

*Lyonsiella*, M. Sars.*Lyonsiella jeffreysi*, n. sp. (Pl. XXV. figs. 1-1*b*).

Testa tenuis, globosa, inæquilateralis, antice recte truncata, postice et inferne arcuata, sordide albida, intus margaritacea, undique minute granulata, lineis gracillimis numerosis radiantibus instructa, striisque incrementi hic illic sublamellatis ornata. Margo dorsi anticus brevis, rectus, horizontalis, posticus longior, declivis, vix excurvatus. Lunula concava, tota in valva dextra. Umbones incurvati, antrorsum versi. Cardo edentulus. Ligamentum internum, callo parvo sustentatum.

This species is thin, convex, inequilateral, a little higher than long, perpendicularly truncated in front, rounded behind and along the ventral margin. The front dorsal line is horizontal and straight, and at the termination forms a sharp angle with the anterior side. The posterior dorsal edge is rather oblique and nearly rectilinear. The valves are dirty whitish, dull, somewhat pearly within, everywhere finely granular, and also sculptured with many (about fifty) fine hair-like raised lines and a few concentric lines of growth at intervals, distinct and almost lamellar. The umbones are somewhat incurved, and directed towards the front. The lunule is concave, smooth, extends to the end of the dorsal margin, and is entirely in the right valve. It projects a little beyond the level of the rest of the margin of the valve, and fits into a slight emargination in the corresponding part of the left valve. The hinge-line is altogether destitute of teeth, and the ligament is internal and supported by a small shelly ossicle underneath. The front adductor scar is high up, just under the front dorsal margin, the posterior one being lower down, at the end of the dorsal slope.

Length 19 mm., height 20, diameter 14.

*Habitat.*—Station 106, Mid Atlantic, in 1850 fathoms; Globigerina ooze.

The preserved animal of this fine species appears to agree very closely with the description of *Lyonsiella* by Sars in Remarkable Forms of Animal Life, p. 25.

It has a single branchial plume on each side, no labial palps, and a byssiferous foot. The anal and branchial siphonal orifices are distinct, the latter being surrounded by papillæ.

*Lyonsiella papyracea*, n. sp. (Pl. XXV. figs. 2-2*b*).

Testa magna, tenuissima, alba, rotunde cordata, globosa, liris filiformibus numerosis radiantibus ornata, incrementi lineis tenuibus sculpta, epidermide tenuissima sordide albida induta. Umbones prominentes, antemediani, valde incurvati, antrorsum versi. Linea cardinalis edentula, tenuis. Ligamentum internum, parvum, paulo pone umbones situm, callo crassiusculo suffultum. Pagina interna nitida, submargaritacea, radiatim striata, striis cum liris externis congruentibus.