centric folds, in their natural relation, but seen from the internal surface of the genital sacs. Fig. 20 exhibits a small portion of a lobe magnified, in order to show how the tentacles of the genital pouches are scattered on a broad band, immediately 'adjoining the folds of the sexual organ, in which the eggs may be seen projecting from the surface of the ovarian lobes. In a younger specimen, *Fig.* 21, the ovaries are not yet fully developed, and the eggs do not project beyond the folds of the ovarian lobes. *Fig.* 22 represents the male organ, which, even in its mature condition, resembles more, by the form of its lobes, the ovaries of the young, than those of the adult; in o s the connection of the concentric folds with the genital pouch (s) is exhibited. In the male the tentacles of the genital pouches are less numerous than in the females, in their adult condition. The young female has, also, fewer than the adult.

Considered as a whole, the genital pouches, with their festoon-like lobes of sexual organs, winding in elegant folds around the whole sac, as shown in Fig. 18, have nothing of the rigidity which that figure seems to exhibit; for it is in unceasing motion, the sac itself being highly contractile. Not only does it wave constantly to and fro, but the folds, into which the whole is drawn, are alternately contracting and elongating, and in these movements the single lobes of the sexual organs are unceasingly changing their relative position. It is only in younger specimens, in which these lobes are comparatively few, as seen in Fig. 18, that their regular arrangement may be traced; the pouch itself being then shallow and projecting but slightly. As it grows larger the number of folds increases (Pl. IV. Fig. 2, Pl. V. Fig. 14), and even in specimens of moderate size, as those represented in Pl. IV. Fig. 1, and Pl. V. Fig. 15, they are so numerous that their connection may easily escape observation. In very old specimens, in which the genital pouches hang down upon the curtains of the actinostome (Pl. III.), these folds are innumerable, and their play presents a most striking spectacle. These movements seem to be a provision to bring the sexual organs constantly into renewed contact with fresh surfaces of water, and the tentacles, arranged in broad bands along the sexual organs, which are also unceasingly playing in their immediate vicinity, must powerfully contribute to this result.

When the eggs are mature, they drop from the ovarian folds and fall into the genital pouches, and are certainly not cast into the surrounding element, in the normal condition of these organs; for eggs are always found, at the time of spawning, in innumerable quantity, upon the inner surface of the actinostome, between its folds, which, though not provided with little sacks for their reception, as in Aurelia, are, nevertheless, adapted to lodge them between their plications, and to retain them until they are so far advanced in their transformation, as to be fit to live in open water. Even stranded specimens may frequently be found upon vol. IV.