Part III.—Epitome of Current Literature.*

1. Anatomy and Physiology.

Associated Facial, Vocal and Respiratory Components of Emotional Expression: An Experimental Study. (*Journ. Neur. and Psychopathol., vol. xvii, p.* 241, *Jan.*, 1937.) *Magoun, H. W., et al.*

The writers carried out experiments on monkeys and cats. They found that co-ordinated facial and vocal activity closely resembling that seen and heard during the expression of unpleasant emotion by the normal animal were obtained in response to electrical stimulation of a localized area in the mid-brain and pons of the lightly anæsthetized monkey and cat, and of the acutely decerebrate cat. The anterior portion of the hypothalamus was also found to be reactive in the cat. In both animals the reactive area in the midbrain includes the central grey matter of the aqueduct and a bridge of tissue extending from this region through the dorsal part and into the lateral and ventral portions of the tegmental area. Responses from the decerebrate cat showed that the effects were, partly, independent of afferent projections to the thalamus or cortex, and it would appear that within the reactive area there exists an efferent pathway or system for eliciting co-ordinated facial, vocal and respiratory activity during the expression of emotion in these animals. G. W. T. H. Fleming.

The Cerebral Circulation: Some New Points in its Anatomy, Physiology and Pathology. (*Journ. Neur. and Psychopath., vol. xvii, p.* 193, *Jan.*, 1937.) *Putnam, T. J.*

The writer summarizes the present position and points out that the cerebral arteries are not end-arteries, but possess a rich system of anastomoses. The liability of the brain toward vascular disturbances is due rather to the sensitiveness of the parenchyma than to deficiency in blood-supply. Different regions in the brain are characterized by marked differences in pattern of blood-supply. This the writer considers may be of importance in the localization of disease processes. The cerebral vessels are under vasomotor control by the sympathetic, but react much more strongly to chemical stimuli than to nervous impulses. Carbon dioxide is a particularly active vaso-dilator. The role of vasospasm in epilepsy and migraine is doubtful. A diffuse loss of myelin may be produced by a mild general anoxæmia and local loss of myelin by a mild local asphyxia, e.g., following venous thrombosis. The lesions which result simulate closely those of " perivenous encephalomyelitis ", multiple sclerosis and diffuse sclerosis. The writer suggests that these diseases are thrombotic in origin. Partial anoxæmia of the cortex leads to a loss of nerve-cells without softening. Evidence is advanced that the parenchymal atrophy in general paralysis is a similar diffuse process, the result of endothelial hypertrophy in the capillaries. G. W. T. H. Fleming.

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