## CENTRAL NERVOUS SYSTEM.

BRAIN-No. 25.

DISSECTION TO SHOW THE CORPUS DENTATUM OF THE CEREBELLUM, THE CEREBELLAR PEDUNCLES

Most of the upper surface of the right cerebellar hemisphere has been removed, together with the inferior peduncle and the lower crossed fibres of the middle peduncle, which spread out over the corpus dentatum. The superficial coating of the superior peduncle and of the lateral fillet has been scraped away.

The corpus dentatum is a crumpled sheath of grey matter enclosing white matter, imbedded in the white core of the cerebellar hemisphere. Its anterior end presents a hilum or mouth from

which proceeds the superior peduncle.

The superior cerebellar peduncle arises mainly in the corpus dentatum. It also contains fibres from the cerebellar cortex, and part of Gowers' tract. Leaving the cerebellum it passes upwards, sinking deeper into the dorsal part of the pons and converging towards its fellow, to which it is united by the superior medullary velum, and disappears into the mid-brain under cover of the inferior quadrigeminate body. In the mid-brain the peduncles decussate; and many fibres end in the red nucleus. The rest pass on to the optic thalamus, where some end, while others proceed through it to the internal capsule and thence through the corona radiata to the Rolandic area of the cerebral cortex.

The lateral fillet is a flattened band of fibres which emerges from the groove between the pons and superior peduncle and lies on the outer side of the latter. It belongs to the Auditory System. It is formed from the corpus trapezoides—a group of transverse fibres in the pons derived from the cochlear nuclei of both auditory nerves and from the superior olive. The lateral fillet nucleus—a continuation of the superior olivary nucleus—also adds fibres to the fillet. The fibres end in the internal geniculate body, from which the auditory radiation proceeds, and the inferior corpus quadrigeminum, while a few end in the superior quadrigeminate body.

The figures indicate—

1. Corpus dentatum.

2. Stump of inferior peduncle and 5. Superior cerebellar peduncle.

3. Junction between pons and inferior peduncle. middle peduncle.

4. Lateral fillet.

lower fibres of middle peduncle. 6. Fibres forming anterior edge of

Superior corpus quadrigeminum. 10. Pineal body.

8. Inferior brachium connecting the inferior quadrigeminate body with the internal geniculate body, which is cut.

9. Pulvinar of optic thalamus.



