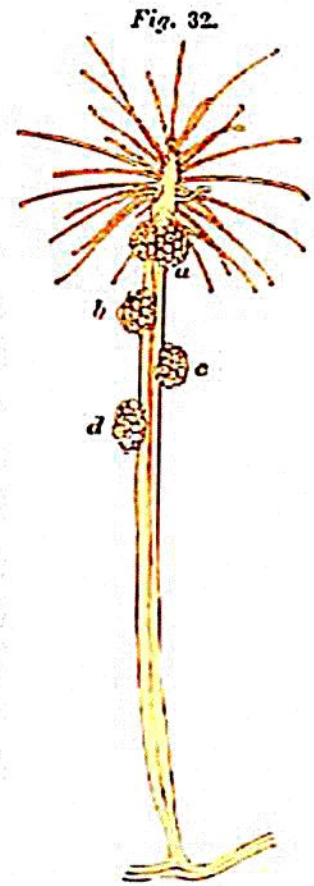


the proboscis, is several times thicker than the outer one (*a*), but gradually thins out, till, in the cylindrical part of the pedicel, the two are of equal thickness. Ten, fifteen, twenty, or twenty-five pedicels spring from a large, thick, and short peduncle (Pl. XXI. *Fig. 8*^a, *n*), which projects directly from the sides of the body. This form of grouping may be compared to a very short raceme, as the term is used in reference to plants. Usually these bunches are attached to the stem, nearly on the same level, and just below the tentacles (*Fig. 2*, A B D F II), but frequently the crowded groups extend downward, either continuously or in detached masses,¹ over one third of the distance toward the base (wood-cut 32). When the stem is contracted, these scattered groups are brought together so as to appear as if they originated nearly upon the same level (*Fig. 2*, G). After maturing their young within the cavity in which they arise, and casting them forth, the medusoids shrivel and die, without ever becoming free, or assuming a form at all resembling common free Medusæ.



SECTION III.

EMBRYOLOGY OF CLAVA LEPTOSTYLA.

According to our notes, the time of breeding is June and July, but whether it begins earlier and lasts later remains doubtful. The first individual of a new colony always originates as an egg, in the body of a medusoid (Pl. XX. *Fig. 11*, *b*³). We have not investigated the mode of development of the egg, and can only say that, just before segmentation, it is situated in the cavity of the disk of the medusoid, and rests there, neither attached to, nor surrounded by, any membrane. Being crowded between the disk and the proboscis, the two or three eggs are more or less mutually flattened, and irregularly polyhedral. The yolk (*b*³) is a dense, grayish, finely granulated mass, lighted up on one side by a large Purkinjean vesicle (*b*⁴). The latter is equal, in diameter, to about one third of the egg.

¹ A hydra of *Clava leptostyla*, similar to *Fig. 2*, A, Pl. XXI., to show the groups of medusæ (*b c d*) attached along the stem for some distance

below the head; *a*, a group in the place where they have usually been observed. Drawn from nature by H. J. Clark.