

- II. "The *auricula* or *oblonga* group ; 10–500 fathoms (70 fathoms best)."
Pulvinulina auricula, *P. oblonga*, *P. scabra*, *P. hauerii*, and *P. lateralis*.
- III. "The *menardii* or abyssal group ; 100–2700 fathoms."
Pulvinulina menardii (and var. *fimbriata*), *P. tumida*, *P. canariensis*,
P. patagonica, *P. crassa*, *P. micheliniana*, *P. umbonata*, *P. exigua*,
and *P. pauperata*.
- IV. "The *schreibersii* or stellar group ; 30–2700 fathoms."
Pulvinulina schreibersii, *P. procera*, and *P. karsteni*.
- V. "The *elegans* or strongly limbate group ; 70–1000 fathoms."
Pulvinulina elegans, *P. partschiana*, *P. berthelotiana*, and *P. favus*.

The geographical distribution of the genus is world-wide. Living specimens have been taken in the Arctic Ocean up to the very farthest points hitherto explored, and in the southern hemisphere to the Antarctic Ice-barrier; and at every intermediate latitude the type is copiously represented. Certain species have a more or less pelagic existence, either at the surface of the ocean or in mid-water, but the majority of forms inhabit the bottom-ooze, and their bathymetrical range extends from the littoral or algal zone down to a depth of 3125 fathoms. In point of numerical abundance, the specimens of *Pulvinulina* far exceed those of any other genus of recent Foraminifera, *Globigerina* alone excepted; and their dead shells, especially those of the pelagic species, contribute in like proportion to the formation of oceanic deposits.

The geological history of the genus commences in the Carboniferous period, the earliest known *Pulvinulina* being rare specimens pertaining to the "*elegans*" group, which occur in the Calcaire de Namur of Belgium. Very similar forms have been found in the Trias of St. Cassian and of Derbyshire, in the Lias, and the Oolite. The Cretaceous age is marked by a large increase in the number of species, and the list receives constant accessions during the successive stages of the Tertiary epoch.

Pulvinulina repanda, Fichtel and Moll, sp. (Pl. CIV. fig. 18, *a.b.c.*).

Nautilus repandus, Fichtel and Moll, 1803, Test. Micr., p. 35, pl. iii. figs. *a.d.*

Rotalia repanda, Parker and Jones, 1860, Ann. and Mag. Nat. Hist., ser. 3, vol. v. p. 175, No. 25.

Pulvinulina repanda, Carpenter, 1862, Introd. Foram., p. 210.

Placentula repanda, Berthelin, 1878, Foram. de Bourgneuf et Pornichet, p. 41, No. 68.

Pulvinulina repanda, Terrigi, 1880, Atti dell' Accad. Pontif., ann. xxxiii. p. 206, pl. iii. fig. 61.

The *Nautilus repandus* of Fichtel and Moll has been adopted by Parker and Jones as the central type of the genus *Pulvinulina*. The original figure (*loc. cit.*) is that of a regularly Rotaliform shell, the two faces of which are nearly equally convex, presenting