

extend down towards the ambitus so far that the extremity of the poriferous zone is placed at a point nearly half-way between the anal opening and the ambitus, far below its position in *Podocidaris sculpta*. In both of these specimens the anal system was covered by five plates (Pl. XXXIV. fig. 15) developed equally. The miliaries of the genital plates are larger and more prominent than those of the coronal plates. The madreporic body is but little developed, consisting merely of three to five indistinct pores. In the larger specimen the genital openings are small but sharply defined, and placed excentrically nearer the anal edge, as they are in *Podocidaris sculpta*.

The proportions of the abactinal system are somewhat different in the two species. In *Podocidaris prionigera*, the diameter of the test being 9 mm., the abactinal system is 6 mm., while in *Podocidaris sculpta* it occupies a comparatively small part of the abactinal region (see Revision of the Echini, pl. iv. figs. 6, 8). The actinal system also is comparatively larger in the proportion of 5 to 9 to the diameter of the test; while it is only as 2 to 5 in *Podocidaris sculpta*. On the actinal side the ambulacral suckers are large and powerful; they diminish in size towards the ambitus, and become more distant and pointed as they approach the abactinal system.

Station 218. March 1, 1875. Lat. 2° 33' S., long. 144° 4' E.; 1070 fathoms; bottom temperature, 2.1° C.; globigerina ooze.

Station 205. November 13, 1874. Lat. 16° 42' N., long. 119° 22' E.; 1050 fathoms; bottom temperature, 2.4° C.; grey ooze.

Podocidaris sculpta.

Podocidaris sculpta, A. Agassiz, 1869, Bull. Mus. Comp. Zool., vol. i.

Station 24. March 25, 1873. Off Culebra Island; 390 fathoms; mud.

Cælopleurus.

Cælopleurus, Agassiz, 1840, Cat. Syst. Ectyp.

Cælopleurus maillardi (Pls. V., VI., XXXVIII. figs. 7-9; Pl. XLV. figs. 1-6).

Keraiaphorus Maillardi, Mich., 1862, Maill. Bourbon. Ann. A.

Cælopleurus Maillardi, A. Agassiz, 1871, Bull. Mus. Comp. Zool., vol. ii. p. 456.

This remarkable Sea-urchin was first described by Michelin under the name of *Keraiaphorus*. He did not, however, suspect its close affinities to the Arbaciadæ, and Lütken was the first to hint at its identity with *Cælopleurus*, which a comparison I subsequently made of small specimens dredged by the "Hassler" with Michelin's figures fully corroborates.