

four little more than stellato-pentagonal. The smallest example I have seen measures $R = 4.5$ mm., $r = 2.5$ mm., and has six supero-marginal plates, and seven infero-marginal plates. These are all broader than long, and there is as yet no trace of the "dorsal" spine on the supero-marginal plates. At the extremity of the odd terminal plate there is a single tapering pointed spine standing on the median radial line, and directed outward; and one on each side at a lower level. The infero-marginal plates bear a well-developed lateral spine, which is comparatively robust and pointed. The adambulacral plates, which are long and narrow, have a marginal series of spinelets which radiate over the furrow, about five in number near the mouth, but not more than three near the extremity; external to these, on the actinal surface of the plate, is a lineal series of three or four papilliform granules, equal sized. There is no large conical spine on the actinal surface of the plate, but near the extremity of the ray the aboral spinelet of the marginal series is much larger than the others. The mouth-plates are elongate and ploughshare-shaped; the suture between the two plates of a pair is not closed; and the odontophore is exposed. There are at least eight intermediate plates in each actinal interradial area, three on each side of the median interradial line, each of which touches the marginal plates, and a fourth intervenes between the innermost of the three and the mouth-plates. These plates bear small, equal, papilliform granules.

At a little older stage, when the measurements are $R = 7.5$ mm., $r = 3$ mm., there are nine supero-marginal plates and ten infero-marginal plates, and the supero-marginal plates bear a low conical papilla—the rudiment of the future dorsal spine. The characters of the adambulacral plates, mouth-plates, and intermediate plates are essentially the same as described above. On two or three of the innermost adambulacral plates there are indications of the future prominent large conical spine on the actinal surface, but on the outer part of the ray the large spine is in the marginal series and at the aboral end. There are twelve or fourteen plates in the actinal interradial areas.

When the measurements are $R = 11$ mm., $r = 4$ mm., there are fourteen supero-marginal plates, and, excepting the greater length of the ray and the increase in the number of plates in the actinal interradial area (at least twenty-four being present), there is not a great change from the characters noted in the preceding stage.

When a little larger, with the radial proportions of $R = 12.5$ mm., $r = 4.25$ mm., and fifteen supero-marginal plates are present, the adambulacral plates are distinctly beginning to assume the characters of the adult form. The large conical spine is well-developed, although it does not yet occupy the central position on the actinal surface.

When the young Asterid has attained the dimensions of $R = 18$ mm., and $r = 5.25$ mm., its characters are sufficiently marked to leave little if any doubt as to the species, if such a specimen were dredged singly.

With a major radial dimension of 41 mm. and $r = 10$ mm. there is still no trace of the central conical spine on the plates of the actinal interradial areas in a specimen from