

and the fluid contents of the stomach circulate very rapidly, a phenomenon which, owing to the transparency of the distended walls, may be seen very readily. As an opposite extreme to this, the proboscis stretches out till it equals in length the greatest extension of the discal tentacles (*Fig. 16, p¹*), and is as slender as the thickest part of the stem.

Proles medusoidea.—The full-grown medusoid is a very simple, double-walled body (Pl. XXII. *Fig. 14*), with a thick proboscis (*p*) projecting half way or less into its cavity, while at the opposite end, around the lower edge of the disk, are three or four solid, short, and rather unshapely tentacles (*t*). Excepting the tentacles, the whole structure of the medusoid is almost identical with that of *Parypha crocea*, even to the absence of radiating and circular chymiferous tubes. As it produces only two or three young, it is seldom distended in a lateral direction, as in the latter genus, but usually presents an elongated form (*Figs. 13 and 14*), produced by the efforts of the young to push their way out through the actinal opening of the disk.

Embryology. Proles hydroidea.—The description of the development of the young hydroids of *Parypha crocea*, up to the time when the tentacles have assumed an oblong shape (Pl. XXIII. *Fig. 13, c²*), applies perfectly well to *Thamnocnidia*, and therefore needs not be repeated here. Beyond this, however, there are certain differences, not so much of structure as of form, in their relation to the parent body, which require special notice. Owing to the small number of the embryos, there being only two or three produced by each medusoid, and to the fact that they are developed consecutively, each young hydroid (Pl. XXII. *Fig. 12, st*) occupies a large proportion of the cavity of the disk. There is, however, one remarkable feature in regard to the position of the young in the parent, which at once distinguishes this genus from *Parypha*, namely, that from a very early period the young is frequently, if not always, fitted like a cap over the end of the proboscis (*Fig. 12, d d¹*), or rather over the germ-basis (*e*) which covers the proboscis. In this position the base (*st*) of the young hydroid occupies the region near the opening of the disk of the parent medusoid, and the tentacles (*te*) embrace the base of the proboscis (*d*). From this time forward, the development of the embryo is very rapid. The mass of the body forming the cap to the proboscis, becomes proportionally smaller (*Fig. 13, st*) and constricted just behind the base of the tentacles (*te*). This part constitutes the stem. The proboscis first appears in the form of a broad, conical protuberance (*te*), within the circle of tentacles, while the latter become simply elongate and tapering to a blunt end. In the mean while the proboscis of the medusoid, with its covering, the germ-basis (*e*), retracts from, or rather is pushed out of its cap-like socket by the protruding proboscis of the hydroid. After this the embryo seems actually to grow larger, while the stem (*Fig. 14, st*) becomes a little longer than broad, the proboscis