

The abactinal area is covered with a thin and almost transparent membrane, which is indurated with a great number of spiniferous spicules or pseudo-paxillæ. These consist of a circular scale-like base, from the centre of which a spine-like process rises vertically, and this may be divided into two, three, or four equal spinelets, the latter number being the most general in the centre of the disk, and those with one spinelet near the margin. The spinelets are moderately robust, obtuse, all united at the base, and radiating apart very slightly, have more or less the appearance of imperfect paxillæ, whilst the squamous basal plate is scarcely larger than the diameter of the vertical spinous process. These pseudo-paxillæ are rather crowded in the immediate centre of the disk, but are elsewhere moderately and uniformly well-spaced. There are no papulæ. The presence of an actual anal aperture is doubtful.

The marginal plates form a perpendicular wall of small but uniform height. The upper margin of the superior series and the lower margin of the inferior series are slightly bent inwards and form bevelled edges. The supero-marginal plates are eight in number, counting from the median interradiial line, exclusive of the terminal. The innermost plates are nearly twice as long as high, and the outermost are higher than long. The two innermost plates on each side of the median interradiial line each bear a single, very minute, conical spinelet near the upper margin, and directed horizontally. The two outermost supero-marginal plates extend to the median radial line, where they join the corresponding plates from the other side of the ray; the two next plates are separated by a narrow strip of the abactinal membrane with pseudo-paxillæ, and the remaining plates fall in the disk margin. The terminal plate is slightly tumid proximally, and tapers rapidly to a fine extremity, which is continued in a robust, sharply pointed, terminal spine. This spine, which is longer than the plate, is placed in the median radial line of the ray, and is directed outward and slightly upward from the horizontal; two smaller spinelets less than half the size of the above are placed at a lower level, one on each side of the extremity of the furrow.

The infero-marginal plates correspond in number and breadth to their superior companions; their height is less than the length, and varies very slightly throughout the ray.

Seven cribriform organs are present in each interbrachial arc; they are very narrow, and the outermost are almost imperceptible. Their structure is papilliform. (See Pl. XXVIII.)

The ambulacral furrows are narrow and entirely closed in by the overarching plates and spinelets. The adambulacral plates are large and subrescentric in form, with the extremities truncate and the incurved margin directed towards the furrow. Their armature consists of three spines to each plate, which are moderately long, slightly tapering, obtuse, and rather compressed, covered with very delicate membrane, which near the base unites with that of the adjoining spines, and forms a rather broad continuous web, by which the spines are bound together in continuous series. The spines