

W. F. Osgood: "Liouville's theorem concerning periodic functions of several variables."

L. M. Kells: "A complete characterization of dynamical trajectories in n -space."

W. H. Cramblet: "A classification of discontinuous functions and some allied problems."

J. K. Lamond: "Note on the reduction of multiple L -integrals to iterated L -integrals."

L. A. Howland: "Functions of n variables which are functions of r combinations of these variables."

J. I. Tracey: "Covariant curves of the plane rational quintic."

A. B. Coble: "Restricted systems of equations."

L. P. Eisenhart: "Transformations of surfaces of Voss."

H. Galajikian: "A type of non-linear integral equation."

T. H. Gronwall: "On systems of linear total differential equations."

T. H. Gronwall: "Extension of Laurent's theorem to several variables."

T. H. Gronwall: "On approximation by trigonometric sums."

R. D. Beetle: "Cyclic systems of osculating circles of curves on a surface."

G. M. Green: "Canonical systems in projective differential geometry, with special reference to the theory of curved surfaces."

J. H. M. Wedderburn: "A type of primitive algebra."

F. N. COLE,
Secretary

THE AMERICAN SOCIETY OF NATURALISTS

THE thirty-first annual meeting of the American Society of Naturalists was held in the Zoological Laboratory of the University of Pennsylvania on December 31, 1913. In affiliation with the society this year were the American Society of Zoologists, the American Association of Anatomists and the Federation of American Societies for Experimental Biology.

A revised constitution and by-laws was adopted with several important modifications of the old constitution:

1. The former division of the society into an eastern branch and a central branch was abolished. "Sections of the society may be organized in any locality, with the approval of the society in each case, by ten or more members for the purpose of holding meetings for the presentation of scientific papers. Such sections shall have the right to elect their own officers and associate members, but associate membership in any section shall not confer membership in the society.

2. The executive committee is permitted at its discretion to remit for any year the annual assessment of one dollar.

3. The secretary and treasurer are to be elected for terms of three years each. An additional member of the executive committee is to be elected each year to serve for three years.

4. "A committee of three, consisting of the president, vice-president and secretary, shall arrange a program for each meeting."

5. "The records of the society shall be published once every three years, beginning in 1914."

6. "The society shall reimburse the secretary for traveling and hotel expenses incurred in attending the annual meeting."

The following were elected to membership in the society: Irving W. Bailey, Harvard University; Arthur M. Banta, Carnegie Station for Experimental Evolution; Harley H. Bartlett, Bureau of Plant Industry; Charles T. Brues, Harvard University; Philip P. Calvert, University of Pennsylvania; Mintin A. Chrysler, University of Maine; R. A. Gortner, Carnegie Station for Experimental Evolution; Milton J. Greenman, Wistar Institute; Robert W. Hegner, University of Michigan; Lawrence J. Henderson, Harvard University; Merkel H. Jacobs, University of Pennsylvania; G. L. Kite, Henry Phipps Institute; Ralph S. Lillie, Clark University; Clarence E. McClung, University of Pennsylvania; J. H. McGregor, Columbia University; Edward B. Meigs, Wistar Institute; J. Percy Moore, University of Pennsylvania; Alice Robertson, Wellesley College; Edmund W. Sinnott, Harvard University; Arlow B. Stout, New York Botanical Garden; P. W. Whiting, Harvard University.

The program of the morning session was as follows:

"Some Physiological Phases of the Study of Teratological Variations," by J. Arthur Harris.

"Some Physiological Observations Regarding the Genetic Factors for Plumage Patterns," by Raymond Pearl and Alice M. Boring.

"Twin and Triplet Hybrids from Wild Species of *Oenothera* with Segregation in the First Generation," by George F. Atkinson.

"The Functions of an Environment," by Lawrence J. Henderson (by invitation).

"A New Method of Analysis of Fertilization: Results and Theory," by Frank R. Lillie.

"On the Adaptation of *Fundulus* to Abnormal Salt Solutions," by Jacques Loeb. (Read by title.)

"Sex Recognition and Sexual Selection in Vertebrates," by Jacob E. Reighard.

"Endemic Species from Ancient Strands and Recently Observed Modifications of Seed-plants on the Beaches of the Salton Sea," by Daniel T. MacDougal. (Read by title.)

"Divergent Characters of the Progeny Arising from Seed Maturing in Treated Ovaries of *Scrophularia occidentalis*," by Daniel T. MacDougal. (Read by title.)

"Association of Hereditary Factors in Parthenogenetic Lines of *Hydatina*," by A. Franklin Shull.

"An Inherited Variation in the Strength of Linkage," by A. H. Sturtevant (by invitation).

"Size Inheritance in *Drosophila*," by Edward N. Wentworth. (Read by title.)

"Studies on Inheritance in Orthoptera," by Robert K. Nabours (by invitation).

"Physiological Resistance to Drought in F_2 Segregates of Certain Maize Crosses," by Herbert P. Roberts. (Read by title.)

"Partially Sterile Crosses between Species of *Nicotiana*," by Edward M. East. (Read by title.)

"Reciprocal Crosses between *Oenothera biennis* and *Oenothera muricata*," by Bradley M. Davis. (Read by title.)

The session of the afternoon consisted of a symposium on the subject "The Scope of Biological Teaching in Relation to New Fields of Discovery," Papers were presented by Michael F. Guyer, University of Wisconsin—Zoology; Mintin A. Chrysler, University of Maine—Botany; Robert R. Bensley, University of Chicago—Anatomy and Medicine; George H. Parker, Harvard University—General Physiology.

In the discussion following the reading of the four principal papers, Drs. Goldfarb, Atkinson, Loeb, Clapp, McMurrich, Morgan, McClung, Lefevre, Reighard, Henderson and Knower participated.

The Naturalists' dinner was held on the evening of December 31, at the Hotel Walton, with one hundred and ten in attendance. The president's address by Professor Ross G. Harrison was entitled "Science and Practise."

The officers of the Society for 1914 are:

President—Samuel F. Clarke, Williams College.

Vice-president—Frank R. Lillie, University of Chicago.

Secretary—Bradley M. Davis, University of Pennsylvania.

Treasurer—J. Arthur Harris, Carnegie Station for Experimental Evolution.

Additional Members of the Executive Committee—Raymond Pearl, Maine Agricultural Experiment

Station; Ross G. Harrison, Yale University, and Elias P. Lyon, University of Minnesota.

BRADLEY M. DAVIS,
Secretary

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

SECTION E—GEOLOGY AND GEOGRAPHY

THE sixty-fifth meeting of Section E, Geology and Geography, of the American Association for the Advancement of Science was held in the senate chamber of the state capitol, Atlanta, Ga., December 28, 1913, to January 1, 1914. Vice-president J. S. Diller presided. Professor U. S. Grant, Northwestern University, Evanston, Ill., was elected vice-president of the association and chairman of Section E for the next meeting to be held in Philadelphia. Dr. E. H. Sellards, state geologist of Florida, was elected a member of the council, Dr. David White, United States Geological Survey, a member of the sectional committee, and Dr. S. W. McCallie, state geologist of Georgia, a member of the general committee.

In connection with the meeting the following resolutions were unanimously adopted:

WHEREAS, it is recognized that the American Association for the Advancement of Science is the great scientific organization of this country, and,

WHEREAS, it is hoped that this organization may continue to fulfil its great function as the representative of science in America,

Be it Resolved, that it is the sense of Section E, an important branch of the parent organization, that the strongest men interested in geology and geography should be urged to assist in every way possible in promoting the best interests of the general organization,

Furthermore, in the belief that these purposes can be most effectively accomplished by the co-operation of existing geological and geographical organizations, it is recommended that every effort be made to have the meetings of the Geological Society of America and the Association of American Geographers held, as frequently as possible, in connection with those of the American Association for the Advancement of Science,

It is Further Recommended, that the officers of Section E, with the approval of the council, be instructed to take such steps as are necessary to secure the desired results.

The address of the retiring Vice-president, Professor J. E. Todd, was given on the subject, "Pleistocene History of the Missouri River."