

which appears without the shell; the spherical portion remaining within the body: by means of the above fluid, as in the Polypes,\* the tube is darted forth, or retracted. Belon counted 5000 of these suckers in one species. In the sea-urchin star-fish† there are twenty rays, and the suckers are so thick as to touch each other. They may probably be of use to them also as organs of prehension to seize their prey. Those of the family to which the Medusa star-fish‡ belongs move in a different way. The diverging rays are firm and hard, have few spines, and no channel with suckers; they are used by the animal as legs, and as they are regularly placed it can move in any direction that suits it. To go towards any particular spot, it uses the two rays that are nearest to it, and another that is most distant from it; the two first curve at their extremity so as to form two hooks, which being applied to the sand drag the body forwards, while the posterior is curved vertically and performs the part of a repelling lever. The suckers, which in this genus issue from the sides of the rays, at the junction of the upper and lower surfaces, appear short, but being retractile, they can be lengthened, and doubtless are used to seize the animals that come in their way. What can more strikingly indicate the contrivance and design of an Intelligent Being than the structure of these stellated animals by which they are enabled to move in different directions, and to secure their prey?

The exterior envelope of the *sea-urchins* is formed by two membranes, the one external and thicker, and the other a very thin pellicle. Between the membranes is a thick, solid, calcareous shell composed of a great number of polygonal pieces, evidently immoveable, but not soldered during the growth of the animal. The shell of the common species,§

\* See above, p. 174.

† *Asterias echinites*.

‡ *Gorgonocephalus*.

§ *Echinus edulis*. L.