length and 40 mm. in width; the height of the shell in the female is 25 mm., in the male it is considerably less. The apex is nearly in the centre of the dorsal surface; the genital openings are three in number, in the female very large; the bilabiate mouth is placed well forward on the ventral aspect; and the excretory opening is posterior and supramarginal. The odd anterior ambulacrum is shallow, and the tube-feet which are projected from it are large and capitate. The anterior paired ambulacra are somewhat longer than the posterior. The whole of the surface of the test is covered with a close pile of small spines of a dark-green color; those fringing the ambu-

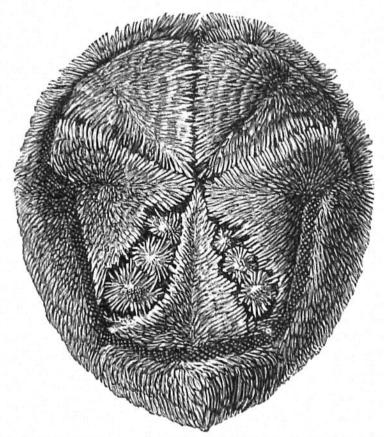


Fig. 43.—Hemiaster Philippii, Gray. Accessible Bay, Kerguelen Island. Twice the natural size.

lacral grooves are long and slightly curved, and they bend and interdigitate so accurately over the ambulacra that one might easily overlook the grooves at a first glance. The peripetalous fasciole is somewhat irregular; but in those examples in which it is best defined, it forms a wide arch, extending backward on each side a little beyond the lateral ambulacra of the trivium,