

tumid, or slope slightly at a high angle to the margin, in other words, nearly vertical. Actinal surface nearly plane, the intermediate areas slightly tumid between the ambulacral furrows and the margin. Seen on the actinal side, the comparatively great length of the rays for this genus is especially noticeable. The whole surface of the starfish is covered with a thick leathery investing membrane. No spines or tubercles of any kind are present on the abactinal surface.

The marginal plates bear a single, short, flat, truncate spinelet, and occasionally two are present. These are directed horizontally. Marginal spines are not present on the outer part of the ray, and extend only a short distance beyond the disk proper.

The armature of the adambulacral plates consists of two spines,—one on the furrow margin, which is robust at the base and tapers to a point; the other on the actinal surface of the plate, which is rather longer and much larger than the furrow spine, is flat, abruptly truncate at the tip, and often fimbriate there, also often more or less gouge-shaped, with the groove on the outer side. Occasionally a supplementary outer spine is present on the median or outer part of the furrow.

On the actinal surface the membrane is traversed by channels which run from the adambulacral plates to the margin; the marginal spines appearing as if placed one at the end of each band thus marked off by the furrow-like channels.

The madreporiform body, which is rather large and suboval, is situated approximately midway between the centre of the disk and the margin. The striæ upon its surface have the appearance of more than usual regularity in their centrifugal radiation.

Papulæ numerous and generally distributed on the abactinal surface, excepting in the median interradial areas, and perhaps also, but less distinctly, on the median radial line of the rays.

The anal aperture is subcentral and closed by numerous comparatively robust papillæ.

The ambulacral tube-feet are quadriserial in the median portion of the ambulacral furrow.

Colour in alcohol, a yellowish white, often with a more or less brown shade.

*Localities.*—Station 149E. Off Cape Maclear, Kerguelen Island. January 21, 1874. Depth 30 fathoms.

Station 149H. Off Cumberland Bay, Kerguelen Island. January 29, 1874. Depth 127 fathoms. Surface temperature 39°·8.

*Remarks.*—This form is very nearly allied to *Porania antarctica*, but is distinguished by the total absence of any spines or tubercles whatever on the abactinal surface. The rays are broad at their base, and less pronounced where they spring from the disk, having in consequence less trace of any interradial constriction or depression. No marginal spines are present on the outer part of the ray of *Porania glaber*, whereas they are continuous to the extremity in *Porania antarctica*. The disproportion in length between the inner and outer spine on the adambulacral plates is not so great in *Porania glaber* as in *Porania*