

Nodosaria radicula, Linné, sp. (Pl. LXI. figs. 28-31).

- "Cornu Hammonis erectum," Plancus, 1739, Conch. Min., p. 14, pl. i. fig. 5.
Nautilus radicula, Linné, 1767, Syst. Nat., 12th Ed., p. 1164, 285;—1788, Ibid., 13th (Gmelin's) Ed., vol. i. pt. 6, p. 3373, No. 18.
 " Montagu, 1803, Test. Brit., p. 197, pl. vi. fig. 4.
Nodosaria radicula, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 252, No. 3;—Modèle No. 1.
 " *geinitziana*, Neugeboren, 1852, Verhandl. u. Mitth. siebenb. Vereins f. Nat., Jahrg. iii. p. 37, pl. i. fig. 1.
 " *glandulinoides*, Id. Ibid. p. 37, pl. i. fig. 2.
 " *inconstans*, Id. Ibid. p. 38, pl. i. figs. 6, 7.
Glandulina tenuis, Bornemann, 1854, Liasformation, p. 31, pl. ii. fig. 3, a.b.
 " *major*, Id. Ibid. p. 31, pl. ii. fig. 4, a.b.
Nodosaria geinitzi, Reuss, 1854, Jahresb. d. Wetterauer Gesellsch., 1851-53, p. 77, fig. 12.
Glandulina elegans, Neugeboren, 1856, Denkschr. d. k. Akad. Wiss. Wien, p. 69, pl. i. fig. 5.
 " *reussi*, Id. Ibid. p. 69, pl. i. fig. 6.
Nodosaria beyrichi, Id. Ibid. p. 72, pl. i. figs. 7-9.
 " *incerta*, Id. Ibid. p. 72, pl. i. figs. 10, 11.
 " *kirkbyi*, Richter, 1861, Geinitz's Dyas, p. 121, pl. xx. fig. 30.
Glandulina conica, Terquem, 1862, Foram. du Lias, 2^{leme} mém., p. 435, pl. v. fig. 10, a.b.
Nodosaria jonesi, Reuss, 1862, Sitzungsb. d. k. Ak. Wiss. Wien, vol. xlvi. p. 89, pl. xii. fig. 6.
 " *clariformis*, Terquem, 1866, Foram. du Lias, 6^{leme} mém., p. 477, pl. xix. figs. 17, 18.
 " *radicula*, Brady, 1867, Proc. Somerset. Arch. and Nat. Hist. Soc., vol. xiii. p. 106, pl. i. fig. 4.

The figures in the classical work of Plancus on which Linné based the present species are bold and characteristic. They indicate straight, tapering, Nodosarian shells, with four globular segments apiece and a central orifice on a somewhat produced neck, the surface of the shells being smooth and devoid of ornament. The chambers are more inflated and the sutures more depressed than those of the specimens from which the illustrations, Pl. LXI. figs. 28-31, are drawn, the latter showing some approach to the characters of *Nodosaria humilis*, Roemer (Verstein. norddeutsch. Kreid., 1841, pt. 2, p. 95, pl. xv. fig. 6). In these particulars many of the figures referred to in the synonymy accord much better with the original type.

Nodosaria radicula has a wide area of distribution. It is found in the arctic seas, and on the shores of Norway and of the British Islands; in the North Atlantic, from shallow water to a depth of 1360 fathoms; in the South Atlantic as deep as 2350 fathoms; and in the South Pacific from 37 to 1100 fathoms; and it also occurs in the Adriatic. It has not been observed in the North Pacific.

In the fossil state, the species has been identified in the Permian formations of England and Germany (Brady), in the Upper Trias of Derbyshire (Jones and Parker), in the Lias of various parts of England (Brady, Blake) in the Kimmeridge Clay (Blake), in the Chalk of the North of Ireland (Wright), and at almost every stage of the Tertiary series.