Spitting movements were obtained from stimulation at the level of the supraoptic commissures in the region of the subfornical component of the medial forebrain bundle. G. W. T. H. FLEMING.

Hypothalamus and Temperature Control. (Arch. of Neur. and Psychiat., vol. xxx, p. 728, Oct., 1933.) Bazett, H. C., Alpers, B. J., and Erb, W. H.

The writers studied the brain-stems of cats with anterior decerebrations. They found that the animals had the capacity of reacting to cold and of regulating their own body temperature at a normal level (and probably of developing fever), in the absence of the corpus striatum and thalamus, which were not, therefore, essential. The presence or absence of temperature control appeared to be associated with the preservation of the hypothalamus just cephalic to the corpora mamillaria; the area included the nuclei surrounding the walls of the third ventricle and the infundibular nuclei. Such animals did not, however, show a normal hyperpnœa when exposed to excessive heat. G. W. T. H. FLEMING.

The Localizing Significance of Spasticity, Reflex Grasping and the Signs of Babinski and Rossolimo. (Brain, vol. lvi, p. 213, July, 1933.) Kennard, M. A., and Fulton, J. F.

The authors investigated certain signs in tame chimpanzees before and after circumscribed surgical lesions of various excitable regions of the cerebral hemispheres. They found that lesions of area 4 cause flaccid paralysis of the contralateral extremities, a Babinski response and diminution of tendon reflexes. These signs became more pronounced after bilateral lesions. Lesions limited to area 6 are followed by spastic paralysis of the contralateral extremities, together with forced grasping, and increase in tendon reflexes, the Rossolimo response and fanning of the toes. These signs were present for a longer period after bilateral lesions. Recovery of motor power may be extensive, but the sign of Rossolimo persists permanently, even after a unilateral lesion. When areas 4 and 6 are both removed from one cortex, very marked spasticity and forced grasping appear. The extensor Babinski becomes exaggerated, Rossolimo's sign is increased and tendon reflexes become permanently exaggerated. In monkeys and baboons complete bilateral extirpation of areas 4 and 6 is followed by permanent and complete loss of voluntary power. Forced grasping and spasticity are extreme, and the involuntary postural and righting reflexes of Magnus and de Kleijn may be demonstrated readily. The bodily reflex status of such animals appears to be identical with that of thalamic G. W. T. H. FLEMING. preparations.

Rôle of the Anterior Roots in Visceral Sensibility. (Arch. of Neur. and Psychiat., vol. xxx, p. 99, July, 1933.) Stone, T. T.

The author found from experiments on cats that the anterior roots do not contain antidromic sensory fibres conducting painful impulses from the viscera, such as that produced by forceful dilatation of the gall-bladder. Section of the posterior roots, if a sufficiently large number are severed, will abolish visceral pain produced in this way. The author concludes that the posterior roots are the pathways into the spinal cord for certain painful impulses from the viscera.

G. W. T. H. FLEMING.

Neuro-muscular Irritability in Relation to the Biochemistry of the Minerals. II. Influence of Changes in the Ca/P and Na/K Ratio in the Food. (Biochem. Zeitschr., vol. cclxii, p. 367, 1933.) Seekles, L., and Sjollema, B.

On a diet with a normal mineral composition, the physiological irritability is low and the AC/AO quotient (anode closing or opening) is less than 1. The composition of such a diet is Na/K = $I : 6 \cdot I$, Ca/P = $I : \cdot 78$, Ca/K = $I : 3 \cdot 52$, Ca/Mg = $I : \cdot 132$. With an abnormally high Na/K ratio of I : 542, the AC/AO quotient is generally, but not always, increased, but it is regularly and more definitely

LXXX.

9