

of and lateral to the posterior clinoid process, passing between the free and attached borders of the tentorium cerebelli. It runs along the lateral wall of the cavernous sinus, above the other orbital nerves, receiving in its course one or two filaments from the cavernous plexus of the sympathetic, and a communicating branch from the ophthalmic division of the trigeminal. It then divides into two branches, which enter the orbit through the superior orbital fissure, between the two heads of the Rectus lateralis. Here the nerve is placed below the trochlear nerve and the frontal and lacrimal branches of the ophthalmic nerve, while the nasociliary nerve is placed between its two rami.

The **superior ramus**, the smaller, passes medialward over the optic nerve, and supplies the Rectus superior and Levator palpebræ superioris. The **inferior ramus**, the larger, divides into three branches. One passes beneath the optic nerve to the Rectus medialis; another, to the Rectus inferior; the third and longest runs forward between the Recti inferior and lateralis to the Obliquus inferior. From the last a short thick branch is given off to the lower part of the ciliary ganglion, and forms its **short root**. All these branches enter the muscles on their ocular surfaces, with the exception of the nerve to the Obliquus inferior, which enters the muscle at its posterior border.

THE TROCHLEAR NERVE (N. TROCHLEARIS; FOURTH NERVE) (Fig. 776).

The **trochlear nerve**, the smallest of the cranial nerves, supplies the Obliquus superior oculi.

It *arises* from a nucleus situated in the floor of the cerebral aqueduct, opposite the upper part of the inferior colliculus. From its origin it runs downward through the tegmentum, and then turns backward into the upper part of the anterior medullary velum. Here it decussates with its fellow of the opposite side and emerges from the surface of the velum at the side of the frenulum veli, immediately behind the inferior colliculus.

The nerve is directed across the superior cerebellar peduncle, and then winds forward around the cerebral peduncle, immediately above the pons, pierces the dura mater in the free border of the tentorium cerebelli, just behind, and lateral to, the posterior clinoid process, and passes forward in the lateral wall of the cavernous sinus, between the oculomotor nerve and the ophthalmic division of the trigeminal. It crosses the oculomotor nerve, and enters the orbit through the superior orbital fissure. It now becomes the highest of all the nerves, and lies medial to the frontal nerve. In the orbit it passes medialward, above the origin of the Levator palpebræ superioris, and finally enters the orbital surface of the Obliquus superior.

In the lateral wall of the cavernous sinus the trochlear nerve forms communications with the ophthalmic division of the trigeminal and with the cavernous plexus

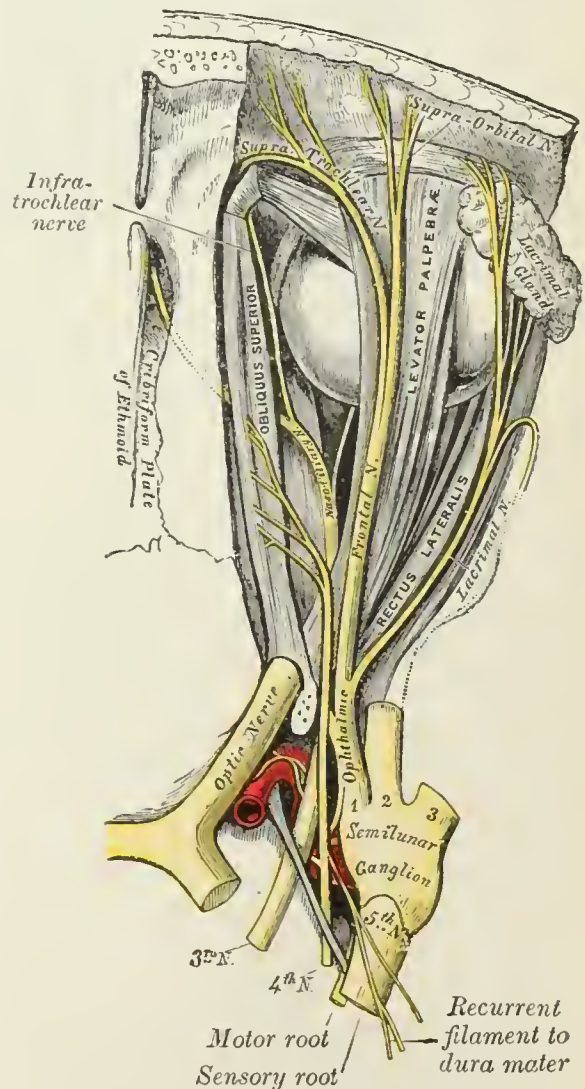


FIG. 776.—Nerves of the orbit. Seen from above.