

The earliest appearance of the type, geologically speaking, is in the Carboniferous epoch, and from that remote era down to recent times it is found in microzoic strata of almost every age.

Haplophragmium agglutinans, d'Orbigny, sp. (Pl. XXXII. figs. 19-26).

Spirolina agglutinans, d'Orbigny, 1846, For. Foss. Vien., p. 137, pl. vii. figs. 10-12.

„ *simplex*, Reuss, 1855, Sitzungsab. d. k. Ak. Wiss. Wien, vol. xviii. p. 232, pl. ii. fig. 30.

Haplophragmium rectum, Brady, 1876, Monogr. Carb. and Perm. Foram., p. 66, pl. viii. figs. 8, 9.

Test elongate, crosier-shaped; planospiral at the commencement, subsequently linear. Spiral portion relatively small, consisting of little more than one visible convolution; compressed, excavated at the umbilici; peripheral edge rounded. Linear portion cylindrical, slightly increasing in size towards the distal end, seldom composed of more than six or seven segments; septation often obscure in large specimens. Aperture simple, central, terminal. Length, $\frac{1}{100}$ th to $\frac{1}{10}$ th inch (0.25 to 2.5 mm.).

The general features of *Haplophragmium agglutinans* are adequately illustrated by the series of figures given in Pl. XXXII. The drawings, which are all done to the same scale, show also the great diversity that exists in the size of the specimens. The characters of the species are nevertheless tolerably uniform in other respects, and specimens measuring $\frac{1}{100}$ th inch have about the same number of segments as those ten times that length, and are very similar in general contour. The chambers are generally subcylindrical, sometimes slightly inflated; when the walls are thin, the sutural lines are distinct (fig. 21, &c.), but when the test is thick (figs. 19, 24), or very rough externally (fig. 20), the segmentation can scarcely be traced on the exterior.

The figures of crosier-shaped *Lituolinæ* given by the earlier authors are for the most part exceedingly obscure, and the various forms are associated with the long varieties of *Peneroplis*, under the generic term *Spirolina*. They are usually more or less irregular, and show signs of labyrinthic structure.

There can be little doubt that the *Haplophragmium rectum* of the Carboniferous Monograph (*loc. cit.*) belongs to the present species. It was named before the extent of variation in the group, of which d'Orbigny's figure is the central type, was fully recognised.

Haplophragmium agglutinans is found living in every part of the world, and it has a wide bathymetrical range, though comparatively rare in shallow water. Small specimens have been obtained on our own shores, off the Isle of Wight (Millett) and in Dublin Bay (Wright). Its distribution list includes nine Stations in the North Atlantic, the depths of which vary from 530 to 2750 fathoms, the furthest northern limit being