted to the origin and classifica-

tion of rocks has been divided by two new partition cases into three large alcoves. One alcove devoted to rocks, the second to meteorites (celestial rocks), and a third to rock genesis replace the former continuous rock series now partly dismantled. Modern installation making this technical exhibit intelligent to the general public is now under way.

Dr. Foshag represented geology on the committee in charge of the new Smithsonian Index Exhibit, while other members of the department assisted in the preparation of the necessary specimens for display. J. H. Benn, aide, temporarily assigned to this project, assisted in modeling and in general installation.

A loan collection of carved jades selected to show the wide range of the qualities of this stone was installed in the mineral hall. The exhibition cases devoted to gold and quartz were reinstalled to give better effect. The old velvet pads in the gem cases, some 500 in number, were replaced by new ones prepared by Miss Jessie G. Beach, who also completed a finding index of minerals for the use of the guards stationed in that hall. Exhibition labels giving more general information for the public and numbering more than 2,000 were prepared and distributed for the general mineral series and the exhibits in physical geology. As time permitted, Mr. Benn continued the consolidation of the Museum, Roebling, and Canfield mineral series into a single systematic study collection, completing it as far as the aragonite group. He also completed an index of mineral names for this collection through the metallic oxides, and in dismantling the former rock series selected and distributed many specimens in the study series.

Mr. Benn and B. O. Reberholt cared for the several geological exhibits in the National Zoological Park and adjacent grounds, repairing and cleaning them as necessary. Mr. Reberholt, in charge of the rock-cutting laboratory, reports the preparation of 535 thin sections, the cutting and polishing of 121 minerals, rocks, and ores, and cutting, polishing, and etching 51 meteorites. He completed the repolishing of various large examples of folded and faulted rocks for the earth structure alcove in the physical geology hall.

The head curator continued work on the renovation and labeling in more popular form of the physical geology exhibits; the alcoves illustrating geysers, hot springs, concretions, veins and dykes, and weathering are completed, leaving only glacial geology and earth structure. Two new sets of slides for the stereomotorgraph were completed.

Dr. C. E. Resser, curator of stratigraphic paleontology, was occupied in the preparation and study of several Cambrian faunas, in forwarding work on his Cambrian index, and in assisting various students studying in his special field. For the exhibition series he

prepared a fine Miocene echinoid block from Chesapeake Bay, which as now displayed gives a good idea of a sea bottom in geological times. The task of remounting and relabeling the biologic exhibition of cephalopods occupied part of his time, while the preparation of a special case of Yellowstone National Park fossil plants exhibited mainly by transparencies was advanced. Dr. G. A. Cooper contributed an exhibit of silicified Permian fossils to the Smithsonian series. Here he showed gradation from the solid blocks of limestone through partly etched fragments to delicate specimens entirely freed from the rock by acid. He further completed the installation of a large collection of Devonian fossils made in former years during his field work in New York State, and, finally, placed in form available for study the results of his last field trip. During this work he added many specimens to the biological series with the result that certain divisions of time, such as the Pennsylvanian and Permian, were much strengthened.

The head curator's work on the invertebrate collections comprised the arrangement and relabeling of the Paleozoic insect study series and of the biological set of Paleozoic pelecypods, the latter representing 200 standard drawers. With the return to the Museum of the great graptolite collections lent to Dr. Rudolf Ruedemann for monographic study, their separation into a biologic and stratigraphic series was begun. Toward the end of the year similar work was undertaken on the biologic series of corals, the main result being the preparation and remounting of about 400 thin sections by Mr. Reberholt.

New cases permitted further improvement in the arrangement of the foraminiferal collections. Lloyd G. Henbest, in charge of the work upon this group for the U. S. Geological Survey, continued active work on the mounting and labeling of specimens, while Dr. T. Wayland Vaughan specialized as heretofore on the study of the larger Foraminifera.

With the appointment on the U. S. Geological Survey staff of Dr. Ralph W. Imlay, specialist in the Upper Mesozoic, the work of assembling and reducing the many Lower Cretaceous collections accumulated throughout the years was undertaken and completed. Not only has much space been saved, but the specimens are now in logical order for future study.

Dr. Paul Bartsch, curator of Cenozoic invertebrates, reports favorable progress on the care of the collections under his charge and a furtherance of their study mainly by members of the U. S. Geological Survey. Here, Drs. W. P. Woodring and Ralph W. Stewart specialized on the Cenozoic paleontology of western America, while Drs. Harry S. Ladd, Julia A. Gardner, C. Wythe Cooke, and F. Stearns MacNeil continued studies of the eastern American Tertiary.

In paleobotany, Dr. R. W. Brown completed the preparation and reduction of the post-Paleozoic plant collection stored in the attic, not only reducing its weight materially but making the specimens more easily available for study. Dr. Charles Read moved his office to the paleobotanical library where the Paleozoic plants under his charge are housed, thus allowing Dr. Brown to segregate the post-Paleozoic plants in his own room, an arrangement more satisfactory for both.

Curator C. W. Gilmore reports the addition of the following specimens to the exhibition series of vertebrate fossils: First, an articulated tail, pelvis, and hind limbs and feet of the duck-billed dinosaur *Corythosaurus*, a specimen of unique interest in that it preserves patches of skin impressions; second, a mounted skeleton of *Stenomylus*, a small camel from Nebraska; and, third, a skull of the small duck-billed dinosaur known as *Procheniosaurus*.

In addition to supervising the work of the laboratory in vertebrate paleontology, Norman H. Boss, the chief preparator, completed the *Corythosaurus* skeleton and the *Procheniosaurus* skull for exhibition. He also prepared numerous delicate and difficult specimens for the study series. J. T. Horne and W. E. Moran devoted the greater part of the year to preparatory work on both study and exhibition material. As a result, all the specimens of the 1938 Uinta collection have been prepared and only one box remains of the 1940 Bridger collection.

Toward the close of the fiscal year Mr. Horne started the mounting of the *Uintatherium* skeleton. Most of the missing bones were restored, and good progress was made on the supporting iron work.

Assistant Curator Gazin, in addition to his field expedition, spent some time on the classification and arrangement of the Tertiary collections of Paleocene, Eocene, and Upper Pliocene mammalian study collections.

INVESTIGATION AND RESEARCH

Dr. E. O. Ulrich, associate in paleontology, was actively engaged during most of the year in the identification of various Ordovician collections and the preparation of faunal lists for use in stratigraphic studies. Part of his time was devoted to work on the stratigraphic chapter introductory to the nearly completed monograph of Chazyan brachiopods by himself and Dr. G. A. Cooper. Several fields trips were necessary to clear up doubtful points in the geologic history of the Appalachian Valley where most of these brachiopods were collected. The study of the Museum's large collection of Receptaculitidae, little understood spongelike fossils requiring most careful preparation, and researches upon various Chazyan faunas from the southern Appalachians occupied the rest of his time. He has been of material

assistance as usual to other members of the staff in help and advice in their geological problems.

The head curator completed and submitted for publication a paper describing the Nevada Early Ordovician Pogonip sponge fauna. Two smaller articles, "Generic Descriptions of Upper Paleozoic Bryozoa" and "Ostracoda from the Devonian (Onondaga) Chert of West Tennessee," were published during the year. With the help of Miss Margaret W. Moodey, work on the bibliographic index of Paleozoic Pelmatozoa was brought to a close and the manuscript accepted for publication. Studies on Silurian corals from Siberia and on Permian Bryozoa from Australia were pursued as time would permit.

Dr. C. E. Resser gave most of his available time to researches on Grand Canyon Cambrian fossils, a project practically finished at the close of the year when the receipt of considerable additional material forwarded by former park naturalist Dr. E. D. McKee further delayed it. Dr. Cooper reports good progress with the Chazyan brachiopod monograph prepared jointly with Dr. Ulrich; about 300 species belonging to more than 80 genera are now described, and the preparation of the illustrations and revision of the manuscript should be finished by the end of next year. About a thousand type specimens will result from this research. He prepared the correlation chart of Devonian formations of North America, one of a series sponsored by the National Research Council for publication by the Geological Society of America. This required the study of over 450 formations and the preparation of an explanatory text condensed to about 100 pages.

Miss Margaret W. Moodey, aide in work on the Springer echinoderm collection, besides correcting and typing the synonymic bibliographic index of Paleozoic Pelmatozoa, a manuscript of nearly 1,800 pages, mentioned previously, brought all necessary cataloging and other work on the collection up to date. This technical volume prepared in joint authorship with the head curator and in response to Dr. Springer's wishes, was a fitting finale to her Museum endeavors. Dr. Edwin Kirk as usual spent much time in the preparation and study of the Upper Paleozoic crinoids, resulting in three publications during the year.

Lloyd Henbest, of the U. S. Geological Survey, devoted his attention mainly to the fusulinid Foraminifera of Texas and Utah. Dr. Josiah Bridge continued studies of the Lower Paleozoic rocks until near the close of the year when defense work in strategic minerals occupied his attention. Research on the Mesozoic and Cenozoic collections has been carried on by the various members of the Geological Survey who have offices in the Museum building. Dr. L. W. Stephenson was engaged largely in a study of the Woodbine formation of Texas; Dr. Ralph W. Imlay on the Comanche rocks of the same State; and Dr.

J. B. Reeside, Jr., although mainly occupied in editorial duties upon the various manuscripts passing through his hands, worked on other divisions of the Mesozoic.

In the section of paleobotany, Dr. R. W. Brown made good progress in his researches on the Fort Union formation and its flora following field work of the previous summer. Dr. Charles Read was occupied with the floras of Permian age and with the microscopic structure of Tertiary woods from Yellowstone National Park.

Curator C. W. Gilmore completed and submitted for publication three short manuscripts, entitled "New Fossil Lizards from the Upper Cretaceous of Utah," "On Little Known Fossil Lizards from the Oligocene of Wyoming," and "A New Fossil Reptile from the Upper Cretaceous of Utah." A fourth manuscript, "Paleocene Lizards of Wyoming," based principally on a collection belonging to Princeton University, was completed and a manuscript descriptive of the fossil lizards of Mongolia is well under way.

In his research studies of the Paleocene faunas from the Dragon and Wagonroad horizons in Utah Assistant Curator Gazin has included Paleocene materials from the Denver and Dawson formations in Colorado and the Upper Pliocene and Pleistocene faunas from the Benson and Curtis Ranch horizons in the San Pedro Valley of Arizona. Manuscripts resulting from all three of these investigations have been transmitted for publication.

Dr. Stuart H. Perry, associate in mineralogy, completed the text and plates for a bulletin on the structures of iron meteorites. This new field of study has been highly fruitful and the bulletin will be an important contribution to the knowledge of meteorites.

Dr. W. F. Foshag carried on an investigation of the mineralogy and petrology of the Shaw amphoterite. Later he was assigned to work in cooperation with the U. S. Geological Survey on defense minerals of Mexico and undertook a field study of the tin resources of that country.

Assistant Curator E. P. Henderson completed the descriptions of five meteorites and submitted them for publication.

The total number of lots of material received in the department for identification and report was 482, distributed in the different divisions as follows: General geology, 202; mineralogy and petrology, 236; stratigraphic paleontology, 28; and vertebrate paleontology, 22. Official replies to requests for information numbered 571, distributed as follows: General geology, 236; mineralogy and petrology, 221; stratigraphic paleontology, 28; and vertebrate paleontology, 75. Lots of specimens, principally gems, to the number of 210 were brought to the division of mineralogy and petrology by individuals and received immediate attention.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

The distribution of geological specimens was as follows: Gifts, 2,013 specimens; exchanges, 2,333 specimens; loans for study, 1,256 specimens; transfers, 69 specimens.

NUMBER OF SPECIMENS UNDER DEPARTMENT

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

Mineralogy and petrology	156,136
Geology, systematic and applied	98,413
Statigraphic paleontology	2,360,592
Vertebrate paleontology	29,635
Total	2,644,776

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DEPARTMENT OF ENGINEERING AND INDUSTRIES

(Carl W. Mitman, *Head Curator*)

Fair progress can be reported this year in all branches of work of the department. The volume and quality of accessions are comparable to those of recent years, and while there was a slowing up in the progress of the work of improvement, of both exhibited and stored collections, they are now in better condition than ever before. Tribute is due the many manufacturers who completed their commitments for the improvement of the industrial collections in the face of the primary demands made upon them by the national defense emergency.

During the first half of the year the graphic arts collections were closed to the public while the construction of the Index Exhibit in the main hall of the Smithsonian Building was in progress. The aircraft collection, too, was closed to the public during the last third of the year to permit a much-needed interior renovation of the corrugated-iron building housing this collection.

The head curator serving as chairman of the committee on exhibits for the main hall of the Smithsonian Building devoted the greater portion of his time during the first half of the year of supervising the design, construction, and installation of these exhibits. The work required the services and many hours of time of both professional and subprofessional members of the department, with the consequent slowing down the planned work within the department.

ACCESSIONS

During the year the department received 191 accessions, comprising a total of 2,688 specimens. This is an increase over the previous year of 2 in the number of accessions and 671 in cataloged specimens. These accessions were allocated to the several divisions as follows: Engineering, 48 (155 specimens); crafts and industries, 79 (1,540 specimens); graphic arts, 64 (993 specimens).

Engineering.—The 48 accessions cataloged by this division are distributed as follows: Transportation and civil engineering, 14 (51 specimens); aeronautics, 14 (36 specimens); mechanical engineering, 2 (2 specimens); electrical engineering and communication, 8 (36 specimens); mining and metallurgical engineering, 2 (18 specimens); physical sciences and metrology, 4 (7 specimens); tools, 4 (5 specimens).

Several accessions in the section of transportation worthy of note are an operating exhibit of the Westinghouse air brake, and three fine scale models—the Polish motorship *Pilsudski*, the Rolls Royce automobile *Silver Ghost*, and the diesel-engined trawler *Storm*. The *Pilsudski*, built in 1936, is believed to be the first ocean liner destroyed by a magnetic mine in the present war. The model, which is a well-executed representation of a modern motor liner, was lent by the Gydnia America Line, Inc. The motor car *Silver Ghost* is famous for completing a 15,000-mile reliability road test in 1907, during which it ran 14,371 miles without a forced stop for other than tire trouble. The quarter-size scale model was lent by Rolls-Royce, Ltd. The model of the trawler *Storm* brings up to date the unique collection of models of vessels engaged in the American fisheries. The *Storm* was built at Bath in 1936 for the Bay State Fishing Co. The model, which is framed and plated and finely executed in every detail, was made by Carrol Ray Sawyer and was presented by the General Seafoods Corporation.

The display presented by the Westinghouse Air Brake Co. combines a clear exposition of the principle and operation of the air brake with a brief historical exhibit. The main part of the display is a diagrammatic model of the wheels of a railroad car truck with the air brake rig, the air reservoir, valve, and brake cylinder. When the visitor presses the switch to operate the exhibit, the wheels accelerate to full running speed; then, after an interval, the brakes are applied and the wheels brought to a smooth stop just as they would be on the train. Synchronized with this are the wheels of a scale model train mounted just above it. Three small models illustrate primitive braking methods and three actual valves are included to show the development of an important element of the air brake.

Ralph E. Cropley continued to add to the documentary material that he has presented relating to ocean steamships. His gifts include a well-drawn painting of the United States Army transport *President Lincoln.*

A unique accession to the section of aeronautics received as a transfer from the United States Navy Department was a fighter airplane known as the Curtiss "Sparrowhawk." This type of aircraft was developed in the period 1931–35 for use as an auxiliary fighter to the Navy dirigibles *Akron* and *Macon* and came to be commonly called the "Akron Fighter." Each airship housed five of these fighters within the hull. They were launched from the dirigible and hooked on again by means of a trapeze.

The original model of a steam-engined bombing helicopter designed in Civil War times was presented by Miss Clara McDermott and William V. McDermott, descendants of the inventor, William C.

Powers, of Mobile, Ala. Family tradition has it that the inventor proposed the construction of this aircraft to bomb blockading Federal ships, but fearing that if successful the industrial North could and would build duplicates of the device in greater quantities, he decided to conceal it. The model has just recently come to light.

Five interesting scale models were added to the collection. They were the Columbia monoplane, 1910, presented by the Aero Club of Washington, D. C.; the Triplane bomber, 1918, designed by Lawrence Sperry for the U. S. Navy, presented by the Sperry Gyroscope Co.; the U. S. Army pursuit type "P–35," made and donated by Norman Gary; and the U. S. Army trainer type "BT–8" and the amphibian "SEV–3N" presented by the Republic Aviation Corporation.

A motion-picture film recording the presentation of the Langley Medal to Glenn Curtiss in 1913 was presented by Joseph Abel. This includes a demonstration of an early Curtiss flying boat.

The outstanding accession in the section of mechanical engineering is an exceptional model of a Reynolds-Corliss steam engine of about 1900. The model was made by Howell M. Winslow and presented by his daughter, Miss Julia E. Winslow. The model is perfectly finished and fully operating. It is a splendid representation of one of the large prime movers that powered American industry before the widespread application of the electric motor.

An early electrically heated air moistener was received from O. D. Hogue, who designed the device and made and marketed several thousand of them. It represents a phase in the development of domestic air-conditioning.

The section of electrical engineering and communication received three original Plante storage battery plates and two replicas of the pasted plate batteries made by T. A. Willard in 1881. The originals of these were made to supply current to early battery-operated dental engines. They were presented by the Willard Storage Battery Co. The Philco Corporation presented the tone arm of a photoelectric phonograph. The feature of this is the use of a tiny mirror actuated by the needle that reflects a beam of light upon a light-sensitive cell. The beam of light vibrates with the vibrations in the track of the record and the current from the cell varies in the same way. This current, amplified, actuates a diaphragm to reproduce the sound that made the record.

The Dewar Manufacturing Co. presented a series of carbide mine lamps. The original hand-made model of the lamp made by Fred A. Baldwin in 1904 is an interesting contrast with the modern lamp that is included. These are exhibited with other mining lamps in the section of mining and metallurgical engineering.

One of the most spectacular acquisitions of recent years is the 93-dial display clock made by Louis Zimmer, of Lierre, Belgium, for the Brussels World's Fair in 1935. This clock, which is 14 feet high, tells the standard time of many places around the world, the tides in a number of ports, and a great variety of calendar and astronomical events. It has three automatons, one of which appears to strike the quarter hours. The clock was brought to the United States by Edward Willing. It was transferred to the Museum by the Procurement Division of the United States Treasury.

There was added to the section of physical sciences and metrology a Gregorian telescope used by Dr. John William Draper while professor of chemistry and natural philosophy at Hampden-Sydney College, Richmond, Va., around 1836. It was made by Gilbert & Co., London, probably in the early 19th century. The accession was received as a loan from the Board of Trustees of the College.

The collections of the section of tools were increased by the acquisition of an early tinner's stove presented by Miss Deborah M. Russell, a draw knife from Miss Irene M. Scott, a pair of inside calipers from Paul E. Garber, and a large wooden bellows, of the type used to blow the old blacksmiths' forges, purchased.

Crafts and industries; medicine and public health.—The 79 accessions received by these divisions were distributed among the several sections as follows: Textiles, 30 (229 specimens); woods and wood technology, 11 (401 specimens); chemical industries, 14 (791 specimens); agricultural industries, 1 (5 specimens); medicine and public health, 23 (114 specimens).

The collections of the section of textiles were enhanced during the year by the gift of 122 specimens of new fabrics. These included examples of the latest and most representative cotton fabrics selected and contributed by the Cotton-Textile Institute; rayon dress materials, sheer goods, sharkskins, heavy satins, and a specimen of nylon parachute fabric furnished by S. Slater and Sons, Inc., which firm claims to be the oldest manufacturing house inside the continental United States; and fleeces of the type of wool used in making cloth for our defense forces, as well as specimens of the fine quality fabrics used in our soldiers' uniforms, presented by the Arlington Mills.

A cotton "event handkerchief," printed in 1890 for the Cotton Centenary and commemorating the starting of Samuel Slater's cotton spinning machinery on December 20, 1790, was presented by Lt. Comdr. H. Nelson Slater, U. S. Navy, a great-grandson of Samuel Slater. Robert E. Coe presented two cotton pictorial prints: "The Unanimous Declaration of Independence," printed in Boston about 1830; and "Sabbath Schools First Instituted by Robert Raikes in Gloucester, Eng., A. D. 1782," stamped "Henry Bowen's Chemical

Print, 19 Water St., Boston," which probably was issued as a 50th anniversary handkerchief.

To the Museum's collection of sewing machines there was added through the gift of Mrs. Edwin M. Barr a hand chainstitch machine made under William G. Beckwith's patent of April 18, 1871. For the collections illustrating the garment industry, two specimens were contributed: From Frank L. Union, a pleating board used for laying folds or pleats in cloth made in 1869 by the lender when he was 13 years old; and from the family of A. F. Perry, a hand-operated eyelet machine and punch used before 1850 for making eyelets in men's clothes.

The collection of old-time needlework and textile handicrafts was increased by gifts of beadwork, hairwork, waxwork, quilting, patchwork, weaving, and hooked-rug making. Mrs. Charlotte K. Stratton presented a catalog of original hooked-rug patterns, designed by Edward S. Frost, of Biddleford, Maine, who made his first stencils for printing rug patterns in 1870. Mrs. Stratton also lent a series of specimens illustrating the making of a hooked rug, including three original metal stencils. Dr. Paul B. Johnson added to the collection of needlework implements a series of bone and steel knitting needles and crochet hooks. Dr. C. J. Campbell presented specimens of homespun wool yarns spun by him on a flaxwheel. To the fast-growing collection of coverlets and quilts eight specimens made prior to the Civil War were received as gifts. These include a hand-woven seamless coverlet combining a double-weave Jacquard pattern and single-weave background of red, blue, and green wool cross stripes, made in 1845 at Fayetteville, Pa., by Dennis Cosley, a famous weaver, and father of the donor, Edwin M. S. Cosley; a patriotic cotton quilt, pieced and appliqued in 1861, in a red, white, and blue, stars-and-stripes pattern, presented by Mr. and Mrs. Eugene A. Teter; and a wool and cotton "Log Cabin" quilt pieced of 4,872 light and dark colored blocks, made by Mrs. Catherine Huff Hutchins, Cape Porpoise, Maine, grandmother of the donor, Mrs. John W. Gough.

The outstanding accession in the section of woods and wood technology was the first letter file made to handle correspondence unfolded and vertically. It was designed by the donor, Edwin G. Seibels, in 1898 solely for his own use and was made to his order by the Globe Files Co., predecessor of the Globe-Wernicke Co. Designed for deskside use, the file consists simply of a wooden box with a roll top and lock and a follower block to keep letters in a vertical position. The file is still serviceable after 40 years' use. Its general introduction to the business world occurred soon after Mr. Seibels' original order had been filled. The invention was never pat-

ented. S. L. Allen & Co., Inc., presented a series of specimens showing the manufacture of solid and laminated hickory skis. These are of special interest at this time since the Army is now training ski troops as part of the national defense program. To accompany this exhibit four photographs of these troops, taken by the United States Army Signal Corps, were furnished by the War Department. An exhibition panel of hard-maple flooring was made and presented by the Holt Hardwood Co. This is a beautiful sample of flat-grain stock of a wood that ranks third among the species used for this purpose. For the study collections of authentic woods 149 hand samples of woods of the United States were received from the New York State College of Forestry; from the School of Forestry at Duke University came 18 microscopic mounts of temperate and tropical woods as an exchange for wood specimens sent to the school; and from Leo R. Kische, as an exchange, 14 wood specimens, mostly from Alabama and Georgia, collected with botanical material.

An outstanding accession to the section of chemical industries, which is of especial significance at the present time, is that received from the B. F. Goodrich Co., consisting of a series of rubber articles of importance in national defense. This includes a complete rubber tractor track, a bullet-proof inner tube for a truck tire, a high altitude mask, sponge rubber lining for tank turrets, and other important items. Another lot of exhibit specimens illustrates the use of rubber in fields less familiar to the general public, such as springs for railway cars, motor mountings, belting, and vacuum sweeper parts, as well as the more familiar fields of toys and hospital and drug sundries. This firm also made new additions to the historical series of rubber tires, including one composed entirely of the synthetic rubber "Ameripol" and contributed an exhibit illustrating the manufacture of the rubberlike synthetic resin "Koroseal," made from coal, limestone, and salt as basic raw materials, and its application in making waterproof, washable coated fabric articles, such as raincoats, shower curtains, and tablecloths, as well as for tubing and electrical insulation. A new exhibit pertaining to the plastics nylon, Butacite, and Lucite, was contributed by E. I. Du Pont de Nemours & Co. Included, too, are three series of specimens illustrating the manufacture of cellulose nitrate and cellulose acetate from cotton and the utilization of these two important cellulose compounds. This unified exhibit has replaced several former exhibits of products resulting from the chemical treatment of cotton. The Plaskon Co. added to the exhibit previously contributed specimens showing the use of a urea type resin adhesive in laminating wood. This makes possible a superior type of waterproof plywood of especial interest at this time because of its extensive use in airplanes.

In the division of medicine and public health the most valuable exhibit received for addition to the section of pharmacy was contributed by Eli Lilly & Co. and is labeled "The Anemias." It illustrates the modern method of treating anemia with medicines made from liver, stomach secretions, iron, and other substances. The chief addition to the section of public health was presented by Wallace & Tiernan Co. This is a hypochlorinator for sterilizing water incorporated in a diorama illustrating the purification of water on a farm. The diorama supplements an adjoining one picturing conditions leading to the pollution of water. The section of materia medica received from Fritzsche Bros. colored transparencies, photographs, and specimens of essential oils for addition to the exhibit of oils and related substances. Merck & Co. and Schieffelin & Co. presented fresh material for the cinchona exhibit. Other gifts of drugs and medicines were received from Dodge & Olcott Co.; Allaire, Woodward & Co.; R. Hillier's Son Corporation; S. B. Penick & Co.; Peek & Velsor; and J. L. Hopkins & Co. The history of medicine section was enhanced by several gifts: A colored reproduction of a painting entitled "Osler at Old Blockley," from John Wyeth & Bro.; a medical book of 1764, and a magic "soldier letter," from Karl Fietze; Loyal Legion medal of Lt. Col. William Irvin Wolfley, U. S. Army, from members of his family. Additions to the spectacle collection were received from Hendrik de Groot, Miss Deborah M. Russell, Paul B. Johnson, and from J. E. Norton, through his daughters, Mrs. Martha N. Beavers and Mrs. Ada Darnell. There were added to the osteopathic collection the first license issued by the Pennsylvania Board of Osteopathic Examiners, presented by Dr. John L. Allen, and a photograph of the first class graduated from the Northern Institute of Osteopathy, donated by Dr. Louise P. Crow, both through Dr. Riley D. Moore.

Graphic arts.—The 64 accessions received and cataloged by this division were divided between the two sections as follows: Graphic arts, 34 (859 specimens); photography, 30 (134 specimens). The total is a considerably larger increment to the collections than that of any recent year.

Of the 34 accessions recorded by the section of graphic arts, two are particularly noteworthy. The first is a collection of 435 specimens consisting of wood engravings, drawings, medals, and other technical material of the late William Baxter Closson, as well as prints by a process of his invention. The collection was presented by Mrs. Closson. During the period 1870 to 1890 Closson was one of a famous group of wood engravers whose artistic work illustrated the pages of such well-regarded magazines as Century and Scribner's. Toward the close of this period and in an effort to speed up the normally slow

and tedious process of wood-block making, Closson invented a process of engraving on wax. While the results were satisfactory, the process was never used commercially because of the great success of the half-tone process. The collection just received contains the tools and wax as well as a finished plate of Closson's process, together with the medals awarded him for his wood engravings and paintings.

Prior to this year, graphic arts possessed only two rather late Currier and Ives prints. This situation, however, exists no longer because of the very generous donation of Miss A. S. Colgate, of Tuxedo Park, N. Y., of 200 Currier and Ives prints in addition to a loan of 183 more. Currier and Ives prints were published in New York City from about 1835 to 1899 and dealt with every subject imaginable in the whole range of American life. Miss Colgate's collection deals largely with horses, horse racing, and fire fighting and constitutes about 10 percent of the total number of Currier and Ives prints now listed.

One of the noteworthy accessions received in the section of photography was the original camera believed to have been used by Dr. John W. Draper around 1836 while a member of the faculty of Hampden-Sydney College, Richmond, Va. The camera was lent to the Museum by the Board of Trustees of that institution largely through the efforts of the Rev. Howard C. Cobbs, an alumnus of the college. Draper's researches on the chemical phenomena of light in both the organic and inorganic world include the most valuable work done by him. It is quite conceivable, therefore, that in the course of his investigations he experimented along the lines introduced by Fox Talbot in which Talbot combined a camera with paper rendered sensitive with coatings of silver salts and produced negative photographs. The Draper camera now in the Museum collection is believed to be the camera part of the apparatus used by Draper in his experiments of that early date. A second noteworthy accession of the section of photography was the gift of some 50 specimens of photographic apparatus and photographs presented by Will H. Towles. The collection includes an English G. Hare camera and plate holders; several E. & H. T. Anthony cameras; a valuable C. C. Harrison & J. Schnitzer lens; and over 40 original William Brady photographs. Additions this year to the historic collection of motion-picture equipment were made chiefly through the gifts of Lt. Col. Dache M. Reeves. These consisted of a Pathex 9.5 mm. camera and projector and a Sept camera. Both instruments are of French manufacture and new to the collection.

INSTALLATION AND PRESERVATION OF COLLECTIONS

As in the years immediately preceding the current one, the installation work of the department was largely a matter of rearranging the ever-increasing collections within the fixed exhibition and storage

areas available. The policy instituted several years ago of eliminating from the exhibited series and placing with the study and stored collections all but the most important specimens was continued with good effect, and by the close of the year all new accessions with one or two exceptions were properly cared for. The continuing although slow acquisition by the department of standard fireproof storage units and the substitution of these for the old wooden storage fixtures are proving of material benefit. In general the condition of both exhibited and stored collections is good. The work on the collections done by the several divisions during the year follows:

Engineering.—The principal new exhibition was the installation of the Louis Zimmer 93-dial clock in the west-south range gallery. After its erection several weeks of attention by the curator and preparator were required to set and adjust its many dials.

A large part of the effort of the aid and preparator during the first half of the year was devoted to work on the Smithsonian Index Exhibit. Several dioramas for this exhibit in addition to the division's part were executed in the laboratory and the artist employed for the work was assisted in completing others.

Special exhibits during the year included the continuation of the display of ship music lent by the Misses McDevitt and Wright, and a display of automobile advertisements from about 1900 to 1940, lent by Leo Pascal.

Some progress was made in carrying out the plan for the permanent disposition of the stored collections. Storage units requisitioned in the previous year were delivered and these permitted the transfer of the Dewey collection of mineral products to the storage space in the southwest basement.

Repairs and painting in the Aircraft Building necessitated several moves of the entire collection there. This occupied a substantial part of the assistant curator's time during the period.

Crafts and industries.—Twenty-four new installations and 30 reinstallations of the textile collections were carried out during the year in the south hall, east-south range, and the range gallery above. The increase of new exhibit material meant the rearrangement of many cases and the retirement of some specimens to make room for newer or more valuable material.

Three exhibits of new material were installed in the wood court, and four exhibits were rearranged. The 168 samples of woods received for the study collection are awaiting cutting to standard size, since owing to a shortage of labor no sawing or finishing of specimens was attempted during the year.

On the galleries devoted to the exhibits of the section of chemical industries 15 new installations and 16 rearrangements were made during the year. Four of the new installations were of material

taken from storage. All the exhibits of furs were removed from the southwest court gallery to the south gallery and placed with the exhibits of leather to allow for the addition of strictly chemical material.

In the section of pharmacy the cinchona collection was rearranged, and new specimens were added and the exhibits relating to the manufacture of gelatin capsules and the production of liver extract and insulin were illuminated. These exhibits are colorful and attractive, being the first within the department in which use was made of the new fluorescent light. The 31 dioramas of the Upjohn medicine-making series are being renovated and restored by Mrs. Ruth B. Degges, of Washington, D. C., at the expense of the contributor. Deteriorated specimens were replaced by new, or retired to storage; periodic examination and fumigation of perishable material was carried out; many new labels prepared.

Graphic arts.—The work begun last year on the complete rearrangement of the collections within the greatly restricted area now available to this division was continued this year and constituted the major activity. While the newly arranged collections are on a less extensive scale than formerly, their educational value has not been lessened to any appreciable degree. While the section of photography succeeded in installing all new accessions of exhibition value, the work was accomplished only by the removal to storage of objects of lesser educational or historical value. In addition to the regular curatorial work, the division held 8 special monthly exhibits on the graphic arts and 11 on photography. These were as follows:

Graphic Arts

Hester Merwin, New York City: 23 drawings of native types; October 1940.
Childe Hassam (1859–1935): 35 etchings and lithographs; November 1940.
Southern Printmakers Society, Mount Airy, Ga.: 36 wood engravings by members of the society; December 1940.
Emil Ganso, Woodstock, N. Y.: 39 prints in various mediums; January 1941.
Creative Printmakers Group, New York City: 58 silk-screen prints; February 1941.
Margaret Ann Gaug, Chicago, Ill.: 35 etchings; March 1941.
Chicago Society of Etchers, Chicago, Ill.: 144 miniature etchings; April 1941.
Cliff Parkhurst, New York City: 27 etchings; May 1941.

Photography

Rowena Brownell, Providence, R. I.: 46 prints; September 1940.
Walter L. Green, Chevy Chase, Md.: 60 prints, flowers; October 1940.
D. J. Ruzicka, New York City: 43 prints; November 1940.
New York Camera Club, New York City: Members' show; December 1940.
Metropolitan Camera Club Council, New York City: 100 prints; January 1941.
American Photo Publishing Co., Boston, Mass.: 106 prints; February 1941.

Associated Telephone Camera Clubs, New York City: 53 prints; March 1941.
Severo Antonelli, Philadelphia, Pa.: 63 prints, "Photography at Work"; April 1941.
Popular Photography, Chicago, Ill.: 104 salon prints; May 1941.

INVESTIGATION AND RESEARCH

The research activities of the staff of this department consist largely in documentary studies in the fields of engineering and industrial history. Minor investigations, however, are a routine curatorial duty of the staff both for the proper development of the collections and to furnish requested information to correspondents and others. In the first category is the continuing work of Dr. F. L. Lewton, curator of crafts and industries, on the history of the White ney cotton gin, and on a new study of Samuel Slater, the so-called "father of American manufactures." Frank A. Taylor, curator of engineering, is engaged in collaboration with Robert S. Williams in preparing a number of brief, simply written articles on the work of prominent inventors and mechanics. This is being done to investigate the value of such material as practice reading for vocational- and trade-school students. The preliminary tests indicate some merit in the idea, and it is planned to complete enough of the articles to make a book-length publication. Investigators from the National Bureau of Standards searching for a successful method of confining airplane engine ignition current to the conductors when flying in the rarefied air at high altitudes found the complete solution in the method used by Wiley Post in the *Winnie Mae*, now part of the Aircraft Collection. The Department of Justice was advised on the relation of the work of William Kress to the development of seaplane hull construction; and the Federal Trade Commission was furnished technical information for its investigation of alleged unfair trade practices in certain textile industries. Assistance was given to the Department of Labor in obtaining source material for designs of hand-tufted bedspreads, and was furnished information on the amount of hand labor engaged in certain special textile operations. The Office of Production Management was supplied with information on kapok substitutes, while information as to the classification, cataloging, and labeling of a collection of mountain homespun was furnished the Farm Security Administration.

Identifications of woods were made for the Bureau of Entomology and Plant Quarantine, the Department of Commerce, and the U. S. Tariff Commission. For the U. S. Customs Service the materials composing the staffs of small flags imported from Japan were identified; for the Office of the Quartermaster General, War Department, the wood used in skis for Army units was identified. The assistant curator, W. N. Watkins, also outlined methods of inspection for

such material and assisted in drawing specifications for skis. Assistance was given to the Federal Trade Commission by the identification of woods and by expert testimony in a hearing on the use of the term "Philippine mahogany" in commerce.

Attempts were made during the year to comply with literally hundreds of requests for special information from individuals and to identify material sent to the Museum. Among these requests were those concerning the history of the thimble; directions for making braided rugs; first types of barbed wire, sprocket wheels, leather belts; the process of manufacture of glass, paint, glue, rubber, insulin; and the origin of "chop suey." Twenty-one lots of material were received for routine examination and report.

DISTRIBUTION AND EXCHANGE OF SPECIMENS

Specimens distributed from the department consisting of objects, photographs, and prints totaled 7,282 during the year. Approximately 6,000 of these were contained in the seven traveling exhibits on "How Prints Are Made," circulated by the division of graphic arts. These exhibits were in circulation in schools, colleges, libraries, and museums throughout the year in many States and in Hawaii. The demand continued for prints of the drawings and photographs produced by the Historic American Merchant Marine Survey and preserved in the division of engineering. Negatives of all drawings are now in hand, and a total of 457 sheets of drawings was ordered by private purchasers during the year. The department donated 305 items to educational institutions, distributed 912 specimens and photographs as loans, made 51 exchanges for specimens already received, and transferred 14 specimens to other Government agencies and individuals. At the request of Capt. S. F. Wogan, of the training section of the Export Control Administration, a collection of small specimens of common and uncommon metals was prepared in the division of engineering and turned over to that agency.

NUMBER OF SPECIMENS UNDER DEPARTMENT

The total number of specimens in the department at the close of the year was 134,722, distributed as follows:

Engineering	16,843
Textiles	15,501
Woods and wood technology	12,103
Chemical industries	23,437
Agricultural industries, including foods	2,211
Medicine and public health	19,184
Graphic arts, including photography	45,443
Total	134,722

DIVISION OF HISTORY

(Theodore T. Belote, *Curator*)

Public attention to the collections of this division, always present, is now especially high because of interest in the national defense movement. The number of visitors recorded and the number of written inquiries received during the past year fully equaled, if not exceeded, those of any previous year. As in other years, much information pertaining to historical museum materials was given to other departments of the Government, especially the Treasury Department on the subject of numismatics.

ACCESSIONS

The accessions were somewhat fewer than for the previous fiscal year, the total number being 46, including 1,595 specimens.

The art collection was increased by the gift of a plaster bust of Abraham Lincoln by William Marshall Swayne, which was presented by the heirs of the sculptor through Richard B. Swayne and Marion Swayne Richter.

The costume collection received as a gift the dress of Mrs. Andrew Jackson Donelson worn when she was mistress of the White House during the administration of President Jackson. This has been in the Museum as a loan and was presented this year formally by the owner, Mrs. Moncure Burke, forming a most important addition to the Museum's possessions. As a further gift there came most opportunely, from Miss Bethia R. Caffery, a pearl necklace presented to Mrs. Donelson by President Andrew Jackson and worn by her when she was in the White House.

A diplomatic coat and sword worn by Col. Samuel Simpson of Virginia when a member of the diplomatic staff of the United States in England, in 1851, was presented by Mrs. Herbert C. Easterday.

Among costume accessories received of more than the usual historical interest are a gold watch and a pair of silver cuff links owned by William Jennings Bryan. These were presented to the Museum by Daniel Bride, through Mrs. Daniel Bride. From the estate of Mary L. D. Macfarland there came as a gift a watch, chain, pin, and medallion of gold owned originally by Henry B. F. Macfarland, Commissioner of the District of Columbia from 1900 to 1910.

The military collection was increased by two saddles and bridles with accessories, used during the war with Mexico by Brig. Gen.

Caleb Cushing, United States Volunteers. These were presented by Miss Margaret W. Cushing.

To the numismatic collection there came a collection of 70 foreign coins struck during the period from 1930 to 1940, lent by the American Numismatic Association. A series of United States bronze, nickel, and silver coins struck at the Denver, Philadelphia, and San Francisco mints in 1940 was received from the Treasury Department.

INSTALLATION AND PRESERVATION OF COLLECTIONS

Two changes of major importance were made during the past year in connection with the installation of the historical collections. One of these consisted in the transfer of four screen cases containing mementos of the lives and careers of the secretaries of the Smithsonian Institution from the rotunda of the Arts and Industries Building to the center of the west hall. The other included the installation of six type dresses of the period from 1812 to 1895. These represent in an excellent manner the era to which they belong and complete a large series of such period costumes shown in the wall cases on the north side of the costumes hall.

A special historical exhibit was prepared for installation in the main hall of the Smithsonian Building in connection with a general series illustrating the activities of the Smithsonian as a whole. The historical unit in this series is contained in three wall cases, which display materials relating to civil, naval, and military history. The civil material includes a bronze bust of General Washington by Houdon; two silver trays and two china plates owned by George Washington; a box desk owned by Thomas Jefferson; a silver teapot made by Paul Revere; a silver teapot owned by Samuel Chase; oil paintings showing the design of the United States Flag in 1777, 1783, and 1795; United States coins of the early nineteenth century and United States medals of the late nineteenth and the early twentieth centuries. The naval material includes oil paintings showing the design of the United States Flag in 1863, 1898, and 1941; an oil painting of the U. S. S. *Hartford* in 1864; copies of gold medals struck during the War of 1812; a series of decorations; a sword and scabbard of the early part of the nineteenth century; and a model of a submarine chaser of the early part of the twentieth century. The military material includes oil paintings showing the design of the United States Flag in 1818, 1822, and 1863; an oil painting entitled "The 77th Division on Fifth Avenue, 1918"; a series of bronze copies of original gold medals of the War of the Revolution; a series of decorations of the late 19th century; a

sword and scabbard of the early nineteenth century; and examples of the enlisted man's headgear of 1846 and 1917.

A special exhibit of timely public interest installed in the rotunda of the Arts and Industries Building includes various types of objects of a military character relating to the history of National Defense during the period from the War of the Revolution to the present day. The rotunda is particularly appropriate for an exhibition of this character because the central exhibit is the plaster model from which was fashioned the mammoth figure of Freedom that surmounts the Capitol dome. The exhibit includes a well-selected series of objects and pictures relating to American military history, including small arms, uniforms, and various other types of military accessories. A unique feature is a series of 60 oil paintings showing the designs of various types of naval, national, and military flags flown in the various wars of United States history from 1775 to the present day.

Other interesting items in the Defense exhibit are flintlock pistols of the period of the Revolution, a Ferguson breech-loading rifle captured from the British forces by United States troops at the Battle of Kings Mountain, October 7, 1780, and epaulets and powder horns of the same period. Swords, pistols, and rifles of the War of 1812 and other great conflicts of our own country are also shown. Among the famous makes of such objects represented are Springfield muskets and rifles of various periods. The exhibit also includes various types of Colt revolvers, Hall breech-loading rifles, percussion cap pistols, and Harpers Ferry pistols and rifles. Other displays are of objects relating to single conflicts, and a series of colored lithographs showing the cut and design of various types of uniforms worn in the United States Army from 1776 to 1906. Wall cases show actual examples of many of the uniforms illustrated in the prints.

The pictures of flags are shown in screen cases and are arranged in two series of 30 flags each. The first of these indicates the changes in design in the National Flag during the entire period of its history, from 1777 to the present day, the two basic changes made by Congress in 1795 and 1818 being clearly indicated. As the arrangement of the stars in the Flag was not specified in any of the acts of Congress concerning its design for at least a century, during this period there was very little standardization in the form in which they were shown. Many of the various methods are displayed in the exhibition. The second series shows the designs of many historic local and national United States military flags flown by various military organizations during the period from 1775 to the present. This includes pictures of such historic flags of the Revolution as the Bedford flag, the New Hampshire flags, the Connecticut flag, the Rhode Island flag, the New York flags, the Pennsylvania flags, the Pulaski flag, the South Caro-

lina flag, and the flag of the Second Dragoons. There are also pictures of military flags of the period from the War of 1812 to the present time, including those flown by the cavalry and infantry regiments of the regular Army.

Mrs. Katherine F. Richey, of the Brooklyn Navy Yard, New York, as a gift to the Museum restored and mounted two valuable flags in accordance with the general method devised by her mother, Mrs. Amelia Fowler, of Boston, Mass., and used by her in the restoration and mounting of many historic flags throughout the United States. One of the two was a battle flag of the period of the Creek Indian War in 1813, a flag 62 by 70 inches in size, made of thin cream silk bearing painted designs showing the United States coat of arms with 18 stars above and the inscription "God Armeth the Patriot" below. This was presented by the ladies of Nashville to the Nashville Battalion during the Creek War, in 1813. The other flag restored is a presidential campaign banner of 1840, made of white silk, 6 by 12 feet in size, bearing a portrait of Henry Clay, surmounted by an eagle with a laurel wreath, and to the side, printed in large black letters, "Clay & Frelinghuysen, Union Bank Currency, Revenue on Imports, Protection of American Industry, Distribution of the Proceeds of the Public Lands among the States, one Presidential term, Reduction of Executive Power." These valuable specimens are now ensured of preservation.

A wall case on the north side of the naval court was remodeled to provide for the installation of a series of paintings pertaining to the First World War.

INVESTIGATION AND RESEARCH

Research work in the division covered various phases of the subjects of arms, flags, coins, and medals. The results were expressed largely in the form of correspondence, but the notes made in this connection will also serve as the basis for further work in these branches of the historical museum field. The division prepared data for a radio broadcast entitled "Establishment of the National Coinage System" in "The World is Yours" series.

The National Park Service borrowed 38 negatives of Civil War uniforms and a series of muskets and rifles was lent to the Marine Corps Museum, Marine Barracks, Quantico, Va.

Assistance was rendered by the curator to the Treasury Department on numerous occasions in connection with information on the subject of gold coins. Sixty-nine lots of material were received by mail for identification and report. Several hundred inquiries were received from visitors to the division.

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NUMBER OF SPECIMENS UNDER DIVISION

Art	4,901
Costumes	4,299
Domestic	10,853
Military	27,864
Narrative	2,259
Naval	2,729
Numismatic	48,271
Philatelic	408,518
Total	509,694

ACCESSIONS DURING THE FISCAL YEAR 1940–41

(Except when otherwise indicated, the specimens were presented, or were transferred, in accordance with law by Bureaus of the Government)

ABBOT, Dr. CHARLES G., Washington, D. C.: 2 "first-day covers," 1 dated April 14, 1940, the other October 28, 1940 (158114).

ABEL, JOSEPH, Washington, D. C.: Negative of a motion picture, taken by the donor, showing flights of an early Curtiss Flying Boat and a portion of the occasion when Glenn Curtiss was presented with the Langley Medal by the Smithsonian Institution, February 13, 1913 (160272).

ACADEMY OF NATURAL SCIENCES, Philadelphia, Pa.: (Through Henry W. Fowler) 16 fishes, cotypes and paratypes (157855, exchange); (through Morgan Hebard) 4 insects (160137, exchange); (through Dr. H. A. Pilsbry) 2 mollusks (157821).

AERO CLUB OF WASHINGTON, Hyattsville, Md.: (Through Mrs. Mary Benson) Model, 1/16 size, of the Columbia monoplane, 1910, which was designed and constructed in Washington, D. C., and probably the first all-American monoplane, both plane and engine, to fly (160274).

AGRICULTURA, MINISTERIO DE, *Departamento de Genetica*, Santiago, Chile: (Through Dr. Carlos Muñoz) 16 grasses from Southern United States (158145, exchange).

AGRICULTURAL EXPERIMENT STATIONS, Gainesville, Fla.: (Through Dr. A. N. Tissot) 2 flies and 1 bark beetle collected in Florida (159019).

AGRICULTURE, U. S. DEPARTMENT OF:

Bureau of Animal Industry: 493 mollusks from Montana and Wyoming (157325); (through Dr. E. W. Price) 2,268 mollusks from Logan, Utah, collected by Dr. W. H. Krull (156741).

Bureau of Entomology and Plant Quarantine: 45 isopods, 94 mollusks, and 24 amphipods (156415, 156460, 156769, 156813, 156910, 157048, 157327, 157671, 158258, 158285, 158646, 158713, 159034, 159678, 159954); 1 vial of copepod eggs (156870); 33,000 insects representing 2,800 species, including types, paratypes, or cotypes of nearly 400 species as well as 10,000 unidentified Coleoptera and notes recording field observations on some of the species, assembled by the late Ferdinand Nevermann, Costa Rica (157611); 47 slides with 30 species of mites, including 17 species represented by type material (158308); 8 slugs (159844); 64,000 miscellaneous insects retained out of the 23,200 lots received by the Division of Insect Identification during the fiscal year 1940–41 (160001).

Forest Service: (through Dr. Miriam Bomhard) 25 plants from Western United States (158711).

Bureau of Plant Industry: 32 plants from Arizona and West Virginia (157157, 157158); (through Dr. F. R. Fosberg) 3 plants from Asia (158053, 158947); (through Dr. F. J. Hermann) 1 plant from Bolivia (158376); (through Dr. T. H. Kearney) 683 plants from Arizona (156965, 157162, 157260, 157339, 158047, 158110, 158172, 159119); (through B. Y. Morrison) 982 grasses, mounted (158810); (through R. H. Peebles) 4 plants from Arizona (156804); (through P. L. Ricker) 11 plants (157805).

AITKEN, THOMAS, Berkeley, Calif.: 15 mosquitoes (155413); 6 flies (159534).

ALAIN, Brother, Vedado-Habana, Cuba: 8 ferns from Cuba (159966).

ALEXANDER, ROBERT, Wynnewood, Pa.: 100 mollusks from near Cape May, N. J. (157899).

ALFARO, Dr. ANASTASIO, San José, Costa Rica: 442 insects from Costa Rica (157171).

ALLAIRE, WOODWARD & Co., Peoria, Ill.: 1 each of poplar buds, blue cohosh, resin of *Podophyllum*, and boldo leaves for the materia medica collection (159240).

ALLARD, H. A., Washington, D. C.: 1,544 plants from Virginia (158054, 159121, 160210).

ALLEN, Dr. JOHN L., Wilkes-Barre, Pa.: (Through Dr. Riley D. Moore) The first license issued by the Pennsyl-

vania Board of Osteopathic Examiners, dated August 4, 1909, to Dr. Virgil A. Hook, one of the founders of the Atlantic School of Osteopathy and the first osteopathic physician to practice in Wilkes-Barre, Pa. (159849).

ALLEN, PAUL H., Balboa, Canal Zone: 386 plants from Panama (157287, 157307, 157834, 158079, 158373, 158393, 158715, 159154, 159767, 159967, 160109).

ALLEN, ROBERT P., New York, N. Y.: 137 invertebrates and 3 insects from Texas and Florida (157628).

ALLEN, S. L., & Co., INC., Philadelphia, Pa.: 8 specimens showing the manufacture of solid and laminated hickory skis (160247).

ALLISON, LEONARD N., Ann Arbor, Mich.: 9 mollusks from Washtenaw County, Mich. (157745).

ALPHEN, J. L. (See under General Seafoods Corporation.)

ALVARENGA, Dr. LEONIDAS, San Salvador, El Salvador: 1 fresh-water sponge (159882).

AMERICAN MUSEUM OF NATURAL HISTORY, New York, N. Y.: Skins and skulls of 2 rodents from Ecuador (116285, exchange); (through John T. Nichols) 1 fish, paratype (159343, exchange); (through Dr. W. G. Van Name) 2 isopods, cotypes (157154).

AMERICAN MUSEUM OF PHOTOGRAPHY, Philadelphia, Pa.: 1 wet plate of the Smithsonian Building made by Caspar W. Briggs, who is now 94 years old (159704).

AMERICAN NUMISMATIC ASSOCIATION, New York, N. Y.: Coins of Albania, Argentine, Bolivia, Brazil, British North Borneo, Cape Verde Islands, Egypt, Germany, Honduras, Hong Kong, Iran, Iraq, Italy, Nepal, New Zealand, Nicaragua, Paraguay, Rumania, San Marino, Vatican City, Yugoslavia, British Malaya, and Switzerland (70 specimens) and 9 coins of the Dominican Republic, India, Panama, Rumania, and Travancore, struck 1938–40 (157069, 158906, loans).

AMERICAN-PACIFIC WHALING CO., Seattle, Wash.: (Through A. Van De Venter, Chief Boatswain, U. S. C. G.) Complete skull and both sets of baleen of a humpback whale and fetal whalebone whale skull, collected by Boatswain Van De Venter in the North Pacific Ocean during 1940 (157799).

AMERICAN PHOTOGRAPHIC PUBLISHING CO., Boston, Mass.: 106 pictorial photographs for special exhibition during February 1941 (158942, loan).

AMERICAN SECURITY & TRUST CO. (See under Estate of Mary L. D. Macfarland.)

AMERICAN TELEPHONE & TELEGRAPH CO., New York, N. Y.: Telephone instrument, 1937, consisting of a transmitter and a receiver assembled in one handle and a mounting for holding same equipped with a dial and containing within all other elements of a subscriber's station, namely, induction coil, condenser, and ringer (159498).

ANCHORAGE STAMP CLUB, Anchorage, Alaska: (Through Mrs. William Mellish) Cover with cachet commemorating the opening of the post office at Fort Richardson, Alaska, on April 1, 1941 (159656).

ANDERSON, CHARLES S., Harrisburg, Pa.: 14 flies (157683).

ANDERSON, Dr. R. M. (See under Canadian Government, Department of Mines and Resources.)

ANGELL, J. W., New York, N. Y.: 4 insects (159426).

ANTHROPOLOGICAL MUSEUM MONTANÉ, Habana, Cuba: (Through Dr. René Herrera Fritot and Dr. Fernando Royo) 10 shell artifacts from a cave at Punta del Este, Isle of Pines, Cuba (156488).

ANTONELLI, SEVERO, Philadelphia, Pa.: 63 prints made for illustrations and cover pages for April 1941 show of illustrative photography (159489, loan).

ANTUNES, P. C. A., Fortuleza, Ceara, Brazil: 1 mosquito (159867).

APOLINAR-MARIA, Brother, Bogotá, Colombia: 13 plants from Colombia (159641).

ARISS, ROBERT, Albuquerque, N. Mex.: 85 Pleistocene land and fresh-water shells from Placitas, N. Mex. (156007).

ARIZONA STATE MUSEUM, Tucson, Ariz.: (Through Prof. Emil W. Haury) 4 lots of sherds from a ruin on Forestdale Creek, near Show Low, Navajo County, Ariz., excavated in 1940 by Prof. Haury (159918).

ARLINGTON CAMERA CLUB, Arlington, Va.: 248 pictorial photographs representing fifth annual travel salon of the Photographic Society of America and the third annual members' exhibit of the Arlington Camera Club for special exhibition during March 1941 (159268, loan).

ARLINGTON MILLS, Boston, Mass.: 2 fleeces of Territory wool, 1 in the grease and 1 scoured, and 3 wool fabrics (flannel shirting, worsted serge, and Elastique) manufactured for uniforms for the armed forces of the United States (160218).

ARMSTRONG, URSEL S., Albany, Calif.: 13 lots of larger Foraminifera, representing 7 genera, a total of about 175 specimens, from Arabia (160223).

ARNOLD, Prof. JOHN G., JR., New Orleans, La.: Type and paratypes of helminths (158857).

ARTHUR, B. F., Winchester, Va.: Cast-iron, revolving waffle-iron formerly used for approximately half a century on a wood-burning stove in the home of the donor (156955); specimen of barbed-wire fencing (159858).

ASHBURN, M. F., Patagonia, Ariz.: 373 fishes, 2 tadpoles, 20 insects, collected by donor 2 miles northeast of Lochiel, Ariz., in the Santa Cruz River and in Sheyhe Spring, Santa Cruz County, June 9, 1940 (156618).

ATLAS POWDER CO., Wilmington, Del.: A series of 42 specimens illustrating the preparation of various chemical compounds from sugar through the intermediate formation of the 2 hexitols, mannitol and sorbitol (157658, loan).

ATWATER, Rev. DAVID T., Brooklyn, N. Y.: 3 mollusks (160187, exchange).

AYERS, Mrs. HESTER M., New York, N. Y.: 23 matted drawings of Carib Indians, West Indian Negroes, and Polynesians, together with a scrap book of exhibition and press notices (157578, loan).

BAHOVEC, FRED, Baranof, Alaska: 1 photograph of the Alaska giant squid (159520).

BAILEY, Dr. REEVE M., Ames, Iowa: 2 fishes, paratypes (157459).

BAILEY, VERNON, Washington, D. C.: 2 arrowpoints from farm near Mud Lake and 2 fragments of pottery from near mound by Lake of the Woods, near Mud Lake, Minn. (158413).

BAKER, Mrs. ARTHUR, Friendship Station, D. C.: 5 plants from Utah (158589).

BALDWIN, Dr. J. T., Jr., Ann Arbor, Mich.: 117 plants from Southeastern United States (158374, 158564).

BALES, Dr. B. R., Circleville, Ohio: Paratype of mollusk from Little Duck Key, Fla. (158213).

BALL, WILLIAM H., Washington, D. C.: 35 amphipods and 8 mollusks from District of Columbia, Maryland, and Virginia (158311, 160026).

BANDY, Dr. MARK C., Llallagua, Bolivia: 50 cassiterite and associated minerals from Llallagua and other localities in Bolivia and 2,000 branchiopods and other fossils from the Uralian (Permian) rocks southeast of Apillapampa, Bolivia (152117); 14 pieces of wurtzite and other minerals from Bolivia and Chile (157096, deposit).

BARBOUR, Prof. ROGER W., Morehead, Ky.; 10 skins and skulls of mammals collected in Kentucky during 1938–39 (155041).

BARGER, Dr. G. J. P., Washington, D. C.: 1 termite queen from Angola, West Africa (157822).

BARKER, R. WRIGHT, Houston, Tex.: (Through Dr. T. Wayland Vaughan) 5 lots of Cretaceous and Tertiary larger Foraminifera from Mexico (159010).

BARNES, R. M., Lacon, Ill.: 43 insects (43 species) (150418, 156702).

BARR, Mrs. EDWIN M., Chevy Chase, D. C.: Hand chainstitch sewing machine made under Wm. G. Beckwith's patent, April 18, 1871, and purchased by the donor's mother in Crewe, Cheshire, England (157576).

BARTLETT, Capt. ROBERT A., New York, N. Y.: A collection of marine invertebrates, a baby walrus skeleton, and 266 plants from the west coast of Greenland (156683).

BARTLEY, FLOYD, Circleville, Ohio; 47 plants from Ohio (158357).

BARIRUM, Dr. JOHN A., Auckland, New Zealand: 10 branchiopods from Mesozoic strata of New Zealand (160216, exchange).

BARTSCH, Dr. PAUL, Washington, D. C.: Young southern robin (159929).

BARWICK, Prof. A. R., Washington, D. C.; Posterior portion of a fossil skull (157214).

BASH, RICHARD T., San Francisco, Calif.: (Through Dr. V. D. Spicer) 1 mollusk from Midway Island (160103).

BAUGHMAN, J. L., Houston, Tex.: Fishes, echinoderms, crustaceans, coelenterates, and mollusks collected in Gulf of Mexico and Texas by donor (156479).

BAXTER, EDGAR M., Santa Barbara, Calif.: 3 plants from California (160121).

BAYER, TED, Riviera, Fla.: 30 mollusks, 4 brittle-stars, and 1 starfish (153923, 158689, 159379).

BEACH, JESSIE M., Washington, D. C.: 1 northern flicker (159700).

BEACH, WILLIAM N., New York, N. Y.: 1 moose collected during 1940 in Alberta, Canada (157948).

BEATTY, HARRY A., Christiansted, St. Croix, Virgin Islands: 14 bats, 1 fish, and 2 bird bones collected in Virgin Islands (158443, 159639).

BEAVERS, Mrs. MARTHA N. (See under J. E. Norton.)

BEEBE, Dr. WILLIAM, New York, N. Y.: 1 mollusk (159317).

BEER, JAMES. (See under State College of Washington.)

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

BENESH, BERNARD, Chicago, Ill.: 51 beetles and wasps (159263, 159452).

BENNETCH, LEONARD M., Bethlehem, Pa.: 1 rotifer slide (159644).

BENSON, Mrs. MARY. (See under Aero Club of Washington.)

BERG, CLIFFORD O., Ann Arbor, Mich.: A small collection of miscellaneous insects, including 1 new species (157044, 158332).

BERMAN, Dr. H. (See under Harvard University, Department of Mineralogy and Petrography.)

BERRY, Dr. S. S., Redlands, Calif.: 222 mollusks (10 paratypes and 27 topotypes) and 11 fossil mollusks (paratypes) (157911, exchange).

BIERIG, ALEXANDER, San José, Costa Rica: 5 beetles (157648, exchange).

BIGELOW, Dr. H. B. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

BING, JOSEPH M., New York, N. Y.: 2 exposure meters, visual extinction type (158309).

BIRD, HENRY, Rye, N. Y.: 40 miscellaneous insects (158415).

BISELL, Mrs. ELEANOR W. (See under Mrs. Caroline W. Shannon.)

BISHOP MUSEUM, BERNICE P., Honolulu, Hawaii: (Through E. H. Bryan, Jr.) 2 fishes from Hawaii (158909, exchange); (through Elwood C. Zimmerman) 1 beetle (158546).

BLACK, RALEIGH A., Mont Albert, Victoria: 70 grasses from Australia and Tasmania (157262, exchange).

BLACKWELDER, Dr. R. E., Washington, D. C.: 1 beetle, type (157175); 2,830 miscellaneous beetles collected in Panama during 1930–31 (158505).

BLAKE, Mrs. DORIS H. (See under Los Angeles Museum of History, Science and Art.)

BLAKE, Dr. S. F., Washington, D. C.: 1 fossil crab from the Miocene, Calvert formation, Calvert Beach, Md. (156908); 1 mollusk (157712); 1 plant from Arizona (158130, exchange); 1 plant from Alabama (158707, exchange); 1 plant from Florida (159915, exchange).

BLOMQUIST, Prof. H. L. (See under Duke University.)

BLUM, JOHN E., Piedmont, Calif.: 2 beetles (157330).

BOHART, Dr. RICHARD M., Davis, Calif.: 16 insects (6 representing 5 species of Strepsiptera and 10 representing 5 species of wasps) (146880, exchange).

BOMHARD, Dr. MIRIAM. (See under U. S. Department of Agriculture, Forest Service.)

BOR, Dr. N. L. (See under Forest Research Institute and College.)

BORSUM, Mrs. A. W., Annapolis, Md.: 3,084 mollusks from Samoa (157038).

BOTANICAL AND FORESTRY DEPARTMENT, Hong Kong: 3 plants from China (156938).

BOTTIMER, L. J., Beltsville, Md.: 8 mollusks from Bradenton, Fla. (160027).

BOURQUIN, FERNANDO, Buenos Aires, Argentina: 4 Lepidoptera (158790).

BOWMAN, Capt. H. W., Arlington, Va.: Collection of Moro and Negrito weapons, consisting of kampilan, kris, wooden shield, bow, spears, and arrows, and a basketry hat obtained by donor while on duty in the Philippine Islands (157000).

BRANTLEY, O. M., Washington, D. C.: Buffalo-horn cane made in Texas about 1860 (158951, loan).

BRAUN, Dr. ANNETTE F., Cincinnati, Ohio: 16 Lepidoptera (12 species of which 9 are represented by 12 paratypes) (159399).

BRAY, ROBERT, Arlington, Va.: A collection of fresh-water amphipods, copepods, and shrimps taken in Maryland and Virginia (159377).

BRAZILIAN EMBASSY. (See under Dr. Rudolf Von Ihering.)

BRENCKLE, Dr. J. F., Mellette, S. Dak.: 52 grasses (157574, 157937); 96 plants from South Dakota (157338, exchange).

BRENNER-PHOTO Co., Washington, D. C.: 1 Dr. R. Krugener camera with lens and shutter for roll film and plates (158977); 1 L–672 Eastman aerial camera, 4 by 5 motor driven, 3 magazines, no lens (159793).

BRERETON, ESTELLE J., Washington, D. C.: 19th century European colored art-glass vase, blown and double-dipped after the fashion of the so-called Empire and Biedermeier period (159794).

BRIDE, DANIEL (deceased): (Through Mrs. Daniel Bride) Gold watch and silver coin cuff links owned by William Jennings Bryan (158474, bequest).

BRIDGE, Dr. JOSIAH, Washington, D. C.: 1 specimen of lead-zinc ore from the New Prospect Mine, Lead Mine Bend, Powell River, Tenn. (157642); about 1,000 land and fresh-water mollusks from Burnet and Gillespie Counties, Tex. (158916).

BRIDWELL, J. C., Washington, D. C.: 2 plants from near Washington (159697).

BRIGHAM, EDWARD F. P., Miami, Fla.: 47 specimens of Foraminifera (157604).

BRIGHAM YOUNG UNIVERSITY, PROVO, Utah: (Through Prof. B. F. Harrison) 134 plants from Utah (157526); (through Dr. Vasco M. Tanner) 2

weevils, both paratypes (159710, exchange).

BRISCOE, Prof. M. S., Harpers Ferry, W. Va.: 7 mollusks, 1 jar of bats, 5 bottles of insects, 1 bottle of plants (fungi), all from caves in West Virginia (158290).

BRITISH GOVERNMENT:

Agriculture Department, Entomological Branch: 17 Lepidoptera representing 16 species, all paratypes (158310, exchange).

British Museum (Natural History): 193 photographs of ferns (types) (156999, exchange); (through O. W. Richards) 4 wasps (4 species), all paratypes (151017, exchange).

Royal Botanic Gardens: 818 grasses (158946, 159553, exchanges).

BRITISH GUIANA DEPARTMENT OF AGRICULTURE: 3 plants from British Guiana (157572, exchange).

BROCKMAN, C. F. (See under U. S. Department of the Interior, National Park Service.)

BRONAUGH, CLAUDE B., Afton, Okla.: 1 fossil starfish from the Chester group of Craig County, Okla. (157521).

BROOKLYN BOTANIC GARDEN, Brooklyn, N. Y.: 120 plants chiefly from Tennessee (157159, exchange).

BROOKMAN, BERNARD, Berkeley, Calif.: 4 flies, all paratypes (157461).

BROOKS, LAWRENCE L., Larchmont, N. Y.: 3 pictorial photographs, "Valley Forge," "Singing Tower," and "Historic Williamsburg" (159773).

BROSTRUP, JOHN O., and THOMAS T. WATERMAN, Washington, D. C.: 128 architectural photographs for special exhibition during February 1941 (159014, loan).

BROWN, IDA A. (See under University of Sydney.)

BROWN, W. L. (See under Smithsonian Institution, National Museum.)

BROWNELL, Mrs. ROWENA, Providence, R. I.: 46 framed pictorial prints for special exhibition during September 1940 (157516, loan).

BRUNER, S. C., Habana, Cuba: 25 beetles from Cuba (157195, 158215).

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

BRYANT, HERWIL M. (See under U. S. Department of the Interior, Antarctic Service, and Dr. Edwyn P. Reed.)

BUCHANAN, L. L., Washington, D. C.: 76 weevils from Manchuria (156901).

BÜES, C., Quillabamba-La Convencion, Peru: 184 ferns from Peru and skull of Peruvian *Potos* without lower jaw (158659).

BUFFALO, UNIVERSITY OF, Buffalo, N. Y.: (Through Prof. Albert R. Shadle) 7 beetles (157002).

BUFFALO MUSEUM OF SCIENCE, Buffalo, N. Y.: 100 Devonian invertebrate fossils from the Onondaga and Hamilton formations of western New York (157100, exchange).

BURANELLI, FELICITY. (See under Medal of the Month Club.)

BURBANK, E. A., San Francisco, Calif.: Photograph of a painting of a Hopi girl, Ni-Yang-I-Mana, painted by the donor (159806).

BURCK, Prof. PAUL R., Radford, Va.: 601 mollusks from Virginia (157324).

BURCH, TOM, Redondo Beach, Calif.: 150 mollusks from California and Mexico (156708, 157681, 159304, 159619).

BUREN, W. F., Ames, Iowa: 5 ants (2 female holotypes, 1 male paratype, and 2 worker paratypes) (159176).

BURKE, Mrs. MONCURE, Washington, D. C.: Dress of Mrs. Andrew Jackson Donelson, tortoise-shell back comb, presented to President Andrew Jackson after the Battle of New Orleans, and a silver filigree card case owned by Mrs. Andrew Jackson (157963).

BURT, Prof. CHARLES E., Winfield, Kans.: 4 medusae, 4 stomatopods, 7 amphipods, and 7 isopods (151542); 1 dried sand-dollar (153687); 8 insects, 60 land, fresh-water, and marine shells, and 100 oligochaete worms, from Kansas, Oklahoma, and Texas (157016); 154 marine shells from Nova Scotia, 2 insects, 2 starfishes, 1 fish, 50 shrimps, and many worm tubes (158271); 16 duplicate frogs (159428).

BUSHNELL, DAVID I., Jr. (See under R. L. Updike.)

BUSWELL, W. M., Coral Gables, Fla.: 10 ferns from Florida (160107).

BYRD ANTARCTIC EXPEDITION, 1933–35: 100 lots of copepods (158312).

CABALLERO Y C., Dr. EDUARDO, Mexico, D. F.: 2 leeches, cotypes (157067); slide containing new species of trematode (158156); cotype of trematode (158552); cotypes of new species of helminth from a bird (158757).

CABANILLAS, Lt. Comdr. J. M., Balboa, Canal Zone: 1 shrimp (152749).

CADY, WALLACE M. (See under John W. Van Tuyl.)

CAFFERY, BETHIA R., Franklin, La.: Pearl necklace presented to Mrs. Andrew Jackson Donelson by President Andrew Jackson, and worn by Mrs. Donelson when she was mistress of the White House, during the administration of President Jackson (157901, loan).

CALCUTTA, INDIA, ROYAL BOTANIC GARDEN: 4 photographs of type specimens of plants (158057. exchange).

CALDERON, Dr. S., San Salvador, El Salvador: Skin and skull of gray fox and 2 alcoholic house mice collected in El Salvador (156928).

CALHOUN, JOHN B., Evanston, Ill.: Skins and skulls of 13 small mammals collected in Tennessee during 1940 (157798).

CALIFORNIA, UNIVERSITY OF, Berkeley, Calif.: 1 fern from Mexico (158245); 569 plants from California (157001, exchange); (through Dr. J. Wyatt Durham) 256 casts of fossil mollusks from the Pacific coast region of North America (159787); (through Prof. E. O. Essig) 1 vial of insects (160136); (through Prof. Carl Epling) 4 plants from Colombia (157925, exchange); (through Prof. T. H. Goodspeed) 71 plants from Ecuador (156808, exchange), 344 plants from Mexico and Central America (156809, exchange); (through John L. Morrison) 4 cultivated plants (157882, exchange).

CALIFORNIA ACADEMY OF SCIENCES, San Francisco, Calif.: 1 beetle (158943, exchange); 270 plants (159478, exchange); (through Mrs. Doris H. Blake and Edward S. Ross) 5 beetles (3 species), all paratypes (159417).

CALIFORNIA DEPARTMENT OF AGRICULTURE, Sacramento, Calif.: (Through Mrs. M. K. Bellue) 1 plant from California (157661).

CALLAN, EDWARD McC., Trinidad, British West Indies: 4 Hymenoptera (159244).

CAMERA CLUB, New York, N. Y.: 45 pictorial prints, members' show of the Club, for special exhibition during December 1940 (158404, loan).

CAMPBELL, Dr. C. J., Hanover, N. H.: Specimens of homespun yarns, consisting of 2 measured skeins of white wool yarn with colored ties marking each click or 40 turns of the reel, and 2 small quills of black wool yarn wound on 4½-inch sections of "soda straws," spun by the donor in the spring of 1938 on a flaxwheel (159171).

CANADIAN GOVERNMENT, Ottawa, Canada:

Department of Agriculture, Entomological Branch: (Through Dr. J. McDunnough). 16 Lepidoptera, 13 being paratypes of 6 species (159069, exchange); 2 Lepidoptera (159393, exchange); (through G. Stuart Walley) 36 insects (28 species), 14 being paratypes of 13 species (157216, exchange); 10 insects, 8 being paratypes of 4 species (159339, exchange); 6 insects, paratypes (159407).

Department of Mines and Resources: (Through Dr. R. M. Anderson) Cast of the type skull of a bear collected on the Alaska-Yukon boundary on July 3, 1912 (159443, exchange).

National Museum of Canada: (Through A. E. Porsild) 352 plants from Alaska (159972, exchange).

CANFIELD FUND, Smithsonian Institution: 1 tourmaline from Mount Mica, Paris, Maine (157160); 1 quartz twin and 1 scheelite crystal from Japan (157291); 1 specimen each of aquamarine, cassiterite, columbite, and tourmaline (157650); 5 gem aquamarines from Centerville, Idaho (157656); 2 garnets (157958); a collection of proustite, stephanite, argentite, and other minerals from Mexico and elsewhere (158503); 1 specimen of sterretite and 1 of durdenite from Fairfield, Utah, (159120); 1 specimen of eosphorite from Black Mountain, Rumford, Maine (159711); 1 uvarovite specimen from Tuolumne County, Calif. (159847).

CARABIA, J. P., New York, N. Y.: 11 plants from Cuba (157742).

CARCELLES, Dr. ALBERTO, Buenos Aires, Argentina: 8 mollusks, including 3 paratypes, from Argentina (159746).

CARDENAS, Prof. MARTIN, Cochabamba, Bolivia: 50 plants from Bolivia (157302).

CARNEGIE INSTITUTION OF WASHINGTON, Washington, D. C.: A collection of marine invertebrates, 4 current meters, and a waterproof camera box (156966); a collection of miscellaneous invertebrates and algae (158813).

CARNEGIE MUSEUM, Pittsburgh, Pa.: 1 frog (paratype) from Vancleave, Miss. (157583); cast of the skull and lower jaws of a small dinosaur from the Jurassic of Utah (159712); (through Gordon K. MacMillan) 19 mollusks from West Virginia (158762).

CAROLINE, Sister MARY, Key West, Fla.: 7 marine and fresh-water shells (4 species from Florida (156151).

CARTER, FRED D., Washington, D. C.: 1 cardinal (159638).

CASTELLANOS, Dr. ALBERTO, Buenos Aires, Argentina: 1 plant from Argentina (158733).

CASTLE, Prof. W. A., Columbia, Mo.: 7 slides of turbellarian worm (holotype and paratype) (159375).

CATHOLIC UNIVERSITY OF AMERICA, Washington, D. C.: (Through Rev. Father Hugh O'Neill) 1 plant from Georgia (158001, exchange).

CAZIER, M. A., Berkeley, Calif.: 38 insects, of which 11 species are represented by paratypes (151367, exchange).

CENOZOIC RESEARCH LABORATORY, Peiping, China: Reconstruction of skull and jaws of early man and casts of maxilla and skull fragments from which reconstruction was made (157070).

CENTRAL NATIONAL MUSEUM OF MANCHUKUO, Hsinking, Manchukuo: (Through Dr. R. Endo) 13 fossil plants, 3 fossil vertebrate specimens, and 28 birds from Manchukuo (150788, exchange).

CENTRO NACIONAL DE AGRICULTURA, San Pedro Montes de Oca, Costa Rica: (Through Dr. J. M. Orozco) 2 plants from Costa Rica (157878).

CHACE, E. P., San Pedro, Calif.: 8 West American mollusks (157304); 4 paratypes of mollusks (157513).

CHACE, Dr. FENNER, A., Jr. (See under Harvard University, Museum of Comparative Zoology.)

CHAMBERLAIN, Prof. CHARLES J., Chicago, Ill.: 1 cultivated plant (156939).

CHAMBERLAIN FUND, FRANCES LEA, Smithsonian Institution: 3,007 mollusks of the Calvert formation (156890, 158881, 159153, 159676); 1 spinel from Ceylon (45.84 carats) and 1 enclase from Brazil (8.91 carats) (157161); 108 land mollusks (158675).

CHANDLER, ALBERT, St. Louis, Mo.: Fern from Arkansas (159753).

CHANDLER, Prof. ASA C., Houston, Tex.: 8 lots of parasitic worms (159625); 9 mollusks from Houston (160176).

CHAPMAN, Dr. WILBERT M., Seattle, Wash.: 1 pair of otoliths from a male chinook salmon from the Skagit River, Wash. (157856).

CHASE, Mrs. AGNES, Washington, D. C.: 34 grasses from South America (157212, 159624); 90 grasses from Delaware and Maryland (158002); 88 grasses (158055, 159750); 20 grasses from New England (159475); 14 grasses from China (159771); 21 grasses from New Guinea (160242).

CHASE, L. C., & Co., INC., New York, N. Y.: 12 mohair pile fabrics representative of the types used for furniture and for railroad, bus, and theater seating upholstery; also 5 flat, mohair and cotton fabrics, plain and printed, used for drapery (157248).

CHASEN, F. N., Singapore, British Malaya: 1 brittle-star (158344).

CHATHAM, C. F., San Francisco, Calif.: 1 synthetic emerald weighing 44/100 carat (160184).

CHEATHAM, Dr. P. N., Burnet, Tex.: 1 beetle larva from Texas (159530).

CHEN, Prof. H. T., Hong Kong: 236 fresh-water shells from China (159705).

CHENEY, Mrs. GRETCHEN C., Harrisburg, Pa.: 10 crayfishes from Pennsylvania (157301).

CHEYNEY, J. S., Hot Springs, Ark.: Plant from Arkansas (157286).

CHICAGO SOCIETY OF ETCHERS, Chicago, Ill.: 144 miniature etchings for special exhibit during April 1941 (159491, loan).

CHISHOLM, Mrs. MAUDE L., Proctor, Vt.: 5 ferns from Vermont (157485).

CHRYSLER, Prof. M. A., New Brunswick, N. J.: 12 ferns from Costa Rica (157827). (See also under Rutgers University.)

CHULIN, Dr. M. (See under Moscow Academy of Sciences.)

CIVIL WORKS ADMINISTRATION and BUREAU OF AMERICAN ETHNOLOGY: Archeological specimens from various mounds in the vicinity of Parish, on Little Manatee River, Manatee County, Fla. (160244); archeological specimens from a sand burial mound on Lemon Bay, half a mile south of Englewood, Sarasota County, Fla. (160243); archeological and skeletal material from a refuse and a burial mound 1½ miles west of Belle Glade, Palm Beach County, Fla. (160249).

CLARK, AUSTIN H., Washington, D. C.: 10 mollusks from Harrisonburg, Va. (157328).

CLARK, Prof. HUBERT L., Cambridge, Mass.: 51 echinoderms (21 species) from the Percy Sladen Expedition to the Abrolhos Islands, Western Australia (160264, exchange).

CLARKE, Mrs. JAMES A., Stephentown, N. Y.: A beadwork necklace, made with needle and thread on a bead loom, bearing the name, place, and date, "H. Platt Wylie, Stephentown, N. York, April 30, 1833," and small designs in white and turquoise on a dark-blue background, which was presented to the donor by Mrs. Marion Sanford, a descendant of the Wylie family (157953).

CLARKE, J. F. G., Washington, D. C.: 2 crustaceans from Grand Canyon, Ariz. (156886); 20 insects (158414).

CLARKE, JOHN H., Los Angeles, Calif.: A ground and polished umbone of abalone showing annulations (156409); 4 mollusks (158788).

CLEMENS, Dr. WILBERT A., Nanaimo, British Columbia.: 1 crab (157058).

CLEVELAND WELDING CO., Cleveland, Ohio: (Through The B. F. Goodrich Co.) A series of 7 chromium-plated

cross sections of rims for mounting rubber tires illustrating the historical development of the types used on farm tractors and other agricultural implements and on bicycles (160220).

CLOKEY, Dr. I. W., South Pasadena, Calif.: 41 plants, mostly from Nevada (157520); 1 plant (157860).

CLOSSON, Mrs. WILLIAM B., Newton, Mass.: 111 wood-engravings, 33 prints made by the Closson method, 8 mezzotints, and 227 extra prints for exchange purposes, 9 medals, 47 wax-engraving tools, and other materials used in the Closson method (159703).

CLOUD, PRESTON E., Rolla, Mo.: 98 Pennsylvanian invertebrate fossils from Illinois (158517).

CLOVER, ELIZADA U., Ann Arbor, Mich.: 31 grasses from Arizona (159521).

COCKERELL, Prof. T. D. A., Boulder, Colo.: 578 bees, including many holotypes, cotypes, and paratypes (158291, 158346, 158549, 159936, 159959, 160219); (through Dr. W. G. Van Name) 2 isopods, cotypes (157178).

COE, ROBERT E., Ravenna, Ohio: 2 pictorial cotton prints: A 15-inch square, "The Unanimous Declaration of Independence," printed during the 1830's by the Boston Chemical Printing Co., and a 12-inch square, "Sabbath Schools First Instituted by Robert Raikes in Gloucester, Eng. A. D. 1782," stamped "Henry Bowen's Chemical Print, 19 Water Street, Boston," probably issued as a 50th anniversary commemorative kerchief (159288); 24-inch square of a pictorial linen or glazed cotton fabric, printed in blue with 2 impressions each of the companion subjects: "The Love of Truth—Mark the Boy" and "The Effect of Principle—Behold the Man," issued as a Washington commemorative print, each repeat of the pattern showing a registration mark, indicative of block or copperplate printing, and the designs spaced for cutting apart in the form of individual squares, 10½ by 12 inches (159401, loan).

COHEN, ELIAS, Baltimore, Md.: Alcoholic bat (159792).

COLE, JAMES, Bethesda, Md.: Skin of a shrew from Cropley, Montgomery County, Md. (159866).

COLGATE, ADELE S., Tuxedo Park, N. Y.: 200 Currier and Ives prints (160221); 183 Currier and Ives prints and 2 original drawings by Louis Maurer (156418, loan).

COLLINS, L. V., Los Angeles, Calif.: Fossil cephalopod from the Carboniferous rocks of Oklahoma (157146, exchange).

COLLOM, Mrs. ROSE E., Payson, Ariz.: 6 plants from the Grand Canyon, Ariz. (160046). (See also under U. S. Department of the Interior, National Park Service.)

COLORADO COLLEGE, Colorado Springs, Colo.: 3 ferns from Ecuador (158562); (through Prof. C. William T. Penland) 10 plants from Ecuador (159326).

COLTON, Prof. HAROLD S., Flagstaff, Ariz.: 2 sections of yellow pine from near Flagstaff, the larger showing sensitive growth rings, the smaller illustrating complacent rings (158096).

COMMERCE, U. S. DEPARTMENT OF, *Bureau of Foreign and Domestic Commerce:* 3 woods from Ecuador (160269).

COMSTOCK, Dr. JOHN A., Los Angeles, Calif.: 9 Lepidoptera (158782).

CONARD, Prof. HENRY S. (See under Grinnell College.)

CONCHA, ADRIANO CABAL, Medellín, Colombia: 8 flies (158988).

COOK, W. P., San Diego, Calif.: 3 mollusks from California (158267).

COOKE, Dr. C. WYTHE, Washington, D. C.: 25 marine snails from East Timbalier Island (Bird Island), La. (156970); 300 fresh-water shells, insects, and some crustaceans from Ichtucknee Spring, Suwannee County, Fla. (159708).

COOKE, Dr. C. WYTHE, and T. P. KIRBY, Washington, D. C.: 150 marine shells from Florida (160105).

COOLEY, Dr. R. A. (See under Federal Security Agency, Public Health Service.)

COOPER, Col. ALEX. T., San Juan, Puerto Rico: Full-dress U. S. Army uniform of 1910 (157343).

COOPER, Dr. and Mrs. G. ARTHUR. (See under Smithsonian Institution, National Museum.)

CORDE, Sister MARY, Maryknoll, N. Y.: 14 marine shells from the Philippines (156767, 157068); 3 mollusks (159963).

CORNING, JOHN H.: (through Union Trust Co. of District of Columbia, executors) Collection of Japanese metal work, principally fire pots, braziers and teapots, Satsuma ware, and other ceramics, and a theatrical robe of paneled embroidery (155318, bequest).

CORRELL, Dr. DONOVAN S., Cambridge, Mass.: 87 ferns, mostly from North Carolina and Louisiana (158175).

CORY, Dr. V. L., Sonora, Tex.: 30 plants from Texas (157211).

COSLEY, EDWIN M. S., Troy, Ohio: Hand-woven seamless coverlet, combining a double-weave Jacquard pattern of medallions and stars with rose-tree

border in natural cotton yarns and a single-weave background of red, blue, and green wool cross stripes, reverse showing colored pattern on white, made in 1845 by the donor's father, Dennis Cosley, at Fayetteville, Franklin County, Pa. (157562).

COTTAM, Prof. WALTER P. (See under University of Utah.)

COTTON-TEXTILE INSTITUTE, Inc., New York, N. Y.: 29 cotton fabrics produced by American manufacturers for the fall and winter of 1940 (158116); 25 cotton fabrics produced by American manufacturers for the spring and summer of 1941 (159714).

COWLING, Capt. H. T., Arlington, Va.: 2 isopods and 2 specimens of moss from Endless Caverns, New Market, Va. (158087).

COZIER, ALLEN R., Washington, D. C.: A 2-stringed musical instrument, bowed Moroccan rehab (158859).

CRAIG, Dr. R. Y., Baldwin Park, Calif.: 3 plants from Mexico (157883).

CREATIVE PRINTMAKERS GROUP, New York, N. Y.: 58 silkscreen prints for special exhibition during February 1941 (158844, loan).

CREIGHTON, Dr. W. S., New York, N. Y.: 14 ants (4 species represented by 10 paratypes and 2 species by 4 specimens not types) (158785).

CROCKER, NELLIE J., Tarrytown, N. Y.: Decorated silver blanket pin and spoon obtained by the donor from a Peruvian Indian girl in the High Andes along the railroad between Arequipa and Cuzco (158345).

CROPLEY, RALPH E., Summit, N. J.: Painting of U. S. Army Transport *President Lincoln* ex "Scotian" built in 1905, painted by Fred Pansing, 1910 (157205). (See also under Robert A. Potts.)

CROSS, J. C., Kingsville, Tex.: 2 shrimps (147275).

CROW, Dr. LOUISE P., Los Angeles, Calif.: (Through Dr. Riley D. Moore) A framed photograph of the first class graduated from the Northern Institute of Osteopathy, Minneapolis, Minn., June 1, 1897 (159971).

CRUMB, S. E., Puyallup, Wash: 36 Lepidoptera (157978).

CUATRECASAS, Dr. JOSÉ, Bogotá, Colombia: 136 plants from Colombia (150857, exchange).

CUCKLER, ASHTON C., Honolulu, Hawaii: 7 mollusks from Minnesota and Nebraska (160096).

CUSHING, MARGARET W., Newburyport, Mass.: Saddles and accessories used by Brig. Gen. Caleb Cushing, U. S. Volunteers, during the War with Mexico, 1846–48 (17 specimens) (158206).

CUTLER, Dr. HUGH G., St. Louis, Mo.: 54 plants, mostly from Mexico and Southwestern United States (159545).

DAHL, RICHARD, Oakland, Calif.: 30 beetles (157974).

DAMMERS, Comdr. C. M., Riverside, Calif.: 96 insects (158914).

DANIEL, Brother, Medellín, Colombia, South America: Collection of miscellaneous insects from Colombia (156091); 200 plants from Colombia (156898, 157108, 157714, 158743).

DARNELL, Mrs. ADA. (See under J. E. Norton.)

DA ROCHA, Prof. DIAS, Ceara, Brazil: Small collection of beetles from Brazil (156002); 1 plant from Brazil (156803); 2 mollusks from South America (158500).

DARTIGUE, Dr. MAURICE. Port-au-Prince, Haiti: 4 mollusks from Haiti (158913).

DAVIS, Prof. WARD B., College Station, Tex.: Skin and skull of bat collected in Culberson County, Tex. (159875).

DAVIS, WILLIAM T., Staten Island, N. Y.: 18 cicadas (5 species) (157121, exchange).

DEAROLF, KENNETH, Dayton, Ohio: 30 amphipods and 11 worms (149023, 151203).

DE FUNARO, C. WENDELER, New Rochelle, N. Y.: 1,343 beetles, including 16 named species of which 7 are represented by type material and 1,326 miscellaneous Carabidae (157418, exchange).

DEGENER, OTTO, Oahu, T. H.: Fern from Fiji (159681).

DE GROOT, HENDRIK, Los Angeles, Calif.: A series of 32 specimens illustrating the manufacture of spectacle lenses by molding from plastic material and a series of 11 specimens of some early and special types of glass bifocal spectacle lenses (158527).

DEIGNAN, H. G., Washington, D. C.: 183 fishes, 1 mollusk, frogs, snakes, and lizards (159652).

DENLEY, CHARLES F., Glenmont, Md.: 4 pheasants (157303, 157420, 159073).

DENNIS, ELLEN, Baltimore, Md.: Rosewood square piano made by André Stein, d'Augsbourg et Vienne, about 1830 (157422).

DENSMORE, FRANCES, Red Wing, Minn.: An ethnological collection of objects from the Teton Sioux, Chippewa, and other Indian tribes consisting of beaded, skin, turtle figurine charms and other beadwork, a cup and pin game, a bone fishhook, and 2 bracelets (13 specimens) (158401).

DENTON, J. FRED, Houston, Tex.: 105 land shells from Houston (159382).

DEPAUW UNIVERSITY, Greencastle, Ind.: 56 grasses from Samoa (156737, exchange).

DERR, H. B., Fairfax, Va.: A large colony of Niagaran coral from Elmhurst, Cook County, Ill. (159070).

DETHIER, Prof. VINCENT G., Cleveland, Ohio: 1 insect (158209); small collection of eggs and larvae of Lepidoptera (6 species) (159127).

DEWAR MANUFACTURING Co., Brooklyn, N. Y.: 5 carbide mine lamps, 1904 to the present model (157348).

DE ZEEUW, Dr. CARL. (See under New York State College of Forestry.)

DIAKONOFF, Dr. A. (See under Proefstation voor de Java-Suiker-Industrie.)

DICTAPHONE CORPORATION, Bridgeport, Conn.: Modern Dictaphones, including 1 dictating machine, 1 transcribing machine, 3 accessories, and 3 records (157169).

DIDDELL, Mrs. W. D., Jacksonville, Fla.: 11 plants from Florida (157609, 157659, 158334, 158732, 158749, 160005).

DIETRICH, Capt. J. W. P., and Dr. EUGENE R. KELLERSBERGER, Batavia, Java: Skull of a babirusa collected in the interior of New Guinea (160000).

DIRKS, JANE C., Champaign, Ill.: 61 flies and Hymenoptera (158028); 64 mollusks from near White Heath, Piatt County, Ill. (159719).

DISCOVERY COMMITTEE, London, England: (Through Dr. N. A. Mackintosh) 104 starfishes (79 species) from the *Discovery* expeditions to the Antarctic (160138).

DISTRICT OF COLUMBIA SPELEOLOGICAL SOCIETY, Washington, D. C.: (Through W. J. Stephenson) 150 mollusks, 6 mammals, 5 reptiles and amphibians, 4 crustaceans, and 4 insects (158697).

DIZ, R., Washington, D. C.: An Underwood typewriter silencer case (159751).

DODGE, H. R., Madison, Wis.: 13 beetles (158841, exchange).

DODGE & OLCOTT Co., Bayonne, N. J.: 1 specimen each of the oils of cardamom, ginger, cubeb, and santal for the materia medica collection (159241).

DOLE, SARAH P. (See under John L. Proctor.)

DOOLITTLE, Dr. A. A., Washington, D. C.: 240 slides of Entomostraca, 9 notebooks, 243 vials of Entomostraca, 6 boxes of printed labels, 1,045 species and faunal cards (157575).

DRAKE, Prof. CARL J., Ames, Iowa: 18 insects, 13 representing 6 species, 4 of them by 11 paratypes and 1 by allotype (158695, 159085).

DUGAND, ARMANDO, Bogotá, Colombia: 11 bird skins from Colombia (156692)

DUKE UNIVERSITY, *School of Forestry*, Durham, N. C.: 18 microscope mounts of Panama woods made from samples furnished from the Museum's duplicate collection (159752, exchange); 200 microscopic mounts of temperate and tropical woods (160185, exchange); (through Dr. H. L. Blomquist) 26 plants from North Carolina (158306, exchange).

DUNCAN, WILBUR H. (See under University of Georgia.)

DUNHAM, Dr. D. W., Columbus, Ohio: 9 fresh-water jellyfishes (159621).

DUNLOP, H. A. (See under International Fisheries Commission.)

DUNMIRE, C. V., Washington, D. C.: 30 engraved wood-blocks used as newspaper illustrations (157719).

DU PONT, E. I., DE NEMOURS & Co., Wilmington, Del.: 10 panels with mounted specimens and/or pictures; 1 panel illustrating several new products resulting from chemical research, the other 9 illustrating the preparation and certain of the applications of the following products: Cellulose nitrate, cellulose acetate, nylon, Butacite, Lucite, and neoprene (157022); 1 calendar with reproductions of paintings representing events in American history (158860).

DURHAM, Dr. J. WYATT. (See under University of California.)

EAST, CHARLES S., Washington, D. C.: 5 pairs of otoliths, 2 lizards, and 1 turtle from Bass Lake, Burnett County, Wis. (157062).

EASTERDAY, Mrs. HERBERT C., Washington, D. C.: Diplomatic sword and coat owned by Col. Samuel Simpson, of Virginia, during the year 1851, when he was diplomatic representative of the United States to England (157071).

EDMONDSON, Prof. C. H., Honolulu, Hawaii: 6 shrimps from Ponape Island, Carolines (142865), 3 shipworms from Hawaii (159267).

ELLIS, T. KENNETH, Hot Springs, Va.: Approximately 251 amphipods and 11 vials of amphipods taken from the fresh waters of Virginia and the salt waters of South Carolina and 1 isopod and 14 mollusks taken in South Carolina, including types and paratypes (156885, 157150, 157738, 159549, 160051).

EMERY, Dr. WILLIAM O., Washington, D. C.: 2 fraudulent sandstone pipes (157021).

EMMERSON, MILO E., Washington, D. C.: A 19th-century druggists' twine reel (156968).

ENDO, Dr. R. (See under Central National Museum of Manchukuo.)

ENGELHARDT, GEORGE P., Hartsdale, N. Y.: 41 Lepidoptera, comprising 6 named species of butterflies (17 specimens) and 22 moths, 2 paratypes (159654).

EPLING, Dr. CARL. (See under University of California.)

EPSTEIN, ERWIN, Cleveland, Ohio: 2 beetles from Quebec, Canada (157962.)

ESSIG, Prof. E. O. (See under University of California.)

ESTAÇÃO AGRONÓMICA NACIONAL, Belém, Lisboa, Portugal: (Through Dr. A. R. Pinto da Silva) 50 plants from Portugal (160064, exchange).

FAGAN, CHARLES, L., Rahway, N. J.: 394 miscellaneous insects from the west coast of South America (159088, 159925).

FAIRCHILD, GRAHAM B., Ancon, Canal Zone: 25 flies (13 species, 3 of which are represented by 6 paratypes) (157458).

FAIRMAN, CHARLES E., Washington, D. C.: 21 medals and awards won in photographic competition, exhibiting at salons (159636).

FALLS, R. H. M., Montreal, Quebec: Air-mail cover with 6-cent blue air-mail stamp of the 1938 issue and cachet commemorating centennial of the postage stamp, postmarked Hamilton, Ontario, May 6, 1940 (157033).

FANG, Dr. E. P., Omei-hsien, Szechwan, China: 193 plants from China (152802).

FARRELL, JAMES E. (See under Louella C. Perry.)

FASSETT Prof. NORMAN C. (See under University of Wisconsin.)

FAUST, Prof. GEORGE T. (See under U. S. Department of the Interior, Bureau of Mines.)

FAUTIN, REED W., Champaign, Ill.: 19 miscellaneous insects (158113).

FAXON, JACK, Washington, D. C.: 1 red-tailed hawk (157936).

FEDERAL SECURITY AGENCY, *Public Health Service:* (Through Dr. R. A. Cooley) 11 insects, all paratypes (157924, 159472, 159645, 160003); (through William L. Jellison) 38 miscellaneous insects representing 7 species in 4 families and 2 orders (157964); (through Dr. James F. Spindler) 2 beetles from Mary Island, Alaska (158827).

FELDMAN, SEYMOUR I., Minneapolis, Minn.: 3 trematodes (158540).

FENNAH, R. G., St. Lucia, British West Indies: 318 mollusks, 4 echinoderms, a collection of marine invertebrates, and 1 bottle of algae (157494); 4 vials of insects and 7 additional insects from St. Lucia (159897).

FENTON, JOHN WILLIAM (deceasel): (Through Dr. W. N. Fenton) Archeological material mostly from the Conewango region, Chautauqua and Cattaraugus Counties, N. Y.; a few specimens from other States, 1 from Mexico, and 1 from Assyria (159125).

FENTON, Dr. WILLIAM N., Washington, D. C.: Important collections of ethnological materials from the Seneca, Cayuga, and Onondaga Indians (157025, 157156, 157457, 158251); a catlinite pipe and a stone club originally collected by Asa Camp in Minnesota between 1870 and 1890 (159265). (See also under John William Fenton.)

FERAY, DAN E., Butte, Mont.: Metatype of a foraminifer (159775).

FERGUSON, Dr. F. F., Norfolk, Va.: Collections of marine invertebrates, marine shells, and insects (157183, 157508, 157547).

FERNANDEZ, RAUL COTO, Cartago, Costa Rica: 3 lots of parasitic worms from the golden oriole and meadowlark (157739).

FERRIS, Mrs. ROXANA S. (See under Stanford University.)

FIELD MUSEUM OF NATURAL HISTORY, Chicago, Ill.: Photographs of 693 plants, types (157533, 159790, exchanges); 811 plants from tropical America (157573, 158395, 158734, exchanges); skin and skull of bat collected by C. C. Sanborn at Arequipa, Peru, May 18, 1940 (157695, exchange); 56 plants (159415, exchange).

FIETZE, KARL, Wallace, Idaho: A German medical book by Johann Friedrich Junius, Leipzig, 1764, and a "soldier letter" with the alleged magic power of protecting the bearer from sickness and other kinds of misfortune (159460).

FIGUEROA P., ADALBERTO, Cali, Colombia: A small collection of plant lice on specimen of royal palm (158594).

FISHBURNE, B. P., Washington, D. C.: Pewter wine pitcher, bearing inscribed date of manufacture together with maker's touch marks (157028).

FISHER, GEORGE L., Houston, Tex.: 115 plants from Texas and New Mexico (158086, 159883).

FISHER, K. A., Port-au-Prince, Haiti: Zoomorphic head, pot lug, and 3 potsherds from the Isle de Cabrits, Departemente du Sud, Haiti (15829).

FISHER, Dr. WALTER K., Pacific Grove, Calif.: 63 starfishes (29 species from

various localities) and 2 whales (159546).

FLANDERS, S. E., Riverside, Calif.: 14 flies (159076).

FLUCK, Rev. WILLIAM H., Newfane, Vt.: 14 mollusks from Venezuela and Colombia (157989).

FOLK, G. EDGAR, Jr., Cambridge, Mass.: 1 frog and 5 lizards from Haiti (157078).

FORD, Rev. PAUL D., Sunbury, Pa.: 4 mollusks (156123).

FOREST RESEARCH INSTITUTE AND COLLEGE, New Forest, India: (Through Dr. N. L. Bor) About 30 grasses from British India (157535, exchange).

FOSBERG, Dr. F. R., Washington, D. C.: 14 plants from Hawaiian Islands (156972, exchange). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)

FOSHAG, Dr. W. F., Washington, D. C.: 7 plants from Mexico (159770). (See also under Smithsonian Institution, National Museum.)

FOSTER, M. B., Orlando, Fla.: 103 plants, mostly ferns, from Brazil (158127, 158746).

FOWLER, HENRY W. (See under Academy of Natural Sciences, Philadelphia.)

FOWLER, JAMES, Washington, D. C.: Collections of amphipods and isopods from Maryland and Virginia (158561, 158703, 159086, 159695); 250 freshwater mollusks from Virginia (159413).

FOX, RALPH, Washington, D. C.: Fragmentary pot and potsherds from Indian village near Redlawn, Va. (159089); archeological specimens from the left bank of Anacostia River, just south of Benning Road, D. C. (159962).

FRANCLEMONT, J. G., Ithaca, N. Y.: 11 Lepidoptera, including 8 paratypes (158303, exchange).

FRANKLIN AND MARSHALL COLLEGE MUSEUM, Lancaster, Pa.: A rare Devonian crinoid from Deer Lake, Pa., and a Lower Cambrian crustacean (158791, exchange); 95 invertebrate fossils from the Lower Cambrian, Silurian, and Devonian of Pennsylvania and 1 Cretaceous worm from New Jersey (159174, exchange).

FRANSSEN, Dr. C., Buitenzorg, Java: Paleoliths, Neolithic artifacts, and Bronze age beads from various sites in Java, Dutch East Indies, mostly collected by donor (159728, exchange).

FRASER, MORRIS. (See under Zoological Research Supply.)

FREDERICK, A. C., Albany, N. Y.: 1 butterfly (159009, exchange).

FREEMAN-MARSH, Mrs. KATE L., Washington, D. C.: A hairwork memorial wreath, collected in Georgia by the donor, and a study sample of a pictorial cotton print taken from her brother's scrapbook dated 1859 (159075).

FRIEDENWALD, Dr. HARRY, Baltimore, Md.: A jeweler's "touchstone" of black jasper, originally brought to Baltimore by Isaac Bamberger, grandfather of the donor, when he came to Baltimore from Bavaria, about 1840, and used by him in the jeweler's trade (158536).

FRITOT, Dr. RENÉ HERRERA. (See under Anthropological Museum Montané.)

FRITZSCHE BROS., Inc., New York, N. Y.: 1 specimen each of the oils of Roman chamomile, cascarilla, and petitgrain (158781); 1 specimen each of the volatile oils of juniper, savin, cedar, cedarwood, and citronella (159402); 8 colored transparencies and 4 photographs for addition to the exhibit of volatile oils and related substances (159748); 1 10-ounce specimen of oil of citronella (159973).

FROST, A. P., Mount Rainier, Md.: 3 large shrimps from the Gulf of Mexico (157478).

FROST, C. A., Framingham, Mass.: 4 insects, 3 from North Carolina and 1 from India (157605). (See also under Irene M. Scott.)

FULLER BRUSH Co., Hartford, Conn.: A series of 85 specimens illustrating the current types of personal and household brushes and related articles manufactured by this company and also steps in the manufacture of the twisted-wire type of brush (158451).

FULTON, MARION A., Washington, D. C.: Straw cover for a carriage wheel, used to place over the wheel to protect the rider's costume in boarding or alighting from the vehicle (159868).

GALLEGO, F. LUIS, Medellín, Colombia: 63 miscellaneous insects from Colombia (157676).

GARBER, PAUL E., Washington, D. C.: A pair of inside calipers adjustable by means of a set screw and quadrant and marked "J. H. Call. Patented May 23, 1861" (158412); 1 tintype and 3 cartes-de-visite (158639); a canvas-covered wooden trunk made in Ballymoney, Ireland, in 1850 and brought to America shortly thereafter (159168).

GARDNER, Dr. JULIA, Washington, D. C.: 1 crab from Chincoteague, Va. (157640).

GARDNER, S. ALMY, Washington, D. C.: Civil War badge, Union Soldiers Alliance, issued to Charles Thomas Gardner, a member of the staff of Gen. Ambrose E. Burnside (157456).

GARNIER, RALPH L., Los Angeles, Calif.: 2 plates and 2 prints on satin, made by the Metgar process (159720).

GARY, NORMAN, Takoma Park, Md.: A model, 1/16 size, of the Seversky pursuit airplane type P-35 in current use by the U. S. Army Air Corps (157954, loan).

GATES, Prof. F. C. (See under Kansas State Agricultural College.)

GAUG, MARGARET A., Chicago, Ill.: 35 etchings for special exhibition during March 1941 (159169, loan).

GAULT, P. S., Washington, D. C.: 1 anemone from Samoa (145507).

GAW, H. ZANYIN, Kiating, Szechwan, China: 27 medusae (155067).

GAZIN, Dr. C. L. (See under Smithsonian Institution, National Museum.)

GENERAL SEAFOODS CORPORATION, Boston, Mass.: (Through J. L. Alphen) A scale model of the fishing trawler *Storm*, 1936, complete with nets (158207).

GENTRY, HOWARD S., Tuscon, Ariz.: 12 plants from Mexico (157999).

GEORGE PEABODY COLLEGE FOR TEACHERS, Nashville, Tenn.: 31 ferns from Tennessee (159671).

GEORGIA, UNIVERSITY OF, Athens, Ga.: (Through Wilbur H. Duncan) 1 plant from Georgia (158375, exchange).

GERBERG, EUGENE J., Delmar, N. Y.: 4 lice on 3 slides (155921).

GERHARD, EMME, Port Washington, N. Y.: 5 pictorial photographs, "Serenity," "Lorelei," "Jungfrau," "Angelet," and "Simplicity" (157746).

GIANELLA, Prof. VINCENT P., Reno, Nev.: One specimen of realgar from Getchell mine, Humboldt County, Nev. (157645).

GILA PUEBLO, Globe, Ariz.: Archeological material from various sites in southwestern New Mexico and southeastern Arizona (153943, exchange).

GLEASON, P. R., Santa Rita, N. Mex.: 388 Lepidoptera (157249, 158211, 160145).

GLENN, MURRAY O., Magnolia, Ill.: 236 Lepidoptera (154456, 158222, 159175).

GOERGES, Mrs. FRANKIE B. C., Chatham, N. J.: (Through Harold Trapido) 1 snake from Chatham, N. J. (158821).

GOIN, Prof. COLEMAN, J., Gainesville, Fla.: 3 fossil bird bones from Florida (159280).

GOLDENSKY, ELIAS, Philadelphia, Pa.: 1 portrait of Frederick E. Ives (159873).

GONTIJO, Dr. ROMEU PIRES. (See under Secretaria da Agricultura do Estado de Minas Geraes.)

GOODDALL, J. A., Webster Groves, Mo.: Silk quilt pieced of light and dark colored blocks in a "Log Cabin" pattern, which in colonial days was known as a "pressed" quilt; also the blue ribbon or "First Premium" awarded to this quilt in 1878 by the St. Louis Agricultural and Mechanical Association (157598).

GOODDING, LESLIE N., Phoenix, Ariz.: 16 plants from New Mexico and Arizona (160008, 160146).

GOODRICH, B. F., Co., Akron, Ohio: A series of 406 specimens, 17 photographs, and 14 hand-tinted photographic transparencies illustrating the manufacture and application of various articles made from rubber and from "Koroseal," a rubberlike polymer of vinylchloride; also 7 specimens of automobile, airplane, tractor, and farm implement tires (157505); a series of specimens illustrating the use of rubber in national defense (160239, loan). (See also under Cleveland Welding Co.)

GOODRICH, Prof. CALVIN. (See under University of Michigan.)

GOODSPEED, Prof. T. H. (See under University of California.)

GOODWIN, Dr. RICHARD H. (See under University of Rochester.)

GOUDY, FREDERIC W., Marlboro, N. Y.: 1 book, "Bertha M. Goudy, a Memorial" (158058).

GOUGH, Mrs. JOHN W., Winthrop, Mass.: A wool-and-cotton "Log Cabin" quilt pieced of 4,872 light and dark colored blocks, forming 168 6-inch squares, by the donor's grandmother, Mrs. Catherine Huff Hutchins, of Cape Porpoise, Maine (158248).

GOULD, FRANK W., Berkeley, Calif.: 40 plants from United States and Canada (158586).

GOWANLOCH, JAMES N. (See under Louisiana State Department of Conservation.)

GRACE, W. A., Wanganui, New Zealand: 33 ferns from New Zealand (157289, exchange).

GRAF, JOHN E., Washington, D. C.: 516 insects, 2 vials of aphids, 3 larvae; 8 diplopods, 2 chilopods, 9 vials of ants, 7 spiders, 8 lizards, 2 mollusks collected in Virginia during June 1940 (157217); aluminum token commemorating the career of William F. Cody, 1846–1918 (158307).

GRANDIN, ALICE E. and FLORENCE, Washington, D. C.: 4 Oriental ivory carvings (159759).

GRANT, Maj. CHAPMAN, San Diego, Calif.: 6 frogs from St. Jan and St. Thomas, West Indies (158822).

GRAVELL, D. W., Habana, Cuba: (Through Dr. T. Wayland Vaughan) 3 lots of Tertiary larger Foraminifera from Mississippi (159012).

GREEN, WALTER L., Chevy Chase, Md.: 60 flower photographs exhibited during October 1940 (158176, loan).

GREENE, CHARLES T., College Park, Md.: 250 miscellaneous insects, mostly Diptera collected in Maine and New Hampshire during August 1940 (157568).

GREENWAY, ELIZABETH W., Baltimore, Md.: (Through Mrs. L. G. Wallis) A collection consisting of a pina-cloth lace veil, a satin waistcoat, and 3 embroidered smoking caps; the veil and the waistcoat were worn respectively by Mrs. and Mr. William Greenway at their wedding, June 8, 1843 (159084).

GREGG, Dr. WENDELL O., Los Angeles, Calif.: 2 mollusks, paratypes (159411).

GRESSITT, Dr. J. LINSLEY, Canton, China: 12 beetles representing 12 species, all paratypes except 1, which is a holotype (160006).

GRIEGER, JOHN M., Pasadena, Calif.: 1 topaz crystal from Minas Geraes, Brazil (158851, exchange).

GRINNELL COLLEGE, Grinnell, Iowa: (Through Prof. Henry S. Conard) 30 plants from Iowa (159202).

GROUT, Dr. A. J., Manatee, Fla.: Moss from Mexico (158814); 3 mosses from Tobago, British West Indies (160134, exchange).

GUEDET, Rev. EDWARD, Napa, Calif.: 416 insects, mostly beetles, collected in Alturas, Calif. (157247).

GUNTER, GORDON, Rockport, Tex.: 1 hermit crab (158083).

GYDNIA AMERICA LINE, Inc., New York, N. Y.: A scale model of the motorship *Pilsudski* (157101, loan).

HAIRFTON, Mrs. N. C., Kenilworth, D. C. 3 rabbits (157477).

HAMPDEN-SYDNEY COLLEGE, Hampden Sydney, Va: A camera and a telescope used by John William Draper at Hampden-Sydney College, September 28, 1836, to September 1, 1839 (157613, loan).

HAMPTON, WILLIAM A., Woodbridge, Va.: 1 beetle, collected near Smithfield, Va. (159341).

HANES, C. R., Schoolcraft, Mich.: 27 plants from Michigan (158434).

HANNA, FORMAN, Globe, Ariz.: 11 pictorial photographs (157717).

HANNA, LEO A., Centralia, Wash.: Plant from Washington (159670).

HANSIN, JOHN, Salina, Kans.: 8 grasses from Kansas (159526).

HARDY, D. ELMO, Lawrence, Kans.: 53 Diptera (153606); 4 flies (160067, exchange).

HARLEY, Mrs. G. W., Monrovia, Liberia: 12 ferns from Liberia (158584).

HARMAN, Mrs. ELIZABETH W. (See under Mrs. Caroline W. Shannon.)

HARMON, O. B., Petersburg, W. Va.: (Through A. C. Lewis) 17 miscellaneous mammal bones from Snake Hole Caverns near Petersburg (156977).

HARPER, Dr. ROLAND M., University, Ala.: 1 card of sulphur-tipped spunks (matches), purchased by the donor in Boston in 1909–10, similar in type to the old-fashioned sulphur match in common use during the middle decades of the 19th century (157029); 63 plants from Alabama and Georgia and 12 photographs (158532).

HARRIS, GEORGE M., Washington, D. C.: A square piano, bearing No. 37600, made by Steinway & Sons about 1877, in rosewood case, with 4 elaborately carved legs (159745).

HARRISON, Prof. B. F. (See under Brigham Young University.)

HARRY, HAROLD, University, La.: 1 holothurian from Pelican station 137 (159334).

HARTMAN, Dr. OLGA, Los Angeles, Calif.: 5 marine shells from North Carolina (158410).

HARVARD UNIVERSITY:

Arnold Arboretum, Jamaica Plain, Mass.: 187 plants from Arizona (157660); 2,227 plants (158166, exchange); 9 plants from Central America (159939).

Botanical Museum, Cambridge, Mass.: 4 plants from Mexico (157603); 8 plants (159623, exchange); 3 photographs of orchids (159870, exchange); (through Dr. Louis O. Williams) 1 plant from the Philippine Islands (156937, exchange).

Department of Mineralogy and Petrography, Cambridge, Mass.: (Through Dr. Harry Berman) 1 specimen of bellingerite from Chuquicamata, Chile (157977); 1 specimen of whitlockite from the Palermo mine, North Groton, N. H. (159937).

Gray Herbarium, Cambridge, Mass.: Grass from New Jersey (156884, exchange); 51 plants from New Brunswick (156971, evchange); 849 plants from Virginia (157486, 157532, exchanges); 21 plants from tropical America (158128, ex-

change); 74 plants, mostly from New England (157641, 158129, 158226, 158274, exchanges); 915 plants from the Rocky Mountain region (158523, exchange); 273 ferns from Dominica (159123, 159345, exchanges); 476 plants (159414, exchange); 11 plants from Brazil (159911, exchange); (through C. A. Weatherby) photograph of type of fern (157536, exchange).

Museum of Comparative Zoology, Cambridge, Mass.: 2 lizards from St. Croix, Virgin Islands (158297); 1 brittle-star from Tobago (158645); (through Dr. Fenner A. Chace, Jr.) 247 Brachyura (158983, exchange); (through J. L. Peters) skin of a screech owl (159981, exchange); (through William C. Schroeder) 68 fishes collected in Siam by the Harvard-Primate Expedition, 1937 (154367).

HASBROUCK, Dr. EDWIN M., Washington, D. C.: 1 cormorant (157807); 4 speciments of brant (159087); 2 snow geese (159701).

HASSAM, Mrs. CHILDE, East Hampton, Long Island, N. Y.: 30 etchings and 30 lithographs by Childe Hassam (157173).

HAUGHT, OSCAR, Guayaquil, Ecuador: 667 plants from Ecuador (155807).

HAUPT, Prof. A. W., Los Angeles, Calif.: 23 ferns, mostly from Costa Rica (158232).

HAURY, Prof. EMIL W. (See under Arizona State Museum.)

HAWKINS, Dr. JOHN, Orono, Maine: About 300 vials of sawfly larvae (158786).

HAWKINS, RUSSELL, Jr., Portland, Oreg.: A large collection of mollusks, echinoderms, crustaceans, and miscellaneous invertebrates and 182 bottom samples obtained by Mr. Hawkins on his Gulf of California cruise in the winter of 1939 and 1940 (159627).

HAWLEY, W. H. Jr., Washington, D. C.: 1 beetle (157606).

HAYDEN, Dr. ADA. (See under Iowa State College.)

HEAL, Mrs. BETTY B., Washington, D. C.: 1 motion-picture projector head (157202).

HEBARD, MORGAN. (See under Academy of Natural Sciences of Philadelphia.)

HEFT, Mrs. NINA K. (deceased), Hagerstown, Md.: (Through William F. Heft, Sr.) Bordered, cotton, patchwork quilt, "Sunburst," quilted in circles and feather patterns, swastika and waved lines, and made about 1840 at Funkstown, Md., by the donor's grandaunt, Anna S. Shriver; also an all-white "stuffed work" crib quilt, elaborately quilted in floral, fruit, bird, and basket designs, which was made by an ancestor of the donor (157749).

HEGEMAN, ANNIE-MAY, New York, N. Y.: 2 Roman sarcophagi, 2 Ionic capitals, and 2 sculptured marble blocks, unknown origin and date (159743).

HELLIWELL, Mrs. PHOEBE L., Boston, Mass.: Glass punch bowl presented to Col. Porter D. Tripp, of the 11th Massachusetts Regiment, in 1865 by the members of that regiment in recognition of his services during the Civil War (159013).

HENDERSON, CHARLES L. (See under Kimberly-Clark Corporation.)

HENDERSON, RICHARD L., Washington, D. C.: A collection of 195 ethnological specimens, consisting of baskets, boat models, hunting and fishing paraphernalia, pipes, objects of personal adornment, utensils, and miscellaneous items from the Eskimo, also from Indian tribes of the Pacific Northwest Coast and from the Athapascan Indians of the Northwest Interior (159919).

HENNE, C., Los Angeles, Calif.: 8 Lepidoptera, 4 paratypes (157752).

HENRY, Dr. DORA P., Seattle, Wash.: A large collection of barnacles (159376).

HERMANN, Dr. F. J., Arlington, Va.: 1 plant from Virginia (158146). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)

HESS, FRANK L., College Park, Md.: 6 nickel ores from Mexico and 1 aragonite (157097), 3 figured specimens of spodumene bearing pegmatite from Long Creek Church, 3½ miles north of Kings Mountain, N. C. (157098); 13 specimens of bastnaesite from Ruanda-Urundi, Belgian Congo (159637).

HETZLER, HERMAN G., Rochester, N. Y.: 2 crayfishes (157419).

HEWITT, Mrs. J. N. B., Washington, D. C.: A collection of 6 ethnological objects, consisting of 1 pair of beaded leggings, a wooden flute, a gourd rattle, an arrow, and 2 corn-husk dolls, all originally collected from the Canadian division of the Iroquois Indians (157103).

HICKEY, Mrs. HAZEL C., Washington, D. C.: Black lace-and-straw bonnet worn during the latter part of the 19th century and a hair bracelet with gold clasp set with topaz and engraved with the initials "L. J. R." (159236).

HIDORE, JOHN, Rockford, Iowa: About 2,000 Devonian invertebrate fossils from the Hackberry shales of Iowa (150174).

HILDEBRAND, Dr. S. F. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

HILL, WILLIAM C., Stillwater, Okla.: (Through Prof. R. Chester Hughes) 7 slides and 1 vial of type material of helminths (158317).

HILLIER'S SON CORPORATION, R., New York, N. Y.: 1 specimen each of white rosin, cardamom seeds, and althea root for the materia medica collection (159243).

HINCKLEY, L. C., Marfa, Tex.: 82 plants from Texas (159946).

HINTON, GEORGE B., Aguililla, Michoacán, Mexico: 1,943 plants from Mexico (156922, 157493, 158298, 158587, 158635, 160106).

HIRSCHL, Mrs. MARCUS A., Chicago, Ill.: Wooden flute with silver ferrules and 1 key, bearing the maker's mark of P. A. Crone, long in the possession of the family of the donor and reputedly picked up on the field of Waterloo (158742).

HITCHCOCK, Prof. C. LEO. (See under University of Washington.)

HOARD, ROBERT, San Diego, Calif.: 89 isopods and 1 solpugid (144632.)

HOBART COLLEGE, Geneva, N. Y.: (Through Prof. Theodore T. Odell) Approximately 1,000 slides of diatoms from numerous type localities, assembled and mounted by the late Dr. H. L. Smith (159235).

HOBBS, HORTON H., Jr., Gainesville, Fla.: 59 crayfishes, representing types, allotypes, and paratypes (157213, 157903, 158488, 158927); 8 amphipods from caves in Alachua County, Fla. (159186). (See also under Yale University, Peabody Museum.)

HODGE, WALTER H., Cambridge, Mass.: 3 plants from Dominica (159564).

HOGGAN, R. LOUISE. (See under Sugarhouse Chamber of Commerce.)

HOGUE, O. D., South Duxbury, Mass.: A Hogue electric air moistener (patented 1922 and 1925) and a small hand adz (159459).

HOLLIDAY, SAMUEL, Cambridge, Mass.: 26 brachiopods and 1 sponge from the Pogonip limestone of Nevada (159173).

HOLLISTER, GLORIA. (See under New York Zoological Society.)

HOLMES, THE MISSES, Edisto Island, S. C.: 75 amphipods from Edisto Island (159548).

HOLT, EDWARD L., Grand Junction, Colo.: 3 fossil clams from the Morrison formation of Colorado (159403).

HOLT HARDWOOD CO., Oconto, Wis.: Panel of hard-maple flooring measuring 29¼ inches by 8 feet (157188).

HONESS, RALPH F., Jackson, Wyo.: 7 land snails (157525).

HOOVER, S. L., Mount Rainier, Md.: 6 plants from Maryland (157481).

HOPKINS, J. L., & CO., New York, N. Y.: 1 specimen each of Burgundy pitch and malt for the materia medica collection (159471).

HORA, Dr. SUNDER L. (See under Zoological Survey of India.)

HOUGH, Mrs. WALTER, Washington, D. C.: A small collection of insect galls collected in Arizona on juniper (159204).

HOYT, J. S. Y. (See under Smithsonian Institution, National Museum.)

HUBBARD, Dr. C. ANDRESEN, Forest Grove, Oreg.: 14 fleas, 6 of them holotypes and allotypes (158403, 159016).

HUBBARD, W. EUGENE. (See under Fred Leus Schmidt.)

HUBBS, Prof. CARL L., Ann Arbor, Mich.: 16 invertebrates from vicinity of Thumb Bay, Alaska, 1 starfish and some mollusk material, collected by Walter J. Eyerdam (158704). (See also under University of Michigan, Museum of Zoology.)

HUBRICHT, LESLIE, St. Louis, Mo.: 119 amphipods (157394, 160062); 9 vials of amphipods (5 of which are cotypes), 16 vials of isopods (all cotypes), and 1 vial of hydroids (158208).

HUFF, BERNICE, Chapman, Kans.: 18 mollusks from Puerto Rico (156819).

HUGHES, Prof. R. CHESTER. (See under William C. Hill; Robert E. Kuntz; Prof. George A. Moore; Harold J. Peery; L. Ormand Rodgers; Fred L. Schmidt.)

HUGHLEIN, Mrs. C. F., Louisville, Ky.: 2 Bohemian red enameled and stoppered blown-glass bottles, an enameled stoppered blown-glass pitcher, a bisque figurine, a blue glaze stoneware creamer made by Wedgwood, Swiss carved wooden fork and spoon, and 2 decorated Staffordshire plates (157849).

HUMES, ARTHUR G., Urbana, Ill.: 22 specimens of a new copepod (158736).

HUMM, H. I., Miami, Fla.: 1 nemertean worm and 2 mollusks (157104).

HUNGE, CARL, Concepcion, Chile: A small collection of beetles collected in Chile (158296).

HUNGERFORD, Prof. H. B., Lawrence, Kans.: 4 specimens of insects, paratypes (155075); 2 Hemiptera, paratypes (159205, exchange); 1 beetle

from Arizona (159469). (See also under University of Kansas.)

HUNTER, DARD, Jr., Cambridge, Mass.: 1 brochure, a specimen of type cut and cast by Dard Hunter, Jr. (159490).

HUNZIKER, Dr. ARMANDO T., Buenos Aires, Argentina: 4 plants from Argentina (158109).

IIMORI, Prof. S., Tokyo, Japan: 6 minerals, including thorogummite, yttrialite, etc., from Japan (157546, exchange).

INDIA, ZOOLOGICAL SURVEY OF, Calcutta, India: (Through Dr. Sunder Lal Hora) 4 fishes (157732, 159269).

INGHAM, Dr. R. O., Livingston, Ala.: 1 male skeleton, and 1 trephined female skull, both from near Picicalca, about 20 miles west of Cuzco, Peru (157455).

INSTITUTO AGRONÓMICO DO ESTADO DE SÃO PAULO, Campinas, Brazil: (Through Dr. A. P. Viegas) 67 grasses from Brazil (157877, 159432).

INSTITUTO BOTÁNICO, Bogotá, Colombia: 329 plants from Colombia (157210, 158105, exchanges).

INSTITUTO DE CIENCIAS NATURALES, Bogotá, Colombia: 978 plants from Colombia collected by J. Cuatrecasas (157880, 158538, exchanges).

INSTITUTO DE LA SALLE (MUSEO), Bogotá, Colombia: (Through Brother Niceforo Maria) 2 turtles from Colombia (155042).

INSTITUTO GEOLÓGICO DE MÉXICO, Mexico, D. F.: 1 slice of the Morito (or San Gregorio) Chihuahua, Mexico, meteorite (714 grams) (159618); (through U. S. Geological Survey) a collection of casts of type specimens of 34 fossil cephalopods and 6 fossil pelecypods described by Castillo and Aguilera and by Burckhardt (159535).

INTERIOR, U. S. DEPARTMENT OF THE:

Fish and Wildlife Service: A large collection of nemertean worms collected by the *Albatross* and *Fish Hawk*, including types of 2 new species (157926); 2 human skulls and some artifacts collected from the ruins of an old village on Amchitka Island, Alaska, by Warden Mangan (158314); 952 mammals transferred by the Fish and Wildlife Service between June 10, 1940, and June 13, 1941 (160267); 1 dusky shearwater (159488); (through Dr. H. B. Bigelow) 68 lots of medusae (157975); (through Dr. S. F. Hildebrand) 2 parasitic isopods taken from the mouth of *Anchovia starki*, Miraflores Locks, Canal Zone, by Dr. S. F. Hildebrand (156918) and 2 fishes from North Creek, Arcadia, Va., collected on November 14, 1939, by Eugene Surber (158660); (through W. F. Kubichek) trunk skeleton of the trumpeter swan (158636); (through Milton J. Lindner) 2 shrimps, representing type and paratype of a new species (158845); (through A. C. Martin) 3 plants from Arctic America (157718); (through O. Lloyd Meehean) 9 fishes from Little Gum Swamp, Fla. (156991); (through Fred G. Orsinger) 2 sturgeons and 1 catfish from Wisconsin, which died in the Aquarium (157665); (through Dr. Victor B. Scheffer) 1 crab from St. Paul Island, Alaska (158981), and 80 mollusks from Jefferson County, Wash. (160052).

Geological Survey: 6 specimens of nelsonite from near Roseland, Va. (155665); specimen of bauxite from Cold Springs Kaolin mine near Cold Springs Station, Va. (158293); 11 sponges, 1 alcyonarian from the Bering Sea, and 97 mollusks from Alaska (158729); 3 lithologic specimens of Jurassic rocks from eastern Utah, collected by M. I. Goldman (158768); 2 Weston Electrical Instrument Co.'s early laboratory standard meters (158783); 12 free ventifacts of Cambrian age and 1 block of Cambrian sandstone containing ventifacts from Llano County, central Texas (159433); 10 specimens of mammalian remains collected in 1939 and 1940 by Dr. R. W. Brown in the Denver Basin, Colo. (159672); a collection of wind-faceted cobbles, aragonite prisms, concretions of dahllite, etc., from the Big Horn Basin, Wyo. (159920); (through W. W. Rubey) 9 fossil Pleistocene shells from Power County, Idaho (157884). (See also under Instituto Geológico.)

Bureau of Mines, Tuscaloosa, Ala.: (Through Prof. George T. Faust) 3 montmorillonites from Georgia, Alabama, and Mississippi (156936).

National Park Service: 6 Cambrian fossils (158567); 4 mollusks from St. Croix, Virgin Islands (159706); (through C. Frank Brockman) 163 Lepidoptera representing 14 species in 5 families (160100); (through Mrs. Rose E. Collom) 155 plants from Arizona (156948, 157549); (through F. A. Kittredge) 53 type specimens of invertebrate fossils from the Kaibab formation of Grand Canyon, Ariz. (158678); (through Prof. Aven Nelson) 1,078 plants collected in McKinley National Park, Alaska, by Dr. and Mrs. Aven Nelson, 1939 (159777);

(through Dr. Carl P. Russell) 13 bones of a pine marten (158921).

U. S. Antarctic Service: (Through Herwil M. Bryant) Small collection of natural-history specimens, comprising birds, plants, echinoderms, crustaceans, postlarval fishes, mollusks, insects, and diatoms from Antarctica collected by Mr. Bryant (157835).

INTERNATIONAL FISHERIES COMMISSION, Seattle, Wash.: (Through H. A. Dunlop) 1 fish (157309, exchange).

IOWA STATE COLLEGE, Ames, Iowa: (Through Dr. Ada Hayden) 493 plants from Iowa (158171, exchange).

IRVINE, L. C. (See under Clara McDermott.)

IVES, Prof. J. D., Jefferson City, Tenn.: 6 flies (2 species) (158018).

JACKSON, RALPH W., Cambridge, Md.: 40 mollusks from Ecuador (156371).

JACOBSON, MORRIS K., Rockaway, N. Y.: 21 mollusks (157579, 157680, 158115).

JACOT, Mrs. ARTHUR P., Asheville, N. C.: 4,222 miscellaneous insects from the Orient, together with 2 record books pertaining to same (157677).

JAMIESON, PAUL E., Washington, D. C.: Silver hunting-case watch with original key made by T. F. Cooper, serial No. 22841, carried by the donor's grandfather, the Rev. Jesse Mitchell Jamieson (160304).

JELLISON, WILLIAM L. (See under Federal Security Agency, Public Health Service.)

JENNINGS, CEDRIC. (See under Rhode Island State Insectary.)

JOHNSON, HARRY, Hynes, Calif.: 300 plants from Guatemala (158597).

JOHNSON, Dr. PAUL B., Washington, D. C.: Collection consisting of metal powder horn, dated 1850, pair of spectacles in metal case, bone and steel knitting needles and crochet hooks, German woodsman's knife in rawhide sheath, and 1 lot of decorated earthenware sherds from Wilkes County, N. C. (158132); right half of Indian male lower jaw from near Darby, Wilkes County, N. C. (158343).

JOHNSTON, E. C., Seattle, Wash.: 17 Lepidoptera (159941).

JOHNSTON, F. N., Nonquit, Mass.: A collection of type specimens of Upper Triassic ammonites from South Canyon, New Pass Range, Nev., described by the donor (157251).

JONES, Prof. E. RUFFIN, Jr., Norfolk, Va.: 6 slides of turbellarian worms (155374).

JONES, Dr. FRANK M., Wilmington, Del.: 2 bred specimens of Lepidoptera (159874).

JONES, JOHN C., Delmar, N. Y.: 15 bird skins (158917).

JONES, Dr. VOLNEY H., Ann Arbor, Mich.: (Through Dr. T. H. Kearney) 56 plants from Arizona (159122).

JONES, Mrs. W. A., Roll, Ariz.: 1 spotted long-eared bat (157403).

JURY, A. E., Winnsboro, S. C.: Pottery fragments from a shell mound on Horse Island, near the mouth of the North Edisto River across Bohickett Creek from Rockville, Charleston County, S. C. (154206).

KAISER, Mrs. SUE M. (See under Mrs. Lucy M. Marston.)

KANSAS, UNIVERSITY OF, Lawrence, Kans.: 12 Pennsylvanian brachiopods (158808, exchange); (through Prof. H. B. Hungerford) 2 insects, paratypes (159978, exchange).

KANSAS STATE AGRICULTURAL COLLEGE, Manhattan, Kans.: (Through Prof. F. C. Gates) 15 plants from Kansas (160076).

KARLOVIC, JOHN K., Chicago, Ill.: 428 miscellaneous insects (156703, 157553, 159522).

KEARNEY, Dr. T. H. (See under U. S. Department of Agriculture, Bureau of Plant Industry; Dr. Volney H. Jones; and University of Wyoming.)

KEEN, Dr. MYRA, Stanford University, Calif.: 2 marine shells from San Diego, Calif. (159152); topotype of a mollusk (159470). (See also under Stanford University.)

KELLER, PAUL, Athens, Ga.: 27 mollusks from Georgia (160053).

KELLERSBERGER, Dr. EUGENE R. (See under Capt. J. W. P. Dietrich.)

KELLOGG, Dr. REMINGTON. (See under Smithsonian Institution, National Museum.)

KENK, Dr. ROMAN, Ann Arbor, Mich.: 830 amphipods from Michigan (159421, 159991).

KENTON, Mr. and Mrs. R. W., Dutch Harbor, Alaska: Carved ivory pin found in an ancient village site near Dutch Harbor, Unalaska, Aleutian Islands (158336).

KENTUCKY, UNIVERSITY OF, Lexington, Ky.: (Through Dr. P. O. Richter and H. F. Schoof) 1 beetle, allotype (157748).

KERKHOFF LABORATORIES, WILLIAM G., Corona del Mar, Calif.: (Through Prof. G. E. MacGinitie) 20 echinoderms (155258).

KILLIP, ELLSWORTH P., Washington, D. C.: 284 plants from Virginia and West Virginia (157743); 11 plants from Colombia collected by Mrs. E. Dryander (157751); 12 plants from Plummers Island, Md. (159532).

KIMBERLY-CLARK CORPORATION, Neenah, Wis.: (Through Charles L. Henderson) 5 specimens of printing by the Henderson process, with description and photographs (159537).

KINSEY, Prof. ALFRED C., Bloomington, Ind.: 1,079 adults and galls of cynipid wasps, representing 258 adults of 88 kinds and 538 pins of galls of 117 kinds, all paratypes but 1, which is a holotype, and 283 determined specimens not paratypes representing 45 kinds (159090).

KIRBY, T. P. (See under Dr. C. Wythe Cooke.)

KISCHE, LEO R., Columbus, Ga.: 14 woods of the United States, mostly from Alabama and Georgia (159913, exchange).

KITTREDGE, F. A. (See under U. S. Department of the Interior, National Park Service.)

KLEEREKOPER, HERMAN, São Paulo, Brazil: 30 amphipods from Brazil (158826).

KLOTS, Dr. A. B., New York, N. Y.: 48 Lepidoptera (158347).

KNOBLOCH, IRVING W., Buffalo, N. Y.: 2 specimens of copper ore from Barranca del Cobre, Chihuahua, Mexico, and 95 specimens of plants from Mexico (157015, 157985).

KNOWLTON, Dr. G. F., Logan, Utah: 18 insects, including holotypes of 3 species (157107, exchange). (See also under Utah State Agricultural College.)

KNULL, Prof. JOSEF N. (See under Ohio State University.)

KOMP, W. H. W., Ancon, Canal Zone: 9 insects (157031, 157106, 157288).

KOPERBERG, Dr. S., Jogjakarta, Java: 14 tanned snake, iguana, crocodile, and toad skins (159115). (See also under Alexander Wetmore.)

KRIGER, S., Washington, D. C.: A collection of jade objects showing the varieties and uses of jade (157095, loan).

KRUKOFF, BORIS A., New York, N. Y.: 74 plants from Bolivia (157534); 1 plant from Colombia (156806, exchange).

KUBICHEK, W. F. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

KUMM, Dr. HENRY W., New York, N. Y.: 28 mosquito larvae (16 slides) from Costa Rica (12 species) (158433).

KUNTZ, ROBERT E., and L. ORMOND RODGERS, Stillwater, Okla.: (Through Prof. R. Chester Hughes) 1 slide of type material of helminths (158318).

LADD, Dr. H. S., Washington, D. C.: 14 lots of crabs, 1 jar of Bryozoa, and a considerable collection of mollusks (156682).

LANE, Dr. JOHN, São Paulo, Brazil, 49 flies (19 species) (158231).

LA PLATA, UNIVERSIDAD DE, La Plata, Argentina: 53 plants from Argentina (156946, exchange).

LARSON, GUSTAV E., Silver Spring, Md.: 1 film strip stereoscope (Tru-vue) and 1 film strip (160071).

LAWRENCE, Mr. and Mrs. SYDNEY W., Washington, D. C.: 204 coquina shells from St. Petersburg, Fla., selected to show variations in color that this species presents (157204).

LEADBETTER, FRED H., Lincoln, Maine: (Through Dr. Guy W. Leadbetter) Mounted head of Newfoundland caribou (157922).

LEAVENWORTH, W. C., Urbana, Ill.: 38 grasses from Mexico (157984).

LEE, CHARLES B., Buffalo, N. Y.: 65 mollusks from Pittsford, N. Y. (159107).

LEE, MARION G., Washington, D. C.: 1 red bat collected in the U. S. Chamber of Commerce Building, Washington, D. C. (157682).

LEFCOURT, IRWIN, Washington, D. C.: 1 lithograph portrait of Henry Wadsworth Longfellow by Baker, published by Armstrong & Co. (159536).

LEGRAND, DIEGO. (See under Museo de Historia Natural.)

LEIGHTON, Dr. DOROTHEA C., Baltimore, Md.: 6 bird skins from St. Lawrence Island, Alaska (159072).

LEON, Brother, Vedado-Habana, Cuba: 24 palms from Cuba (158525, exchange).

LEONARD, E. C., Washington, D. C.: 163 plants from Maryland and Virginia (160025).

LEONARDOS, OTHON E., Washington, D. C.: 27 marine shells from shell mounds near Rio de Janeiro, Brazil (158760).

LERNER, MICHAEL, New York, N. Y.: 2 mounted fish skins, prepared by Al Pflueger, 1 black marlin, and 1 thresher shark (156774).

LEROY, Dr. L. W., Los Angeles, Calif.: Type and 3 paratypes of Cenozoic Foraminifera (157823).

LEWIS, A. C., Washington, D. C.: 15 bats (159410). (See also under O. B. Harmon.)

LEWIS, Mrs. J. E., Washington, D. C.: 31 articles from the Philippines, including 15 weapons and other miscellaneous items; 17 Apache objects, including baskets and beadwork; 7 miscellaneous objects (159760).

LILLY, ELI, & Co., Indianapolis, Ind.: An exhibit, entitled "The Anemias," illustrating the modern method of treating these diseases with medicines made from liver and other substances (157716).

LIN, Dr. HIE DING, Chicago, Ill.: An earthenware figurine, representing the dragonlike form of a Buddhist temple dog (157026, loan).

LINDNER, MILTON J. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

LINGEBACH, CARLTON, Washington, D. C.: 1 shrew (160265).

LINGNAN UNIVERSITY, Canton, China: 873 plants from China (collected on the Fifth Kwansi Expedition, 1937) (159524, exchange).

LINSLEY, Dr. E. GORTON, Berkeley, Calif.: 8 adult paratypes and 3 slides of primary larvae of 2 species of beetle (156405).

LOCHMAN, Dr. CHRISTINA, South Hadley, Mass.: 31 invertebrate fossils, types, from the Upper Cambrian of Texas (157392); 199 invertebrate fossils from the Bonneterre dolomite (Upper Cambrian) of southeastern Missouri (157402); 50 Lower Devonian invertebrate fossils from the vicinity of Albany, N. Y. (160173, exchange).

LOCKHART, W. E., Split Rock, Wyo.: 1 piece of jade from Fremont County, Wyo. (157643).

LODGE, H. M., Takoma Park, Md.: 1 mollusk from Florida (156889).

LOEBLICH, Dr. ALFRED R., Chicago, Ill.: 548 invertebrate fossils including portions of the holotypes of 40 species, from the Ordovician and Pennsylvanian rocks of Oklahoma (156974, 158279, 158449).

LOMEN, CARL J., Seattle, Wash.: 14 artifacts from old Eskimo burials on Nunivak Island, Alaska (2d Judicial Division) (159744).

LONGWELL, Prof. CHESTER R., New Haven, Conn.: 8 small lots of Cambrian fossils from the Muddy Mountains area, near Las Vegas, Nev. (159776).

LOOMIS, HAROLD F., Coconut Grove, Fla.: 17 plants from Haiti (156941).

LOS ANGELES MUSEUM OF HISTORY, SCIENCE AND ART, Los Angeles, Calif.: 1 skull and lower jaws of a saber-toothed tiger (151954, exchange); (through Mrs. Doris H. Blake and Dr. W. Dwight Pierce) 2 beetles, paratypes (159416).

LOUISIANA STATE DEPARTMENT OF CONSERVATION, New Orleans, La.: (Through James N. Gowanloch) A small collection of mites collected on muskrats captured at Bayou Lacombe near Covington, La. (159047), and 2 mollusks from Plaquemine, La. (160186).

LUNZ, G. ROBERT, Jr., Charleston, S. C.: 7 insects, 200 amphipods, and 25 isopods from South Carolina (157080, 157152, 159550).

LYMAN, FRANK (Family), Luverne, Ala.: 2 mollusks from Palm Beach County, Fla. (157172, 157179).

LYNCH, JAMES E., Seattle, Wash.: 4 phyllopods (154645).

MACCORD, HOWARD A., Washington, D. C.: Bones of 26 animals—bear, elk, deer, fox, squirrel, skunk, dog, opossum, raccoon, beaver, groundhog, cougar, and lynx—from Page County, Va. (158740); 6 land snails from near Rileyville, Va. (158431); 1 lot of bones of the wild turkey from an old Indian site, Shenandoah Valley, Va. (158638); archeological collection from the surface of various Indian village sites in Maryland and Virginia (159927).

MACCORD, HOWARD A., and CARL MANSON, Washington, D. C.: Archeological specimens and skeletal remains from prehistoric village site on the Keyser farm near Rileyville, Page County, Va. (160002).

MACDONALD, H. J., Beaufort, N. C.: 4 amphipods (156887).

MACDOUGALL, THOMAS, Tehuantepec, Oaxaca: (Through Dr. Hobart M. Smith) 3 turtles and 4 insects (159338).

MACFARLAND, MARY L. D.: (Through American Security & Trust Co.) Gold watch, chain, pin, and medallion owned by Henry B. F. Macfarland, Commissioner of the District of Columbia, 1900–1910 (158473, bequest).

MACGINITIE, Prof. G. E. (See under William G. Kerkhoff Laboratories.)

MACKAY, RALPH E., Seattle, Wash.: 1 tetrahedrite and pyragyrite, 1 argentiferous galena from Wernecke mine, Mayo, Yukon, and 1 copper nugget from McCarthy, Alaska (157881, exchange).

MACKINTOSH, Dr. N. A. (See under Discovery Committee.)

MACMILLAN, GORDON K. (See under Carnegie Museum.)

MAGUIRE, Prof. BASSETT. (See under Utah State Agricultural College.)

MALLIS, ARNOLD, Los Angeles, Calif.: 3 amphipods (158273).

MANN, Dr. WILLIAM M. (See under Smithsonian-Firestone Expedition to Liberia, 1940.)

MANSON, CARL. (See under Howard MacCord.)

MANTER, Prof. H. W., Lincoln, Nebr.: 9 slides of type of trematodes (156709); 12 mollusks and 1 isopod from Brazil (159321).

MARBLE, Dr. JOHN P., Washington, D. C.: 1 rare earth-bearing travertine from Blue Holes Creek, near Dubois, Fremont County, Wyo. (157181).

MARSH, G. E., Washington, D. C.: 1 Sirenian skull including lower jaws, pieces of skull, 14 vertebrae, etc., from Scientists Cliffs, Calvert County, Md. (159846, exchange).

MARSHALL, BYRON C., Imboden, Ark.: 1 grasshopper (157079); 48 phyllopods (157332); 6 mollusks (157398).

MARSHALL, ERNEST B., Laurel, Md.: 5 pairs of otoliths (158709).

MARSTON, Mrs. LUCY M., and Mrs. SUE M. KAISER: (Through Mrs. Mary Mead, Berkeley, Calif.) 2 chiefs' blanket weavings of the Navaho, originally purchased by the late Elwood Mead in Colorado in 1882 and 1883 (159677).

MARTIN, A. C. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

MARTINEZ, JUAN, Montevideo, Uruguay: 1 fish collected in Montevideo swamps of "Carrasco" (155309).

MARTINEZ, Prof. MAXIMINO, Mexico, D. F.: 133 plants from Mexico (156902, 159471, 160194); 1 insect belonging to the family Fulgoridae from Mexico (160179).

MASON, EDWIN A., Groton, Mass.: A small collection of insects (144368).

MASON, Dr. JOHN F., Princeton, N. J.: 9 specimens of fossiliferous limestone, including 1 rare brachiopod from the Pogonip group of Nevada (159172).

MASSEY, Prof. A. B., Blacksburg, Va.: 1 plant from Virginia (157741).

MATCHETTE, W. M., Canoga Park, Calif.: Photograph of a portrait of Louis Philippe (159303).

MATHEY, C. F., St. Louis, Mo.: A stone effigy pipe said to have been found nearly 80 years ago near New Athens, Ill., on the Kaskaskia River (158957).

MATTESON, J. H., Miami, Fla.: 2 butterflies (158246).

MAXON, Dr. WILLIAM R., Washington, D. C.: 75 plants from Maine (157482).

MAXWELL, MARY E., Washington, D. C.: A collection consisting of ancient Egyptian seal ring, Indian turban ornament, Japanese damascene and silver work, Russian enamel card case, girdle and necklace acquired in Honolulu in 1894, mounted metallic beetle from Brazil, also a stickpin and cuff links of Jaipur work, and a Spanish mantilla of applied lace on net (157607): a collection consisting of 23 musical instruments from European and Oriental sources, also 22 specimens comprising cutting and slashing weapons, firearms, and other miscellaneous objects of period art (160028).

MAYNARD, ERNEST A., St. Petersburg, Fla.: 1 specimen of agate from Rio Grande do Sul, Brazil (158377).

MAZZOTTI, Dr. LUIS, MEXICO, D. F.: 22 fresh-water shells from Mexico (157722); 2 dog lice (157790); 8 bats (158283, 158667, 159035).

MCANDREW, Mrs. JAMES W., Washington, D. C.: Catlinite pipe and beaded and quilled buckskin pipe pouch, formerly the property of the Sioux Indian medicine man Sitting Bull, from whom it was taken by Maj. Gen. James W. McAndrew, then a lieutenant of the 21st Infantry, U. S. Army (157027).

MCCART, WILLIAM L., Fort Worth, Tex.: 1 plant from Texas (157013).

MCCLUSKEY, W. A., Moscow, Idaho: 3 mollusks from Lewiston, Idaho (159332).

MCCOMB, HARRY V., Alhambra, Calif.: 2 trap-door spider nests from Alhambra (159400); 3 trap-door spiders with their nests, collected by the donor in Alhambra (160140).

MCCONNELL, Prof. DUNCAN, Austin, Tex.: 1 specimen of barrandite with dahllite from Island Gran Roque, Venezuela; 1 fluor-apatite with carbonate-apatite and 1 carbonate-apatite with fluor-apatite from Magnet Cove, Ark. (156654).

MCDERMOTT, CLARA and WILLIAM V., Mobile, Ala.: (Through L. C. Irvine) An original experimental model and plans of a helicopter invented in 1862–63 by William C. Powers and intended to provide the Confederate defenders of Mobile with a means for aerial bombing of the Federal blockading fleet (156895).

MCDOUGALL, KENNETH D., Durham, N. C.: 2 crustaceans from North Carolina (159970).

MCDUNNOUGH, Dr. J. (See under Canadian Government, Department of Agriculture.)

MCELVARE, ROWLAND R., New York, N. Y.: 20 Lepidoptera (6 genera) (158165); 33 Lepidoptera (158328, 160120, 160237, exchanges).

MCFARLIN, JAMES B., Sebring, Fla.: 9 plants from Florida (157185, 158394).

MCGINTY, THOMAS L., Boynton Beach, Fla.: 124 mollusks from Florida (156694).

MCKAY, Lt. Comdr. D. E., Washington, D. C.: Nearly complete skeleton with skull and lower jaw from "Spit site," Unalaska Harbor, Alaska (158806).

MCMANUS, JOHN J., New York, N. Y.: The Manly Memorial Medal for 1939 and a copy of its certificate of award; this medal was awarded to E. W. Hives and F. L. Smith, of Rolls-Royce, Inc., by the Society of Automotive

Engineers, Inc. (158952, loan). (See also under Rolls-Royce, Ltd.)

MEAD, Mrs. MARY. (See under Mrs. Lucy M. Marston.)

MEDAL OF THE MONTH CLUB, New York, N. Y.: (Through Felicity Buranelli) A bronze memorial plaque with the obverse and reverse sides mounted on an oak panel commemorating the aeronautical accomplishments of Capt. Edwin C. Musick, who piloted the initial trans-Pacific commercial flight (158784).

MEEHEAN, O. LLOYD. (See under U. S. Department of the Interior, Fish and Wildlife Service).

MELLA, FRITZ, Buenos Aires, Argentina: A crystal of beryllium from the La Toma district, Province of San Luis, Argentina (159629).

MELLEN, FREDERIC F., Iuka, Miss.: 4 corals from the Upper Niagaran near Clifton, Tenn. (159885).

MELLISH, Mrs. WILLIAM. (See under Anchorage Stamp Club.)

MENDES, LUTZ O. T., Campinas, Brazil: 29 bugs (10 species or varieties) (155985, exchange).

MENDEZ, Prof. ALEJANDRO. (See under Museo Nacional, Panama.)

MERCK & Co., Inc., Rahway, N. J.: 13 cinchona alkaloids and alkaloidal salts and 1 specimen of quinine sulphate (157808, 157900).

MERIDEN GRAVURE Co., Meriden, Conn.: 1 facsimile copy of "A Book of Ornament," by Simon Gribelin (1661–1733), printed by the Timothy Press with collotype reproductions by the Meriden Gravure Co. (158978).

MERRIAM, Dr. C. W., Ithaca, N. Y.: 9 Pleistocene marine shells from Labrador, 5 species (157341).

MERRITT, Prof. C. A., Norman, Okla.: 2 fragments of Boise City, Cimarron County, Okla., meteorite (1,478 grams) (159940, exchange).

MERTIE, Dr. JOHN B., Jr., Sligo Park Hills, Md.: (Through Dr. J. B. Reeside, Jr.) Eskimo arrowhead of bone found on the surface in the Valley of Lost River, western Seward Peninsula, Alaska (158807).

METROPOLITAN CAMERA CLUB COUNCIL, New York, N. Y.: 100 photographs (salon prints) for special exhibition during January 1941 (158710, loan).

MICHAEL, Dr. C. A., Austinville, Va.: 3 pieces of rock with numerous specimens of trilobite from the Shady limestone, Austinville, Va. (160170).

MICHIGAN, UNIVERSITY OF, Ann Arbor, Mich.: 133 grasses from Texas (158735, exchange).

Herbarium: 16 plants from Mexico and British Honduras (157282); 68 plants from Mexico and Central America (154374, 157599, 158787, 158883, exchanges); 46 plants (157740, exchange); 27 plants from Texas (158370, exchange).

Museum of Zoology: 1 adult and 6 young crabs (159091, exchange); (through Prof. Calvin Goodrich) 4 Mexican land shells, including 2 paratypes (159347); (through Prof. Carl L. Hubbs) 1 fish (paratype) from Mar de La Plata, Argentina (159931, exchange).

MICHIGAN STATE COLLEGE, East Lansing, Mich.: 2 slices of the Reed City, Mich., meteorite (785 grams and 713 grams) (158698, exchange).

MIDDLEKAUFF, WOODROW W., Ithaca, N. Y.: 6 paratypes of a sawfly and some larval material of the same species (158292).

MILES, CECIL, Honda, Colombia: 22 fishes from the Magdalena Drainage, near Honda (156920); 16 fishes and 2 mollusks (158131).

MILLER, GERRIT S., Jr., Washington, D. C.: 5 small mammals and 2 reptiles (158242).

MILLS, Dr. HARLOW B., Bozeman, Mont.: (Through Harry D. Pratt) 1 insect, holotype (160101).

MILLWARD, WILLIAM. (See under University of Nanking.)

MINER, JULIUS D., Monterey, Mass.: A small collection of Collembola (159369).

MISSOURI BOTANICAL GARDEN, St. Louis, Mo.: 627 plants from Panama and Costa Rica (157163, 159477, exchanges); 100 plants from Western United States (157209, exchange); 29 lichens (160245, exchange).

MITTLEMAN, M. B., Athens, Ohio: Holotype of a new species of salamander (160009).

MIZELLE, Prof. JOHN D., Notre Dame, Ind.: 4 lots of parasitic worms (158890).

MOECK, ARTHUR H., Milwaukee, Wis.: 1 butterfly (158553).

MOFFITT, GENTRY, Elkader, Iowa: 15 plants from Tennessee (159389).

MOHR, Dr. CARL O., Champaign, Ill.: Skull of jack rabbit and scalp of another jack rabbit, from Rapidan, Blue Earth County, Minn., collected in 1936 and 1937 (158980).

MONTANA STATE UNIVERSITY, Missoula, Mont.: 4 plants from Montana (158088).

MONTE, Dr. OSCAR, São Paulo, Brazil: 2 bugs (157625); 11 bugs (7 species, 1 represented by 2 paratypes) (157467, exchange); 17 insects (7 species), including 1 paratype (158295, exchange).

MONTGOMERY, DEE, San Antonio, Tex.: 1 butterfly (159739).

MOORE, EDWARD M., Tavernier, Fla.: 67 mollusks from the vicinity of Battlepoint Key, Florida Bay (157233).

MOORE, Dr. EMMELINE, Albany, N. Y.: 1 crayfish (145393).

MOORE, Prof. G. A. and Prof. R. CHESTER HUGHES, Stillwater, Okla.: 4 adult and 10 larval salamanders (paratype of a new species) from Sequoyah County, Okla. (159968).

MOORE, Dr. RILEY D. (See under Dr. John L. Allen and Dr. Louise P. Crow.)

MOREIRA, Dr. CARLOS, Ipanema, Rio de Janeiro, Brazil: 9 Aeglas (156961).

MORGAN, Dr. BANNER BILL, Madison, Wis.: 3 helminths (157141).

MORGAN, Rev. MICHAEL, St. Bernard, Ala.: 3 plants from Alabama (160214).

MORRIS, Dr. JARVIS S., San German, Puerto Rico: 9 bats from near Corozal, Puerto Rico (156963).

MORRISON, B. Y. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

MORRISON, JOHN L. (See under University of California.)

MORRISON, Dr. JOSEPH P. E., Washington, D. C.: 50 shrimps from Anne Arundel County, Md., and Woodland Beach, Del. (157203); 1 plant (157215); 2 land planarians from Front Royal, Va. (157515); 24,676 mollusks, mammals, reptiles and amphibians, fishes, insects, and crustaceans from Illinois, Maryland, Virginia, and West Virginia (158696); 46 fishes, 1 vial of larvae, some insects, and crustaceans from Virginia (159305); 5 bats (159408); 1 bryozoan, 8 crabs, 1 crayfish, 10 shrimps from Delaware and Virginia (160117). (See also under National Speleological Society.)

MORSE, STANLEY, Houston, Tex.: 56 archeological specimens from the Dyersdale Indian site on Green Bayou, Harris County, Tex. (158679).

MORTIMER, M. F., Nashville, Tenn.: 160 plants from Tennessee (156504).

MOSCOW ACADEMY OF SCIENCES, Moscow, U. S. S. R.: (Through Dr. M. Chulin) 220.2 grams of the Boguslavka meteorite and 734 grams of the Zovtnevyj Hutor meteorite (157084, exchange).

MOSSMANN, ERNEST, North Bergen, N. J.: 36 study samples of embroideries and burnt-out lace made on the Schiffli embroidery machine and a sample of embroidery made on a Bonnaz machine (157577).

MOURET, E., Mexico, D. F.: 2 lots of cassiterite from the Cabires mine, Tepuxtepec, Michoacán, Mexico (160098).

MUENSCHER, Prof. WALTER C. (See under New York State College of Agriculture.)

MUÑOZ, Dr. CARLOS. (See under Ministerio de Agricultura.)

MUNZ, Prof. PHILIP A., Claremont, Calif.: 34 plants, mostly from South America (158173). (See also under Pomona College.)

MURPHY, J. J., Washington, D. C.: 1 fungus (157109).

MURRAY, ARLTON, Washington, D. C.: A fossil crocodile scute and the distal end of tibiotarsus of a bird, from near Plumpoint wharf, Calvert County, Md. (159299).

MURRAY, Rev. J. J., Lexington, Va.: 3 bird skins from Virginia (154893).

MURRILL, Dr. W. A., Gainesville, Fla.: 832 plants from Florida (156800, 157806, 158170).

MUSEO DE HISTORIA NATURAL, Montevideo, Uruguay: 16 plants from South America (158657); (through Diego Legrand) 13 plants from South America (159066).

MUSEO NACIONAL, Panama, Panama: (Through Prof. Alejandro Mendez) 89 mollusks from the Island of Coiba, 11 corals, and 4 ophiurans (154363).

MUSEO NACIONAL, San José, Costa Rica: 380 plants from Costa Rica (157164).

MUSICK, RICHARD W., Logan Mills, Pa.: 1 albino chipmunk (160188).

MYERS, Prof. GEORGE S., Stanford University, Calif.: 4 fishes collected by C. V. Kulkarni in 1938 in brackish water near Bombay, India (159444). (See also under Stanford University.)

NANKING, UNIVERSITY OF, Nanking, China.: (Through William Millward) A collection, including 50 types, of Cambrian fossils from Shantung, China (159467, exchange).

NASH, Mrs. KATHERINE C., Washington, D. C.: 5 etchings by Reginald Cleveland Coxe (156967).

NATIONAL GEOGRAPHIC SOCIETY, Washington, D. C.: (Through Mrs. John Waldron) 2 beetles collected in Virginia (157465).

NATIONAL SPELEOLOGICAL SOCIETY, Washington, D. C.: (Through Dr. J. P. E. Morrison) 10 amphipods from Luray Caverns, Va. (159206); 100 ostracods and 15 amphipods (159969); (through W. J. Stephenson) 5 bats and 1 flea (159669) and 2 bats from Virginia and 1 from West Virginia (160215).

NAVY DEPARTMENT, Washington, D. C.: An original Curtiss Akron Fighter

airplane, type "F9C–2," which was in service with the airships *Akron* and *Macon* 1932–1935 (153569); (through the Procurement Division, Treasury Department) 12 objects, consisting of decorated tapa, woven matting, fire fans, baskets, kava bowl, bamboo pillow, and 1 lot of photographs, from Samoa, Guam, and Virgin Islands, selected from material exhibited by the Department of the Navy at the International Colonial and Overseas Exposition, Paris, France, in 1931 (158476).

NELSON, Prof. AVEN. (See under U. S. Department of the Interior, National Park Service.)

NELSON, ELIAS, Yakima, Wash.: Plant from Washington (157488).

NESBITT, HENRY F. (deceased): (Through Mrs. Henry F. Nesbitt, Washington, D. C.) 2 pieces of whalebone from the Akutan, Alaska, whaling station (158588).

NEWCOMBE, Dr. CURTIS L., Yorktown, Va.: 33 mollusks from Virginia (157820, 158912, 159298).

NEWCOMBE, Prof. W. A., Victoria, British Columbia: 2 marine shells (159248).

NEW YORK BOTANICAL GARDEN, New York, N. Y.: 37 photographs of types of plants (157537, exchange).

NEW YORK STATE COLLEGE OF AGRICULTURE, Ithaca, N. Y.: (Through Prof. W. C. Muenscher) 72 plants mainly from New York (158585, exchange).

NEW YORK STATE COLLEGE OF FORESTRY, Syracuse, N. Y.: 149 samples of trees of the United States of America (159329, exchange); (through Dr. Carl de Zeeuw) 125 plants (159698, exchange).

NEW YORK ZOOLOGICAL SOCIETY, New York, N. Y.: (Through John Tee-Van) 2 fishes (157720, exchange); (through Gloria Hollister) 3 fishes (159394, exchange).

NICEFORO, Brother MARIA, Cucuta, Colombia: 6 crabs from Cucuta (159853); (See also under Instituto de la Salle (Museo).)

NICHOLS, MARY, Casper, Wyo.: 2 dreikanters from the Badlands, 16 miles east of Greybull, Wyo. (157655, exchange).

NICHOLS, JOHN T. (See under American Museum of Natural History.)

NIEMAN, A. H., Woodville, Ohio: 30 invertebrate fossils from the Silurian (Guelph) dolomite of northwestern Ohio (159539).

NIGHTINGALE, H. W., Seattle, Wash.: 11 marine shells (2 species) from Puget Sound (154907).

NORTH CAROLINA, UNIVERSITY OF, Chapel Hill, N. C.: 1 fern from South Carolina (158526, exchange).

NORTH DAKOTA, UNIVERSITY OF, Grand Forks, N. Dak.: (Through Prof. G. C. Wheeler) 1 frog from Oshkosh, Wis. (158089); a small collection of grasshopper "ticks" (158495).

NORTH DAKOTA, UNIVERSITY OF, Grand NAL IDENTIFICATION, Bismarck, N. Dak.: Incomplete skeleton with skull and lower jaw of a female Indian found by W. P. A. workers 3 miles east of New Rockford, N. Dak. (159116).

NORTON Co., Worcester, Mass.: 13 grinding wheels and abrasive materials (156969).

NORTON, EDNA M., Pinckneyville, Ill.: 20 crayfishes (153335).

NORTON, J. E., Candor, N. Y.: (Through Mrs. Martha Beavers and Mrs. Ada Darnell) Pair of spectacles, period of 1880 (157570).

NOTMAN, HOWARD, Staten Island, N. Y.: 2 beetles (159655).

NYLANDER, OLOF O., Caribou, Maine: 11 lots of fossil shells (about 455) and 5 matrices (160236).

ODELL, Prof. THEODORE T. (See under Hobart College.)

OEHLER, CHARLES, Cincinnati, Ohio: 23 beetles (7 species) (159709, exchange).

OGDEN, FRANK K., Wellsboro, Pa.: Rose cane from Pennsylvania (159765).

O'HARA, Mrs. DANIEL, Waltham, Mass.: Decorated spoon carved from the horn of the Rocky Mountain sheep by the Haida Indians of southeastern Alaska (158182).

O'HARA, Mrs. ELIOT, Washington, D. C.: 3 ethnological objects, consisting of beaded and quilled skin pipe pouch from the Sioux Indians, a small beaded velvet bag or purse with woven loop handle, from the Iroquois Indians, and a decorated earthenware canteen from the Cochiti Pueblo, New Mexico (158181).

OHIO STATE MUSEUM, Columbus, Ohio: (Through Edward S. Thomas) 16 insects (159238, exchange).

OHIO STATE UNIVERSITY, Columbus, Ohio: (Through Prof. J. N. Knull) 1 beetle (paratype) (158708).

OKULITCH, Dr. VLADIMIR J., Toronto, Ontario: 2 species of fossil corals from the Black River limestone of Ontario (157060).

OLMSTED, Dr. A. J., Washington, D. C.: 1 pictorial photograph, "Washington" (157517).

O'NEILL, Rev. Father HUGH. (See under Catholic University of America.)

O'Neill, Dr. J. B., Washington, D. C.: Baking plate, of soapstone, from San Clemente Island, Los Angeles County, Calif. (159914).

Orozco, Dr. J. M. (See under Centro Nacional de Agricultura.)

Orsinger, Fred G. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

Pacific Biological Laboratories, Pacific Grove, Calif.: (Through E. F. Ricketts) 112 ophiurans (157273, 157678); 1 bat, 5 fishes, 1 lot parasitic worms, and about 200 marine invertebrates (159124).

Padgett, Mrs. Edward R., Washington, D. C.: A glazed terra-cotta water carafe, a pair of beaded Indian moccasins, and 2 beaded belts from the Dakota Sioux (157421).

Palmer, Ralph S., Ithaca, N. Y.: Fetal skull of beluga whale collected at Churchill, Manitoba (158247).

Parkhurst, Cliff, New York, N. Y.: 27 etchings for special exhibition during May 1941 (159848, loan).

Parlin, John C., Buckfield, Maine: Mushroom from Maine (157270).

Parodi, Dr. Lorenzo R., Buenos Aires, Argentina: 40 grasses from Argentina (158967, 159431); 36 grasses from Argentina (158675, 160040, exchanges).

Parr, Prof. A. E. (See under Yale University, Peabody Museum of Natural History.)

Parris, W. G., Boom, Tenn.: 55 mollusks from Obey River, Tenn. (158625).

Parsons, Dr. Carl T., Cambridge, Mass.: 1 beetle, paratype (150417).

Parsons, Dr. H. H., Barksdale Field, La.: A collection of 9 objects from northern and western American Indian tribes, all collected about 50 years ago (159819).

Parsons, Gen. J. K., Baltimore, Md.: A haversack of beaded native woven cloth from the Bagobo of Davao Province, Mindanao, Philippine Islands; also an ante-bellum hand-woven woolen coverlet from Alabama (157596).

Pascal, Leo, Washington, D. C.: 17 cards of early automobile advertisements, 1 large credit card, 1 unmounted "spread" of automobiles of 1940, 1 blank share of stock "Pennsylvania Horseless Carriage Manufacturing Co., #446," and a book "Motor Goose Nursery Rhymes" for temporary exhibition (20 specimens) (158244, loan).

Patterson, B. C., Staunton, Va.: 3 Chinese ant-nose coins or charms made between 650 and 250 B. C. (158918).

Payne, George K., Washington, D. C.: 1 young soft-shelled turtle from Jonesville, La. (157149).

Pearse, Prof. A. S., Durham, N. C.: 1 insect (157502); a collection of amphipods and isopods from Beaufort, N. C. (156701).

Pechuman, L. L., Medina, N. Y.: 10 flies (1 paratype), representing 10 species (157201, exchange).

Peebles, R. H., Sacaton, Ariz.; 4 mosses from Arizona (158048, 159757). (See also under U. S. Department of Agriculture, Bureau of Plant Industry.)

Peek & Velsor, Inc., New York, N. Y.: 1 specimen each of white oak bark, magnolia bark, and senega root for the materia medica collection (159242).

Peery, Harold J., Stillwater, Okla.: (Through Prof. R. Chester Hughes) 1 vial of parasitic worms (158319).

Peirson, Frank W., Altadena, Calif.: 5 grasses from California (157503).

Pendleton, Mrs. W. F., McLean, Va.: Framed engraving, "Mount Vernon in the Olden Time" (157644).

Penick, S. B., & Co., New York, N. Y.: 1 specimen each of spruce gum, olibanum tears, and salicin for the materia medica collection (159302).

Penland, Prof. C. William T., Colorado Springs, Colo. (See under Colorado College.)

Perez, Dr. Gilbert S., Manila, Philippine Islands: 32 land and fresh-water shells from Managok, Beukidnon, Philippines (160169).

Perkins, J. D., Washington, D. C.: Model, 1/12 size, of the Grumman Gulfhawk airplane, which is being flown by Al Williams at the present time (158180, loan).

Perry, A. F., Family of, Benton, Ark.: (Through Delis Perry) A hand-operated eyelet machine and an eyelet punch, for making eyelets in men's clothes, which were used before 1850 by the grandfather of Miss Perry (158705, loan).

Perry, Louella C. (deceased): (Through James E. Farrell) "Stella" music box of Swiss manufacture, No. 3819, and 61 steel disk records in hardwood cabinet (159680).

Perry, Dr. Stuart H., Adrian, Mich.: 1 specimen each of Cedartown, Ga., Odessa, Tex., Central Missouri, and Pitts, Ga., meteorites (158062, 158522).

Perrygo, Watson M., Washington, D. C.: Skin and skeleton of a bobcat from Oxon Hill, Md. (160213). (See also under Smithsonian Institution, National Museum.)

PETELOT, Prof. A., Hanoi, Tonkin, French Indo-China: 30 plants from Indo-China (157584).

PETERS, JAMES L. (See under Harvard University, Museum of Comparative Zoology.)

PETERSON, D. S., Washington, D. C.: 2 airplane insignia of the World War, 1914–1918, used on airplanes of the Lafayette Escadrille and the 95th Pursuit Squadron, respectively (157955, loan).

PEW, Mrs. EARL, Whittier, Calif.: 226 Tertiary mollusks (62 species) (156773).

PHAIR, A. W. A., Lillooet, British Columbia: 103 miscellaneous insects from British Columbia (154341).

PHELPS, WILLIAM H., Caracas, Venezuela: 2 woodpeckers (160104, exchange).

PHILCO CORPORATION, Philadelphia, Pa.: Parts of a Philco phonograph including the photoelectric tone arm, record changer, and turn table (157830).

PHILIPS, LUCIE G., Marianna, Fla.: A pair of ornamental hairwork bracelets, mounted with gold clasps engraved with the name "Lucy," made about 1886 at New Orleans, La., from the donor's hair when she was 6 years old (159048).

PICKEL, Prof. D. BENTO, São Paulo, Brazil: 114 grasses from Brazil (157285, 158750, 159109, 159715).

PICKFORD, Dr. GRACE E., New Haven, Conn.: 1 giant earthworm (hypotype), 26 slides of setae, 1 slide of nephridium, 11 slides of calciferous gland, and 9 vials with isolated nephridia, spermathecae, etc. (157949).

PIERCE, Dr. W. DWIGHT, Los Angeles, Calif.: 15 insects (8 pinned, the others on slides)—10 of these 11 species represented by 13 paratypes (158811, exchange). (See also under Los Angeles Museum of History, Science and Art.)

PILSBRY, Dr. H. A., Philadelphia, Pa.: 5 mollusks from Texas (157059). (See also under Academy of Natural Sciences of Philadelphia.)

PITELKA, FRANK A., Berkeley, Calif.: 167 amphipods and 23 isopods (157654).

PITTIER, Dr. H., Caracas, Venezuela: 1,652 plants from Venezuela (156699, 156810, 158050, 158106, 158351, 158450, 158965, 158979, 159253, 159653, 159938).

PIZZINI, ANDREW, Washington, D. C.: 100 amphipods from District of Columbia and Maryland and 5 isopods and 8 ostracods from District of Columbia (158313).

PLASKON CO., INC., Toledo, Ohio: 31 specimens relating to the manufacture and application of urea type molded plastics and urea type resin adhesives (158051).

PLAUMANN, FRITZ, Nova Teutona, Brazil: 26 Lepidoptera (24 species) from Brazil (156995).

PLUNKETT, C. A., Clinton, Mo.: 2 railroad spikes with wide holding head and driving head above (158024).

POMONA COLLEGE, Claremont, Calif.: 113 plants from California (158174, 160039, exchanges); (through Dr. P. A. Munz) 2 plants from Western United States (158948).

POPULAR PHOTOGRAPHY, Chicago, Ill.: 104 salon prints for special exhibition during May 1941 (157381, loan).

PORSILD, A. E. (See under Canadian Government, National Museum of Canada.)

PORTER, Prof. C. L. (See under University of Wyoming.)

POST OFFICE DEPARTMENT, U. S., Washington, D. C.: 1-cent, 2-cent, 3-cent, 5-cent, and 10-cent United States postage stamps of the Famous American series of 1940 in triplicate (30 specimens) (156964); 3 copies each of the 3-cent Pony Express, the 3-cent Pan-American Union, the 3-cent Fiftieth Anniversary of Statehood of Idaho, and the 3-cent Fiftieth Anniversary of Statehood of Wyoming, commemorative stamps (12 specimens) (157250); 19 sets (1,215 stamps) of specimen stamps and 1 30-cent Canal Zone stamp received by the Post Office Department from the International Bureau of Universal Postal Union, Berne, Switzerland (157333, 157791, 158440, 159180, 159994, 160147); 45 United States postage stamps issued in 1940 158233); burnished red earthenware bowl with external white and black decoration, probably originated in the Lesser Antilles or in northern South America (158789); 3 copies of the 3-cent 150th Anniversary of Statehood of Vermont commemorative stamp (159909).

POTTS, ROBERT A., New York, N. Y.: (Through R. E. Cropley) 4 pages of printing from the reign of Queen Anne (1710), printed by Thomas Newcomb and Henry Hills, Printers to the Queen (157586).

PRATT, Dr. HARRY D., St. Paul, Minn.: 9 mosquitoes (158499). (See also under Dr. H. B. Mills and under Dr. H. G. Rodeck.)

PRESCOTT, Prof. G. W., Albion, Mich.; 19 ferns from Panama (158045, 158276).

PRICE, MRS. ANNA M., Blanco, Tex.: A small collection of insects from Texas (156868).

PRICE, Dr. DAVID, University Heights, N. Y.: 10 mollusks (158091).

PRICE, Dr. E. W. (See under U. S. Department of Agriculture, Bureau of Animal Industry, and Dr. H. C. Roquet.)

PRICE, JOHN W., Lancaster, Pa.: 50 amphipods from Pennsylvania and District of Columbia and some insect material (159112).

PROCTOR, JOHN L., and SARAH P. DOLE, Washington, D. C., and Seattle, Wash.: Uniform coat of a paymaster, U. S. Navy, during the Civil War (139864).

PROCTOR, WILLIAM, Bar Harbor, Maine: 3 beetles from Mount Desert Island, Maine (157750).

PROEFSTATION VOOR DE JAVA-SUIKER-INDUSTRIE, Pasoeroean, Java: (Through Dr. A. Diakonoff) 15 bugs (157838).

PUGET SOUND, COLLEGE OF, Tacoma, Wash.: (Through Prof. James R. Slater) 2 salamanders from Coeur d'Alene Lake, Kootenai County, Idaho, (158756).

QUAKER OATS Co., Chicago, Ill.: A panel with a series of 22 mounted specimens illustrating the manufacture and certain industrial applications of fufural and its derivatives, chemical compounds known as the "furans," which are made commercially from oat hulls (159850).

QUESTEL, ADRIEN, Pointe-a-Pitre, Gaudeloupe: 416 plants from Guadeloupe (156879, 156947).

QUINBY, GRIFFITH E., Hickman, Ky.: 36 mosquitoes (156980, exchange).

QUINN, Mrs. ERCELLE M., Washington, D. C.: Collection of 22 specimens from the Philippine Islands, consisting of 1 head ax, 2 bows, 1 lot of arrows, 1 spear, and 1 coconut fiber raincoat (159872).

RAMOS, Dr. J. A., Mayagüez, Puerto Rico: Alcoholic rat (159045).

RANCHO SANTA ANA BOTANIC GARDEN, Anaheim, Calif.: (Through Dr. Carl B. Wolf) 1,039 plants from California (157810).

RANSIER, H. E., Manlius, N. Y.: Plant from Washington (157443); 8 photographs of plants (158524).

RAPP, FLOYD A., Washington, D. C.: 1 barite crystal from Copperus Mountain, Storm Station, Ohio (157744).

RATNER, Mr. and Mrs. HYMAN, Washington, D. C.: An 8-keyed ivory flute bearing the maker's mark of L. Drouet, 358 Oxford Street, London, with tuning slide and fittings in sterling silver (157783).

RECORD, Prof. S. J. (See under Yale University, School of Forestry.)

REED, Dr. EDWYN P., Valparaiso, Chile: (Through Herwil M. Bryant) 1 skeleton of black-faced ibis, 1 insect cocoon with pupa, 6 hippas, 2 crabs, and 2 fishes (159856).

REESIDE, Dr. J. B., Jr., Washington, D. C.: 583 land and fresh-water mollusks from Idaho and Texas (158402). (See also under Dr. John B. Mertie, Jr.)

REEVES, Lt. Col. DACHE M., Langley Field, Va.: 63 specimens, comprising stone hammers from Murphy, N. C., and quartz projectile points and rejectage from Montgomery, Ala. (158858); a small collection of Lava specimens from the slope of Mauna Kea, Hawaii (158915); 1 Pathex 9.5-mm. motion-picture camera, 1 Pathex projector, 1 portrait attachment, 1 title attachment, 1 box repair patches, 2 Mazda lamps, 1 8-foot electric cord, with plugs, 1 Sept motion-picture camera and 4 magazines (159747); 1 3–A autographic Graflex camera without lens, about 1908 (159871).

REEVES, J. EDWARD, Washington, D. C.: A 2-bladed oak airplane propeller, Navy pattern, the last of its type used at the Anacostia, D. C., Naval Air Station (160271).

REEVES, Prof. R. G. (See under Texas Agricultural and Mechanical College.)

REH, EMMA, Washington, D. C.: Wooden harpoon head with socket or handle, from Seri Indians of Tiburon Island, Lower California (158731).

REHDER, Dr. HARALD A., Bethesda, Md.: 1 robin (157957).

REHDER, Dr. and MRS. HARALD A., Bethesda, Md.: 270 specimens, 39 lots, of land and fresh-water shells and a small collection of insects from southeastern Virginia and adjacent North Carolina (158550).

REINHARD, H. J., College Station, Tex.: 4 flies, paratypes (150539).

RENFRO, Mrs. J. H., Fort Worth, Tex.: 22 brachiopods and 2 crinoids from Pennsylvanian rocks of central Texas (159342); 1,800 invertebrate fossils from the Pennsylvanian and Permian strata of Texas (158277, exchange).

REPUBLIC AVIATION CORPORATION, Farmingdale, Long Island, N. Y.: 2 Seversky airplane models, illustrating recent types, namely the Amphibian "SEV–3N" and the Basic Trainer "BT–8," each $\frac{1}{16}$ size (135538).

RESSER, Dr. CHARLES E. (See under Smithsonian Institution, National Museum.)

RHOADES, WILLIAM, Indianapolis, Ind.: 16 geodes, 3 stylolites, and 1 septarium from Indiana (157434, exchange).

RHODE ISLAND STATE INSECTARY, Kingston, R. I.: 1 small collection of thrips found on Austrian pine (157292); (through Cedric Jennings) 30 insects (157986, 159784).

RICE, Mrs. JEANETTE H., Washington, D. C.: 2 specimens of European handicraft, consisting of 1 pair of women's gloves knitted in 1842 by Mrs. Fanny Haas, the great grandmother of the donor, in Baden, Germany, and 1 Spanish-lace mantilla purchased in Shanghai by her brother, Louis Haas, and made by European Catholic nuns resident in China (159865).

RICHARDS, A. GLENN, Philadelphia, Pa.: 2 flies (157826).

RICHARDS, Dr. HORACE G., Philadelphia, Pa.: 3 brachiopods from the Pleistocene gravels of Manitoba (159177).

RICHARDS, O. W. (See under British Government, British Museum.)

RICHTER, MARION S. (See under The Heirs of William M. Swayne.)

RICHTER, Dr. P. O. (See under University of Kentucky.)

RICKER, P. L. (See under U. S. Department of Agriculture, Bureau of Plant Industry.)

RICKETTS, E. F., Pacific Grove, Calif.: 4 mollusks from Lower California (159097); 3 starfishes (160139). (See also under Pacific Biological Laboratories.)

RIGGS, LOWRY, Rockville, Md.: 11 birds and 1 snake from Argentina and Paraguay (157934).

RILEY, J. H., Washington, D. C.: 1 eastern bobwhite (157168).

ROBA, RENÉ-PAUL, Managua, Nicaragua: A collection of miscellaneous insects from Nicaragua (157651).

ROBERTS, Dr. FRANK H. H., Jr. (See under Smithsonian Institution, Bureau of American Ethnology.)

ROBERTSON, Mrs. IMOGENE C., Buffalo, N. Y.: 1 mollusk from the Philippines (156811).

ROBINSON, BERRY A., Fort Belvoir, Va.: 20 coins of Europe and the United States and a token of the United States (157784).

ROBINSON, Lt. Col. CHARLES McK., Fort Lauderdale, Fla.: Cover carried on the Pan American Good-Will Flight of the U. S. Army, December 21, 1926, to May 2, 1927 (159039).

ROBINSON, MELVIN C., Atlantic, N. C.: Archeological specimens from Indian shell heaps on Cedar Island, at south end of Pamlico Sound, Carteret County, N. C., gathered and presented by the donor (156414).

ROBINSON, T. R., Terra Ceia, Fla.: 1 plant from Florida (159476).

ROCHESTER, UNIVERSITY OF, Rochester, N. Y.: (Through Dr. Richard H. Goodwin) 39 plants from Mexico and Eastern United States (158230, exchange).

ROCK, Dr. JOSEPH F., Dalat, Indo-China: 762 bird skins and 13 mammals collected for the National Museum (157063).

RODD, BRENT T., Fort Myers, Fla.: 1 albino loggerhead shrike mummy (156878).

RODECK, Dr. H. G., Boulder, Colo.: (Through H. D. Pratt) 1 holotype of insect (160102).

RODGERS, L. ORMAND, Stillwater, Okla.: (Through Prof. R. Chester Hughes) 12 slides of parasitic worms, including 2 types (158263). (See also under Robert E. Kuntz.)

ROEBLING FUND, Smithsonian Institution: Samples of Iceland spar from Iceberg Lode mine, near Dickson, N. Mex. (156214); 1 green garnet from Danieb Ost, Erongo Mountains, Southwest Africa (156599); 2 specimens of orpiment and 1 of orpiment and realgar from Mercur, Utah (157559); 1 described specimen of dioptase with cerussite and wulfenite from Mammoth, Ariz. (158252); 2 specimens of stolzite from El Cabrestante mine, Conception del Oro, Zacatecas, Mexico (158448); specimen of Waynesboro, Ga., meteorite (1,760 pounds) (158475); collection of uranium minerals from Spruce Pine, N. C. (159234); sample of Burkett, Tex., meteorite (159398); specimen of zircon, variety cyrtolite, from Bancroft, Ontario (159961); specimen of rhodocrosite and pyrite from Catamarca Province, North Argentina (160004); the Diaz collection of Mexican cassiterites and other cassiterite specimens from Mexico (160246); a collection of minerals and ores (118 specimens) from Bolivia, deposited in the National Museum by Jack Hyland (160250).

ROGERS, R. M., Washington, D. C.: Partial skeleton of porpoise from the Miocene, Calvert formation, between Camp Roosevelt and Plumpoint, Calvert County, Md. (160065).

ROLLER, JANE, Washington, D. C.: 125 land and fresh-water shells from Ohio (158049).

ROLLS-ROYCE, Ltd., London, England: (Through John J. McManus) Model of the Rolls-Royce automobile *Silver*

Ghost, 1907, and exhibition case for same (157389, loan), Phantom III motor-car engine, 1939 (incomplete) and collection of separate parts for the same (about 11 specimens) (158059).

ROOSEVELT, Mrs. FRANKLIN D., Washington, D. C.: Cream-colored satin evening dress worn by Mrs. Roosevelt on the occasion of the third inauguration of her husband, Franklin Delano Roosevelt, as President of the United States, January 20, 1941 (159462).

ROQUET, Dr. H. C., Bigtimber, Mont.: (Through Dr. E. W. Price) 190 mollusks (157342).

ROSE, WARDEN O., Durbin, W. Va.: 1 bald eagle (158745).

ROSENGURTT, BERNARDO, Montevideo, Uruguay: 36 plants from Uruguay and Brazil (157053, 157859, 157938).

ROSS, EDWARD S. (See under California Academy of Sciences.)

ROTH, CONRAD, Portsmouth, Ohio: 55 cicadas from Ohio (156862).

ROTH, FRANK W., Joplin, Mo.: 1 fossil fish from the Eocene, Green River, formation of Wyoming (158260, exchange).

ROWLEY, ELMER B., Glens Falls, N. Y.: 1 specimen of denritic uraninite from Grafton Center, N. H. (158662, exchange).

ROXO, MATHIAS G. DE OLIVEIRA, Rio de Janeiro, Brazil: 8 specimens of fossils from Bom Conselho, Bahia, Brazil (159050).

ROYAL ONTARIO MUSEUM OF ZOOLOGY, Toronto, Ontario: 108 Orthoptera representing 23 species, 2 of them by paratypes (158842, exchange).

ROYAL TYPEWRITER CO., INC., Washington, D. C.: Royal standard typewriter, model #1, serial #10442 (158210).

ROYO, Dr. FERNANDO. (See under Anthropological Museum Montané.)

RUBEY, W. W. (See under U. S. Department of the Interior, Geological Survey.)

RUNYON, ROBERT, Brownsville, Tex.: 114 plants from Texas, Arkansas, and Kentucky (157024, 158598, 159736, 159964, 160108).

RUSLING, WILLIAM J., New Brunswick, N. J.: 1 beetle larva from the top of Kittatinny Mountain, near Culver Lake in Sussex County, N. J. (158133).

RUSSELL, AGNES, MARY, and MARGARET JANE, Takoma Park, D. C.: Handwoven, Jacquard type coverlet in a "John Mellinger design," of homespun yarns prepared by Jacob and Catherine Mullendore, Rohrersville, Md., and woven for them in 1841 by John B. Welty at Boonsboro, Md.; a piece of homespun linen sheeting woven of flax raised and prepared on the Rohrersville farm by Catherine Mullendore, great-grandmother of the donors; and a photograph of the Mullendores' stone farmhouse built at Rohrersville, Md., in 1823 (158408).

RUSSELL, Dr. CARL P. (See under U. S. Department of the Interior, National Park Service.)

RUSSELL, DEBORAH M., Framingham, Mass.: Small clay-and-iron tinner's stove, wrought-iron spider, gridiron, cast-iron boiling pot with handle, 2 pairs of tongs, 1 shovel, 2 fire pokers, 3 canes, 5 leather pocketbooks, and 2 pairs of spectacles (156765, 157874).

RUTGERS UNIVERSITY, New Brunswick, N. J.: (Through Prof. M. A. Chrysler) 77 ferns from Jamaica and Costa Rica (159323).

RUZICKA, Dr. D. J., Jackson Heights, Long Island, N. Y.: 43 prints for exhibition during November 1940, (158178, loan).

RYAN, HAROLD J., Los Angeles, Calif.: 6 flies, of species new to collection (156927).

SABROSKY, CURTIS W., East Lansing, Mich.: 2 flies (151327, exchange).

SAGMULLER, F. B., Arlington, Va.: 4 snakes from Virginia (157662).

SALAZAR, FRANCISCO, San Luis Potosi, Mexico: 1 specimen of cassiterite from El Tocho mine, near Arriaga, San Luis Potosi (160097).

SALO, O. J., Red Lodge, Mont.: A collection of 8 dreikanters showing the various rock types, from Big Horn County, Wyo. (158989).

SALTER, WILLIAM E., Washington, D. C.: 324 mollusks from mouth of Parkers Creek, Calvert County, Md. (157580, 159412, 159622); 350 fresh-water snails from Bakers Spring, Waynesboro, Va. (158003); 1 upper jaw of a sunfish from Scientists Cliffs, Calvert County, Md. (159346); copper nugget from Calvert County, Md. (159620); 500 fresh-water shells from the Potomac River (159756).

SANDERSON, Dr. MILTON W., Fayetteville, Ark.: 2 beetles (types) (159259).

SANSLER, Mrs. JEAN, Washington, D. C.: Mexican haired dog (159118).

SARGENT, R. H., Washington, D. C.: 27 ethnological objects, consisting of hunting and fishing paraphernalia of the Alaskan Eskimo, maté cups, bombillas, a handmade violin of South American natives, and other miscellaneous objects from various peoples, including lacquered snuff box and bamboo rope from Szechwan Province,

China, a mastodon tooth from Alaska, wax flowers from Maine, and a spring scales from Bolivia (159932).

SATTRE, A. M., Moorhead, Minn.: 2 praying mantes (157190).

SAWAYA, Dr. PAULO, São Paulo, Brazil: 18 Aeglas (156962).

SAWYER, W. M., New York, N. Y.: 4 brushes used by George Inness, 3 brushes used by Maurice Fromkes, and 1 lithograph by the donor (157715).

SAXTON, V. F., Mount Arab, N. Y.: 1 mollusk from Sarasota Beach, Gulf of Mexico (156392).

SAYLOR, LAWRENCE W., Bowie, Md.: 775 miscellaneous insects and arachnids, collected by R. Greenfield in Mexico, 1938 (157331).

SCARLETT, J. S., Ballycastle, Northern Ireland: 2 copies of booklet "The Evolution of Printing," commemorating the 500th anniversary of printing (158520).

SCHEFFER, Dr. VICTOR B. (See under U. S. Department of the Interior, Fish and Wildlife Service.)

SCHIEFFELIN & Co., New York, N. Y.: 4 specimens of cinchona pharmaceutical preparations (158700).

SCHILLING, WILLIAM, Washington, D. C.: An old hair-trunk lined with newspapers (Post and Commercial Transcript, Baltimore, 1839) (158280).

SCHMIDT, FRED L., Stillwater, Okla.: (Through Prof. R. Chester Hughes) 13 slides of type material of helminths (156648).

SCHMIDT, FRED L., and W. EUGENE HUBBARD, Stillwater, Okla.: (Through Prof. R. Chester Hughes) 12 slides of type material of helminths (158316).

SCHMITT, Dr. WALDO L., Washington, D. C.: 1 water-tight camera holder and 1 4 by 5 Graflex camera box, used by the late Prof. W. H. Longley to make the first under water autochromes of fishes, 1926 (157518). (See also under Smithsonian Institution, National Museum.)

SCHOOF, H. F. (See under University of Kentucky.)

SCHROEDER, WILLIAM C. (See under Harvard University, Museum of Comparative Zoology.)

SCHWARZ, ADOLPH, Phoenix, Ariz: Photograph of Philippine military officer and program of funeral honors in memory of President William McKinley by the United States troops stationed at Manila, on the *Luneta*, September 19, 1901 (159229).

SCHWEICKERDT, Dr. H. G. (See under Union of South Africa, *Department of Agriculture and Forestry.*)

SCHWENGEL, Mrs. F. R., Scarsdale, N. Y.: 1 fossil marine shell from Florida (157871).

SCOTT, IRENE M.: (Through C. A. Frost, Framingham, Mass.) 1 curved-blade draw knife (157601).

SCOTT, SEARGENT P., Granville Center, Mass.: Daguerreotype of Seargent Smith Prentiss (1808–1850) (157369).

SECRETARIA DA AGRICULTURA DO ESTADO DE MINAS GERAES, Bello Horizonte, Minas Geraes, Brazil: (Through Dr. Romeu Pires Gontijo) 60 grasses from Brazil (158124).

SEIBELS, EDWIN G., Columbia, S. C.: The original vertical letter file invented by the donor in 1898 (160270).

SEIFRIZ, Prof. WILLIAM, Philadelphia, Pa.: 146 plants from Cuba (157290); 1 plant from Florida (159262).

SENIOR, ROBERT M., Cincinnati, Ohio: 1 plant from Syria (160241).

SHADLE, Prof. ALBERT R. (See under University of Buffalo.)

SHAMEL, H. H., Washington, D. C.: 20 bats collected at Withero Cave, Bath County, Va. (160217).

SHANNON, Mrs. CAROLINE W., Mrs. ELEANOR W. BISELL, and Mrs. ELIZABETH W. HARMAN, Washington, D. C.: (Through Capt. Thomas J. Shannon) Loyal Legion Medal, No. 5317, of Lt. Col. William I. Wolfley, U. S. Army (157569).

SHAUB, Prof. B. M., Northampton, Mass.: 8 specimens of vein material containing galena, sphalerite, and chalcopyrite from Westfield, Mass. (159943).

SHAW, CHARLES M., Ocala, Fla.: 1 plant cultivated in Florida (158506).

SHAWINIGAN PRODUCTS CORPORATION, New York, N. Y.: A series of 43 specimens and 4 photographs illustrating production of certain synthetic chemicals from basic raw materials—coal, limestone, and water; also a series of 32 articles molded from polyvinyl acetal resin, one of the products of this process (159245).

SHERBURNE, R. G., Takoma Park, Md.: 1 2-foot trunk section of a 13-inch crack willow tree (157252).

SHERWIN-WILLIAMS Co., Philadelphia, Pa.: 1 book, "Paint and Color Style Guide," an example of fine printing (158521).

SHINNERS, LLOYD H., Madison, Wis.: 7 plants from Wisconsin (159371).

SHREVE, H. I., Martinsburg, W. Va.: 3 bats (159388, 159409).

SIEGFRIEDT, Dr. J. C. F. (deceased): (Through Mrs. J. C. F. Siegfriedt, Red Lodge, Mont.) A collection of 5 driekanters illustrating the method

of formation from Big Horn County, Wyo. (159071).

SILVA, Dr. A. R. PINTO DA. (See under Estação Agronômica Nacional.)

SILVA, PEDRITO, Washington, D. C.: 190 insects (152 representing 10 genera of Tingitidae and 38 representing 3 species of Coleoptera) from Brazil (157170).

SILVEUS, W. A., San Antonio, Tex.: 21 grasses from Southern United States (158056).

SIMPSON, Mrs. H. H., Sr., High Springs, Fla.: 1 moth (158281).

SINGER, J. W., Stamping Ground, Ky.: 1 plant from Tennessee (157165).

SLATER, Mrs. ELSIE M., El Paso, Tex.: 1 fern from Texas (159404).

SLATER, Lt. Comdr. HORATIO N., Washington, D. C.: A cotton "event handkerchief," showing a portrait of Samuel Slater, his mill, first Sunday School in America, Harley's Store, and Pawtucket Falls Bridge, printed by Cranston Print Works Co., Cranston, R. I., from copperplates engraved at James Provan & Son's, Providence, R. I., 1890, for the Cotton Centenary, at Pawtucket, R. I., commemorating the starting of Samuel Slater's cotton spinning machinery, December 20, 1790, in the Old Slater Mill (158911).

SLATER, Prof. JAMES R. (See under College of Puget Sound.)

SLATER, S., & SONS, Inc., Slater, S. C.: 9 finished rayon fabrics for dresses, underwear, and slippers, and 1 specimen of nylon parachute fabric (160212).

SLATIN, HARRY, Washington, D. C.: 3 vials of Cladocera, 1 vial of ostracods, 2 isopods, and 1 earthworm from the C. & O. Canal, near District of Columbia line (158135).

SLATTERY, RICHARD G., Washington, D. C.: 1 female skeleton from near Maurertown, Va., and an incomplete female skeleton from Saltville, Smyth County, Va. (158504); 1 fossil porpoise skull from the Miocene, Calvert formation, near Plumpoint wharf, Calvert County, Md. (159928).

SLATTERY, RICHARD G., and HUGH STABLER, Washington, D. C.: Child's skeleton (near 8 years of age) from Kerns site, left bank of Shenandoah River in Clarke County, Va., ⅓ mile above mouth of Spout Run, and child's skeleton (near 6 years of age) from Jones site, left bank of north fork of Shenandoah River in Shenandoah County, Va., near Maurertown (158108).

SMITH, Dr. CLYDE F., Raleigh, N. C.: 3 holotype slides of insects (157105).

SMITH, Comdr. ED. H. (See under U. S. Department of the Treasury, the Coast Guard.)

SMITH, FRANK E., Key West, Fla.: 1 carapid fish disgorged by a seacucumber (157588); 2 mollusks from Florida (157666).

SMITH, Dr. HOBART M. (See under Thomas MacDougall and Walter Rathbone Bacon Scholarship, Smithsonian Institution.)

SMITH, Dr. HUGH M., Washington, D. C.: 16 original water-color drawings, by J. Urata and K. Ito, of varieties of goldfish (159348).

SMITH, Mrs. HUGH M., Washington, D. C.: A collection of 24 embroideries, laces, and other heirlooms long in the possession of the family of the donor and 11 ethnological objects acquired in Siam in 1930 (160222).

SMITHSONIAN-FIRESTONE EXPEDITION TO LIBERIA, 1940: 1,943 fishes, insects, crustaceans, annelids, mammals, reptiles, amphibians, and mollusks collected in Liberia in 1940 by Dr. W. M. Mann (157242).

SMITHSONIAN INSTITUTION, Washington, D. C.: 1 etching by John Costigan, "Cutting Fodder" (157747, deposit); 2 wroughtiron gates from the Children's Room of the Smithsonian Building (158676, deposit); 1 etching, "Chance Meeting," by Martin Lewis, and associate member's print of the Society of American Etchers (159702, deposit); bronze copies of the Langley gold medals awarded by the Smithsonian Institution to Gustave Eiffel, 1913, and Joseph S. Ames, 1935 (159758, deposit).

Bureau of American Ethnology: Portions of a child's skull and skeleton partly embedded in stony matrix, collected near Kissimmee, Fla., by L. R. Farmer and sent to the Bureau in 1933 (124559); skeletal and cultural remains from burial sites on Pennock Island and Dall Island (Bobs Bay), southeastern Alaska, collected during the summer of 1940 by Dr. Julian H. Steward (157350); 94 ethnological specimens from Carrier Indians, obtained by Dr. Julian H. Steward in the region of Fort St. James, British Columbia, during the summer of 1940 (157796); a collection of ethnological objects consisting of wooden mask, a cradle board, and a swamp milkweed burden strap,

purchased among the Iroquois Indians during the past summer by Dr. William N. Fenton (157565(; collection of carved wooden masks and musical instruments collected by the late J. N. B. Hewitt among the Iroquois Indians of the Six Nations Reserve, Grand River, Ontario, Canada (158151) ; 2 unfinished wooden masks made by Tom Harris, an Onondaga Indian of the Six Nations Reserve, Grand River, Ontario, Canada, and collected in August 1940 by Dr. William N. Fenton (158498) ; (through Dr. Frank H. H. Roberts, Jr.) skeleton of a coyote from Fort Collins, Colo. (160172). (See also under Civil Works Administration.)

National Museum, collected by members of the staff: Brown, W. L.: 1 plant from British Columbia (157372). Cooper, Dr. G. Arthur: (with Mrs. Cooper) 15,000 invertebrate fossils from the Devonian of Alpena, Cheboygan, Presque Isle, Emmet, and Charlevoix Counties, Mich. (157180) ; 20,000 invertebrate fossils from the Ordovician and Silurian of west Tennessee, the Pennsylvanian of north central Texas, and the Permian of the Glass Mountains, of west Texas, collected during field season of 1940 (157364). Foshag, Dr. W. F.: 245 rocks, minerals, and ores from Mexico and potsherds and stone artifacts collected at various sites in the States of San Luis Potosi, Zacatecas, and Durango, Mexico (158572). Foshag, Dr. W. F., and Dr. Remington Kellogg: Portions of skulls of 2 whales (157490) ; portions of vertebral columns of whales (157491). Gazin, Dr. C. L.: A collection comprising 149 lots of vertebrate fossils from the Cretaceous and Paleocene deposits of Utah and the Eocene of Wyoming, secured during the 1940 field season (156837). Perrygo, W. M., J. S. Y. Hoyt, and John S. Webb.: 1,204 bird skins, 1 skeleton, and 1 alcoholic bird from South Carolina (158548). Resser, Dr. Charles E.: About 7,500 invertebrate fossils from the Cambrian and other Paleozoic formations from the Rocky Mountain region, Tennessee, and Missouri (156847) ; 500 Cambrian fossils from southwestern Virginia and Tennessee (160183). Schmitt, Dr. Waldo L.: A collection of marine invertebrates, mollusks, fishes, porpoise skeleton, marine algae, plants, minerals, and a pair of oar locks (157371) ; a small collection of fishes, echinoderms, bottom samples, marine invertebrates, fossil deposits from South Seymour Island, lava rock and a bird's nest from James Island, 3 snakes, 2 geckos, lizards, plants and living seeds of the *Rooseveltia* palm from Cocos Island (159578). Stewart, Dr. T. Dale: Skeletal remains and archeological objects from 9 different sites along the middle coast of Peru (160141). Wedel, Dr. Waldo R.: Skull fragment of a raven (157167) ; archeological materials collected at various Indian village sites in Smyth, Washington, and Russell Counties, Va. (159926). Wetmore, Dr. A.: 352 bird skins, 3 skeletons, and 2 deer frontlets and antlers from Costa Rica (158556).

National Museum, obtained by purchase: 424 skeletons of birds and 26 skeletons and skulls of mammals from Brazil (154352) ; skin and skeleton of Mexican hairless Chihuahua dog from Zacatecas, Mexico (154475) ; a collection of Coal Measures plants from Cameron, Okla. (154633) ; 3,614 plants from Mexico (156354, 156568, 156896, 157933, 158590) ; 113 plants from Panama (156953) ; 8 crinoids from the Mississippian (Fayetteville formation) of Oklahoma and 3 edrioasteroids from the Pennsylvanian of Oklahoma (156973) ; 2 turtleshell box rattles (Wenontowi's), ritual paraphernalia of the Seneca Indians at the Coldspring Longhouse on the Allegheny Reservation (156998) ; 25 North American mosses (157480) ; 7 coiled baskets collected by Charles Sheldon from the Seri Indians of Tiburon Island, Lower California, Mexico, in 1921-22 (157646) ; 1 skull, lower jaws, vertebrae, and ribs of fossil cetacean from Miocene, Calvert formation, of Calvert County, Md. (157713) ; 2 celts and a stone knife from near Maissade, Fort Liberté and St. Michel, Haiti (157847) ; 3 scale drawings and scrapbook of *The Spirit of St. Louis* (157959) ; 6 unusual Devonian crinoids (158117) ; 1 large crinoid, 1 trilobite, and 28 unusual brachiopods from the Silica shale of Ohio (158118) ; 525 plants, collected in Korea by Mrs. R. K. Smith (158223) ; a large blacksmith's forge bellows (158227) ; a collection of fossil fishes, from Benito, Spanish Guinea, Africa (158580) ;

29 mollusks from western New York (158843); 2 crinoids, including 1 type (159077); 1 Devonian crinoid (159078); 14 (6 fragmentary) gold-plated figurines from the Province of Veraguas, Panama (159473); 1 tintype of General Grant and family, a copy (159626); 1 facsimile copy of "The Bay Psalm Book," original printed by Stephen Daye at Cambridge, Mass., in 1640 (159774); 1 Navaho ceremonial or Yebechi blanket from Arizona (159808); collection of 3 ceremonial dance costumes made and used by the Tucano Indians of the Rio Uapes in the state of Amazonas, Brazil, near the Colombian border, and 1 basket of flat cane strips from the Lake Coary region of the State of Amazonas, Brazil (159912); 2 oil paintings of Quechua Indian subjects from the village of Otavalo of the Ecuadorian Province of Imbabura, executed on goatskin (159917); a collection of early American silver long in the possession of the Storer and Cutts families, consisting of a silver porringer and a rat-tail teaspoon, each bearing the maker's mark of Samuel Edwards, Boston, Mass., and dating from the year 1742 (160248).

National Zoological Park: 98 mammals (157571, 158430, 159170, 159406, 159869, 160238); 145 bird skeletons, 18 bird skins, and 1 egg (157102, 157902, 158214, 159083, 160240); 1 African lungfish (158164).

SMYTH, Dr. E. GRAYWOOD, Glen Ellen, Calif.: 84 plants from Peru (158684).

SMYTH, J. ADGER, Salem, Va. 24 skins and 1 skeleton of birds from Peru (158225).

SOLIS, RAFAEL, Tejamen, Durango: 1 specimen of cassiterite from 29th de Junio mine, America, Sierra de San Francisco, Durango, Mexico (160099).

SORENSEN, A., Pacific Grove, Calif.: 1 mollusk from off Cape San Martin, Calif. (157956); 2 crabs (159065).

SOSA, Dr. IGNACIO, Cardenas, Cuba: 25 Cuban land shells (157176).

SOUTH DAKOTA STATE COLLEGE, Brookings, S. Dak.: (Through Gerald B. Spawn) A small collection of beetle mites (158591).

SOUTH DAKOTA STATE SCHOOL OF MINES, Rapid City, S. Dak.: 25 plants from South Dakota (157587).

SOUTHERN PRINTMAKERS SOCIETY, Mount Airy, Ga.: 36 wood-engravings by 6 members of the society for special exhibit during December 1940 (158518, loan).

SOUTHWORTH, CHARLES, Thedford, Ontario: 200 Devonian (Hamilton) corals, brachiopods, and other fossils from Ontario (157174); 2 slabs of limestone containing invertebrate fossils from the Devonian (Hamilton) of Ontario (158278).

SOXMAN, G. M., Dallas, Tex.: 24 plants from Texas (158966, 159226, 160061).

SPAWN, MRS. CARRIE M. O., Washington, D. C.: A miniature copy of the Liberty Bell made from an oak joist taken from Independence Hall and an early graphophone with 16 wax cylinder records (18 specimens) (158102).

SPAWN, GERALD B. (See under South Dakota State College.)

SPERRY, JOHN L., Riverside, Calif.: 7 Lepidoptera (4 species, 2 being represented by 3 paratypes) (158243).

SPERRY, Dr. OMER E., Alpine, Tex.: 78 plants from Texas (158748).

SPERRY GYROSCOPE Co. Inc, Brooklyn, N. Y.: Model, 1/16 size, of the Lawrence Sperry Amphibian triplane built in 1920 as an experimental bomber for the U. S. Navy (158179).

SPICER, Dr. V. D., Honolulu, Hawaii: 12 marine shells from Midway Island (159707, 159960). (See also under Richard T. Bash.)

SPINDLER, Dr. JAMES F. (See under Federal Security Agency, Public Health Service.)

SPRINGER, STEWART, Englewood, Fla.: 8 sharks (158107); 52 sharks collected by donor and J. L. Baughman in Florida and Texas (159316).

STABLER, HUGH. (See under R. G. Slattery.)

STAINS, GEORGE S., Logan, Utah: 21 flies, including 2 paratypes (158111, 158212).

STANFORD UNIVERSITY, Stanford University, Calif.: (Through Mrs. Roxana S. Ferris) 109 plants from Mexico (156940, exchange); (through Dr. Myra Keen) 21 mollusks from California (158061, exchange); (through Prof. George S. Myers) 9 fishes from Sitankai, P. I. (159015);

Natural History Museum: (Through Prof. George S. Myers) 1 fish (158840); 2 fishes collected by Dr. A. W. Herre in the Philippine Islands (159888, exchange).

STEARNS, J. L., Laurel, Md.: 35 plants from Florida (160135).

STEHLE, Dr. H., Fort-de-France, Martinique: 32 plants from Martinique (156801).

STEPHENSON, Dr. L. W., Washington, D. C.: 1 mollusk from Kinney County, Tex. (158945).

STEPHENSON, W. J., Washington, D. C.: 1 insect and 1 purple salamander from Cochrane's Cave, near Spice, W. Va. (158134); 17 bats and the skull of a dog (158739, 159405, 159791). (See also under District of Columbia Speleological Society and National Speleological Society.)

STERN, EDWARD, & Co., Philadelphia, Pa.: A series of samples of the Optak process, a method of printing by Collotype with screen (159930).

STEVENSON, JOHN A., Washington, D. C.: Plant from Wisconsin (157483).

STEWART, FRANK G., Washington, D. C.: 2 wooden airplane propellers, 4-bladed, for use with the Liberty engine, 1918–1920 (160276).

STEWART, Dr. T. DALE. (See under Smithsonian Institution, National Museum.)

STEYSKAL, GEORGE, Detroit, Mich.: 9 flies (158379).

STILES, Mrs. CHARLES W., Washington, D. C.: Silver-mounted buffalo-horn ash receiver made about 1900 at the direction of Mrs. Elizabeth W. Stiles for her son, Dr. Charles W. Stiles (159713); human skeleton without skull from the laboratory of the late Dr. Charles W. Stiles (159864).

STONE, Dr. R. G., Kansas City, Mo.: 50 polychaete worms, and 3 gephyrean worms (157236).

STORM, MARIAN, Mexico, D. F.: 1 plant from Bolivia, 3 plants from Mexico, and a package of seeds (157318, 157852, 159699).

STRANDINE, Dr. E. J., Chicago, Ill.: 415 mollusks (157274).

STRATTON, Mrs. CHARLOTTE K., Montpelier, Vt.: Catalog of original "Frost" hooked-rug patterns (158348); a series of specimens illustrating the making of a hooked rug, an old hooked rug from Frost's pattern No. 60, 3 of the 7 original stencils for the same pattern, an old unhooked burlap for pattern No. 62, and a modern stamped burlap for pattern No. 60 (158349, loan).

STRAUSS, Dr. ARNOLD F., Norfolk, Va.: 1 garden slug from Virginia (157729).

STREETER, O. J., Sulphur, Nev.: Block of sulphur and a small collection of sulphur ores from Sulphur, Nev. (146254, 157667).

STUMM, Dr. ERWIN, Oberlin, Ohio: 8 brachiopods from the Devonian of Ohio (159435).

SUGARHOUSE CHAMBER OF COMMERCE Salt Lake City, Utah: (Through R. Louise Hoggan) Wooden cup carved from one of the main timbers of the first sugar factory in the Western Hemisphere, which was built in Sugarhouse, Utah, and began operations in 1855 (158098).

SWAYNE, WILLIAM M., Heirs of, Chicago, Ill.: (Through Richard B. Swayne and Marion S. Richter) Plaster bust of Abraham Lincoln by William Marshall Swayne (157225).

SWISHER, C. E., Garden Valley, Calif.: 1 spider from the Empire Canyon, El Dorado County, Calif. (157818).

SWITZER, EDNA E., Morrisville, Pa.: A black lace jacket, applique on net, and a pair of black lace mitts, which belonged to the mother of the donor (157932).

SYDNEY, UNIVERSITY OF, Sydney, New South Wales: (Through Ida A. Brown) 4 brachiopods from Australia (154420, exchange).

TAMAYO, Dr. FRANCISCO, Caracas, Venezuela: 2 plants from Venezuela (156899, 158228).

TANG, Dr. CHUNG-CHANG, Pieping, China: 40 mollusks from China (157876).

TANNER, Dr. VASCO M. (See under Brigham Young University.)

TAYLOR, Prof. LELAND H., Morgantown, W. Va.: 4 phyllopods from West Virginia (157140).

TAYLOR, RICHARD, Bethesda, Md.: Posterior portion of a cetacean skull from the Miocene from near Flag Pond Wharf, Calvert County, Md. (157824).

TAYLOR, Dr. WILLIAM R., Ann Arbor, Mich.: 1 bryozoan (160079).

TEE-VAN, JOHN. (See under New York Zoological Society.)

TEICHERT, Dr. CURT, Crawley, Western Australia: 56 fossil crinoids (157492, exchange).

TELEPHONE CAMERA CLUB OF MANHATTAN, Floral Park, Long Island, N. Y.: 53 pictorial photographs for special exhibition during March 1941 (159266, loan).

TELLO, Dr. JULIO C., Lima, Peru: 2 skulls (no lower jaws) from Ica, Peru (160142).

TEMPLEMAN, Dr. W., St. John's, Newfoundland: 25 copepods (159374).

TETER, Mr. and Mrs. EUGENE A., Little Rock, Ark.: "Patriotic" cotton quilt pieced and appliqued in a red, white, and blue stars-and-stripes pattern, in 1861, by Mary Rockhold-Teter, of Noblesville, Ind., great-grandmother of Eugene A. Teter (157340).

TEWKESBURY, RICHARD, Charlotte, N. C.: 26 fresh-water mollusks from eastern Panama (157514).

TEXAS, AGRICULTURAL AND MECHANICAL COLLEGE OF, College Station, Tex.: (Through Prof. R. G. Reeves) 8 plants (157696).

TEXAS, UNIVERSITY OF. (See under Work Projects Administration.)

THOMAS, EDWARD S. (See under Ohio State Museum.)

THOMPSON, J. WILLIAM, Seattle, Wash.: 13 plants mostly from Washington (157527).

THORNTON, Hon. C. W., Nome, Alaska: 2 plants from Alaska (157845).

TIDD, W. M., Columbus, Ohio: 11 copepods (holotype and paratypes of a new species) (158862).

TING, PETER C., Sr., San Francisco, Calif.: 17 beetles, representing 5 species, 4 of which are new to the collection, 250 miscellaneous insects and 35 microscope slides (157825, 157976); 31 beetles, representing 15 named species, all by paratypes, apparently all new to the collections, and 12 undetermined specimens (159008, exchange).

TISSOT, Dr. A. N. (See under Agricultural Experiment Stations.)

TOKYO IMPERIAL UNIVERSITY, *Botanical Institute*, Tokyo, Japan: 4 plants (157608, exchange).

TOLMAN, RUEL P., Washington, D. C.: Limb section of the goldenrain-tree grown on premises of donor (159239).

TOMÁS ALBERTO, Brother, San Pedro, Antioquia, Colombia: 77 plants from Colombia (156907, 158329).

TORRE BUENO, J. R. DE LA, Tucson, Ariz.: 8 insects (156900).

TOSH, JOHN PAUL, Beckley, W. Va.: 38 plants from West Virginia (158257, 158563).

TOUMANOFF, Dr. C., Saigon, Indo-China: A small collection of parasitic insects from Indo-China (157694, 158929).

TOWLES, WILL H., Washington, D. C.: 2 cameras, 7 plate holders, 42 Brady photographs, a panoram printing frame, and a camera lens (158846).

TRAINER, FRANK W., Farmville, Va.: 2 insects (157479).

TRAPIDO, HAROLD. (See under Mrs. Frankie B. C. Goerges and Dr. A. H. Wright.)

TREASURY, U. S. DEPARTMENT OF THE:

The Coast Guard: A small lighthouse lens complete with pedestal and clockwork (160273); submarine signal bell complete with suspending chain and characteristic mechanism (160275); (through Comdr. Ed. H. Smith) 1 box of skeletal material (160171).

Bureau of Customs: (Through Procurement Division) A collection of 620 gem stones, including beryl, tourmaline, etc., and 606 small aquamarines (158070).

Bureau of the Mint: United States and California gold coins struck 1799–1915 (13 specimens) (155097); bronze, nickel, and silver coins struck at the Denver, Philadelphia, and San Francisco mints, 1940 (159295).

Procurement Division: 1 large 93-dial display clock made by Louis Zimmer, Lierre, Belgium, in 1935; 3 pieces (cocks and plants) of blacksmith's art work made by L. van Boeckel, Lierre, Belgium (157730). (See also under Navy Department.)

TRESSLER, Dr. WILLIS L., College Park, Md.: 57 amphipods from Solomons Island (159996).

TRYON, R. M., Jr., Cambridge, Mass.: 73 ferns from Wisconsin and Indiana (158052).

TUCKER, HAL, Los Angeles, Calif.: 2 slides of type and paratypes of nematodes (157308).

TURNER, E. A., Quitman, Ga.: 5 isopods (147051).

TURNER, Prof. F. E., College Station, Tex.: 6 Upper Cambrian brachiopods from Wyoming (155894).

TURVER, HARRY R., Santa Cruz, Calif.: 1 ribbonfish from Santa Cruz (159286, exchange).

TURVER, Mrs. H. R., Santa Cruz, Calif.: 5 mollusks, 4 brachiopods, and 2 echinoderms, all Tertiary (159533, exchange).

TWEEDIE, M. W. F., Singapore, Straits Settlements: 2 crabs from Christmas Island (157094).

ULKE, Dr. TITUS, Washington, D. C.: Photograph and cultivated plant from Virginia (157809).

UNION, FRANK L., Miami Fla.: A pleating board, used for laying folds or pleats in cloth, made by the donor in 1869, in Boston, Mass., when he was 13 years old (157670).

UNION OF SOUTH AFRICA, *Department of Agriculture and Forestry*, Durban, South Africa: (Through Dr. H. G. Schweickerdt) 237 plants from Natal (157898, exchange).

UNION TRUST CO. OF DISTRICT OF COLUMBIA. (See under John H. Corning.)

UNITED SHOE MACHINERY CORPORATION, Boston, Mass.: A cut-out model of a heel seat lasting machine, a newly developed machine used in the manufacture of shoes (160211).

UNITED STATES GOVERNMENT PRINTING OFFICE, Washington, D. C.: 1 early lead slug cutter (158060).

UPDIKE, R. L., Bedford, Va.: (Through D. I. Bushnell, Jr.) Collection of stone implements and pottery frag-

ments from Mons Site, Peaks of Otter, Bedford County, Va. (158177).

UTAH, UNIVERSITY OF, Salt Lake City, Utah: (Through Dr. W. P. Cottam) 28 plants from Mexico, Utah, and Arizona (151032, 158809).

UTAH STATE AGRICULTURAL COLLEGE, Logan, Utah: (Through Dr. George F. Knowlton) 51 flies, all type material (157155, 157460, 160175); 8 slides (7 species) of aphids (158411); (through Prof. Bassett Maguire) 75 plants from Southwestern United States (158949, exchange).

VALENTINE, Dr. J. M., Somerset, Va.: 14 beetles and 1 vial of weevils (158551).

VAN DE VENTER, Boatswain A. (See under American-Pacific Whaling Co.)

VAN NAME, Dr. W. G. (See under American Museum of Natural History and Prof. T. D. A. Cockerell.)

VAN NATTA, R. D., Casper, Wyo.: 44 archeological specimens from Dinwiddie Canyon on the Arapaho Indian Reservation in Fremont County, Wyo. (157935).

VAN SICLEN, Mrs. M., Arlington, Va.: 375 mollusks from Florida, 6 echinoderms, 15 sponges, etc. (157679).

VAN TUYL, JOHN W., Greenport, N. Y.: (Through Wallace M. Cady) A fragment of Chazyan coral from 1 mile northwest of Middlebury, Vt. (158866).

VAUGHAN, Dr. T. WAYLAND, Washington, D. C.: About 2,400 lots of Cretaceous and Tertiary larger Foraminifera from Mexico, Cuba, Antigua, Peru, New Zealand, and other places (149309). (See also under R. Wright Barker and under D. W. Gravell.)

VERRILL, Mrs. CLARENCE S., North Vancouver, British Columbia: 1 camel-cricket collected in North Vancouver (159934).

VIEGAS, Dr. A. P. (See under Instituto Agronômico do Estado de São Paulo.)

VIQUEZ, CARLOS S., San José, Costa Rica: 4 lots of parasitic worms (158352).

VISEL, GLADYS O., Washington, D. C.: Cultivated shrub (159916).

VIVAS-BERTHIER, GASTON, Ithaca, N. Y.: 61 beetles collected in Venezuela (158681).

VON IHERING, Dr. RUDOLF, Rio de Janeiro, Brazil: 13 shrimps, 875 mollusks, and 3 lots of parasitic worms (151602); (through Brazilian Embassy) a collection of frogs from northeastern Brazil (157077).

VONSEN, M., Petaluma, Calif.: 10 specimens of ammonium sulphate and associated minerals from the geysers, Sonoma County, Calif. (155418).

WAGGAMAN, Maj. ENNAILS, Washington, D. C.: 2 coiled basketry jars and 1 tray, collected originally from the Apache by Gen. John S. Mason in the 1870's or early 1880's (157782).

WAGNER, CARROLL E., Baltimore, Md.: A small collection of insect galls on oak leaf (157297).

WAGNER, Prof. GEORGE. (See under University of Wisconsin.)

WAGNER, WARREN H., Jr., Philadelphia, Pa.: 200 butterflies (158944).

WAGNER, W. H., Jr. Washington, D. C.: 2 plants (157023).

WALCOTT, Mrs. CHARLES D., Washington, D. C.: A blanket woven in traditional style from wool of Rocky Mountain goat, with totemic decorative designs in color effected by use of native vegetable and mineral dyes, from the Chilkat Indians of southeastern Alaska (157030).

WALDBOTT, Dr. SIGMUND, Cincinnati, Ohio: 1 small lot of pisolitic barite and 2 of galena from Joplin, Mo. (157061).

WALDRON, Mrs. JOHN. (See under National Geographic Society.)

WALKER, Dr. E. H., Washington, D. C.: 89 plants from the Eastern United States (158275, 158925).

WALLACE, Dr. DAVID H., Solomons Island, Md.: 1 lot of parasitic worms (157087).

WALLACE, ELIZABETH, Falls Church, Va.: 100 mollusks from Patterson Creek, near Keyser, W. Va. (157329).

WALLACE & TIERNAN CO., INC., Newark, N. J.: A diorama and hypochlorinator to illustrate the subject of water purification (158741).

WALLEY, G. STUART. (See under Canadian Government, Department of Agriculture.)

WALLING PROCESS CO., Washington, D. C.: 7 progressive proofs showing how a silk-screen print is made and 2 additional silk-screen prints (159721).

WALLIS, Mrs. L. G. (See under Elizabeth W. Greenway.)

WALTER RATHBONE BACON SCHOLARSHIP, Smithsonian Institution: (Through Dr. Hobart M. Smith) A collection of reptiles, amphibians, birds, mammals, and insects from Mexico (156990).

WAR, U. S. DEPARTMENT OF, *Office of the Chief Signal Officer:* American Racing Pigeon Hall of Fame Medal, the Hall of Fame Certificate of Award, and the War Record of the pigeon Cher Ami (157032); 4 photographs of ski troops in the U. S. Army (160268).

WASHINGTON, STATE COLLEGE OF, Pullman, Wash.: (Through James Beer) 2 slides of parasites (159207).

WASHINGTON, UNIVERSITY OF, Seattle, Wash.: 459 plants from Mexico

(158371, 159525); (through Prof. C. Leo Hitchcock) 7 plants from the Western United States (158812).

WATERMAN, THOMAS T. (See under John O. Brostrup.)

WATERS, JAMES A., Dallas, Tex.: A collection including 10 type specimens of Pennsylvanian Foraminifera from the Dornick Hills formation of the Ardmore Basin, Okla. (158919).

WATKINS, W. N., Washington, D. C.: 1 plant from Maryland (157166).

WAYNE, A. A., Washington, D. C.: Skull of a bobcat (159772).

WEATHERBY, C. A. (See under Harvard University, Gray Herbarium.)

WEBB, JOHN S., Washington, D. C.: 1 starling (158950). (See also under Smithsonian Institution, National Museum.)

WEDEL, Dr. WALDO R. (See under Smithsonian Institution, National Museum.)

WELLER, Dr. J. MARVIN, Urbana, Ill.: 17 species of minute crinoids from the Pennsylvanian and Permian rocks of the United States and Europe (159264).

WELLS, J. ROBERT, La Oroya, Peru: 3 skulls (1 with lower jaw) and a right humerus from various localities in Peru (157973).

WELLS, Dr. J. W., Columbus, Ohio: 12 recent corals from Florida, 2 from Japanese Islands, 3 from East Africa, and 1 late Tertiary coral from Japan (158991, 159011).

WELSH, Dr. TOM, Rockville, Md.: 5 bats from West Virginia (156978).

WENZEL, RUPERT L., Chicago, Ill.: 26 beetles, representing 10 species of which 6 are represented by 14 paratypes (158730, exchange).

WESTCOTT, RUSSELL G., Los Angeles, Calif.: 2 cultivated plants from Guatemala (159274).

WESTINGHOUSE AIR BRAKE Co., Wilmerding, Pa.: (Through John B. Wright) 6 specimens comprising an operating exhibit on the Westinghouse air brake (160266).

WETMORE, Dr. ALEXANDER, Washington, D. C.: Coins and paper currency of Costa Rica, 1929–1940 (9 specimens), and of Colombia and the Netherlands, 1922–1940 (21 specimens) (158368, 159995); a representative collection of the plastic art of the natives of Bali, consisting of 2 wooden masks and 6 figurine carvings used as handles of sirih-stampers, also a piece of Javanese batik cloth, presented by Dr. S. Koperberg (158666); 1 etching, "In Velvet," by A. A. Jansson (159203). (See also under Smithsonian Institution, National Museum.)

WEYHE GALLERIES, New York, N. Y.: 39 prints by Emil Ganso for special exhibition during January 1941 (158519, loan).

WHARTON, Dr. G. W., Durham, N. C.: 1 crab (159502).

WHEELER, Prof. G. C., Grand Forks, N. Dak.: 1 slide of parasitic worms (159232). (See also under University of North Dakota.)

WHEELER, Dr. MARSHALL R., College Station, Tex.: 4 phyllopods (159682).

WHERRY, Dr. EDGAR T., Philadelphia, Pa.: 4 ferns from Arizona (157684).

WHITELEY, GEORGE, Jr., Woods Hole, Mass.: 5 amphipods from Woods Hole (157019).

WHITING, A. F., Flagstaff, Ariz.: 5 plants from Arizona (159696).

WHITMER, G. B., West Falls Church, Va.: 4 fossils, including 2 coiled cephalopods from the Lower Ordovician at Timberville, Va. (157610).

WHITTEN, HORACE, Austin, Tex.: 102 marine invertebrates (155932, 156960, 157137).

WHORRALL, MRS. CHARLES H., Washington, D. C.: 1 towhee (157923).

WILCOX, F. ELIZABETH, Washington, D. C.: Rush-bottom painted chair in the Sheraton manner of 1800 and an 18th-century flax spinning wheel owned by the donor's great-grandparents, Peleg Brown, 1775–1860, and Elizabeth B. Brown, 1780–1871, of Stonington, Conn.; a bouquet of wax flowers, mounted in a shadow box, made in 1838 by the donor's grandmother Elizabeth Brainard (Brown), 1818–1855, while attending the Utica (N. Y.) Female Academy, and a report of the Academy, dated December 21, 1838 (157471).

WILKINSON, WILLIAM J., Long Island City, N. Y.: 14 specimens of intaglio, offset, and letter-press printing (159538).

WILLARD STORAGE BATTERY Co., Cleveland, Ohio: 2 replicas of the T. A. Willard pasted plate storage battery of 1881 and a box containing 3 Plante plates of about 1909 (157689).

WILLIAMS, Dr. LOUIS O. (See under Harvard University, Botanical Museum.)

WILLIS, MRS. A. C., Washington, D. C.: A small collection of insects from Nova Scotia (157489).

WILLIS, BARBARA, Falmouth Heights, Mass.: 40 mosses from Barro Colorado Island, Canal Zone (157484, exchange).

WILSON, JOSEPH F., Davidson, N. C.: Skull, skin, 2 pairs of mandibles, and 1 odd mandible of the musk deer; 1 pair of mandibles and 3 skulls (without jaws) of the roe deer; 2 bird skins, a duck and a goose, all collected near Soonchun, Korea (160045).

WILSON, Mrs. ROSS, Harbel, Liberia: 2 baby carriers from the Grebo tribe, Cape Palmas, Liberia (158685).

WINSLOW, JULIA E., Westbrook, Maine: Model of Reynolds-Corliss steam engine made about 1900 by Howell M. Winslow, father of the donor (157370).

WISCONSIN, UNIVERSITY OF, Madison, Wis.: (Through Prof. N. C. Fassett) 162 plants (159201, 159344, exchanges).

Zoological Laboratory: (Through Prof. George Wagner) 1 hatchling turtle (159786).

WOLCOTT, GEORGE N., Rio Piedras, Puerto Rico: 3 beetles, type and 2 paratypes (152029).

WOLF, Dr. CARL B. (See under Rancho Santa Ana Botanic Garden.)

WOLFGANG, Brother WOLF, St. Bernard, Ala.: 4 plants (158926).

WOODRING, Dr. WENDELL P., Washington, D. C.: 2 land shells from California (159300).

WOODSON, Dr. ROBERT E., Jr., St. Louis, Mo.: 135 plants from Panama (158486).

WOODWARD, Mrs. SHIRLEY, Washington, D. C.: A beaded medicine bag from a Plains Indian tribe (157904).

WORK, ROBERT, Washington, D. C.: 7 fresh-water copepods taken in the District of Columbia (160118).

WORK PROJECTS ADMINISTRATION, Washington, D. C.: (Through University of Texas) A slab containing a fore and hind foot track of a sauropod dinosaur from the Glen Rose limestone, near Glen Rose, Tex. (158928);

Federal Arts Project: 54 assorted prints made for the W. P. A. (159237).

WRIGHT, Dr. A. H., Ithaca, N. Y.: (Through Harold Trapido) Snake from Palo Pinto, Tex. (159200).

WRIGHT, JOHN B. (See under Westinghouse Air Brake Co.)

WYETH, JOHN & BRO., Inc., Philadelphia, Pa.: A 14 by 18 inch colored reproduction of Dean Cornwell's painting "Osler at Old Blockley" (157261).

WYOMING, UNIVERSITY OF, Laramie, Wyo.: (Through Dr. T. H. Kearney) Plant from Arizona (159074, exchange); (through Prof. C. L. Porter) plant from New Mexico (159117).

YALE UNIVERSITY, New Haven, Conn.:

School of Forestry: (Through Prof. Samuel J. Record) 34 woody plants from the Dominican Republic (158356); 19 plants collected in the Dominican Republic (157051, exchange).

Peabody Museum of Natural History: 219 Paleozoic and Mesozoic brachiopods (157099, exchange); (through Horton H. Hobbs) 3 crayfishes, comprising holotype, allotype, and paratype of a new species (159167); (through Dr. A. E. Parr) 6 fishes, paratypes (156486, exchange).

YOUNG, FRANK N., Jr., Gainesville, Fla.: 8 beetles (157711, exchange).

YOUNG, FRED W., Chicago, Ill.: Brass bell formerly worn by the bellwether during the early days of the sheep industry in the Western United States (156439).

YOUNGER, Mrs. COLE J., Fairfield, Conn.: Plant from Connecticut (157487); a collection of ethnological objects comprising baskets from several tribes of United States and Canadian Plateau and Pacific Coast Indians, carved paddle from Cook Islands, bead and quill decorated objects from Plains Indians, pottery from Pueblo and other southwestern tribes, baskets and other objects from eastern Woodlands Indians, Japanese stone jar, a fire bellows, glassware, ceramics; historical (costume) articles as hats, fans, canes, dresses, riding crops, umbrellas; a mounted elk head (loan) several hundred lantern slides, mostly geological subjects, a large framed photograph and a transparency of the moon—all from the home of the late Mrs. Charles D. Walcott (157706, gift and loan).

ZADIG, BERTRAND, New York, N. Y.: 1 woodcut portrait of Benjamin Franklin (159301).

ZELIFF, Prof. C. C., State College, Pa.: 1 trematode (158634).

ZETEK, Dr. JAMES, Balboa, Canal Zone: 2 lots of shipworms (about 6 specimens) from Panama, including the type of a new species (158409).

ZIMMERMAN, ELWOOD C., Honolulu, Hawaii: 4 fresh-water shrimps from Suva, Fiji (148103); 15,600 beetles, among which are many rare and valuable species (159924). (See also under Bernice P. Bishop Museum.)

ZINN, DONALD J., New Haven, Conn.: 12 isopods (159378).

ZOOLOGICAL MUSEUM, Copenhagen, Denmark: 4 echinoderms (153520, exchange).

ZOOLOGICAL RESEARCH SUPPLY, Englewood, Fla.: (Through Morris Fraser) 1 fish (160133).

PUBLICATIONS ISSUED BY THE UNITED STATES NATIONAL MUSEUM DURING THE FISCAL YEAR 1940–41

REPORT

Report on the progress and condition of the United States National Museum for the year ended June 30, 1940. 8vo, iii+118 pp. January 1941.

BULLETINS

Bulletin 100, volume 13. The fishes of the groups Elasmobranchii, Holocephali, Isospondyli, and Ostariophysi obtained by the United States Bureau of Fisheries steamer *Albatross* in 1907 to 1910, chiefly in the Philippine Islands and adjacent seas. By Henry W. Fowler. 8vo, x+879 pp., 30 figs. March 10, 1941.

Bulletin 176. Life histories of North American cuckoos, goatsuckers, hummingbirds, and their allies. By Arthur Cleveland Bent. 8vo, viii+506 pp., 73 pls. July 20, 1940.

PAPERS PUBLISHED IN SEPARATE FORM

FROM BULLETIN 100

Vol. 14, part 1. Report on the Echinoidea collected by the United States Fisheries steamer *Albatross* during the Philippine Expedition, 1907–1910. Part 2: The Echinothuridae, Saleniidae, Arbaciidae, Aspidodiadomatidae, Micropygidae, Diadematidae, Pedinidae, Temnopleuridae, Toxopneustidae, and Echinometridae. By Theodor Mortensen. Pp. i–iv, 1–52, figs. 1–3, pl. 1. July 25, 1940.

FROM VOLUME 26, CONTRIBUTIONS FROM THE UNITED STATES NATIONAL HERBARIUM

Title page, table of contents, and index. Pp. i–xii, 531–554. March 6, 1941.

FROM VOLUME 86 OF THE PROCEEDINGS

Title page, table of contents, and index. Pp. i–ix, 595–626. July 22, 1940.

FROM VOLUME 87 OF THE PROCEEDINGS

No. 3077. Further studies on the opalinid ciliate infusorians and their hosts. By Maynard M. Metcalf. Pp. 465–634, figs. 21–157. October 29, 1940.

FROM VOLUME 88 OF THE PROCEEDINGS

No. 3090. Seven new species and one new genus of hydroids, mostly from the Atlantic Ocean. By C. McLean Fraser. Pp. 575–580, pls. 32, 33. September 13, 1940.

FROM VOLUME 89 OF THE PROCEEDINGS

No. 3093. Two new anuran amphibians from Mexico. By Edward H. Taylor. Pp. 43–47, pls. 1–3. August 13, 1940.

No. 3094. The West American *Haliotis*. By Paul Bartsch. Pp. 49–58, pls. 6–8. August 15, 1940.

No. 3095. Revision of the scarabaeid beetles of the phyllophagan subgenus *Listrochelus* of the United States, with discussion of related subgenera. By Lawrence W. Saylor. Pp. 59–130, figs. 1–13. November 15, 1940.

No. 3096. The Cuban operculate land mollusks of the family Annulariidae, exclusive of the subfamily Chondropominae. By Carlos de la Torre and Paul Bartsch. Pp. 131–385, i–x, pls. 9–57. April 2, 1941.

No. 3097. Seven new crayfishes of the genus *Cambarus* from Florida, with notes on other species. By Horton H. Hobbs, Jr. Pp. 387–423, figs. 14–22. November 23, 1940.

No. 3098. Echinoderms from Greenland collected by Capt. Robert A. Bartlett. By Austin H. Clark. Pp. 425–433, pls. 58, 59. February 27, 1941.

No. 3099. A revision of the keyhole urchins (*Mellita*). By Hubert Lyman Clark. Pp. 435–444, pls. 60–62. December 12, 1940.

No. 3100. *Eurhoptodes*, a remarkable new genus of Philippine cryptorhynchine weevils. By Elwood C. Zimmerman. Pp. 445–448, fig. 23. November 1, 1940.

No. 3101. The polyclad flatworms of the Atlantic coast of the United States and Canada. By Libbie H. Hyman. Pp. 449–495, figs. 24–31. February 27, 1941.

No. 3102. New species of heterocerous moths in the United States National Museum. By William Schaus. Pp. 497–511. March 6, 1941.

No. 3103. *Dinotocrinus*, a new fossil inadunate crinoid genus. By Edwin Kirk. Pp. 513–517, pl. 63. February 28, 1941.

No. 3104. A supposed jellyfish from the pre-Cambrian of the Grand Canyon. By R. S. Bassler. Pp. 519–522, pl. 64. February 27, 1941.

No. 3105. Notes on birds of the Guatemalan highlands. By Alexander Wetmore. Pp. 523–581. March 26, 1941.

FROM VOLUME 90 OF THE PROCEEDINGS

No. 3106. New fishes of the family Callionymidae, mostly Philippine, obtained by the United States Bureau of Fisheries steamer *Albatross*. By Henry W. Fowler. Pp. 1–31, figs. 1–16. April 8, 1941.

No. 3108. Synopsis of the tachinid flies of the genus *Tachinomyia*, with descriptions of new species. By Ray T. Webber. Pp. 287–304, fig. 17. June 30, 1941.

No. 3111. The Chicora (Butler County, Pa.) meteorite. By F. W. Preston, E. P. Henderson, and James R. Randolph. Pp. 387–416, fig. 19, pls. 54–59. June 17, 1941.

No. 3114. A new genus of sea stars (*Plazaster*) from Japan, with a note on the genus *Parasterina*. By Walter K. Fisher. Pp. 447–456, pls. 66–70. June 18, 1941.

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