

lower border of the anus; plates 22 and 23 form the right and a portion of the upper border of the anus, and 23 also supports the first and half the second brachial of the posterior arm. Plate 24 is just anterior to and also supports the first brachial of this arm, it also reaches the mouth and forms part of its border; plate 25 is semicircular in outline, fills up the inner portion of the half sigma of the anterior arm and supports all of its brachials on this side; its inner border is raised to form the edge of a channel which receives the eight grooves of the anterior brachials. Plate 26 borders on the mouth, supports the posterior edge of the first anterior brachial, and bears the genital pore; 27 is formed like 25 and receives the six grooves of the posterior arm; 28 supports the last brachials of the posterior arm on the outer side of the curve and with 29 forms the left border of the anus. At the point where plates 26, 27 and 28 meet each other there is a peculiar, small, roughened mound which may represent the madreporite.

There is considerable variation in the plate arrangement in the three specimens figured. Specimen C was probably as aberrant a form as could have been found in the two hundred or more specimens collected. This specimen has 37 plates besides the brachials, A had 29, and B shows but 28.¹ The four plates bordering the mouth are constant and may be called the orals. They bear covering plates some of which may be seen in specimen B [pl. 1, fig. 5]. The plates I have called brachials are vertical plates with their lower edges resting on the neck plates of the theca and their middle portion against the opposite oral. These plates do not show covering pieces but the orals numbered 25 and 27 still continue their covering pieces which now reach completely across the food groove, forming a single series of rectangular plates. There were several of these in position on the anterior arm but they became lost through an accident and the only completely transverse plates now present are in the posterior arm. The first one or two brachials are the largest; the others then grow rapidly smaller as the half sigma recedes from the mouth. All bear truncate faces on their distal ends and the larger are marked as if they had borne extended and movable brachioles. The larger faces are directed more nearly upward and

¹Compare figures 1, 2 and 3 of the text.