

developed, but probably its character is greatly modified ; the specimen under notice leads to the inference that it is almost aborted in the present instance.

At the extremities of the rays there is on each side an elongate supero-marginal plate, equal in length to about seven or eight segments of the ray, becoming thicker at the aboral end and developing more or less of a knob. These expansions join at the extremity of the ray, and form an arch over the termination of the ambulacral furrow, the knobs bearing several prominent spinelets stouter than any of those in the vicinity.

The ambulacral furrows are broad and rather petaloid. The tube-feet are arranged in simple pairs. The adambulacral plates are very narrow and spaced widely apart, the margin of the furrow being simply a narrow ridge. Their armature consists normally of two spines, placed transversely and very slightly oblique, but frequently only one is present. They are long, thickened at the base, tapering to the point ; and when two are present, the outer one is often much larger than its companion. No trace of any investing membrane is present. Squamous plates are present on the outer margin of the adambulacral plates, which doubtless are the representatives of the aperture-papillæ. They seem to be more or less aborted functionally in the specimen under notice, and are apparently ankylosed, at any rate on the inner half of the ray, to the general body-skeleton ; they are large, and broadly oval or subspatulate in shape.

The mouth-plates resemble in character those of *Hymenaster*. The median keel along the suture is very prominent adorally and sharply rounded. Two short, robust, curved, slightly clavate, and rather thorny spinelets stand on each side of the keel near the middle of the plates. Owing to the bad state of preservation of this specimen, the rest of the armature is unfortunately undistinguishable.

The actino-lateral spines, which are fifteen to twenty in number, or perhaps rather more, are comparatively short, delicate, and widely spaced ; the longest is about the fourth from the mouth, and rather shorter than the breadth of the ambulacral furrow, measured from the base of this spine to the base of its correspondent on the opposite side. The actino-lateral spines do not diminish very rapidly in length as they approach the extremity. A fibrillar tissue of very loose construction forms the web uniting the spines, and at the same time constitutes the actinal floor of the test, beyond the margin of which the spines project considerably. In places where the actinal web has been removed in the interradial space, no paxillæ are to be seen for supporting the pseudo-supradorsal membrane from the sides of the rays, the cavity appearing to be very feebly developed there.

*Locality.*—Station 244. In the Mid-North Pacific, between Yeddo and San Francisco, near the meridian of 170° E. June 28, 1875. Lat. 35° 22' 0" N., long. 169° 53' 0" E. Depth 2900 fathoms. Red clay. Bottom temperature 35°·3 Fahr. ; surface temperature 70°·5 Fahr.