

nutrient parts may be by its means fitted for more immediate assimilation, for as there is neither circulating nor lymphatic systems, the absorption of the nutrient fluids must be made directly from the stomach itself. By the contraction of the periphery of the body, this water is again expelled at pleasure through the tentacula in a continuous stream or in jets, and if the contraction is sudden and strong, the water may be thrown out with such force as to rise to the height of at least a foot. It is remarkable that the water does not escape from all or the greater number, but only from a few of the tentacula. Whether any part escapes by the mouth is doubtful.

All the native species are single, viz. every individual is isolated and complete in itself, and not organically associated with others, as the polypes of the preceding orders are. They are also all oviparous, the ova being generated in appropriated organs. According to Spix the ova, in the Actiniæ, form several grape-like clusters, situated in the interseptal spaces, with ducts which open into the base of the stomach by several apertures, and hence the ova are presumed to gain their freedom by traversing the stomach and mouth.\* Blainville doubts this, being led from analogy to believe it more probable that the oviducts may open in the labial rim, as they do in the asteroid zoophytes. † Delle Chiaje says that they terminate in the tentacula of the Actiniæ; ‡ and Cavolini states, that in the Caryophyllia the ova are discharged through small distinct openings between each of the tentacula.§ Their natural passage of egress may be considered to be undetermined, but it seems to be ascertained that they do, under certain circumstances, escape from the body sometimes through the tentacula, or in apertures between them, and sometimes through the mouth. Mr Teale, after vainly attempting to discover any proper oviduct, thinks it probable that the ova, when sufficiently matured, "actually burst their membranous envelope, and become lodged in the interseptal spaces where they are exposed to the free access and continued supplies of sea water, the grand stimulus to their further develop-

\* Carus, *Comp. Anat. Trans.* ii. 308, pl. i. fig. x.

† *Man. d'Actinologie*, 79.

‡ *Bull. des Sc. Nat.* xvii. 471.

§ *Edin. New Phil. Journ.* i. 153.