pelagic—' etc., seeming to use the terms as synonymous. Again, there is something of doubt in the validity of certain references to symbiotic relations, as in the following: '*Hydractinia* and even the sea-anemone form interesting partnerships with the hermit-crab.' This is all admirable and beyond dispute. But that 'the polyps cover up the shell occupied by the crab, thus concealing it from its enemies and its prey' may be seriously doubted. Indeed, every observer knows that there are more hermit-crabs without the hydroid colonies than with them. And furthermore, the reviewer has found larger colonies of this particular hydroid on bits of water-logged spars and on the piles of a dock than the combined colonies of scores of crab-shells.

The figures are for the most part well selected and executed. In a few cases figures are rather too diagrammatic for accuracy. In its mechanical aspects the book is a creditable piece of press-work. The typography is excellent and mistakes few. A slight one may be noted in the description of Fig. 68, where the expanded and contracted vorticellæ are wrongly indexed. C. W. H.

SCIENTIFIC JOURNALS AND ARTICLES.

The American Naturalist for October contains but two papers: 'The Naididæ of Cedar Point,' by L. B. Walton, and the 'Mechanism of the Odontophoral Apparatus in *Sycotopus canaliculatus*,' by J. C. Herrick. The microscopic Oligochæta have received little attention in this country and Professor Watson's paper deals with the local species systematically, giving a key to the genera and describing seven new species. Professor Herrick describes in detail the structure and workings of the rasping apparatus by means of which the winkle bores through and destroys so many clams and similar mollusks. He decides that Huxley's views were correct and that the radular membrane bearing the teeth slides back and forth over the supporting cartilage like a chainsaw.

The Bulletin of the College of Charleston Museum for October is mostly devoted to the early history of the museum which may possibly claim to be the oldest public museum of natural history in the United States. The rival claimant is the collection of minerals of Harvard which dates back to 1798.

The Museum News of the Brooklyn Institute for November has articles on the 'Housekeeping of a Large Museum,' 'The King Penguin' and on 'The Woodward Jade Collection.' This last contains a good *résumé* on the history of jade objects and the methods of working. The principal article in the Children's Museum section is devoted to 'Bird Life in Bedford Park.'

SOCIETIES AND ACADEMIES.

THE TORREY BOTANICAL CLUB.

ON May 23, 1906, the club held a special meeting in commemoration of the tenth anniversary of the commencement of work in the development of the New York Botanical Garden.

The meeting was held in the lecture hall of the Museum Building at the Botanical Garden. President Rusby presided, and there was an attendance of 125. The following persons were elected to membership: Percy L. Ricker, U. S. Department of Agriculture, Washington, D. C.; Miss Winifred J. Robinson, Vassar College, Poughkeepsie, N. Y.; Miss Bina Seymour, 115 West 84th Street, New York City.

After the election of new members the club listened to an illustrated lecture by its president on 'The History of Botany in New York City.'

Dr. Rusby presented a historical sketch of the development of botany in the city of New York, giving special attention to the history of local botanical gardens, of the botanical department of Columbia College and of the Torrey Botanical Club. The earliest local work related to the botanical gardens of Colden, Michaux and Hosack, and to the publication of local catalogues and floras. The second period was that of text-books, manuals and other educational works. Out of the associations resulting from local work, the Torrey Botanical Club developed so gradually that it was impossible to fix the date of its