

pointed out above, there are a few omissions. There is, of course, room for diversity of opinion concerning the validity of some of the species which are given recognition, but no one can be personally familiar with the characters, history and synonymy of such a multitude of forms, and all that the author could do was to take the latest revision of each group as his guide. In adopting this course he has done all that could be expected and has produced a valuable *résumé* of the labors of specialists in many groups.

In fact, too much can hardly be said in favor of the catalogue. It represents an enormous amount of painstaking labor and will long remain a monument to the industry, patience and bibliographical skill of its author. It is indispensable to the student of mammals and its chief drawback is, perhaps, its high price (66 Marks), which may put the book beyond the reach of some who need it most.

T. S. PALMER.

WASHINGTON, D. C.

*The Genera and Species of Blastoidea, with a list of the Specimens in the British Museum of Natural History.* By F. A. BATHER. London. 1899. 8vo. Pp. x + 70.

This list "attempts to provide a complete index to every name that has ever been applied to a real or supposed Blastoid genus or species." It also gives the names now considered valid, and the synonyms with 'cross-references from the latter to the former.' It cites the literature, "the bibliographic details being placed under the name now valid. It catalogues all the specimens of Blastoidea contained in the Geological Department of the British Museum," and designates the specimens of historical interest, the types and figured specimens.

Bather's catalogue, like all of his work, is very detailed. The bibliographic references are not always mere title citations, but often give the important conclusions of writers, particularly those of synonymy. The list, however, 'is in no sense a revision' of the Blastoidea.

The important change in this list is the retention of *Nucleocrinus*, Conrad, 1842, in place of *Elæocrinus*, Roemer, 1851. *Orbitremites*, a

nomen nudum of Gray, 1840, was established by T. & T. Austin, 1842, and, therefore, displaces *Granatocrinites*, Troost, 1849 (nom. nud.), *Granatocrinus*, Hall, 1862, and Etheridge and Carpenter, 1886. *Orophocrinus*, von Seebach, 1864, although in general use, should be displaced by *Dimorphocrinus*, d'Orbigny, 1849. Bather does not make this change, although he disapproves of Etheridge's and Carpenter's reason for rejecting this name, namely, *Dimorphocrinus*, "has never been adopted by paleontologists on account of the erroneous and incomplete nature of his generic diagnosis." On the same ground other names now in use can be rejected. The reviewer prefers to accept *Dimorphocrinus*.

The total number of specimens of Blastoidea in the British Museum is 1,223, representing 73 species out of a total of about 166 listed species. "These figures speak for themselves. However numerous may be the specimens of Blastoidea in other museums, there can scarcely be any collection so representative of the class as a whole, or so rich in specimens of the highest scientific importance, as in that of the British Museum."

CHARLES SCHUCHERT.

U. S. NATIONAL MUSEUM.

*Grundlinien der Maritimen Meteorologie.* Von PROFESSOR DR. W. KÖPPEN, Abtheilungsvorsteher an der Deutschen Seewarte. Hamburg, Verlag von G. W. Neumayer Nachfolger. 1899. 8vo. Pp. vi + 83.

There has for some time been need of just such a book as Dr. Köppen has now given us. We have a brief and elementary presentation of the fundamental principles of marine meteorology, arranged by a master of the subject, in attractive form. While the book is intended especially for seamen, and as an introduction to the more advanced *Segelhandbücher* of the German Naval Observatory at Hamburg, students of meteorology in general will find it admirably suited to their own use. There are six chapters, the subjects of which are as follows: I., instruments; II., the correlation of the weather elements; III., the periodic variations of temperature, pressure, etc.; IV., the geographic distribution of weather phenomena,