this is afforded by *Cladorhiza moruliformis*, nobis, in which the pinnæ are placed close together near the top of the main axis (*vide* woodcut, Fig. 1); being all of the same length, and radiating in every direction, while the soft tissues of the sponge occupy the spaces between them, they give rise to a spherical head perched on the end of a stalk.

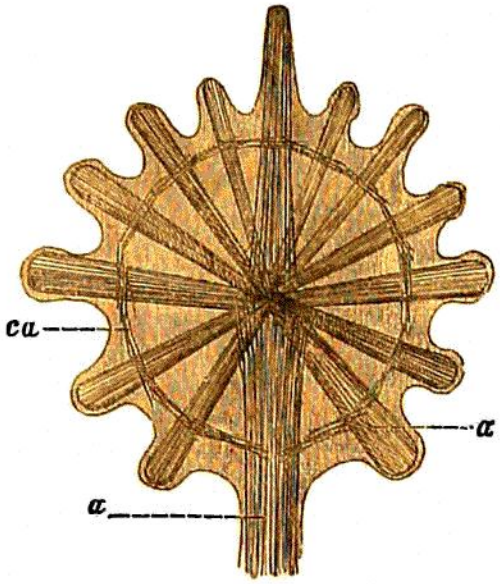

FIG. 1.—*Cladorhiza moruliformis.* Longitudinal section of the head showing the arrangement of the skeleton; *a*, axis of stem and radial bands of fibres; *ca*, capsule of loosely disposed spicules. × 4.

But by far the most remarkable of the modifications which the main skeleton thus undergoes are exhibited in the various species which we have called "*Crinorhiza*" forms[1] (*vide* woodcut, Fig. 2). When this remarkable adaptive form is present in its most typical condition we have the central axis represented by a stiff, straight, tapering root; the bulk of the soft parts are condensed into a small subglobular or cap-shaped "body," while the pinnæ are very long and slender, and are arranged in a single whorl close to the top of the axis; these long processes are very numerous and radiate in all directions, extending far beyond the body of the sponge; they are directed outwards and downwards, and their function is doubtless to prevent the sponge from sinking into the soft mud on which it lies, for which purpose they are admirably adapted.

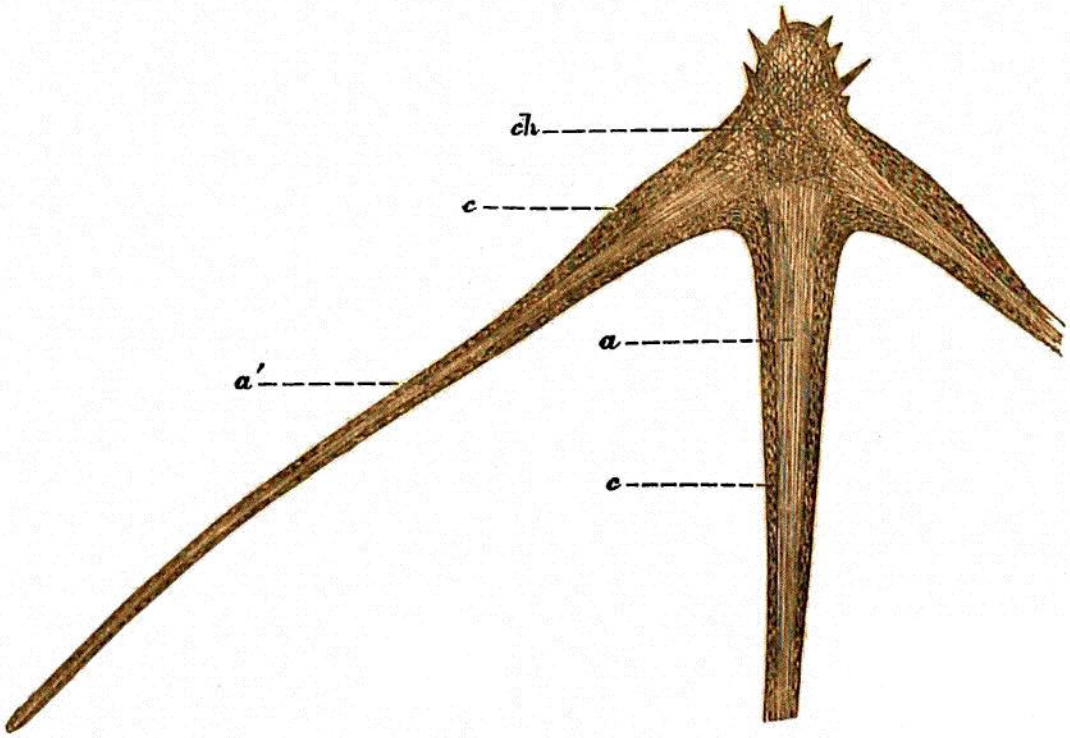

FIG. 2.—*Axoniderma mirabile.* Vertical section, showing the skeleton arrangement in a typical "*Crinorhiza*" form; *a*, axis of stem; *a'*, axis of supporting processes; *c*, cortical layer of amphiasters; *ch*, choanosome (?). × 5.

The *Crinorhiza* forms appear to be without oscula and pores, nor have we succeeded in finding flagellated chambers, although some of the specimens were in very fair

[1] *Ann. and Mag. Nat. Hist.*, ser. 5, vol. xviii. p. 342.