

Another unusual feature was the relation between the vertex and the occiput in these same pairs. In both members of one pair the alpha rhythm was mixed at the occiput and subdominant at the vertex, while in the other pair it was dominant at the occiput and rare at the vertex.

G. W. T. H. FLEMING.

*Connections between the Striatum and the Substantia Nigra in a Human Brain* (*Arch. Neur. and Psychiat.*, vol. xxxviii, p. 550, Sept., 1937.) Rundles, R. W., and Papez, J. W.

Microscopic examination of a brain by means of Pal-Weigert sections through the brain-stem revealed bilateral degeneration of the caudate nucleus and the putamen with preservation of the globus pallidus. The striatum, including the caudate nucleus and the putamen, has direct fibre connections with the globus pallidus and, what is equally important, also with the substantia nigra. The ansa lenticularis, fasciculus lenticularis and the pallidostriatal tract contain no fibres of striatal origin. Symptomatology referable in individual cases to either striatum or to the substantia nigra is explained on the basis of an interruption of the strio-nigric relationship. Cortical projections to the centrum medianum and the arcuate nucleus of the dorsal thalamus are described.

G. W. T. H. FLEMING.

*Hypothalamic Regulation of Temperature in the Monkey.* (*Arch. Neur. and Psychiat.*, vol. xxxviii, p. 445, Sept., 1937.) Ranson, S. W., Fisher, C., and Ingram, W. R.

The normal rectal temperature of the monkey varies between 100° and 101.5° F. Post-operative hyperthermia develops in the monkey when bilateral lesions are made in the lateral part of the rostral portion of the hypothalamus, i.e., in the region around the fornix rostral to the mamillary bodies. Hypothermia develops when the bilateral lesions are situated dorsolateral to the rostral part of the mamillary bodies. Tests in the cold room need to be made on monkeys with hyperthermia, since cats with rostrally placed hypothalamic lesions showed impaired regulation against heat without any impairment of the capacity to resist cold. The most caudally placed lesions cause true poikilothermia. Recovery from hyperthermia occurred as a rule within twenty-four hours, but hypothermia lasted many days. In two cases of hyperthermia in man, the lesions were described by Alpers as confined to structures near the wall of the third ventricle.

G. W. T. H. FLEMING.

*Angio-architecture of the Substantia Nigra and its Pathogenic Significance.* (*Arch. Neur. and Psychiat.*, vol. xxxvi, p. 118, July, 1936.) Finley, K. H.

The substantia nigra is supplied with blood by four pial arteries—the basilar, the posterior cerebral, the posterior communicating and the choroid. There are no end-arteries. Most of the parenchymal arteries supplying the substantia nigra also supply neighbouring nuclei. Most of its veins drain blood only from this nucleus. Within the substantia nigra the density of the capillaries parallels closely the number of ganglion cells in any given part.

G. W. T. H. FLEMING.

*Researches on the Physiology and Pharmacology of the Autonomic Nervous System. I. Is the Inversion of the Adrenaline Effect by Treatment with 933 F due to Parasympathetic Excitation?* (*Arch. Sci. Biol. [Italy]*, vol. xxiii, pp. 14-21, 1937.) Lombroso, U., and Zumma, C.

The experiments were done on dogs. The answer is negative, since the effect persists after atropinization. The poison of *Bufo vulgaris* has all the biological and chemical actions of adrenaline, including the hypertensive action. However, while the hypertensive action of adrenaline is inverted by 933 F, that of *Bufo vulgaris* poison is unaffected.

P. F. METILDI (Chem. Abstr.).