

Two specimens were obtained to the south of 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.

*Ascidia meridionalis*, Herdman (Pl. XXXI. figs. 4–8).

*Ascidia meridionalis*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1879–80, p. 465.

*External Appearance.*—The shape is somewhat variable; it is generally oval, the anterior end being rather narrower than the posterior. The posterior end is rounded, and the anterior more or less pointed. The body is flattened laterally, and is attached by the posterior end and part of the left side. The branchial aperture is terminal, at the extremity of a large conical process, the apex of which is inclined ventrally and to the right; the atrial aperture is to the right of, or on the dorsal edge, about one-third of the way down; it also is on a process, which, however, does not usually project so much as the branchial one; it is directed dorsally, anteriorly, and slightly to the right; the lobes of both apertures are distinct.

The surface is slightly velvety; otherwise it is smooth, but more or less creased and seamed. The colour is light brown or horn colour.

Length of the body, about 12 cm.; breadth of the body, about 8 cm.

*The Test* is softish, and tears easily, it is from 1.5 to 6 millimetres thick, the left side being thicker than the right. Vascular trunks enter about the middle of the left side, near the ventral margin, and large vessels are seen ramifying on the inner surface, which is smooth and shining.

*The Mantle* is moderately muscular.

*The Branchial Sac* is slightly plicated longitudinally. Three small transverse vessels occur between each pair of large ones. The internal longitudinal bars are strong, and bear short stout papillæ at the angles of the meshes, and also small conical intermediate ones. The meshes are slightly longer transversely than antero-posteriorly, and contain each 6 to 8 stigmata. The stigmata are elongate-elliptical in shape.

*The Dorsal Lamina* is broad, and is ribbed transversely; the margin is serrated.

*The Tentacles* are simple, filiform, about sixty in number, and placed long and short alternately.

*The Dorsal Tubercle* is crescentic in shape, with the horns pointing anteriorly.

This is a large and well marked species; the form is more or less oval, the anterior end being the narrower (Pl. XXXI. fig. 4). In some of the specimens, however, the shape is a good deal more irregular than in the one figured. The apertures are placed on large conical projections, the sides of which are channelled by the grooves leading down from between the lobes. In one specimen the branchial aperture is only seven-lobed, while