The communication with the tympanic branch of the glossopharyngeal nerve is effected by the **caroticotympanic,** which may consist of two or three delicate filaments.

The **cavernous plexus** (*plexus cavernosus*) is situated below and medial to that part of the internal carotid artery which is placed by the side of the sella turcica in the cavernous sinus, and is formed chiefly by the medial division of the internal carotid nerve. It communicates with the oculomotor, the trochlear, the ophthalmic and the abducent nerves, and with the ciliary ganglion, and distributes filaments to the wall of the internal carotid artery. The branch of communication with the oculomotor nerve joins that nerve at its point of division; the branch to the trochlear nerve joins it as it lies on the lateral wall of the cavernous sinus; other filaments are connected with the under surface of the ophthalmic nerve; and a second filament joins the abducent nerve.

The **filaments of connection** with the ciliary ganglion *arise* from the anterior part of the cavernous plexus and enter the orbit through the superior orbital fissure; they may join the nasociliary branch of the ophthalmic nerve, or be continued forward as a separate branch.

The **terminal filaments** from the internal carotid and cavernous plexuses are prolonged as plexuses around the anterior and middle cerebral arteries and the ophthalmic artery; along the former vessels, they may be traced to the pia mater; along the latter, into the orbit, where they accompany each of the branches of the vessel. The filaments prolonged on to the anterior communicating artery connect the sympathetic nerves of the right and left sides.

THE CERVICAL PORTION OF THE SYMPATHETIC SYSTEM (PARS CERVICALIS S. SYMPATHICI).

The **cervical portion** of the sympathetic trunk consists of three ganglia, distinguished, according to their positions, as the **superior, middle,** and **inferior ganglia,** connected by intervening cords. This portion receives no white rami communicantes from the cervical spinal nerves; its spinal fibers are derived from the white rami of the upper thoracic nerves, and enter the corresponding thoracic ganglia of the sympathetic trunk, through which they ascend into the neck.

The **superior cervical ganglion** (*ganglion cervicale superius*), the largest of the three, is placed opposite the second and third cervical vertebræ. It is of a reddish-gray color, and usually fusiform in shape; sometimes broad and flattened, and occasionally constricted at intervals; it is believed to be formed by the coalescence of four ganglia, corresponding to the upper four cervical nerves. It is in relation, in *front,* with the sheath of the internal carotid artery and internal jugular vein; *behind,* with the Longus capitis muscle.

Its **branches** may be divided into **inferior, lateral, medial,** and **anterior.**

The **Inferior Branch** communicates with the middle cervical ganglion.

The **Lateral Branches** (*external branches*) consist of gray rami communicantes to the upper four cervical nerves and to certain of the cranial nerves. Sometimes the branch to the fourth cervical nerve may come from the trunk connecting the upper and middle cervical ganglia. The branches to the cranial nerves consist of delicate filaments, which run to the ganglion nodosum of the vagus, and to the hypoglossal nerve. A filament, the **jugular nerve,** passes upward to the base of the skull, and divides to join the petrous ganglion of the glossopharyngeal, and the jugular ganglion of the vagus.

The **Medial Branches** (*internal branches*) are peripheral, and are the **laryngopharyngeal branches** and the **superior cardiac nerve.**

The **laryngopharyngeal branches** (*rami laryngopharyngei*) pass to the side of the