

*Bulimina aculeata*, d'Orbigny (Pl. LI. figs. 7-9).

"Polymorpha *Pineiformia*," Soldani, 1791, Testaceographia, vol. i., pt. 2, p. 118, pl. cxxvii. fig. I; pl. cxxx. fig. vv.

*Bulimina aculeata*, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 269, No. 7.

„ *patagonica*, Id. 1839, Foram. Amér. Mérid., p. 50, pl. i. figs. 8, 9.

„ *pupoides*, var. *spinulosa*, Williamson, 1858, Rec. For. Gt. Br., p. 62, pl. v. fig. 128.

„ *presli*, var. *aculeata*, Parker and Jones, 1862, Introd. Foram., Appendix, p. 311.

„ *aculeata*, Siddall, 1879, Catal. Brit. Rec. For., p. 8.

The more or less spinous condition of the test furnishes the characteristic feature of this species. The spines vary in length in different specimens, and they generally spring from the extended inferior edges of the chambers, like the marginal teeth of *Bulimina marginata*; but sometimes they are distributed irregularly over the whole of the earlier portion of the shell. The later chambers are often globose and smooth; if aculeate, the spines are comparatively short and inconspicuous.

*Bulimina aculeata* follows the same general lines of distribution as *Bulimina marginata*; that is to say, it is abundant in the North Atlantic and the South Pacific, and much less common in the South Atlantic and North Pacific. It covers, however, an even wider geographical area, for it has been found as far north as between Drontheim and the North Cape on the coast of Norway, and as far south as the Antarctic Ice-barrier. A comparison of the distribution-lists shows that on the whole *Bulimina aculeata* affects deeper water than *Bulimina marginata*. Out of twenty-two Challenger Stations at which it has been collected, nine have a depth of more than 1000 fathoms, the deepest being 2740 fathoms.

The species appears in Crosskey and Robertson's list of the fossils of the Glacial Clays of Norway.

*Bulimina inflata*, Seguenza (Pl. LI. figs. 10-13).

*Bulimina inflata*, Seguenza, 1862, Atti dell' Accad. Gioenia, vol. xviii., ser. 2, p. 107, pl. i. fig. 10.

„ „ Schwager, 1866, Novara-Exped., geol. Theil, vol. ii. p. 246, pl. vii. fig. 91.

„ *buchiana*, Reuss, 1870, Sitzungsab. d. k. Ak. Wiss. Wien, vol. lxii. p. 484, No. 3;—  
Schlicht, 1870, Foram. Pietzpuhl, pl. xxii. figs. 30-33.

*Bulimina inflata* is a transition form connecting the spinous *Bulimina aculeata* with the costate *Bulimina buchiana*. The test is either oval or tapering; the chambers are extended backwards as in *Bulimina marginata*, and they are crenulated for some distance within the free edges, so as to form short longitudinal costæ, which are continued beyond the margin as stout projecting spines.

The distribution of *Bulimina inflata* is very similar to that of *Bulimina buchiana*, though the two forms seldom occur at precisely the same localities. It is not quite so