

Actinal interradiar areas small, with numerous small intermediate plates which extend far along the ray. The intermediate plates all bear small compact groups of spinelets.

Armature of the adambulacral plates consisting of:—(1.) a furrow series of rather long, delicate, cylindrical, uniform spinelets, which form either a straight series or may be slightly curved. (2.) On the actinal surface of the plate are two longitudinal series of shorter and more compressed spines, the inner of these two series being frequently irregular.

Madreporiform body large and situated rather nearer the margin than midway between it and the centre of the disk.

No true pedicellariæ are present, but an incipient form of the organ may occur in some species.

*Remarks.*—The type of this genus is the starfish originally described by Müller and Troschel<sup>1</sup> under the name of *Astropecten andromeda*. It appears to me to merit generic distinction on account of the difference (1.) in the character of the marginal plates, (2.) in the number and disposition of the actinal intermediate plates, (3.) in the armature of the adambulacral plates, (4.) in the spinulation of the marginal plates, and (5.) in the character of the paxillæ.

*Synopsis of the Species included in the Genus Psilaster herein described.*

- A. With marginal plates vertical, almost confined to the lateral wall of the ray.
- a. With narrow delicate rays. Interbrachial arcs well rounded. With papilliform granules on the marginal plates: no membrane. Inner pair of mouth-spines very large . . . . . *gracilis.*
  - b. With robust rays, thick at the base. Interbrachial arcs acutely rounded. With squamiform papillæ on the marginal plates, often covered with membrane. Inner pair of mouth-spines small.
    - a. Infero-marginal plates at the base of the ray with four or five flattened spinelets equally spaced on the aboral margin. Inner pair of mouth-spines subequal to the rest. Supero-marginal plates conspicuously encroaching on the abactinal area on the outer part of the ray . . . . . *andromeda.*
    - b. Infero-marginal plates at the base of the ray with three or four small flattened spinelets grouped in a slightly oblique series near the aboral end of the lateral margin. Inner pair of mouth-spines conspicuously longer than the rest. Supero-marginal plates not conspicuously encroaching on the abactinal area on the outer part of the ray . . . . . *acuminatus.*
- B. With broad marginal plates, forming a broad, conspicuous margin to the abactinal area.
- a. With marginal plates nearly plane. Supero-marginal plates with no specially enlarged tubercle. Infero-marginal plates with one spine near the lateral margin. No pedicellariæ on the marginal plates . . . . . *cassiope.*
  - b. With marginal plates distinctly tumid. Supero-marginal plates often with a specially enlarged tubercle. Infero-marginal plates with an oblique series of four spines near the lateral margin. Incipient pedicellariæ on the marginal plates. . . . . *palagiatus.*

<sup>1</sup> System der Asteriden, 1842, p. 129.‡