

details as to their internal structure. The male (Pl. VIII. fig. 8) has an elongate oval shape, the surface is irregularly folded; its length was about 0.75 mm.; it was covered by a thin chitinous mantle bearing very short hairs over its whole surface. At one extremity, which no doubt corresponds to the extremity of the peduncle, a couple of small knobs were seen, which probably served for the attachment to the interior surface of the scutum. At the other extremity rudiments of valves were visible. I could make out four of them, and they had a very regular oval shape. Between these rudimentary valves there is probably an opening present; a tuft of hair-like cirri protrudes from this opening, and may be traced for some distance within the cavity of the mantle.

Of the female and hermaphrodite animal I have figured the mandible and the maxilla. The mandible (Pl. VIII. fig. 6) has three teeth, the first of which is slightly longer than the two others; the inferior angle is a little produced and elegantly pectinated. The maxilla (fig. 7) has the free edge almost straight; two large spines are implanted near the upper extremity, and another large spine is visible at a little distance from the lower end. The remaining spines are small, and placed at some distance from one another.

B. SPECIES WITH PERFECTLY CALCIFIED VALVES.

A. SPECIES WITH A CARINA, A PORTION OF WHICH PROJECTS FREELY.

Scalpellum trispinosum, n. sp. (Pl. VI. figs. 15, 16).

Valves thirteen; surface of the valves covered by membrane. Carina simply bowed; umbo at the apex, the part of the carina where the apex is placed projects freely. Rostrum and sub-carina present, sub-rostrum wanting. Upper latus triangular, small; latera of the lower whorl two, small, triangular.

This curious species is represented by a single adult specimen only. Two extremely small specimens of the same species are inserted near its base.

The *capitulum* in general shape resembles that of *Scalpellum villosum*, Darwin. It consists of thirteen valves—the sub-rostrum of *Scalpellum villosum* is not represented in *Scalpellum trispinosum*. All the valves are covered by a villous membrane; the umbones near the apex are the only naked parts. The scuta, terga, and the carina are relatively large; the upper latera and the valves of the lower whorl are small, and placed a little apart from each other. As in *Scalpellum villosum*, all the valves are added to at their inferior ends.

The *scutum* is large, triangular. The apex projects distinctly outwards; the occludent margin is slightly hollowed out; the basal margin is elongated.

The *tergum* is large, flat, triangular, in area much surpassing the scutum. The occludent margin is straight, the scutal margin convex, the carinal margin convex also.

The *carina* is boat-shaped and without a flat roof. The umbo is at the apex, which