

The *Centradenia* (fig. 4, *uc*; fig. 7), or the so-called liver, is a lanceolate gland, the upper convex surface of which is flatly conical, and fills up the inferior concave face of the pneumatocyst (fig. 4, *pf*). Its lower flat horizontal face forms the roof of the central siphon, and is separated from its base by the gastrobasal plate, a thick structureless fulcrum (fig. 4, *st*). The periphery of this plate is pierced by sixteen radial main canals, which arise from the lanceolate base of the central siphon in two longitudinal rows, and run along the subumbrella towards its margin; they give off at their base sixteen ascending liver-canals, which run in the convex upper surface of the centradenia towards its conical apex, where they unite and form a central "liver-star." Very numerous lateral branches, which arise everywhere from these main canals, penetrate into the solid exodermal parenchyma of the centradenia, and form a very dense network by innumerable anastomoses. The vessels in the upper and outer (hepatic) part of the central gland are dark brown or black, thickly filled with pigment-granules (fig. 4, *uh*), except the uppermost; whilst the canals in the lower and inner (renal) part are white or colourless, and contain numerous small greenish guanin-crystals (fig. 4, *un*).

*Central Siphon* (fig. 2; fig. 4, *sa*; fig. 7, *sa*).—The large central polypite is inversely conical, sharply compressed from both sides, very contractile, and variable in form and size. Its lanceolate roof is nearly half as large as the adjacent basal face of the centradenia, and separated from it by the structureless fulcrum or the gastrobasal plate. Its muscular wall is very thick, and exhibits in some specimens outside eight or sixteen thick longitudinal ribs, which are prominent inside as deep grooves. The opening of the mouth has often eight triangular lips (fig. 4, *so*).

The periphery of the lanceolate base of the central siphon exhibits sixteen openings, which conduct into the sixteen radial main vessels of the subumbrella; two opposite of these gastral canals lie nearly in the sagittal axis of the subumbrella (one ventral and one dorsal), and these are much wider and longer than the fourteen other vessels which arise symmetrically from both sides (fig. 7).

*Canal System* (fig. 7).—The reticular system of anastomosing gastro-canals, which arise from the branches of the sixteen above-mentioned radial main canals, is in this, as in other large Velellidæ, very complicated. The following principal branches may be distinguished:—(1) The sixteen ascending superficial canals, which pass off from the former immediately at their origin, and end centripetally in the upper face of the centradenia; (2) very numerous canals which form a dense reticulum in the subumbrella; (3) numerous vessels which arise from the peripheral part of the centradenia, and enter into the gonostyles; (4) a smaller number of vessels, outside the latter, which open into the tentacles; (5) a corona of radial submarginal vessels which run in the peripheral part of the subumbrella, between the tentacular zone and the margin; these open into (6) a marginal ring-canal, which runs inside the series of marginal glands; (7) a coronal canal, or inner submarginal ring-vessel, runs in the furrow between