

tability,—the existence of a mouth and stomach,—the nature of their food, its digestion, and the evomition of the indigestible remains are incontestible proofs of this;—and it seems improbable, to say no more, that this animal should be fitted round with a case that grew independent of it and from a different cause. And the case itself has no analogy, as Ellis shewed very clearly, either to bark or to wood: it possesses the structure of neither of them, nor is it formed in the same manner by the addition of concentric layers, nor does it contribute to the formation of new parts, but, like the shell of testaceous mollusca, it is extravascular, and when once formed suffers no other change than what external injuries or time may operate. If possible its coincidences with the skin of cellular plants are even fewer: the one is a living part which has very important functions to perform in relation to the plant itself and to the atmosphere or circumfluent medium in which it lives; the other exhibits no action characteristic of life, and is nothing more than a condensed albuminous or calcareous sheath, appropriated solely to support or protection.\*

But although I agree with the advocates of the animality of zoophytes in general, I cannot go the length of Ellis in considering it proved that sponges and corallines belong to the same class. Ellis, we have seen, knew that no polypes were to be found in sponge, and their existence in the pores of corallines was inferred merely from the structure of these and their chemical composition. They have been examined by subsequent naturalists fully competent to the task, and under the most favourable circumstances,—in particular by Cavolini and Schweigger,—and the result has been a conviction that these productions are truly apolypous. Now this fact, in my opinion, determines the point, for if they are not the productions of polypes, the zoologist who retains them in his province must contend that they are individually animals, an opinion to which I cannot assent, see-

\* I do not enter into the question whether the *Confervæ* are real animals or not, because, whatever conclusion we might adopt, they would not come within our definition of a zoophyte or polype, since they assuredly have neither mouth, tentacula, nor stomach. Nor need I discuss the propriety of instituting, with Treviranus, a fourth kingdom of animated nature, composed of the zoophytes and aquatic cryptogamia, as my object and plan is only to describe what have been almost universally considered zoophytes.