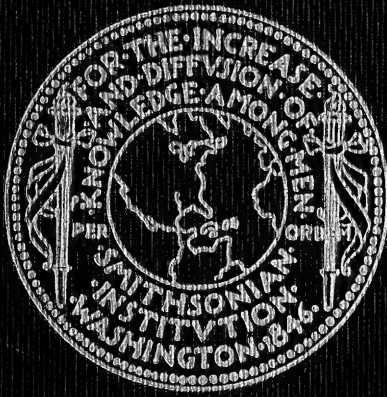


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Smithsonian Institution  
Annual report

**AUTHOR-SUBJECT INDEX**  
**TO ARTICLES IN**  
**SMITHSONIAN ANNUAL REPORTS**  
**1849-1961**

*Compiled by*  
**RUTH M. STEMPLE**  
*Florida State University Library*  
**and**  
**THE EDITORIAL AND PUBLICATIONS DIVISION**  
**SMITHSONIAN INSTITUTION**



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## PREFACE

The Smithsonian Institution was established in 1846 as the result of the bequest of James Smithson, an English scientist. He bequeathed his entire fortune to the United States of America for the purpose of founding "an establishment for the increase and diffusion of knowledge among men." For the increase of knowledge, the Institution is continuously engaged in research in many branches of science, as well as scientific expeditions to all parts of the world; the diffusion of knowledge is accomplished principally by the extensive exhibits in its museums, its art galleries, and its zoological park, and by several series of publications which are distributed throughout the world.

Probably the best known of these series is the Annual Report of the Board of Regents, usually called the Smithsonian Annual Report. A Report has been published every year since 1846, and starting with 1849 a General Appendix was included in each volume for the purpose of disseminating information on important and interesting scientific investigations. The "Advertisement" introducing the General Appendix to each volume states its function as follows:

The object of the GENERAL APPENDIX to the Annual Report of the Smithsonian Institution is to furnish brief accounts of scientific discovery in particular directions; reports of investigations made by staff members and collaborators of the Institution; and memoirs of a general character or on special topics that are of interest or value to the numerous correspondents of the Institution.

It has been a prominent object of the Board of Regents of the Smithsonian Institution from a very early date to enrich the annual report required of them by law with memoirs illustrating the more remarkable and important developments in physical and biological discovery, as well as showing the general character of the operations of the Institution; and, during the greater part of its history, this purpose has been carried out largely by the publication of such papers as would possess an interest to all attracted by scientific progress.

In 1880, induced in part by the discontinuance of an annual summary of progress which for 30 years previously had been issued by well-known private publishing firms, the Secretary had a series of abstracts prepared by competent collaborators, showing concisely the prominent features of recent scientific progress in astronomy, geology, meteorology, physics, chemistry, mineralogy, botany, zoology, and anthropology. This latter plan was continued, though not altogether satisfactorily, down to and including the year 1888.

In the report of 1889, a return was made to the earlier method of presenting a miscellaneous selection of papers (some of them original) embracing a considerable range of scientific investigation and discussion. This method has been continued to the present time.

The Smithsonian Reports are distributed by the Institution to 3,600 libraries in the United States and 1,700 libraries abroad. Although each volume includes an index, access to the valuable scientific information in the Reports has been limited by the lack of a general index to the series as a whole. With this thought in mind, Miss Ruth M. Stemple of the Florida State University Library (now at the West Virginia University Library) undertook on her own initiative to prepare such an index. The manuscript was reviewed and somewhat amplified by the Editorial and Publications Division of the Smithsonian.

The index is by authors and subjects, the subjects being sufficiently cross-indexed, it is believed, to enable users to locate any desired subject of interest to them.

The subjects treated in Smithsonian Report articles cover almost the entire gamut of scientific disciplines. If any subjects predominate, they would be in the general fields of biology, geology, and anthropology—fields with which the Smithsonian has been prominently identified during its more than a century of scientific endeavor. However, articles dealing with all other sciences will be found in the Reports, including astronomy, physics, chemistry, meteorology, medicine, and engineering.

Many of the earlier Reports contain articles of great historical interest as recording scientific discoveries which have exerted vast influence on the lives of all of us up to the present time. For example, W. C. Roentgen records in the 1897 Report his discovery of the penetrating radiation which he called X-rays. In the Report for 1911 we read Marconi's own account of his successful transmission of messages over distances by "wireless." The beginnings of practical human flight are recorded by Wilbur Wright in the 1902 Report and Orville Wright in that for 1914.

Scientific breakthroughs that led to spectacular developments are exemplified by Ernest Rutherford's article in the 1938 Report recording the successful transmutation of one element into another; by Karl K. Darrow's 1940 account of the first achievement of nuclear fission; and by Wendell M. Stanley's attempt to relate viruses to cancer, genes, and life in the Report for 1957.

Outstanding current activities in various fields of science are represented in the 1959 Report by Capt. E. B. Roberts's account of the vast scientific results of the recent International Geophysical Year, and by Ralph S. Solecki's description of the skeletons of three Neanderthal adults, who lived from 46,000 to 64,000 years ago, found in Shanidar Cave in northern Iraq; in the 1960 Report by the article "Exploring the Solar System by Radar," by Paul E. Green, Jr., and Gordon H.



Pettengill, and E. M. McCormick's description of the marvelous operations of modern digital computers.

The entire series of Reports include some 3,000 articles, many of them written by world leaders in the various branches of science. It is the hope of the Smithsonian Institution that the present author-subject index will lead to a wider acquaintance with the diversified scientific source material in Smithsonian Annual Reports covering 113 years.

LEONARD CARMICHAEL,  
*Secretary, Smithsonian Institution.*



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**EDITOR'S NOTE:** The user of this index should keep in mind that its prime purpose is to point to what subjects have been published upon in the Smithsonian Reports so far as indicated in the titles of the papers, and to list the authors and titles of the various articles. It is not an index to the detailed contents of the articles, as this would require a work of many times this size. It has been the aim in preparing the index to keep the classification as simple as possible and to avoid multiple listings under overlapping entries. Subject entries are not mutually exclusive; for example, under Anthropology one will not find brought together all the references to the subdivisions of Anthropology, such as Ethnology, Archeology, Indian Languages, etc. The title of the paper is usually the guide line. Many of the larger subjects, such as Anthropology, Antiquities, Archeology, and Birds, are subdivided mainly by geographical locality. Cross references have been inserted only where deemed most helpful. Occasionally absolute uniformity of treatment has been sacrificed for the sake of brevity and expediency. To aid in the use of the index, the names of authors of articles are printed in capitals and lower case; subjects in capitals and small capitals.

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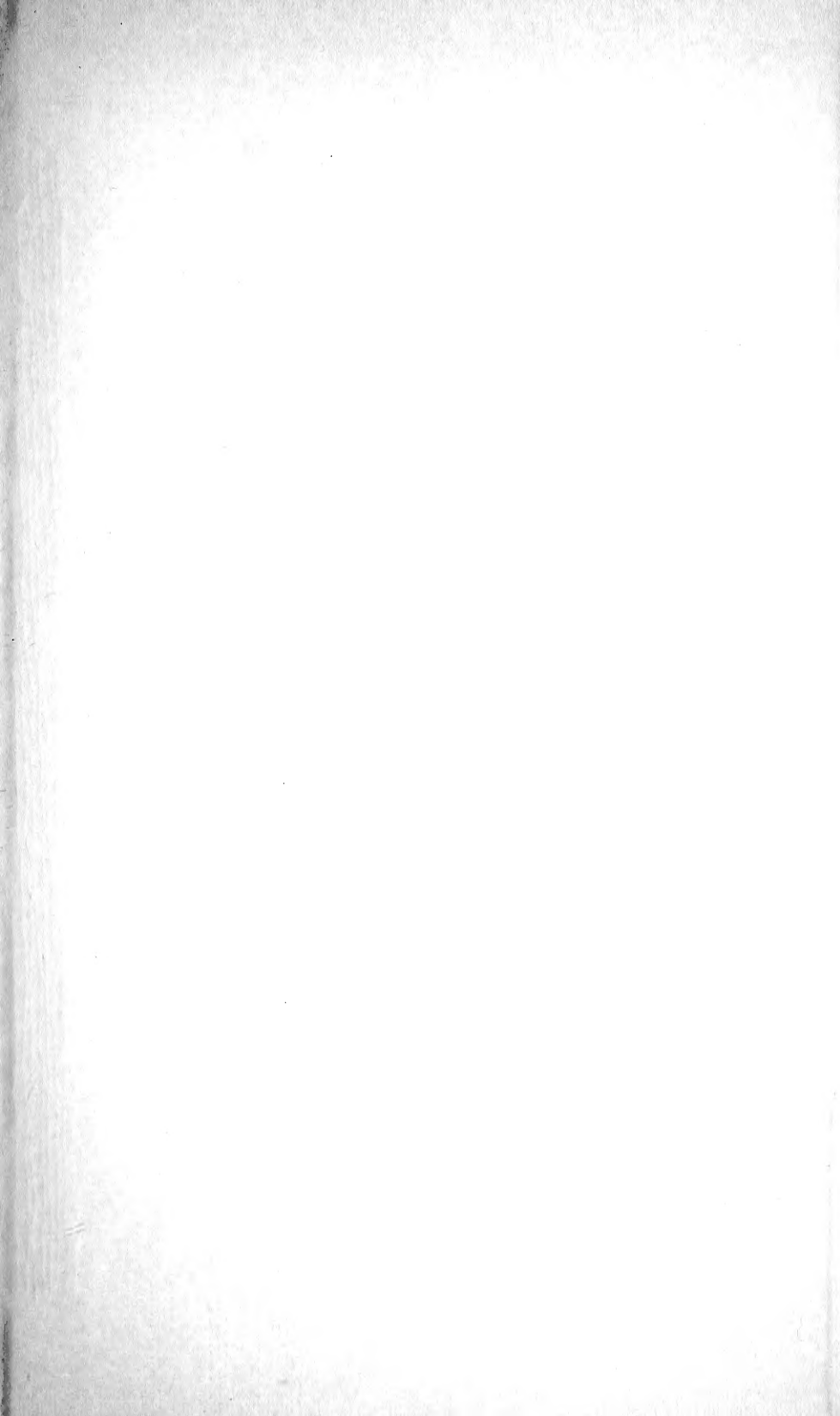












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