

*The Tentacles* are filiform ; there are about thirty very long thin ones, with intermediate shorter ones.

*The Dorsal Tubercle* is large, and is transversely elliptical in shape ; both horns are rolled inwards, and form large spiral coils.

This is an attractive-looking species, with its nearly rectangular form and milk-white soft looking test. From some points of view it looks like a little white barrel. The apertures are at the extremities of the anterior end, and are distinctly cross-slit (Pl. XIX. fig. 7).

The test is not at all like that of a typical *Styela*, it is thick, soft and flexible. The mantle is muscular but thin, and is closely attached to the test.

The internal longitudinal bars are wide ribbon-like bands, but they are few and distantly placed. Consequently the meshes are greatly elongated transversely, containing usually about fifteen stigmata each (Pl. XIX. fig. 8), but in some cases (*e.g.*, the most ventrally placed meshes) as many as forty. The transverse vessels are alternately larger and smaller (*tr.* and *tr.*'), while here and there the smaller ones fail, and a row of very long stigmata is formed. Delicate horizontal membranes are present, here and there, between the transverse vessels, dividing parts of the meshes, but they never extend far (Pl. XIX. fig. 8).

Three specimens of this species were obtained at Kerguelen Island, at depths of from 10 to 100 fathoms.

*Styela exigua*, Herdman (Pl. XIX. figs. 5 and 6).

*Styela exigua*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1880-81, p. 68.

*External Appearance.*—The body is quadrangular in shape ; it is a little longer than broad, and is somewhat compressed laterally. The anterior end is broad and rather flat, while the posterior end is narrower and more rounded. The body is attached slightly by the posterior end of the left side. The apertures are sessile and inconspicuous ; the branchial is terminal and median, the atrial is on the dorsal edge, one-fourth of the way down.

The surface is even, but partially covered by a thin coating of sand. The colour is a dirty grey.

Length of the body, 1 cm.; breadth of the body, 0·8 cm.

*The Test* is cartilaginous and thick, but soft.

*The Mantle* is very thin, and is closely united to the test.

*The Branchial Sac* is wide, with four folds on each side. The alternate transverse vessels are wider than the intermediate ones. The internal longitudinal bars are stout ; there are six on each fold, and only one in the interspaces. The meshes are transversely elongated, and contain each about six stigmata.