

the egg and embryo it is not a very favorable species for observation, had other conditions been favorable, we had all the material for working out the earlier stages in the development of the young very fully. The eggs, on being first placed in the pouches, are spherical granular masses of a deep orange color, inclosed within a pliable vitelline membrane, which they entirely fill. They become rapidly paler in color by the development of the blastoderm; they then increase in size probably by the imbibition of water into the *gastrula* cavity; and a whitish

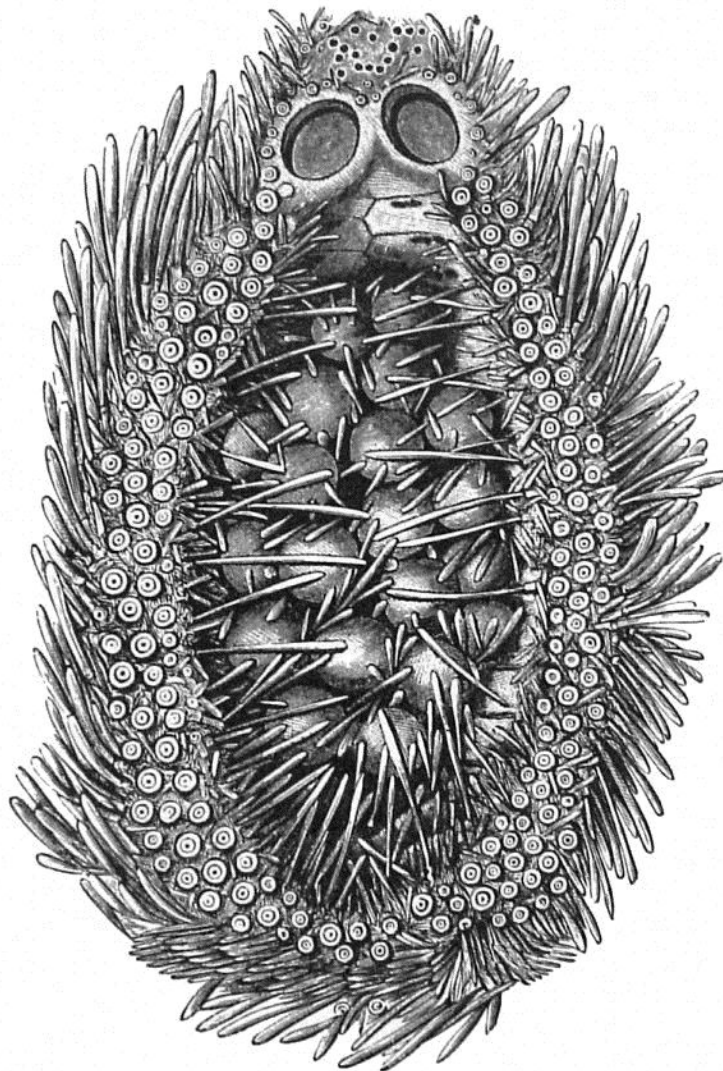


FIG. 46.—*Hemiaster Philippii*. The arrangement of the eggs in one of the marsupial recesses. Five times the natural size.

spot with a slightly raised border indicates an opening which, I have no reason to doubt, is the permanent mouth; but of this I can not be absolutely certain. The surface now assumes a translucent appearance, and becomes deeply tinged with dark-