

“good species” of which, in fact, cannot be spoken of in the usual systematic sense. We find among them only varying series of forms, which do not even completely transmit their specific form to their nearest descendants, but by adaptation to subordinate, external conditions of existence, perpetually change. It frequently occurs here, that there arise out of one and the same stock different form-species, which according to the usual system would belong to several quite distinct genera; this is the case, for instance, with the remarkable *Ascometra* (Frontispiece, Fig. 10.) The entire external bodily form is much more pliable and protean in Calcareous Sponges than in the silicious sponges, which are characterized by possessing silicious spicula, forming a beautiful skeleton. Through the study of the comparative anatomy and ontogeny of calcareous sponges, we can recognise, with the greatest certainty, the common primary form of the whole group, namely, the sack-shaped *Olynthus*, whose development is represented in the Frontispiece (compare its explanation in the Appendix). Out of the *Olynthus* (Fig. 9 on the Frontispiece), the order of the *Ascones* was the first to develop, out of which, at a later period, the two other orders of Calcareous Sponges, the *Leucones* and *Sycones*, arose as diverging branches. Within these orders, the descent of the individual forms can again be followed step by step. Thus the Calcareous Sponges in every respect confirm the proposition which I have elsewhere maintained: that “the natural history of sponges forms a connected and striking argument in favour of Darwin.”

The second main class or branch in the tribe of Zoophytes is formed by the Sea-nettles (*Acalephæ*, or *Cnidæ*). This interesting group of animals, so rich in forms, is composed