

that the action is independent of the will of the animal.

10. ZOOPHYTAL ORGANIZATION.—If we extend our observations to the patches of white calcareous matter, called *flustra*, that may be seen on every sea-weed or shell on the shore (Pl. V. fig. 6), appearing like delicate lace-work, we shall discover that these apparently mere specks of earthy substance, also belong to the animal kingdom. Many species of this zoophyte are common along our coasts, and I will describe their structure somewhat in detail, as their examination will serve to illustrate the nature of those corals which, from their magnitude and extent, become such important agents in the economy of nature.

The *flustra*, when taken fresh and alive out of the water, presents to the naked eye the appearance of fine net-work, coated over with a glossy varnish; with a glass of moderate power, this substance is discovered to be full of pores, disposed with much regularity (Pl. VI. fig. 6). If a powerful lens be employed, while the *flustra* is immersed in seawater, very different phenomena appear; the surface is found to be invested with a fleshy or gelatinous substance, and every pore to be the opening of a cell, whence issues a tube, with several long feelers or arms: these expand, then suddenly close, withdraw into the cells, and again issue forth; the whole surface being studded with these hydra-like forms; the *flustra* thus constitutes as it were a family of polypes, each individual of which is per-