

Milne-Edwards first revealed the anatomical structure of zoophyte organisms, and made it possible to differentiate them from a number of other forms with which they had been erroneously included in previous classificatory systems. Ehrenberg based his classification of coral zoophytes exclusively on the characters of recent corals, more especially on his examination of the Red Sea corals. The number of tentacles was, in his opinion, the leading feature of distinction; according to it he erected the main sub-divisions of his classification.

Fossil corals were described and figured in most of the larger palæontological works that appeared during the first half of the nineteenth century. The illustrative plates of Goldfuss (1826), Michelin (1841-47), Lonsdale and MacCoy display a large number of fossil species, but notwithstanding the advances that were being made in the knowledge of living corals, the systematic treatment of fossil corals in these works is as crude and antiquated as in the much earlier works of Guettard, Parkinson, and Schlotheim. The profound and exhaustive works of Milne-Edwards<sup>1</sup> and Haime revolutionised the study of corals. These scientists made a thorough investigation of the organisation of living polyps, and from that proceeded to examine group after group of the fossil corals, directing attention equally to the evidences afforded by the skeleton regarding the original form and structure of the fossil polyps, and to the phylogenetic indications given by the occurrence and distribution of the fossil faunas in the stratigraphical succession. The penetrating critical instinct and unbiassed judgment of the authors produced a work which is recognised to be one of the most skilful that has ever appeared in scientific literature. The classificatory system of Milne-Edwards and Haime is based upon the character of the septa and the mode of their increase in number, and with a few modifications, the system has remained until the present day.

Later works on fossil corals for the most part dealt with the coral faunas of particular localities or of a particular stratigraphical horizon. Of special value are the monographs of Reuss, Fromentel, De Koninck, Koby, Hall, Becker,

<sup>1</sup> Henri Milne-Edwards, born 1800 in Bruges, studied medicine in Paris, and was at first the Professor of Natural History in the Collège Henri IV., then in 1841 at the Museum. In the year 1862 he was appointed Professor of Zoology, and two years later Director of the Museum; died 1885 in Paris.