

The *Tentacles* are small, and seem not to differ strikingly in size. They are very delicate, and are very slightly branched, almost simple, having only occasional minute pinnæ. Calcareous spicules similar to those of the branchial sac are plentiful in the tentacles.

The *Dorsal Tubercle* is rather large, and has more of the usual appearance than those of *Culeolus recumbens* and *Culeolus perlucidus*. It is of a transversely ovate shape, with the aperture turned towards the right side (Pl. X. fig. 12). The anterior horn turns outwards and upwards, while the posterior horn, also turned outwards, is coiled in a close spiral of one and a half turns. The peritubercular area is triangular and not large in comparison with the size of the tubercle. The peripharyngeal bands forming its lateral boundaries are straight (Pl. X. fig. 12, *p.p.*).

The *Nerve Ganglion*.—The ganglion is large and of a bright yellow colour. It has an oblong quadrangular shape (Pl. XIII. fig. 4, *n.g.*), and gives off two large nerve trunks at each end.

In the mantle covering the ganglion dorsally, there is a patch of branched calcareous spicules, similar to those in the branchial sac. They are very numerous, and cross and interlace, forming in one part of the patch a very dense reticulum (Pl. XIII. fig. 4, *sp.*).

The single specimen of this species is in a good state of preservation. It was obtained in the centre of the Pacific Ocean, almost on the Equator.

Station 271. September 6, 1875; lat. $0^{\circ} 33' S.$, long. $151^{\circ} 34' W.$; depth, 2425 fathoms; bottom temperature, $1^{\circ} C.$; globigerina ooze.

COMPARISON OF THE SPECIES OF CULEOLUS.

As the six species of this genus differ in nearly all the minute details of structure, it will be interesting to go over the more important organs, and point out the differences and resemblances which they present in the different species.

External Appearance.—In respect to external appearance there is a strong general resemblance between the species. They all consist of a more or less ovate body borne on a long peduncle. In all, the anterior end of the body, where the peduncle is attached, is narrower than the posterior end, and in none of them is there much lateral compression.

In all the species the peduncle, after leaving the test, turns at a right angle—in two of them (*Culeolus recumbens* and *Culeolus perlucidus*) ventrally, and in the other four dorsally. Consequently, in all the long or antero-posterior axis lies at right angles to the peduncle, and therefore in a more or less horizontal position. In *Culeolus wyville-thomsoni*, and *Culeolus perlucidus* this axis comes to be inclined downwards and posteriorly on account of the curvature of the peduncle, while in *Culeolus recumbens* the peduncle is so flexible that it could not have supported the weight of the body, which must, therefore, have rested on the bottom.