

spicule, the amphiaster; the additional spicules being arranged in a dense external layer. Or, on the other hand, it may have been derived from a genus of sponges, characterised by the presence of an amphiaster, which, having taken to deep water and a soft bottom, has acquired the "*Crinorhiza*" form independently. In any case the genus seems to be very nearly related to *Cladorhiza*, standing to it in much the same relation as *Meliiderma* does to *Chondrocladia* (*vide* p. 102).

Axoniderma mirabile, Ridley and Dendy (Pl. XX. fig. 5; Pl. XXI. figs. 8, 9, 10).

1886. *Trochoderma mirabile*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 344.

1886. *Axoniderma mirabile*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 493.

Sponge (Pl. XX. fig. 5) of "*Crinorhiza*" form, consisting of a conical, cap-shaped body perched on the end of a slender stalk or root, which is inserted into the centre of the lower, concave surface of the body. The root swells out considerably just before

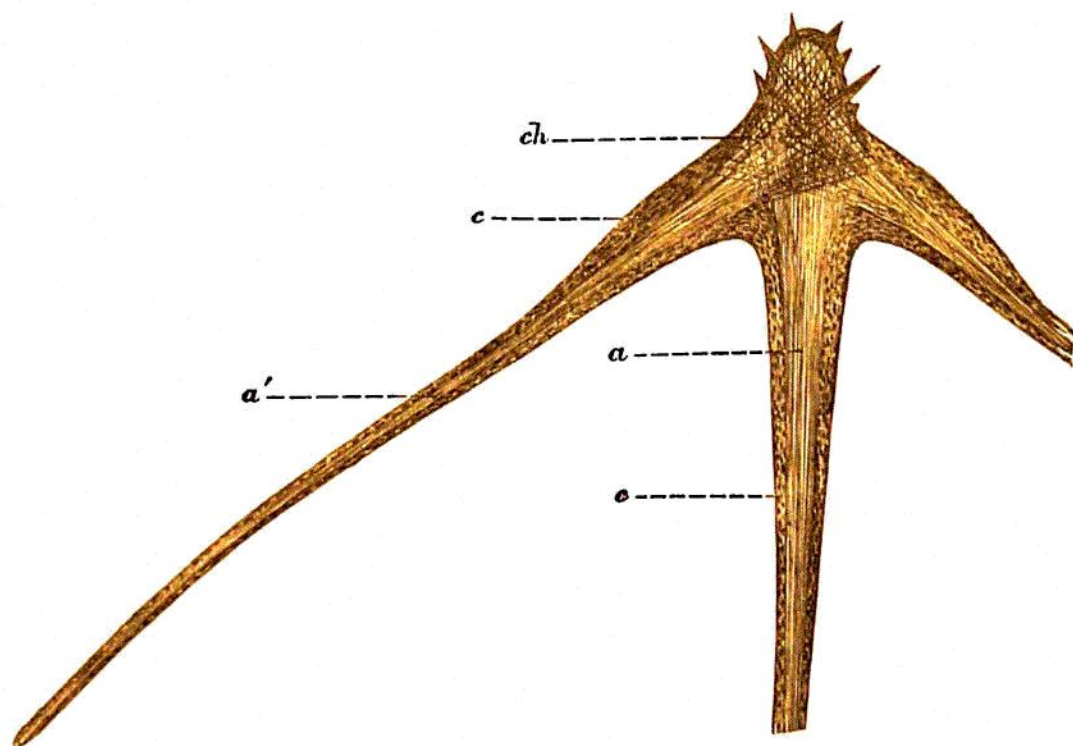


FIG. 5.—*Axoniderma mirabile*. Vertical section, showing the skeleton arrangement; *a*, axis of stem; *a'*, axis of supporting process; *c*, cortical layer of amphiesters; *ch*, choanosome (?). $\times 5$.

its insertion into the head. From the free circular margin of the body numerous (thirty or forty) very long, filamentous, spicular processes are given off obliquely outwards and downwards. The summit of the body is produced into a papilla, from which project numerous very short and slender spicular processes. Transverse diameter of the body, from base to base of the long spicular processes, a little over 6 mm. Length of root nearly 50 mm.; it thins out to hair-like proportions at the lower end, and may very possibly have been broken off. Length of the long spicular processes