

or pad is developed on the surface that fits over the aperture, upon which it closes like a valve.

The mouth-plates are of moderate size; widely expanded laterally, the keel along the junction being well developed, prominent aborally, and with a rather produced peak adorally. Two secondary or superficial spines are present on each plate—one near the adoral extremity, the other shorter and more robust, midway on the plate and with a wide-flaring investment. It is a question whether the anterior pair ought not, from their position, to be ranked with the true mouth-spines. Mouth-spines proper three or four in number, acicular, and placed on the margin of the lateral flange.

The actino-lateral spines are closely placed, and entirely hidden in the thick fleshy membrane with which the actinal interradial areas are uniformly covered; fifty to sixty spinelets are present on each side of the ray.

Colour in alcohol, purplish grey on the abactinal surface, pinkish purple on the actinal surface.

Locality.—Station 295. Off the west coast of South America. November 5, 1875. Lat. $38^{\circ} 7' 0''$ S., long. $94^{\circ} 4' 0''$ W. Depth 1500 fathoms. Globigerina ooze. Bottom temperature $35^{\circ} 3$ Fahr.; surface temperature $58^{\circ} 5$ Fahr.

Remarks.—This is a large form, approaching *Hymenaster nobilis* in size, which it also resembles in its fleshy habit. In *Hymenaster carnosus*, however, the paxillæ-crowns do not form definite areas, and the spinelets are large and spike-like; the spiracula are very minute and arranged in groups; and there are two spinelets in the adambulacral armature.

7. *Hymenaster glaucus*, Sladen (Pl. LXXXIV. figs. 1 and 2; Pl. LXXXVI. figs. 4-6).

Hymenaster glaucus, Sladen, 1882, Journ. Linn. Soc. Lond. (Zool.), vol. xvi. p. 221.

Marginal contour stellato-pentagonal. Interbrachial arcs well indented, forming a distinct angle, except in very large specimens, where the web has become somewhat overgrown, and abnormally thickened. Minor radial proportion from 68 to 76 per cent. $R = 46$ mm.; $r = 35$ mm. The rays taper to a fine extremity and the web is rather full on the margins, and somewhat irregular in consequence. General form very depressed. On the abactinal surface the radial areas are well marked out, distinct from the fringe and interradial membrane, by a regular linear arrangement of paxillæ-spinelets, the radial areas being elevated above the general surface. The pseudo-sides of the rays are short and perpendicular; the rays themselves having the appearance of standing in relief above the superficies of the marginal and interradial webs, tapering to a fine point, and maintaining their distinctness up to the very extremity. The lateral web or fringe is largely developed, and, being rather full, is in consequence somewhat irregular.

The supradorsal membrane is furnished with very numerous muscular fibres, which