

and form a single structure, just within the outer wall, and immediately without the inner wall, thus forming a quasi third, or middle wall to the tentacles. Lest it may be doubted that these fibres are contractile within the digestive cavity and chymiferous canals, I would state, that upon being touched with a needle, when they are laid open by a section, a distinct contraction and a wrinkling of the wall of the canal may be observed.

“The great contractility of the digitate bodies of the reproductive organs is well known and undisputed, and yet the muscular layer of these appendages is directly continuous with that which underlies the wall of the digestive cavity and chymiferous tubes, and, moreover, with the wall, embraces a solid core or axis, which is a direct prolongation of the gelatinous layer, the same layer which constitutes the greater bulk of the body, and gives it a certain degree of rigidity.

“In young specimens, two and a half inches in diameter, within the region where the fibrillæ are concentric in the adult, the inner side of the cells of the outer wall have their granular contents arranged in parallel lines, which form concentric circles about the disk. The cells are fusiform and their longer axes trend parallel to the granular lines. At a little later period, the interior half of each cell gradually divides off, after the manner of self-division of cells, and then the muscular portion of each cell constitutes a layer hardly distinct from the cell itself, and is more like a filamentous prolongation of the parietes of the same, than a truly separate stratum. We may see the tendency to these prolongations in the branching cells which are imbedded in the gelatinous layer, not only of the actinal, but also of the abactinal side, where they connect more or less with those in the muscular layer; and in the digitate bodies appended to the reproductive organs, the branching, scattered cells, so characteristic of the gelatinous layer of the disk, are very rare, and are imbedded in the solid, fibrous, muscular layer, which constitutes the whole core of each appendage.”

There is another stage in the existence of our *Aurelia*, which deserves to be noticed. After the spawning period, a large number of them, reduced in their natural strength, and unable to resist the influence of the approaching stormy season in the autumn, are cast upon the shore, while even at that time, large numbers may be seen still floating upon the water, near its surface, in a more or less dilapidated condition, though still alive. At this time they have lost, to a great degree, their transparency, owing to the thickening of their tissue by an increased deposition of animal substance. Their disk has become tough and almost leathery, and is more elastic, though at the same time more brittle than it was before. The tentacles are, for the most part, gone, as well as the eyes; and this decomposition of the margin extends so far, that even the marginal tube and parts of the anastomoses of the radiating tubes disappear. Yet even in that condition, the fluid