

Perrier cannot well be unaware of the fact at the present time, as it is noticed in the text of Ludwig's work on the Crinoids, and the paper is properly quoted in his bibliography. It is difficult, therefore, to see on what grounds Perrier bases his claim respecting the re-discovery of these ciliated funnels, "sur lesquels, depuis Johannes Müller, j'ai le premier attiré l'attention (1872)." When he published the paper here referred to, he had only made a superficial examination of these openings, each of which he described as leading into a small cul-de-sac. It would seem indeed as if he were then unaware, not only of Grimm's more correct observations of the previous year, which may be readily understood, but also of Müller's description of these pores *published nearly thirty years before*;¹ for he never mentioned Müller at all, and suggested that the pores might be special sense organs! Now, however, he tells us that they have a threefold connection—(1) with the water-vascular ring; (2) with the plexus of glandular tubules round the gullet; (3) with the cavities of the chambered organ. No other observers have noticed these points, and Prof. Perrier's proofs of his statements will be awaited with much interest.

NOTE E.

(Page 102.)

ON THE INTERVISCERAL BLOOD-VESSELS.

Perrier admits in his latest note² that diverticula of the cavity of the axial organ extend through the coelom, and that while some of them "apparaissent sur les coupes comme terminés en culs-de-sac, d'autres se plongent manifestement en canaux. Quelques-uns de ces canaux courent parmi les trabécules innombrables de la cavité générale; il en est qui se rendent vers les bras."

Some of these canals, which are regarded by Ludwig and myself as the intervisceral blood-vessels, are represented in Pl. LVII. figs. 2-5 and Pl. LX. figs. 3, 5—*ib.* If they are merely parts of a "vaste système aquifère," as Perrier believes, it is difficult to understand their existence; for the body-cavity through which they ramify already contains water which has entered it by the water-pores of the disk. What then is the object of a special set of aquiferous tubes distributed over the coils of the digestive canal and not communicating with the ambulacral system, but with the axial organ and the labial plexus; and why is it that their lumen is so frequently filled up with coagulum?

NOTE F.

(Page 106.)

ON THE RELATION OF THE VASCULAR SYSTEMS OF A CRINOID TO THOSE
OF THE OTHER ECHINODERMS.

Perrier's latest views respecting the vascular system of a Crinoid are expressed in the

¹ Durch diese capillaren Poren kann das Wasser bis in die Nähe des im Kelch liegenden Eingeweidesacks eindringen (Bau des Pentacrinus, *loc. cit.*, p. 49; see also the Bau der Echinodermen, *loc. cit.*, p. 63).

² *Comptes rendus*, t. xcvi. p. 1449.