

(Pl. L. figs. 1, 2) sixteen gonostyles. The medusiform gonophores arise from their proximal part either isolated or in clusters (compare p. 37 above).

Tentacles.—The corona of submarginal tentacles exhibits in the Discalidæ very interesting forms, since these organs correspond in the two genera of this family to those of two important larval stages of the Porpitidæ. *Discalia* (Pl. XLIX. figs. 1, 4) possesses only eight simple radial tentacles of cylindrical form, which bear no lateral branches, but a simple terminal cnidosphere (or a spherical knob composed of radially disposed cnidocysts). The larva of the other genus, *Disconalia*, also exhibits in its young state eight simple tentacles (Pl. L. fig. 9), and hereafter at their distal end a group of four terminal cnidospheres (fig. 10). These become multiplied in older larvæ, and form a subumbrellar corona inside the limb of the umbrella. The adult *Disconalia* (Pl. L. fig. 1) possesses two rows of tentacles, in which eight perradial bunches are prominent. Each tentacle is cylindrical, with club-shaped distal end, and bears in its distal half three longitudinal rows of pediculate cnidospheres, an odd inferior and two paired lateral series (compare p. 38).

Ontogeny.—The individual development of the Discalidæ is not known, but is probably identical with that of the Porpitidæ (compare p. 39).

Phylogeny.—The phylogenetic value of the Discalidæ is, in my opinion, very great. I regard *Discalia* as a survival of the common ancestral form of all Disconnectæ, and *Disconalia* as an intermediate form between this and *Porpalia*.

Synopsis of the Genera of Discalidæ.

Umbrella with eight simple tentacles. Pneumatocyst without concentric ring-chambers,	1. <i>Discalia</i> .
Umbrella with numerous tentacles, arranged in eight radial bunches. Pneumatocyst with concentric ring-chambers, surrounding the octoradial central disc,	2. <i>Disconalia</i> .

Genus 1. *Discalia*,¹ Haeckel, 1888.

Discalia, Hkl., System der Siphonophoren, p. 29.

Definition.—Discalidæ, with a lenticular or subglobular umbrella, including a lenticular pneumatocyst, which is composed of a central chamber and eight surrounding radial chambers, without concentric ring-chambers. Marginal tentacles eight, simple, with a terminal cnidal knob.

The genus *Discalia* is the simplest and most primitive form of all Disconnectæ, and may be regarded as one of the common ancestral forms of this order. It may be compared to an octonemal Trachomedusa (*Trachynema*, *Marmanema*, *Rhopalonema*), which has developed an octoradial pneumatophore in its exumbrella, and in which the eight simple genital sacs of the subumbrella have been replaced by eight palpons or mouthless gonostyles, which afterwards produce medusiform gonophores by budding.

¹ *Discalia* = marine disc, δίσκος, ἀλιος.