

as it is written by ordinary people. Above all, let her seek the advice of some leading man of science in whom she has confidence, and get him to revise her work before publication—submitting, if necessary, to a severe editing of her “results.” We trust that she will take in good part what we have thought it our duty to say, for we feel convinced that if she will but consent to put a check on some of her impulses and to proceed on lines that have stood the test of time and experience, the new work with which she threatens us may yet prove to be a real and valuable contribution to the literature of protoplasm.

F. A. D.

CATALOGUE OF MADREPORARIA.

Catalogue of the Madreporarian Corals in the British Museum (Natural History). Volume iii. The Genus *Montipora*, the Genus *Anacropora*. By Henry M. Bernard, M.A. Large 4to. Pp. vii + 192. Plates xxxiv. (London: Printed by the order of the Trustees, 1897.)

OF the two genera, *Montipora* and *Anacropora*, catalogued in this volume, the latter is stated by the author to be little more than a group of specialised *Montipores*, so that the contents of the book may be said to relate nearly entirely to the single genus *Montipora*, Quoy and Gaimard. This genus is one of the reef-building, perforate corals, included with *Madrepora*, *Turbinaria* and *Astræopora* in the family of the *Madreporidæ*. It is widely distributed in the Indo-Pacific region wherever coral reefs occur, and the Museum collections of it have been largely added to of late years, by specimens obtained by Mr. Bassett-Smith, Surgeon R.N., from reefs in the China Sea, by Mr. Saville-Kent from the great Barrier Reef of Australia, by Prof. Haddon from Torres Straits, and by Mr. Stanley Gardiner from Funafuti.

The distinguishing structural feature of *Montipora*, as compared with the other members of the *Madreporidæ*, is the great development of the porous *cœnenchyma* between the corallites, and the comparatively reduced size and inconspicuous position of these latter. The upper surface of the *cœnenchyma* in these corals is furnished with an extraordinary variety of minute papillæ, tubercles, and ridges, which appear to be very liable to change, so that even in the same specimen the differences may be sufficient to constitute four or five distinct types. In spite of this fact, the author has based his systematic classification of the species mainly on the characters of this defensive surface ornamentation of the *cœnenchyma*, and justifies his course on the plea that there is no other available alternative. The result is that each individual specimen, and almost every fragment may, without much difficulty, be regarded as a distinct species, and in practice this is approximately the case. Thus of the eighty-eight new species constituted by the author, fifty-four are founded on single specimens or stocks, and in fourteen others, there are, in the Museum collection, but two specimens or fragments to each species. The remaining twenty new species are represented by three or more specimens each, but it is evident,

with regard to most of these, that the puzzled mind of the author has led him temporarily to a wholesale lumping of the specimens. These specimens or reputed species are described with great care and detail, but that they will be accepted as valid species seems very doubtful.

The volume is illustrated by thirty collotype plates, showing the corals either of their natural size or reduced to one-half or two-thirds, and by four lithographed plates of the surface characters enlarged. Many of the collotype figures, owing to their reduced scale, are of comparatively slight value, but the enlarged figures are very carefully drawn, and should prove highly useful for comparison; they would have been of still more service if drawn on a more uniform scale, instead of, as now, ranging between six and forty diameters. We regret to note that eighteen of the *new* species in this volume are not accompanied by any figures, and of several others no enlarged surface drawings are given; it is surprising that such a deviation from the established scientific procedure of figuring new forms should be permitted in a work issued by our leading scientific institution. It would, further, have been desirable to show by figures the “middle streaming layer” and the lower and upper layers of the *cœnenchyma* with their bent threads, since this terminology appears to be new.

We venture to remark that the numbers of the specimens in the Museum Register are only quoted here and there in this volume of the Catalogue, whereas in the first volume they are scrupulously given in all cases. Any one who has had to hunt up a type specimen in the Museum, will acknowledge the advantage of being able to quote the “registered number,” and it is very important where, as in the case of these corals, nearly every specimen is a type (and perhaps unfigured), that the registered number should be given in the published Catalogue, so as to be available for identification.

The maze of variations shown in a collection of recent corals call for the utmost patience, courage and judgment on the part of the investigator, and Mr. Bernard deserves the greatest sympathy and encouragement in the difficult and puzzling task which he has undertaken.

G. J. H.

OUR BOOK SHELF.

Das Wachstum des Menschen. By Dr. F. Daffnfr. Pp. vi + 129. (Leipzig: Engelmann, 1897.)

IN one hundred and thirty pages the author traces the physical development of man from the embryological state through that of *fœtal* existence to childhood, and thence to puberty, maturity, and decay.

The first few chapters are devoted to the proportions and weights of *fœtuses* of various ages, along with the causes which determine the sex of offspring. The view adopted is that the more vigorous element prevails, the argument being based upon the fact that young *primiparæ* (seventeen to nineteen years) bear a large percentage of boys; while women in full vigour (twenty to twenty-one years) bring forth more girls, the percentage of the latter decreasing again as the age of the mother increases.

Puberty, with its accompanying physical changes, together with a severe condemnation of the corset and