

muscle into the shell, instead of being in the centre of the posterior truncation, is in its right hand angle.

The Digestive Tract.—The anterior portion (buccal mass, œsophagus) resembles that of the other Cavoliniidæ already examined. The stomach, like that of *Clio*, possesses a fifth large triangular masticatory plate, situated behind the four others, and on the ventral side.

All the species of *Cavolinia* have a posterior gastric cæcum, such as has already been described in some species of *Clio*.

The liver in the typical *Cavoliniæ* is like that of the preceding genus in shape, and its duct opens at the right side of the hinder portion of the stomach. In the group A (*Cavolina trispinosa* and *Cavolinia quadridentata*, Pl. III. fig. 3) this organ has an arrangement unique among the Thecosomata; it is composed of two lobes, quite separated, and having each its own duct. These two lobes of the liver are placed to the right and left of the stomach, and their ducts open separately on either side of the gastric cæcum, the duct of the right lobe being much longer than that of the left.

In all *Cavoliniæ* the anus opens almost dorsally, quite behind the liver. Close to the anus is a flattened anal gland, as in other members of the family.

The Circulatory and Excretory Organs.—The heart is situated on the right beside the genital gland. The kidney is towards the ventral aspect of the latter and behind it, disposed almost transversely. In *Cavolinia* the kidney is not at all spongy; its structure is the same as that found in other Cavoliniidæ.

In all the typical *Cavoliniæ* (i.e., the six species included in group B) there is a gill, as Boas¹ has already pointed out. In *Cavolinia inflexa* it is smaller than in the other forms.

The form and structure of this organ are well known, since Souleyet described and figured it in *Cavolinia tridentata*. I will only remark that the gill of *Cavolinia* is not symmetrical, as might be imagined. The right hand portion is more developed than the left, for it extends farther forwards, besides which it is more dorsal in position. It corresponds to the anterior part of the gill in the Gastropoda.

The Generative Organs.—A consideration of the generative organs as a whole shows that some differences exist between the typical Cavoliniidæ and the two species included in group A.

In the latter the genital gland is quite ventral in position, and it is developed equally on the right and left sides. In the typical *Cavoliniæ*, on the other hand, the gland is quite asymmetrical, and largely developed on the left side.

The genital duct in group A presents an elongated swelling on its course, which is lacking in the typical forms; these, however, are provided with a vesicula seminalis which has the form of a long cæcum, without any dilatation at its extremity, and coiled several times upon itself (Pl. III. fig. 2, *h*). *Cavolinia inflexa* has an ovoid vesicula

¹ *Spolia atlantica*, p. 207.