

II. Microscleres. 3. *Microoxea*, 0·115 mm. long; a smaller, centrally-thickened variety of this is also present. 4. *Spiraster*, passing into a metastar, 0·0316 mm. long.

*Colour*.—Yellowish-white.

*Habitat*.—Atlantic Ocean, near Cape St. Vincent; depth, 292 fathoms.

*Remarks*.—Carter calls attention to the resemblance of the spicules of this sponge to those of *Sphinctrella horrida*, O. Schmidt; this suggested to me its relationship to *Pæcillastra*, and, after carefully considering Carter's description, I think it highly probable that it belongs to this genus. The triod appears to represent the cladome of an orthotriæne, the rhabdome of which has been suppressed.

*Sphinctrella horrida*, O. Schmidt.

*Sphinctrella horrida*, O. Schmidt, Spong. Atlant. Gebiet., p. 65, pl. vi. figs. 6–7, 1870.

*Sponge*.—A vertical plate, 2 to 3 cm. thick, with rounded edges; surface rough; oscules, the patent openings of oval elongated cloacas, fringed by a palisade of long spicules; cloacas lined by a fenestrated membrane.

*Spicules*.—I. Megascleres. 1. *Oxea*, 5·0 by 0·142 mm. 2. *Triæne*, triradiate and quadriradiate; a single actine 1·06 by 0·106 mm.

II. Microscleres. 3. *Microoxea*, with an irregularly swollen surface, 0·5 mm. long, and with a smooth surface, 0·18 mm. long. 4. *Spiraster*, 0·022 mm. long.

*Colour*.—Ectosome blackish, choanosome colourless.

*Habitat*.—Florida; depth, 111 to 228 fathoms.

*Sphinctrella annulata* (Carter).

*Tisiphonia annulata*, Carter, Ann. and Mag. Nat. Hist., ser. 5, vol. vi. p. 140, pl. v. fig. 28, 1880.

*Sponge*.—Massive, 2·12 mm. in diameter, attached.

*Spicules*.—I. Megascleres. 1. *Oxea*, fusiform, 0·885 by 0·02 mm. 2. *Calthrops*, actines annulated by transverse, minutely spined, rounded ridges, each actine 0·24 by 0·02 mm.

II. Microsclere. 3. *Spiraster*, 0·0127 mm. long.

*Colour*.—White.

*Habitat*.—Gulf of Manaar.

*Remarks*.—Carter, in recognising the position of this species as one of the Theneidæ, compares the calthrops (2) with the calthrops-like triæne of *Normania crassa* (*Pæcillastra compressa*). But since, as he states, the microoxea characteristic of *Pæcillastra* is absent, it cannot be assigned to this genus. Still less can it be assigned to *Thenea* (*Tisiphonia*). The calthrops from its close resemblance to that which occurs in *Sphinctrella ornata* suggests the reference to *Sphinctrella*, to which genus I provisionally assign it.