

mm. 5. *Chiaster*, centrum well developed, actines cylindrical, tylote, varying from about six to twelve in number, 0.016 mm. in diameter.

*Colour*.—Externally brown, yellowish within.

*Habitat*.—Samoa Islands.

*Remarks*.—I owe a type-slide containing mounted spicules of this sponge to the kindness of Dr. Perceval Wright, to whom it was presented by Selenka. The spicules evidently belong to a sponge closely related to *Cydonium eosaster*, Sollas, and *Cydonium globostelliferum* (Carter). The spheraster is, however, much larger than in either of these species, and the rhabdi are strongyles, not oxeas. The minute aster, which I have termed a chiaster, should perhaps in strictness be termed a spheraster with tylote actines.

*Cydonium globostelliferum* (Carter).

*Geodia globostellifera*, Carter, Ann. and Mag. Nat. Hist., ser. v. vol. vi. p. 134, pl. vi. fig. 38, 1880.

? *Geodia globostellifera*, Ridley, Spong. "Alert," p. 480, pl. xliii. fig. 6, 1884.

*Sponge*.—Globular, free or attached; surface covered with attached detritus.

*Spicules*.—I. Megascleres. 1. *Somal oxea*, 2.39 by 0.021 mm. (C.), 3.0 by 0.038 mm. (R.). 2. *Cortical oxea*, 0.16 by 0.005 mm. (R., not mentioned by Carter). 3. *Orthotriæne*, rhabdome 1.71 by 0.021 mm. (C.), by 0.07 mm. (R.); cladi, chord 0.5 mm. (C.), 0.58 mm. (R.). 4. *Protriæne*, cladi 0.112 mm. long (C.), 1 mm. (R.).

II. Microscleres. 5. *Sterraster*, 0.07 mm. (C.), 0.09 mm. (R.), in diameter. 6. *Spheraster*, 0.0211 mm. (C.), 0.028 mm. (R.), in diameter. 7. *Somal chiaster*, actines numerous, truncate, 0.0042 mm. (C.), 0.0063 mm. (R.), in diameter. 8. *Choanosomal chiaster*, 0.034 mm. (C.), 0.038 mm. (R.), in diameter.

*Colour*.—Violet-grey (C.), pale crimson in places (R.). Size, 19 mm. (C.), 80 mm. (R.), in diameter.

*Habitat*.—Gulf of Manaar (C.); Port Darwin, north-east coast of Australia, near tide marks, bottom, sand and rocks (R.).

*Remarks*.—The letters (C.) and (R.) placed after the measurements indicate that they are quoted from Carter and Ridley respectively. It will be seen that the two sets of measurements correspond fairly well, and probably the two sponges belong to the same species, as Ridley supposes; there still remain two points for further examination before this can be regarded as certain,—first the apparent absence of cortical oxeas in Carter's sponge, and next the small diameter of the orthotriæne as compared with that in Ridley's specimens.

The species is evidently very similar to *Cydonium eosaster*, in which, however, dichotriænes and not orthotriænes are present.