The Psycho-galvanic Reflex: A Review. (*Brain, vol. xliii, Part* 1, *May*, 1920.) *Prideaux, E.*

For further investigations into the psychological study of the psycho-galvanic reflex a very good case has been made out. It would seem that we have in this reflex a valuable objective sign, which may help in the elucidation of many unsolved problems in psychological medicine, and which we cannot afford to disregard. As a good general introduction to the subject, and as a useful survey of the history and present position of knowledge concerning it, this paper of twenty-four pages may be commended. The headings of its sections may be quoted: "Apparatus Employed," "Phenomena of the Reflex," "Nature of the Reflex as a Physical Problem," "Physiological Processes concerned in the Causation of the Reflex," "Clinical and Psychological Study of the Reflex." Its use as a "complex" indicator, and its behaviour in hysterical anæsthesia, in the hypnotic state, and in certain psychoses, are discussed. A bibliography giving fifty-three references is appended.

SYDNEY J. COLE.

A Psychological Interpretation of Essential Epilepsy. (*Brain, vol. xliii, Part* 1, *May*, 1920.) *Clark, L. Pierce.*

This interpretation of essential (genuine, idiopathic) epilepsy presupposes a characteristic mental constitution, independent of any deterioration that may result from fits. In all epileptics, sane or insane, there is an affective disorder—an inherent deficiency in the mental make-up. That it is from this that the emotional and intellectual deterioration gradually proceeds is observable long before the first fit. The convulsive stage is but a further unfolding of the original make-up.

This make-up is revealed in the defects of adjustment at the several epochs of stress. In infancy the potential epileptic is, from birth, fretful and irritable. As time goes on, he proves disobedient and unmanageable. With these behaviour defects there is a hyperactivity of physical and intellectual development. His mood is highly changeable—one moment contented, the next irritable beyond appeasement. Continuity of purpose is lacking in his play, and he cannot for long be amused. At school he is little amenable to discipline. His interest and attention vary. Brilliant in some subjects, he is grossly backward in others. His adjustment to his environment being incomplete and unsatisfying, he becomes self-important and sensitive. Childhood is thus a period fruitful in stresses, and fits often begin then.

At puberty, adjustment to work and to social demands becomes increasingly burdensome. The potential epileptic will not take a proper attitude of apprenticeship. The requirements of interdependence and subordination to a main purpose irritate him beyond endurance. He is selfish, moody, irascible, and inclined to think he is persecuted. Now begins a habit deterioration, partly protective; he eases the stress by evading the exactions of strict behaviour. So we see, not fits as yet, but various dissipations. Having no intimate friends he is a free-lance, eager to work his will upon the world and largely able to do so. Social

trammels being in great part shaken off, his intellectual efforts run with less stress than the normal, but in the consummation of his task the influence of social and family custom fails as a directing force. Thus new hindrances arise, which wear down his invulnerability, till at last some trivial stress appears to be the precipitator of a frank epilepsy. The main reason why most epileptics are unmarried is not that fits are a bar to marriage, but that the epileptic rarely has the character-equipment for marriage. Emotionally and sexually he rarely develops beyond the level of puberty; he lacks the tenderness of feeling and the capacity for self-sacrifice characteristic of adult love.

The muscular convulsion is comparable to the impulsive movements of the fœtus and infant, which become slowly inhibited by voluntary control at the end of the nursing period. The motivation of these impulsions is unconscious; they occur even in brainless embryos. The loss of consciousness in the epileptic fit is, psychologically, a protective mechanism—a retreat to an early stage in development, permitting a revival of the fœtal impulsions.

Treatment consists, not in the drugs beloved of text-book writers and general practitioners, but in an intensive educational training designed according to the defects and capabilities of the individual.

SYDNEY J. COLE.

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2. Neurology.

Fissural Pattern in Four Asiatic Brains. (*Journ. of Anatomy, vol liv, Part* 4, *July*, 1920.) *Cole, S. J.*

The brains in this research are Chinese, Japanese, Goanese, and Arabian respectively, and the specimens were obtained from the racial series in the museum of the Royal College of Surgeons. The drawings included in the paper are prepared according to the method employed by the author in his study of three Chinese brains in the *Journal of Anatomy*, 1911. The picture of the mesial and basal surfaces are tracings from photographs, modified only so far as to indicate, by a slight break in the line of the sulcus, the presence and position of any bridging sulcus contained within it. A different method is adopted for the picture of the convex surface, which not only gives indication of deep gyri, but departs so much in another respect from photographic outline that it becomes "a sort of Mercator's projection," after Kohlbrugge's manner. Cole indicates that without this method, which he describes in his introduction, a comprehensive record of the fissural pattern could not be given without cumbersome and costly multiplication of pictures from numerous points of view. H. DEVINE.

A Case of Myasthenia Gravis. [*Un Cas de Myasthénie Paralytique.*] (*L'Encéphale, July* 10*th*, 1920.) *Claude, H., and Porak, R.*

Immediately after an attack of "influenza" (?) which kept him from work for 8 days, a man, æt. 53, complained of diplopia and tinnitus aurium, with general weakness and susceptibility to fatigue, increasing during the next two months. There was also double ptosis. The limbs showed no actual paralyses, and the tendon reflexes were