DESCRIPTIONS OF NEW ASTEROIDEA FROM THE PACIFIC.

By

ARTHUR A. LIVINGSTONE (Assistant Zoologist, The Australian Museum.)

(Plates xxvii-xxviii.)

Among the specimens recently acquired by the Australian Museum the following have been considered to be species new to science and are described in this contribution.

Calliaster erucaradiatus¹ sp. nov.

(Plate xxvii.)

Description.—R. = 34 mm., r. = 12 mm.; R. = 2.8 r. Br. (from middle of one interbrachial to middle of another), 13 mm.; at middle of ray and between superomarginals, 5.5 mm.; between antepenultimate and penultimate superomarginals, 4 mm.

Disk relatively small, slightly elevated along radii. The rays taper gradually and evenly to a blunt tip. Abactinal surface covered by moderately sized plates of varying dimensions. Most of these plates are swollen and each carries either a single fairly long and robust spine (3 mm. high) or a nipple-like boss. The remaining plates of the abactinal surface are flat and unarmed, and most of them border the superomarginal plates. All plates of the abactinal surface are separated from one another by a single encircling belt of squarish and rectangular, flat-topped granules.

The papular pores are fairly numerous and occur singly between the plates on both actinal and abactinal surfaces.

The circular dome-like madreporite is small, but not inconspicuous. It is situated in the interradial region in a position closer to the inner edges of the superomarginals than to the centre of the disk.

Eight superomarginal plates occur on each side of each ray, counting from the centre of the interbrachial arc. Each superomarginal is moderately swollen, smooth and separated from its neighbours by a single encircling belt of squarish and roundly-rectangular, flat-topped granules, smaller than those separating plates on the disk. All superomarginals, with the exception of the first and second, meet across the ray. The first superomarginal (adjoining the interradial line) in every instance carries two, usually fairly long, spinelets (up to 3 mm. high). One is placed on the outer edge of the plate pointing outwards and slightly upwards. The other is situated on the inner edge of the plate and points directly upwards. The second superomarginal (with an occasional exception, when only a small nipple-like boss occurs) carries a single centrally-placed spinelet (about 3 millimetres tall), which is directed upwards and slightly outwards. The third superomarginal plate is armed with a similar spinelet, which is placed outwards from a central position and directed further outwards from the vertical plane than the spinelet of the previous plate. The fourth, fifth and sixth superomarginals are also armed with a spinelet, but its direction

¹In reference to the likeness of the rays to certain Australian caterpillars.