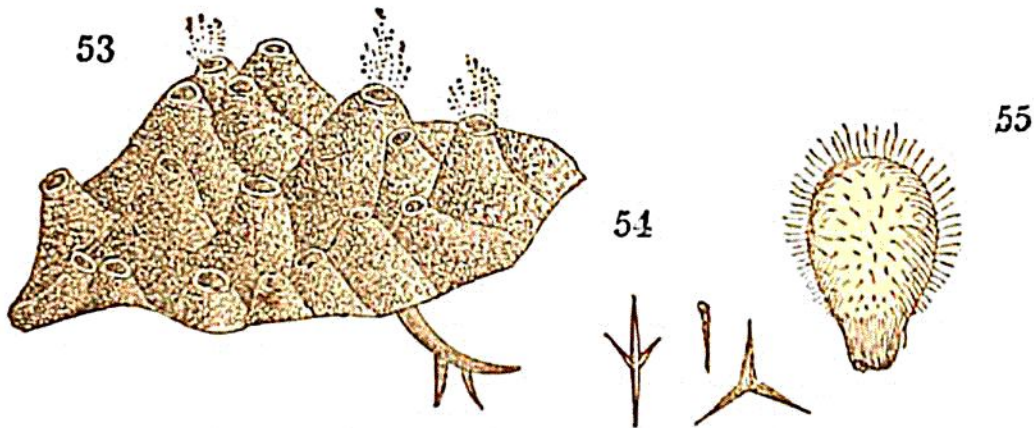


plants, but in their internal organization they differ entirely from every vegetable production; being composed of a soft flesh intermixed with a tissue of fibres, some of which are solid, others tubular; and the whole being interwoven together into a curious and complicated net-work. The substance of which this solid portion, or basis, is formed, is composed partly of horn, and partly of siliceous or calcareous matter. It has been termed the axis of the Zoophyte; and as it supports the softer substance of the animal, it may be regarded as performing the office of a skeleton, giving form and protection to the entire fabric.

The material of which the fleshy portion is composed is of so tender and gelatinous a nature that the slightest pressure is sufficient to tear it asunder, and allow the fluid parts to escape; and the whole soon melts away into a thin oily liquid. When examined with the microscope the soft flesh is seen to contain a great number of minute grains, disseminated through a transparent jelly. Every part of the surface of a living sponge (as may be seen in fig. 53) presents to the eye two kinds of orifices; the larger having a rounded



shape, and generally raised margins, which form projecting papillæ; the smaller being much more numerous, and exceedingly minute, and constituting what are termed the pores of the sponge.

It was, for a long time, the received opinion among naturalists that this superficial layer of gelatinous substance was endowed with a considerable power of contractility: it was generally believed that it shrunk from the touch, and that visible tremulous motions could be excited in it by