Papua, 1070 fathoms; Station 168, east of New Zealand, 1100 fathoms; and Station 238, in the deepest portion of the North Pacific, 3950 fathoms.

Haplophragmium cassis, Parker, sp. (Pl. XXXIII. figs. 17–19).

Lituola cassis, Parker, 1870 (in Dawson's paper), Canad. Nat., N. S., vol. v. p. 177; p. 180, fig 3.

Test free, spiral at the commencement, bilaterally symmetrical or nearly so; elongate, arcuate, much compressed, outer margin thin and sharp. Initial (spiral) segments few and minute; those subsequently formed projected in a curved line, broad, subtriangular, and obliquely set. Aperture simple, situated at the distal extremity of the final segment. Walls thin, texture coarsely arenaceous, firmly cemented; colour brown. Length,  $\frac{1}{18}$ th inch (1.4 mm.).

Haplophragmium cassis is an arenaceous isomorph of Cristellaria crepidula, and except for the relatively large dimensions of the former and the different structure of the walls, the descriptive characters of the one species might, with but little impropriety, be employed for the other. It was one of a number of interesting Foraminifera which were first obtained by Dr. G. M. Dawson from the Gulf of St. Lawrence, and were figured in his memoir on the Rhizopod-fauna of that region, under names assigned to them by Prof. Parker.

Haplophragmium cassis is an extremely rare species, peculiar to the shallow water of northern seas. Its distribution list comprises only three localities :—Gaspé Bay, mouth of the river St. Lawrence, 16 fathoms (Dawson); Lievely Harbour, Disco, Greenland, 5 to 20 fathoms (Norman); and Deva Bay, Spitzbergen, lat. 77° 30' N., depth 7 fathoms (Robertson).

For the figured specimens, which are from Gaspé Bay, I am indebted to my friend Dr. G. M. Dawson of Montreal.

## Haplophragmium foliaceum, H. B. Brady (Pl. XXXIII. figs. 20-25).

Haplophragmium foliaceum, Brady, 1881, Quart. Journ. Micr. Sci., vol. xxi., N. S., p. 50.

Test crosier-shaped, complanate, very thin, flat on both sides; consisting of numerous segments, the earlier ones forming two to three convolutions of a flat spire, the later ones arranged in a broad, straight, linear series. Segmentation distinct; peripheral edge slightly constricted at the sutures; septal lines arched. Aperture simple, terminal. Length,  $\frac{1}{20}$ th inch (1.25 mm.).

Haplophragmium foliaceum is one of the most beautiful modifications of the Lituoline type. The test is of elegant crosier-like form, and so thin that, mounted in Canada balsam, its structure is fully displayed when viewed as a transparent object. Somewhat