

7. *Astropecten imbellis*, Sladen (Pl. XXXIV. figs. 3 and 4; Pl. XXXVIII. figs. 4-6).

*Astropecten imbellis*, Sladen, 1883, Journ. Linn. Soc. Lond. (Zool.), vol. xvii. p. 255.

Rays five.  $R = 24$  mm.;  $r = 7$  mm.  $R > 3.5 r$ . Breadth of a ray at the base, about 7 mm.

Rays rather narrow, especially on the outer part, tapering continuously from the base to the extremity. Interbrachial arcs subacute.

The paxillar area has a comparatively open and irregular appearance, in consequence of the character of the paxillæ; these have short thin pedicles, scarcely forming a true tabulum, and are surmounted by eight to ten rather long delicate spinelets, much longer than the pedicle, which do not usually radiate apart widely. In consequence of the rather wide separation of the paxillæ, a somewhat "draggled" appearance is produced. In the centre of the disk the paxillæ are rather smaller and more crowded, and a central eminence is present.

The supero-marginal plates, which are eighteen in number from the median interradiial line to the extremity, are about as broad as high, but higher on the inner part of the ray. The plates are slightly tumid, and form a well-rounded margin to the ray. The surface of the plates is covered with very fine, closely placed, papilliform granules; and the innermost eight or nine supero-marginal plates bear a small, delicate, sharply pointed spinelet, about equal in length to the length of the plate, and placed near the middle of the abactinal portion of the plate. The breadth of the plates is very little greater than the length on the inner portion of the ray; and on the outer portion these proportions are reversed.

The infero-marginal plates are broad, gently rounded towards the actinal surface, and do not extend beyond the superior series. They bear three lateral spines, placed close together in a very oblique series, the second from the margin being slightly the longest and most robust; all are exceedingly delicate, needle-like, and very faintly bent, the longest being rather more than twice the length of the plate. On the innermost three plates the upper or outer spine is the longest; it is also flattened and much broader than elsewhere. Excepting on the innermost three plates no other spines occur; on these, however, one or two very small ones are present in the median line. The surface of the infero-marginal plates is covered with numerous minute papilliform squamules closely placed, which become more spiniform towards the margins.

Not more than two or three actinal intermediate plates are present, and these are covered with short, papilliform spinelets similar to those just mentioned.

The armature of the adambulacral plates consists of short, delicate, cylindrical spines, slightly tapering at the tips, which form two series. The inner series consists of three spines, the middle one slightly longest, radiating apart and directed over the furrow. The outer series consists likewise of three similar and equal spinelets, usually directed towards