

beset with minute pits or depressions in close, regular, parallel lines extending from one end of the test to the other. Test imperforate, the pitted depressions penetrating only about half the thickness of the shell-wall. Length, $\frac{1}{13}$ th inch (1.9 mm.).

This is an exceedingly interesting species, both on account of the peculiar structure of the shell-wall and the variability of the aperture.

The test is porcellanous and opaque, and the surface is marked by rows of pits, which at first sight bear considerable resemblance to perforations. The punctation, however, under ordinary circumstances, does not extend much beyond half the thickness of the shell-wall, and a transverse section of the test has the appearance represented in the annexed woodcut (fig. 4, *e*). Occasionally, though very rarely, an old specimen may be met with, more or less distinctly perforate at prominent points of the surface; but this condition is never found except in dead and worn shells, and it is manifestly the result of subsequent erosion.

The woodcuts (fig. 4, *a*, *b*, *c*, *d*) illustrate the variability of the aperture better than any verbal description. The orifice itself is usually oval, and situated in a deep depression with a bilabiate or cruciate border, or occasionally one of intermediate form; but cases are not wanting in which the fissure follows the contour of the border, as in fig. *c*, and becomes lobulated at the margin.

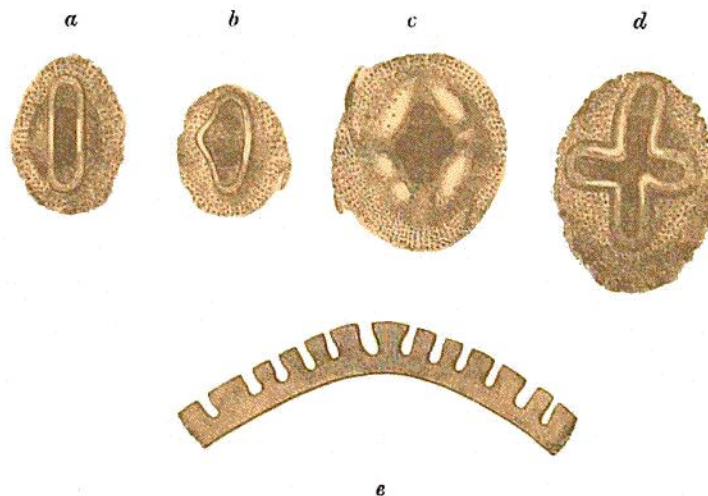


FIG. 4.—*Miliolina rupertiana*.

a. b. c. d. Various forms of aperture; magnified 40 diam.

e. Transverse section of the shell; magnified 200 diam.

The distribution of *Miliolina rupertiana* is limited to the shallow-water margins of the seas of warm latitudes. The Challenger collections only furnish specimens from the islands on the south shores of Papua, west of Torres Strait (Stations 186 to 189, depths 6 to 28 fathoms), and even here the species is very rare. It occurs in material dredged by Mr. Haly, the zealous and energetic curator of the Colombo Museum, on the north-west coast of Ceylon, 2 fathoms; in the late Mr. M'Andrew's dredgings, in the Gulf of Suez, 15 to 20 fathoms; and, much more plentifully, in littoral sands collected for me by Mr. L. Kitching, near Tamatavé, on the east coast of Madagascar.