

in others it takes the form of a ring of round or oblong beads immediately encircling the umbilicus, whilst there are some varieties in which it has the aspect of an embossed star, with straight or curved tapering rays covering the septal lines to within a short distance of the periphery.

The orifice, the normal form of which is a simple curved fissure, often shows traces of subdivision by transverse bars, approaching in character the multiple or porous aperture of the *Polystomellæ*.

The geographical distribution of *Nonionina* is world-wide, specimens having been found in every latitude and at almost every depth at which the sea-bottom has been explored. There is no satisfactory evidence of the existence of the genus before the commencement of the Tertiary epoch;¹ but it occurs in the Eocene of the Paris Basin, and becomes gradually commoner in succeeding formations down to recent times.

Nonionina depressula, Walker and Jacob, sp. (Pl. CIX. figs. 6, 7).

"*Nautilus spiralis utrinque subumbilicatus*," Walker and Boys, 1784, Test. Min., p. 19, pl. iii. fig. 68.

Nautilus depressulus, Walker and Jacob, 1798, Adams's Essays, Kanmacher's Ed., p. 641, pl. xiv. fig. 33.

Nonionina perforata, d'Orbigny, 1846, For. Foss. Vien., p. 110, pl. v. figs. 17, 18.

„ *granosa*, Id. Ibid. p. 110, pl. v. figs. 19, 20

„ *punctata*, Id. Ibid. p. 111, pl. v. figs. 21, 22.

„ *umbilicatula*, Williamson, 1858, Rec. For. Gt. Br., p. 97, pl. iv. figs. 70, 71.

„ *crassula*, Id. Ibid. p. 33.

„ *asterizans*, var. *depressula*, Parker and Jones, 1862, Introd. Foram., Appendix, p. 310.

Polystomella crispa, var. (*Nonionina*) *depressula*, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 403, pl. xiv. fig. 39, *a.b.*

Nonionina crassula, Fischer, 1870, Actes Soc. Linn. Bordeaux, vol. xxvii. p. 396, No. 43.

„ *granosa*, Terquem, 1882, Mém. Soc. géol. France, sér. 3, vol. ii., Mém. III., p. 43, pl. ii. fig. 10, *a.b.*

The test of *Nonionina depressula* is much compressed, and the peripheral edge round; the umbilici are nearly flush, that is to say, they are neither much excavated nor umbonate, nor do they exhibit any amount of sutural limbation; the segments are somewhat inflated and the margin more or less lobulated; the shell-wall is usually very thin and hyaline.

As compared with the allied forms, the characters of *Nonionina depressula* are those of a starved variety, and the conditions under which it is found support this view. It

¹ Reuss, in his memoir on the Classification of the Foraminifera, states the geological range of the genus as "the Silurian formation (?), the Carboniferous Limestone, and from the Chalk forwards" (*Sitzungsb. d. k. Ak. Wiss. Wien*, 1861, vol. xlv. p. 389). The first of these is quoted interrogatively, and may be dismissed as wanting confirmation. The Carboniferous specimens referred to are almost certainly forms now assigned to the genus *Endothyra*; and those from the Chalk are probably *Pullenia* which were included by d'Orbigny, and at that time by Reuss also, in the genus *Nonionina*.