

with the normal form at one point in the North Atlantic and at one in the South Pacific. It occurs in bottom-dredgings from three Stations in the North Atlantic, from four in the South Atlantic, and from one in the South Pacific.

Pulvinulina tumida, H. B. Brady (Pl. CIII. figs. 4-6).

Pulvinulina menardii, var. *tumida*, Brady, 1877, Geol. Mag., Dec. II. vol. iv. p. 294.

„ „ „ Id. 1879, Quart. Journ. Micr. Sci., vol. xix., N. S., p. 80.

Pulvinulina tumida is probably only a variety of *Pulvinulina menardii*, but the test is stouter and altogether more solidly built. Its general contour is oblong, both the superior and inferior faces are highly convex, and the peripheral edge thick or rounded, and little if at all constricted at the sutures; on the inferior face the segments are more or less inflated and the umbilicus sunken; the longer diameter is about $\frac{1}{2}$ th inch (1 mm.).

This form was taken in the tow-net on three occasions, twice in the North Atlantic and once in the South Atlantic.

Its presence has been determined in bottom-dredgings from seven Stations in the North Atlantic, 450 to 2750 fathoms; from nine in the South Atlantic, 420 to 2475 fathoms; from eleven in the South Pacific, 20 to 2600 fathoms; and from two in the North Pacific, 500 to 1850 fathoms. Of these the most northerly is Station 45, lat. 38° 34' N., the most southerly Station 323, lat. 35° 39' S.; but with a few exceptions the points referred to are all within the tropics.

A few specimens were found with other Foraminifera in a piece of white limestone from the New Britain group, the precise geological age of which has not been determined, but otherwise the species has not been recognised in the fossil condition.

Pulvinulina canariensis, d'Orbigny, sp. (Pl. CIII. figs. 8-10).

Rotalina canariensis, d'Orbigny, 1839, Foram. Canaries, p. 130, pl. i. figs. 34-36.

Pulvinulina repanda, var. *menardii*, subvar. *canariensis*, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 395, p. 16, figs. 47-49.

„ *canariensis*, Owen, 1876, Journ. Linn. Soc. Lond., vol. ix., Zool., p. 148, pl. v. fig. 21.

„ „ Brady, 1879, Quart. Journ. Micr. Sci., vol. xix., N. S., p. 80.

„ „ Terrigi, 1880, Atti dell' Accad. Pontif., ann. xxxiii. p. 207, pl. iii. figs. 59, 60.

Pulvinulina canariensis may be treated as a feeble modification of *Pulvinulina menardii*. The test is smaller than that of the type, the two lateral faces are nearly equally convex, and the periphery is acute or subcarinate; it has usually only four or five segments in the outer whorl, and they are so combined that the ends project considerably at the margin; there is but little sutural limbation, frequently none.