

the observer proceeds to corresponding pairs in higher years. Melville points out that the Binet test age is more significant as an indication of capacity to profit by school instruction, and the maze test as an indication of fundamental ability to meet simple situations in daily life. He considers that if the subject is failing in school or life but passes these tests to age, or on the average of the two to an age over 12, he should not be classed as mentally subnormal.

The object of the book is to provide a uniform procedure for psychological or social workers, who make preliminary studies of cases before they are brought to a medico-psychological laboratory or clinic for complete investigation. They thus serve a purpose of preliminary weeding out. Unlike some enthusiasts the author gives a warning that the Binet test age is a convention to be interpreted in the light of all available data, and is not an exact expression of the mental age of the subject. He concludes that none but specialists in mental and physical disorders should make a diagnosis of mental retardation.

The little volume also contains data on the limits of physical dimensions usually compatible with normality, and a section on clinical interpretation culled from the works of Binet, which will be read with appreciation by all.

F. S.

Part III.—Epitome of Current Literature.

1. Psychology and Psycho-Pathology.

The Essentials of an Education. (*Ment. Hyg.*, April, 1920.) Paton, S.

The essentials of an education are: (1) a knowledge of actual life; (2) a definite impelling interest in some phase of life; (3) the recognition from actual experience of one's own capacity and limitations of adjustment; (4) the acquirement of the emotional attitudes and habits necessary for perceiving and adapting to reality. These ensure against nervous breakdown, but are not synonymous with modern education, which views the problems of man as he was or may become, not his reactions as he is. Life is a process of slow adjustment, and must be accepted as it is. If elemental biological facts are not faced squarely serious personal difficulty arises. Conflict to the point of mental depression can be so met as to preserve sound personal judgment on public questions. Individual conscious processes are not so essential to adjustment as is believed: decision is made from well-grounded feeling, often not from reason which can be logically detailed. An outstanding example is Abraham Lincoln, whom science cannot explain by his heredity or early experiences. Successful life implies consciousness of the reality of environment, and avoids the visions of intemperate idealism. The student is not taught to know himself, to estimate the present, and to intelligently adjust to immediate circumstances. Hence the many graduates of highest distinction who are subsequently failures, being finally seen in hospitals, reformatories, prisons or asylums. The numbers in insane institutions are more than those in colleges or universities.

The child is often taught to "dodge reality"; spoiling extends to adolescence; he at last takes refuge in academic environment or philosophy, and "suppressions" result. Efforts toward compensation narrow the channels for the emotions, distort mental vision, and misshape the personality. Sensitiveness with feeling of superiority cause withdrawal from the social "herd"; criticism becomes a slight; cynicism appears. These are a defence against reality, and may determine enthusiastic radicalism, ardent pacifism with "conscientious objection" (a symbol of the personal peace desired but not attained), or an "intellectualism" which decries the modern thinker as a "revivalist." Apology for defect and a constant personal "grouch" may occur, recognised by (a) the replacement of facts by symbols, (b) vague expression where there should be concise and accurate statement of fact, and (c) protective reactions embodied in emotion and intellect. The personality is disorganised; quixotic pleading for tolerance and liberal-mindedness is co-existent with intolerance of the common-sense values of life. In aiding forces of reaction they find outlets for the release of personal tensions due to "conflicts." In this group are also academic mystics, sensation-mongers, supporters of "jazz-journals," "who display an ebullience of misdirected emotion and incoherent thought" (Ghent). Formal education requires the realisation of two biological principles—(1) innate personal dispositions which cannot be changed, but should be employed to best advantage; (2) the needs thus created should acquire satisfaction by gaining adjustment to reality. A scheme of investigation is adduced and suggested for embodiment in the educational system, where it postulates the intelligent direction of every student individually. Particular emphasis is laid on the *commencement* of each of the three important epochs, as here briefly indicated. (1) School period: General physical and emotional characteristics, whether learning by ear, eye, or with assistance of muscular system; fatiguability, mental and physical. Motor adjustments are correlated with the conscious processes. The present system suppresses intelligent curiosity, which should be preserved. (2) High school: As (1), also rate and character of development, femininity or masculinity; home instruction in sex hygiene to be supplemented and clearly presented, destroying half-truths which disorganise personality; detection of imperfect emotional adjustment or the shunning of reality. Are situations frankly met which cause embarrassment or perplexity? Special aptitudes or interests should already be indicated. (3) College or university: As above; reasons for entry, dominant purpose or "drifting"; personal creativeness (observation, reproduction, pertinence). Presence of "wishful thinking"? Actuality replaced by imaginary situations? Well balanced personality and comprehension of culture? If disturbances, extent and nature of compensation reactions.

The chief duty of the teacher should be to estimate the individual's adaptive capacity, and to assist its successful development. The teacher's personality is of particular import: he must be trained in discovering and analysing the foundation forces of character. Von Moltke declared that the Prussian schoolmaster won the Franco-Prussian War by his influence on the national life: this upheld

autocracy. Can democracy develop a superior type of teacher who will rightly direct the essential factors of character and temperament, thus establishing in personality the foundations of democracy and of lasting peace? On this biological view the teacher becomes a recognised leader in the determination and security of civilisation.

JOHN GIFFORD.

Organ Inferiority and its Psychological Compensation. (Summary of Adler's Monographic Study.) (*The State Hosp. Quart.*, November, 1920.) Haviland, H. C.

In beginning the study of organ inferiority, Adler starts with the consideration of the urinary apparatus. The ætiology of renal disease is obscure. In cases of genuine or primary kidney disease the final cause cannot be traced beyond the kidney. The nephrotoxic theory (scarlet fever, etc.) fails because we know of no poison which attacks the kidney and at the same time only the kidney. The theory that the kidneys are more prone to disease because of their function as excretory organs fails also. Why is it that, with bacteria in the blood, with chronic metabolic anomalies, with alcoholism, pregnancy, or chill, the kidneys are so often found healthy? We are, therefore, forced to the third view—that most renal diseases are caused by a fundamental inferiority of the urinary excretory apparatus. One of the strongest arguments for this theory is heredity. In many cases it becomes questionable just where the aspect of disease begins for us. It is necessary to pursue the theory as regards many, if not most, diseases. Can the inferior organ by treatment be aroused to sufficient function and to additional development? Often it can in young people, often it cannot in older patients.

Why do certain diseases just attack a certain organ? The hypothesis accepted is that there is a primary inferiority of this organ as a basis for the disease. Tuberculosis is probably always localised in an inferior organ. So also are diphtheria, pneumonia, typhoid, cholera, and dysentery. At the same time the part the bacterial invasion plays is not denied, though many pathogenic organisms can be demonstrated in well people. He therefore drops this conception of "absolute" inferiority for these widely spread diseases, and introduces the term "relative" inferiority.

(1) *Morphologic inferiority.*—The shape, size, and individual proportions of tissue, individual cell complexes, of the whole or limited parts of the apparatus may be deficient. Thus one of the individual's organs has to perform necessary functions with a lesser stock of tissue and one less capable of resistance, and the hour comes when the insufficiency of the organ is revealed. Foetal defect is due to heredity or prenatal influences, and the same or different organs may be affected. Organic inferiorities close to the surface have passed up to to-day under the name of stigmata. Manifold inferiority may occur extending through several organs.

(2) *Functional inferiority.*—This consists in a quantity or quality of work insufficient to satisfy a standard of required effectiveness. Shock of any sort, infections, exhaustion, overwork of a bodily or psychological nature, disturbance of temperature, will usually show their effects. We