

*The Tentacles* are simple, they are stout and rather curled, about thirty in number and all of much the same size.

*The Dorsal Tubercle* is simply oval; the aperture is at the narrower anterior end; the horns are not coiled, and nearly touch.

This is an ordinary and typical *Styela*, except that the apertures are not clearly four lobed, but seem to have one or two extra projections each (Pl. XIX. fig. 3). The mantle and test are closely united; both are thin but strong, the test being in the typical Cynthiad condition—namely, tough and leathery.

The branchial sac is normal. The eight folds are well marked, and the vessels and meshes are of an ordinary size (Pl. XIX. fig. 4). Two sizes of transverse vessels were noticed, but they do not seem to alternate regularly. Besides these, a delicate horizontal membrane appears to be invariably present, cutting each mesh into two areas (Pl. XIX. fig. 4, *tr.*').

One specimen of this species was obtained in the Antarctic Ocean, to the south of Kerguelen Island, at Station 150; February 2, 1874; lat. 52° 4' S., long. 71° 22' E.; depth, 150 fathoms; bottom temperature, 1°·8 C.; bottom, rock.

*Styela lactea*, Herdman (Pl. XIX. figs. 7–8).

*Styela lactea*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1880–81, p. 68.

*External Appearance.*—The body is nearly rectangular, varying from an oblong to a spherical shape; it is erect and not compressed. The anterior end is straight and wide, the posterior end is also straight and is nearly as wide. The dorsal and ventral edges are slightly convex. The body is attached by the whole of the posterior end. The apertures are both anterior; they are nearly sessile, and are four-cleft. The branchial is at the ventral edge of the anterior end, and is directed ventrally; the atrial is at the dorsal edge of the anterior end, and is directed anteriorly and dorsally.

The surface is smooth, but is seamed with transverse creases and slight folds, while longitudinal ones are seen here and there. The colour is a creamy white.

Length of the body, 4·5 cm.; breadth of the body, 3·5 cm.

*The Test* is thick, but soft and flexible; it is quite opaque.

*The Mantle* is closely attached to the test. The musculature is fine, and is composed of longitudinal and transverse bands intersecting at right angles.

*The Branchial Sac* has four folds upon each side. The internal longitudinal bars are rather few, but wide; there are about six on a fold, while they are few and distant in the interspaces. The meshes are greatly elongated transversely, some of those near the endostyle containing thirty or forty stigmata; they are occasionally divided by narrow horizontal membranes.

*The Dorsal Lamina* is a plain membrane, with no ribs, and an even margin.