

Station in the North Pacific, 2300 fathoms; and at one in the South Atlantic, 2200 fathoms. It has also been dredged by Balkwill and Wright in Dublin Bay, 45 fathoms.

Lagena hertwigiana, H. B. Brady (Pl. LVIII. fig. 36, *a.b.*, woodcut, fig. 12).

Lagena hertwigiana, Brady, 1881, Quart. Journ. Micr. Sci., vol. xxi., N. S., p. 62.

Test pyriform, with delicate ectosolenian neck rising abruptly from the apex. Surface finely reticulated, each angular mesh with a conspicuous perforation in the centre. Sections show that the shell-wall is double, that the intermediate space is divided into cells or chamberlets by perpendicular walls, of which the external areolation marks the position, and that the larger perforations open into the cells. Length, $\frac{1}{75}$ th inch (0.34 mm.).

The external features of *Lagena hertwigiana* are well depicted in fig. 36, to a scale of 75 diameters; and the minute structure of the shell-wall is indicated by the annexed woodcuts, which represent longitudinal and transverse sections, magnified 200 diameters. The neck is a prolongation of the inner or primary shell. In abraded or worn specimens the test presents a soft and spongy appearance, owing to the cellulated pithlike structure of the external or supplementary shelly growths.



FIG. 12.—*Lagena hertwigiana*.

a. Longitudinal section of the shell.
b. Transverse section.
Magnified 200 diam.

Morphologically, the cellulation of the shell-wall may be supposed to have its origin in the reticulated form of ornament, the raised network being closed-in by the formation of a thin exterior shelly lamina.

A variety differing slightly from the figured specimen is occasionally met with, in which the perforations are arranged in nearly regular equidistant lines, precisely as may be seen in the later segments of *Nodosaria intercellularis*.

This is probably directly related to the group of forms in which the reticulated ornament consists of longitudinal costæ and transverse bars.

The best examples of *Lagena hertwigiana* have all been obtained from one locality, off Raine Island, Torres Strait, 155 fathoms, where both varieties are found. Less characteristic specimens occur at Station 160, south of Australia, 2600 fathoms; and similar forms have been dredged by the Rev. A. M. Norman on the coast of Norway, south of Bukken, near Bergen, 150 to 200 fathoms.