In many Trachomedusæ, and in almost all Narcomedusæ, the marginal tentacles present the remarkable phenomenon of having migrated upwards on the dorsal surface of the umbrella from their original points of attachment close to the margin, so that they finally spring from a zone at some distance from the umbrella margin, with their roots plunged into the substance of the umbrella. In such cases accumulations of thread-cells form meridional urticating streaks ("umbrella clasps" or "peronia" of Haeckel) by which the bases of the tentacles continue to be connected with the marginal urticating ring.

Comparison of the Medusa with the Hydranth.—The Craspedote Medusa as seen in the planoblast, however different its form may appear from that of the Hydropolyp as seen in *Hydra* or in the hydranth of the compound trophosome, may nevertheless be easily reduced to this fundamental type form.

If we suppose the body of *Hydra* to be extended laterally in a plane immediately behind the hypostome, and on a level with the tentacular verticil, carrying between its upper and lower surfaces an extension of the body cavity, a hollow disc will be thus formed, having the tentacles springing from its margin, and with the hypostome which carries the mouth projecting from its centre. If now its upper and lower walls coalesce with one another throughout their entire extent, except along four or more radial lines running from the gastral cavity to the tentacular margin, there will result a disc traversed by radiating canals and margined by tentacles. This disc will manifestly represent the umbrella of a Medusa with its radial canals and marginal tentacles, while the hypostome will correspond to the manubrium; and it only needs the distal ends of the radiating canals to become united to one another by the formation of a circular canal, and the proximal stem-like extension of the *Hydra* with its disc of attachment to be suppressed in order to convert the polyp form in all essential points into the Medusa form. The Medusa is thus nothing but a hydranth whose body-walls are extended in the form of an umbrella with offsets from the gastral cavity, and act as an organ of natation.

Form and Structure of the Hedrioblast.—The hedrioblasts or gonophores, which never become detached from the trophosome as free-swimming zooids, are in the form of fixed sac-like buds. Of these two types must be distinguished. In one the medusoid conformation, however degraded, is yet sufficiently expressed to admit of its being recognised, the essential parts of the umbrella, including the endoderm lamella or "vascular lamella," being always present even though no gastrovascular canals may have been formed in it. In the other neither endoderm lamella nor gastrovascular canals have been formed, and the umbrella is represented solely by its outer ectodermal layer, which here lies directly on the spadix or endodermal *cul de sac* which forms the hollow axis of the gonophore. The first of these varieties of the hedrioblast is known as the *medusoid*, the second as the *sporosac*.