Pulvinulina canariensis inhabits a somewhat larger area than the typical Pulvinulina menardii, its northern and southern limits being lat. 60° 32' N., and lat. 46° 40' S. respectively. It is less common than the type in the tropics, and more generally diffused in the north and south temperate zones; hence in the "Porcupine" dredgings Pulvinulina canariensis is abundant, whilst well-characterised examples of Pulvinulina menardii are extremely rare.

Surface-specimens were obtained by the Challenger naturalists at three points in the North Atlantic, at ten in the South Pacific, and at one in the North Pacific. It has been observed in bottom-dredgings from fifty to sixty Challenger and "Porcupine" Stations, distributed over the North and South Atlantic, the Southern Ocean, and the South Pacific. It is much less common in the North Pacific and the Indian Ocean.

Mr. Robertson has specimens of *Pulvinulina canariensis* from the Post-tertiary beds of Garvel Park, Greenock; but with this exception the species has not been identified in the fossil condition.

Pulvinulina patagonica, d'Orbigny, sp. (Pl. CIII. fig. 7, a.b.c.).

Rotalina patagonica, d'Orbigny; 1839, Foram. Amér. Mérid.; p. 36, pl. ii. figs. 6-8. Pulvinulina scitula, Brady, 1882, Proc. Roy. Soc. Edin., vol. xi. p. 716.

"A variety of *Pulvinulina canariensis*, differing from the typical form in its relatively small size and compact habit of growth. The margin is rounded instead of sharp, and the peripheral ends of the chambers are only slightly convex instead of standing out prominently as in *Pulvinulina canariensis*. Notwithstanding its minute dimensions, it generally attracts attention by its glistening white appearance. Longer diameter,  $\frac{1}{100}$ th inch (0.25 mm.)," or more.

This variety was noticed in the foregoing terms under the name *Pulvinulina scitula*, in the "Knight Errant" Report (*loc. cit.*) When that Report was written, I had overlooked or only partially considered d'Orbigny's previous description and figures of *Rotalina patagonica*, which, notwithstanding some discrepancies, I am now convinced are intended for the same form. The diameter of the test, according to d'Orbigny, is onesixth of a millimètre ( $\frac{1}{150}$ th inch); his specimens, however, were from comparatively shallow water; those from the Faröe Channel were somewhat larger, about  $\frac{1}{100}$ th inch; but, on deep bottoms in the South Pacific and elsewhere, the test frequently measures  $\frac{1}{40}$ th inch in its longer diameter.

A few rather doubtful surface-specimens of *Pulvinulina patagonica* have been observed in one tow-net gathering in the South Atlantic, and in one from the west coast of Patagonia. It is, however, so common a constituent of bottom-dredgings and so widely diffused, that more evidence is required before it can be classed amongst normally pelagic organisms. The following is the record of its geographical distribution :--twentyone Stations in the North Atlantic, depths from 90 to 2435 fathoms; eight in the South