HEAD AND NECK SPINAL CANAL—No. 4.

TO SHOW THE STRUCTURES LYING ON THE BASIS CRANII.

The vertebral arteries, after entering the spinal canal, pass upwards and inwards, pierce the arachnoid, and come to lie in the subarachnoid space in front of the medulla, and they extend forwards to the lower margin of the pons, where they unite to form the basilar artery. This artery is frequently tortuous, and passes forwards in the subarachnoid space to the anterior end of the pons, where it terminates by dividing into the two posterior cerebral arteries.

Vessels and nerves piercing the dura mater of the skull.

The internal carotid artery pierces the dura mater in the interval between the clinoid processes.

The second cranial nerves pass out through the optic foramina, carrying a prolongation of the dura mater

with them into the orbit.

The third pair of nerves pass through the dura at the side of the posterior clinoid process, and pass into the wall of the cavernous sinus. The small fourth nerves pierce the dura mater external to the former, and also pass into the wall of the cavernous sinus. The fifth pair of nerves pierce the dura at the apex of the petrous temporal bone, and pass into a recess called the cavum Meckelii in the substance of the dura, where the Gasserian ganglion is formed.

The sixth pair of cranial nerves pierce the dura mater internal to the former, by the side of the

basi-sphenoid, and pass into the interior of the cavernous sinus.

The seventh and eighth nerves pass outwards through the internal auditory meatus, and pass into the

petrous temporal bone.

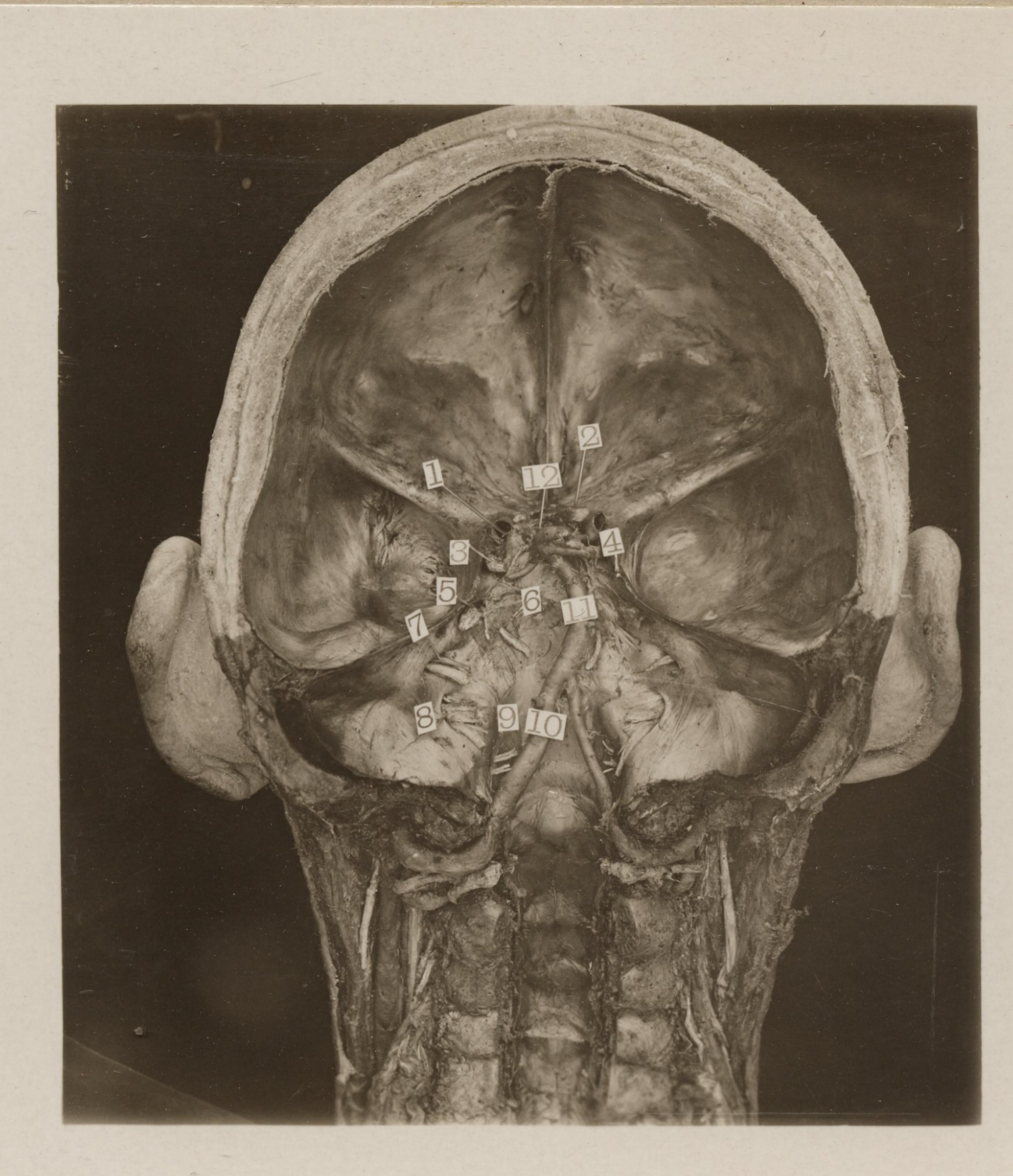
The ninth, tenth, and eleventh nerves pass out through the middle compartment of the jugular foramen, the ninth being separated from the others by a septum of dura mater.

The twelfth nerves pass out through the anterior condylar foramina and pierce the dura at that spot.

The figures indicate—

- 1. Internal carotid artery.
- 2. Second or Optic nerve.
- 3. Third or Oculomotor nerve.
- 4. Fourth or Trochlear nerve.
- 5. Fifth or Trigeminal nerve.
 6. Sixth or Abducens nerve.

- 7. Seventh or Facial and Auditory nerves.
- 8. Ninth, tenth, and eleventh or Glosso-pharyngeal, Vagus, and Spinal accessory nerves.
- 9. Twelfth or Hypoglossal nerve.
- 10. Vertebral artery.
- 11. Basilar artery.





D AND NECK-SPINAL CANAL. No. 4.

(EDINBURGH STEREOSCOPIC ANATOMY)