

The Dorsal Tubercle is in the form of a transversely flattened band crossing the anterior end of a deep triangular peritubercular area.

The Alimentary Canal is placed on the left side of the body in its posterior half. The œsophagus is long, the stomach small, and the intestine relatively short. The œsophagus is anterior to the intestine, and the whole canal forms a loop open dorsally.

The Reproductive Organs form a globular mass placed on the dorsal edge of the stomach and filling up the loop between the œsophagus and the intestine.

Locality.—March 3, 1874; Station 157; lat. $53^{\circ} 55' 0''$ S., long. $108^{\circ} 35' 0''$ E.; depth, 1950 fathoms; bottom, Diatom ooze; surf. temp. $37^{\circ} \cdot 2$, bottom temp. $32^{\circ} \cdot 1$.

This is an important species which appears to be more nearly allied to *Abbyssascidia* than to any other genus of the Ascidiidæ; and although it does not conform with all the characters of that genus as given in the first part of this Report (p. 193), I have considered it better to place it here in the meantime, than to form a new genus intermediate between *Abbyssascidia* and *Ascidia* for its reception.

In external appearance (Pl. XI. fig. 1) it is like an *Ascidia*. It has an eight-lobed branchial and a six-lobed atrial aperture, and the latter is placed upon a posteriorly directed siphon like that of *Ascidia plebeia*, Alder. The vessels in the test are very numerous, and form a conspicuous feature (Pl. XI. fig. 1) as they are distinctly seen through the transparent test.

The body inside the test is greatly contracted, so as to appear only about three-quarters of the size necessary to fill its cavity (Pl. XI. fig. 2). The short wide branchial siphon and the long narrow atrial are readily seen. The viscera are placed upon the left side of the body, and the mantle on that side has no muscle bands. The long tentacles are seen projecting freely out of the branchial aperture (Pl. XI. fig. 2).

The branchial sac has a very loose and fragile appearance, the reason being that all the vessels are very narrow and the spaces between them large. The internal longitudinal bars are especially thin, but bear very large papillæ (Pl. XI. fig. 4), and are united to the transverse vessels by large membranous flaps. The general appearance of this branchial sac recalls that of *Abbyssascidia wyvillii*.

The dorsal lamina is evidently formed of a series of languets (Pl. XI. fig. 5) which have been united by a membrane. In *Abbyssascidia wyvillii*¹ there are short languets. The closely placed tentacles (Pl. XI. fig. 3) are remarkable for their great length, stretching easily for half their extent outside the branchial aperture. The smaller tentacles are exceedingly narrow. The conditions of the dorsal tubercle and peritubercular area are seen in Pl. XI. fig. 3. Probably the dorsal tubercle in *Abbyssascidia wyvillii* is in much the same condition. The nerve ganglion is long and narrow.

The œsophagus commences about half-way down the dorsal edge of the branchial

¹ See this Report, Part I. p. 194, pl. xxvii. fig. 11.