

Kerguelen Island, at Station 150; February 2, 1874; lat. $52^{\circ} 4' S.$, long. $71^{\circ} 22' E.$; depth, 150 fathoms; bottom temperature, $1^{\circ} 8 C.$; bottom, rock.

Styela gyrosa, Heller.

(1) *Cynthia verrucosa*, Philippi, Müller's Archiv, 1843.

Styela gyrosa, Heller, Untersuch. ü. d. Tunicaten d. adriat. Meeres., Abth. 3, p. 15, 1877.

This large and apparently widely distributed species was found by the Challenger expedition at Port Jackson in considerable quantity. There are some large specimens of it from the same locality in the Liverpool Free Public Museum. They were dredged and brought home by Mr. Patterson.

As Heller (*loc. cit.*) has lately given a long description of the Mediterranean specimens, and as the Australian ones seem to correspond in all particulars, little remains to be said here. The Challenger specimens are even more massed together into pseudo-colonies than Heller's seem to have been, and occasionally half-a-dozen or more individuals are found united by the fusion of their tests into a rounded clump, placed upon an irregularly twisted peduncle, nine or ten centimetres in length.

A number of specimens were dredged in 6 fathoms of water at Port Jackson, Australia.

Styela convexa, Herdman (Pl. XIX. figs. 3-4).

Styela convexa, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1880-81, p. 69.

External Appearance.—The body is rudely hemispherical, or bluntly conical in shape, and is not flattened laterally. The anterior end and the sides are convex; the posterior end is large, and is attached to a stone, and slightly expanded at the edge. The branchial aperture is terminal, and is placed rather to the ventral side of the middle of the anterior end, but forms its most prominent point; the atrial aperture is moderately distant, at the dorsal edge of the anterior end; both are sessile and inconspicuous.

The surface is moderately smooth, and is finely creased in all directions, especially round the apertures. The colour is a dull yellowish-brown, but lighter on the margins of the posterior end.

Length of the body, 2 cm.; breadth of the body (dorso-ventral), 2.6 cm.

The Test is thin, but very tough; it is white on section.

The Mantle is closely united to the test, and has the musculature fine but close.

The Branchial Sac has four folds upon each side. There are about eight internal longitudinal bars upon a fold, and the same number in the interspaces. The meshes are elongated antero-posteriorly; each contains about three stigmata, and is divided transversely by a narrow horizontal membrane.

The Dorsal Lamina is slightly crimped but plain; the edge is even.