to the viscera, separating the visceral cavity from a third cavity, which occupies the caudal region.

Gills are entirely absent in *Clione*. According to Wagner the body-wall presents a hollow space in its thickness, in which the venous blood probably becomes oxygenated, and whence it may return into the auricle by an orifice, which would place this latter in communication with the space in question. I have never seen this orifice, but perhaps it is very difficult to discover it in preserved specimens.

The kidney occupies the same position as in the Pneumonodermatidæ and Clionopsidæ, and its relations with the pericardium are similar. Wagner 1 has been unable to find the reno-pericardial orifice, which may, nevertheless, be discovered by examining serial transverse sections of the kidney. The external opening of this organ is near the anus (Pl. V. fig. 5, f), but it does not occupy a common depression with the latter.

The Generative Organs are disposed as in the two preceding families, and do not offer special characters.

The Nervous System of Clione limacina has been particularly studied by Eschricht,² Souleyet,³ von Jhering,⁴ and Wagner.⁵ Cuvier's contribution to this particular subject is almost nothing; his figure shows three pairs of ganglia, of which the median (corresponding to the pedal ganglia) are not united by a commissure, whilst the other two pairs (cerebral and visceral) are said to be both united by subasophageal commissures.

Eschricht's description is equally brief, but more correct. His figure is too small, and in some points inexact.

Souleyet's figures are undoubtedly better; unfortunately they have no explanatory letters, and the accompanying text refers only to the cerebral and buccal ganglia.

As to the drawing given by von Jhering, no less than twenty years after that of Souleyet, it is a complete anachronism, being incomplete, inaccurate, and highly diagrammatic.

Lastly, the illustrations published by Wagner are very detailed, but they indicate several arrangements which my researches 6 seem to me to refute.

The general arrangement of the nervous system of *Clione* resembles that of all the preceding genera, the pleural ganglia being paired, in contradiction to what is stated by von Jhering.

The nerves given off by each cerebral ganglion are five in number; three springing from the anterior and two from the dorsal part.

- ¹ Die Wirbellosen des weissen Meeres, Bd. i. pl. ix. fig. 2, x.
- ² Anatomische untersuchungen über die Clione borealis, p. 6, pl. iii. fig. 28.
- ³ Voyage de la Bonite, Zoologie, t. ii. p. 283, pl. xv. bis figs. 16, 17.
- 4 Vergleichende Anatomie des Nervensystemes und Phylogenie der Mollusken, p. 239, pl. v. fig. 20.
- ⁵ Die Wirbellosen des weissen Meeres, Bd. i. pp. 98-105, pl. xi. fig. 4, pl. xii. fig. 1.
- Recherches sur le système nerveux des Ptéropodes, Arch. de Biol., t. vii. pp. 96-101, pl. iv. figs. 1-4.