

Magellans Strait, 55 fathoms; from two points on the west coast of Patagonia, 45 and 160 fathoms; from the Falkland Islands, 4 fathoms; and from the mouth of the Rio de la Plata, 13 fathoms; the last named being in lat.  $35^{\circ} 2' S$ . Messrs. Parker and Jones, however, have obtained small specimens in the South Atlantic, as far north as lat.  $26^{\circ} 45' S$ .

The geological distribution of the species commences with the Upper Cretaceous formations. It occurs in the Green-sand of New Jersey, and in the Chalk of Mecklenburg (Reuss); in the Pliocene and Post-pliocene beds of Southern Italy (Seguenza); and in the Sub-recent clays of Cambridgeshire and Lincolnshire (Parker and Jones).

*Pulvinulina elegans*, d'Orbigny, sp. (Pl. CV. figs. 4, 5, 6).

- "Nautili Ammoniformes sive trochiformes," Soldani, 1780, Saggio Oritt., p. 99, pl. ii. fig. 13.  
*Rotalia (Turbinulina) elegans*, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 276, No. 54.  
*Pulvinulina elegans*, Parker, Jones, and Brady, 1871, Ann. and Mag. Nat. Hist., ser. 4, vol. viii. p. 174, pl. xii. fig. 142.

*Pulvinulina partschiana*, d'Orbigny, sp. (Pl. CV. fig. 3, *a.b.c.*, woodcut, fig. 21).

- Rotalina partschiana*, d'Orbigny, 1846, For. Foss. Vien., p. 153, pl. vii. figs. 28-30; pl. viii. figs. 1-3.  
 " " var., Bornemann, 1855, Zeitschr. d. deutsch. geol. Gesellsch., vol. vii. p. 340, pl. xvi. fig. 6, *a.-c.*  
*Rotalia elegans*, Parker and Jones, 1860, Quart. Journ. Geol. Soc., vol. xvi. p. 455; pl. xx. fig. 46.  
*Pulvinulina repanda*, var., *elegans*, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 397 pl. xvi. figs. 44-46.  
*Rotalia flosculiformis*, Schwager, 1866, Novara-Exped., geol. Theil, vol. ii. p. 262, pl. vii. fig. 109.  
*Pulvinulina partschiana*, Reuss, 1870, Sitzungsber. d. k. Ak. Wiss. Wien, vol. lxii. p. 36;—  
 Schlicht, 1870, Foram. Pietzpuhl, pl. xx. figs. 23-25, 29-31.  
*Pulvinulina elegans*, Blake, 1876, Yorkshire Lias, p. 472, pl. xvii. figs. 38, 38a.  
*Placentula partschiana*, Berthelin, 1882, Bull. Soc. géol. France, sér. 3, vol. xi. p. 16.

The *Rotalia elegans* of the "Tableau Méthodique," founded upon figures in Soldani's "Testaceographia," passes by insensible gradations into the *Rotalina partschiana* of the "Vienna Basin" memoir. The particular variety represented by the former figure attains larger dimensions, the test is less convex and therefore relatively thinner, and the septa are marked by broad clear lines, neither elevated nor depressed; whilst in the latter the sutures, especially on the inferior face, are generally more or less limbate externally. Well characterised specimens of the two forms are portrayed in Pl. CV. fig. 3 and figs. 4-6 respectively. At six Challenger Stations both varieties present themselves, and with them passage-forms of every intermediate contour. Morphologically the points of difference, even in extreme examples, are comparatively trifling, and they appear to be