

late body, is partly continued into an eminence called the **lateral geniculate body**, and partly into the optic tract. The **inferior brachium** passes forward and upward from the inferior colliculus and disappears under cover of the **medial geniculate body**.

In close relationship with the corpora quadrigemina are the superior peduncles, which emerge from the upper and medial parts of the cerebellar hemispheres. They run upward and forward, and, passing under the inferior colliculi, enter the tegmenta as already described (page 792).

Structure of the Corpora Quadrigemina.—The **inferior colliculus** (*colliculus inferior; inferior quadrigeminal body; postgemina*) consists of a compact nucleus of gray substance containing large and small multipolar nerve cells, and more or less completely surrounded by white fibers derived from the lateral lemniscus. Most of these fibers end in the gray nucleus of the same side, but some cross the middle line and end in that of the opposite side. From the cells of the gray nucleus, fibers are prolonged through the inferior brachium into the tegmentum of the cerebral peduncle, and are carried to the thalamus and the cortex of the temporal lobe; other fibers cross the middle line and end in the opposite colliculus.

The **superior colliculus** (*colliculus superior; superior quadrigeminal body; pregemina*) is covered by a thin stratum (**stratum zonale**) of white fibers, the majority of which are derived from the optic tract. Beneath this is the **stratum cinereum**, a cap-like layer of gray substance, thicker in the center than at the circumference, and consisting of numerous small multipolar nerve cells, imbedded in a fine network of nerve fibers. Still deeper is the **stratum opticum**, containing large multipolar nerve cells, separated by numerous fine nerve fibers. Finally, there is the **stratum lemnisci**, consisting of fibers derived partly from the lemniscus and partly from the cells of the stratum opticum; interspersed among these fibers are many large multipolar nerve cells. The two last-named strata are sometimes termed the **gray-white layers**, from the fact that they consist of both gray and white substance. Of the afferent fibers which reach the superior colliculus, some are derived from the lemniscus, but the majority have their origins in the retina and are conveyed to it through the superior brachium; all of them end by arborizing around the cells of the gray substance. Of the efferent fibers, some cross the middle line to the opposite colliculus; many ascend through the superior brachium, and finally reach the cortex of the occipital lobe of the cerebrum; while others, after undergoing decussation (**fountain decussation of Meynert**) form the tectospinal fasciculus which descends through the formatio reticularis of the mid-brain, pons, and medulla oblongata into the medulla spinalis, where it is found partly in the anterior funiculus and partly intermingled with the fibers of the rubrospinal tract.

The corpora quadrigemina are larger in the lower animals than in man. In fishes, reptiles, and birds they are hollow, and only two in number (corpora bigemina); they represent the superior colliculi of mammals, and are frequently termed the optic lobes, because of their intimate connection with the optic tracts.

The **cerebral aqueduct** (*aqueductus cerebri; aqueduct of Sylvius*) is a narrow canal, about 15 mm. long, situated between the corpora quadrigemina and tegmenta, and connecting the third with the fourth ventricle. Its shape, as seen in transverse section, varies at different levels, being T-shaped, triangular above, and oval in the middle; the central part is slightly dilated, and was named by Retzius the **ventricle of the mid-brain**. It is lined by ciliated columnar epithelium, and is surrounded by a layer of gray substance named the **central gray stratum**: this is continuous below with the gray substance in the rhomboid fossa, and above with that of the third ventricle. Dorsally, it is partly separated from the gray substance of the quadrigeminal bodies by the fibers of the lemniscus; ventral to it are the medial longitudinal fasciculus, and the formatio reticularis of the tegmentum. Scattered throughout the central gray stratum are numerous nerve