

face shown in Pl. XV. fig. 2. One remarkable fact in connection with them is the presence of well-developed protriænes throughout their whole course from the origin to the surface. The dichotriænes, evidently modifications of the protriænes, and the anatriænes, occur only near the surface, beyond which they do not project except in the sheltered depression shown in the upper edge of fig. 1. Here the anatriænes extend outwards for about 0·25 mm., and some of them, together with fully-developed oxeas, occur amidst some attached foreign material, free and completely extruded from the sponge.

The anatriænes are sometimes reduced to anadiænes and anamonænes, the latter somewhat resembling the anamonænes of *Tetilla pedifera*, except that the cladus is far shorter in length.

*Anthrastra ridleyi*, Sollas.

*Ecionema ridleyi*, Sollas, Prelim. Account, Sci. Proc. Roy. Dubl. Soc., vol. v. p. 191, 1886.

*Sponge* ovate; a few papillary processes (apparently for attachment) at the lower end; several small oscules on the summit.

*Spicules*.—I. Megascleres. 1. *Oxea*, massive, fusiform, straight or curved, sharply pointed or not; 4·07 by 0·118 mm.

2. *Orthotriæne*; rhabdome conical, massive, sharply pointed or rounded off near the end; cladi stout, conical, diverging outwards and slightly forwards. Rhabdome 4·0 by 0·118 mm., cladi 0·27 to 0·32 mm. long, chord 0·58 mm.

3. *Anatriæne*; rhabdome slender, conical, sharply pointed; cladi diverging more outwards than backwards; front of the cladome rounded. Rhabdome 3·6 by 0·03 mm., cladi 0·103 mm. long, chord 0·183 mm., sagitta 0·08 mm.

II. Microscleres. 4. *Anthaster*, small, actines usually numerous, a single actine of a tetrad form from 0·01 by 0·0039 mm.

5. *Chiaster*, actines slender, hair-like, tylote, no visible centrum; 0·0158 mm. in diameter.

*Colour*.—Yellowish-white.

*Habitat*.—Port Jackson, June 3, 1873; depth, 30 to 35 fathoms.

*Remarks*.—The single specimen obtained of this sponge is a prolate ellipsoid, with a minor axis of 15 mm. and a major axis of 23 mm. It differs from *Ecionema pyriformis* in possessing orthotriænes instead of dichotriænes, and in the reduction of the anthaster, which differs only slightly from a chiaster. Both sponges bear a general resemblance to *Anthastra (Stelletta) tethyopsis*, Carter; which, however, is distinguished by much larger megascleres, the oxea measuring 8·68 by 0·05 mm., and the dichotriæne 8·68 by 0·07 mm.