

ON A NEW ASTEROID FROM QUEENSLAND.

By

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(Plates xvii-xix.)

Goniodiscaster integer sp. nov.

(Pl. xvii, figs. 1-2.)

Description.—R. = 71 mm.; r. = 26.5 mm.; br. (at base of ray between third and fourth superomarginals and including the projecting inferomarginals) 21.5 mm. R. = 2.6 r. and 3.3 br. Rays equal in length, except in one case where the measurement falls short by 2 mm.

Disc moderately and evenly elevated. The rays taper gradually and evenly towards their free extremity. Interbrachial arcs moderately rounded. The papular areas, which are not noticeably distinct, are confined to the abactinal surface. The papular pores number from three to nine to an area. The areas are more distinct, and the pores in them more numerous, in the distal two-thirds of the ray. The pores are less distinct on the disc and not so numerous as on the rays. The papular areas extend along the ray to the second or third last superomarginal plate.

The plates of the abactinal surface are evenly and systematically arranged. A pentagon of one to six spine-like granules with bare conical tips occurs on the centre of the disc. The plates within the area formed by the pentagon are indistinct. The median radial or carinal series of plates commences in each case at one of the five granules or groups of granules forming the pentagon, and extends down the ray in a distinctive manner to end near the tip of the ray at or between the third and fourth last superomarginal plates. The median radial plates number twenty-two to a series; twenty-three in one case. They are fairly large in size on the disc but gradually become smaller as they continue along the ray. The series of plates lying next to the median radials are noticeably smaller, except near the tips of the rays, where all the plates are more or less of equal size. This second series ends, in the majority of cases, at the fifth last superomarginal. A third radial series containing three or four plates ends at the third superomarginal. One or two plates occur between the third series of radial plates and the plates bordering the interradial furrow. The plates bordering the interradial furrow are arranged in four pairs, the upper pair being always the largest, and also the largest on the abactinal surface. The lowermost pair are about the same in size as the radial plates lying next to them. The interradial furrow is conspicuous. The madreporite is oval in shape; it is situated in the interradial furrow between two of the groups of granules forming the pentagon, and measures 5.5 mm. across its widest part.

The granulation of the abactinal surface is coarse and uneven. The area within the pentagon, in addition to being heavily clothed in rounded granules, contains several conspicuous and blunt tubercles. Other plates of the abactinal surface are also clothed in granules of varying sizes, the big ones, almost approaching tubercles in size, being very common and prominent. The granules in the papular areas are small and of even size. The superomarginal plates increase very slightly in size as they proceed towards the tip of the ray. None are definitely swollen or enlarged near the tip. The superomarginals, which