

TWO NEW ASTEROIDS FROM AUSTRALIA.

By

ARTHUR A. LIVINGSTONE,

(Assistant Zoologist, The Australian Museum, Sydney.)

(Plate xviii.)

THIS contribution contains descriptions of two new species, one from New South Wales and one from Western Australia. The former belongs to the genus *Pseudarchaster*, which has not hitherto been recorded from Australian waters; the Western Australian species belongs to *Parasterina*, and has already in that State an ally, *P. crassa* (Gray).

The genus *Parasterina* is, so far, confined to the southern hemisphere, being recorded from South Africa, Australia, and South America.

Pseudarchaster boardmani sp. nov.

(Plate xviii, figures 7-11.)

Description.—Rays five; R. = 28 mm., r. = 11.5 mm., R. = 2.4 r. Breadth of ray between second and third superomarginal 10 mm. The rays are fairly short and tapering; narrow. Interbrachial arcs rounded, though slightly inclined to acuteness.

The abactinal surface is covered in paxillæ, which are compact but not wholly uniform in size. Some are small, carrying about eight granule-like spinelets, while others, particularly the regularly arranged median radial series, are much larger, carrying up to forty spinelets. The peripheral spines are slender, some almost needle-like in appearance. The paxillæ decrease in size on the rays and near the margins of the disc, but no groove of any kind exists between the paxillæ and the superomarginal plates. The abactinal plates, which carry, and are totally hidden by, the densely packed paxillæ, are roundly hexagonal, slightly domed, and surrounded by six papular pores as in species of *Mediaster*. The plates vary in size, some being very small, particularly on the rays. Only the median radial series reaches to the terminal plate. The series next to it ends at the fifth or sixth last superomarginal plate.

Counting from the middle of the interbrachial arc to the terminal plate the superomarginals are seen to be fifteen in number. Superomarginals in and near the middle of the interbrachial arcs are high and narrow, with deep sutures between them, but gradually become wider and lower and the sutures much shallower towards the ends of the rays. The ultimate superomarginal plate is very small. All the superomarginals are clothed in a spine-like granulation, which is very dense and evenly distributed. The terminal plate is fairly large and conspicuous, prismatic, and possesses a rugged surface and a glassy sheen. On the actinal surface the terminal plate is deeply channelled to accommodate an extension of the ambulacral groove.