

investigation, however, it shows several very remarkable and important conditions of formation not to be found at the present day in the majority of Discomedusæ, and which may be considered extremely old peculiarities inherited from the common ancestral form of the Acraspedæ. In this way *Nauphanta* comes nearer the Tesseroniæ than the other Ephyroniæ, and connects these two sub-sections of the Acraspedæ in a most interesting fashion; above all, it is remarkable in one respect, that the four important interradiial septal nodes or cathamma which separate the four broad perradiial gastral pouches and which have disappeared entirely in most Discomedusæ, still exist here. The reproductive glands lie in the subumbral wall of the coronal intestine below the septal nodes (much further, therefore, towards the exterior than in most other Discomedusæ). But in the peculiar nature of the central principal intestine, and also in that of the peripheric coronal intestine, we find manifold peculiarities which recall the Tesseroniæ more than the Ephyroniæ, and which must be regarded as very ancient heirlooms from the common ancestral form of the two sections.

The axial principal intestine ("gaster principalis," figs. 2-7) appears at first sight to consist, as in the other Discomedusæ, of two principal sections, of the upper (aboral) central stomach and the lower (oral) buccal stomach; the former is covered by the umbrella disk, and is itself flatly discoid; the latter is more funnel-shaped, and hangs freely down in the umbrella cavity. The buccal stomach is, however, constricted in the middle; this stricture probably corresponds to the palatine opening ("porta palatina," *gp*), in which case we can probably still distinguish here all the three gastral chambers of this section of Medusæ. The boundary between the two principal sections is formed by the horizontal cathammal plane, in which the four septal nodes or cathamma (*kn*) are placed; these may be considered the pyloric opening ("porta pylorica," *gy*). Otherwise the three gastral chambers have an extremely simple formation. If the foregoing supposition be correct, the buccal stomach or œsophagus ("proboscis") is limited to the oral half lying below the palatine opening (*gp*), which has the form of a truncated quadrangular pyramid. The base of the latter is formed by the quadrate oral opening, from whose four corners the four perradiial short triangular oral lobes project (figs. 12, 14, *al*). It only extends as far as the proximal margin of the coronal muscle; consequently the œsophagus only occupies the upper half of the umbrella cavity. Above the palatine opening (*gp*), the stomach is again dilated in the form of a flat funnel, corresponding to the true central stomach (*gc*). This funnel opens above immediately into the flat basal stomach (*gb*), and appears only separated from it by the four interradiial pyloric valves ("vavulæ pyloricæ," *gi*). These are four flat tongue-like projections, which stand out centripetally from the four septal nodes in the base of the stomach, and bear the gastral filaments at their upper free end (fig. 14, *f*); they completely correspond to the stronger pyloric valves of many Cubomedusæ (p. 98). The ideal horizontal plane, in which they lie, corresponds to the pylorus of the Tesseroniæ, and therefore actually forms the