Structure.—The thalamus consists chiefly of gray substance, but its upper surface is covered by a layer of white substance, named the **stratum zonale**, and its lateral surface by a similar layer termed the **lateral medullary lamina.** Its gray substance is incompletely subdivided into three parts—anterior, medial, and lateral —by a white layer, the **medial medullary lamina.** The anterior part comprises the anterior tubercle, the medial part lies next the lateral wall of the third ventricle while the lateral and largest part is interposed between the medullary laminæ and includes the pulvinar. The lateral part is traversed by numerous fibers which radiate from the thalamus into the internal capsule, and pass through the latter to the cerebral cortex. These three parts are built up of numerous nuclei, the connections of many of which are imperfectly known.

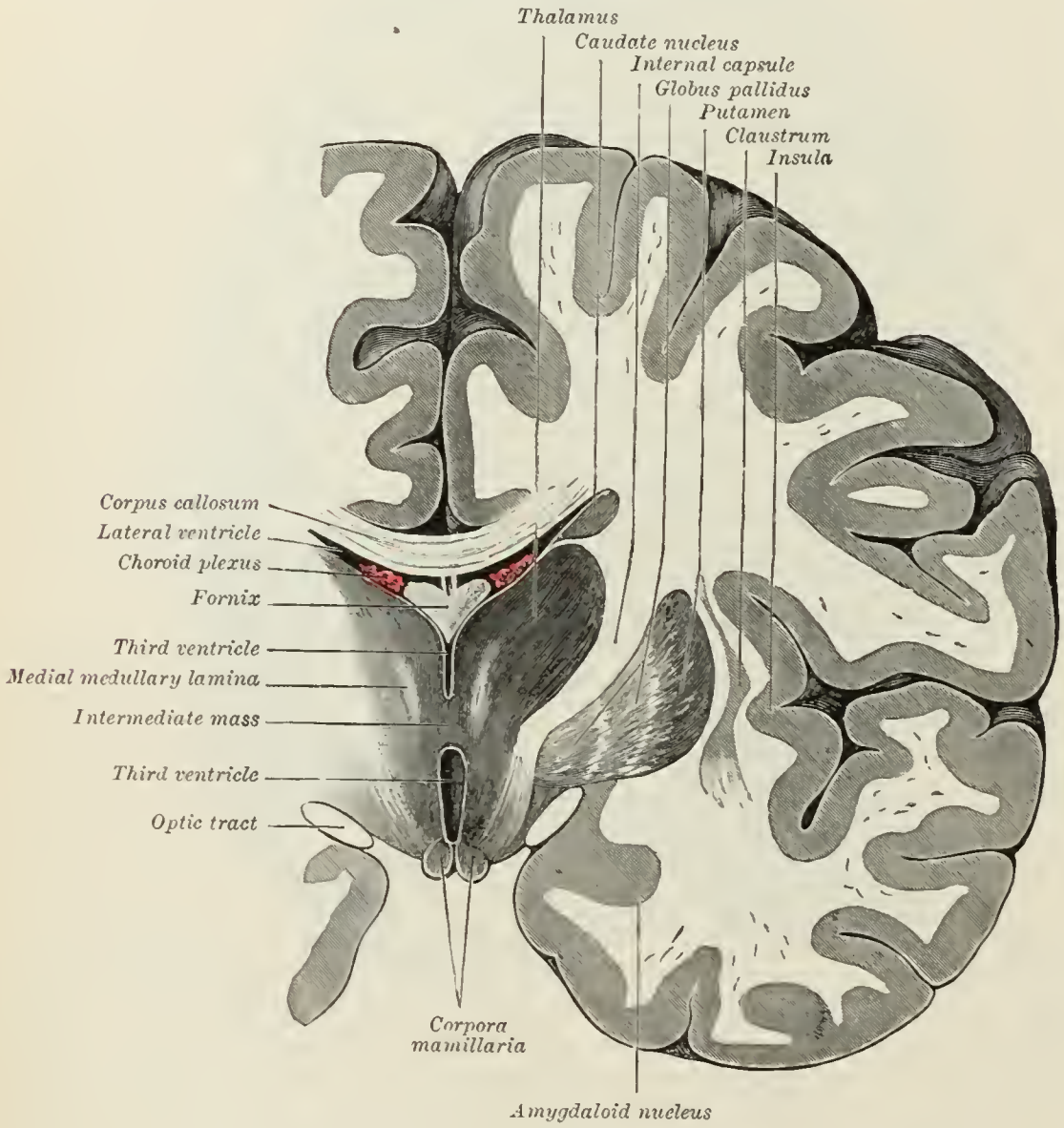

FIG. 718.—Coronal section of brain through intermediate mass of third ventricle.

Connections.—The thalamus may be regarded as a large ganglionic mass in which the ascending tracts of the tegmentum and a considerable proportion of the fibers of the optic tract end, and from the cells of which numerous fibers (thalamocortical) take origin, and radiate to almost every part of the cerebral cortex. The lemniscus, together with the other longitudinal strands of the tegmentum, enters its ventral part: the **thalamomammillary fasciculus** (*bundle of Vicq d'Azyr*), from the corpus mammillare, enters in its anterior tubercle, while many of the fibers of the optic tract terminate in its posterior end. The thalamus also receives numerous fibers (corticothalamic) from the cells of the cerebral cortex. The fibers that arise from