it is not necessary to assume an injury of the spinal cord in the sense of a reflex paralysis, nor a secondary mechanical factor to account for them? It might seem more probable, in view of the author's experience, that the sympathetic part of the nerve could be affected by a peripheral lesion where motor and sensory disturbances were absent, the lesion being due not to a definitely localized injury in the neighborhood of the nerve trunk, but to a more general shattering of the nerves producing "dissociated" disturbances. Perhaps vasomotor effect in the otherwise psychogenic symptom complex after shell shock, etc., might be thus explained. The author thinks that observations such as he presents may throw some light upon the problem of the functional or organic nature of certain symptoms following severe contusion and it may thus become clear that in the conditions resulting therefrom there is a mingling of functional and organic factors. When the transient symptoms such as the edemas vanish in the course of suggestive treatment it should not immediately be assumed that they are psychogenic, for all symptoms that vanish during the period of psychic treatment need not, for that reason, be of psychic origin.

Dana, C. L. SOMATIC CAUSES OF PSYCHONEUROSES. [Journal A. M. A., April 24, 1920.]

The author maintains that the psychoneuroses are organic as well as psychic conditions. Being thus in part neurologic diseases, he thinks it would be a disaster if neurology were to abandon the study of this exceedingly numerous and sorely handicapped group of patients. If this should happen, they would go first perhaps to various types of psychotherapeutic specialists and perhaps later to clinical psychologists and pedagogues. The last is already happening. The management of these cases calls for the closest observation and the most accurate study of the personality, but also of physical, metabolic and endocrine defects. It is, therefore, to trained neurologists conscious of their responsibilities and familiar with the best technical methods that the care, and the prevention, of psychoneuroses belongs.

Friedlaender, R. THE SIGNIFICANCE OF RECIPROCAL PSYCHOSOMATIC INFLUENCES IN THE NEUROSIS PROBLEM. [Neurol. Centralbl., May 16, 1918, No. 10, Vol. 37.]

Though the knowledge of the neuroses has been greatly enriched by war experiences many phases of the problem are still obscure. The author thinks, however, that the significance of the psychic factor is now more generally recognized, thus opening the way to approach the neuroses from a psychological point of view. Those who followed Charcot and Moebius saw in the idea the explanation of these disturbances, but the feelings moods, and emotions are now considered also to play an important rôle in the development of the war neuroses. In

more recent works the "wish" which is often said to be "unconscious" is placed in the foreground to account for the fixation of the symptoms, while shock, fright, etc., are held to be the most important factors in setting the disease in action. Concerning the part played by the somatic trauma, there is wide diversity of opinion, however, Oppenheim considering it to be chiefly responsible for the disturbances; Gaup, Nonne, Lewandowski, Bonhoeffer believing this factor to have little to do with the etiology of the neuroses; Strümpell, Goldscheider, Binswanger and others holding that both somatic and psychic elements are responsible for the phenomena. In the author's opinion a better understanding of these disturbances may be attained by going out from the periphery instead of from the center. He follows the psychology of Ziehen and regards the sensation as the "immediately given." Sensation and ideas are usually accompanied by one of the opposite feelings, plain-pleasure (according to Ziehen) or excitement-rest, tension-relaxation (according to Wundt), that is to say, by a negative or positive emotional tone. In the pathogenesis of the neuroses it is the feelings with negative emphasis, or emotional tone, pain, excitement, tension, that are principally of significance. From these emotional tones which accompany both sensory impressions (sensory emotional tones) and ideas (ideative emotional tones), moods and affects develop which have the quality of extending to other sensations and ideas originally without such feeling stress. These moods and affects differ from the simple feelings of pleasure and pain by their greater intensity, their property of influencing the course of association to an extreme degree, and by certain accompanying physical effects, principally in the motor and vasomotor systems. It is the negative emotional tones, pain tensions, etc., that are the factors in the production of the psychoneuroses. It is not the ideas that give rise to these disorders but emotionally toned sensations from which arise ideas, moods and affects that color the entire mental life. Liepmann has called attention to the fact that it is the emotionally toned idea not the simple idea which is the cause of nervous symptoms. Summing up briefly, the primary centripetal or "corticipetal" components of the psychoneuroses are the sensations emphasized by negative emotional tones, pain, tension, etc., from which, on the ground of a special disposition and with the assistance of attention, ideas emphasized by the same negative feeling tones, as well as moods and emotions colored by them are developed. These, not the infinitely manifold and constantly changing content of the ideas, are the essential moment in the disease, though certain dominant, or guiding, or perseverant, ideas attain special prominence in the symptom complex. It seems, therefore, to the author that the "wish," the "will to disease," the "struggle for the pension," the "timor belli" are given too exclusive weight. Careful psychological analysis in individual cases would yield valuable material in deciding these questions. As for the unconscious, the half conscious,

and the subconscious—their existence, in the author's opinion, is very doubtful. Taking up what he considers the still more difficult problem of the centrifugal or "cortico-fugal" component of the psychoneuroses he seeks to explain how the psychic processes influence the somatic. In the neurotic subject this influence is manifested both in motivation and inhibition and may effect all the functions of the organization which are under nervous control, as motility, the vasomotor, the trophical, and the excretory processes. It is supposed to take place in the same manner as in health, for it is known that the emotions, especially fear and anxiety, have a certain paralyzing or exciting influence on the smooth and transversely striated muscles, as well as on the vasomotor and the cardiac apparatus, and on the activities of the glands. According to James and Lange the somatic factors are the essential and primary elements, and the emotions are nothing more than their after effects. In this "repercussion" theory the emotions arise secondarily, as result of the somatic changes accompanying sensation. The author states that though the majority of psychologists have rejected this theory one fact which it emphasizes cannot be denied even by its opponents, namely, that the sensations determine the degree of the emotion, so that a weak emotion can be strengthened and prolonged by renewal of the sensation. This is a fact of importance in accounting for the neuroses, because, going out from this point of view, they may be explained as a circular process; a "vicious circle" is assumed to be set up as result of reciprocal psychosomatic influences which first give rise to the pathological symptoms, then establish them and increase their intensity progressively. This circular process, which may be called a psychosomatic reciprocity, the author says, is not a hypothesis merely, but a fact of experience well known to every observer of functional nervous diseases. Starting with sensations in the widest sense, it is seen how these connect, in the individual suffering from chronic or acute psychoneurosis, with emotionally toned ideas, from which develop moods and affects which are emotionally toned in the same manner, leading in their turn to nervous phenomena of irritability or inhibition that constitute the clinical picture of the disease. This viewpoint seems to throw light on various obscure phases of the neuroses, for example it explains how the neuroses might arise in organic disease (rheumatism, neuritis, etc.); it also explains hypochondria as the fixation of ideas with painful emphasis in response to sensation; it explains autosuggestion, in the sense that the sensations with emphasized emotional tones influence the psyche and are returned in fortified somatic effects. Psychopathic neuroses in Babinski's sense and somatogenic neuroses in Strümpell's sense could be explained as infracortical, and an analogous reciprocal effect might be assumed between periphery and spinal centers. Goldscheider's experiments with clamps and his observation of the post traumatic neuroses have been in confirmation of the author's view. In the therapy

the effort should be to replace the negative (painful) ideas by others with positive (pleasant, restful) emphasis; the author thinks that the electro therapy has more than a suggestive effect, that it actually influences the nervous irritability and simulates to action and inhibition in proportion to the dosage. As a rational "corticopetal" therapy rest in a dark room is recommended because the nervous stimuli are thus limited.

Wohlwill, Friederich. CONCERNING A PHENOMENON IN THE EXAMINATION OF HYSTERICAL ANESTHESIAS (DISTURBANCE PHENOMENON). [Neurol. Centralbl., Dec. 16, 1918, No. 24, Vol. 37.]

Although the nature and origin of hysterical sensory disturbances are still far from being understood, all writers are unanimous in the opinion that there is little reality in these anesthetics, etc., in comparison not only with organic anesthetics, but also with the motor symptoms of hysteria. While hysterical paralysis acts just like organic paralysis, to the extent even that results independent of the will, such as edema, cyanosis, and atrophy, are present, the hysterical anesthetics act in a very different manner from those produced by organic causes, and the patient is able, if not prevented by accompanying motor disturbances, to carry out very delicate performances requiring fine sensory discrimination—for example of touch in an anesthetic hand, and, besides, where, for instance the sense of touch and thermal sense seem wholly absent, the patient never burns or injures himself as do those who are suffering from organically produced analgesias. The author describes a manner of examining patients to differentiate hysterical disturbances from organic. He tells the patient to close his eyes, then he touches various spots of the patient's body, announcing the fact each time by saying "now," and instructs the patient to respond with "yes" each time the touch is felt and "no" each time it is not. He touches the sound places and the anesthetic ones in rapid succession and in varying order. Confusion of responses or hesitations betray that the sensations from the areas claimed to be anesthetic reach consciousness. Where there is difficulty in determining whether motor or other disturbances accompanied by these anesthetics are hysterical or not, a test of this sort may be resorted to with the anesthetics and the result may give the clue to the nature of the other symptoms.

v. Artwinski, Eugen. CONCERNING HYSTERICAL DEAF MUTISM AND MUTISM, OBSERVED DURING THE WAR. [Neurol. Centralbl., July 16, 1919, No. 14, Vol. 38.]

The author had opportunity during the war, to study numerous cases of mutism and deaf mutism. They would fall under the category of hysteria as defined by Babinski, who says, "A phenomenon is hysterical when it can be exactly reproduced by suggestion and removed by per-