

Infero-marginal plates extending on the actinal area. Supero-marginal plates crowded with numerous small, uniform, cylindrical, miliary spinelets; no large prominent spines. Infero-marginal plates covered with large, flat, squamiform, adpressed spinelets, with one or more similar, large but short, flattened spinelets at the margin adjacent to the supero-marginal plates.

Abactinal area with subhexagonal oblong imbricating plates, bearing paxilliform groups of short spines. A conspicuous medio-radial series larger than the rest. The other plates form regular obliquely transverse series, each plate imbricating on the next in its own series by a single prolongation of peculiar form developed from the inferior surface of the plate. Papulæ regularly distributed.

Actinal interradial areas almost nil, with very few actinal intermediate plates.

Armature of the adambulacral plates triserial, simulating that of *Astropecten*. A series of three geniculated pointed spines in triangle on the furrow margin; followed by one or two outer series of two to four flattened spines.

Madreporiform body in mid area. Occasional pedicellariæ (subforficiform) are present in the median series of spines on the actinal surface of the adambulacral plates.

*Remarks.*—The genus *Archaster*, as originally constituted, comprised the two species named by its founders *Archaster typicus* and *Archaster hesperus*; both are very remarkable forms and are widely separated from one another structurally. Indeed it is impossible any longer to retain them in the same genus; and it is difficult to account for their long companionship except on the ground that *Archaster hesperus* is of rare occurrence and has seldom been brought to Europe, and that nearly all the specimens preserved in museums are dry and more or less damaged. The only point then to determine is as to which of the two forms should stand as the type of the genus *Archaster*, which, in other words, would have been so regarded by its founders, and which of the two represents best the characters mentioned in their brief and very general diagnosis of the genus. That *Archaster typicus* fulfils these conditions I think there can be but little doubt; in the first place there is the specific or trivial name; 2d, its priority in the order of description; 3d, its close conformity with the generic diagnosis, which would be very insufficient for a well-preserved example of *Archaster hesperus*; 4th, I am extremely doubtful whether any anus is present in *Archaster hesperus*, and the presence of this aperture was in Müller and Troschel's opinion the most marked character of all. On these grounds I consider *Archaster typicus* as the type form of the genus *Archaster*; whilst *Archaster hesperus* constitutes the type of a genus for which I propose the name of *Craspidaster*, the characters of which will be discussed on a subsequent page.

Of all the species which have been referred to the genus *Archaster* since 1840 one only—*Archaster angulatus* of Müller and Troschel—presents the same structural characters as the type; the other forms have now been distributed amongst several different genera.