Nodosaria turgidula, Costa, 1856, Atti dell' Accad. Pont., vol. vii. p. 152, pl. xiii. fig. 3.

- " raphanus, Parker and Jones, 1859, Ann. and Mag. Nat. Hist., ser. 3, vol. iii. p. 477.
- ,, bactroides, Reuss, 1862, Sitzungsb. d. k. Ak. Wiss. Wien, vol. xlvi. p. 37, pl. ii. fig. 5.
- " lamelloso-costata, Id. Ibid. p. 38, pl. ii. fig. 6.
- " prismatica, Id. Ibid. p. 36, pl. ii. fig. 7.
- ,, raphanus, Silvestri, 1872, Nodos. Foss. e Viv. d'Ital., p. 43, pl. iv. figs. 67-81.
- " obscura, Reuss, 1874, Das Elbthalgebirge in Sachsen, pt. ii. p. 81, pl. xx. figs. 14.

Nodosaria raphanus may be accepted as the type of the stoutly built somewhat tapering Nodosarians, with comparatively few strongly developed costæ. The figures given by Plancus and Gaultieri allow considerable latitude as to minor particulars, that furnished by the latter author being relatively longer and more tapering than the rest. They represent jointly a group of forms with characters intermediate between those of Nodosaria raphanistrum and Nodosaria scalaris.

The species varies greatly in the size of the test and in the substance and prominence of the costæ. Under favourable conditions, at depths of 150 to 600 fathoms, specimens attain large dimensions, sometimes a length of  $_{10}^{4}$ th inch (10 mm.) or even more. The costæ vary in number from about six to twelve; their outer margins are usually obtusely angular or blunt, but occasionally become thin and sharp as in the fine examples selected for the illustrations, Pl. LXIV. figs. 6–10. Specimens with prominent sharp-edged costæ, more or less resembling these, are figured by d'Orbigny as *Nodosaria lamellosa* (Ann. Sci. Nat., vol. vii. p. 253, pl. x. figs. 4–6), by Neugeboren as *Nodosaria compressiuscula* (Naturw. Verhandl. u. Mitth., Jahrg. iii. p. 59, pl. i. figs. 54–56), and by Silvestri as *Nodosaria acute-costata* (Nodos. Foss. e Viv. d'Ital, p. 48, pl. iv. figs. 82–89). Amongst the recent specimens are some precisely corresponding with the figures last quoted.

Nodosaria raphanus is found in the North and South Atlantic, the South Pacific, the Mediterranean, and the Adriatic, but I have no record of its presence in the North Pacific, and it is neither so common nor so generally distributed as the more slender and arcuate costate varieties. Its bathymetrical range appears to extend to about 1400 fathoms.

Geologically speaking, it is one of the oldest of the Nodosarian forms, occurring as far back as the Upper Trias; and it is of frequent occurrence in subsequent formations, both of Secondary and Tertiary age.

Nodosaria obliqua, Linné, sp. (Pl. LXIV. figs. 20-22).

"Orthoceras minimum," &c., Gaultieri, 1742, Index Test., pl. xix. fig. N.

Nautilus obliquus, Linné, 1767, Syst. Nat., 12th ed., p. 1163, 281 ;-1788, Ibid., 13th (Gmelin's) Ed., p. 3372, No. 14.

" jugosus, Montagu, 1803, Test. Brit., p. 198, pl. xiv. fig. 4.

Orthocera obliqua, Lamarck, 1822, Anim. sans Vert., vol. vii. p. 594, No. 4.

Nodosaria sulcata, Nilsson, 1827, Petrif. Suec., p. 8, pl. ix. fig. 19.