

cal or quadrangularly pyramidal shape, and opens with the truncated aboral end into the peduncle stomach by the pyloric opening ("pylorus," *gy*) and with the quadratic, strongly constricted oral basis into the buccal stomach by the palatine opening ("palatum," *gp*). Four perradial clefts, the gastral openings ("ostia gastralia," figs. 2, 3, *gp*; fig. 21, *go*) lead from the central stomach into the four radial pouches. As the four conical interradial funnel cavities (*ii*) already described project arch-like between the four gastral openings into the central stomach, the formation of the latter becomes rather complicated. Both margins of the cleft-shaped gastral openings are edged nearly their whole length by a row of fine gastral filaments (fig. 21, *f*); these are only wanting on the lower (oral) fourth of the gastral openings where their margin forms the cartilaginous-like thickened groove of the palate (fig. 21, *gs*). The rows of filaments or phacelli run above to the point of the funnel cavities, but do not pass on to the solid tæniola. In comparison with other *Lucernaridæ*, and with the considerable size of our species, its filaments appear slightly developed, very fine and rather short; they are limited here to the lateral margin of the gastral openings, whilst in other species they often extend distally far on to the lateral margins of the genitalia, or proximally on the basal tæniola. Like the filaments, the œsophagus or "buccal stomach" seems only slightly developed in *Lucernaria bathyphila* (proboscis, figs. 2-4, *ga*). It forms a low, fleshy, membranous border, quadrate in outline, which only projects slightly from the palatine opening into the umbrella cavity. The thickened glandular margins of the oral opening are only slightly frilled (fig. 9). The four perradial angles of the œsophagus pass at the palatine opening, into the four sub-umbrel mesogonial folds (*wz*).

The peripheric coronal intestine ("gaster coronaris"), which only communicates by the four perradial gastral openings with the central stomach, in *Lucernaria bathyphila* is formed (owing to the slight development of the eight arms) almost exclusively by the four voluminous radial pouches ("bursæ radiales," *bp*) which Clark termed "quadrant chambers," Keferstein "broad pouch-shaped radial vessels," Taschenberg "radial canals," Kling "radial chambers," and Hertwig "radial chambers or radial pouches." These present four flat pouch-like hollow spaces extending between the umbrella and subumbrella to the umbrella margin. They are only divided by four interradial "septal selvages," or "lines of fusion," linear septa in which the umbrella is fused with the subumbrella ("septa cathammalia," *ks*). As this fusion does not, however, extend as far as the umbrella margin, the four pouches communicate there below the distal end of the septa, by four interradial circular openings, so that a circular communication, a sort of "circular canal," is formed on the umbrella margin (fig. 12, *cc*). The proximal half of the four radial pouches opens by the gastral openings into the central stomach; whilst eight lobe pouches or "arm pouches" ("bursæ lobares") run from its distal margin into the eight arms. The end of each lobe pouch again sends out a tentacle canal into each tentacle (figs. 15-16, *ct*). As the eight arms or marginal lobes in our species project only