

Locality.—Station 307, January 4, 1876; lat. 49° 24' 30" S., long. 74° 23' 30" W.; off the south-west coast of Patagonia; depth, 140 fathoms; bottom, blue mud. One specimen. Off the south-west coast of Patagonia (Station uncertain). Two or three specimens. *Habitat*.—Adriatic Sea (Schmidt); Port Darwin, Australia (Ridley, "Alert"); Torres Strait (Ridley, "Alert"); off the south-west coast of Patagonia (Challenger).

Reniera subglobosa, Ridley and Dendy (Pl. I. figs. 3, 3a; Pl. II. fig. 6).

1886. *Reniera subglobosa*, Ridley and Dendy, Ann. and Mag. Nat. Hist., ser. 5, vol. xviii. p. 327.

Sponge (Pl. I. fig. 3) sessile, subglobular, hollow, thick-walled, with a wide, circular, cloacal opening at the summit. Height 31 mm.; diameter about 25 mm.; diameter of cloacal opening 12 mm.; thickness of wall 8 mm. *Colour* in spirit yellowish-grey. *Texture* firm but very brittle; cavernous, traversed by canals which end beneath the dermal membrane on the outside of the hollow cup, their terminations being here irregularly dispersed. On the inside of the cup (Pl. I. fig. 3a) the openings of the canals (? oscula) are arranged in regular series, separated from one another by ridges as in the figure; these ridges, or strands of tissue, form a rectangular lattice-work. *Surface* even, and probably smooth in the living sponge. *Dermal membrane* delicate, transparent; largely rubbed off; where it still remains it extends right over the openings of the wide canals on the outer surface of the sponge; sometimes also it appears to extend over the inner openings; the oscula were very likely confined to the inside of the cup as in other flabellate and infundibuliform sponges. *Pores* found in the dermal membrane on the outside of the cup in the form of numerous, irregularly scattered, small, rounded openings variable in size, probably confined to the outside of the cup.

Skeleton.—The main skeleton consists of a confused but subrectangular reticulation composed of very loose spiculo-fibre, two or three spicules in width. There is also a definite unispicular dermal reticulation supporting the dermal membrane.

Spicules.—Smooth, slightly curved, subhastately and sharply-pointed oxea (Pl. II. fig. 6), measuring about 0.3 by 0.013 mm.

This species may be recognised by its fine, subglobular, hollow form; by the striking serial arrangement of the openings on the inner surface, and by its firm though brittle consistence. These characters, combined with the size of the spicules, are sufficient to distinguish it from all previously known species. Of possibly related species, *Reniera compacta*, Schmidt,¹ differs from *Reniera subglobosa* in its slender and longer spicules, and from *Reniera dura* in its bast-like cortex and spicules, which are twice as broad as here; they resemble it in their density of structure, but are possibly referable to *Petrosia*.

¹ Spong. Adriat. Meer., Supp. i. p. 38.