

of the breeding season. The head has, in every respect, truly the character of all the Tubularidæ, but may be more closely compared to that of *Parypha* (Pl. XXIII. *Fig. 1^b*). At the height of the breeding season in January, the whole disk between the coronal tentacles (Pl. XXV. *Fig. 2, l*) and the proboscis (*l¹ l²*) is crowded with the medusoid progeny (*d e*), in all stages of growth, from the merest incipient buds to their fully-developed state (*d d¹*), in which they drop from the parent.

The horny sheath (*Figs. 2 and 3, a¹*) is a very notable feature in this genus, as it shows a tendency to form a permanent, turbinate terminal expansion, more or less deeply constricted at several successive points, so as to have the appearance of being ringed. The substance of the sheath, at the upper end, is rather filmy, and very delicate, yielding readily to the distension and flexure of the stem.

The free Medusa (*Figs. 14, 14^a, 15, and 15^a*) of our *Hybocodon*, bears a very close resemblance to that of *Coryne fritillaria*, as figured by Steenstrup in his work upon alternate generation (Pl. I. *Figs. 41–45*), but the Hydroid represented as the parent stock of the latter is a *Coryne*-like animal, if we may judge from the very small figure given by that author.¹

Hereafter we shall give a full description of our Medusa; for the present we must return to the Hydroid, in order to present a more detailed account of its structure. The proboscis carries two rows of tentacles (Pl. XXV. *Figs. 2, 2^a, and 3, l¹ l²*), one of which (*l¹*) borders closely upon the mouth (*Fig. 2^a, p*), while the other is placed at a short distance below, in such a manner that the tentacles of this row alternate with those of the terminal circle. When the proboscis is strongly contracted the two rows are oftentimes brought, apparently, into one series (*Fig. 3, l¹ l²*), but it may be readily seen that the one is concentric to the other. In the oldest hydroids we have counted as many as thirty-two buccal tentacles (*Fig. 3*), and, as they alternate with one another, there are sixteen in each row. They differ in no wise, as regards shape, from those of other Tubularidæ; but those of the terminal circle (*Figs. 2 and 2^a, l¹*) are only half as long as those of the second series (*l²*); and the decurrent bases (*Fig. 2^a, p²*) of the latter alone form the broad, parallel ridges, which lie closely, side by side, about the circumference of the proboscis. The rest of the head, the disk which bears the medusæ, and upon which the coronal tentacles are based, have the same general structure as in *Parypha*. The bunches of medusæ, which are present from January to April, are,

¹ It is very questionable whether the Steenstrupia-like Medusa figured by Sars is truly the progeny of *Coryne fritillaria*, inasmuch as he found it floating in the open ocean, and refers it to this

Hydroid because of a general resemblance to the medusoids which were attached to it. It is unfortunate that he did not give magnified figures of the latter.