

The choanosome presents a cancellous appearance owing to the excessive development of the canals, which form branching vesicular cavities. The large megascleres are irregularly disposed in the choanosome, only assuming a radial direction immediately beneath the cortex.

*Spicules*.—I. Megascleres. 1. *Oxea* (Pl. XXI. fig. 32), fusiform, variously pointed, 4.462 by 0.06 mm. to over 9.0 by 0.0316 mm.

2. *Dichotriæne* (Pl. XXI. fig. 34), rhabdome conical, very thick below the cladome, then rapidly attenuating; cladi bifurcate, protocladi diverging almost horizontally, only very slightly projecting forwards, deuterocladi horizontal. Rhabdome over 4.46 mm. long, by 0.084 mm. broad immediately below the cladome, diminishing to 0.045 mm. in a distance of a little over 0.5 mm.; protocladi 0.127 mm. long, deuterocladi 0.350 mm. long.

3. *Prottriæne*, rhabdome long, slender; cladi highly porrectate. Rhabdome 0.02 mm. broad immediately below the cladome, increasing to 0.029 mm. at a distance of about 0.6 mm. from it; cladi 0.127 mm. long, chord 0.143 mm., sagitta 0.099 mm.

4. *Anatriæne*, rhabdome long, slender; cladi short, widely divergent. Rhabdome 0.018 mm. in diameter, cladi 0.036 mm. long.

II. Microscleres. 5. *Sterraster* (Pl. XXI. figs. 35–40), slightly variable in shape, a prolate ellipsoid flattened at the ends of one of the minor axes, tending to a hexagonal or oblong outline; 0.306 by 0.245 by 0.161 mm.

6. *Somal spheraster* (Pl. XXI. fig. 42), minute, an evident centrum produced into several short conical actines, bluntly rounded at the ends; 0.0118 mm. in diameter.

7. *Choanosomal oxyaster*, a scarcely perceptible centrum with a few slender conical actines sharply pointed or with abruptly truncated ends; 0.0197 mm. in diameter, a single actine about 0.008 mm. long.

8. *Cortical spheraster* (Pl. XXI. fig. 41), a comparatively large centrum, produced into several conical oxeate actines, usually minutely and erectly spined; total diameter 0.032 mm., diameter of centrum 0.012 mm.

In my preliminary account I suggested that this microsclere had been introduced as a foreign body from without; I now find that this is certainly not the case; it occupies the usual position of the third aster, when this is present in a Geodine sponge, lying in the innermost fibrous layer of the cortex, and in the choanosome about the subcortical crypts. It also accompanies the megascleres in their passage through the cortex.

*Colour*.—Greyish-white.

*Habitat*.—Station 192, Ki Islands, September 26, 1874; lat. 5° 49' 15" S., long. 132° 14' 15" W.; depth, 140 fathoms; bottom, blue mud. Trawled.

*Remarks*.—Neither of the two specimens obtained of this sponge are complete, and it is remotely possible that the missing portions may differ from those that remain by