

parallel to the axis of vision), the vertical sail runs from our proximal and right to our distal and left side ("*Verella sinistra*," Chamisso).

*Limbus Umbrellæ* (fig. 1).—The broad soft border of the horizontal disc is widely prominent over the edge of the pneumatophore, and has four deep marginal incisions. Two opposite ones of these correspond to the diagonal axis of the sail (the macrodiagonal), and touch the two ends of its base; the two others correspond to the diagonal axis of the transverse or frontal groove (the brachydiagonal). The border of the mantle is divided by these four marginal incisions into four large lobes, which are disposed in pairs. The two lateral lobes (right and left) are nearly rectangular, and much smaller than the two crescentic sagittal lobes (anterior and posterior). Besides these four deep marginal incisions, which correspond to those of the edge of the pneumatophorous disc, the margin of the mantle-border often exhibits four smaller incisions alternating with the former; but these are not constant.

*Subumbrella* (fig. 2).—The inferior or basal face of the umbrella exhibits the smooth and lobed mantle-border to the same extent as the upper face. A deep elliptical incision, the tentacular or submarginal furrow (*ut*), separates it from the elliptical central area of the subumbrella. This area is bisected by the longitudinal axis of the spindle-shaped, long and narrow centradenia and the base of the central siphon. Numerous sexual siphons occupy the greatest part of that subumbrellar central area, whilst a double or triple corona of tentacles surrounds it.

*Margin of the Sail*.—The triangular vertical sail is composed of an inner chitinous crest arising from the pneumatocyst, and of a canaliferous plate of the exumbrella, covering the two sides of the former. This plate is prolonged over the free margin of the crest, and borders it as a soft contractile limb, which is the uppermost part of the original longitudinal mantle-fold.

*Pneumatocyst* (fig. 5, from above; fig. 6, from below; fig. 4, *p*, in vertical section).—The pneumatocyst is composed, as in all species of *Verella* and *Armenista*, of two different parts, the horizontal discoidal float filled with air, or the pneumatodisc, and the vertical triangular crest, which is the inner skeleton-plate of the soft sail, perpendicular to the disc, and placed in its greater diagonal.

The pneumatodisc, or the horizontal float, is sometimes elliptical or nearly rectangular in outline, at other times distinctly S-shaped. It is two and a half times as long as broad; in the largest specimen 50 to 60 mm. long, 18 to 21 mm. broad.

The four characteristic marginal incisions, which are described above of the mantle-border, are marked also in the periphery of the pneumatodisc (fig. 5); the two notches of the macrodiagonal touch the two ends of the base of the crest, whilst the two notches of the brachydiagonal approach the two ends of the frontal furrow. The four quadrants of the disc, which are separated by these four diagonal notches, are disposed in pairs opposite; the two lateral pairs form an oblique triangle with concave base, and their