Echinoclathria glabra, Ridley and Dendy (Pl. XXIX. figs. 11, 11a; Pl. XXXI. fig. 2).

1886. Echinoclathria glabra, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii p. 476.

Sponge (Pl. XXXI. fig. 2) massive but honeycombed throughout, consisting throughout of thin, flattened trabeculæ, anastomosing and interwoven with one another, leaving oval or rounded meshes about 4 mm. in diameter. The single specimen in the collection is about 112 mm. high by 75 mm. broad, and 44 mm. thick; it has evidently been cut off at the base. Colour in spirit yellow. Texture firm and parchment-like. Surface (of the trabeculæ) glabrous. Dermal membrane thin, transparent, very rarely stretching across the mouths of the cavities at the surface. Oscula not observed, apparently the sponge is lipostomous.

Skeleton.—A reticulation of well-developed horny fibre, sparsely cored by tylota and sparsely echinated by smooth subtylostyli.

Spicules.—Megasclera; (1) smooth, fusiform subtylostyli (Pl. XXIX. fig. 11a), sharply and gradually pointed at the apex and constricted before the head, which is no wider than the shaft; size about 0.11 by 0.0063 mm.; echinating the horny fibre. (2) Long, smooth tylota (Pl. XXIX. fig. 11), very slender, with oval heads; measuring about 0.22 by 0.0032 mm., in the fibre and scattered, especially on the surface of the trabeculæ.

This species is distinguished by its glabrous surface and by the presence of the tylote spicules in the fibre and scattered. No microsclera are present. It is very probable that, owing to its spicular peculiarities, it ought to form the type of a new genus, but we prefer to leave the responsibility of this step to some one who has a larger series of forms for comparison than we have.

Locality.—Station 162, April 2, 1874; lat. 39° 10′ 30″ S., long. 146° 37′ 0″ E.; off Moncœur Island, Bass Strait; depth, 38 fathoms; bottom, sand and shells. One specimen.

Genus Agelas, Duchassaing and Michelotti (Pl. XXIX.).

1864. Agelas, Duch. and Mich., Naturkund. Verhand. Maatschapp. te Haarlem, ser. 2, vol. xxi. p. 76.

1867. Ectyon, Gray, Proc. Zool. Soc. Lond., p. 515.

1870. Chalinopsis, Schmidt, Spong. Atlant. Gebiet., p. 59.

Of various form; with well developed horny fibre echinated by verticillately spined stylote spicules. No microsclera and no other megasclera.

To Carter is due the merit of having pointed out 1 that *Ectyon sparsus*, Gray, is referable to the older genus *Agelas* of Duchassaing and Michelotti, nevertheless he retains Gray's generic name, *Ectyon*; in this we cannot, with due regard to the rules of priority,

¹ Ann. and Mag. Nat. Hist., ser. 5, vol. ix. p. 281.