

intestine is large, but the intestinal loop is rather small. The ovary is considerably branched, and lies chiefly upon the right side of the loop. The spermatic vesicles are of the usual pyriform shape, and are united in twos and threes at the ends of the dichotomising vas deferens; they are found chiefly over the intestine in the lower part of the rectal loop. The genital ducts are conspicuous along the lower edge of the rectum. The renal vesicles cover the greater part of the left side of the stomach. They are large and clear-walled, and contain each one or more spherical concentrically laminated brown concretions.

This species somewhat resembles *Ascidia virginea*, O. F. Müller, but is undoubtedly distinct from it. That species differs from the present one chiefly in its greater length in proportion to the breadth, its greater number of tentacles, the absence of intermediate papillæ on the branchial sac, the shape of the tubercle, and in the condition of the dorsal lamina,—all fairly good characters.

Three specimens, one of them in good condition (the one figured on Pl. XXXII. fig. 7), were obtained from the western end of the Straits of Magellan, at Station 311, January 11, 1876; lat. 52° 50' S., long. 73° 53' W.; depth, 245 fathoms; bottom temperature, 7°·7 C.; bottom, mud; and two, one of them damaged, were obtained off the coast of Buenos Ayres, South America, at Station 320, February 14, 1876; lat. 37° 17' S., long. 53° 52' W.; depth, 600 fathoms; bottom temperature, 2°·7 C.; bottom, hard ground.

*Ascidia translucida*, Herdman (Pl. XXXIII. figs. 1–6).

*Ascidia translucida*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1879–80, p. 466.

*External Appearance*.—The body is ellipsoidal, oblong-ovate, or oblong in shape, and is not flattened laterally; both ends are rounded. It is attached slightly by the left side near the posterior end. The apertures are sessile, and are both on the right side,—the branchial is nearly terminal and median, while the atrial is more than a third of the way down, and at a considerable distance from the dorsal edge.

The surface is smooth and glossy. The colour is a very light grey, almost transparent, and the vascular ramifications show as white markings over the left side and the margins of the right.

Length of the body, 2·2 cm.; breadth of the body, 1·2 cm.

*The Test* is moderately thick and solid, and is transparent. The vascular trunks enter near the centre of the left side; they are of large size and branch freely; they are clearly visible externally, except in the centre of the right side.

*The Mantle* is thin and membranous.

*The Branchial Sac* is longitudinally plicated, and shows externally a well-marked division into pouches. The internal longitudinal bars are strong, and bear rather long curved papillæ at the angles of the meshes; there are no intermediate ones. The transverse vessels are all of much the same size, and the horizontal membranes are broad. The