

*THE PALEONTOLOGIC CORRELATION
THROUGH THE BACHE FUND*

IN 1908 the National Academy of Sciences appointed a committee on comparative research in paleontological correlation with power to add foreign and American associates to their number. The committee was divided into vertebrate and invertebrate sections. The vertebrate section organized with the following members: Professor H. F. Osborn, of Columbia University and the U. S. Geological Survey, chairman; Professors Scott, of Princeton University; Dollo, of Brussels University; Deperét, of Lyons University; Fraas, of Stuttgart University; Koken, of Tübingen University; von Huene, of Tübingen University; Williston, of the University of Chicago. Associated for special subjects: Professor J. C. Merriam, of the University of California; Dr. R. Broom, of Victoria College, Stellenbosch; Dr. Santiago Roth, of La Plata, Argentina; Dr. W. D. Matthew, of the American Museum of Natural History, secretary.

The trustees of the Bache Fund of the National Academy of Sciences through Professor Charles S. Minot, secretary, appropriated \$500 for the work of the committee during the year 1909, and recently made a second appropriation of \$500 for the year 1910. The fund is used partly to defray the expenses of correspondence, chiefly to direct investigation and secure special reports from various members of the committee and others.

The council of the New York Academy of Sciences in 1909 generously offered to cooperate with this research by the publication of the series of bulletins reporting progress. These bulletins are partly published and illustrated with the aid of the Bache Fund. They are as follows: Bulletin No. 1, "Plan and Scope," by Henry Fairfield Osborn and W. D. Matthew; Bulletin No. 2, "Fossil Vertebrates of Belgium," by Louis Dollo, translated by W. D. Matthew; Bulletin No. 3, "Patagonia and the Pampean Formation," review of correlation of Santiago Roth, with lists of characteristic species and provisional systematic references, by W. D. Matthew.

The chairman of the committee has devoted

his entire time (1909) to the preparation of a book entitled "The Age of Mammals," in which the results of his researches upon the correlation of the Tertiary and Quaternary periods, and the development and succession of mammalian faunas during the Cænozoic are set forth more fully and completely than in previous publications, and with as broad and popular a treatment as the subject permits.

The secretary has prepared a series of faunal lists of the Tertiary mammals of North America, on the lines laid out in the preliminary bulletin entitled "Plan and Scope" (p. 45). The object of these elaborate and extended lists is to enable correlators to "get behind the record," to enable them to critically consider each faunal list, to estimate the weight of evidence afforded by each species listed. In such an estimate the exact level and locality, the authority and date of description, the perfection or imperfection of the types, their location (to facilitate reexamination) are always essential factors; and such other data as may seem of value are given in the annotations. Mere lists of species without such data behind them are apt to be confusing and misleading. The results attained in correlations based upon bare lists of species are almost always a summary or average of discordant data. The best that can be hoped for will be that it will be a fair average; and where a preconceived bias exists on the part of the workers in a particular region, it will often be so manifestly incorrect that the results are generally rejected, and the entire subject of correlation discredited by them. Discordance in the evidence we take to be a proof that there is somewhere an error. The publication of these lists with complete data as to each species recorded, and with sections, lists of principal publications and annotation of various kinds, will assist, it is hoped, in locating and eliminating such errors.

Dr. Matthew has also in preparation lists of all the American vertebrate faunæ, with such data as could be readily obtained. These are now completed down to the year 1900. They will be submitted to the several authorities in

charge of different periods for the addition or completion of data, and annotations and geological sections as outlined in the preliminary bulletins. With similar data from foreign horizons these will form a broader and more permanent basis for exact correlation than has hitherto been available.

The general interest that has recently been aroused among students of fossil vertebrata is attested by the appearance of a number of important papers dealing with the more exact correlation of formations in which fossil vertebrates are found. Important additions to the evidence as to the position of the Mesozoic and Cænozoic formations of the Argentine by Ameghino, Roth, Scott, Ortmann, Hatcher and Sinclair have in recent years advanced this difficult problem a long way toward solution. The recent work of J. C. Merriam in California, Oregon and Nevada has been of the highest quality and great importance in correlation of the Pacific slope and other sections of this continent. Von Huene's investigations in the European Triassic, Broom's studies upon the South African Permian and Mesozoic, have already gone far toward clearing up these great problems in correlation. These are cited but as examples of the spirit of thorough, exact and progressive method in which many investigators are carrying on the work, each in his special province.

Correlation of more or less importance is contained in the series of papers published within the last year by Osborn, Matthew, Douglass, von Huene, Knowlton and Broom.

During the coming year the secretary of the committee will devote himself to the preparation of correlation lists for the North American Tertiary and for the North American pre-Tertiary. Data will be prepared for the North American Cretaceous and Cretaceous-Eocene contact by Osborn and Brown. The committee has promised also a number of American and foreign pre-Tertiary faunal correlations by members and associates.

Inquiries should be addressed to W. D. Matthew, American Museum of Natural History, New York.

THE INTERNATIONAL AMERICAN CONGRESS OF MEDICINE AND HYGIENE

THE International American Congress of Medicine and Hygiene of 1910 in commemoration of the first centenary of the May revolution of 1810, under the patronage of the president of the Argentine Republic, will be held May 25, in Buenos Aires, Argentine Republic.

In order to facilitate the contribution of papers and exhibits from the United States, there has been appointed by the president of the congress, Dr. Eliseo Cantón, and the Minister of the Argentine Republic at Washington, a committee of propaganda, of which Dr. Charles H. Frazier (Philadelphia, Pa.) is chairman and Dr. Alfred Reginald Allen (Philadelphia, Pa.) is secretary.

The congress has been divided into nine sections, each section being represented in the United States by its chairman in this committee of propaganda as follows:

- Section 1—Biological and Fundamental Matters, Dr. W. H. Howell, chairman, Baltimore, Md.
- Section 2—Medicine and its Clinics, Dr. George Dock, chairman, New Orleans, La.
- Section 3—Surgery and its Clinics, Dr. John M. T. Finney, chairman, Baltimore, Md.
- Section 4—Public Hygiene, Dr. Alexander C. Abbott, chairman, Philadelphia, Pa.
- Section 5—Pharmacy and Chemistry, Dr. David L. Edsall, chairman, Philadelphia, Pa.
- Section 6—Sanitary Technology, Dr. W. P. Mason, chairman, Troy, N. Y.
- Section 7—Veterinary Police, Dr. Samuel H. Gililand, chairman, Marietta, Pa.
- Section 8—Dental Pathology, Dr. George V. I. Brown, chairman, Milwaukee, Wis.
- Section 9—Exhibition of Hygiene, Dr. Alexander C. Abbott, chairman, Philadelphia, Pa.

It will not be necessary for one contributing a paper or exhibit to the congress to be present in person. Arrangements will be made to have contributions suitably presented in the absence of the author. The official languages of the congress will be Spanish and English. Members of the following professions are eligible to present papers or exhibits: Medicine, pharmacy, chemistry, dentistry, veterinary medicine, engineering and architecture.