The American Folk-Lore Society.—December 28. President, Professor Henry M. Belden, University of Missouri, Columbia, Mo.; secretary, Dr. Charles Peabody, Peabody Museum, Cambridge, Mass.

The American Psychological Association.—December 27-29. President, Professor Carl E. Seashore, University of Iowa; secretary, W. Van Dyke Bingham, Dartmouth College, Hanover, N. H.

The Southern Society for Philosophy and Psychology.—December 28-29. President Dr. S. I. Franz, Government Hospital for the Insane, Washington, D. C.; secretary, Professor R. M. Ogden, University of Tennessee, Knoxville, Tenn.

The American Economic Association.—December 27-30. President, Professor Henry W. Farnam, Yale University; secretary, Professor T. N. Carver, Harvard University, Cambridge, Mass.

The American Statistical Association.—December 27-30. President, Frederick L. Hoffman, Newark, N. J.; secretary, Carroll W. Doten, 491 Boylston Street, Boston, Mass.

The American Sociological Society.—December 27-30. President, Professor Franklin H. Giddings, Columbia University; secretary, Professor A. A. Tenney, Columbia University, New York City.

The American Civic Alliance.—December 29. President, Dr. John Franklin Crowell, 44 Broad St., New York City; secretary, Dr. Gerald van Casteel, 80 Wall St., New York City.

The American Association for Labor Legislation.—December 28-30. President, Professor Henry R. Seager, Columbia University; secretary, Dr. John B. Andrews, Metropolitan Tower, New York City.

The American Home Economics Association.— December 27-30. President, Miss Isabel Bevier, University of Illinois; secretary, Benjamin R. Andrews, Teachers College, Columbia University, New York City.

## PRÍNCETON, N. J.

The American Society of Naturalists.—December 28. President, Professor H. S. Jennings, The Johns Hopkins University; secretary, Professor Charles R. Stockard, Cornell Medical School, New York City.

The American Society of Zoologists.—December 27-29. President, Professor H. V. Wilson, University of North Carolina; secretary, Dr. Raymond Pearl, Maine Agricultural Experiment Station, Orono. Me.

The Association of American Anatomists.—De-

cember 27-29. President, Professor George A. Piersol, University of Pennsylvania; secretary, Professor G. Carl Huber, 1330 Hill Street, Ann Arbor, Mich.

## NEW YORK CITY

The American Mathematical Society.—December 27-28. President, Professor H. B. Fine, Princeton University; secretary, Professor F. N. Cole, 501 West 116th Street, New York City.

## SOCIETIES AND ACADEMIES THE NEW YORK ACADEMY OF SCIENCES SECTION OF BIOLOGY

A REGULAR meeting of the Section of Biology was held at the American Museum of Natural History, October 16, 1911, Chairman Frederic A. Lucas presiding. The program consisted of a lecture by Dr. Charles H. Townsend, director of the New York Aquarium, on "The Voyage of the Albatross to the Gulf of California."

In the spring of 1911 the Albatross, under the direction of Dr. Townsend, made a natural history survey of the Gulf of California. Much valuable information was obtained bearing on the ocean-ography and the general biology of this region, and especially the deep-sea forms.

After stating that the American Museum of Natural History, the New York Zoological Society, the New York Botanic Museum and the United States National Museum cooperated in the voyage of the *Albatross* by special arrangement with the U. S. Bureau of Fisheries, Dr. Townsend gave a general account of the work done.

The Albatross sailed from San Diego. Twentysix hauls of the dredge were made, the deepest being 1,760 fathoms. Shore work was carried on at 32 anchorages around the peninsula of Lower California and at islands in the gulf. Important collections of mammals, birds, reptiles and plants were made. A special study was made of the fishery resources of the region. An interesting feature of the expedition was the rediscovery of the supposed extinct elephant seal (Mirounga). About 100 of these animals were found at Guadeloupe Island, which is uninhabited. Six yearlings were sent alive to the New York Aquarium, and three large males and a female were secured for skins and skeletons. The males were each 16 feet long. Excellent photographs were made. Among the interesting forms obtained by dredging were Harriotta and Cyema, two deep-sea fishes not previously recorded from the Pacific.

At the regular monthly meeting of the section held at the American Museum of Natural History, November 13, 1911, Chairman Frederic A. Lucas presiding, the following papers were read:

Further Notes on the Evolution of Paired Fins: W. K. GREGORY.

The problem under consideration is a phase of vertebrate phylogeny and should be studied in connection with this larger problem.

In very early acquiring myotomes the ancestral vertebrates gained a means of locomotion, by lateral flexures of the body, that was more efficient than movement by means of ciliated epidermis.

The earliest vertebrates probably fed on microscopic particles obtained by ciliary ingestion. The Upper Silurian Birkenia of Traquair apparently had no biting jaws and may have sucked in small food particles, like the larval lamprey. Well-preserved material showed that none of the Ostracoderms had cartilage jaws or teeth, but the dermal plaques around the oral hood sometimes functioned as jaws. Typically carnivorous habits, involving true cartilage jaws, true teeth and both paired and median fins, are first known in the Acanthodian sharks, of the Upper Silurian and Devonian. In brief, fins of all kinds, conditioned in their first appearance by the presence of myotomes, were evolved as an incident in the general transformation of acraniate minute forms, with ciliary ingestion, into well-cephalized fishes of carnivorous habits. The speaker reviewed the evidence for the "fin-fold" theory in the different groups and stated some apparently new objections to the "gill arch" theory. He cited evidence tending to show that the various paddle-like types of paired fins with widely protruded basal cartilages, had evolved from fin-folds independently in the sharks, Crossopterygians and Dipnoans.

Notes on a Pheasant Expedition to Asia: C. WILLIAM BEEBE.

Mr. Beebe gave a short talk, illustrated with lantern slides, on the recent trip which he and Mrs. Beebe made around the world in search of material for a monograph of the Phasianidæ. This expedition was made under the auspices of the New York Zoological Society and at the suggestion and by the financial support of Col. Anthony R. Kuser. In the short time at his disposal he was able to touch only upon Ceylon and the Himalayas. In Ceylon the jungle-fowl peculiar to the island and the India peafowl were studied and their nests and eggs found, and in the Himalayas every genus of pheasant was in-

vestigated, from Gennaus melanonotus at six thousand feet, to Ithaginis cruentus at an elevation of fourteen thousand feet.

The three most important points brought out were the tremendous economic importance of this group, our ignorance of their ecology, and the rapidity of their extermination.

The following nominations were made for officers of the Section of Biology for 1912:

Vice-president of the New York Academy of Sciences, and chairman of the section, Dr. Frederic A. Lucas (renominated).

Secretary of the section, Dr. William K. Gregory, American Museum of Natural History.

> L. Hussakof, Secretary

AMERICAN MUSEUM OF NATURAL HISTORY

## THE TORREY BOTANICAL CLUB

THE meeting of October 25, 1911, was held in the museum building of the New York Botanical Garden at 3:30 P.M., Vice-president Barnhart presiding.

The scientific program consisted of informal reports on the summer's work. Dr. N. L. Britton discussed the genus *Cameraria* L. and illustrated his remarks by specimens and illustrations of the known species, together with those of an undescribed one found by him at the United States Naval Station, Guantanamo, Cuba. He also remarked on the large number of undescribed species of plants in many genera contained in the recent Cuban collections of the New York Botanical Garden.

Dr. Marshall A. Howe gave a brief résumé of a paper on "Some Marine Algæ of Lower California, Mexico," which had been accepted for publication in the November number of the Bulletin. The algæ of Lower California have been hitherto almost unknown, only seven species having been attributed to the region. The materials on which the present paper was based give evidence of the existence there of at least thirty-four species, a good proportion of them being new to science, and it seems probable that adequate exploration of the region would show its algal flora to be rich and varied.

Dr. J. K. Small gave some brief notes on certain species of *Peperomia*, and Dr. H. M. Richards outlined some research work on acidity in cacti, which he had been prosecuting at the Desert Laboratory, Tucson, Arizona.

FRED J. SEAVER,

Secretary pro tem.