face of the spirally coiled up trunk. When we regard the latter from below, after the detachment of the siphons, the remaining pedicles of these form an innermost spiral line (fig. 12, *sp*) inside the spiral corona of gonodendra. In *Stephanospira* these pedicles were regarded by Gegenbaur as the siphons themselves (**10**, Taf. xxxii. fig. 53, *e*). In spirit specimens of Discolabidæ the siphons are usually all detached from their pedicles, which remain as short conical prominences connected with the trunk (compare **6**, pl. iv. fig. 5). The body proper of the siphon consists of the usual three segments. The proximal basigaster is very large and occupies in the contracted siphon about its basal half; its thickened wall is full of small cnidocysts and surrounds a narrow cylindrical cavity (**6**, pl. iv. fig. 5). The stomach proper is very dilatable, usually ovate or spindle-shaped, and exhibits either hepatic ridges, or instead of these numerous glandular villi developed from its thickened entoderm. The distal proboscis is cylindrical, very contractile, and exhibits usually eight, twelve, or sixteen parallel longitudinal muscle-bands; it opens distally by a mouth which is very dilatable and may be expanded in the form of a circular or slightly lobate suctorial disc. Often this distal part is turned over like the inverted finger of a glove (**6**, pl. iv. figs. 4–6).

Tentacles (Pl. XIX. fig. 1; Pl. XX. figs. 13, 16, *t*, 14).—The single tentacle, which is attached to the pedicle of each siphon, near to the insertion of the basigaster, is in all Discolabidæ very long and beset with a series of very numerous and large tentilla. The cnidosac of the latter has a peculiar structure, differing from that of all other Siphonophoræ. The fully-developed tentillum is composed of two segments only, a very large pedicle and a large involucrate cnidosac; the third and distal segment, the terminal filament, has disappeared. The pedicle again is often divided into two portions, a thin cylindrical proximal tube, and an inflated vesicular distal sac, usually club-shaped or pyriform. The cnidosac (sacculus or urticating knob) is ovate, spindle-shaped, or pyriform, bilaterally ysmmetrical, with a more convex dorsal and a less convex or even concave ventral side; it contains, included in a double involucre, a very long cnidoband or urticating chord, coiled up in several spirals. The latter is composed of innumerable small, paliform cnidocysts, and of two lateral series of large ensiform or spindle-shaped cnidocysts. These latter are placed at the distal end of the vesicular cnidosac, whilst they are situated in the other Siphonanthæ usually at its proximal end.

This apparent anomaly, and the divergence in structure from the normal form, is fully explained by the development of the cnidosac; it passes during its ontogeny through different stages, which are represented by the permanent cnidosacs of the genera *Circalia*, *Stephanomia*, *Halistemma*, and *Agalmopsis*. The simple cylindrical tubule of the youngest tentillum becomes divided into the three usual portions, the pedicle, the cnidoband, and the terminal filament. The middle one of these is spirally coiled up as a simple and naked spiral cnidoband. The distal portion of the pedicle becomes inflated, forms a campanulate fold around the top of this band, and grows around it entirely,