

SOCIETIES AND ACADEMIES.

NEW YORK ACADEMY OF SCIENCES. SECTION OF BIOLOGY.

THE December meeting was held at the American Museum of Natural History, Professor Underwood presiding. Papers were presented by Professor H. F. Osborn and Professor F. B. Sumner.

Professor Osborn exhibited newly prepared skulls of *Diplodocus*, *Morosaurus* and *Creosaurus*, from Wyoming. The skull of *Morosaurus* is new to science.

Under the title 'Recent Discoveries of Extinct Animals in the Rocky Mountain Region and their Bearings on the Present Problems of Evolution,' Professor Osborn exhibited a series of skulls of the Eocene ancestors of the Oligocene Titanotheres, stating as a result of recent investigations that the Oligocene Titanotheres were found to represent four distinct lines of descent in each of which horns independently developed, and that the Eocene forms also represented four distinct lines of descent, two of which became extinct, while the others gave rise to Oligocene forms. As bearing upon the general problem of evolution, it was pointed out that the paleontologist enjoys the peculiar advantage of following a series through the origin and development of organs to their subsequent progression or decline. As early as 1888 the speaker had taken the ground that various paleontological series demonstrate the *definite or determinate variations* of certain kinds. In 1892 he connected with this the idea that certain series of animals related by descent from a common stem form exhibit the *potential of similar evolution*, describing this as a law of latent or potential homology. It is now found in this series of Titanotheres that there is more than a potential of similar evolution; there is evidence of a predisposition to similar evolution as shown in the wholly independent development in two distinct series of horns from hornless types at exactly similar points on the skull, namely, at the lateral junction of the frontals with the nasals. (The communication had been in part presented before the Brooklyn Institute

of Arts and Sciences, and before the Zoological Congress at Berne.)

Professor Sumner's paper was a preliminary note on 'Experimental Studies of Elimination and Selective Adaptation in Fishes.' Many experiments with the three common species of *Fundulus* tested the relative effect of asphyxiation and of gradual and abrupt changes of density in transferring from sea to fresh water and *vice versa*. Extended biometric studies point to the following conclusions: (1) the more and the less resisting individuals of a given species are different in type and in variability; (2) different methods of elimination result in selection with reference to different characters; (3) two closely related species were selected with reference to the same characters; (4) *Fundulus heteroclitus* from brackish water differ in all measured characters from those taken from the sea; (5) the differences of type in the three species of *Fundulus* are not due to natural selection acting with reference to the particular conditions which they are fitted to withstand.

M. A. BIGELOW,
Secretary.

DISCUSSION AND CORRESPONDENCE.

STYLE IN SCIENTIFIC COMPOSITION.

PROFESSOR EASTMAN has recently (SCIENCE, XX., 807) criticized certain new terms in physiography, saying they are not in good taste. This, being interpreted, means that his esthetic judgments are different from those of the inventors of the terms; and I find too that my own judgments have individual peculiarities. Such discordance is surely regrettable; except for the entertainment of his graceful fault-finding we should all be happier if we thrilled or shuddered in unison. But how can harmony be attained? I question the efficacy of ridicule, which tends to strengthen rather than remove prejudices. The late Colonel Ingersoll, who made great use of ridicule, held that it had no power to convince, but could only confirm; and it was a favorite saying that he 'came not to convert sinners, but to comfort the faithful.' Is there not some way in which reason may be brought to bear