

The *Genital Organs* consist of a series of about twelve rudely cubical masses, which adhere to the inner surface of the mantle proper, and are covered by the lining membrane of the peribranchial cavity, into which they project (Pl. VIII. fig. 10). They are situated rather towards the ventral edge and occur on both sides of the endostyle, the majority, however, being on the right side.

Each genital mass consists chiefly of a spherical spermarium or testis out of which leads a delicate somewhat undulating vas deferens. As the genital masses on each side are arranged in two or three converging series (Pl. VIII. fig. 10), the testes in each series are united by a vas deferens, and the several vasa deferentia then join to form a common duct (Pl. VIII. fig. 9, *v.d.*), which opens into the peribranchial space near the atrial aperture.

Round the vasa deferentia uniting the different genital masses, and round the genital masses themselves, lie the ova (Pl. VIII. fig. 11, *ov.*), and these continue up to the point of convergence, where there is a short wide membranous tube serving as an oviduct (Pl. VIII. fig. 9, *o.d.*) and opening alongside the common vas deferens.

The masses of ova are yellow, while the bunches of spermatic vesicles composing the testes (Pl. IX. fig. 17a and b, *t.v.*) are pale whitish yellow. The vasa deferentia show as opaque white lines running through the masses of ova. The ova are in various stages of development, very young ones, in which there is little vitellus round the germinal vesicle (Pl. IX. fig. 16b), being numerous. The more mature ova (Pl. IX. fig. 16a) are enclosed each in a capsule formed of cubical or low columnar cells (Pl. IX. fig. 16c).

Two specimens of this species, one of them somewhat injured, were obtained in the Pacific Ocean, west of Japan.

Station 241. June 23, 1875. Lat. 35° 41' N., long. 157° 42' E.; depth, 2300 fathoms; bottom temperature, 1°·1 C.; red clay.

*Culeolus wyville-thomsoni*, Herdman (Pl. X. figs. 1–6, and Pl. XIII. figs. 5 and 6).

*Culeolus wyville-thomsoni*, Herdman, Preliminary Report, Proc. Roy. Soc. Edin., 1880–81, p. 84.

*External Appearance.*—In this species the “body” part is rather larger and the peduncle shorter than in *Culeolus murrayi*. The general shape of the body (Pl. X. fig. 1) is irregularly pyriform, or almost wedge-shaped, on account of the great difference in the width at the two ends; there is no lateral compression. The anterior end, where the stalk is attached, is narrow and tapering. The posterior end, on the contrary, is very broad, but not so much rounded as in the last species. It is divided by the atrial aperture into a dorsal and a ventral portion. The latter is straight, has a truncated appearance, and forms almost a right angle with the posterior extremity of the ventral edge. The dorsal portion, on the contrary, is rounded off, forming a gentle curve, and becoming continuous with the dorsal edge. The dorsal and ventral edges are very irregular, more so