

*Spirillina vivipara*, Ehrenberg (Pl. LXXXV. figs. 1-5).

- Spirillina vivipara*, Ehrenberg, 1841, Abhandl. k. Akad. Wiss. Berlin, p. 442, pl. iii. fig. 41.  
*Operculina punctata*, Reuss, 1849, Denkschr. d. k. Akad. Wiss. Wien, vol. i. p. 370, pl. xlvi. fig. 21.  
*Cornuspira perforata*, Schultze, 1854, Organ. Polythal., p. 41, pl. ii. fig. 22.  
*Spirillina vivipara*, Parker and Jones, 1857, Ann. and Mag. Nat. Hist., ser. 2, vol. xix. p. 284,  
 pl. xi. fig. 46.  
*Cyclolina impressa*, Egger, 1857, Neues Jahrb. für Min. &c., p. 304, pl. x. figs. 7, 8.  
*Spirillina perforata*, Williamson, 1858, Rec. For. Gt. Br., p. 92, pl. vii. fig. 202.  
 „ *vivipara*, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 397, pl. xv. fig. 28.  
 „ „ Moebius, 1880, Foram. von Mauritius, p. 88, pl. viii. figs. 1, 2.

*Spirillina vivipara* is the simplest form of a very simple genus. The test is free, or in rare cases adherent; and consists of a tube coiled on itself on one plane. The tube is either nearly round in section or compressed, and the convolutions are often slightly embracing; the earlier coils are generally comparatively narrow, the later ones broader and of nearly uniform width; the walls are conspicuously perforated, and the aperture is formed by the unconstricted end of the tubular cavity. The lateral faces of the test are either flat, as in fig. 4, or concave, as in figs. 1-3; and the peripheral edge is rounded. The spiral suture is sometimes deeply excavated on the exterior, as in fig. 1; sometimes nearly flush, as in fig. 4, according to the more or less embracing contour of the tube. The diameter of the shell varies from about  $\frac{1}{80}$ th inch (0.42 mm.) to less than half that size.

*Spirillina vivipara* is found in almost every part of the world, from the furthest known point of the Arctic Sea, lat. 83° 19' N., to the shores of Kerguelen Island; the area of distribution embracing the North and South Atlantic, the North and South Pacific, the Indian and the Southern Ocean, the Mediterranean, and the Red Sea. It most affects muddy bottoms of less than 150 fathoms, but it is occasionally met with at greater depths, 620 fathoms being the deepest of the Challenger Stations at which it has been observed.

In the fossil condition it is comparatively rare, unless, owing to its diminutive size, it has been overlooked; nevertheless it has been observed in the Miocene of the Vienna Basin (Reuss), and of Lower Bavaria (Egger); and in the Post-tertiary clays of the north-west of Ireland (Wright).

*Spirillina obconica*, H. B. Brady (Pl. LXXXV. figs. 6, 7).

- Spirillina obconica*, Brady, 1879, Quart. Journ. Micr. Sci., vol. xix., N. S., p. 279, pl. viii.  
 fig. 27, a. b.

Test free, in the form of a depressed cone with elliptical base; superior face convex, inferior concave, peripheral edge rounded; composed of from four to eight convolutions of a subcylindrical tube, swollen at its commencement, but subsequently of even diameter,