

Sphæroidina bulloides inhabits an extensive geographical area, and the limits of its bathymetrical distribution are correspondingly wide. So far as at present known it is not a pelagic species. It has been found on the western shores of Norway, the British Islands, Belgium, and France; in the Mediterranean, the Adriatic, and the Red Sea. It occurs at twenty-three Stations (Challenger and "Porcupine") in the North Atlantic, the depths varying from 85 to 1750 fathoms; at six Challenger Stations in the South Atlantic, 420 to 2350 fathoms; at fourteen in the South Pacific, 37 to 1375 fathoms; at four in the North Pacific, 95 to 2050 fathoms; at two in the Southern Ocean, 1570 fathoms and 2600 fathoms respectively; and it has also been taken in the Indian Ocean.

The earliest known appearance of the species as a fossil, is in the Chalk of Meudon and of the Island of Rügen (Ehrenberg); and it has been recorded under one name or other from the lower *Clavulina-szabói* formation of Hungary, and the Priabona Beds of North Italy (Hantken); the Septaria-clays of Germany (Reuss, Schlicht); from various Miocene deposits in Austria (d'Orbigny, Czjzek, Reuss, &c.), and Lower Bavaria (Egger); and from the Pliocene of Italy (d'Orbigny, Costa, Jones and Parker, &c.), of the south-east of Spain (Jones and Parker), and of the Nicobar Islands (Schwager).

Sphæroidina dehiscens, Parker and Jones (Pl. LXXXIV. figs. 8–11).

Sphæroidina dehiscens, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 369, pl. xix. fig. 5, *a.b.*

Globigerina seminulina, Schwager, 1866, Novara-Exped., geol. Theil, vol. ii. p. 256, pl. vii. fig. 112.

Sphæroidina dehiscens, Pourtales, 1867, Bull. Mus. Comp. Zool. Camb. (1867), p. 107.

" " Brady, 1879, Quart. Journ. Micr. Sci., vol. xix. p. 295.

Sphæroidina dehiscens bears a general similarity to its congener *Sphæroidina bulloides*, not only in the contour of the shell, but in the number of chambers, their individual form, and their mode of arrangement. The walls, however, are thick and coarsely perforated, and more or less reticulated externally; and the chambers are separated by deep irregular sutural fissures, which are either continuous, or closed in places by the approximation of their somewhat jagged edges. The appearance of the test is aptly characterised by the specific name, which suggests its resemblance to the pericarp of a dehiscent fruit in process of opening. The shell-wall frequently attains a thickness of $\frac{1}{30}$ th inch (0.085 mm.), or nearly double that observed in average specimens of *Sphæroidina bulloides*; and the pore-canals often have a diameter of $\frac{1}{250}$ th inch (0.01 mm.).

Judging from bottom-specimens, *Sphæroidina dehiscens* is a widely diffused species. It is common in the tropical and subtropical regions of the Atlantic, and stray examples have been found as far north as the British shores. The Challenger dredgings furnish specimens from nine Stations in the North Atlantic and from eight in the South Atlantic; from twenty-three Stations in the South Pacific, and from four in the North Pacific. Nevertheless, as a pelagic organism, it is comparatively rare in the tow-net gatherings