

which structures differing much in their outward appearance may result. It is composed of an immense number of thin calcareous plates, arranged parallel to one another and connected by thousands of minute hollow pillars of the same calcareous material, passing perpendicularly between the adjacent surfaces. This shell is not adherent to any internal part of the animal which has produced it; but is enclosed in a capsule, and appears like a foreign body impacted in the midst of organs, with which, at first sight, it would appear to have no relation. It, no doubt, is of use in giving mechanical support to the soft substance of the body, and especially to the surrounding muscular flesh; and thus probably contributes to the high energy which the animal displays in all its movements. It has been regarded as an internal skeleton; but it certainly has no pretensions to such a designation; for, although enveloped by the mantle, it is still formed by that organ; and the material of which it is composed is still carbonate of lime. On both these accounts it must be considered as a true shell, and classed among the productions of the integuments. It differs, indeed, altogether from bony structures, which are composed of a different kind of material, and formed on principles of growth totally dissimilar.*

Besides tentacula, the *Sepia* is also furnished with a pair of fleshy fins, extending along the two sides of the body. The *Loligo* has similar organs of a smaller size, and situated only at the extremity of the body which is opposite to the head. They have been regarded as the rudiments of *true fins*, which are organs, developed in fishes, and which are supported by slender bones, called *rays*; but no structure of this kind exists in the fins of the Cephalopoda.

In swimming, the organs principally employed by cuttle-

* Some analogies have, indeed, been attempted to be traced between the cartilaginous lamina of the *Loligo*, and the spinal column of the lowest order of cartilaginous fishes: these I shall have occasion to point out in the sequel. Solid cartilaginous structures also exist in the interior of the body of the cephalopoda, which are considered by some naturalists as indicating an approach to the formation of an internal skeleton, analogous to that of vertebrated animals.