among them being the Proceedings and Bulletins of the U. S. National Museum, and the Reports and Bulletins of the Bureau of American Ethnology.

A chief function of the scientific staff of the National Museum is to conduct original researches on the great national collections in anthropolgy, biology, geology, and engineering, and the results of these studies appear in the Bulletins and Proceedings. The Bulletins are reserved for the larger monographic works in these fields, whereas the Proceedings series provides for the publication of shorter papers, a considerable proportion of them devoted to the description of new species of mammals, birds, fishes, insects, mollusks, and other life forms discovered in the course of investigations by the staff. Up to 10 August 1946, 192 Bulletins have been issued, and 96 volumes of Proceedings, comprising 3,199 individual papers. Issued as a part of the Bulletin series are the Contributions from the National Herbarium, in which are published botanical papers by members of the Museum staff and other scientists working on the plant collections of the National Herbarium. The Bulletin series contains such works as Bent's Life Histories of North American Birds, Clark's Monograph of the Existing Crinoids, Rathbun's volumes on American Crabs, the volumes on scientific results of the Albatross Philippine Expedition, Perry's "Metallography of meteoric iron," and Standley's "Trees and shrubs of Mexico."

The Reports and Bulletins of the Bureau of American Ethnology deal with all phases of the study of the American Indians. Up to and including 1933 the Reports were issued in quarto form and contained scientific monographs in addition to the administrative reports. Thereafter only administrative reports in pamphlet form were issued, all the scientific material appearing as Bureau Bulletins in octavo size. Forty-eight of the quarto Reports were published, and 143 Bulletins have appeared. Among the more comprehensive of the Bureau publications may be mentioned the Handbook of American Indians, edited by Hodge; Kroeber's Handbook of the Indians of California; Swanton's The Indians of the southeastern United States; and the five-volume Handbook of South American Indians, edited by Steward, of which the first two volumes have just appeared.

Other series bearing the Smithsonian imprint, the titles of which indicate the content, are the Annals of the Astrophysical Observatory, Oriental Studies and Occasional Papers of the Freer Gallery of Art, Catalogs of the National Collection of Fine Arts, Publications of the Institute of Social Anthropology, and Smithsonian Special Publications.

In the hundred years of its existence, the Institution has put out some 7,500 individual publications, varying in size from 1-page leaflets to 1,000-page monographs. Some 12,000,000 copies of these have gone out—for the most part free—to libraries, scientific and educational institutions, and interested individuals—mainly scientific workers and students. Only as scientific investigations are recorded in print and put in the hands of those who can use them are they of potential benefit to mankind. Nearly all Smithsonian publications have recorded the results of fundamental researches, which, pooled with like material published by other scientific organizations, form a reservoir of basic new knowledge available to workers in economic fields. It has been said that few encyclopedias and textbooks exist that have not drawn to some extent on Smithsonian publications. However that may be, the "diffusion of knowledge" desired by James Smithson has been increasingly fostered throughout the past 100 years by the publications of the Institution.

The International Exchange Service

H. W. Dorsey

Acting Chief, International Exchanges, Smithsonian Institution

The Smithsonian International Exchange Service was started in 1849, and its operations have grown in scale from the few hundred packages of publications then handled annually to the 714,877 packages that passed through the Service in 1939, the last year before the beginning of World War II.

Two years after its establishment in 1846, the Smithsonian Institution issued the first of its long series of scientific publications. In addition to the American distribution, several hundred copies were sent the following year to scientific and other learned institutions abroad, in return for which many valuable publications were received from these institutions. To continue this desirable exchange of intelligence with the other nations of the earth, Joseph Henry appointed agents in a number of foreign countries. He then offered to other learned bodies the privilege of utilizing this Smithsonian exchange system, an offer that was promptly accepted.

Thus began a project that has grown steadily in scope and usefulness to the present day. By 1880 the cost of the exchange system to the Smithsonian became a very heavy burden, in spite of the generous granting of free ocean freight by many international steamship lines and the cooperation of our own and of foreign governments in admitting exchange shipments free of duty. Congress was appealed to for aid, and in 1881 a small appropriation was granted for the support of the system. This support has continued down to the present time, reaching approximately \$50,000 a year just before World War II. War conditions naturally disrupt the international exchange of publications, although exchanges were continued throughout the war years with all countries of the Western Hemisphere and a few in other parts of the world.

From the beginning of the Smithsonian exchange system, U. S. Government departments made use of the service for exchange of their official documents for those of other governments. In 1867 Congress passed a law systematizing this governmental interchange, and in 1873 the first shipments were made by the Institution under the new law. A few years later international conferences began in Brussels to discuss the exchange between countries, not only of governmental documents, but also of scientific and literary publications, and in 1886 a formal agreement was reached which was ratified by eight nations. Others adhered to the Brussels convention later, and with those countries that did not special arrangements were made for exchanges. The Smithsonian Institution was recognized as the official exchange agency of the United States.

Libraries, scientific societies, educational institutions, and individuals in this country who wish to distribute their publications abroad as gifts or exchanges send the separate addressed packages to the Smithsonian Institution, carriage cost paid. There they are sorted by countries and forwarded with similar shipments from other organizations to the exchange agencies in other parts of the world, where they are distributed to the addressees. Similarly, shipments of publications from exchange agencies abroad to this Institution are distributed free to addresses in this country.

The real contribution of the International Exchange Service lies in its promotion of the wide diffusion of scientific discoveries and of knowledge generally. It is often said that science knows no political boundaries, but without a general exchange of the published results of research, scientists would waste much time and effort in repeating work that had already been done elsewhere. Through the avoidance of such duplication of experimental work, progress in scientific achievement has been very greatly accelerated. The Exchange Service is a very tangible expression of the Smithsonian Institution's part in 'the diffusion of knowledge'' and also of the cooperative character of many of its activities.

The Library of the Smithsonian Institution

Leila F. Clark Librarian, Smithsonian Institution

The library of the Smithsonian Institution, founded by the Act of Organization in 1846, with the initial purpose of procuring "a complete collection of the memoirs and transactions of learned societies throughout the world and an entire series of the most important scientific and literary periodicals," has been largely built up of publications received in exchange for the Institution's own publications. From the very beginning books and journals poured in, for the unique character of the new Institution itself and the quality of its first publications excited the interest of savants abroad as well as in America.

With this fine material in charge of the first librarian, Charles C. Jewett, a man of vision, tireless energy, and contagious enthusiasm far in advance of his time in library planning, the Institution was soon in possession of a well-organized and growing scientific library which was fast becoming a national reference and bibliographical center, for bibliography too was an early concern of the Institution. Not many years passed, however, before it became obvious that the increasing needs of the library for space and money, especially for carrying on certain of Mr. Jewett's plans for its future development, could not be met except by sacrificing too large a part of the funds and equipment needed to go on with the Institution's program for scientific research, and the regents decided that Mr. Jewett's program could not be supported further. But the library continued to grow, and its adequate housing and care presented serious problems. When a considerable amount of new space in the Capitol was made available to the Library of Congress, which at that time had about the same number of volumes as the Smithsonian library, the merging of the two libraries was proposed as offering advantages to both.

Consequently, upon recommendation of Secretary Henry, Congress in 1866 passed an Act authorizing the transfer of the library of the Smithsonian Institution to the custody of the Library of Congress, with special provisions not only for the continued freedom of its use by the Institution but also, through the secretary, for the same freedom of use of the Library of Congress as that enjoyed by members of Congress. Though the Act did not specifically require the deposit of later acquisitions, it was obviously important that the continuity of the sets of serial publications should be maintained, and in the years that have passed since the original Smithsonian Deposit of some 40,000 volumes was made, almost 1,000,000 volumes and parts have been added to it.

At the time of the transfer a small basic reference collection was retained at the Institution, while a messenger went daily to the Library of Congress to borrow whatever was needed for occasional use. As time went on, and the Institution initiated or was made responsible by the Government for more and more scientific and cultural enterprises, collections of books on the special subjects of its investigations began to be needed and were acquired, often more or less independently of each other.

In 1858, the Institution's Museum had become the authorized depository of the scientific collections of the Government, and after 1876, when there was a large influx of specimens from the Centennial Exposition in Philadelphia, it was officially designated as the U. S. National Museum. With the organization of its curatorial work begun, the Museum's need for a more adequate working library became acute. Museums, especially museums of natural history, both in this country and in Europe, had been undergoing transformation from what had been, in the main, cabinets of curiosities into scientific institutions. Scientific publication by museums was increasing enormously, and there was a corresponding rise in interest in museology as a subject for serious study.

So urgent was the need for more books that Secretary Spencer F. Baird in 1881 donated his own extensive private library, a valuable collection of standard works on biology and industry, to supplement the existing small nucleus of the Museum library. In response to a special circular many of the museums and scientific societies of Europe and America contributed sets of their publications, and new exchanges for the Museum's own publications were arranged. Second copies of many of the more