

Part III.—Epitome of Current Literature.*

1. Anatomy and Physiology.

The Rôle of the Parasympathetics in Emotions. (*Psychol. Rev.*, vol. xl, p. 368, July, 1933.) Kling, C.

The writer points out that in fear quite half the bodily changes are expressed by the cranio-sacral outflow, that the degree of fear corresponds somewhat to the degree of parasympathetic influence, and that in terror the parasympathetic influence is manifestly dominant over the sympathetic. The evidence to support these statements consists in the fact that cardiac inhibition is most obvious in fear states, and the fall in blood-pressure and syncope are both due to splanchnic vasodilatation. The spastic condition of the œsophagus reported as "a lump in the throat" or a feeling of "the heart sticking in the throat", and the sensations of tightness in the throat which appear suddenly in terror and gradually in grief and worry and other chronic fear states, are parasympathetic in origin, since the vagus and spinal accessory are responsible for the innervation of the muscular coat of the œsophagus. The "dreadful scream of terror" due to reflex spasm of the laryngeal muscles with the simultaneous contraction of the chest cavity is due to the action of the vagus. The sinking sensation felt in the pit of the stomach is due to gastric contraction via the vagus. Intestinal hypermotility leading to diarrhœa or tonic spasm of the circular muscles of the intestine leading to constipation may both be due to vagus stimulation. A variety of other symptoms of worry, fear and terror can be shown to be due to stimulation of the parasympathetic. This parasympathetic view of the emotions is supported by Bechterev. In mild states of fear the vagus is almost solely in control. Amongst 800 students in psychology the writer found between the emotional depression traits of neurasthenia and reflex vagotonic symptoms a correlation of .47. There are many individuals who habitually express almost any kind of emotion by a characteristic pattern of vagotonic disturbance. Vagus dominance is extremely unpleasant in affective tone, while sympathetic dominance may be pleasurable. The writer finds no evidence for the reciprocal innervation of the two divisions of the autonomic system, but instead considers a double excitement and mixture of symptoms to be the rule.

G. W. T. H. FLEMING.

Respiratory and Pupillary Reactions Induced by Electrical Stimulation of the Hypothalamus. (*Arch. of Neur. and Psychiat.*, vol. xxix, p. 1179, June, 1933.) Ranson, S. W., and Magoun, H. W.

The authors explored the hypothalamus of 22 cats by means of the stereotaxic instrument of Horsley-Clarke. Respiratory acceleration associated with running movements was obtained from stimuli in the lateral hypothalamic area and in the region surrounding the fornix. Marked bilateral dilatation of the pupils was obtained from the same two areas. Bilateral constriction of the pupil resulted from stimulation of the optic tract, the pre-tectal area, and points near the line of separation between the central grey matter, and the tegmentum at the level of the posterior commissure.

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