

are well-marked membranes, which become less marked and die out as they approach the free edge; they appear to be continuations of the horizontal membranes stretching between the papillæ.

The tentacles are placed very closely; the larger ones are of considerable length (Pl. XXXII. fig. 5). The others are rather irregular, both in size and arrangement, although often they are placed alternately, as shown in figure 5.

The neural gland lying under the nerve ganglion is large, flattened, and of a yellow colour. The dorsal tubercle is very simple, and the aperture is thrown round to the right side by the anterior prolongation of the left horn (Pl. XXXII. fig. 6).

The œsophagus is short, and opens far back in the branchial sac, at the posterior extremity of the dorsal lamina. The stomach is long and fusiform, and extends ventrally and anteriorly from the œsophagus. The intestinal loop and the rectal loop are both narrow, but deep antero-posteriorly. The stomach and the first part of the intestine are entirely covered by the reproductive and renal glands. The genital ducts form a distinct line running down the intestinal loop and along the edge of the rectum. The renal vesicles contain clear yellowish-brown concretions. The ovary is much branched and ramifies over the right side of the intestine.

At first I was disposed to consider this species as being identical with Verrill's *Ascidia mollis*,¹ but though closely allied they are undoubtedly distinct. The branchial sacs especially differ considerably in details. *Ascidia falcigera* is also somewhat like *Ascidia obliqua*, Alder, in external appearance, but these species differ in the form and arrangement of the papillæ in the branchial sac.

Eight or nine specimens were obtained in the North Atlantic, to the south of Nova Scotia, at Station 49, May 20, 1873; lat. 43° 3' N., long. 63° 39' W.; depth, 83 fathoms; bottom temperature, 1°·8 C.; bottom, gravel and stones.

Ascidia tenera, Herdman (Pl. XXXII. figs. 7-10).

Ascidia tenera, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1879-80, p. 467.

External Appearance.—The body is oblong, or varies from oval to oblong in shape; it is flattened laterally. The posterior end is rounded, while the anterior end is rather blunt. The body is attached by the posterior third of the left side. The branchial aperture is terminal, is directed somewhat ventrally, and is sessile; the lobes are well-marked; the atrial aperture is placed to the right of the dorsal border, about one-third of the way from the anterior to the posterior end; it is sessile, and the lobes are well marked.

The surface is soft and somewhat velvety, but marked with slight creases, mostly longitudinal; near the apertures, especially the branchial, it is raised into minute pointed projections. The colour is light brownish-grey or pale horn colour.

¹ Descriptions of imperfectly known or new Ascidiæ from New England (American Journal of Science and Arts, ser. iii., vol. vii., 1873). This name was pre-occupied, Hancock having named a British species *Ascidia mollis* in 1870 (Ann. and Mag. Nat. Hist., ser. iv., vol. vi., p. 358).