

In *Æginura*, as in the other true *Æginidæ*, the gastrovascular system (Pl. XIII. figs. 1, 2, 4, 7; Pl. XIV. figs. 8, 11, 12) consists of two different principal parts, corresponding to the two principal parts of the umbrella, and separated by its coronal furrow (*ec*). The central gastral cavity with the œsophagus and oral opening lies on the subumbrel side of the central lens of the umbrella, whilst on the subumbrel side of the peripheric corona of the umbrella there is a circle composed of sixteen internemal reproductive pouches and eight peronial double canals, connected with the umbrella margin by an octagonal marginal canal, along with which it forms the "festoon canal." The central gastral cavity is flat and wide and regularly octagonal in outline (corresponding to the eight tentacle roots and peronial furrows). The cover of the stomach or the upper umbral wall is formed by the flat or slightly convex gastral surface of the gelatinous umbrella lens, into which the adjacent tentacle roots (*tr*) project centripetally as eight supporting edges. The bottom of the stomach or the lower subumbrel wall, consists of a thick layer of circular muscular fibres, immediately connected on their lower surface with the ectodermal epithelium of the subumbrella (*w*), but separated on their upper surface by a thick supporting plate (*z*) from the high endodermal epithelium of the stomach. A cylindrical œsophagus (*gt*) hangs from the middle; it is nearly half as long as the whole radius of the umbrella, probably considerably longer in the living animal. The œsophagus is nearly as broad as long, and quadrangularly prismatic towards the lower end, where the four interradian longitudinal furrows appear, which divide the four broad bordering oral lobes (fig. 8).

The coronal intestine, which projects from the periphery of the central principal intestine, is composed of a circle of sixteen reproductive pouches, alternating in pairs with eight peronial double canals, and arises from the octagonal marginal canal along with which it forms the festoon canal. This festoon canal ("canalis festivus") is homologous with the festoon canal already described in *Cunarcha*, *Polycolpa*, and *Pegantha*, and really consists of eight internemal "lobe canals," which edge the margin of the eight quadrangular collar lobes of the corona of the umbrella. In *Æginura*, however, the lateral margins of these "collar lobes" are fused into the eight peronial furrows (*es*), so that each lobe canal is divided into a horizontal middle part (an octant of the marginal canal) and two vertical side limbs (the two inverted halves of two peronial double canals). At first sight a simple "circular canal" appears to exist upon the umbrella margin (Pl. XIII. figs. 1, 2, 4), which is connected with the stomach by the eight simple broad "radial canals" (as in many Craspedotæ, such as the Pectyllidæ, Pls. III.–VIII.). In the transverse sections (figs. 7, 12), however, we see at once and indubitably that the eight broad, apparently simple "radial canals" consist of two isolated "peronial canals" (*ck*) fully separated by the peronium. Each of the two adjacent peronial canals or clasp-canals open independently above (beside the insertion of the tentacles) into the periphery of the stomach, whilst it turns almost at