

### 5. Mental Deficiency.

*Mental Defectiveness: The Psychological and Psychiatric Diagnosis of the Higher Grades.* (Med.-Legal Journ., July-August, 1931.) Meagher, J. F. W.

To consider, as some do, 2 or 3% of the general population to be feeble-minded is erroneous; from the standpoint of social efficiency  $\frac{1}{2}$ % is a more correct estimate. When the ætiological difficulty is in the germ-plasm, the results of tests are usually clear cut. Where the condition is acquired, the testing shows much unevenness. The normal level should be taken as ten years, and many individuals with a lower mental age are quite successful in a humble way. For the calculation of I.Q. 14 years is preferable to 16. Test answers are one thing, and interpretation is another. No tests will take the place of knowledge and experience on the part of the examiner. The Terman scale is too linguistic, and should be supplemented by tests of a performance character; the Binet and the Porteous maze test is the best combination. For proper mental testing we must understand the viewpoints and problems of children. Other mental traits must be considered, in addition to intelligence, if we would make a satisfactory character study. But the fact that we do not know what the "intelligence" which we measure is does not constitute a valid objection to intelligence testing; we measure electricity without knowing what it is. Development of responsibility depends upon the development of certain social attitudes, which come with the ripening of the instincts. The old estimates of the percentage of defectives amongst criminals were much too high. The intelligence in criminals who commit serious crimes equals that of the population from which they come.

M. HAMBLIN SMITH.

### 6. Pathology.

*Anatomical Changes in Schizophrenia.* (Arbeiten aus der Deutschen Forschungsanstalt, München, 1931.) Spielmeyer, W.

Three possible sources of error must be borne in mind before concluding that any given *post-mortem* finding is definitely connected with schizophrenia. The first is a matter of common knowledge, namely, that other coexistent conditions may produce anatomical changes in the brain, and that it is impossible to assess, *post-mortem*, whether the psychosis or the organic disease is the responsible factor. The second relates to changes, hitherto ascribed to dementia præcox, which Prof. Spielmeyer has found in the brains of young individuals who had died healthy. As examples are given the presence of cell-free zones in the cortex which used to be interpreted as cellular losses, and an abundance of fatty material in neuroglial cells and in the walls of blood-vessels, which were formerly looked upon as pathological changes, or signs of senile degeneration. Thirdly, the fact that linear, necrobiotic areas of irregular distribution, with the blood-vessels intact, have been demonstrated in other conditions, notably eclampsia, various

kinds of intoxication and infection, epilepsy and conditions of psychomotor excitation. Prof. Spielmeyer believes that such changes can be produced by circulatory disturbances, the underlying factor being, not a definite disease, but some functional derangement. They could thus be indirectly related to dementia præcox. In spite of the frequency of negative *post-mortem* findings, he is of opinion that dementia præcox is beyond doubt associated with organic changes in the brain, and he bases this conclusion on the following positive findings (from selected cases) :

(1) Cellular loss in the third layer of the cortex, as well as in the deep layers, sometimes associated with large accumulations of fatty material.

(2) In acute cases, phenomena indicating active destruction in the nerve-cells, with regressive changes in the neuroglia, and often the presence of large amounts of disintegration products.

Although these findings sufficiently establish the organic basis of the disease, they do not represent a definite picture on which alone a diagnosis can be given.

S. ANTONOVITCH.

*The Distribution of Calcium between Blood and Cerebro-spinal Fluid in Mental Diseases.* (*Amer. Journ. Psychiat.*, July, 1931.) Katzenelbogen, S., and Goldsmith, H.

The blood-calcium in organic psychosis ranges between 8.1 and 10.9 mgrm. %. In schizophrenia, manic-depressive psychosis and mental deficiency blood-calcium was found within normal limits. The cerebro-spinal fluid calcium showed an occasional slight fall in schizophrenia and an occasional rise in organic psychosis. In manic-depressive psychosis and mental deficiency only normal figures were found. The calcium content cannot be helpful for diagnosis. The passage of calcium from blood into fluid follows the trend of bromide. There is evidence that the barrier functions somewhat differently in schizophrenia and organic psychosis. The abnormal permeability suggests that the dysfunction of the barrier presents a part malfunction of a diseased organism.

M. HAMBLIN SMITH.

*Gastro-intestinal Motor Functions in Manic-Depressive Psychoses.* (*Amer. Journ. Psychiat.*, July, 1931.) Henry, G. W.

X-ray observations were made in 96 cases. In the manic phase the position of the viscera is from 1 to 2 in. higher than in the depressive phase. Hypomanic patients present a marked increase and depressed patients a marked decrease in visceral tension and motility. Without medical aid some depressed patients retain food residue for a period longer than two weeks.

M. HAMBLIN SMITH.

*Chemical Changes in the Blood during the Course of Alcoholic Delirium Tremens.* (*Ann. Méd. Psych.*, February, 1931.) Toulouse, E., Courtois, A., and Russell, Mlle.

The authors, who have carried out investigations for a period of two years, find that the urea, sugar and cholesterol content of the