DISCOPHORE.

between the lobes, projects slightly in the form of a broad papilla. The proboscis is four-sided (Figs. 24 and 29 a), and the corners (Fig. 29 a^{1}) project considerably beyond the general outline. The digestive cavity extends by means of broad, straight, shallow channels (Fig. 24 c c) to the base of the lobe, and also to each papilla. At a short distance from the base of the proboscis, and opposite each that side, a group of four or five digitate bodies (Figs. 24 g and 26 c) projects into the digestive cavity. These are all the features which we have observed at the moment the ephyra is ready to drop from the strobila, and thus we terminate the description of the strobila stage of Aurelia flavidula.

We have not ascertained, in a direct manner, how the dorsal side (Pl. XI. Fig. 29 l) of the matured ephyra becomes separated from the individual next below it; but can only suppose, with much probability, that a gradual constriction, from without inwardly, divides the proboscis $(2 \ a)$ of the lower ephyra at a point which becomes the lip (a^1) , and which also is in direct contact with the centre (l^2) of the disk lying above it. This, we say, seems probable, from the fact that the last remnant of attachment is a thin string of matter (l^1) , which passes from the centre (l^2) of the mature ephyra to the centre of the proboscis (a) of the lower individual, and is, without doubt, the inner wall drawn out by the struggles of the escaping medusa. Finally, by repeated contractions and expansions of the disk, the ephyra breaks loose from its attachment and swims away.

Before we go on to the ephyra state, however, we will point out some curious anomalies of the scyphostoma and strobila stages. Sars, Dalyell, Reid, and others have already illustrated these anomalies more or less in detail; but we have some new ones to present, besides repeating the description of the hitherto known forms for our native Aurelia.1 The most frequent forms of anomaly are the more or less elongated, tentacle-like processes (Pl. XI^a. Figs. 3-9 c² c³ c⁴), which arise from various parts of the body, but mostly from the base. They are usually single, but occasionally they are forked, or one develops at right angles from the side of another (Fig. S $c^2 c^3$). Similar processes develop from the base of the strobila (Pl. XI. Figs. 2, 3 c² c³). Sometimes these processes are terminated by a clubshaped expansion (Pl. IX*. Fig. 2 c2), as if a new individual were about to be formed. Most frequently, however, a new individual, when developed by the budding process, springs from the side of the parent without the intervention of a secondary basis (Pl. XI. Figs. 19 c² and 25 c² c³). Instead of a single terminal row of tentacles, we find occasionally as many as two or three (Pl. XI. Figs. 18 and 21 e), but we cannot say, in these instances, whether the ephyre had already dropped off; nor that the tentacles precede them: the latter is the more probable, inasmuch as the

¹ We have never observed these anomalies in those scyphostomas which we raised from the egg.