

above. Further, these plates "are large and well-developed in the adult forms in *Pentagonaster semilunatus*, *Gymnasteria carinifera*, in various species of *Pentaceros*, and a large number of the *Goniasteridæ*."

It thus appears that a small number of Ophiurids and a larger number of Starfishes have two rings of plates between the radials and the dorsocentral, just as is the case in *Marsupites*; though in the majority of the members of both groups there is only one ring, the elements of which are interradiial, as is the case in all the Urchins, so far as is yet known. The homology of these interradiial plates with the basals of the Pentacrinoid larva and of *Marsupites* is a part of Lovén's theory; while he long ago pointed out the homology between the central abactinal plate of the Starfish larva and the dorsocentral of *Marsupites*.¹ I do not see therefore, how he can do otherwise than accept the views of Sladen and myself respecting the homology of the radial plates immediately surrounding the dorsocentral of *Ophiomusium*, *Amphiura*, *Asterias*, and *Zoroaster* with the under-basals of *Marsupites*. In both cases these radial plates separate the dorsocentral from an interradiial series which are called basals in a Crinoid and genitals in an Urchin or Starfish, *i.e.*, the plates for which Lovén proposes the general name of "costals." I do not imagine that he will deny (1) that the radial plates between the costals and dorsocentral of *Marsupites* are homologous with the radial plates between the costals and dorsocentral of the young *Asterias*; nor (2) that these radial plates are homologous with the under-basals of *Cyathocrinus*, which are immediately within the basals, or as he prefers to call them, costals. But, according to his present view, these under-basals of *Cyathocrinus* represent the dorsocentral of the young *Asterias*. There is, however, no reason to seek for the homologue of the five under-basals of a dicyclic Crinoid in the single dorsocentral of a larval Starfish; for this dorsocentral is surrounded by five plates which correspond exactly in their relative positions with the under-basals of *Marsupites*, and therefore of other dicyclic Crinoids, including *Cyathocrinus*.

If I may be permitted to use here an expression employed by Prof. Lovén with respect to another homology which he establishes, I would say that "to anyone believing in the consistency of Nature's ways, there is no reason whatever for doubting" that the apical systems of some Asterids and Ophiurids contain plates which are truly homologous with the under-basals of a Crinoid. It is unfortunate that their presence was not discovered in time to be noticed by Prof. Lovén in his recent discussion of the question; for I am sanguine enough to believe that it would have led him to reconsider his views respecting the homology of the five under-basals of a Crinoid with the primitively single dorsocentral of a Starfish.

The interradiial plates in the apical system of a Starfish or Urchin are usually known as the genitals; but this term, "besides being expressive of incidental relations peculiar

¹ *Études, loc. cit.*, pp. 72, 86.