

Next comes *Polysiphonia tuberosa* (565 fathoms), whose handsome calycine form is shown in fig. 189B, while fig. 189A represents the animal as seen from above. The tentacles have here become short wide-mouthed tubes, whose bases are swollen into curiously shaped pads (fig. 190). In *Sicyonis crassa* (1600 fathoms) the tentacles are only small warty or sucker-like rings; in *Polystomidium patens* (1825 fathoms) and *Polyopis striata*

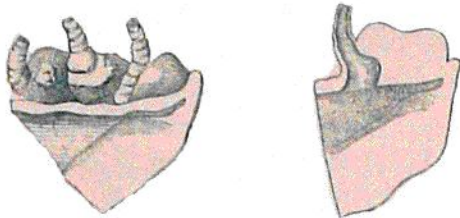


FIG. 190.—Tentacles of *Polysiphonia tuberosa*, Hertwig; side view and section: nat. size.

(2160 fathoms) their walls are almost entirely lost, so that the terminal opening has become a slit in the oral disk, an annular ridge, which surrounds the aperture, being the sole remnant of the tentacle-wall. Finally, in the genus *Liponema* (1875 fathoms), only simple openings indicate the places where the tentacles should stand.

“Thus then, of the twenty species hitherto described from depths of 500 to 2600 fathoms, not

less than six species have shown modifications of the tentacles in one direction, whilst no such change has been observed in any one of the very numerous forms which belong to the coast-fauna. This makes it probable that the retrograde metamorphosis of the tentacles is a consequence of living in the deep sea; and, indeed, peculiarities in the conditions of existence which there obtain can be suggested which might be favourable to a metamorphosis of the tentacles into tubes. Probably the nutriment of the deep-sea animals consists of matters which are far advanced in decomposition and of soft consistence. Such substances, suspended in water or embedded in mud, could not be seized by tentacles, but might be readily absorbed by suctorial apertures or tubes.”

AMBOINA.

On the 4th October, at daylight, the green hills of Amboina were in sight 18 miles off, but the summits were hidden in the clouds; it was found that a current of 12 miles to the westward had been experienced during the night. At 7 A.M. the ship was swung to ascertain the errors of the dipping needle, but the day was far from favourable for this purpose, the weather being overcast with frequent rain squalls, so that it was impossible to complete the observations, and at 3 P.M. the ship rounded Noessaniva Point, and proceeded up the harbour.

On the peninsula of Leytimur, the southeast peninsula of Amboina, three distinct hills are seen from seaward, the easternmost being the highest (2030 feet by the chart); about 5 miles to the westward of this peak is a second hill, longbacked and slightly lower; the land then falls to the westward in a series of rugged slopes, rising again at a distance of 2 or 3 miles from Noessaniva Point, to a round grass-covered hill, which