

Hastigerina pelagica, d'Orbigny, sp. (Pl. LXXXIII. figs. 1-8).*Nonionina pelagica*, d'Orbigny, 1839, Foram. Amér. Mérid., p. 27, pl. iii. figs. 13, 14.*Lituola pelagica*, Jones and Parker, 1860, Quart. Journ. Geol. Soc., vol. xvi. p. 302, table No. 181.*Globigerina pelagica*, Parker and Jones, 1865, Phil. Trans., vol. clv. p. 366.*Nonionina hyalina*, Ehrenberg, 1873, Abhandl. d. k. Akad. Wiss. Berlin (1872), p. 388, pl. iv. fig. 4.*Hastigerina murrayi*, Wy. Thomson, 1876, Proc. Roy. Soc., vol. xxiv. p. 534, pls. xxii., xxiii.,, *pelagica*, Brady, 1879, Quart. Journ. Micr. Sci., vol. xix., N. S., p. 77.

The test of *Hastigerina pelagica* is a nautiloid spire, either subglobular in contour or more or less compressed bilaterally, with excavated umbilici and lobulated periphery. Adult specimens attain a diameter of about $\frac{1}{30}$ th inch (0.84 mm.).

It is composed of somewhat less than two convolutions, of which the later, consisting of either five or six segments, completely encloses the earlier portions. The segments are much inflated, and each successively considerably larger than its predecessor. The aperture is a broad oval or arched opening, symmetrically placed at the inner margin of the final segment, sometimes bordered with a slightly thickened lip. The shell-wall is exceedingly delicate and transparent, and in living specimens is so thin that the outline of the enclosed chambers and the form of the sarcode-lobes can be plainly traced by transmitted light. The pseudopodial perforations are very numerous and almost as minute as those of *Sphæroidina bulloides*, that is to say, about $\frac{1}{8000}$ th inch (0.003 mm.) in diameter, but they appear somewhat larger in worn bottom specimens. The surface of the test is beset with long, slender, needle-like spines, the sides of which are distinctly serrate, especially near the base. They are usually swollen at the point of union with the shell, and a slight constriction may generally be observed immediately above the thickened base. In some cases the spines appear to be hollow, but whether this is the rule, or indeed whether the appearance may not be due to the mode in which the specimens are mounted, I am unable to say with certainty.

The species was repeatedly taken by means of the tow-net during the Challenger voyage, and the central figure of Pl. LXXXIII. is copied from a drawing made by Mr. Wild from a living specimen. This is referred to by Mr. Murray in one of the Preliminary Reports¹ in the following terms:—"At times calcareous Foraminifera occur in vast numbers on the surface, and with a bottle can be picked up from a boat. In one specimen thus procured the sarcode of the animal was found thrown out into bubble-like extensions between the spines of the shell, and over these expansions of the sarcode and along the spines the pseudopodia moved freely and rapidly."

Hastigerina pelagica may be readily identified by the foregoing characters. The

¹ Proc. Roy. Soc., vol. xxiv. p. 534.