CENTRAL NERVOUS SYSTEM.

BRAIN.-No. 21.

MESIAL AND TENTORIAL SURFACES OF THE LEFT CEREBRAL HEMISPHERE WITH THE WHOLE EXTENT OF THE CINGULUM AND THE FORNIX EXPOSED.

Most of the callosal and hippocampal gyri, the isthmus, the dentate gyrus, part of hippocampus major, and the grey matter covering the anterior pillar of fornix have been removed, and the bundle of Vicq d'Azyr has been traced through the optic thalamus to its termination in the anterior nucleus.

The cingulum is a 'long association' tract lying in the limbic lobe. It begins at the anterior perforated spot, arches round the genu, and runs backwards on the corpus callosum lying in the callosal gyrus. Bending round the splenium, it is carried in the isthmus to the hippocampal gyrus, in which it extends forwards to the uncus, and from there to the temporal pole.

The fornix is an arched bilateral structure composed mainly of longitudinal fibres. It is united in its middle part to form the body of the fornix. The body lies below the corpus callosum, to which it is adherent posteriorly and united anteriorly by the septum lucidum. Its anterior end or apex divides into two anterior pillars, its base into two posterior pillars. The anterior pillars descend in front of the foramina of Monro, behind the anterior commissure, sink into the side walls of the third ventricle, and end in the corpora mammillaria in its floor. From each of these the bundle of Vicq d'Azyr ascends, through the optic thalamus, to end in its anterior nucleus. The posterior pillars diverge. Each turns round the optic thalamus, enters the descending horn of the lateral ventricle and becomes continuous with the fimbria and alveus. The alveus consists of fibres spread out in a thin sheet over the hippocampus major. The fimbria, composed of the rest of the fibres, is attached along the inner side of the hippocampus, and extends forward to the recurved end of the uncus. Where the pillars diverge some fibres pass across from one to the other, forming a thin sheet called the lyra.

The figures indicate—

- 1. Body of fornix. 2. Corpus mammillare. The anterior - cut anterior commissure. 18. Paracen ral lobule. pillar, and bundle of Vicq d'Azyr 10. Olfactory peduncle. Note connec- 19. Post-limbic sulcus. Above it is the are seen above it.
- 3. Fimbria.
- 4. Optic thalamus. Below it is the teg- 11. Optic chiasma.
- 5, 6, 7. Splenium, body and genu of corpus callosum.
- 8. Left lamina of septum lucidum.
- 9. Subcallosal gyrus. Behind it is the 17. Calloso-marginal fissure.
- tion between its inner root and quadrate lobule. subcallosal gyrus.
- mentum of mid-brain. 12, 13, 14. Anterior end, middle, posterior end of cingulum.
 - 15. Uncus.
 - 16. Marginal gyrus.

- 20. Internal parieto-occipital fissure.
- 21. Cuneus.
- 22. Posterior calcarine fissure.
- 23. Lingual gyrus.
 24. Occipito-temporal gyrus.



