"The Internal Secretion of the Pancreas," by W. G. MacCallum.

"Our Present Knowledge of Thyroid Function," by S. P. Beebe.

"Metabolism after Parathyroidectomy," by J. V. Cooke.

"Physiological Consequences of Total and of Partial Hypophysectomy," by Harvey Cushing.

Executive Session (Section K).

The officers and committee members for the coming year will be:

Chairman-Frederick G. Novy.

Sectional Committee—Charles Sedgwick Minot, vice-president, 1909–10; George T. Kemp, secretary, 1909–13; Graham Lusk (one year); Jacques Loeb (two years); Elias P. Lyon (three years); William G. Gies (four years); William H. Howell (five years).

Member of the Council-Thomas G. Lee.

Member of General Committee—Clarence M. Jackson.

G. T. KEMP, Secretary

SECTION F

At the Boston meeting, Professor Jacob Reighard was elected vice-president for the next meeting; Professor F. I. Landacre, member of the council; Professor H. F. Nachtrieb, member of the sectional committee, and Professor E. L. Rice, member of the general committee.

Instead of the usual programs for the reading of technical zoological papers, a number of wellknown zoologists cooperated in making general interest programs. The following lectures were delivered: Professor C. J. Herrick, "Evolution of Intelligence and its Organs"; Professor W. E. Ritter, "A Plea for Popular Zoology"; Professor Jacob Reighard, "The Nest-building Habits of some American Fishes" (illustrated); Dr. A. G. Mayer, "The Study of Natural History at the Tortugas Laboratory" (illustrated); Professor F. H. Herrick, "Illustrations of the Life and Instincts of Wild Birds" (illustrated); Dr. Daniel D. Jackson, "The House Fly as a Carrier of Disease" (illustrated by moving pictures furnished by Mr. Edward Hatch, Jr., of the Merchants' Association of New York, and exhibited by the Kleine Optical Co., of Boston); President David Starr Jordan, "Conservation of our Fisheries"; Professor W. E. Castle, "Recent Progress in Study of Heredity" (illustrated).

MAURICE A. BIGELOW,

Secretary

SOCIETIES AND ACADEMIES

THE TORREY BOTANICAL CLUB

THE meeting of December 14, 1909, was called to order at the American Museum of Natural History, with President Rusby in the chair.

The announced paper of the evening, on "The Reclamation of the Desert of the San Bernardino Valley," was then presented by Dr. Rusby and illustrated by some seventy lantern slides. The following abstract was prepared by the speaker.

The distinctions between desert and arid regions were explained and that under discussion was defined as being arid rather than desert, for the most part, although the production of cultivated crops without irrigation was impossible. The first settlement established was a Moravian mission near the present western boundary of Redlands. This was afterwards purchased by the Mormons, who instituted local irrigation. The first extensive irrigation operations were employed by the town of San Bernardino, the present water supply of which is about 1,200,000 gallons, obtained by the deflection of Lytle Creek, besides a large amount from deeply driven wells. This water supplies not only the requirements of the city, but those of a large cultivated area.

San Bernardino is near the western mouth of the large, somewhat horseshoe-shaped valley, from the mountains about which all the water of the valley must come, except that which falls during the rainy season, and which varies from six to twelve inches in the different parts of the valley, the larger amounts falling successively nearer the mountains. The moisture brought by the Pacific winds is precipitated in crossing these mountains during the winter season only. At the greater elevations, 10,000 to 12,000 feet, it is deposited as snow; lower, in the form of copious rains, and in the vallev itself is a more or less scanty rainfall. During this period, moisture is not carried to the great interior plain of Nevada. Utah, Colorado, New Mexico and Arizona, where a dry season then prevails. In the summer, conditions are exactly reversed, no rain whatever falling west of the mountains. It thus happens that the San Bernardino valley gets its natural water supply at a time when cultivation can derive the least benefit from it and the problem is presented of preserving the winter supply and distributing it during the summer. The highly successful operations in the western part of the valley demonstrated the existence of a most fertile soil of great depth, and showed that the sole requirement for a rich agricultural region was an