

cult task ; while gynæcology for all peoples and times has been enriched by the material gathered together in the two volumes that compose the work. Of the many systems of late by coöperative authorship, none shows such consistent and even work, where idea and methods fuse so evenly that differences of opinions are scarcely noticed. It is a good work from the hands of good and earnest men and as such will endure and keep its place.

E. V. DE W.

DIE TRAUMATISCHEN NEUROSEN. Von DR. HERM. OPPENHEIM. Pp. vi. 146. Berlin : A. Hirschwald, 1889.

THE TRAUMATIC NEUROSES. By DR. HERMANN OPPENHEIM.

THIS excellent little brochure contains an admirable summary of the present knowledge concerning those forms of neurosis which follow injuries ; and it may be commended, not only to the medical reader, but to those members of the legal profession who interest themselves in the forensic aspects of railway injuries.

In the introduction the author traces the progress in the knowledge of these affections from the time when Erichsen first called attention to them in his work entitled *Railway Spine* (1868) down to a recent date, when the underlying condition has been recognized as a functional affection of the entire nervous system, but more especially of the brain. The references to the literature of the subject are quite complete, and full justice is done to the important contributions of American authors to this class of affections.

The material upon which the work is based consists of a large number of cases which have come under the author's observation in the Charité Hospital of Berlin ; and thirty-three of these cases are carefully described in the second chapter, which forms an important clinical contribution to this subject. In the remainder of the book the kind of injury producing these neuroses, the special symptoms manifested, and the prognoses and treatment are very concisely described.

Severe concussion of the nervous system is usually produced by the jar of railway collisions or by the shock of railway accidents. The patient is thrown from his seat against the car or tossed to and fro, and, although it is admitted that a stretching of the ligaments about the spine, or even laceration of the muscles may occur, yet, as a rule, the external evidences of injury are very slight, or may be absent. But lesser injuries may cause the same effects. Thus, accidents occurring in factories, where a brick or hammer falls upon the head or back of the workman, or where he steps from a ladder, or even the shock of a sudden slip upon the ice and consequent fall, are cited as causes of traumatic neuroses. This proves that the manner or the situation of the trauma may vary greatly. The essential element in all cases appears to be the severe emotional or mental shock attendant upon the accident ; the fright or the excitement being sometimes followed by a train of nervous symptoms when there has been no physical injury whatever. This mental shock may not be apparent at the time, for patients have been known to help the injured in an accident and go about for some time

without any evidence of disturbance, and then suddenly show all the symptoms of the emotional strain.

"In some cases at once after the injury, in others after an interval of weeks or months the nervous symptoms appear, differing widely in kind and degree, yet having so many features in common as to present a typical picture of disease. . . . The first result of the accident may be a severe shock, lasting several hours or even days; more frequently a short stage of unconsciousness or bewilderment occurs, to be followed by apparent recovery; very rarely a true mental derangement, in the form of hallucinatory confusion, ensues immediately. In the majority of the cases the injured patient presents no symptoms at once, is able to render aid to others, and to continue his duties if he is an employé. But after an interval the first evidences of nervousness appear, causing, perhaps, but little remark, but increasing. Sometimes the attention of both patient and physician is directed for weeks to some surgical injury, while the nervous symptoms, whose commencement has been overlooked, gradually develop.

"The first symptoms are usually entirely subjective; the patient has pain, either in the injured part, or, if there has been no local injury, in the back, especially in the lumbar region. This pain is increased by movement, and compels the patient to hold the parts stiff when he walks or moves. Another subjective symptom is an indefinite sensation of restlessness, excitement, or anxiety, which, as it increases, leads to a change of mental tone, and to a hypochondriacal or even melancholy mood, with great irritability of temper. This is usually accompanied by insomnia. The intelligence is not especially affected, though occasionally it is weakened. Vertigo or attacks of fainting, with or without convulsions, form one of the most frequent symptoms, and often a tremor, increased by excitement, is noticed. To these symptoms disturbances of motion and sensation are often added. The movements are hampered because they cause pain, but besides there is really a paresis, which rarely, however, amounts to paralysis. . . . This may be in one or more limbs, but it is never limited to the muscles supplied by one nerve, and it has characteristics which distinguish it from those forms due to lesion of the spinal cord and brain. Abnormal spastic rigidity of the muscles is frequently found, differing markedly from the contracture of organic disease. The tendon reflexes are increased, and are never absent. There is rarely atrophy in the affected limb. The cranial nerves are never completely paralyzed. Speech is impeded rather than impaired. The sensory disturbances differ in their distribution from those due to any organic affection of the nerves or central organs, and they are usually accompanied by a limitation of the visual field. Oedema is the form of vaso-motor affection most frequently observed. The function of the bladder is rarely affected, but sexual power is usually impaired. An abnormal irritability of the cardiac action is a constant symptom of traumatic neurosis, but actual serious cardiac disease is not produced."

This concise picture of the disease is followed by a minute analysis of the different symptoms, and by a discussion of the theory of the affection. The author holds that the emotional shock is responsible for the symptoms, which would not appear did not a changed and diseased mind react abnormally to slight bodily disturbances. The fact that exactly similar symptoms can be produced by suggestion in persons who are

hypnotized, as has been shown by Charcot, is cited in proof of the psychical origin of the disease.

The persistency of the psychical alteration distinguishes the disease from hysteria, for the great variability of the symptoms characteristic of the latter is not observed. Patients rarely die of the affection, but they seldom recover wholly, according to the author's experience, for in a majority of his cases a condition of nervous irritability has remained after the severer symptoms have subsided. He has seen serious forms of mental derangement ensue. The recovery of some such patients, after they have secured substantial pecuniary compensation from corporations, is ascribed by him to the influence of the mental and emotional influences consequent upon successful litigation; but he has seen many cases in which this result has not been followed by recovery. He makes no new suggestions regarding treatment, which, according to his view of the affection, must be chiefly psychical. The forensic aspects of the subject are briefly discussed in the final chapter. M. A. S.

DIE VERBREITUNG DER TUBERKELBACILLEN AUSSEERHALB DES KÖRPERS.

Von DR. GEORG CORNET, Prakt. Arzt in Berlin und Reichenhall. Separat. Abdruck aus der *Zeitschrift für Hygiene*, 1888, v. 15:1-331.

THE DISSEMINATION OF TUBERCLE BACILLI OUTSIDE THE BODY. By GEORGE CORNET.

SINCE the publication in 1882 of the classical work of Koch upon the etiology of tuberculosis, the tubercle bacillus has come to be universally acknowledged as the cause of the disease. Any complete study of the manner in which the disease is communicated must therefore include the investigation of the occurrence of this specific microorganism outside the body. Such an investigation has been made by Cornet, and as the result of his elaborate research much valuable knowledge has been acquired, which should be of great use in the prophylaxis of the disease.

Because of the vast preponderance of pulmonary tuberculosis over disease due to the same cause in other parts of the body, Cornet is compelled to consider the air to be the common carrier of the infectious material, and has accordingly directed his experiments to the determination of the distribution of the bacillus in the air.

Following out the method of air analysis suggested by von Eschschsch, he has collected the dust from the walls of rooms in which phthisical patients were living—avoiding carefully such portions of the wall as might be soiled by sputum from the patient—and has inoculated it into the peritoneal cavity of guinea-pigs. It would carry us too far to go into the details of his experiments, suffice it to say that they were conducted with every precaution against error in the results from any source. The dust examined in each case represented the settlements from 51,000 litres of air—the amount which a person would breathe in four days, supposing, with Vierordt, 500 c. c. to enter the lungs with each inspiration.

The results obtained by Cornet are in hopeful opposition to the idea