

cells. A low endodermal fold, like that in *Pectis* (Pl. VI. fig. 12, *yc*), but less strongly developed, rises at the distal margin of the festoon canal, projecting freely into its lumen (Pl. XII. fig. 12, *yc*).

In contrast to the preceding *Polycolpa*, in which the reproductive glands appear in their simplest form as a circular closed girdle in the lower wall of the stomach, *Pegantha* shows us the most widely differentiated and highly developed form of the genitalia. Here the originally simple and connected genital girdle is divided into a circle of separate reproductive sacs, hanging freely in the periphery of the gastral cavity. Each lobe cavity of the umbrella collar receives one genital pouch, which is surrounded and protected by the concave subumbrel surface of the collar lobes (Pl. XI. fig. 3; Pl. XII. figs. 7, 9). The genera of the Peganthidæ, *Polyxenia* and *Pegasia* represent connective intermediate forms between the two extremes *Polycolpa* and *Pegantha*, so that we have here the division of the simple subgastral reproductive girdle into a circle of separate pouches, shown in four different phylogenetic stages (comp. my System der Medusen, 1879, pp. 327-332). The cavities of the isolated reproductive sacs of *Pegantha pantheon* (fig. 5, *sc*) communicate with the periphery of the gastral cavity (figs. 7, 9, *sc*). Each of the eighteen genitalia has the shape of a thick roundish leaf, with the two edges turned towards the edges of the collar lobes, whilst the upper surface is delicately twisted or folded (fig. 3, *s*). The transverse section (figs. 5, 6) shows that the gastral endodermal epithelium of the sac cavity (*sd*) is composed of high cylindrical cells, and divided by a strong supporting plate from the mass of the spermatozoa (*sm*). On the other hand, the latter is in continuous connection with the gastral ectodermal epithelium of the subumbrella, from which it originates. Under stronger magnifying power, we find the same condition here which Hertwig described (1878) in *Cunina lativentris*. The superficial ectodermal layer of cells (figs. 5, 6, *sw*), which forms the subumbrel cover of the testes, sends out supporting fibres containing nuclei (*zs*) into the subepithelial layer of cells lying beneath it. The larger cells of this layer (*sm*) usually lie inwards, touch the endodermal fulcral plate (*z*), and must be regarded as "mother cells of the spermatozoa," whilst the smaller cells, which usually lie outwards, form spermatozoa already ripe (fig. 6, *sz*).

Family, ÆGINIDÆ, Gegenbaur, 1856.

ÆGINIDÆ, Hæckel, System der Medusen, 1879, p. 334, taf. xix. fig. 8, 9; taf. xx. fig. 11-16.

Narcomedusæ with a marginal canal communicating immediately with the stomach by double peronial canals, with internemal gastral pouches (which have arisen from the distal lobe pouches of radial canals through retrograde formation), without otoporpæ or auditory clasps at the basis of the auditory clubs.