

strikingly displayed than in the group under consideration, in which the investing walls are composed to a great extent of sponge-spicules. Long delicate needles, such as can be felted together, are for the most part employed, and the interstitial spaces are filled with a tolerably compact mass of broken spicula and fine siliceous sand. Whether any cement is used for the incorporation of these materials beyond the sarcode itself, possibly somewhat inspissated on its outer surface, it is difficult to say. The test is soft and somewhat flexible, of just such consistence as might be produced by the mechanical arrangement of bodies like those referred to; it is but little affected by acids, contains no appreciable amount of carbonate of lime, and none of the ferruginous matter which is so common a constituent of the test in the allied arenaceous groups. But, by whatever means it is accomplished, the work is so well done that the interior surface is quite smooth, and the exterior equally neatly though somewhat differently finished.

The aperture in *Pilulina* is a long narrow slit with protruded edges. It is sometimes simply arched, but more frequently has a double curve somewhat resembling the letter S. The sarcodic body of the animal is stated by Dr. Carpenter to be of dark green colour.

Almost the only known specimens of this type are in Dr. Carpenter's collection, and I am indebted to him for the loan of those which are figured in Pl. XXV. They were obtained on the first cruise of the "Porcupine," in the year 1869, at three Stations in the North Atlantic, south of the Rockall Bank, namely, Nos. 21, 23, and 28, depth 1476 fathoms, 630 fathoms, and 1215 fathoms respectively.

Technitella, Norman.

Technitella, Norman [1875], Brady.

"Test elliptical, cylindrical, or subfusiform, composed of the broken fragments of sponge-spicula arranged parallel to the axis, and enclosed entirely, or rarely only partially, in the body-wall. Unattached below and closed. A tubular mouth-opening formed by a contraction for a short distance of the body-walls so as to form a short tube."¹

I have retained the genus *Technitella* provisionally, though in considerable doubt whether there is any really distinctive character by which it can be separated from *Pilulina*. The structure of the test is practically identical in the two genera, and the difference in contour between such forms as *Technitella melo* and the typical *Pilulina* is too trifling to have any generic significance. There remains only the aperture, which in *Pilulina jeffreysii* is a curved slit with pouting lips, whilst that of *Technitella* is normally a rounded opening, either flush with the surface or in a short constricted neck. But Mr. Norman states that the orifice of *Technitella melo* is "in the form of a slit," which "in

¹ Norman, *Ann. and Mag. Nat. Hist.*, 1875, ser. 5, vol. i. p. 279.