series short and broad. Walls thick; segmentation complete; sutural lines generally well marked on the exterior. Length, $\frac{1}{7}$th inch (3·5 mm.).

Haplophragmium calcareum is probably the largest living representative of the genus, and almost equals in dimensions the finest Cretaceous species. The test is massively built, the walls thick and composed of coarse sand, often coral detritus or other calcareous matter, incorporated by means of an unusual proportion of calcareous cement.

The species differs from *Haplophragmium agglutinans* in its flattened contour, from *Haplophragmium pseudospiralis* in its distinct and regular segmentation, and from both in its large dimensions.

Under the name *Haplophragmium humboldti*,[1] Reuss has described a form which serves as a connecting link between *Haplophragmium agglutinans* and the present species. It resembles *Haplophragmium calcareum* in the compression of the earlier portion of the test, and *Haplophragmium agglutinans* in the nearly cylindrical contour of the later segments.

Haplophragmium calcareum has been found at six Challenger Stations, all of which, with a single exception, are within the tropics, namely:—off Culebra Island, West Indies, 390 fathoms; at two points off the coast of South America, south of Pernambuco, 675 fathoms and 350 fathoms respectively; off Kandavu, Fiji Islands, 210 fathoms; Torres Strait, 155 fathoms; and off Sydney, 410 fathoms.

Haplophragmium tenuimargo, H. B. Brady (Pl. XXXIII. figs. 13–16).

Haplophragmium tenuimargo, Brady, 1882, Proc. Roy. Soc. Edin., vol. xi. p. 715.

Test elongate, crosier-shaped, much compressed; lateral edges thin and jagged. Spiral segments few and small; those of the linear series, about six in number, broad and slightly convex; septation obscure. Aperture simple, irregular in form, terminal. Texture coarse, surface extremely rough. Length, $\frac{1}{10}$th inch (2·5 mm.) or somewhat less.

In general appearance *Haplophragmium tenuimargo* is not unlike *Haplophragmium pseudospirale*, but the test exemplifies a marked advance in structure upon that of the latter species, the earlier portion being more evidently spiral, and the cavity definitely segmented, though externally the septation is indistinct. Its thin peripheral edge and jagged outline are very characteristic features.

The species has been obtained at six localities, very wide apart, the number of specimens in each case seldom exceeding two or three. The following is the list:—Faröe Channel, warm area, 530 fathoms; Challenger Station 5, south-west of the Canaries, 2740 fathoms; Station 323, east of Buenos Ayres, 1900 fathoms; Station 218, north of

[1] Originally as *Spirolina humboldti*, Reuss, 1851, *Zeitschr. d. deutsch. geol. Gesell.*, vol. iii. p. 65, pl. iii. figs. 17, 18, but subsequently as *Haplophragmium*.