

narrow muscular air-duct (*auroductus*), which opens internally at the base of the pneumatophore, and externally to the outside. The radial canals of the metamorphic nectophore are modified into a complex radial system of wide glandular chambers.

SIPHOSOME OR NUTRITIVE BODY.

The nutritive body exhibits in the different groups of the class Siphonophoræ much more manifold and important differences of form and structure than the swimming body. Undoubtedly the most important difference is this, that in the Monosiphoniæ (or the *monogastric* Siphonophoræ) the archisiphon or protosiphon (the primary gastral tube of the medusoid larva) remains alone as the organ for the reception and digestion of food, while in the Polysiphoniæ (or the *polygastric* Siphonophoræ), "secondary suctorial tubes" or metasiphons are developed by budding, each provided with a gastric cavity and a mouth opening. In the Polysiphoniæ the primary mouth opening of the medusoid larva only rarely persists, in all Disconanthæ, and in two families among the Siphonanthæ (Stephalidæ and Physalidæ). In most (perhaps all the rest) of the polygastric Siphonanthæ, the primary mouth opening of the protosiphon is probably closed, and the latter persists only as the stem of the stock (*truncus* or *cænosome*).

The polymorphic appendages, which bud out as lateral branches from the stem of the siphosome, are partly medusoid (*bracts, gonophores*), partly polypoid (*siphons, palpons, cystons, gonostyles*). The poly-organ theory regards the former as multiplied umbrellas of one Medusa, or as secondary vicaria of such, the latter as repeated manubria or vicaria of the same. The poly-person theory, on the other hand, regards each single bract as a medusoid person, which has lost all its organs except the umbrella, and each single siphon and palpon as an independent Hydropolyp. Our medusome theory regards in the different cases these polymorphic appendages partly as dislocated organs of medusomes, partly as multiplied reserve organs or vicaria of the same.

SIPHONS OR SUCTORIAL TUBES.

(*Polypites, Gastral Tubes, Stomach Sacs, Nutritive Polyps, Eating Polyps, Hydranths, Gastrozooids.*)

The siphons, which have given the name Siphonophoræ to the entire class, are the most important and the most constant appendages of their organism. From a physiological point of view they are rightly regarded as organs for the reception of food and digestion; from a morphological point of view they are sometimes regarded as homologous with an entire Polyp, sometimes with the gastric tube or manubrium of a Medusa.