

and 0.012 mm. along the other; the spherical nucleolus is about 0.0039 mm. in diameter.

*Myriastræa clavosa* (Ridley) (Pl. XII. figs. 34-43).

*Stelletta clavosa*, Ridley, Rep. Zool. Coll. "Alert," 1881-82, p. 474, pl. xliii. figs. 1, 2.

*Sponge* (Pl. XII. fig. 34).—Small, spherical, free; flattened or depressed above, in the centre of the depression a single small, circular, or oval oscule, with a thin membranous margin, which roofs over the cloacal chamber, into which numerous small excurrent canals open. Surface even; pores uniformly distributed in sieve-like areas.

Flagellated chambers small, on an average 0.02 mm. in diameter.

*Spicules*.—I. Megascleres. 1. *Oxea* (Pl. XII. fig. 35) slender, fusiform, straight or slightly curved, sharply pointed; from 2.86 by 0.016 mm. to 3.42 by 0.0316 mm. in diameter.

2. *Dichotriæne* (Pl. XII. fig. 36), a slender, conical, usually excessively sharply pointed rhabdome; protocladi projecting forwards and outwards, deuterocladi extending horizontally. Rhabdome from 2.825 by 0.035 mm. to 3.42 by 0.047 mm.; protocladi from 0.08 to 0.11 mm. long; deuterocladi from 0.27 to 0.29 mm. long.

3. *Anatriæne* (Pl. XII. fig. 37), a long, slender, sharply pointed rhabdome, cladi conical, regularly recurved, sharply pointed; front of the cladome usually rounded hemispherically. Rhabdome 2.32 by 0.002 mm. to 3.02 by 0.024 mm.; cladi from 0.055 to 0.079 mm. long, chord and sagitta from 0.04 and 0.08 to 0.072 and 0.127 mm.

4. *Cloacal oxea*, slender, fusiform, sharply pointed, 0.318 by 0.009 mm.

II. Microsclere. 5. *Chiaster* (Pl. XII. fig. 38), actines tylote, 0.008 to 0.012 mm.

*Colour*.—Faint yellowish or greenish-white.

*Habitat*.—Station 186, September 8, 1874; lat. 10° 30' S., long. 142° 18' E.; depth, 6 fathoms; bottom, coral mud. Dredged.

Station 208, January 17, 1875; lat. 11° 37' N., long. 123° 31' E.; depth, 18 fathoms; bottom, blue mud. Trawled.

Also (Ridley), Prince of Wales Channel, and West Island, Torres Straits, 7 to 9 fathoms; bottom, sand and coral; and Arafura Sea, off north-west coast of Australia, 32 to 36 fathoms; bottom, sand, mud, and shells.

*Remarks*.—The collection contains a series of specimens all remarkably alike in form, structure, and the characters of their spicules; and it has been a task of great difficulty, attended with considerable uncertainty, to define the exact limits of the species. Ridley states that the spicules of the numerous specimens which he examined varied but slightly in dimensions; of those which I have regarded as belonging to *Myriastræa clavosa*, this, as will be seen from the appended table, can hardly be said; they differ in