work them over into more popular form, with the inevitable errors, inaccuracies and misrepresentations which characterize such productions. Professor MacMillan has wisely chosen to supply his own popular edition.

CHARLES E. BESSEY.
THE UNIVERSITY OF NEBRASKA.

SCIENTIFIC JOURNALS AND ARTICLES.

The American Naturalist for February has for its first article a paper by Henry Fairfield Osborn on 'The Angulation of the Limbs of Proboscidia, Dinocerata and other Quadrupeds in Adaptation to Weight.' Stephen R. Williams discusses 'The Specific Gravity of some Fresh Water Animals in Relation to their Habits, Development and Composition,' the conclusion being that the movements of an animal are closely related to its density and this in turn to its food habits. Carl H. Eigenmann and George Daniel Shafer describe 'The Mosaic of Single and Twin Cones in the Retina of Fishes,' Thomas H. Montgomery has a 'Note on the Genital Organs of Zaitha,' and Maynard M. Metcalf in 'Willey on the Enteropneusta' directs attention to some of that author's far-reaching theoretical conclusions. The 'Synopses of North American Invertebrates' are again continued, Mary J. Rathbun contributing the seventh part on the Cyclometopous or Cancroid Crabs. The balance of the number is occupied with reviews of recent literature.

IN *The Osprey* for February, Paul Bartsch continues his 'Birds of the Road,' and under 'Esthetic Birds' is given Beccari's account of the Gardener Bird of New Guinea. Eugene S. Rolfe presents 'Nesting Notes on the Waders of the Devil's Lake Region,' and W. E. Clyde Todd has an excellent article on 'The Requirements of a Faunal List,' while Philo W. Smith, Jr., describes the 'Nesting of Stephen's Whip-poor-will.' The editor contributes some valuable comments on 'The Origin of the Hawaiian Fauna,' and there are some interesting letters and notes.

THE *Journal of the Boston Society of the Medical Sciences* for January 16th, has for its leading article a paper by Theobald Smith on 'Variation among Pathogenic Bacteria,' a subject to which Dr. Smith has paid particular attention for many years. As he states, on the one hand the element of variability has been overlooked, and on the other hand the tendency to concede to bacteria any degree of variability, has given rise to theories which leave but little importance to pathogenic bacteria in the ætiology of disease. The writer concludes that since new disease germs are not constantly appearing the inference is that most species cannot adapt themselves to a parasitic existence. Mark W. Richardson has a note 'On the Cultivation of the Typhoid Bacillus from Rose Spots'; E. W. Taylor describes a case of 'Gumma of the Oblongata,' remarkable for the location and size of the tumor, and James H. Wright notes 'A Simple Method for Anaërobic Cultivation in Fluid Media.'

A Revue des revues d'histoire naturelle has been established at Paris under the direction of MM. Coupin and de Courdirban. It is published bi-monthly.

DR. A. S. EAKLE, assistant in mineralogy at the University Museum, has become the American editor for Groth's *Zeitschrift für Krystallographie.*

SOCIETIES AND ACADEMIES.

NEW YORK ACADEMY OF SCIENCES.

SECTION OF BIOLOGY.

AT the meeting of February 12, 1900, presided over by Professor Bashford Dean, the following program was offered:

J. A. MacGregor, 'On the Development of the Skull in Ceratodus.'

F. B. Sumner, 'Kupfer's Vesicle in Relation to Gastrulation and Concrescence.'

G. S. Huntington, 'Some Muscle Variations of the Pectoral Girdle.'

J. H. MacGregor gave a brief preliminary report on the development of the skull in Ceratodus, the Australian lung-fish. The research was made conjointly with Professor Bashford Dean.

Only the early stages of the chondrocranium have as yet been studied; but it is noteworthy that these early stages show even closer resemblance to the amphibian skull than does the adult. The suspensorium is autostylic from the