

*Tentacles* (figs. 1-4, *t*).—The eight tentacles are cylindrical, somewhat larger than the diameter of the umbrella, and bear a single cnidosphere at the distal end.

Genus 2. *Disconalia*,<sup>1</sup> Haeckel, 1888.

*Disconalia*, Hkl., System der Siphonophoren, p. 30.

*Definition*.—Discalidæ, with a lenticular or discoidal umbrella, including a discoidal pneumatocyst, which is composed of a central chamber, eight surrounding radial chambers, and several concentric ring-chambers. Marginal tentacles numerous, arranged in eight radial bunches.

The genus *Disconalia* is closely allied to the preceding ancestral genus *Discalia*; but it differs from it in the multiplication of the marginal tentacles, which form eight marginal bunches; and mainly in the peripheral increase of the octoradial pneumatocyst, which is surrounded by several concentric ring-chambers. It corresponds therefore to that larval stage of the Porpitidæ which Alexander Agassiz<sup>2</sup> has figured of *Porpita linnæna*. The young larvæ, probably of all species of Porpitidæ, after having passed the *Discalia*-form, assume a transitional *Disconalia*-form.

Perhaps even Eschscholtz observed a *Disconecta* belonging to this genus. The interesting small form, taken in the tropical Pacific, which he figures under the name *Porpita ramifera*,<sup>3</sup> is either a true *Disconalia*, or the corresponding larva of some Porpitid passing through this typical stage. The answering of this question is not possible, since the organs of the subumbrella, which would be decisive, are neither figured nor even mentioned in the description given by Eschscholtz.

Two species of *Disconalia* (both deep-sea inhabitants) were found by me in the Challenger collection, one from the Southern Pacific (Station 181), the other from the Indian Ocean, south of Australia (Station 157). The latter (*Disconalia pectyllis*) had much longer and less ramified tentacles, and a larger pneumatocyst, than the former (*Disconalia gastroblasta*); but its state of preservation was not sufficient for a full description. Regarded from a phylogenetic point of view, *Disconalia* is of the highest importance as a necessary connecting link between *Discalia* and *Porpalia*. It is derived from the ancestral genus *Discalia* by the multiplication of the air-chambers and the tentacles; if its gonostyles acquired a mouth, it would pass into *Porpalia*.

*Disconalia gastroblasta*, n. sp. (Pl. XLIX. figs. 7-12; Pl. L. figs. 1-10).

*Habitat*.—Southern Pacific, north-east of Australia, Station 181, August 25, 1874; lat. 13° 50' S., long. 151° 49' E.; depth, 2440 fathoms.

<sup>1</sup> *Disconalia*, derivative from *Discalia*.

<sup>2</sup> 57, pl. ix. fig. 3.

<sup>3</sup> 1, p. 17, Taf. 16, figs. 3a, 3b.