

Length of the capitulum, 31 mm.

The *peduncle* is cylindrical, narrow, short (10 mm.); the scales are not calcareous, but yet their margins are very distinct. They form eight longitudinal rows, each containing about eight scales.

A single specimen of this species was taken at Station 198, October 20, 1874; lat. 2° 55' N., long. 124° 53' E.; depth, 2150 fathoms; bottom temperature, 3°·7 C.; bottom, red clay.

Observations.—I have not been able to investigate the structure of the mouth, of the cirri, of the caudal appendages, &c. With regard to the complemental males, I found on the interior surface of the right-hand scutum five of them attached close to the occludent margin. I have figured one of them (Pl. VIII. fig. 11). Their size is 1·3 mm. Their form is elongate, having the shape of a pear. The small antennæ (*an*) are distinctly to be observed, and consist of one segment only. The body is covered by a double wall, the exterior one forming a kind of mantle. Its outer surface is clothed with very small bristles, and at one extremity, the more swollen one, the external wall has an opening. The only organ which is well developed is the testis (*t.*), with its receptaculum seminis (*r.s.*). The testis is very large and heart-shaped; the receptaculum seminis is relatively small, and consists of an oval sac; at one extremity it communicates with the testis, at the other with the vas deferens. I tried in vain to distinguish where this duct opened; probably it is close to the opening of the mantle.

The specimen of *Scalpellum compressum* contained eggs. These are not very numerous, but relatively large. Their shape is oval, their length about 0·8 mm.

C. SPECIES WITH THE CARINA SIMPLY BOWED.

A. *With a sub-carina.*

Scalpellum acutum, n. sp. (Pl. III. fig. 19; Pl. VIII. fig. 12).

Surface of the valves smooth, not covered by membrane. Valves thirteen. Carina simply bowed, very short. Umbo of the carina at the apex. A distinct sub-carina and a distinct rostrum are present. Only two lateral valves of the lower whorl at each side.

Of this extremely interesting species three specimens were taken at Station 170, 520 to 630 fathoms, and one specimen at Station 78, 1000 fathoms.

The *capitulum* is flat and elongate, and consists of thirteen valves. Besides the carina and the three pairs of upper latera, there are a rostrum, a sub-carina, and two pairs of latera of the lower whorl. Most of the valves have an elongate and pointed shape; the umbo of the rostrum projects outwards. The capitulum is not covered by membrane; near the base, however, small parts of a chitinous covering are still adhering to the valves.

The *scutum* is parallelogram-shaped, and divided into two triangular parts by a slightly