

Fig. 4.—A mature ovum, 100 times the natural size. The spheroidal egg cell is enclosed in a thick structureless chorion (*yc*); a projecting micropyle (*ym*) opens at one point of it. The yolk is composed of spheroidal, thickly compacted yolk granules (*yd*) of equal size. The clear spheroidal germinal vesicle (*yn*) contains a large dark germinal nucleus (*yf*), and this, again, a visible double contoured germinal nucleolus (*yp*).

Fig. 5.—A follicle of the ovary, seen from the inner (endodermal and abxial) surface, four times the natural size. The ova are distributed on the free endodermal surface (turned to the coronal sinus) of the fan-shaped transverse folds of the follicle in such a way that the smallest and younger ova lie on the basal margin of insertion of the folds, but the larger and older on its freely projecting margin.

Fig. 6.—A follicle of the ovary in longitudinal section, four times the natural size. The flat axial ectodermal surface of the subumbrella (*qw*) is separated by a thick gelatinous fulcral plate (*zw*) from the thickly folded abaxial endoderm surface, from whose germinal epithelium (*ds*) the ova are originated. *h* Umbrella cavity. *cs* Hollow cavity of the coronal sinus.

Fig. 7.—Fold of a follicle of the ovary in longitudinal section, eight times the natural size. The more mature ova (*so*) surrounded by a chorion, are enclosed in special fulcral capsules (*yz*), wide, separate, gelatinous sheaths formed by a superficial abaxial growth of the supporting plate of the subumbrella (*wz*). *cs* Hollow cavity of the coronal sinus.

Fig. 8.—Horizontal transverse section through an interradian cathammal node, 300 times the natural size. *ug* Gelatinous substance of the umbrella, transformed into fibrous cartilage (*ug₂*) at the point of fusion. *du₂* Umbral endodermal lamella of the cathamma. *dw₂* Subumbral endodermal lamella of the cathamma. *zw* Gelatinous supporting plate of the subumbral transformed into fibrous cartilage (*zw₂*) at the point of fusion. *cs* Coronal sinus (in this case divided by the four septal nodes into four perradial spaces). *du* Umbral endodermal epithelium; *dw* subumbral endodermal epithelium of the coronal sinus. *md*" Insertion of the deltoid muscle (in transverse section). *mw* Circular muscles of the subumbrella. *qw* Endodermal epithelium of the subumbrella.

Fig. 9.—A small piece of fibrous cartilage from the hardened gelatinous tissue of the cathamma (fig. 8, *ug₂*), 600 times the natural size. The histological structure of this modified gelatinous tissue immediately at the point of fusion is similar to the fibrous cartilage of the vertebratæ. *yz* Cartilaginous cells enclosed in cartilaginous capsules. *yi* Fibrous cords of the intercellular substance.

Fig. 10.—Horizontal transverse section through a fused clasp, 300 times the natural size. *qe* Ectodermal epithelium of the exumbrella. *qw* Ectodermal epithelium of the subumbrella. *du* Umbral endodermal epithelium. *dw* Subumbral endodermal epithelium of the lobe pouch. *ug* Gelatinous substance of the umbrella transformed in *ug₂* into fibrous cartilage. *zw* Gelatinous substance of the subumbrella transformed in *zw₂* into fibrous cartilage. *kl* Cathamma lobare. *bl* Lobe pouches.