

and have the same thickness as those of the body (c^1). Its cavity does not open outwardly, but, at the base, communicates broadly with that of the convex portion. In this condition the young hydroid is set free, urging its way through the aperture of the disk between the cristate tentacles ($f f^1$).¹ The tentacles generally trail behind in the egress of the young, and very often, especially when there is but one highly-developed individual present, they occupy the region around the proboscis of the medusoid whilst the body presses against the opposite end. During the struggles of the young to push its way out, the medusoid becomes very much elongated in the direction of its axis. When once fairly freed from its parent, the young hydroid crawls about for a short time upon its long tentacles, and finally turns over and fixes itself by what we have hitherto spoken of as the convex portion of the body (c^1). We now recognize the latter as the basal side, or stem, of the individual; and are confirmed in this by the fact that it is covered by a thin, yellowish, glutinous film (*Fig. 14^a, c*), which acts as the medium of adherence to whatever the young animal may settle upon for a habitation. This glutinous film, the rudiment of the horny tube which encloses the stem of the hydroid, may be detected, without much difficulty, a short time before the exclusion of the young; but in order to see it satisfactorily, the hydroid must be cut out of its parent. We are able now to determine what organ the hernia is (*Fig. 14, c*) which developed from the concave side of the body; from its position above, and in the centre of the circle of long tentacles, there can be no doubt that it is the proboscis, although it has not yet the proboscidal tentacles. Very soon, however, the end of the proboscis is opened, and around this opening, or mouth, the buccal tentacles, five, six, or seven in number, develop rapidly. At this stage, the young hydroid appears identical, at least under a low magnifying power, with the young of *Thamnocnidia spectabilis*, of the same age (*Pl. XXII. Fig. 15*). There are often as many as nine or ten young hydroids, at one time, in a single medusoid (*Pl. XXIII. Fig. 12*), but not all in the same stage of development; there are those which have been very recently separated from the granular, yellow mass which clings around the proboscis, and have still a spheroidal form (e); others with tentacles just budding (*Fig. 22, b*), some half grown to the age of exclusion ($e^1 e^2 e^3$), and, finally, one or two just leaving the parent.

When the yellow granular mass has become quite thin, by repeated self-division and the casting off of young hydroids, it may at first sight be very readily mistaken for a second or outer wall (*Fig. 17, a*) of the proboscis, but its absence

¹ The young resemble so much the small Aca-leph-like animal described by Leuckart under the name of *Pyxidium* (*Archiv f. Naturg.*, 1856, Vol. I.

p. 31, Pl. II. *Fig. 7*), that I am inclined to consider this, also, as the free progeny of the sessile medusoid of some European *Tubularia*.