

*The Rate of Conduction and Refractory Period of the Human Sensory Neurone.* (Brain, vol. lvi, March, 1933.) Golla, F., and Antonovitch, S.

The authors found that the total refractory period of sensory nerves lasted 1.7σ and the partial refractory period 2.3σ. A gradual increase of the sensory response was noted when the second stimulus fell within the partial refractory period of the first and the stimulation interval was gradually increased. A sensation of reduplication was noted when the two stimuli were 11 σ apart. This sensation was accompanied by a diminution in the intensity of sensation. The mean velocity of conduction was found to be 75 m. per second. G. W. T. H. FLEMING.

*On the Connections of the Medial Cell-Groups of the Thalamus.* (Brain, vol. lvi, March, 1933.) Clark, W. E. le G., and Boggan, R. H.

As the result of experiments carried out on cats and rats the authors sum up their results as follows: The *nucleus dorsomedialis* sends fibres which run into the most medial fasciculi of the internal capsule, and then pass forward in close relation to the septum and the basal surface of the brain, to end in the granular cortex of the frontal lobe represented by *area prefrontalis orbitalis lateralis, intermedia and medialis*. This confirms results previously obtained in the rat's brain. It is interesting to note that in the higher primates, where this region of the cortex undergoes a remarkable expansion, the dorsomedial nucleus shows a progressive enlargement and a clear differentiation into lateral and medial elements.

The *nucleus submedius* sends fibres mainly to the lenticular nucleus *vis* the internal capsule.

The *nucleus anteromedialis*: In a rat there was atrophy of this nucleus following a lesion of the frontal pole of the hemisphere.

The *nucleus centralis lateralis* is unaffected by lesions of the frontal pole. It is closely related to the commissural fibres of the thalamus.

The *nucleus centralis medialis* is an intrathalamic mechanism concerned with the linking up of other thalamic elements.

The *nuclei of the mid-line* send fibres to one another and by means of short relays of neurones to the hypothalamus. G. W. T. H. FLEMING.

*Effects of Alcohol on the Chronaxia of the Motor System.* (Arch. of Neur. and Psychiat., vol. xxix, April, 1933.) Malamud, W., Lindeman, E., and Jasper, H. H.

In two-thirds of the cases investigated by the authors the normal flexor-extensor chronaxia relationship changed, with a tendency towards equalization or even reversal. In these cases there were marked co-ordination disturbances, but no motor or mental changes. In the other third of the cases the normal chronaxia differences between flexors and extensors became exaggerated. In these cases the mental changes predominated, the co-ordination not being affected to any appreciable extent. G. W. T. H. FLEMING.

*The Function of the Brain in Olfaction. I: Olfactory Discrimination and an Apparatus for Its Test.* (Journ. Comp. Psychol., vol. xv, April, 1933.) Swann, H. G.

Rats were used in the experiments. There is seldom any loss in the capacity for discrimination after a rest of 14 days. The discrimination is stable even after over-training. No fatigue effect was noticed. The quickness with which learning takes place seems independent of the odour used as a positive stimulus. It is probable that the superiority of rats over human beings is qualitative rather than quantitative. Controls verify that olfaction and no other sense is involved.

M. HAMBLIN SMITH.