

## CLASSIFICATION.

---

The classification here proposed for the Sclerodermic Zoantharia or Madreporaria is, in the main, based on the system of Milne-Edwards and Haime, as developed in the *Histoire Naturelle des Coralliaires*. This system, owing to the researches of numerous investigators within the last few years, has been considerably altered, and the changes necessitated have been very recently (August 1884) given expression to by Professor P. Martin Duncan in his valuable and much needed Revision of the Families and Genera of the Sclerodermic Zoantharia, from which revision unfortunately the Madreporaria Rugosa were excluded.

While acknowledging my extreme indebtedness to this work, among others, of Professor Duncan, I must at the same time state that the examination of the Reef-Corals of the Challenger, and their comparison with recent and fossil forms, have thrown much new light upon classification, and have led to the modification of his scheme in many not unimportant particulars, chief among which may be mentioned the treatment of the section Madreporaria Rugosa, which here has been merged into that of the Madreporaria Aporosa.

The more immediate cause which has led to this change has been the structure and relationship of the remarkable Coral *Moseleya latistellata*, which was dredged by the Challenger in 8 fathoms water off Wednesday Island, Torres Straits, Australia, and for which a new subfamily, Moseleyinæ, of the Astræidæ, was provisionally proposed,<sup>1</sup> while its close affinity with the Rugosa and the probable dismemberment of that group were at the same time indicated. This form has now been definitely placed under the family Cyathophyllidæ.

The opinion of Louis Agassiz that the Rugosa should be referred to the Hydrozoa rather than to the Anthozoa, has not been justified; while, on the other hand, the tendency of more recent investigation and thought has been to show that, although many of the forms generally referred to the Rugosa are probably not Madreporarian, yet the essential characteristics of the more typical forms are decidedly those of the Zoantharia Sclerodermata. This opinion on the classification of the Rugosa has been most recently endorsed by Professor Duncan, who groups them under the Zoantharia Sclerodermata or

<sup>1</sup> *Ann. and Mag. Nat. Hist.*, 1884, vol. xiii. p. 293.