

curving ventrally as they go, and keeping within the ventral half of each side. About three-fourths of the way back they split up and become lost in the irregular fibres surrounding the posterior end of the body.

At the base of the atrial siphon a red spot is seen distinctly through the muscles of the mantle. This is the pigmented glandular mass, placed on the extremity of the vas deferens, which is sometimes so conspicuous in *Ciona intestinalis*. It has been described in that species by Heller,<sup>1</sup> and more recently by Roule,<sup>2</sup> who regards it as a renal organ.

The branchial sac is very similar to that of *Ciona intestinalis*, and possesses no noteworthy peculiarity. Occasionally, as shown in the figure (Pl. XLIX. fig. 13), one or two stigmata are interrupted where the delicate horizontal membranes connecting the intermediate papillæ cross them, but no small transverse vessels extending the length of a mesh were found.

Several Crustacea were present as commensals in this branchial sac.

<sup>1</sup> Untersuchungen über die Tunicaten des Adriatischen Meeres, II. Abth., *Denkschr. d. k. Akad. d. Wiss. Wien*, Bd. xxxiv. p. 120, 1875.

<sup>2</sup> Roule, *Recherches sur les Ascidies Simples des Côtes de Provence*, p. 170.