

The structure of the test varies with the locality and the nature of the sea-bottom. The walls are often composed of fine siliceous grains very neatly joined together, as in figures 1, 2, 3; sometimes they are beset with projecting sponge-spicules, as in figure 4; but more frequently, especially in northern habitats where the species is most plentiful, the test is constructed of coarse sand and has a very rough exterior, as shown in figure 5.

I have notes of the occurrence of *Reophax difflugiformis* at about forty localities. It was found in thirteen out of sixteen soundings obtained on the shores of Franz-Josef Land and Novaya-Zemlya, in latitudes extending to nearly 80° north, at depths of from 55 fathoms to 219 fathoms. It is common in the Farøe Channel, 530 to 555 fathoms, and has been taken at four other points in the North Atlantic, ranging from 420 to 2435 fathoms; it also occurs in shallow water in Dublin Bay. The following localities complete the record of its distribution:—four Stations in the South Atlantic, 1035 to 2200 fathoms; off Kerguelen Island, 120 fathoms; the Southern Ocean, south of Australia, 2600 fathoms; seven Stations in the South Pacific, 58 to 2425 fathoms; and three in the North Pacific, 2300 to 3950 fathoms.

My first acquaintance with the species was from a fossil specimen in Mr. Robertson's collection, obtained many years ago from the Post-tertiary College Clay of Cumbrae; but I cannot speak with certainty of its occurrence elsewhere in the fossil state. At the same time, judging from the extremely variable contour and texture of recent specimens, I have very little doubt that the Cretaceous forms described by Berthelin under the names *Haplophragmium scruposum* and *Haplophragmium lagenarium*,<sup>1</sup> and possibly also some reputed Mesozoic *Lagenæ*, in reality belong to this species.

*Reophax ampullacea*, H. B. Brady (Pl. XXX. fig. 6, *a.b.*).

*Reophax ampullacea*, Brady, 1881, Quart. Journ. Micr. Sci., vol. xxi. N. S., p. 49.

Test monothalamous, compressed; broad and rounded at the base, tapering towards the distal end; exterior rough. Length,  $\frac{1}{30}$ th inch (0·84 mm.).

This is a somewhat large flattened variety, bearing the same sort of relation to *Reophax difflugiformis* that *Lagena marginata* bears to *Lagena globosa*.

It has only been met with at one locality,—off Christmas Harbour, Kerguelen Islands, 120 fathoms.

*Reophax fusiformis*, Williamson, sp. (Pl. XXX. figs. 7–11).

*Proteonina fusiformis*, Williamson, 1858, Rec. For. Gt. Br., p. 1, pl. i. fig. 1.

*Lituola nautiloidea*, var. *scorpiurus*, Parker and Jones, 1862, Introd. Foram., App., p. 309.

*Lituola fusiformis*, Wright, 1877, Proc. Belfast Nat. Field Club, 1866–7, Appendix,—Table.

*Reophax fusiformis*, Siddall, 1879, Catal. Brit. Rec. Foram., p. 4.

<sup>1</sup> *Mém. Soc. géol. France*, sér. 3, mém. 5, p. 21, pl. i. figs. 1, 2.