Peritz, Georg. PSYCHOPATHOLOGY OF ARITHMETICAL COMPUTATION. [Deutsche Ztschr. f. Nervenhe., Vol. LXI, p. 234.]

Everyone who has treated patients with brain wounds is impressed by the frequency with which wounds here localized are accompanied by disturbances of the faculty of computation. On the other hand, few cases of this sort are cited in connection with diseases of the brain and with congenital weak-mindedness. In a neurological convention the author offered a case of amnesic aphasia accompanied by pronounced disturbances of the faculty of computation. Liepmann made the observation that this disturbance usually accompanied motor aphasia. Other writers mention cases in which hemianopsia was present with disturbances of the faculty of computation, but offer no examples in support of Liepmann's view. According to the opinion of the author, disturbance of the faculty of computation is not a pronounced symptom of motor aphasia, but it may arise in this connection in those suffering from brain wounds, if the wounds are sufficiently extensive. In the present article the author limits himself to disturbances of computation connected with wounds of the occipital region and with hemianopsia, and arrives at the following conclusions: There is disturbance of the faculty of computation in injuries of the occiput only when the left brain half is injured; where there is injury of the right side the capacity is intact. Where there is an extensive bilateral wound there is serious disturbance of computation, but this does not seem to be the case where there is bilateral hemianopsia of only the lower quadrants. The center for arithmetical performances seems to be situated in the left gyrus angularis. There is a functional relation between the arithmetical faculty and the optic system, so that it may be assumed that the faculty of counting receives support from the visual regions even when the individual does not belong to the visual type. The ideas of form are not always disturbed together with the capacity of computing. It must therefore be assumed that these two faculties are not inseparably connected, of which further evidence is the fact that good mathematicians are often not clever at doing sums in the head. Where there is disturbance of the ideas of form, optical disturbances of other sorts cannot be inferred from this fact alone, and it would seem that in the optical region there is great differentiation of faculty. The disturbances of the capacity of computation are perceptible in the time it takes to do sums and in the inaccuracy of results. The retardation of the processes are associated with disturbances of comprehension, understanding, and concentration. The inaccuracy of results is also affected by the same causes. [J.]

Reichardt, M. THEORY CONCERNING THE SOUL. [Journ. f. Psychol. u. Neurol., Vol. XXIV, p. 168.]

The brain is the seat of many vital processes, but only a part of these enter into subjective consciousness, and an unbridged chasm exists

between certain of the life processes in the brain and those conscious phenomena which constitute immediate inner experience. In the opinion of the author the real motive force of life is not a quality inherent in the psychic factor, but one dependent on a fore-psychic central station of the highest order. Consciousness is to a certain extent an instrument of the central station, thus serving the organism in its relations to the environment and in the performance of purposeful activities. This station, however, is central, not only for the psychic activities, but also for the entire physical organism, inclusive of the vitally important vegetative nervous system, controlling the spontaneity and purposeful self-direction of all the phenomena of life. From it proceed the impulses of the psychic sphere, of the emotional life. Attention and appetite, too, are properties of the fore-psychic processes. What is called soul, therefore, in the original sense of the word, is an ultimate property of the fore-psychic vital phenomena whose unity is the result of the entire centralized vital forces. Referring to the anatomical side of the problem, the author gives a schematic representation of this central process in relation to the other mental processes, stating that the psychic phenomena proper, the psychosensory, mnesic and associative processes, are localized in the brain cortex, but that this higher central station has its localization in the brain stem, as has also the vitally essential central vegetative apparatus. The central gray matter seems to be a specially important region for the psychic central function as well as for the vegetative element; that is to say, the inner lining membrane of the brain stem toward the third and fourth ventricles. In psychology it is customary to make a distinction between intelligence and character, between mind and soul. The author assents to this distinction, but goes a step further and assumes a separate special localization for these qualities, and brings the soul into relation with a definite portion of the brain, *i.e.*, the brain stem. In proof of this view, he emphasizes the astonishing unity and harmony of normal mental life and adduces the fact that mental diseases, such as dementia praecox, manic depressive insanity, paranoia, etc., are not in the strict sense due to loss of intelligence, but are disturbances of the vital central function. [J.]

Wedekind, Arnim W. PSYCHIC INFECTION. [Journ. f. Psychol. u. Neurol., No. 22, p. 185, and No. 23, p. 1.]

The studies of the author were made on six groups of cases: 1. An epidemic of anxiety in a fortress guard after the suicide of a soldier. 2. Induced paranoia by contagion from a daughter to a father. 3. Epidemic of religious insanity with incest. 4. Epidemic of twitching spasms in a laundry. 5. Contagion of twitching spasms with unconsciousness. 6. Schizophrenia in various members of a family. In the author's opinion the material here gathered, tends to prove that purely mental contagion may produce effects which render practically healthy