

inner row bends over the mouth very symmetrically, while the outer forms an equally beautiful cup. In life the tentacles can be moved individually. Dyster found that the anterior region (his "head") could be reproduced in forty-eight hours—not, it is true, completely, but with a mouth and short tentacles which sufficed to cause food-currents.

Body-Cavity.

The body-cavity is separated by the basement-tissue into two regions, viz. (1) the body-cavity of the anterior region and tentacles, and (2) the body-cavity of the trunk (Pl. III. fig. 1). This was first clearly pointed out by Mr. Caldwell. The former chamber is complex and sinuous from the number of processes and septa for spaces or organs connected with it, and it is difficult of demonstration. Into the great vascular area the ciliated funnels of the sense-organs debouch.

In the posterior division, viz. that including the rest of the body, the mesenteries divide the body-cavity into three chambers (Pl. I. fig. 4). Thus a median mesentery attaches the œsophagus and stomach to the body-wall ventrally, while a mesentery passing on each side from the other arch of the alimentary canal separates the intestine in a special segment. Moreover, the latter chamber is subdivided by a mesentery which proceeds from the posterior wall of the intestine to the body-wall. The right arch of the intestine is further closely connected with the right mesentery, or perhaps it is more strictly in accordance with fact to say that the right mesentery is divided by the intestine. It thus happens that the intestine is fixed centrally by one and distally by two mesenteries. The latter are for the most part formed of basement-tissue which thus evenly splits—for instance, when encircling the intestine in the right mesentery.

Before leaving the mesenteries, notice may be made here of a peculiar organ occurring chiefly in the left intestinal mesentery anteriorly (Pl. I. figs. 3 and 4, *cos*). As soon as the basement-tissue forms the septum on each side for the enclosure of the rectum, and before the nephridia debouch into the space lying exterior to this region, a special thickening is observed on each side close to the pharyngeal division of the alimentary canal, the inner surface (abutting on the intestinal space) being coated with closely arranged, and apparently sensory, cylindrical epithelium, an aperture (Pl. I. fig. 3), moreover, occurring in the centre of the enlargement. After a short course, the organ on the right mesentery (which is chiefly occupied by the intestine) becomes pediculate in transverse section, that is to say, the long fold becomes narrowed along the edge of attachment to the mesentery, and afterwards disappears. The left organ, on the other hand, takes the form of an elevated cushion of sensory epithelium upon a somewhat fusiform thickening of the basement-tissue forming the mesentery (Pl. II. fig. 6). This condition is best seen in adults; indeed, in the young example specially examined it could not be satisfactorily made out.