

The animals which occupy the lower divisions of the scale can exist only in a liquid element. Their forms present many analogies with vegetables; and hence they have been denominated *Zoophytes*, that is, animated plants: but as it is now well ascertained that they possess the essential characters of animals, the term of *Phytozoa*, or plant-like animals, which has been given to them by some modern writers, would appear to be a more appropriate designation. It is, however, scarcely worth while, at the present day, to change a name so generally received as that of *Zoophytes*, and the application of which is not likely to lead to any misunderstanding.

§ 2. *Porifera, or Sponges.*

Among *Zoophytes*, the lowest station in the scale of organization is occupied by the tribes of *Porifera*, the name given by Dr. Grant to the animals which form the various species of sponge, and which are met with in such multitudes on every rocky coast of the ocean, from the shores of Greenland to those of Australia. Sponges grow to a larger size within the tropics, and are found to be more diminutive and of a firmer texture, as we approach the Polar circles. Dr. Grant observes* that they are met with equally in places covered perpetually by the sea, as in those which are left dry at every recess of the tide. They adhere to, and spread over the surface of rocks and marine animals, to which they are so firmly attached that they cannot be removed without lacerating and injuring their bodies. "Although they thrive best," he farther remarks, "in the sheltered cavities of rocks, they come to maturity in situations exposed to the unbroken fury of the surge. They cover the nakedness of cliffs and boulders; they line with a variegated and downy fleece the walls of submarine caves, or hang in living stalactites from the roof."

In their general appearance they resemble many kinds of

* Edinburgh Philosophical Journal, vol. xiii. p. 94.