# 1927.] PSYCHOLOGY AND PHYSIOLOGICAL PSYCHOLOGY. 659

## The Localization of the Origin of Voluntary Impulses [À propos de la Localisation d'Origine des Impulsions Volontaires]. (L'Encéph., March, 1926.) Fontecilla, M.

In a very compressed paper the author advances the view that the cerebral cortex is subordinate to a double nucleus situated at the third ventricle, having two aspects—vegetative and personal. W. D. CHAMBERS.

#### 2. Psychology and Physiological Psychology.

### Verbalization in Multiple Choice Reactions. (Psychol. Review, November, 1926.) Rexroad, C. N.

This article shows the results of a series of experiments in multiple choice reactions, and presents data that are readily interpretable only if it be assumed that the individual is almost constantly making verbal responses, and that these responses play a large part in setting off overt responses. WM. McWILLIAM.

### Playing School—A Compensatory Mechanism. (Psychol. Review, November, 1926.) Lehman, H. C., and Witty, P. A.

In this article the authors continue a comparison of the study of play in white and negro children, taking as their subject "playing school." It is shown that girls of both races engage in this activity much more commonly than boys. That negro children participate in playing school more frequently than white children, and that both race-groups participate less frequently in this activity as age increases.

The writers suggest that the negro children engage in playing school more commonly than white children because this activity symbolizes to them knowledge, power and prestige, which they are unable to achieve in the world of actuality. This form of makebelieve play may be a compensatory activity.

### WM. MCWILLIAM.

# Recent Work of Pawlow and his Pupils. (Arch. of Neur. and Psychiat., April, 1927.) Gant, W. H.

#### I. Conditioned Reflexes.

Pawlow considers all acts to be reflex, and distinguishes two kinds of reflex—the inborn, physiological, unalterable or unconditioned reflex, and the acquired, usually called psychic or conditioned reflex. The flow of saliva resulting from the sound of a bell alone, because it formerly accompanied feeding, is a conditioned reflex. In order to form the conditioned reflex, the conditioning stimulus must be associated with the unconditioning stimulus a certain number of times (twenty or more, depending on the dog and other conditions). The conditioning stimulus must always precede the unconditioning stimulus. An example of what is called a conditioned reflex of the second order is given by blowing a whistle at the same time as a conditioning stimulus formed by a light is given. Soon the whistle