

3. *Gizzard or Stomach*.—Almost all the Bulloidea have a stomach armed with horny plates, usually three in number, almost symmetrical (one dorsal, and a lateral one on either side). This number is, however, variable, as is also the symmetry of the plates. Thus in *Scaphander* the three plates are irregular, the dorsal being very narrow. In *Acera* there are nine such plates, and in *Runcina* (= *Pelta*) four symmetrically disposed as in the Thecosomata,<sup>1</sup> so that in this respect the Bulloidea differ much more among themselves than *Runcina* differs from the Thecosomata.

Besides this there are in many Bulloidea in front of the three large symmetrical plates twice as many smaller plates, just as in the Thecosomata (*Bulla hydatis*,<sup>2</sup> *Bulla striata*,<sup>3</sup> *Haminea cornea*,<sup>4</sup> &c.).

4. *Liver*.—*Philine* and *Bulla* are said to have two hepatic ducts;<sup>5</sup> the less specialised *Cavoliniæ* (*Cavolinia trispinosa*<sup>6</sup> and *Cavolinia quadridentata*, Pl. III. fig. 4, *h, j*) have also two.

5. *Anal Gland*.—The gland which is found in the Cavoliniidæ (*Clio*, *Cavolinia*) to the left of the visceral cavity at the extremity of the rectum, almost symmetrically with respect to the osphradium, exists also in the Bulloidea; I have seen it in *Bulla striata*, *Haminea hydatis* (Pl. II. fig. 3, *h*), and *Haminea cornea*; in *Scaphander* it occupies a prolongation of the mantle which accompanies the visceral sac for several turns of the spire (as Vayssière<sup>7</sup> has already observed); in *Actæon* the arrangement is similar to that of *Scaphander*, but the extension formed by the gland is much longer and reaches as far as the first coils of the spire.

*The Generative Organs*.—In *Philine*<sup>8</sup> and *Doridium*<sup>9</sup> there is a vesicula seminalis comparable to that of certain species of *Cavolinia* (e.g., *Cavolinia tridentata*).

*The Nervous System*.—The cerebral ganglia are separated from each other and connected by a long supræesophageal commissure, both in the Bulloidea and the Thecosomata. The pleural ganglia are fused with the cerebral in the Thecosomata to form a single mass which is usually undivided externally. This is also the case in *Actæon* (Pl. II. fig. 11); in all the other Bulloidea the pleural ganglia are situated near to the cerebral ganglia, so that the cerebro-pleural connectives are either very short or not discernible. We have further seen that in the Thecosomata, e.g., in *Cymbulia* (Pl. IV. fig. 2), the stomato-gastric nervous system has the same arrangement as in the Bulloidea (*Philine*): an anterior and a posterior ring connected by threads passing between the horny stomacal plates.

<sup>1</sup> Vayssière, Recherches anatomiques sur les genres *Pelta* et *Tylodina*, *Ann. d. Sci. Nat. (Zool.)*, sér. 6, t. xv. pl. i. fig. 4.

<sup>2</sup> Vayssière, Recherches anatomiques sur la famille des Bullidés, *loc. cit.*, pl. xii. fig. 111.

<sup>3</sup> Vayssière, Recherches zoologiques et anatomiques sur les Mollusques Opisthobranches du Golfe de Marseille, i. Tectibranches, *loc. cit.*, pl. i. fig. 4.

<sup>4</sup> *Ibid.*, pl. i. fig. 11.

<sup>5</sup> Vayssière, Recherches anatomiques sur la famille des Bullidés, *loc. cit.*, p. 88.

<sup>6</sup> Souleyet, Voyage de la Bonite, Zoologie, t. ii. pl. ix. fig. 30.

<sup>7</sup> Vayssière, Recherches anatomiques sur la famille des Bullidés, *loc. cit.*, p. 90.

<sup>8</sup> *Ibid.*, pl. x. fig. 83.

<sup>9</sup> *Ibid.*, pl. viii. fig. 68.