

its thickness (*Fig. 6, d*). After this, the inner wall (*Fig. 8^a, b*) of the disk, which hitherto has maintained a thickness equal to that of the outer wall, ceases to grow so rapidly as the latter (*Fig. 8^a, a*), and, about this time, the walls of the area, around the future aperture of the disk, rise in the form of papillæ (*Figs. 8 and 8^a, f*), varying from two to four in number. The papillæ are, homologically, the tentacles, although they do not ever seem to perform the office of such organs, even when most fully developed. In some medusoids unmistakable signs of a greater age than this may be discovered, and yet the tentacles have not begun to develop. Thus, in certain individuals, the germ-basis (*Fig. 7, c*) has changed to the characteristic yellow color of the later stages, but there are no tentacular appendages on the disk. The individual figured is an instance of the plasticity of the medusoid, which, at times, may be seen very much elongated, and then, again, concentrated upon itself in a globular form. The subsequent development of the medusoid consists in the elongation of the tentacles (*Figs. 9-14, f*) and the diminution of the thickness of the inner wall of the disk, until it appears like a mere filmy epidermis upon the interior of the outer wall, and, unless highly magnified, cannot be seen. On this account the disk appears to have only a single wall in the figures (*Figs. 9-14*) representing the later and last phases of growth. Owing to the dense red pigment granules, which collect in large numbers along the sides, and especially at the tip (*Figs. 8, 9, and 10, d*) of the chymiferous cavity of the proboscis, the whole medusoid is pervaded by a delicate pink tint, which, when seen in a certain light, combines with the yellow color of the germ-basis to form an orange hue. The mouth of the disk is formed very late, probably not until the young is just ready to leave the parent.

THAMNOCNIDIA TENELLA Ag. *Proles hydroidea*. *Adull.*—Although this species agrees so closely, in nearly all its details, with *T. spectabilis*, it has a very different habitat; it is never found, with its congener, in brackish water, but always in the open ocean, among rocky pools. It is a very delicate, graceful animal, and much the smallest of our Tubularians, having about half the size of *T. spectabilis* or *Parypha crocea*. It branches very irregularly, loosely, and openly (*Pl. XXII. Fig. 21*), with a stem of uniform thickness throughout, about as large as a common sewing needle, or, to be more exact, one fiftieth of an inch in diameter. The medusoids have been observed in January, July, August, and December, but the young hydroids were only seen escaping from the parent during the months of July and August.

VanBeneden has given a very incorrect account of the reproduction of the Tubularians, in his paper on the Embryology of these Hydroids. According to his representation, the medusoids, after freeing themselves from their parent stock, attach themselves to submarine bodies, and grow up into new hydroids. This