

*Functions and Diseases of the Frontal Lobe in Man* [*Leistung und Erkrankung des menschlichen Stirnhirns, 1 Theil, Graz, 1902*]. (Reported in *Neurol. Cbl.*, Oct. 16th, 1902.) Anton and Zingerle.

There are still many unsolved questions about the functions of the frontal lobe; most investigators think that it contains centres for the muscles of the head and trunk, while Munk places them on the convexity of the hemispheres, and Horsley on the median plane of the marginal gyrus. It seems certain that in front of the sulcus præcentralis there are centres for the movements of the eye. The frontal lobe has an influence on the maintenance of the bodily equilibrium.

In their laborious study of the histology of this lobe the authors have found that the structure of the frontal lobe is not different from that of the other lobes. The great mass of the association fibres lies laterally to the ventricles; the projection and commissural fibres nearer to the middle line. There are regions in the frontal lobe in which the fibres of the corona radiata are scanty. Hence impairment of associations may be explained. The authors point out that injuries to the frontal lobe are frequently followed by atrophy of the opposite side of the cerebellum.

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*On the Localisation of Cerebral Hemianæsthesia* [*Zur Localisation der cerebralen Hemianästhesie*]. (*Neurol. Cbl.*, No. 21, 1902.) Schaffer.

Dr. Schaffer observes that there are centripetal nerve-tracts which end in the optic thalamus, from which another neuron issues which passes to the cerebral cortex. From a case of hæmorrhage of the thalamus studied by Probst, it appears that the thalamo-cortical neuron passes through the lamina medullaris externa to the side of the inner capsule, and, lying close to the ganglion lenticularis, reaches the median convolutions, the parietal lobes, and the gyrus fornicatus. Those fibres which go to the occipital lobe spring from the pulvinar and disperse in the stratum sagittale externum. Probst's results agree with those of Flechsig. According to Déjerine and Long, there is no distinct sensory system in the posterior limb of the inner capsule; the fibres which go to the cortex, as well as those going to the thalamus, mingle with the fibres of the pyramidal tract, which, beginning in the knee, spread to the retro-lenticular segment of the inner capsule. Hemianæsthesia occurs under two conditions—(1) a lesion of the thalamus opticus which may affect the ganglion in the passage of the fibres either on the bulbar or cortical side; (2) when the conducting tract between the thalamus and the cortex is affected, the thalamus remaining intact. In this case the lesion is of an extensive character.

Observations made both by the clinical and experimental methods prove that the motor functions, the cutaneous sensibility, and the muscular sense are localised in the same parts of the cortex—that is, in the motor zone, which ought to be called the sensori-motor zone.

Dr. Schaffer then gives a description of a case of hemianæsthesia, a labourer, æt. 18 years, who suffered for above a year from complete motor and sensory paralysis of the left half of the body. The loss of sensation, which approached the middle line, was complete. The sense