

The dorsal lamina is in a condition rarely seen in the genus *Styela*. It is narrow, and the free margin is cut into a series of wide triangular notches, leaving outstanding teeth between them (Pl. XX. fig. 5). The membrane is also ribbed transversely; a long rib runs up the centre of each tooth to the apex, while between each pair of these there are a number (about six) of shorter ribs which do not reach the margin. This lamina presents a condition of affairs intermediate between the usual plain smooth-edged membrane of the typical *Styela*, and the large distinct languets of *Styela bythia*.

The tentacles are of three sizes, placed so that if we call the largest A, and the smallest C, they have the following arrangement:—A, C, B, C, A, &c. (Pl. XX. fig. 6, *tn.*, *tn.*' and *tn.*""). The peritubercular area is very large, and is much deeper than the dorsal tubercle, which is small and occupies merely the apex. Both horns are turned to the right, the one outwards and the other inwards (Pl. XX. fig. 6, *d.t.*).

The intestine is a narrow tube, and the loop which it forms is rather wide,—another point in which this species differs from the typical members of the genus.

One specimen of *Styela flava* was dredged in the South Atlantic, off the coast of Buenos Ayres, at Station 320; February 14, 1876; lat. 37° 17' S., long. 53° 52' W.; depth, 600 fathoms; bottom temperature, 2°·7 C.; bottom, hard ground.

*Styela glans*, Herdman (Pl. XX. figs. 10–13).

*Styela glans*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1880–81, p. 65.

*External Appearance.*—The shape is regular, and is between conical and hemispherical. The highest point of the body is at the ventral edge of the anterior end. The posterior end is large and flat, and is attached to a piece of coral. The dorsal edge is more convex than the ventral. The branchial aperture is anterior, and is placed at the highest part, near the ventral edge; the atrial is on the dorsal edge, two-thirds of the way down; both are sessile and inconspicuous.

The surface is roughish, but regular. The colour is a dark reddish-brown.

Length of the body, 1·5 cm.; breadth of the body, 1·2 cm.

*The Test* is not thick, but is tough; it is white on the inner surface.

*The Mantle* is very thin and membranous.

*The Branchial Sac* has four slight folds upon each side, about five internal longitudinal bars being crowded together, and the same number placed further apart alternately. The meshes are elongated antero-posteriorly, and contain three stigmata each. They are divided transversely by narrow membranes.

*The Dorsal Lamina* is a narrow membrane.

*The Tentacles* are simple; they are few and of moderate size.

*The Dorsal Tubercle* is simple; it is nearly circular in outline.

This is a small regularly shaped species, rather like an acorn in appearance (Pl. XX).