

muscular nature, rise up within the peduncle, dividing at the expansion of the body, into eight distinct fasciculi, one proceeding to each arm. These fasciculi are composed of long parallel fibres, are analogous to the lamellæ of the Actiniæ, and like them divide the body into eight equal compartments, for the inner fold of the corium is intimately connected with them on both sides. The vermiform cæca lie in these compartments; and the ova appear also to be generated in them, but whether they have an appropriate ovary is doubtful. A specimen which had undergone a certain degree of putrefaction and dissolution exhibited these ova forming a complete circle round the mouth with rows running up the arms to the base of the tentacula. (Fig. 36.) The ova were proportionably large, roundish or oval (Fig. 36, *d*), and irregularly grouped. The change produced in the appearance of the tentacula was considerable, for the globular apex had disappeared, and all had assumed a linear or conical figure (Fig. *e*),—the centre filled with an opake granular matter forming a dark speck at the apex, and covered with a clear mucous skin. The vesicle presented precisely the same structure, but no aperture was visible in either part.

The Lucernariæ can swim with some rapidity in the water by alternate dilatations and contractions of the body, but they are usually found adherent to sea-weeds, the first species in a dependent position, the two latter invariably erect, so that Lamarck is in error when he describes the mouth as being inferior. When in a state of expansion, few marine worms exceed them in beauty and singularity of form; when contracted they are shapeless and easily overlooked. They feed on small crustaceous animals brought within reach by the tide or their own destiny,* and to arrest them more certainly the ten-

* Lamouroux asserts that *L. campanulata* perceives its prey when within a short distance and pursues it. His words are—"J'avois la précaution de changer l'eau de mes Lucernaires deux fois par jour; dans un vase qui ne contenoit qu'un de ces animaux, ce dernier exécuta des mouvemens qui me parurent extraordinaires dans un être d'un consistence aussi molle, immédiatement après que j'y eus de l'eau nouvelle; avec la loupe je m'aperçus que ces mouvemens étoient causés par la présence d'un animalcule que la Lucernaire sembloit poursuivre en se portant à droite et à gauche, pour tâcher de le saisir; toutes les fois qu'il s'éloignoit à la distance d'environ un pouce, la Lucernaire cessoit tout mouvement; s'il se rapprochoit, la chasse recommençoit de suite, et les mouvemens étoient vifs et prompts: l'animalcule fut enfin saisi par les tentacules d'un des rayons, qui à l'instant se replie vers la bouche; les autres restèrent toujours étalés; ce rayon reprit peu à peu sa position ordinaire. M'étant procuré d'autres animalcules, je les donnai à mes Lucernaires, et j'eus le plaisir de voir leurs mouvemens se répéter avec les mêmes circonstances." Mem. du Mus. ii. 464.