

tion, especially since this obstructive attitude is directed particularly against those women who, by reason of sound physique, trained intelligence, and high ideals, are undeniably best fitted for maternity.

The author maintains that, instead of adapting the biological needs of the race to professional regulations, it might be possible to adapt professional regulations to biological needs. Accordingly, a scheme is outlined in the second half of the book for arresting the decline of birth-rate among professional workers, taking due account of the factors at present predisposing to failure, whereby services would be provided by a co-operative organisation to deal with all phases of child-rearing. Great stress is laid on the necessity for easily available, up-to-date medical supervision for the child from the moment of conception until it reaches school age.

The book suffers from diffuseness, repetition, and, above all, from irritating mannerisms and a certain immaturity of style reminiscent of the college debating society. But it is an illuminating account of the difficulties encountered by women attempting to conduct their parenthood in a sane and un-sentimental way, and is a strong indictment of the progress of medical knowledge and availability of that knowledge on all matters concerned with pregnancy and child-rearing. The problems are difficult of solution and there is urgent need for organised research in this, as yet, almost virgin field. But the author justly remarks: "No one can visualise the splendour of man's material achievements without wondering why for so long the human race has neglected its own needs".

M. A.

### The Wry-mouthed Feather-stars.

*Smithsonian Institution: United States National Museum. Bulletin 82: A Monograph of the Existing Crinoids.* By Austin Hobart Clark. Vol. 1: *The Comatulids.* Part 3: *Super-family Comasterida.* Pp. vii + 816 + 82 plates. (Washington, D.C.: Government Printing Office, 1931.) 2 dollars.

IT is ten years since the second part of this elaborate monograph was published, but, considering the enormous amount of detail here assembled after personal checking by the author, one cannot complain of undue delay.

The unstalked crinoids herein discussed are those with the anus in the centre of the oral face and with the mouth consequently excentric. Though all are

included in a single family Comasteridæ (formerly Actinometridæ), they are here placed in a super-family Comasterida. The object of this conception, which we owe to Gislén, is to contrast them with the super-families Tropiometrida and Mariametrida, which with the Comasterida make up the curiously named Oligophreata, one of the two sub-orders of the Comatulida. The Comasteridæ again are subdivided into three sub-families—Capillasterinæ, Comactiniinæ, and Comasterinæ, and these between them cover nineteen genera. As moderately familiar examples we may mention *Comaster* itself, based by L. Agassiz on *Comatula multiradiata* Lamarck, a species that has given occasion for much controversy; and *Comatula* Lamarck, with genotype *C. solaris*, of which *Actinometra* Müller and its genotype *A. imperialis* are respectively synonyms. These two species exemplify in intensified degree that variability which renders the identification of all these animals a task of perplexing difficulty, enhanced in practice by the mutilation of most available specimens. Those confronted with the problem will be grateful to Dr. Clark for his careful diagnoses and elaborate keys, which, as he says, should be followed very closely and literally.

The more general worker will value the introduction, which traces the development of the scheme of classification adopted in the present monograph. To that development the largest contributor has been Dr. Clark himself in a long series of papers, of which summaries are here given. Other writers, especially T. Gislén, are also mentioned. Besides this, the synonymies and references to literature at the head of each classificatory division give a brief précis of nearly every work cited. In view of these remarkably complete and detailed references, it is not easy to understand why on pp. 76 and 81 Dr. Clark assigns the establishment of the family Actinometridæ to himself in 1907. That family, with Atelecrinidæ and Thaumatoocrinidæ, was already defined in the Echinoderm volume of "A Treatise on Zoology", edited by Lankester in 1900.

The numerous photographs of specimens reproduced in half-tone on 82 plates (back to back) add to the appearance and weight of the volume and make one marvel the more at its remarkably low price. It may, however, be doubted whether they are so useful for purposes of identification as the outline drawings of special structures used in previous volumes. There is an index to systematic names, but a complete index to vol. I is promised for part 5. We wish Dr. Clark health and strength to complete his great work.

F. A. BATHER.