

THE PALEONTOLOGICAL SOCIETY

THE second annual meeting of the society will be held in the Carnegie Museum, Pittsburgh, Pa., beginning Wednesday morning, December 28, at 10 o'clock. President Charles Schuchert will preside over the meeting. The program will include a conference on the Criteria in Paleozoic Paleogeography, with the following subjects for discussion:

The Nature of Tertiary and Modern Marine Faunal Barriers and Currents, by William H. Dall.

The Value of Floral Evidence in Marine Strata as indicative of Nearness of Shores, by David White.

Are the Fossils of Dolomites indicative of Shallow, Highly Saline and Warm Seas? by Stuart Weller.

Were the Habitats of Reef-making Tabulata and Tetracoralla similar to those of Living Hexacoralla? by T. Wayland Vaughan.

The Stratigraphic Significance of the Wide Distribution of Graptolites, by Rudolph Ruedemann.

The Stratigraphic Significance of Bryozoa, by Edward O. Ulrich.

The Stratigraphic Significance of Brachiopoda, by Charles Schuchert.

The Stratigraphic Significance of Ostracoda, by R. S. Bassler.

The Relation of the Paleozoic Arthropods to the Strand Line, by John M. Clarke.

The Paleogeographic Significance of Land Vertebrates in Paleozoic Strata, by S. W. Williston.

MECHANICAL SCIENCE AND ENGINEERING
IN THE AMERICAN ASSOCIATION

THERE have been promised the following papers for Thursday morning, December 29:

A. H. Blanchard: (a) "Comparison of English and American Traffic Regulations," (b) "Relations between Modern Traffic and the Alignment and Profile of Highway Design," (c) "The Present Status of the Use of Bituminous Materials in Road Construction in the U. S."

A. H. Blanchard and I. W. Patterson: "Methods of taking Traffic Census on Highways."

A. N. Johnson: "The Science of Highway Building."

E. F. Chandler: "The Amount of Stream Flow in the Northern Prairies."

F. W. McNair: "Consequence of the Solution of Air in a Hydraulic Air Compressor."

The program for Friday will be a symposium on aeronautics and related subjects. An appreciation of Dr. Chanute and his work by one or two members of the section will be given. The papers thus far promised are as follows:

J. Ansel Brooks: "A Study of Aviation in Europe during the Summer of 1910."

R. W. Wilson: "Determination of the Altitudes of Aeroplanes by Triangulation."

S. P. Ferguson: "An Indicator for Determining the Efficiency of Aeroplanes."

C. H. Peabody: "Technical Education in Aeronautics."

W. J. Humphreys: "Permanent Winds."

On Wednesday afternoon, the section will meet in joint session with Section B to hear the vice-presidential addresses of Professor J. F. Hayford and Professor L. A. Bauer. Other papers than those listed are partially promised and still others will be brought in between now and the dates of the meetings of the section.

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 Minneapolis, during convocation week, beginning on December 27, 1910.

American Association for the Advancement of Science.—Retiring president, Dr. David Starr Jordan, of Stanford University; president, Professor A. A. Michelson, University of Chicago; permanent secretary, Dr. L. O. Howard, Smithsonian Institution, Washington, D. C.

Local Executive Committee.—Wilbur F. Decker, chairman; Frederic E. Clements, secretary; Leroy J. Boughner, Frederic B. Chute, James F. Corbett, James F. Ells, Wallace G. Nye, Henry F. Nachtrieb, Edward E. Nicholson, Francis C. Shenehon, Albert F. Woods, Frederick J. Wulling.

Section A—Mathematics and Astronomy.—Vice-president, Professor E. H. Moore, University of Chicago; secretary, Professor G. A. Miller, University of Illinois, Urbana, Ill.

Section B—Physics.—Vice-president, Dr. E. B. Rosa, Bureau of Standards, Washington, D. C.;

secretary, Professor A. D. Cole, Ohio State University, Columbus, O.

Section C—Chemistry.—Vice-president, Professor G. B. Frankforter, University of Minnesota; secretary, Professor C. H. Herty, University of North Carolina, Chapel Hill, N. C.

Section D—Mechanical Science and Engineering.—Vice-president, Professor A. L. Rotch, Blue Hill Meteorological Observatory; secretary, G. W. Bissell, Michigan Agricultural College, East Lansing, Mich.

Section E—Geology and Geography.—Vice-president, Dr. John M. Clarke, state geologist of New York, Albany, N. Y.; secretary, F. P. Gulliver, Norwich, Conn.

Section F—Zoology.—Vice-president, Professor Jacob Reighard, University of Michigan; secretary, Maurice A. Bigelow, Columbia University, New York, N. Y.

Section G—Botany.—Vice-president, Professor R. A. Harper, University of Wisconsin; secretary, H. C. Cowles, University of Chicago, Chicago, Ill.

Section H—Anthropology and Psychology.—Vice-president, Professor Roland B. Dixon, Harvard University; secretary, George Grant MacCurdy, Yale University, New Haven, Conn.

Section I—Social and Economic Science.—Vice-president, the Hon. T. E. Burton, Cleveland, Ohio; secretary, Fred. C. Croxton, 1229 Girard Street, Washington, D. C.

Section K—Physiology and Experimental Medicine.—Vice-president, Professor F. G. Novy, University of Michigan; secretary, George T. Kemp, Hotel Beardsley, Champaign, Ill.

Section L—Education.—Vice-president, President A. Ross Hill, University of Missouri; secretary, Charles Riborg Mann, University of Chicago, Chicago, Ill.

Permanent Secretary (for five years)—Dr. L. O. Howard, Washington, D. C.

General Secretary—Professor Frederic E. Clements, University of Minnesota.

Secretary of the Council—Professor John Zeleny, University of Minnesota.

American Mathematical Society (Chicago Section).—December 28–30.

American Federation of Teachers of the Mathematical and Natural Sciences.—December 28–29. President, Professor C. R. Mann, University of Chicago; secretary, Eugene R. Smith, Polytechnic Preparatory School, Brooklyn, N. Y.

The American Physical Society.—President, Professor Henry Crew, Northwestern University;

secretary, Professor Ernest Merritt, Cornell University, Ithaca, N. Y.

The American Chemical Society.—December 28–31. President, Professor Wilder D. Bancroft, Cornell University; secretary, Professor Charles L. Parsons, New Hampshire College, Durham, N. H.

The American Society of Zoologists (Central Branch).—December 29–30.

The Entomological Society of America.—December 27–28. President, Professor John B. Smith, Rutgers College; secretary, C. R. Crosby, 43 East Avenue, Ithaca, N. Y.

The Association of Economic Entomologists.—December 28, 29. President, Professor E. D. Sanderson, Morgantown, W. Va.; secretary, A. F. Burgess, Melrose Highlands, Mass.

The Botanical Society of America.—December 28–31. President, Dr. Erwin F. Smith, U. S. Department of Agriculture; secretary, Dr. George T. Moore, Missouri Botanical Garden, St. Louis, Mo.

Botanists of the Central States.—Secretary, Dr. Henry C. Cowles, University of Chicago, Chicago, Ill.

American Phytopathological Society.—December 28–30. President, Dr. F. L. Stevens, North Carolina College of Agriculture and Mechanic Arts; secretary, Dr. C. L. Shear, U. S. Department of Agriculture, Washington, D. C.

American Microscopical Society.—December 28, 29. Secretary, Dr. Thomas W. Galloway, James Millikin University, Decatur, Ill.

American Nature Study Society.—January 1. President, Professor Otis W. Caldwell, University of Chicago; secretary, Professor Fred L. Charles, University of Illinois, Urbana, Ill.

Sullivant Moss Society.—December 27–28. Acting secretary, Dr. George H. Conklin, 1204 Tower Avenue, Superior, Wis.

The American Psychological Association.—December 29–31. President, Professor J. H. Pillsbury, University of Michigan; secretary, Professor A. H. Pierce, Smith College, Northampton, Mass.

ITHACA

The American Society of Naturalists.—December 29. President, Dr. D. T. MacDougal, Desert Botanical Laboratory, Tucson, Ariz.; secretary, Dr. Charles R. Stockard, Cornell Medical School, New York City.

The American Society of Zoologists (Eastern Branch).—December 28–30. President, Professor Thomas H. Montgomery, Jr., University of Penn-

sylvania, secretary, Dr. Herbert Rand, Harvard University, Cambridge, Mass.

The Association of American Anatomists.—December 28–30. President, Professor George A. Piersol, University of Pennsylvania; secretary, Professor G. Carl Huber, 1330 Hill St., Ann Arbor, Mich.

The Society of American Bacteriologists.—December 28–30. President, Professor V. A. Moore, Cornell University; secretary, Charles E. Marshall, Michigan Agricultural College, East Lansing, Mich.

NEW HAVEN

The American Physiological Society.—December 27–29. President, Professor W. H. Howell, Johns Hopkins University; secretary, Professor A. J. Carlson, University of Chicago.

The American Society of Biological Chemists.—December 28–30. President, Thomas B. Osborne, Connecticut Agricultural College; secretary, Dr. Alfred M. Richards, University of Pennsylvania, Philadelphia, Pa.

PITTSBURGH

The Geological Society of America.—December 29, 31. President, Dr. Arnold Hague; secretary, Dr. E. O. Hovey, American Museum of Natural History, New York City.

The Association of American Geographers.—December 30–January 1. President, Professor Henry C. Cowles, University of Chicago; secretary, Professor Albert P. Brigham, Colgate University, Hamilton, N. Y.

The American Paleontological Society.—December 28–29. Secretary, Dr. R. S. Bassler, U. S. National Museum, Washington, D. C.

PROVIDENCE

The American Anthropological Association.—December 28–31. President, Dr. W. H. Holmes, Bureau of Ethnology; secretary, Dr. Geo. Grant MacCurdy, Yale University, New Haven, Conn.

The American Folk-lore Society.—Week of December 29. President, Dr. Henry M. Belden, University of Missouri; secretary, C. Peabody, Harvard University, Cambridge, Mass.

NEW YORK CITY

The American Mathematical Society.—December 28–29. President, Professor Maxime Bôcher, Harvard University; secretary, Professor F. N. Cole, 501 West 116th St., New York City.

SCIENTIFIC NOTES AND NEWS

DR. CHARLES OTIS WHITMAN, head of the department of zoology of the University of

Chicago since 1892 and director of the Woods Hole Marine Biological Station for twenty years, died of pneumonia at his home at Chicago on December 6.

MR. R. A. SAMPSON, F.R.S., professor of mathematics and astronomy in the University of Durham, has been named astronomer royal for Scotland and professor of practical astronomy in the University of Edinburgh, in succession to Mr. F. W. Dyson, F.R.S.

SIR JOSEPH JOHN THOMSON, Cavendish professor of experimental physics at Cambridge, and Sir Victor Horsley, the London surgeon, have been elected corresponding members of the Prussian Royal Academy of Sciences.

LORD AVEBURY has been elected a corresponding member of the Paris Academy of Sciences in the section of anatomy and zoology.

WE learn from *Nature* that Emperor Francis Joseph has conferred the Austrian great gold medal of science and literature upon Mr. E. Torday, the leader of the scientific expedition sent out by the British Museum to study the native tribes in the Kasai basin of the Congo.

THE city of Philadelphia, on the recommendation of the Franklin Institute, has awarded the John Scott legacy premium and medal to Dr. L. H. Baekeland, of Yonkers, New York, for his invention of bakelite. The Franklin Institute has awarded Elliott Cresson medals for "distinguished, leading and directive work," in their respective fields of endeavor to the following: Dr. Harvey W. Wiley, chief chemist to the Department of Agriculture, Washington, for his work in the fields of agricultural and physiological chemistry. John Fritz, Bethlehem, Pa., for his work in the development of the iron and steel industries. John A. Brashear, Pittsburgh, Pa., for his work in the production and perfection of instruments for astronomical research. Edward Weston, Newark, N. J., for his work in electrical discovery and in the advancement of electrical application. Ernest Rutherford, professor of physics, Owens College, Victoria University, Manchester, Eng.,