

Reviews and Notices of Books.

Conditioned Reflexes. By I. P. PAVLOV. Translated by G. V. ANREP.
London: Oxford University Press: Humphrey Milford. 1927. Pp.
430. Price 28s. net.

PAVLOV'S experiments are undertaken entirely from the physiological aspect and the unit on which his researches are based is naturally the reflex. He advances arguments to show that the so-called instincts do not differ in their nature from the more complex reflexes and that all mental phenomena may be described in terms of reflex response. The reflexes involving the cerebral cortex are characterized by what is called signalization and the intervention of distance-receptors. They are acquired after birth and constitute the conditioned reflexes as opposed to the unconditioned inborn reflexes. The study of the circumstances governing these conditioned reflexes led to the study of inhibition. This showed that the cortex was concerned not only with positive conditioned reflexes but with negative or inhibitory conditioned reflexes, and that a sensory stimulus may result in inhibition as well as excitation. Various types of inhibition are described and this leads to a discussion of experiments illustrating the analyzing and synthesizing activity of the cerebral hemispheres. Irradiation and concentration of nervous processes are the subject of further investigation and this is followed by evidence for the identification of sleep with internal inhibition and all the implications associated with this. The effect of damage to the cerebral cortex on the excitations and inhibitions of reflexes is discussed at length and the difficulties and unsolved problems associated with conditioned reflexes are dealt with.

The last lecture is devoted to applications to man. While these applications must be made with caution Pavlov believes that the "neurasthenic" type of neurotic corresponds to the excitable type of dog, characterised by prolonged periods of exhaustion, since the nervous system is always subjected to continuous wear and tear. The "hysteric" type of neurotic is said to correspond to the inhibitable type of dog with brief periods of excitability when control is in abeyance. Many of the experiments seem to suggest possible methods of therapy by developing internal inhibitions. The special form of inhibition involved in hypnosis is referred to and the analogy of suggestion with many of the conditioned reflexes obtained in the experiments is remarked.

The English-speaking medical public owe a deep debt of gratitude to the Royal Society for making possible, and to Dr. Anrep for so admirably carrying out, the translation of this work, which is without doubt the most important contribution to the physiology of the nervous system since the publication of Sherrington's classic in 1906.

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