

principal parts, the central principal intestine and the peripheric coronal intestine. The central part or the axial principal intestine ("gaster principalis") communicates with the peripheric coronal intestine by the four perradial openings ("ostia gastralia"), and is divided into three different sections, the basal, the central, and the oral stomach. The aboral basal stomach or peduncle canal ("gaster basalis," *gb*), which may also be called the "apical canal," is a narrow, almost cylindrical, hollow space occupying the entire cone of the umbrella, in whose point it ends cæcally above, whilst below it opens by the pylorus (*gy*) into the central stomach. Four longitudinal gelatinous selvages, the important interradianal tæniola, project from the inner surface into its hollow space, and, as in the closely-allied Lucernaridæ, traverse the entire length of the hollow basal umbrella peduncle (figs. 2, 3, 8, *ft*). The peripheric part of the basal stomach is thus divided into four perradial grooves (figs. 3, 8, *gb*).

The central stomach ("gaster centralis," *gc*) has, on the whole, a spheroidal or almost quadrangularly pyramidal form, which, however, is complicated by the four interradianal exodermal funnel cavities (*ii*) sinking down into it from above. The distal processes of the four tæniola, each of which bears two rows of gastral filaments (*ft*) inside in the central stomach, run as projecting selvages on the endodermal gastral surface of the funnel cavities. The central stomach opens above by the "porta pylorica" (*gy*) into the basal stomach, below in the centre by the "porta palatina" (*gp*) into the oral stomach, and round by the four cleft-shaped gastral openings into the coronal intestine. The gastral openings (fig. 6, *go*) are narrow, almost horizontal clefts, divided from one another by the four interradianal septal nodes ("nodi cathammals," *kn*), these important points of fusion at which the umbral and the subumbral wall of the gastral space have grown together. That this is really a fused plate is plain from the fact that an endodermal layer of epithelium—"endodermal lamella" or cathammal plate—runs in the middle through the cartilaginous-like gelatinous mass of the septal node.

The oral stomach or œsophagus ("proboscis," *ga*) is formed of a quadrangularly prismatic tube, nearly equal in length to the breadth of the umbrella (figs. 1, 2, *at*). It is four times as long as broad, and has four projecting perradial angles which run into the four mesenteries above, whilst the external surface is depressed like a groove between them (fig. 6, *a*). The oral opening is surrounded by an undulating oral margin crowded with thread cells, and runs out into four short perradial lobes (fig. 4 in the middle).

The peripheric coronal intestine ("gaster coronaris"), which in most Acraspedæ is divided into from four to sixteen radial pouches or canals, forms a simple wide coronal sinus ("sinus coronaris," *cs*) in *Tesserantha* as in *Periphylla*. It occupies the whole space between the septal nodes and the umbrella margin (figs. 2, 3, 5, *cs*). The broad gastral openings only may, therefore, be considered as homologous with the four radial pouches (*bp*); in fact, the four short septal nodes which divide the gastral openings correspond