whilst the outer members of the series are simply truncate papillæ or elongate granules. On the margin of the mouth-plate adjacent to the adambulacral plate is a series of six papilliform spinelets or granules similar to the last-mentioned. One or two additional spinelets usually stand on the interspace of the plate formed by the divergence of this and the median series.

The paxillæ of the abactinal area are of two forms, and present a very ornate appearance. Those which occupy the radial portions of the disk are hexagonal, tabulate, and well spaced, with a definitely-arranged spinulation; the covering of the interradial areas, on the other hand, consists of square or rhomboid plates compactly placed and covered with a small uniform miliary granulation similar to that on the supero-marginal plates. The median radial line is occupied by a longitudinal series of transversely elongate hexagonal paxillæ, which are larger than any of the others. Their transverse diameter is 2 mm., and the longitudinal measurement (corresponding to the direction of the ray) varies from 1 to 1·5 mm. The margin of the tabulum is occupied by a regularly placed series of twenty-two to twenty-five short, prismatic, sharply truncate spinelets, their truncation being in conformity with the well-defined, regular and sharply-angular hexagonal outline of the paxilla as a whole, which is so regular that these spinelets almost appear as if trimmed into form with a knife. The central portion of the tabulum is occupied by seven to eighteen semiglobular well-spaced granules, which vary in size according to number, but are of uniform size on a given tabulum. When this series of paxillæ reaches the base of the ray proper, they lose their tabulate character and appear more like simple hexagonal plates compactly placed, and the marginal series of spinelets lose their prismatic character and become rounded granules similar to those on the surface of the tabulum, and at the same time the latter increase in number. Towards the end of the ray the paxillar plates lose their hexagonal outline and become square, and finally become so small that their serial succession is interrupted by the contact of the two corresponding supero-marginal plates from each side of the ray. The radial series then rapidly aborts, and the extremity of the ray is occupied entirely by the supero-marginal plates. On each side of the median radial line of paxillæ, within the area of the disk, are three parallel longitudinal series of similar, but somewhat smaller, hexagonal tabulated paxillæ. The outermost two are confined to the area of the disk and terminate at the base of the ray; the innermost, however, is continued a little further along the ray, nearly to the middle, but the hexagonal form is altogether lost; and all the plates near the base of the ray and any which proceed along it change the special spinulation of the tabulated paxillæ for the small miliary granulation similar to that on the supero-marginal plates above noticed. The tabulated paxillæ of the three series on each side of the median row are of the same height and character as the latter, and they stand well spaced, so that the star-like prolongations uniting the bases, as well as the papulæ, are visible. The row of paxillæ next to the median series have their transverse