

describes the visceral ganglia in "*Spirialis*" *australis* as like those of *Cavolinia*, that is as forming a single mass. I have had the opportunity of studying this form as well as *Limacina helicina*, and can state that in it, as well as in *Limacina lesueurii*, *Limacina trochiformis*, and *Limacina inflata*, the ganglia of the visceral commissure are disposed in the same asymmetrical fashion. The distribution of the nerves is also certainly identical, but it is difficult to distinguish this in the case of such small animals.

The enteric or stomato-gastric nervous system includes a pair of buccal ganglia, united by a thick and rather long commissure. These ganglia are placed in contact with the œsophagus below the pedal ganglia; each of them is joined to the corresponding cerebral ganglion by a thin connective. They give off anteriorly the nerves to the buccal mass, and posteriorly two filaments which pass along the œsophagus to the stomach, where they ramify and anastomose, so as to form a plexus whose appearance varies a little in different individuals. Some ganglionic thickenings are observed in the plexus.

## 2. *Peracelis*.

*The Head* is quite differently shaped from that of *Limacina*; it is quite distinct, as I have already had occasion to point out in the systematic part of this Report; it has the form of a short proboscis issuing from the dorsal margin of the fin (Pl. I. fig. 9, *a*), the two lips uniting dorsally and ventrally; the two tentacles are symmetrical, and have no sheath. It is this proboscis which in Costa's figure<sup>1</sup> might easily be taken for the ventral lobe of the foot, which would be notched in the middle of its free margin.

*The Foot*.—The fins have no tentaculiform lobe; the ventral lobe of the foot is not notched in the middle of its free margin, but is broader at the base than at this margin.

*The Mantle* has on its right margin, a little ventrally, an appendage in the form of a triangular lobe, analogous to the balancer of *Limacina*. The dorsal pallial gland (shield) is shorter than in *Limacina*. It is not homogeneous, as in the case of this latter, which resembles that of *Clio* (subgenus *Creseis*), but presents alternating transverse bands (Pl. I. fig. 10). It is asymmetrical like that of *Limacina*.

*The Digestive Tract* agrees with that of *Limacina*, both in the relative position of its constituent parts and in their shape. As in *Limacina* there are two lateral jaws, two little salivary glands, and five large masticatory gastric plates, of which four are symmetrical, and the fifth triangular, posterior, and dorsal. Furthermore, as in *Limacina*, the bile-duct opens into the left of the digestive tract, and the flexure of the intestine is dorsal and to the right.

The visceral anatomy of *Peracelis* is otherwise very similar to that of *Limacina*, and

<sup>1</sup> Illustrazione della *Spirialis recurvirostra*, *Ann. Mus. Zool. R. Univ. di Napoli*, anno iv. pl. iv. fig. 12.