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Smithsonian Institution  
Annual Report

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

*Compiled by*  
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**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.*



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

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- ABACÁ**  
Introduction of abacá (manila hemp)  
into the Western Hemisphere, by  
H. T. Edwards. 1945: 327-349
- ABALONES**  
Abalones of California, by Charles  
Lincoln Edwards. 1913: 429-438
- Abbe, Cleveland, Dorpat and Poulkova.  
1867: 370-390
- Meteorology. 1884: 257-432
- Meteorology and allied subjects. 1881:  
231-331; 1882: 365-457; 1883: 483-  
569
- Progress of science as illustrated by the  
development of meteorology. 1907:  
287-309
- Abbot, Charles G., Accomplishments of  
modern astronomy. 1927: 149-166
- Architecture of atoms and a universe  
built of atoms. 1922: 157-166
- Astronomy in Shakespeare's time and  
in ours. 1936: 109-122
- Astrophysical Observatory of the  
Smithsonian Institution. 1948:  
167-174
- Contents of interstellar space. 1933:  
211-218
- Discovery of helium and what came of  
it. 1918: 121-126
- Evolution of the stars. 1926: 175-184
- Habitability of Venus, Mars, and other  
worlds. 1920: 165-171
- How deep is the ocean? 1922: 275-  
284
- How the sun warms the earth. 1933:  
149-179
- Influences of sun rays on plants and  
animals. 1926: 161-173
- N rays of M. Blondot. 1903: 207-214  
1914 tests of the Langley "aerodrome."  
1942: 111-118
- Radiation of the sun. 1912: 153-165;  
1914: 137-152
- Recent progress in astronomical re-  
search. 1906: 161-171
- Recent progress in astrophysics. 1913:  
175-194
- Solar constant of radiation. 1910: 319-  
328
- Solar radiation. 1932: 107-120
- Solar radiation as a power source.  
1943: 99-107
- Solar variation and weather. 1944:  
119-153

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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.

## Abbot, Charles G.—Continued

Solar vortices and magnetism in sun spots. 1908: 321-338

Some recent astronomical events. 1901: 153-169

Studying the sun's heat on mountain peaks in desert lands. 1920: 145-163

Twenty-five years' study of solar radiation. 1931: 175-198

Weather governed by changes in the sun's radiation. 1935: 93-115

Who will promote science? 1922: 137-143

Abbott, C. C., The Stone Age in New Jersey. 1875: 246-380

Abbott, R. Tucker, Mollusks and medicine in World War II. 1947: 325-338

## ABBOTT, W. L.

Abbott collection from the Andaman Islands, by W. E. Safford. 1901: 475-492

Abel, O., Genealogical history of the marine mammals. 1907: 473-496

Abich, Staatsrath, Remarkable forms of hailstones recently observed in Georgia [U.S.S.R.]. 1869: 420-421

## ABSOLUTE ZERO

Approach to the absolute zero of temperature, by F. Simon. 1935: 249-264

History of cold and the absolute zero, by James Dewar. 1902: 207-240

## ABSORBENT MATERIALS

Sphagnum moss: war substitute for cotton in absorbent surgical dressings, by George E. Nichols. 1916: 221-234

## ABSTRACT

New uses of the abstract, by George A. W. Boehm, 1959: 309-325

## ACACIAS

Ant acacias and acacia ants of Mexico and Central America, by W. E. Safford. 1921: 381-394

## ACADEMY OF SCIENCES OF PARIS

Historical sketch of the Academy of Sciences of Paris, by Pierre J. M. Flourens. 1862: 337-357

## ACCIDENTS

Color blindness in its relation to accidents by rail and sea, by F. Holmgren. 1877: 131-195

## ACCLIMATIZATION

Acclimatization of the white race in the Tropics, by Robert DeC. Ward. 1930: 557-576

Ackermann, A. S. E., Utilization of solar energy. 1915: 141-166

## ACOUSTICS

Acoustics applied to public buildings, by Joseph Henry. 1856: 221-234

Adams, Charles C., Outline of the relations of animals to their inland environments. 1917: 515-542

Adams, Frank D., A visit to the gem districts of Ceylon and Burma. 1926: 297-318

Adams, George I., Outline review of the geology of Peru. 1908: 385-430

Adams, Herbert B., The state and higher education. 1889: 695-710

Adams, K. T., Radio acoustic ranging. 1944: 221-238

Adams, Leason H., The earth's interior, its nature and composition. 1937: 255-268

Adams, Leason H., and Williamson, E. H., Composition of the earth's interior. 1923: 241-260

Adams, Roger, Man's synthetic future. 1952: 217-231

Adams, W. H., Mounds in Spoon River Valley, Illinois. 1879: 368-370; 1881: 558-563; 1883: 835-838

Adams, Walter S., The sun's place among the stars. 1935: 139-151

What lies between the stars? 1941: 141-149

Adler, Cyrus, Samuel Pierpont Langley. 1906: 515-533

Adrian, E. D., Brain rhythms. 1944: 453-460

Aebersold, Paul C., Radioisotopes: new keys to knowledge. 1953: 219-240

## AEROBIOLOGY.

Outdoor aerobiology, by P. H. Gregory. 1961: 445-453

## AERONAUTICS

- Aerial experiments, by Wilbur Wright. 1902: 133-148
- Aerial locomotion, by F. H. Wenham, 1889: 303-323
- Aerial navigation, by O. Chanute. 1903: 173-183
- Aeronautic research, by Joseph S. Ames. 1922: 167-174
- Aeronautic voyages performed with a view to the advancement of science, by Francis Arago. 1863: 331-349
- Autogiro: its characteristics and accomplishments, by Harold F. Pitcairn. 1930: 265-271.
- Fifty years of flying progress, by Grover Loening. 1954: 201-216
- Forty years of aeronautical research, by J. C. Hunsaker. 1955: 241-271
- International air maps and aeronautical marks, by Ch. Lallemand. 1911: 295-302
- Present status of military aeronautics, by George O. Squier. 1908: 117-144
- Progress of aeronautics, by M. Janssen. 1900: 187-193
- Recent aeronautical progress, by B. F. S. Baden-Powell. 1902: 121-131
- Research for aeronautics: its planning and application, by W. S. Farren. 1944: 251-284
- Ten years' gliding and soaring in Germany, by Walter Georgii. 1930: 273-283
- Three famous early aero engines, by Robert B. Meyer, Jr. 1961: 357-372
- Various modes of light in relation to aeronautics, by James Bell Pettigrew. 1867: 325-334
- Wings for transportation, by Theodore P. Wright. 1941: 563-583
- Wings over the sea: are landing places necessary for the commercial aerial crossing of the North Atlantic? by Louis Blériot. 1935: 453-462

Wright brothers as aeronautical engineers, by M. P. Baker. 1950: 209-223

See also AIRPLANES, AVIATION, FLIGHT, etc.

Affel, H. A., Transatlantic telephone cable. 1955: 273-298

Aflalo, F. G., Some private zoos. 1901: 689-696

## AFRICA

Cullinan diamond—a description of the big diamond recently found in the Premier Mine, Transvaal, by F. H. Hatch and G. S. Corstorphine. 1905: 211-213

Economic conquest of Africa by the railroads, by A. Fock. 1904: 721-735

From the Niger, by Lake Chad, to the Nile, by Boyd Alexander. 1909: 385-400

From the Somali coast through southern Ethiopia to the Sudan, by Oscar Neumann. 1903: 775-792

Gorillas of the Kayonsa region, western Kigezi, southwest Uganda, by C. R. S. Pitman. 1936: 253-275

Kabyles of north Africa, by A. Lisauer. 1911: 523-538

Notes on some effects of extreme drought in Waterberg, South Africa, by Eugène N. Marais. 1914: 511-522

Okapi: the newly discovered beast living in central Africa, by Harry H. Johnston. 1901: 661-666

Origin of African civilizations, by L. Frobenius. 1898: 637-650

Origin of west African crossbows, by Henry Balfour. 1910: 635-650

Soil erosion: the growth of the desert in Africa and elsewhere, by Daniel Hall. 1938: 303-315

Some geographical aspects of the Nile, by H. G. Lyons. 1908: 481-503

Some remarks on the protective resemblance of South African birds, by Alwin Haagner. 1909: 493-504

## AFRICA—Continued

- Stanley and the map of Africa, by J. Scott Keltie. 1890: 277-291  
 Through Africa from Cape to Cairo, by Ewart S. Grogan. 1900: 431-448  
*See also* names of countries

Agassiz, Alexander, Gulf stream. 1891: 189-206

## AGASSIZ, ALEXANDER

Alexander Agassiz, 1835-1910, by Alfred Goldsborough Mayer. 1910: 447-472

## AGASSIZ, LOUIS JEAN RODOLPHE

Louis Agassiz, by Rufus P. Stebbins. 1873: 198-210

Louis Agassiz: a biographical notice, by Ernest Favre. 1878: 236-261

## AGE

Old age, by Elie Metchnikoff. 1904: 533-550

## AGE DETERMINATION

Carbon-14 method of age determination, by Frank H. H. Roberts, Jr. 1951: 335-350

Agnew, Samuel A., Mounds in Mississippi. 1867: 404-406

## AGRICULTURE

Debt of agriculture to tropical America, by O. F. Cook. 1931: 491-501  
 Foot-plow agriculture in Peru, by O. F. Cook. 1918: 487-491

Grassland and farmland as factors in the cyclical development of Eurasian history, by J. Russell Smith. 1944: 357-384

Milpa agriculture, a primitive tropical system, by O. F. Cook. 1919: 307-326

*See also* FARMS

## AIR

Outdoor aerobiology, by P. H. Gregory. 1961: 445-453

Relations of air and water to temperature and life, by Gardiner G. Hubbard. 1893: 265-275

*See also* ATMOSPHERE

## AIR CURRENTS

Holes in the air, by W. J. Humphreys. 1912: 257-268

Jet streams, by R. Lee. 1957: 293-302  
 Nature of currents of air, by A. Colding. 1877: 447-462

## AIRPLANES

Aerial locomotion, by F. H. Wenham. 1889: 303-323

Comparison of propeller and reaction propelled airplane performances, by Benson Hamlin and F. Spenceley. 1947: 429-457

Experiments with the Langley aerodrome, by Samuel Pierpont Langley. 1904: 113-125

First man-carrying aeroplane capable of sustained free flight—Langley's success as a pioneer in aviation, by A. F. Zahm. 1914: 217-222

Langley aerodrome. 1900: 197-216  
 1914 tests of the Langley "aerodrome," by C. G. Abbot. 1942: 111-118

Stability of aeroplanes, by Orville Wright. 1914: 209-216

*See also* AERONAUTICS, AVIATION, DIRIGIBLES, FLIGHT

## AIR POLLUTION

Air of the New York subway prior to 1906, by George A. Soper. 1907: 647-667

Atmospheric pollution in growing communities, by François N. Frenkiel. 1956: 269-299

Problems in smoke, fume, and dust abatement, by F. G. Cottrell. 1913: 653-685

AIR SHIPS, *see* DIRIGIBLES, BALLOONS

## AIR TRANSPORT

Modern trends in air transport, by W. F. Durand. 1939: 513-532

Wings for transportation (recent developments in air transportation equipment), by Theodore R. Wright. 1941: 563-583

Aitken, John, Phenomena connected with cloudy condensation. 1893: 201-230

## ALABAMA

Mica beds in Alabama, by William Gesner. 1879: 382

## ALABAMA—Continued

Shell heaps on Mobile River, by A. S. Gaines and K. M. Cunningham. 1877: 290-291

## ALASKA

Archeology and ecology of the Arctic slope of Alaska, by Ralph S. Solecki. 1950: 469-495

Atnatanas: natives of Copper River, Alaska, by Henry T. Allen. 1886: 258-266

Bogoslof volcanoes, by C. Hart Merriam. 1901: 367-375

Condition of wild life in Alaska, by Madison Grant. 1909: 521-529

Exploration to Mount McKinley, America's highest mountain, by Alfred H. Brooks. 1903: 407-425

Flora of Alaska, by J. T. Rothrock. 1867: 433-463

Indian villages of southeast Alaska, by Herbert W. Krieger. 1927: 467-494

Journey to the Youcan, Russian America, by W. W. Kirby. 1864: 416-420

Klondike and Yukon goldfield in 1913, by H. M. Cadell. 1914: 363-382

Reindeer in Alaska, by Gilbert H. Grosvenor. 1902: 613-623

## ALBERT I OF MONACO, PRINCE

Anthropological work of Prince Albert I of Monaco, and the recent progress of human paleontology in France, by Marcellin Boule. 1923: 495-507

## ALCHEMY

Battle of the alchemists, by Karl T. Compton. 1933: 269-282

Revival of alchemy, by H. Carrington Bolton. 1897: 207-217

Alderman, Arthur Richard, Meteorite craters at Henbury, central Australia. 1932: 223-234

Aldrich, J. M., Division of insects in the United States National Museum. 1919: 367-379

Alexander, Boyd, From the Niger, by Lake Chad, to the Nile. 1909: 385-400

Alexander, C. A., Microscope. 1860: 344-354

Origin and history of the Royal Society of London. 1863: 137-152

Preservation of wood. 1864: 196-205

Alexander, Stephen, Relations of time and space. 1861: 140-148

Vastness of the visible creation. 1857: 169-178

## ALGAE

Algal pillars miscalled geyser cones, by Roland W. Brown. 1948: 277-282

Cultivating algae for scientific research, by Florence E. Meier. 1932: 373-383

Marine algae, by William Henry Harvey. 1855: 87-130

Those ubiquitous plants called algae, by Florence E. Meier. 1935: 409-428

Useful algae, by Florence Meier Chase. 1941: 401-452

## ALIMENTATION

Theory of energy and the living world; physiology of alimentation, by A. Dastre. 1898: 515-549

## ALKALI SALTS

Alkali problem in irrigation, by Carl S. Scofield. 1921: 213-223

## ALLANTOIN

The healing properties of allantoin and urea discovered through the use of maggots in human wounds, by William Robinson. 1937: 451-461

Allard, H. A., Our insect instrumentalists and their musical technique. 1928: 563-591

Allard, H. A., and Garner, W. W., Effect of the relative length of day and night on flowering and fruiting of plants. 1920: 569-588

Allen, Gordon, and Dobzhansky, Theodosius, Does natural selection continue to operate in modern mankind? 1958: 359-374

- Allen, Harrison, Biographical sketch of John Adam Ryder. 1896: 673-687
- Allen, Henry T., Atnatanas: natives of Copper River, Alaska. 1886: 258-266
- Allen, Joel A., Influence of physical conditions in the genesis of species. 1905: 375-402
- Allen, T., Explosibility of coal oils. 1861: 330-342
- ALLOYS
- Rarer metals and their alloys, by W. Chandler Roberts-Austen. 1896: 497-515
- ALPHABETS
- Origin of the Canaanite alphabet, by Franz Praetorius. 1907: 595-604
- ALPS
- Great Alpine tunnels, by Francis Fox. 1901: 617-630
- ALUMINUM
- Alloys of aluminum, by J. H. Dagger. 1889: 725-727
- Aluminum, by H. C. Hovey. 1889: 721-725
- ALUMINUM SULPHATE
- Effect of aluminum sulphate on rhododendrons and other acid-soil plants, by Frederick W. Coville. 1926: 369-382
- Alvarez, Walter C., Emergence of modern medicine from ancient folkways. 1937: 409-430
- AMBERGRIS
- Ambergris—Neptune's treasure, by C. P. Idyll. 1959: 377-383
- AMBLYSTOMA
- Change of the Mexican axolotl to an amblystoma, by August Weismann. 1877: 349-375
- AMERICA, ANCIENT
- Food plants of ancient America, by O. F. Cook. 1903: 481-497
- Population of ancient America, by H. J. Spinden. 1929: 451-471
- AMERICANS—ABORIGINAL
- Advent of man in America, by Armand de Quatrefages. 1892: 513-520
- Prehistoric culture waves from Asia to America, by Diamond Jenness. 1940: 383-396
- Race history and facial characteristics of the aboriginal Americans, by W. H. Holmes. 1919: 427-432
- See also INDIANS
- AMERRIQUE INDIANS
- Amerriques, Amerigho Vespucci, and America, by Jules Marcou. 1888: 647-673
- Ames, Joseph S., Aeronautic research. 1922: 167-174
- AMMABROMA
- A rare parasitic food plant of the Southwest, by Frank A. Thackery and M. French Gilman. 1930: 409-416
- Ammann, Othmar H., Broddingnagian bridges. 1931: 571-577
- AMPÈRE, ANDRÉ MARIE
- Eulogy on Ampère, by Francis Arago. 1872: 111-171
- AMPHIBIANS
- Amphibians, pioneers of terrestrial breeding habits, by Coleman J. Goin. 1959: 427-445
- Amundsen, Roald, Expedition to the South Pole. 1912: 701-716
- To the North Magnetic Pole and through the Northwest Passage. 1906: 249-273
- ANATOMY
- Recent advances in the study and techniques of anatomy, by Paul G. Roope and Samuel W. Leshner. 1952: 327-342
- ANCESTOR WORSHIP
- Ancestor worship of the Hopi Indians, by J. Walter Fewkes. 1921: 485-506
- ANCHOR STONES
- Anchor stones, by B. F. Snyder. 1887: 683-688
- ANDAMAN ISLANDS
- Abbott collection from the Andaman Islands, by W. E. Safford. 1901: 475-492
- Anderson, Carl D., Elementary particles of physics. 1949: 203-212



- Anderson, Carl D.—Continued  
New facts about the nucleus of the atom. 1935: 235-247
- Anderson, Edgar, Man as a maker of new plants and new plant communities. 1956: 461-479
- Anderson, J. Gunnar, *In Nordenskiöld, Otto*, q.v.
- Anderson, Martin B., Sketch of the life of Chester Dewey. 1870: 231-240
- Anderson, Tempest, and Flett, John S., Preliminary report on the recent eruption of the Soufrière in St. Vincent, and of a visit to Mont Pelée in Martinique. 1902: 309-330
- Anderson, W., Antiquities of Perry County, Ohio. 1874: 386
- Anderson, William, Molecular structure of matter. 1889: 711-720
- Anderson, William Gilbert, Mounds near Quincy, Illinois, and in Wisconsin. 1879: 341-344
- ANDRÉE, S. A.  
Letters from the Andrée party. 1897: 401-412
- Andrews, C. W., Recently discovered Tertiary Vertebrata of Egypt. 1906: 295-307
- Andrews, Frank D., Indian relics from Schoharie, N.Y. 1879: 391
- Andrews, Loring B., Earth, sun, and sunspots. 1936: 137-144
- ANESTHETICS  
Recent advances in anesthesia, by John C. Krantz. 1944: 467-476
- ANIMALS  
Animal as a prime mover, by R. H. Thurston. 1896: 297-328  
Animal behavior, by Ernest P. Walker. 1940: 271-312  
Animal life at high altitudes, by R. W. G. Hingston. 1925: 337-347  
Animal societies, from slime molds to man, by R. E. Snodgrass. 1960: 425-445  
Animals that hunt, by Henri Coupin. 1903: 567-571  
Applied systematics: usefulness of scientific names of animals and plants, by Waldo L. Schmitt. 1953: 323-337  
Care of captive animals, by Ernest P. Walker. 1941: 305-366  
Ecology, evolution, and distribution of the vertebrates, by Austin H. Clark. 1952: 282-303  
Experimental studies on the mental life of animals, by N. Vaschide and P. Rousseau. 1903: 545-566  
Eyes that shine at night, by Ernest P. Walker. 1938: 349-360  
Fauna of America, by Austin H. Clark. 1951: 287-302  
Flight of animals, by James Gray. 1954: 285-303  
Laws of orientation among animals, by G. Reynaud. 1898: 481-498  
Life history studies of animals, by L. C. Miall. 1897: 483-506  
More about animal behavior, by Ernest P. Walker. 1949: 261-292  
Outline of the relations of animals to their inland environments, by Charles C. Adams. 1917: 515-542  
Parasites common to animals and man, by Benjamin Schwartz. 1955: 419-431  
Restoration of extinct animals, by Frederic A. Lucas. 1900: 479-492  
Rhythmic nature of animals and plants, by Frank A. Brown, Jr. 1959: 385-406  
Sources of animal behavior, by G. P. Wells. 1956: 415-429  
Survival of animals in hot deserts, by E. B. Edney. 1959: 407-425  
*See also* BIRDS, MAMMALS, etc., and names of animals
- ANIMALS—EUROPE  
Derivation of the European domestic animals, by C. Keller. 1912: 483-491
- ANIMALS—TIBET  
Some Tibetan animals, by R. Lydekker. 1904: 429-435
- ANTARCTICA  
Antarctic exploration, by G. S. Griffiths. 1890: 293-304  
Antarctic land of Victoria from the voyage of the *Discovery*, by Maurice Zimmerman. 1909: 331-353

## ANTARCTICA—Continued

- Antarctica: a vanished austral land, by Henry O. Forbes, 1894: 297-316
- First crossing of Antarctica, by Lincoln Ellsworth. 1937: 307-321
- Paleogeographical relations of Antarctica, by Charles Hedley. 1912: 443-453
- Penguins of the Antarctic regions, by L. Gain. 1912: 475-482
- Promotion of further discovery in the Arctic and Antarctic regions, by Clements R. Markham. 1894: 317-341
- Renewal of Antarctic exploration, by John Murray. 1893: 353-373

## ANTARCTIC EXPEDITIONS

- Antarctic question: voyages to the South Pole since 1898, by J. Machat. 1908: 451-480
- Antarctic voyage of the *Belgica* during 1897, 1898, and 1899, by Henryk Arctowski. 1901: 377-388
- Expedition to the South Pole, by Roald Amundsen. 1912: 701-716
- First year's work of the National Antarctic Expedition, by Clements R. Markham. 1903: 459-465
- Geological results of the Byrd Antarctic expedition, by Laurence M. Gould. 1932: 235-250
- Ronne Antarctic research expedition 1946-1948, by Finn Ronne. 1949: 369-393
- Scientific advantages of an Antarctic expedition, by John Murray. 1897: 413-436
- Some results of the British Antarctic expedition of 1907-1909, by E. H. Shackleton. 1909: 355-368
- Swedish Antarctic expedition, by Otto Nordenskiöld et al. 1903: 467-479

## ANTENNAE

- Homoeotic regeneration of the antennae in a phasmid or walking-stick, by H. O. Schmit-Jensen. 1914: 523-536
- Antevs, Ernst, Late-glacial clay chronology of North America. 1931: 313-324

## ANTEVS, ERNST

- Research Corporation awards to A. E. Douglass and Ernst Antevs for researches on chronology. 1931: 303-324
- Anthony, M., Evolution of the human foot. 1903: 519-535
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