

can be said to distinguish them is that *Bulimina ovata* is more regularly ovate and generally rather longer proportionately than its allies; that *Bulimina affinis* tapers more evenly towards the aboral extremity; and that *Bulimina pupoides* has usually shorter segments, and their spiral arrangement is more apparent. It may be questioned whether anything is gained by retaining "species" on these terms.

*Bulimina ovata* is common in littoral sands on our own coast, and is generally distributed over the North Atlantic, at depths of less than 1400 fathoms. It occurs in the South Atlantic as low as 2200 fathoms; and in the South Pacific from 15 to 580 fathoms. It is found as a fossil in the Eocene beds of the Isle of Wight (Brady), in the Miocene of the Vienna Basin (d'Orbigny), in the later Tertiary deposits of Southern Italy (Costa), and in the Post-tertiary clays of Norway and the west of Scotland (Crosskey and Robertson).

Of *Bulimina affinis* the Challenger collections furnish examples from the western coast of Patagonia, 565 fathoms, and from the deep area of the North Pacific, 3125 fathoms. D'Orbigny's single specimen was found in shore-sand from Cuba. There is nothing, to all appearance, in Reuss's figures of *Bulimina ovulum* to separate them morphologically from the present species, and if that be so its geological history goes back as far as the Cretaceous epoch.

*Bulimina pupoides* occurs upon our own shores, as well as over a wide area of the North Atlantic, ranging from shallow water to a depth of 1000 fathoms. It has also been met with in the Indian Ocean, off the Cape of Good Hope, and at various points amongst the islands of the South Pacific. In the fossil condition it is found in the Miocene of the Vienna Basin (d'Orbigny), in the later Tertiaries of the neighbourhood of Rome (Terrigi), and in the Post-tertiary deposits of Norway, Scotland, Italy, and Canada (Sars, Crosskey and Robertson, Vanden Broeck, Dawson).

*Bulimina elongata*, d'Orbigny (Pl. LI. figs. 1; and 2?).

*Bulimina elongata*, d'Orbigny, 1846, For. Foss. Vien., p. 187, pl. xi. figs. 19, 20.

„ *eocena*, Hantken, 1872, Jahrb. d. k. ungar. geol. Anstalt, vol. i. p. 136, pl. ii. fig. 16.

This also is a form that might properly be placed in the same series as the foregoing, although in its extreme development the lower portion of the test is even more attenuated than the specimens represented in the drawings, and the whole shell is sometimes more or less curved. In point of contour fig. 1 stands about intermediate between d'Orbigny's *Bulimina elongata* and Reuss's *Bulimina imbricata* (Haidinger's Naturw. Abhandl., vol. iv. p. 38, pl. iv. fig. 7), whilst the stouter specimen (fig. 2) is a connecting link with *Bulimina ovata*.

Elongate varieties like these occur in the North Atlantic, 630 fathoms, and in the South Atlantic, 1425 fathoms. The localities given by d'Orbigny are—living, in the Adriatic (?), and fossil, in the Miocene at Nussdorf near Vienna. Von Hantken's *Buli-*