

tentacles are also of two sizes, arranged alternately, but here there are twelve of each size.

In *Culeolus perlucidus* and *Culeolus moseleyi* the relative sizes and arrangements are not so definite. In the latter species the tentacles are small, and are the simplest and least branched forms found in the genus.

*The Dorsal Tubercle.*—This organ in *Culeolus murrayi* and *Culeolus wyville-thomsoni* has quite the ordinary structure, and resembles the simpler forms we usually find in the Cynthiidæ. In *Culeolus moseleyi* also the dorsal tubercle is not abnormal, having an ovate form, an aperture, and two twisted horns.

In two of the species, however, *Culeolus recumbens* and *Culeolus perlucidus* the organ is very different, and is apparently of a much simpler type. In both it takes the form of a somewhat elliptical mass with a simple straight aperture—merely the opening of the canal provided with thick lips, and not twisted or coiled in any way. In *Culeolus perlatus* I was unable to make out the dorsal tubercle without cutting the unique specimen more than I considered justifiable.

There is nothing notable about the nerve-ganglion. It occupies the usual position, is of elongated form, and gives off nerve trunks at the branchial and atrial ends.

I was unable to make any observations on the condition of the neural gland. From want of material I could not make a special object of this organ, and it was not noticed incidentally along with any other parts. In *Culeolus recumbens* and *Culeolus perlucidus*, however, where the region of the nerve-ganglion and the peritubercular area were carefully examined, it cannot have any great development; and it probably constitutes the mass forming the back of the dorsal tubercle, in which case the canal leading from the gland to the tubercle would be reduced to a minimum.

There is nothing worthy of special remark in the condition of the peripharyngeal bands, the præbranchial zone, and the peritubercular area.

*The Alimentary Canal.*—The structure and course of the alimentary canal was determined in those species of which there are more than a single specimen.

In all it is small relatively to the size of the body and compared with the branchial sac; and in all it is situated at the posterior end of the body and on the left side of the branchial sac. In all the œsophagus is short, the stomach large and well defined, and the intestine long and narrow, but here the general similarity ends.

In *Culeolus murrayi* the anterior or intestinal end of the stomach is rather the larger, while in *Culeolus recumbens* the œsophageal end is the larger. In both the wall is pushed out into a number of cæcal processes or diverticula. In *Culeolus perlucidus* the stomach is more elongated, tapers towards both ends, and has no cæcal processes. Though the exact course of the intestine differs in the three species, yet in all it runs for a short distance anteriorly along the ventral edge of the branchial sac, after leaving the stomach, and then turns dorsally, up the left side, and finally runs back posteriorly to end near the atrial aperture.