of the faculty of modifying the stereotyped extrapyramidal synergias and of adjusting them to special purposive acts. The loss of function can be compensated to a more or less considerable degree by the ipsilateral precentral gyrus.

(2) The positive symptoms are: (*a*) Exhibition of the function of the intact extrapyramidal cortical motor areas which are no longer under the control of the anterior central convolution and are dissociated from its activity; (*b*) increased spinal reflex activity, the spinal reflex machinery being freed from the control exerted on it by the anterior central convolution. G. W. T. H. FLEMING.

The Effects of Certain Experimental Lesions of the Central Nervous System of Cats as Determined by some Specific Tests of Motor Performance. (*Bull. Neur. Inst. New York, vol. iv, p.* 451, *Dec.*, 1935.) *Chapell, M. N., and Pike, F. H.*

The authors give the methods and results of experimental lesions of the motor cortex and pyramidal tracts in cats. The destruction of a relatively large area of one parietal lobe did not give rise to any disturbance which could be construed as arising from an actual lesion of the motor cortex. The limitations which were found were due to an interruption of the afferent side of the motor circuit. After longitudinal incision of the decussation of the pyramidal tracts, recovery was so complete that only a slight motor deficiency remained.

A small lesion in the right motor cortex caused the permanent loss of skilled movements on the left side, and the animal, which was "left-handed", became "right-handed". The results of bilateral excision of the motor cortices were profound and widespread. Incision of the decussation of Forel did not give permanent loss of control of the movements of large groups of muscles.

The effects of two lesions in the same animal produced successively were often greater than would be expected from the study of the effects of each lesion taken separately. T. E. BURROWS.

The Significance of the Frontal Lobes for Mental Performances. (*Journ. Neur. and Psychopath., vol. xvii, p.* 27, *July*, 1936.) *Goldstein, K.*

After frontal lobe lesions we find: (1) There are disturbances in different fields of psychic performance, but no field is disturbed throughout its extent. (2) The basic change is not a change of any one field or any one performance but a change of total behaviour, with a lack of a particular behaviour. Active (abstract) behaviour is lacking, but concrete behaviour may be very well preserved. This is a disintegration of a higher function to a less complicated lower one determined more by the stimuli of the outer world. G. W. T. H. FLEMING.

Conditioned Reflexes in a Castrate Dog. (*Med. exptl.* [*Ukraine*], *Nos.* 7–8, *pp.* 33–44, 1935.) *Arkhangelskii, V. M.*

Experiments were performed on a dog for a period of 6 years after castration. The functions of the cerebral hemispheres were disturbed, especially for the first 2–3 years after the operation, the disturbance becoming less marked 5–6 years after the operation. During the first period after castration, new conditioned reflexes could not be established (or only with great difficulty). The usual external stimuli had no effect on the conditioned reflexes (this might have been due to the long practice developed by the dog for a period of 9 years of experiments). From 5–6 years after castration the old positive conditioned reflexes gradually returned as well as rough differentiations and old conditioned inhibitions, though the latter were not stable. Fine differentiation was still absent. Conclusion: Though the processes of excitation and inhibition gradually became more stable, there was no return to the normal.

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