

regularity in the ramifications of these tubes, than of those which correspond to the angles of the mouth, not only in their mode of ramification, but also in their origin. Sometimes there are two independent ramifying branches on each side of the middle tube, equally distant from it and from the simple lateral tubes, while, at other times, there may be two independent branching tubes between the middle tube and the lateral tube of one side, and only one on the other side. At times, again, these branching tubes may be directly connected at their base with the middle tube, either on both sides, or only on one side. But all these irregularities are easily accounted for when it is recollected in what way these tubes are formed, and their normal disposition may best be appreciated by a comparison of younger specimens (as those of Pl. XI<sup>b</sup>. and XI<sup>c</sup>.) with adults (as those of Pl. VI. and VII.). In the young, in which the radiating tubes are comparatively few, there are hardly any irregularities, and the radiating tubes corresponding to the corners of the mouth form one bundle with a main stem and more or less numerous branches from near the base, the main stem extending straight to the peduncle of the eye, which is placed in the indentation of the margin, thus showing that the corresponding branching and anastomosing radiating tubes of the adult arise from an increase of the branches and more frequent anastomoses among them, while the middle tube is enlarged without further branching. A similar comparison of the tubes corresponding to the genital pouches shows that at an early stage there arise three main branches from the genital pouches, the lateral ones of which remain simple, while the middle one gives off branches from near its base, the middle stem, nevertheless, remaining simple while the branches ramify again and again and form numerous anastomoses. As the genital pouch itself encroaches upon that main stem during its enlargement, the result is that these branches appear in the end more or less independent from the main axis.

We have thus four simpler systems, with a single main central branch arising from the corners of the mouth, and extending in the direction of the oral appendages to those four eyes in the marginal indentations, which are in the prolongations of the same rays, and four more complicated systems arising from a triangular sack, bordered on each side by a simple radiating tube, reaching the periphery without further ramifications, and giving rise at their confluence with the marginal tubes to but slight indentations, while the middle, simple branch terminates in the peduncle of those eyes which occupy the marginal indentations in the prolongations of those rays in which lie the genital pouches. The obvious homology of these parts, with those of Polyps and Echinoderms, enables us to introduce here a more definite terminology to designate them; for, as the radiating chambers are bound by radiating partitions, on the margin of which hang the ovaries, thus alternating