

such recent forms as *Aphrocallistes*, *Iphiteon*, *Holtenia*, and *Askonema* with certain series of the chalk Ventriculites, there cannot be the slightest doubt that they belong to the same family—in some cases to very nearly allied genera. Fig. 80 represents a very beautiful specimen of *Ventriculites simplex* preserved in flint, for which I am indebted to Mr. Sanderson of Edinburgh. Looking at this in the light of our knowledge of *Euplectella* or *Aphrocallistes beatrix*, we have no difficulty in working out its structure, even to the most minute microscopic detail.

Other sponges, belonging chiefly to the Lithistidæ and the Corticatae, re-

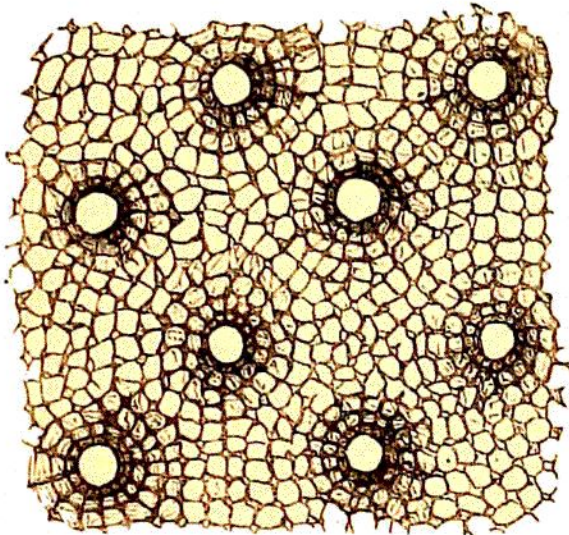


FIG. 81.—*Ventriculites simplex*, TOULMIN SMITH.
Outer surface; four times the natural size.

produce with wonderful accuracy the more irregular sponge-forms of the chalk and greensand; and a group, as yet undescribed, but apparently an aberrant family of the Esperiadæ, send out long delicate tubes, which contract slightly, but in a most characteristic way, at the point of their insertion into the sponge body, recalling very forcibly the peculiar manner in which the tube-like root processes join the sponge in such genera as the vaguely defined *Choanites*.

One sponge belonging to the group is represented at Fig. 83. A sphere 15 to 20 mm. in diameter consists of a smooth glossy external rind, composed of closely meshed pin-headed spicules, with two kinds