Discorbina valvulata, d'Orbigny, sp. (Pl. LXXXVII. figs. 5-7).

Rosalina valvulata, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 271, No. 4.

" ,, Id. 1839, Foram. Cuba, p. 103, pl. iii. figs. 21-23.

" Id. 1839, Foram. Canaries, p. 136, No. 28, pl. ii. figs. 19-21.

Discorbina valvulata, Jones and Parker, 1872, Quart. Journ. Geol. Soc., vol. xxviii. p. 114.

D'Orbigny's figures of Discorbina valvulata represent a somewhat thin outspread test, which in point of conformation nearly equally resembles Discorbina globularis and Discorbina rosacea, but with the septal lines of the superior face marked by broad exogenous bands. The Challenger specimens are more stoutly and compactly built, and in so far are more nearly allied to Discorbina globularis. The extreme expression of the typical characters is found in the Discorbina binkhorsti<sup>1</sup> of the Maestricht Chalk, which has a much depressed, few-chambered test, with the sutural limbation even more strongly developed.

Discorbina valvulata occurs on the shores of Australia and of the islands of the South Pacific, in Hong Kong Harbour, and amongst the West Indies, and the Canaries,—always in very shallow water.

Discorbina obtusa, d'Orbigny, sp. (Pl. XCI. fig. 9, a.b.c.?).

Rosalina obtusa, d'Orbigny, 1846, For. Foss. Vien., p. 179, pl. xi. figs. 4-6.

Discorbina turbo, var. vesicularis, subvar. obtusa, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 386, pl. xiv. figs. 18, 19.

The figured specimen, though agreeing well as to contour and segmentation with Discorbina obtusa, is by no means typical, the walls being as fine and smooth in texture and as minutely foraminated as those of a Pulvinulina. This may be a matter depending more or less upon habitat, as the shell from which the drawing was made came from a warmer region and somewhat greater depth than generally affected by the species.

Such forms occur off Ascension Island, 420 fathoms. Parker and Jones state that the species is tolerably plentiful off the Hunde Islands, Davis Strait, at from 28 to 70 fathoms, commonest at the greater depths. Their figures also represent rather finely porous shells; and I have similar examples from the west coast of Scotland.

D'Orbigny's specimens were Miocene fossils from Nussdorf, near Vienna.

Discorbina rosacea, d'Orbigny, sp. (Pl. LXXXVII. figs. 1, 4).

Rotalia rosacea, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 273, No. 15;—Modèle, No. 39.

Asterigerina planorbis, Id. 1846, For. Foss. Vien., p. 205, pl. xi. figs. 1-3.

" rosacea, Id. 1852, Prodrome de Paléont., vol. iii. p. 158, No. 2952.

Rotalina mamilla, Williamson, 1858, Rec. For. Gt. Br., p. 54, pl. iv. figs. 109-111.

Discorbina turbo, var. rosacea, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 385, pl. xvi. fig. 28, a.b.

rosacea, Parker, Jones, and Brady, 1865, Ann and Mag. Nat. Hist., ser. 3, vol. xvi. p. 25, pl. ii. fig. 71.

<sup>&</sup>lt;sup>1</sup> Rosalina binkhorsti, Reuss, 1861, Sitzungsb. d. k. Ak. Wiss. Wien, vol. xliv. p. 317, pl. ii. fig. 3.