6, *cf*; fig. 8, *cf*). The latter runs like a garland along the margin of the lobes and opens throughout between every two tentacles with a double mouth in the periphery of the stomach. The stomach is a completely flat, circular, or polygonal pouch, occupying the entire lower surface of the umbrella lens (fig. 3, *gc*). Corresponding to the latter, the upper wall or cover of the stomach forms a flat or only slightly convex, rarely concave, circular surface, whose periphery presents in certain conditions of contraction a regular polygon; each of its projecting corners corresponds to a tentacle insertion, each side of the base to the base of a collar lobe. The projecting corners sometimes form triangular pouches with the ends directed towards the insertion of the tentacle (last rudiments of radial pouches). The lower wall or bottom of the gastral pouch is a circular or regularly polygonal thick, muscular plate, covered with endoderm above and exoderm below. The oral opening, which is extended into a short cylindrical œsophagus hanging freely down, is in the centre (fig. 3, *at*). The thickened oral margin is simple, not split up into oral lobes. The muscular plate appear considerably swollen at the oral margin (longitudinal section, fig. 5, *m*). Numerous gland cells (*gd*) are scattered between the high cylinder cells of the gastral endoderm (*dg*), they are 2 to 3 times as broad as the latter, have twice as large a nucleus, and are distinguished by the turbid, granular nature of the protoplasm. As in all Narcomedusæ, the muscular wall of the stomach is capable of considerable contraction and dilatation.

The peculiar festoon canal ("canalis festivus," fig. 6, *cf*; fig. 8, *cf*) which attains its highest development in the Peganthidæ and the complete want of radial canals connected with it, suffices alone to characterise this family and to distinguish it from all other Medusæ. Phylogenetically this peculiar condition is simply derived from that of the Cunanthidæ, and from the fact that the stomach stretches by peripheric growth as far as the insertion of the tentacles (or to the limit of the umbrella lens and the umbrella collar), and so includes the broad pouch-shaped radial canals. The deep sinuses which are found in the Cunanthidæ between each two radial pouches are in some measure obliterated in the Peganthidæ. Hence the "triangular points" of the periphery of the stomach, which in some Peganthidæ run out to the insertion of the tentacles (already described by Eschscholtz in *Polyxenia* as "long three-sided processes of the stomach"), must, in fact, be considered the last rudimentary remains of radial canals. While in the Cunanthidæ the latter still serve to connect the stomach with the radial canal, in Peganthidæ the triangular points open into the periphery of the stomach in as many places as there are insertions of the tentacles between each two collar lobes. The circular canal has, therefore, the same disposition as in the nearly related Cunanthidæ; it runs along the velar margin of the collar lobes immediately under the urticating ring of the true umbrella margin; it is, however, interrupted at the basis of each two adjacent lobes by the insertion of the tentacle, and opens into the stomach beside the latter. The state of the case may be expressed thus: the annular canal of the Pegan-