

TABLE I.—*Water-pores of Hyocrinus.*

Interradius.	Oral Plates.		Anambulacral Plates.	
	A.	B.	A.	B.
No. 1 ¹ (anal),	2	2	0	0
„ 2	0	?	2	4
„ 3	0	1	3	9
„ 4	0	1	3	7
„ 5	1	1	2	7

Thus, therefore, one specimen has all the oral plates perforated by water-pores, with one possible exception; while in the other it is only in the anal interradius and in the next one to it that the oral plate is pierced by a water-pore. It is significant that this interradius (No. 5) is that in which the primary water-pore appears in larval Asterids, Ophiurids, and Crinoids; and also that in both the specimens of *Hyocrinus* the water-pore is situated a little beyond the middle line of the large oral plate (Pl. Vc. fig. 6, *wp*), just as is the case with the single water-pore of the Pentacrinoid.

The disk of *Holopus* is practically entirely made up of the oral plates, and there is no ventral perisome at all. In the figure of these plates which was drawn for Sir Wyville Thomson by Mr. Black (Pl. III. fig. 2), each plate seems to be pierced by several pores; but as the specimen was further dissected after being drawn, and the oral plates were not preserved, I have been unable to satisfy myself upon this point.

The number of water-pores which may occur in any ordinary *Comatula* or *Pentacrinus* varies to a considerable extent. Ludwig estimates that there are 1500 in the ordinary adult *Antedon rosacea*, and there must be even more in *Antedon eschrichti*. Except in the immediate neighbourhood of the mouth they are less abundant in the anal interradius than elsewhere; and though they sometimes occur on the sides of the disk, *i.e.*, over the edge of the ventral surface, they never extend far down towards the dorsal side. When the disk is plated, the pores may be scattered singly in individual plates (Pl. XVII. fig. 6), or they may be grouped together on one plate, sometimes even to the number of twenty, as in *Pentacrinus decorus*.

In the exocyclic type *Actinometra*, the water-pores are generally situated in the immediate neighbourhood of the ambulacra; and the greater part of the disk which is occupied by the large anal interradius is almost entirely free from them. They are not necessarily limited to the disk, for they may also be found on the lower parts of the

¹ These numbers correspond to those which are employed by Ludwig in Asterid morphology.