

entire course short pinnæ which differ but little in length. The wide angle at which the distal ends of the hydrothecæ diverge from the pinnæ, and the narrow point in which they terminate, give to the pinnæ with its two rows of hydrothecæ a not very distant resemblance to the saw of a sawfish,—a resemblance which suggested to Lamouroux the specific name of *pristis*.

The pinnæ spring by a narrow base, each from a short cladophore. Some of them present one or two well-marked constrictions, which are not situated at any regular distance from one another, and by which the pinna becomes divided into two or more internodes of variable length. Some of the pinnæ, however, show no constriction in any part of their course, and no trace of division into distinct internodes.

The distal extremities of the hydrothecæ in both pinnæ and main stem, after diverging at a wide angle end in a point which forms the apocauline boundary of a wide orifice. The plane of this orifice in the pinnæ is directed backwards, while in the stem it looks more towards the distal end of the colony. In both the orifice is completely covered by a thin membrane, the distal half of which is free and capable of being raised from the orifice in the form of a valve-like lid.

The structure of the stem differs widely from that of the pinnæ, and in most respects resembles the usual structure of this part in the Sertularian Hydroids. It is divided by well-marked joints into a series of equal internodes, each of which sends off a pinna from alternate sides near its proximal end. The hydrothecæ, which are deep and nearly cylindrical, are alternately disposed and are confined to one aspect of the stem, which thus presents as in the pinnæ an anterior and a posterior aspect, but the hydrothecæ of the stem show no tendency as in the pinnæ to coalesce with one another along the mesial line.

The hydrothecæ of the stem do not open directly into the common tube, but each communicates with it through the medium of a small chamber, which forms an appendage to the base of the hydrothecæ and opens by a well-defined circular orifice into the cavity of the stem. These little chambers are probably the representatives of the much larger adnate chambers into which the hydrothecæ open in the pinnæ.

The gonangia arise each from a point close to the base of a hydrotheca, and care must be taken not to mistake the optical expression of the orifice of the accessory chambers just mentioned for the spot from which a gonangium had become detached. The short neck, which carries on its summit the orifice of the gonangium, is encircled by a wreath of minute puncta, which recalls a very similar condition in the limbus of the hydrophore of *Halécium*.

A very interesting feature in the economy of *Idia pristis* consists in the apparent ramification of the stem. In all the specimens which I have examined, whether those brought home by the Challenger or those in the possession of Mr. Busk, the main stems, besides sending off the pinnæ, have the appearance of dividing into a greater or smaller