himself to have traced the connection of the ultimate fibrils with those in the tactile papillæ of the tentacles.[1]

The discovery of this extensive perisomic or parambulacral network, derived from the axial cords of the arms and pinnules in various species both of *Antedon* and of *Actinometra*, led me to suspect its presence at the sides of the disk-ambulacra; and after several unsuccessful attempts, chiefly due to the poor state of preservation of my material, I met with one disk of *Antedon eschrichti* which yielded the most satisfactory results. Portions of two sections are shown in Pl. LIX. figs. 6 and 7; while woodcut fig. 8 embodies the result of my studies of a few successive sections in the same series.

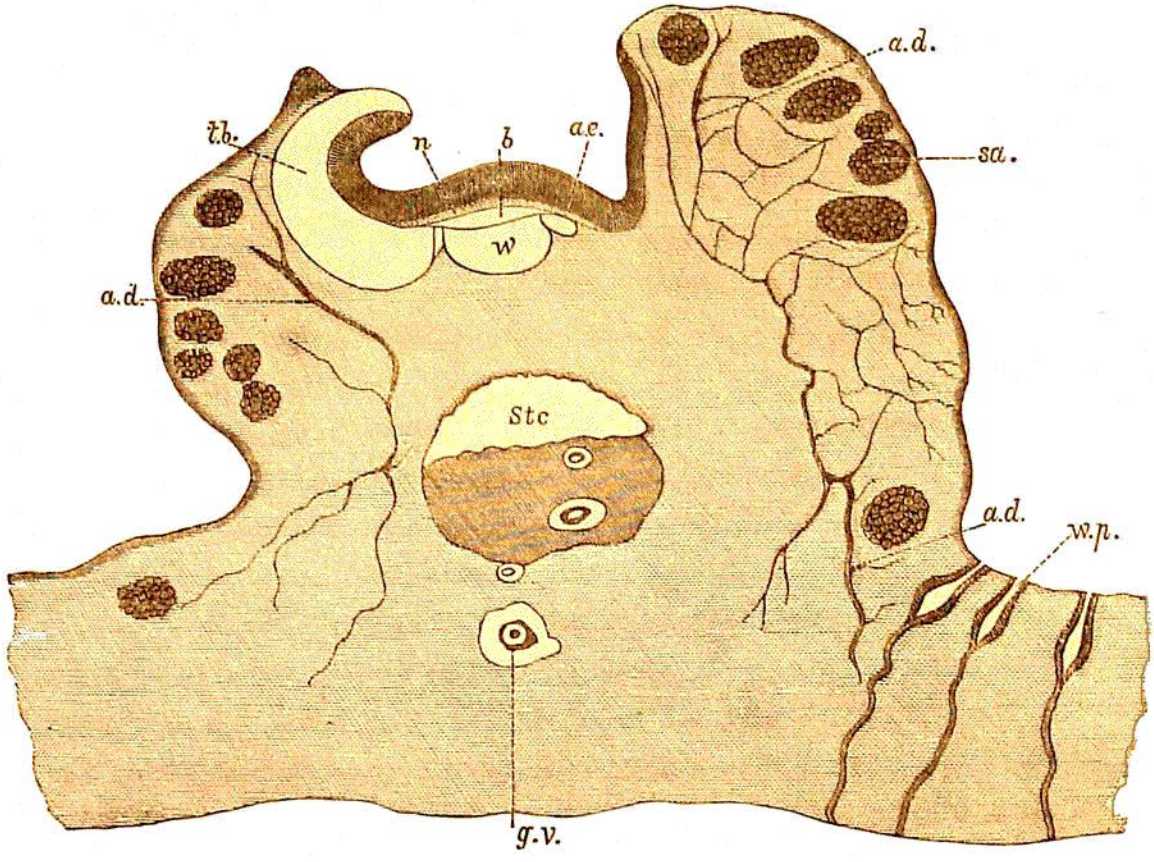


FIG. 8.—Diagrammatic transverse section of an ambulacrum on the disk of *Antedon eschrichti*, × 70.

*a.d.*, The parambulacral nervous network—this is filled in from a few successive sections, only isolated portions of it being visible in any single one; *a.c.*, ambulacral epithelium; *b*, radial blood-vessel; *g.v.*, genital vessel; *n*, radial or ambulacral nerve, the subepithelial band; *sa.*, sacculi; *Stc*, subtentacular canal; *t.b.*, tentacular branch of *w*, the radial water-vessel; *w.p.*, water-pores.

There appears to be a good deal of individual variation; but in this one species, at any rate, the elevated folds of perisome which bear the ambulacra contain a wonderfully rich network of delicate fibrils of precisely the same nature as those which occur at the sides of the brachial ambulacra (Pl. LX. fig. 6, *a'*); and the brachial plexus may be followed down on to the disk at the sides of the food-groove (woodcut, fig. 8, *a.d.*). I have very little doubt that it is joined by branches which proceed upwards into the ventral perisome from the axial cords within the radials and lower brachials. But as

[1] *Comptes rendus*, t. xcvii. p. 188.