right side; it is prominent, and distinctly lobed. It is directed anteriorly and to the right side. The atrial aperture is on the dorsal edge, one-fourth to one-third of the distance from the anterior to the posterior end. It is prominent, is distinctly lobed, and points more or less anteriorly.

The surface is rather uneven, being seamed by a number of shallow grooves, which have mostly a longitudinal course. The posterior end of the body, which is usually prolonged into a more or less uneven base of attachment, has often irregular rough processes projecting from it. The colour is a dull yellowish-grey, with occasional darker patches, especially at the place of attachment.

Length of the body, 17 cm.; breadth of the body, 5.5 cm.

The Test is cartilaginous and moderately thick, but soft and flexible. Vessels are abundant.

The Mantle is strong, and the musculature is well developed on the right side of the body and round the apertures.

The Branchial Sac is strong, and is slightly plicated longitudinally. The transverse vessels are of two sizes, but these are not arranged with great regularity; usually several of the smaller size occur between every two of the larger. The internal longitudinal bars are strong and regular, and bear large curved papillæ at the points of intersection with the transverse vessels and smaller intermediate ones, which are usually connected by delicate horizontal membranes. The meshes are slightly elongated transversely, and contain each eight to ten stigmata. Occasionally much narrower transverse vessels are present for short distances, thus forming two rows of small stigmata in a mesh.

The Dorsal Lamina is a broad membrane, strongly ribbed transversely, and having the edge toothed in some parts and plain in others.

The Tentacles are simple, not long but rather stout, and all of one size.

The Dorsal Tubercle is large but simple. It lies in a shallow peritubercular area, and extends anteriorly almost to the bases of the tentacles. The shape of the tubercle is ovate, while the aperture is at the narrower anterior end. Both horns are turned to the right.

This is a large and somewhat variable species, which appears to be common at Kerguelen Island. In the first part of the Preliminary Report it was considered as being identical with Ascidia mentula, O. F. Müller, a species to which it is closely allied.

The body is elongated, and in the larger specimens is often curved (Pl. XXX. fig. 1), while in younger examples it has a much more regular form, and is not so elongated (Pl. XXX. fig. 2). In the young individual also the area of attachment at the posterior end is comparatively small, while in the larger specimens it is much produced and irregularly twisted, extending in one case more than 7 cm. beyond the posterior end of the body.