

meetings. Addresses were given at the plenary sessions by foreign delegates and other invited members. The sections represented were (1) general biology; (2) cytology, histology, embryology and anatomy; (3) physiology and biochemistry; (4) parasitology, microbiology, hematology and serology; (5) methods and didactics of the biological sciences. The general interest of South American biologists is probably well indicated by the names of the sections and by the numbers of papers given in each. At the plenary sessions 30 papers were presented; in section 1, 26 papers; section 2, 63; section 3, 101; section 4, 93; section 5, 9. Supplementary programs added 22 papers, making a total of 344. The strong medical cast of biology here is apparent in these figures and in the absence of such categories as genetics, ecology, etc.

The officers of the congress were: *President*, Clemente Estable; *Secretary*, Benigno Varela Fuentes; *Treasurer*, Julio E. Moreau. Additional members of the *Executive Committee* were Drs. Apolo, Cordero, Prunell, Pucci, Guerrero and Rubino. For each country in South America represented there was an executive committee and the membership in these is an index to the working forces in biology there. The largest foreign attendance was naturally from Argentina and Brazil. This first Biological Congress was so successful that it was voted to hold a second in Rio de Janeiro two years hence under the presidency of Professor Miguel Ozorio de Almeida. Attendance of North American biologists would, I am sure, bring them much pleasure and considerable surprise at the amount and character of biological work being done south of the Caribbean.

C. E. McCLUNG

LECTURES OF THE PHILADELPHIA ACADEMY OF NATURAL SCIENCES

THE Ludwick free lectures were given in the auditorium of the Philadelphia Academy of Natural Sciences during January and February and will continue through March. These consist of twelve Monday evening and eight Sunday afternoon lectures, the speakers and their subjects being as follows:

- Francis R. Cope, Jr., "New Zealand for the Nature Lover."
 Dr. Clyde Fisher, of the American Museum of Natural History, New York, "Wild Flowers of Spring."
 Dr. William E. Hughes, research associate, "Honolulu."
 Dr. S. A. Barrett, director of the Milwaukee Public Museum, "Tamest Africa."
 Captain James Sawders, of Pittsburgh, "The Wonderland of Mexico."
 Barnum Brown, of the American Museum of Natural History, New York, "Searching for Prehistoric Life in Arizona."

- Dr. Witmer Stone, vice-president, "Bird Life of the New Jersey Sea Coast, Past and Present."
 Samuel G. Gordon, "Across South America and Africa."
 James A. G. Rehn, secretary, "A Naturalist in Honduras."
 Lester W. Strock, "By Pack Train Through the Canadian Mountains."
 Henry W. Fowler, "A Glimpse of Maritime China and Japan."
 Wharton Huber, "Across Canada to the Queen Charlotte Islands."

The Sunday afternoon lectures were as follows:

- Dr. Henry A. Pilsbry, curator of mollusks and marine invertebrates, "Shell Fish and Other Invertebrates of the Seashore of New Jersey."
 James A. G. Rehn, associate curator of entomology, "Insects—Beauties and Pests Found Near Philadelphia."
 Henry W. Fowler, associate curator of vertebrate zoology, "Fishes, Their Life in the Waters Around Philadelphia."
 Dr. Emmett R. Dunn, of Haverford College, "Reptiles and Amphibians, Modern Relatives of Ancient Races."
 Dr. Witmer Stone, curator of vertebrate zoology, "Bird Life in Springtime."
 J. Fletcher Street, "Wild Flowers of the Philadelphia Region."
 Wharton Huber, associate curator of vertebrate zoology, "Familiar Mammals of Pennsylvania and New Jersey."
 Dr. Henry A. Pilsbry, "Animals of the Ancient Past."

The Monday evening lectures begin at 8 o'clock and the Sunday afternoon lectures at 3 o'clock.

THE FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY

THE Federation of American Societies for Experimental Biology formed by the American Physiological Society, the American Society of Biological Chemists, the American Society for Pharmacology and Experimental Therapeutics and the American Society for Experimental Pathology, will meet at the McGill University, Montreal, Canada, from April 8 to 11, 1931. The preliminary program follows:

Wednesday, April 8.—The members are invited to visit various laboratories and points of interest in Montreal. Meetings of the Executive Committee of the Federation and of the Councils of the Societies.

Thursday, April 9.—Joint Session of the Federation and Scientific and Business Sessions of the Societies. A complimentary banquet will be tendered the members in the evening.

Friday, April 10.—Scientific and Business Sessions of the Societies. Joint Demonstrations 2:00 P. M. General Meeting of the American Society of Biological Chemists at 3:30 P. M. The annual banquet

of the federation will be held at the Mount Royal Hotel at 8:00 P. M.

Saturday, April 11.—Scientific Sessions of the Societies. Joint Session of the Federation. A detailed program will be mailed from the office of the secretary of the federation.

The headquarters are the Mount Royal Hotel, Peel Street. A special registration and information bureau will be located on the ninth floor, and also a railroad ticket office, where certificates can be validated and where tickets can be purchased. All members should register at the bureau as soon as possible after arrival and should deposit their railroad certificates for validation. The Mount Royal Hotel can probably accommodate all members who attend. It offers a flat rate of three dollars per person. Requests for reservations should be directed to the Mount Royal Hotel, Peel Street, Montreal. Information in regard to other hotels can be obtained from the secretary. On each day of the meetings table d'hôte luncheons will be served at the Mount Royal Hotel at a price of one dollar per person.

A reduced fare on the "Certificate Plan" of one and one half fares for round trip to and from Montreal will apply to members and associate members (and their dependent families) of the Federation of American Societies for Experimental Biology and affiliated societies, provided over 150 members present certificates.

The local committee in charge of arrangements consists of Drs. J. B. Collip, *chairman*; B. Babkin, N. Giblin, F. E. Lloyd, C. N. H. Long, J. C. Meakins, E. G. D. Murray, H. Oertel, R. L. Stehle, John Tait, D. L. Thomson, T. R. Waugh and D. R. Webster. Arrangements for demonstrations are in the hands of Dr. John Tait, physiology; Dr. D. L. Thomson, biochemistry; Dr. R. L. Stehle, pharmacology, and Dr. T. R. Waugh, pathology.

Any requests should be addressed to Dr. J. B. Collip, chairman of the Local Committee.

HOWARD B. LEWIS, *Secretary*,
University of Michigan,
Medical School,
Ann Arbor, Michigan

THE PASADENA MEETING OF THE AMERICAN ASSOCIATION AND THE ASSOCIATED SOCIETIES

PLANS for the first regular summer meeting of the American Association for the Advancement of Science, to be held at Pasadena, California, from Monday, June 15, to the following Saturday, are rapidly taking shape. The California Institute of Technology, Mount

Wilson Observatory and the Huntington Library and Art Gallery are hosts for this meeting and are cooperating with the Los Angeles Chamber of Commerce and the American Association for the Advancement of Science to make it exceptionally large and successful in every way. Arrangements for the meeting are in the hands of a local committee composed of Paul W. Merrill, *chairman*, Harold D. Babcock, *secretary*, John P. Buwalda, E. C. Watson, Linus Pauling and R. O. Schad.

A group of men of national and international reputation will deliver a series of six evening lectures during the meeting. The list of invited speakers includes outstanding authorities in their particular fields of research. It appears that all sections of the association will be represented in the program. Section B (Physics) and the American Physical Society are planning a four-day meeting. A program committee in charge of physics has already taken active steps and has supplied an impressive list of prominent European physicists who expect to be in California this summer.

Other national societies which are planning to meet with the association are: the Illuminating Engineering Society, the American Association of Economic Entomologists (Pacific Slope Branch), the American Chemical Society (Pacific Intersectional Division), the American Meteorological Society, the American Physical Society, the American Phytopathological Society (Pacific Division), the Astronomical Society of the Pacific, the Botanical Society of America (Pacific Section), the Ecological Society of America, the Society of American Bacteriologists, the Society for Experimental Biology and Medicine (Pacific Coast Branch), and the American Society of Plant Physiologists. The following local organizations are also planning to hold sessions: California State Veterinary Medical Association, the Cooper Ornithological Club (Northern Section and Southern Section), the Lorquin Entomological Society, the Pacific Coast Entomological Society, the San Francisco Aquarium Society and the Western Society of Naturalists.

It is hoped that the morning sessions only will be devoted to the reading of papers by the associated societies and sections and that the afternoons will be devoted to excursions to near-by points of interest. Low excursion rates from nearly all parts of the United States will be available.

SCIENTIFIC NOTES AND NEWS

THE annual meeting of the National Academy of Sciences will be held in the building of the academy in Washington from April 27 to 29 under the presidency of Professor T. H. Morgan, of the California Institute

of Technology. The four-year term of the officers expires at the meeting. Professor A. A. Michelson and Professor William H. Welch are the only living former presidents of the academy.