

gave the name "five-chambered organ" or "quinelocular organ" to the structure which had been described by Müller as a single-chambered heart. For he found it "to contain five chambers clustered like the carpels of an orange round a central axis;" and he described these chambers as being surrounded by a fibrillar envelope which he regarded as nervous in character. Marshall¹ again spoke of the cavity of the centro-dorsal as lodging "a sac divided by vertical septa into five radial compartments, and hence called the chambered organ"; and he went on to explain how this is "surrounded by a thick fibrillar investment known as the central capsule." Ludwig had previously adopted the same terminology,² and, in fact, he was the first to speak of the "chambered organ" without the numerical prefix, but he never used this expression to denote anything else than the five chambers with their central axis inside the central capsule; while he further described and figured the radial axial canals,³ the relations of which to the coeliac canals of the rays and arms were subsequently pointed out by myself.⁴ Their connection with the body-cavity and their distinctness from the chambers of the so-called heart were clearly recognised by Greeff,⁵ both in his figures and in his descriptions; while I am not aware that Teuscher,⁶ the only other recent original writer on the subject up to the time of Perrier and Jickeli, ever used the expression "chambered organ" at all, though he often referred to the "Kammern des Gefässcentrums," and he recognised the connection of the radial axial canals with the coeliac canals of the rays.

Recently, however, Messrs. Vogt and Yung have figured not only the cavities within the central capsule but also the radial axial canals, and the whole system of spaces within the calcareous network occupying the centre of the radial pentagon, together with *some accidental cavities within the solid base of the centro-dorsal piece and in the radials* as "cavités dépendantes de la cavité générale et constituant, dans leur ensemble, l'organe dit cloisonné."⁷ They say "Ce sont les espaces qu'on est convenu d'appeler, fort improprement, l'organe cloisonné," and again "C'est la réunion de toutes ces excavations internes, qui sont revêtues de membranes, envoyant de cloisons transversales et dessinant ainsi un système compliqué de lacunes cloisonnées, qui composent ce que les auteurs ont appelé *l'organe cloisonné (Gekammertes Organ)*. C'est une dénomination éminemment impropre, vu que ce n'est pas un organe, mais une suite de cavités parcourues par l'organe dorsal avec ses vaisseaux, et formant la continuation de la cavité générale du corps, du coelôme, qui entoure les intestins."⁸ The statements contained in the first passage

¹ On the Nervous System of *Antedon rosaceus*, *Quart. Journ. Micr. Sci.*, 1884, vol. xxiv., N.S., p. 510.

² Beiträge zur Anatomie der Crinoideen, *Zeitschr. f. wiss. Zool.*, 1877, Bd. xxviii. pp. 315-326.

³ *Ibid.*, p. 318.

⁴ *Trans. Linn. Soc. Lond. (Zool.)*, 1879, ser. 2, vol. ii. p. 78.

⁵ Ueber das Herz der Crinoideen, *Sitzungsb. d. Gesellsch. z. Beförd. d. ges. Naturwiss. zu Marburg*, 1876, No. 5, p. 93.

⁶ Beiträge zur Anatomie der Echinodermen: I. *Comatula mediterranea*, *Jenaische Zeitschr.*, 1876, Bd. iii. pp. 244-260.

⁷ *Traité d'Anatomie comparée pratique*, Livr. vii., 1886, p. 550, expl. of fig. 276.

⁸ *Ibid.*, p. 530.