

tudinal bars are very strong. The meshes intermediate to the slighter folds are large and square, and are not subdivided by any smaller vessels.

*The Dorsal Lamina* is a broad plain membrane, slightly undulating at the free edge.

*The Tentacles* are large and simple, from twenty to twenty-five in number, and all of one size.

*The Dorsal Tubercle* is small and simple, nearly circular in outline, and has the aperture anterior and rather wide. The horns are not coiled.

*The Alimentary Canal* is situated on the left side, near the dorsal edge.

*The Genitalia* are two elongated glands—one on each side.

This remarkable form is closely allied to *Styela*, from which it is separated generically on account of the peculiar branchial sac, which exhibits the simple structure only known in the two allied genera *Culeolus* and *Fungulus*.

In external appearance (Pl. XXIV. fig. 8) it is small and rudely ovate, with the posterior end narrow and roughened. On account of the thin and transparent test it looks rather like a *Molgula*. The mantle has a large number of muscle bands, forming a minute network, but they are very delicate. The branchial sac (Pl. XXIV. fig. 9) is, however, undoubtedly the most remarkable feature. It is formed of two series of vessels—the transverse and the internal longitudinal—intersecting at right angles. The internal longitudinal bars are placed in threes, and each set (forming one of the slighter folds or projections) is held together by a double series of short transverse vessels, smaller intermediate ones being placed between those which extend all round the sac. In other words, the smaller alternate transverse vessels are confined to the folds. The meshes between the folds (Pl. XXIV. fig. 9) are large and square. As no fine longitudinal vessels are present, there are no true stigmata. On the left side of the branchial sac, near the dorsal lamina, there is a collection of about six or eight internal longitudinal bars, forming a much larger fold.

The tentacles (Pl. XXIV. fig. 10) are simple and stout. They are not long, are all of one size, and are pretty closely placed. The anterior face of each is a flattened plain surface while the posterior or branchial is highly arched and somewhat irregular, the membrane being loose and puffed out in parts as in most *Molgulidæ*.

The dorsal tubercle (Pl. XXIV. fig. 11) is rather simple, and is placed at the anterior extremity of the funnel-shaped tube leading to the neural gland. The peritubercular area is not large, and has an irregularly triangular form. The nerve ganglion is large and oblong in shape. It gives off a considerable number of nerves at each extremity. Its anterior (branchial) end is just at the posterior angle of the peritubercular area.

The intestine is of much the same calibre throughout its length. It is rather small, and lies near the dorsal edge of the left side.

The genital glands are in the form of elongated undulating bodies attached to the inner surface of the mantle, one on each side, and converging towards the atrial aperture.