Chorology of the Genus Cnemidaster.

a. Geographical distribution :—

EASTERN ARCHIPELAGO : One species between the parallels of 0° and 10° S.

Cnemidaster wyvillii, in the Arafura Sea, north-west of the Arrou Islands.

β. Bathymetrical range : 800 fathoms.

γ. Nature of the Sea-bottom : Green mud.

Chorological Synopsis of the Species.

	Ocean.	Range in Fathoms.	Nature of the Sea-bottom.
Cnemidaster wyvillii . .	Eastern Archipelago.	800	Green mud.

1. *Cnemidaster wyvillii*, n. sp. (Pl. LXVII. figs. 3 and 4 ; Pl. LXVIII. figs. 3 and 4).

Rays five. R = 22 mm., r = 4·25 mm. R > 5 r. Breadth of a ray near the base, 3·5 mm.

Rays elongate, cylindrical, slightly flattened actinally, tapering from the base to the extremity. Interbrachial arcs rounded. Disk convex abactinally.

The disk, which is higher than the rays and regularly convex, is occupied entirely by the primary apical plates, each slightly convex or tumid, which are arranged in the following manner. The centre is occupied by the dorso-central plate, which is large, almost subconically convex, pentagonal in outline—the angles being more or less rounded, and the right posterior side somewhat encroached upon for the anal aperture. Contingent on the dorso-central is a complete cycle of five basal plates, rather irregular in shape, apparently quadrangular in form, but probably more or less hexagonal, which are smaller than the dorso-central. External to these are the five primary radial plates, irregularly subhexagonal in form, larger than the basal plates, and either equal in size to the dorso-central or slightly less ; they are inserted far down between the basal plates, but do not reach the dorso-central. The second radial plate is smaller than the first, hexagonal in form, and broader than long. In the third the length and breadth are equal. In the radial plates beyond the third and up to the middle of the ray the length is greater than the breadth, but on the outer half of the ray the breadth is greater than the length. Isolated single papulæ occur at the angles of the plates, but do not extend much beyond the inner half of the ray. The plates of the series on each side of the median radial series are rather smaller, and have the breadth greater than the length on the inner part of the ray, but