

2. A median nerve (*e*) innervating the buccal appendage (which Souleyet regarded as a gill, and to which he attributed a visceral innervation¹) and the anterior tentacle.²

Each cerebral ganglion is connected to two infracæsophageal ganglia. The more anterior of the two is united with it by a rather short connective, which is easily distinguished by its transparence from the opaque white ganglia; the posterior ganglion is almost in contact with the cerebral ganglion.

The anterior subcæsophageal ganglion (Pl. V. fig. 10, *b*) is the pedal ganglion. It is connected with its fellow by a commissure as short as that which connects the cerebral ganglia. In addition to this principal commissure, which does not appear in Souleyet's figure, there is a second very slender one (Pl. V. figs. 8, 9, *f*) analogous to the second pedal commissure observed in the preceding families.

Each pedal ganglion gives origin to three nerves (Pl. V. fig. 8, *l, m*), which supply the foot and the fins. On the posterior margin of the pedal ganglia are situated the otocysts (*i*).

The smaller of the two subcæsophageal ganglia (*c*) which are connected to either cerebral ganglia is connected posteriorly with a large azygous median subcæsophageal ganglion. It follows hence that this little ganglion must be either the pleural ganglion or perhaps a ganglion of the visceral commissure.³

It cannot, however, be the pleural ganglion, for the pedal ganglion of the same side is not united to it by a connective; on the contrary it is quite separated from it (see Pl. V. figs. 8, 10); it is, therefore, a ganglion of the visceral commissure, as is shown also by the nerves which arise from it and innervate the visceral envelope.

The azygous median ganglion (*d*) is elongated transversely and is larger than the two lateral ganglia (*c* and *e*). The two nerves which spring from it supply the viscera.

The buccal ganglia (Pl. V. fig. 9, *c*), which were not observed by Souleyet, are situated under the cæsophagus. The cerebro-buccal connective (*e*) is rather strong, and arises from the posterior margin of the cerebral ganglion on its cæsophageal surface. The two buccal ganglia are close together, and situated between the cæsophagus and the pedal ganglia.

The arrangement of the nervous system of *Halopsyche*, as I have described and figured it, differs in some particulars from Souleyet's account, especially as regards the constitution of the visceral commissure.

In his description Souleyet supplied "par l'analogie" those details which he could

¹ Voyage de la Bonite, Zoologie, t. ii. p. 250.

² Compare the disposition of the buccal appendage and the anterior tentacle in the systematic Report on the Gymnosomata, Zool. Chall. Exp., part lviii. p. 53, fig. 4.

³ I differ from Lacaze Duthiers in not regarding the pleural ganglia as a part of the visceral commissure. The distinctive character of the components of this commissure in the asymmetrical Mollusca is that they are devoid of symmetry, that is to say, they are individually unpaired even when the visceral commissure is paired as regards the number of its ganglia, or they are asymmetrical even when they are in pairs. The pleural ganglia, on the other hand, are always in pairs and equal to each other.