

are neither depressed nor limbate externally. The inferior side has a superficial ornament of radiating lines of minute tubercles.

This is one of several species of *Discorbina*, the shells of which are frequently found in pairs, two individuals adhering firmly to each other by their bases; a condition which has already been noticed in connection with *Textularia folium* (*ante*, p. 357). It is probable that the phenomenon is to be accounted for in the same way in all cases, that it is brought about by the extension of a lobe of sarcode from the mouth of the parent test, the subsequent division of the nucleus, and the continued growth of the new individual without separation from the parent,—a very similar process to that minutely watched by Gruber in a species of *Euglypha*.¹

Discorbina parisiensis was dredged in great abundance on the shores of Kerguelen Island, at depths of 20 to 50 fathoms, but the species was not taken at any other point of the Challenger voyage. A few small specimens have been obtained by Wright at similar or even less depths on the coast of Ireland, and by Berthelin on the Atlantic shores of France.

It was originally described by d'Orbigny as an Eocene fossil from the Paris Basin; it has been found also at several horizons of the Crag of Norfolk and Suffolk.

A closely allied species, *Discorbina wrightii*,² distinguished from the foregoing by its more regularly Rotaliform shell, its shorter and more numerous segments, and their arrangement in several convolutions, the whole of which are visible on the superior face, is represented in the Challenger gatherings by a single specimen dredged off Gomera, Canaries, 620 fathoms.

Discorbina pileolus, d'Orbigny, sp. (Pl. LXXXIX. figs. 2-4).

Valvulina pileolus, d'Orbigny, 1839, Foram. Amér. Mérid., p. 47, pl. i. figs. 15-17.

Discorbina pileolus, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 385.

A highly convex, dome-shaped, or subconical variety, with long, narrow, much curved segments, of which sometimes little more than the final convolution is visible externally; the inferior surface presenting a radiate ornament of riblets or granulose lines. Double specimens (figs. 2, 4), like those of *Discorbina parisiensis* and *Discorbina tabernacularis*, are not uncommon.

Discorbina pileolus occurs at three Challenger Stations:—Port Jackson, 2 to 10 fathoms; off Tongatabu, Friendly Islands, 18 fathoms; and Simon's Bay, Cape of Good Hope, 15 to 20 fathoms; also at the following localities,—Port Stephens, New South Wales; Curtis Strait, Queensland; off Levuka, Fiji, 12 fathoms; Port Elizabeth, Algoa Bay; and, as stated by d'Orbigny, near Arica, on the coast of Peru.

It has been found as a fossil in the Eocene deposits of Grignon, France (Parker and Jones), and in the Miocene of the Island of Malta (Brady).

¹ *Zeitschr. f. Wiss. Zool.*, vol. xxxv. pp. 431-439, 1881.

² Brady, *Denkschr. d. k. Akad. Wiss. Wien*, vol. xliii. p. 104, pl. ii. fig. 6.