

centre: 1. Cochlea; 2. Post. division of eighth pair. 3. Trapezium of same side, then crossing to, 4. Part of lemniscus; 5. Post. pair of corpora quadrigemina; 6. Internal geniculate body; 7. Corona radiata; 8. Cortex of auditory field. B. S.

The Cortical Origin of the Fibres of the Anterior Commissure in Man. By DR. N. POPOFF. (*Neurol. Centralblatt*, No. 22, 1886.)

The best authorities are at variance regarding the anatomical relations of these fibres. Some (Burdach, Meynert, Gratiolet, and others) traced the fibres of the anterior commissure into the temporal and occipital lobes; others claimed that they were spread throughout the whole area of the gyrus fornicatus. Ganser claimed that certain fibres of the anterior commissure originated in the olfactory bulbs. Popoff now publishes a case of softening in the occipito-temporal region. On the left side the softening involved the whole of the gyrus lingualis and the posterior portion of the inner margin of the gyrus fusiformis; on the right side the softened area was of a similar extent. On both sides the softening had penetrated as far as the lateral ventricles. The posterior surface of the right cerebellar hemisphere, and a considerable part of the superficial portion of the pulvinar were also softened. These foci of softening were due to a well-developed cylindrical aneurism of the basilar artery, all branches of this artery exhibiting marked atheromatous changes, and both *arteriæ occipitales* (Duret) having been blocked by large thrombi.

Microscopical examination of the brain-axis revealed degeneration of all the fibres of the posterior division of the anterior commissure. Gratiolet's visual fibres, which are near one focus of softening, were slightly affected, while the bundles of fibres from the olfactory bulbs to the anterior commissure exhibited no distinct changes. It must be noted, in addition, that the temporal lobes were not involved in the disease. From these facts the author concludes, 1. That the posterior division of the anterior commissure is mainly instrumental in connecting the two gyri linguales, but that it is extremely doubtful whether any considerable portion of these fibres take their origin in the temporal lobes; 2. That there is a negative proof that there are no fibres from the gyri linguales to the medulla oblongata; this being in accord with Charcot's views that focal lesions in the occipital lobe are not followed by secondary degeneration in the crura cerebri. Prof. Flechsig adds a note, reporting a similar case in corroboration of the above conclusions. B. S.

PHYSIOLOGY OF THE NERVOUS SYSTEM.

Recent Experiments on the Time-Sense, and on the Perception of Space.

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