elongating, as if raised or dropped, almost independently of the parts with which they are, nevertheless, continuous. At times, however, the whole mass of the actinostome is raised in a bulk, and brought nearer to the disk. When at rest, floating near the surface of the water, the gentle contractions of the margin of the disk alone maintaining the animal in its position, the pillars of the actinostome are more elongated than at other times, as is the case in Pl. III., and the folds of the curtains are gathered up in large rounded masses. When moving actively, however, they are more stretched, sometimes to a length exceeding several times that which they exhibit in Pl. III.

It is very difficult to keep large specimens of this species alive, in confinement, for protracted observation. It is evident that these animals require a very large supply of the purest water, since they rapidly decompose, in a very short time, when kept in a limited quantity of water. A few hours after they have been confined in glass cylinders, even sufficiently large to allow them to stretch their tentacles to a greater extent than is exhibited in Pl. III., and wide enough to hold them without touching the sides, the tentacles begin to drop off, one after the other, and the marginal folds of the actinostome to decompose; and no care, not even the frequent changing of the water, can keep them alive beyond twenty-four They soon discolor the water, and their whole mass becomes soft and offenhours. I have, however, observed a very singular phenomenon in a specimen which sive. I had placed in fresh sea-water, after removing all the tentacles, the genital pouches, and the actinostome, and leaving only the gelatinous disk and the horizontal part The specimen remained alive for many days; from which I of the lower floor. infer that it is chiefly the most active parts of the body, hanging from the lower floor, which require the largest supply of fresh, aerated sea-water. A specimen which I had divided into halves, and a segment representing about one fourth of the whole disk, to which fragments of the lower floor remained attached, but from which all the tentacles, and the genital pouches, with the actinostome, had been removed, continued to live and contract and move about, in a large tub, during a fortnight. Such a persistence of life, in portions of the animal, contrasts strangely with the rapidity with which entire specimens decay and die in confinement, and can only be explained by the more delicate nature of the parts hanging from the lower floor, when compared to the tougher texture of the horizontal part of that floor, and the peculiar consistency of the disk.