

Prof. W. C. Williamson¹ and Dr. Carpenter² for the details of its structure and morphology.

Orbiculina adunca, Fichtel and Moll, sp. (Pl. XIV. figs. 1-13).

<i>Nautilus orbiculus</i> ,	Fichtel and Moll, 1803, Test. Micr., p. 112, pl. xxi.
„ <i>angulatus</i> ,	Id. Ibid. p. 113, pl. xxii.
„ <i>aduncus</i> ,	Id. Ibid. p. 115, pl. xxiii.
<i>Archaias spirans</i> ,	Montfort, 1808, Conch. Systém., vol. i. p. 190, 48° genre.
<i>Helenis spatosus</i> ,	Id. Ibid. p. 194, 49° genre.
<i>Plotus rotalitus</i> ,	Id. Ibid. p. 198, 50° genre.
<i>Orbiculina adunca</i> ,	Lamarck, 1816, Tabl. Encycl. et Méth., pl. cccclxviii. fig. 2, a. b. c.
„ <i>nummata</i> ,	Id. Ibid. pl. cccclxviii. fig. 1, a.-d.
„ <i>numismalis</i> ,	Id. 1822, Anim. s. Vert., vol. vii. p. 609, No. 1.
„ <i>angulata</i> ,	Id. Ibid. p. 609, No. 2.
„ <i>uncinata</i> ,	Id. Ibid. p. 609, No. 3.
„ <i>numismalis</i> ,	d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 305, pl. xvii. figs. 8-10 ;— Modèle, No. 20.
„ <i>adunca</i> ,	Id. 1839, Foram. Cuba, p. 81, pl. viii. figs. 8-14.
„ <i>compressa</i> ,	Id. Ibid. p. 73, pl. viii. figs. 4-7.

Fichtel and Moll, with less than their usual discrimination, figure specimens of this species under three different names; whilst d'Orbigny, not generally given to the simplification of nomenclature, recognises the true relationship of the different forms, and groups together the *Nautilus angulatus*, *orbiculus*, and *adunca* of the authors referred to, as the “very young,” “young,” and “adult” condition of the same species. He stops short, however, at the spiral varieties, and fails to perceive how slight is the modification involved in the addition of a few annular chambers to the already nearly discoidal shell, and distinguishes the circular or nearly circular specimens by a separate name, *Orbiculina compressa*.

The fact is, that wherever *Orbiculinæ* abound the whole range of contours figured in Pl. XIV. may almost always be met with—the embracing or involute spiral, the explanate or evolute, the crosier-shaped, the fan-like, and the discoidal, together with an infinite number of gradational stages. From end to end they present an unbroken series and make but a single species. The various modifications bear no relation to locality, latitude, or depth of water, and it is quite impossible to make them up into groups of any zoological value, or with the slightest basis for subvarietal distinction.

Orbiculina adunca is an essentially tropical species, and though frequenting comparatively shallow water, or even littoral sands, it flourishes also at considerable depths. At four of the Challenger localities the depth ranges from 350 to 450 fathoms. It is common about the Cape de Verde Islands, the Bermudas, and amongst the

¹ *Trans. Micr. Soc. Lond.*, ser. 1, vol. iii. p. 105.

² *Phil. Trans.*, 1856, pp. 547-552; and *Introd. Foram.*, pp. 93-99.