

There need not be the least hesitation in assigning the *Rotalina truncatulinoïdes* of the "Canaries," and the *Rotalina micheliniana* of the "Chalk of Paris," to the same species; and as the memoirs in which they are respectively described were published nearly simultaneously,¹ the question of actual precedence of nomenclature is not of much importance. Parker and Jones have preferred the name attached by d'Orbigny to the Cretaceous specimens, and later writers have followed their usage in this respect.

Pulvinulina micheliniana represents the extreme development in one direction of the "menardii" series; namely, that in which the superior or spiral face of the shell is flat and the inferior highly convex or subconical. It is the isomorph of *Truncatulina refulgens*, from which species it is for the most part readily distinguishable by the more or less excavated umbilicus, and the projecting apical margins of the later segments.

Except at a single locality, just north of the equator, *Pulvinulina micheliniana* was not taken at the surface of the North Atlantic during the Challenger cruise. It was collected, however, amongst other pelagic organisms at three points in the South Atlantic, at four in the South Pacific, and at one in the North Pacific.

The wide-spread geographical distribution of the species is evidenced by the following record of the occurrence of dredged bottom-specimens:—Arctic Seas—Baffin's Bay and Smith Sound, as far north as lat. 79° 26' N.; North Atlantic—thirty-eight Challenger and "Porcupine" Stations, depths 90 to 2740 fathoms; South Atlantic—twelve Stations, 100 to 2475 fathoms; North Pacific—five Stations, 345 to 2950 fathoms; South Pacific—nineteen Stations, 15 to 2600 fathoms; Southern Ocean—four Stations, 50 to 1570 fathoms, as far south as lat. 46° 46' S. It is plentiful also in the Mediterranean and the Indian Ocean.

As a fossil the species has been found in the Cretaceous formations of England (Ehrenberg, Jones and Parker), Ireland (Wright), France (d'Orbigny, Ehrenberg), Germany, Austria, and Bohemia (Reuss, Karrer), New Jersey (Ehrenberg), and elsewhere. It has likewise been obtained from the London Clay (Jones and Parker), and from the Pliocene and Post-tertiary formations of Southern Italy (Seguenza); but our knowledge of its occurrence in deposits of Tertiary age is manifestly incomplete.

Pulvinulina umbonata, Reuss (Pl. CV. fig. 2, a.b.c.).

Rotalina umbonata, Reuss, 1851, Zeitschr. d. deutsch. geol. Gesellsch., vol. iii. p. 75, pl. v. fig. 35, a.-c.

Pulvinulina umbonata, Id. 1866, Denkschr. d. k. Akad. Wiss. Wien, vol. xxv. p. 206.

" " Hantken, 1875, Mittheil. Jahrb. d. k. ung. geol. Anstalt, vol. iv. p. 77, pl. ix. fig. 8, a.-c.

¹ "Nous avons publié, l'année dernière, trois ouvrages spéciaux sur les Foraminifères: 1°. Un travail d'ensemble, descriptif et historique, et un *Genera* complet dans *l'Histoire naturelle de l'île de Cuba*, de M. de la Sagra, avec le Faune locale des Antilles (1 volume in -8°, avec 12 planches in -fol.); 2°. la Faune des îles Canaries, dans *l'Histoire naturelle des îles Canaries*, par MM. Webb et Berthelot; 3°. la Faune de la craie blanche de Paris, dans les *Mémoires de la Société géologique de France*." Foram. Amér. Mérid. (dated 1839), p. 1, footnote.