

3. *Pentaceros productus*, Bell, sp., var. *tuberata*, nov.

Oreaster productus, Bell, 1884, Proc. Zool. Soc. Lond., p. 74.

Localities.—Station 212. Off Malanipa Island, Philippine group. January 30, 1875. Lat. $6^{\circ} 54' 0''$ N., long. $122^{\circ} 18' 0''$ E. Depth 10 fathoms. Sand. Surface temperature $83^{\circ} 0$ Fahr.

Off Samboangan, Philippine group. Depth 10 fathoms.

Remarks.—There are several specimens which I have referred to this species, notwithstanding the fact that they exhibit some differences which are superficially conspicuous when compared with the series of examples from Billiton preserved in the British Museum, which were described by Professor Bell. The chief difference consists in the greater prominence of the tubercles along the median radial line, which in these Philippine examples are large mammiform prominences, the larger ones on the disk terminating in a small teat-like apex; two of these are sometimes present on the first or second tubercle at the adcentral end of the series.

The granulation of the abactinal surface of the Philippine examples is generally coarser than in those from Billiton, and shows a tendency to assume the form of flattened polygonal plates here and there amongst the other granules, chiefly on the plates between the papular areas. The disk is prominently convex and its actinal surface is concave, whilst the disk of the Billiton examples is comparatively flat. This difference is probably owing to the method of preservation: the Challenger specimens having been put into spirit when collected, whilst the Billiton examples are dried, and do not appear to have been placed in any preservative medium previously.

The actinal surface and all the other details of structure not above mentioned of the Philippine specimens correspond exactly to the type examples of the species from Billiton, so admirably described by Bell. After carefully studying both series, I do not feel that the differences above noticed are sufficient to justify the specific separation of the Philippine examples. Professor Bell has kindly compared one of the latter with his types, and his opinion accords entirely with the views above expressed.

The conspicuous character of the differences noted in the Philippine examples of *Pentaceros productus*, and their persistence in all the specimens collected by the Challenger, appear to warrant the recognition of the form as a well-marked variety, which may appropriately be called var. *tuberata*.

4. *Pentaceros callimorphus*, n. sp.

Rays five. $R = 278$ mm.; $r = 110$. $R > 2.5 r$. Breadth of a ray between the sixth and seventh infero-marginal plates, 80 mm.; breadth midway between the mouth and the extremity, 60 mm.

Disk large, elevated, and regularly convex, almost semicircular in profile, its height