

The Reproductive Organs are placed behind the intestinal loop, and may extend posteriorly for a great distance. They are usually over 1 cm. in length.

Locality.—(a) Kerguelen Island, 10 to 60 fathoms; one large and one small colony.
(b) Kerguelen Island, 10 to 100 fathoms; one small colony.

Three specimens of this remarkable species were obtained at Kerguelen Island, at depths between 10 and 100 fathoms. One of them is a large colony (Pl. XXII. fig. 1), from which the description and measurements given above are taken, the other two are very much smaller.

The large colony has been evidently flattened somewhat during preservation; the natural thickness was therefore probably greater than what is stated above. The upper part is formed of two masses, each with a separate short peduncle, which join about one-third of the way down. One of the "heads" is considerably larger than the other, but in all other particulars they agree closely. The posterior part of the colony forming the common peduncle is about 3 cm. in its greatest thickness. It is formed of dark grey test, with a slight slate-blue tinge. This region expands rapidly above to form the convex upper part of the colony in which the Ascidiozooids are imbedded (Pl. XXII. fig. 1). Here the colour is lighter and has a yellowish tint, and the test is much softer and more yielding than lower down. The outer layer of test over the whole colony is very smooth and glistening, but it does not form a firmer or harder layer which may be stripped off as in the case of some other Compound Ascidiæ. The bodies of the Ascidiozooids show through the test of the upper part of the colony as long, opaque, yellow bands, becoming indistinct at their lower ends, where they are not so opaque, and the surrounding test is less transparent (Pl. XXII. fig. 1).

The Ascidiozooids are not arranged with any regularity, but occur at fairly equal distances all through the test in the upper part of the colony. Their anterior ends in many cases form small papillæ, while in other cases the Ascidiozooids have contracted away from the superficial layer of test, and occupy depressions.

The two smaller colonies are nearly of the same size, the one being 2.5 cm. long and 1 cm. broad at the top, and the other 3.5 cm. long and about 1.5 cm. broad. The general shape of body is much the same as in the large colony. The specimen from "Kerguelen, 10 to 100 fathoms"—the smallest colony—is less wedge-shaped than the others, and would be more properly described as irregularly club-shaped. The peduncle is narrow, and the upper part occupied by the Ascidiozooids is rounded, there being no lateral compression.

The Ascidiozooids in all three colonies are very large. They vary from 1 cm. to 2 cm. in antero-posterior length (Pl. XXII. figs. 2, 3), and are generally about 2 mm. across at the widest part, which is near the anterior end. The three regions of which the body is formed correspond to Milne-Edwards' "thorax," "abdomen," and "post-