

fundamental law, the common ancestor of all Zoophytes, namely, the Protascus (vol. ii. pp. 129, 133). By the development of pores in the wall of the stomach and of three-rayed calcareous spicules, the Ascula changes into the Olynthus (Fig. 9.) In Fig. 9 a piece is cut out from the stomach-wall of the Olynthus in order to show the inside of the stomachal cavity, and the eggs which are forming on the surface (*g*). From the Olynthus the most various forms of Calcareous Sponges can develop. One of the most remarkable is the Ascometra (Fig. 10), a stock or colony from which different species, and in fact different generic forms, grow (on the left Olynthus, in the middle Nardorus, on the right Soleniscus, etc., etc.). Further details as to these most interesting forms, and their high importance for the Theory of Descent, may be found in my "Monograph of the Calcareous Sponges" (1872), especially in the first volume. (Compare vol. ii. pp. 160, 167).

PLATE I. (*Between pages 184 and 185, Vol. I.*)

*History of the Life of the most Simple Organism, a Moneron (Protomyxa aurantiaca).* Compare vol. i. p. 184, and vol. ii. p. 53. The plate is a smaller copy of the drawing in my "Monographie der Moneren" (Biologische Studien, 1 Heft, 1870; Taf. 1), of the developmental history of the Protomyxa aurantiaca; I have there also given a detailed description of this remarkable Moneron (p. 11-30). I discovered this most simple organism in January, 1867, during a stay in Lanzarote, one of the Canary Islands; and moreover I found it either adhering to, or creeping about on the white calcareous shells of a small Cephalopod (vol. ii. p. 162), the Spirula Peronii, which float there in masses on the surface of the ocean, or are thrown up on the shore. The Protomyxa aurantiaca is distinguished from the other Monera by the beautiful and bright orange-red colour of its perfectly simple body, which consists merely of primæval slime, or protoplasm. The fully developed Moneron is represented in Figs. 11 and 12, very much enlarged. When it is hungry (Fig. 11), there radiate from the surface of the globular corpuscule