

*tenella*, which is also closely allied to *Ciona intestinalis*. Finally, the Challenger expedition has discovered two new species, which I have dedicated to the founders of the genus, Savigny and Fleming.

*Ciona flemingi*, Herdman (Pl. XXXIV. figs. 7-10).

*Ciona flemingi*, Herdman, Prelim. Rep., Proc. Roy. Soc. Edin., 1879-80, p. 461.

*External Appearance*.—The body is somewhat pyriform and elongated; the anterior end is wide, and the posterior much narrower, forming a short stalk turned ventrally, and attached to some foreign body by the extremity of its right side. The apertures are situated at the anterior end, and are inconspicuous; the branchial is near the ventral edge, the atrial is near the dorsal edge; they are equally far forward, the most anterior point of the body being placed between them.

The surface is smooth; the colour is light grey.

Length of the body, 2.2 cm.; breadth of the body, 8 mm.

*The Test* is thin, soft, and almost gelatinous; it is transparent, the body showing through distinctly. The vessels are few.

*The Mantle* is normal; the musculature is rather feebly developed, consisting chiefly of a few straight bundles running longitudinally.

*The Branchial Sac* is rather thick, small, and shrunken-looking. The transverse vessels are all of much the same size. The internal longitudinal bars are coarse and strong; they are much crumpled, and bear irregular knob-like papillæ at their intersections with the transverse vessels; no intermediate papillæ are present. The meshes have their greatest extent longitudinal, and contain each two to three elongate-elliptical stigmata.

*The Dorsal Lamina* is reduced to a series of languets. Each is short and stout, and has a hook or tusk-like form.

*The Tentacles* are simple, all of one length, and twelve in number.

*The Dorsal Tubercle* is cordate, small, and has both horns turned inwards.

*The Viscera* extend beyond the branchial sac posteriorly. ■

This little species seems to be distinct from the few species hitherto referred to the genus. The body form, the short languets, and the small number of tentacles, are all very characteristic features. The short stalk mentioned above is very slight (Pl. XXXIV. fig. 7), and is merely the narrowed posterior end of the body. It is not sufficient to affect the general statement that the body is sessile in *Ciona*.

The musculature of the mantle is not very strong, but takes the form of longitudinal bands so characteristic of the genus.

The branchial sac, when first opened, showed the contracted and irregularly crumpled condition so frequently seen in spirit specimens of *Ciona intestinalis*, and caused by the pressure of the strongly contracted mantle lying over it.