of the vestibule is formed by the cruciform gastrogenital membrane and by the four interradial genital plates (fig. 4, *wi*) which fill the interspace between its perradial limbs. Looked at from above, the gastrogenital cross shines through the umbrella disk as in many other Rhizostomæ. The delicate gastrogenital membrane (figs. 2, 4, *gg*) formed by the cross, separates the vestibule from the underlying central stomach, of which it at the same time represents the bottom or lower wall. It consists of a very thin, flexible, and extensible fulcral plate, covered with gastral endoderm above and by subumbral ectoderm below; in the middle only it is strengthened by the gelatinous ridge cross (fig. 4, *gh*), whose four perradial limbs separate the four horseshoe-shaped genitalia from each other and pass at their distal end into the axial wall of the four oral pillars. The interradial interspaces between the four perradial limbs of the gastrogenital cross are filled by the four thick cartilage-like intergenital plates (fig. 4, *wi*); these are strong, equilaterally triangular thickenings of the gelatinous umbrella, having the interradial canals (*ci*) running in their middle line and the delicate gastrogenital membrane inserted at their lateral margins.

The four oral pillars (also termed arm pillars or floor pillars, "pilastri," figs. 2, 4, 7, *ap*) form the only connection between the upper and the lower wall of the subgenital vestibule, and are separated from each other by the four wide subgenital apertures. The oral pillars are four strong perradial gelatinous plates shaped like a parallel trapezum (fig. 7, *ap*). They spring with a narrower base, 10 mm. broad, from the distal end of the limb of the gastrogenital cross from above and outside to below, and inside expanding to a breadth of 15 mm. towards the arm disk which is formed by their confluence. The thickness of the arm pillars amounts to from 5–7 mm., their length to 15 mm. Their inner axial surface is curved concavely, their outer abaxial surface curved convexly, the former is turned towards the porticus, the latter towards the cavity of the umbrella corona. The broad perradial pillar canal (figs. 2, 4, 6, *cd*), the distal process of the limb of the gastral cross, runs in the solid gelatinous mass of the pillars, near their axial surface.

The four subgenital apertures (figs. 1, 7, *ig*) represent, in some measure, the four broad low doors, through which we reach from the outside (from the cavity of the umbrella cavity outwards) in the central vestibule. They are rectangular in form (with obtuse angles), are separated from each other laterally by the four perradial arm pillars, and therefore lie interradially. They are limited above by the distal basal part of the triangular intergenital plates, below by the lateral margin of the arm disk. The breadth, or the largest horizontal diameter of the subgenital aperture in its middle amounts to 25 mm., and is nearly three times as much as the smallest breadth of the pillars separating it.

The arm disk or oral disk ("stomodiscus, discus brachiferous," figs. 2, 6, 7, *ah*) represents the bottom of the floor or the lower wall of the subgenital vestibule. It is only