

Interdependence of Stratigraphy and Paleontology: W. J. Sinclair, E. O. Ulrich.

Biologic Principles of Paleogeography: Charles Schuchert, F. H. Knowlton.

Paleontologic Evidences of Climate: T. W. Stanton, David White.

Migration: Henry S. Williams, Arthur Hollick.

Paleontologic Evidences of Adaptive Radiation: H. Fairfield Osborn.

Anatomy and Physiology in Extinct Organisms: Charles R. Eastman, Rudolf Ruedemann.

Contributions to Morphology from Paleontology: Wm. Bullock Clark, Charles D. Walcott.

Embryology and Paleontology: Richard S. Lull, William H. Dall.

Ontogeny and Paleontology: F. B. Loomis, Amadeus W. Grabau.

Phylogeny and Paleontology: Robert T. Jackson, D. P. Penhallow.

Paleontologic Evidences of Recapitulation: E. R. Cumings, L. Hussakof.

Isolation in Paleontology: John M. Clarke.

Continuity of Development from the Paleontologic Standpoint: W. D. Matthew, T. Wayland Vaughan.

Paleontology of Man: S. W. Williston, John C. Merriam.

#### THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

##### SECTION B, PHYSICS AND THE AMERICAN PHYSICAL SOCIETY

At the Boston meeting of the American Association for the Advancement of Science, Section B and the American Physical Society, will in general hold joint sessions for reading papers. The presiding officers will be Dr. L. A. Bauer, of Washington, chairman of Section B, and Professor Henry Crew, of Northwestern University, president of the Physical Society. The address of the retiring vice-president of Section B will be given by Professor Karl E. Guthe, of the University of Michigan. Section B will hold one joint session with Section A, at which several distinguished scientists have promised papers which will be of interest to other sections. Another session will be given to the discussion of the teaching of physics, perhaps in conjunction with Section L.

The program of special papers on research topics will be in charge of the secretary of the

Physical Society and titles should be sent to him at Ithaca, N. Y. All titles should be in his hands by December 14, accompanied by a suitable abstract.

ERNEST MERRITT,  
*Sec. Am. Physical Soc.*

ALFRED D. COLE,  
*Sec. of Section B, A. A. A. S.*

##### SECTION A, MATHEMATICS AND ASTRONOMY

ARRANGEMENTS have been made for two joint sessions of Section A. The first of these is to be held jointly with Section B on Tuesday afternoon, December 28, and the second is to be a joint session with the American Mathematical Society on Wednesday morning. The vice-presidential address of Section B is to be given during the former of these sessions and that of Section A during the latter. The section will organize on Monday morning, and the sessions of Monday afternoon and Tuesday morning will be devoted almost exclusively to astronomical papers. Titles and abstracts should reach the secretary before December 15.

G. A. MILLER,  
*Secretary of Section A*

##### SECTION F, ZOOLOGY

OWING to a clerical error, the preliminary announcement of the Boston meeting wrongly states that a joint session will probably be arranged between Section F and the American Society of Zoologists. The officers of Section F proposed a plan for referring to the American Society of Zoologists the reading of all worthy zoological papers by authors who are not members of that society; but it was rejected by a vote "to keep the meetings of the American Society of Zoologists entirely independent." As a result, it is planned by the officers of Section F to hold on Friday, December 31, a meeting for reading of papers by members of that section who do not on their personal responsibility arrange for presenting their papers in the meetings of the American Society of Zoologists or elsewhere. On the days when that society is reading technical papers, Section F will offer a series of programs designed to appeal to the intelligent public and to men of science who are not primarily zoologists. Thus the conflicting

meetings which so much disturbed the equanimity of zoologists at Baltimore last year will be entirely avoided.

M. A. BIGELOW,  
*Secretary of Section F*

#### THE CONVOCATION WEEK MEETINGS OF SCIENTIFIC SOCIETIES

THE American Association for the Advancement of Science and the national scientific societies named below will meet at Boston, Mass., during convocation week, beginning on December 27, 1909.

*American Association for the Advancement of Science.*—Retiring president, Professor T. C. Chamberlin, University of Chicago; president, Dr. David Starr Jordan, of Stanford University; permanent secretary, Dr. L. O. Howard, Cosmos Club, Washington, D. C.; general secretary, Professor Dayton C. Miller, Case School of Applied Science, Cleveland, Ohio.

*Local Executive Committee.*—H. W. Tyler, chairman; Thomas Barbour, J. S. Kingsley, Edward R. Warren, John Warren, George W. Swett, secretary.

*Section A, Mathematics and Astronomy.*—Vice-president, Professor Ernest W. Brown, Yale University; secretary, Professor G. A. Miller, University of Illinois, Urbana, Illinois.

*Section B, Physics.*—Vice-president, Dr. Louis A. Bauer, Carnegie Institution, Washington, D. C.; secretary, Professor A. D. Cole, Vassar College, Poughkeepsie, N. Y.

*Section C, Chemistry.*—Vice-president, Professor William McPherson, Ohio State University; secretary, C. H. Herty, University of North Carolina, Chapel Hill, N. C.

*Section D, Mechanical Science and Engineering.*—Vice-president, Professor John F. Hayford, Northwestern University; secretary, G. W. Bissell, Michigan Agricultural College, East Lansing, Mich.

*Section E, Geology and Geography.*—Vice-president, Reginald W. Brook, Canadian Geological Survey; secretary, F. P. Gulliver, Norwich, Conn.

*Section F, Zoology.*—Vice-president, Professor William E. Ritter, La Jolla, Cal.; secretary, Professor Morris A. Bigelow, Columbia University, New York City.

*Section G, Botany.*—Vice-president, Professor David Penhallow, McGill University; secretary, Professor H. C. Cowles, University of Chicago, Chicago, Ill.

*Section H, Anthropology.*—Vice-president, Dr. W. H. Holmes, Bureau of American Ethnology; secretary, Dr. George Grant MacCurdy, Yale University, New Haven, Conn.

*Section I, Social and Economic Science.*—Vice-president, Byron W. Holt, 54 Broad St., New York City; secretary, Dr. John Franklin Crowell, 44 Broad St., New York City.

*Section K, Physiology and Experimental Medicine.*—Vice-president, Professor C. S. Minot, Harvard Medical School; secretary, Dr. Wm. J. Gies, College of Physicians and Surgeons, Columbia University, New York City.

*Section L, Education.*—Vice-president, Dean James E. Russell, Columbia University; secretary, Professor C. R. Mann, University of Chicago, Chicago, Ill.

*The American Society of Naturalists.*—December 29. President, Professor T. H. Morgan, Columbia University; secretary, Dr. H. McE. Knowler, University of Toronto, Toronto, Can. *Central Branch.* President, Professor R. A. Harper, University of Wisconsin; secretary, Professor Thomas G. Lee, University of Minnesota, Minneapolis, Minn.

*The American Mathematical Society.*—December 28–30. President, Professor Maxime Bôcher, Harvard University; secretary, Professor F. N. Cole, 501 West 116th St., New York City.

*American Federation of Teachers of the Mathematical and Natural Sciences.*—December 27, 28. President, Professor H. W. Tyler, Massachusetts Institute of Technology; secretary, Professor C. R. Mann, University of Chicago, Chicago, Ill.

*The American Physical Society.*—President, Professor Henry Crew, Northwestern University; secretary, Professor Ernest Merriitt, Cornell University, Ithaca, N. Y.

*The American Chemical Society.*—December 27–31. President, Dr. Willis R. Whitney, General Electric Company, Schenectady, N. Y.; secretary, Professor Charles L. Parsons, New Hampshire College, Durham, N. H.

*The Geological Society of America.*—December 29, 31. President, Dr. G. K. Gilbert, U. S. Geological Survey; secretary, Dr. E. O. Hovey, American Museum of Natural History, New York City.

*The Association of American Geographers.*—December 30–January 1. President, Professor W. M. Davis, Harvard University; secretary, Professor Albert P. Brigham, Colgate University, Hamilton, N. Y.

*The American Society of Vertebrate Paleontologists.*—December 27–29. President, Dr. J. C.