remained for the American Association of Medical Superintendents to announce that, on principles analogous to those which govern "trade unions," only medical superintendents could be members. No doubt the younger members of the profession, who occupy the position of assistants, were excluded in order to prevent the rebellious tendencies of energetic and original workers from running loose and opposing the benevolent tendencies of certain superintendents of keeping asylum matters in the same old conservative rut.

PART II.—REVIEWS.

Cyclopædia of the Practice of Medicine. Edited by Dr. H. Von Ziemssen, Vol. xiv.—*Diseases of the Nervous System and Disturbances of Speech.* By Profs. A. Eulenburg, Nothnagel, H. von Ziemssen, Jolly, Kussmaul, and Dr. J. Bauer.

This volume along with the 12th of this Cyclopædia on Diseases of the Brain and its Membranes bid fair to become for the next ten years standard works on Neurology. We prefer to notice the last volume first. The expectations raised by the array of names at the beginning are not disappointed on a perusal of the volume. To say that all the articles are of equal value and interest would be absurd, or that a book written by so many authors has the unity of one that has come forth from a single brain. It may be safely affirmed that in the future no exhaustive work can ever again be written either on general medicine or even on all the diseases of any one great system by one man. The literature is now too extensive, the requisite experience too impossible to obtain for this ever to happen. The industry and prolixity of Germans have been the chief cause of this. Such a book as the volume we are about to notice, was, in its exhaustive references to the literature of all nations, only possible in Germany. There can be no doubt that English medicine is under a deep debt of gratitude to Prof. Ziemssen for his Encyclopædia, and English-speaking Neurologists in no less degree for his twelfth and fourteenth volumes. The possession and perusal of such books is especially necessary for the alienistic subdivision of the Neurologists. In their case it is ever necessary to be stimulated to search for the hereditary, the dynamical, and the pathological source of mental abnormalities, to remain un-

satisfied till they have discovered the *locus in quo*, and to be reminded of the close kinship of all the neuroses. We can imagine no better practice than for an asylum physician, systematically at regular intervals, to read through a good book on general nervous disease.

The first article is by Prof. Eulenburg, whose researches as a physiologist and practical physician are already so well known, and whose investigations, along with Dr. Guttmann, into the functions and diseases of the sympathetic system of nerves, are to become still better known to the readers of this Journal. (See "Original Articles," p. 165). The subject is "Hemicrania," which he points out is most common (five to one) in the female sex, usually making its appearance after puberty, and disappearing after the age of 50. It is allied hereditarily to epilepsy and insanity, and like them is one of Griesinger's "Congenital Neuropathies." There is one kind of insanity to which he might have pointed as being especially allied to Hemicrania, and that is *Folie Circulaire*. Hemicrania actually occurs as one of the periodic recurring symptoms in some cases of this disease. We have a female patient now in whom the period of excitement is always ushered in by hemicrania and vomiting, lasting for about two days. The following is a curious and suggestive fact:—

> We find in many attacks of migraine, especially those which are connected with vaso-motor disturbances, that deep pressure gives decided pain when applied to *the region corresponding to the ganglion cervicale supremum of the cervical sympathetic*, or to the *ganglion cervicale medium;* sometimes also when applied to *the spinous processes of the lowest cervical and the first dorsal vertebræ.*
>
> Besides these cutaneous hyperalgesiæ, there may exist a *pathological acuteness of the sense of touch (hyperpselaphesia)* in the affected side, as O. Berger has lately shown by accurate tests of the sensibility in a case accompanied by fluxionary hyperæmia (hemicrania angioparalytica).

The following is his explanation of one group of symptoms:—

> The group of symptoms called *hemicrania sympathico-tonica* is to be explained by supposing (as is implied in the name, given by du Bois-Reymond) a *unilateral tonic spasm of the vessels of the head, caused by tetanus in the cervical region of the sympathetic, or in the spinal centre of the cervical sympathetic.*

For the treatment of the disease the author believes more in the constant galvanic current than anything else.

In the next article on Angina Pectoris, he says:—

It follows that we have these types, namely :—

1. *Excito-motor cardiac or cardio-centric ganglionic angina pectoris*, from direct lesion of the automatic excito-motor ganglia of the heart; it may assume the form of irritation (with increased rapidity of pulse) or of paralysis (with retardation of pulse.)

2. *Regulator angina pectoris*, from lesion of the cardiac system of nerves of arrest (vagus). a. *Direct neurosis of the vagus*, either in the form of irritation (retarded pulse and increase in force of pulsations of heart, full, hard pulse, with disturbance of phonation and deglutition; sometimes a temporary arrest of the heart), or, more rarely, in the form of paralysis (acceleration of pulse). b. *Reflex neurosis of the vagus* (angina pectoria reflectoria), originating in disease of the abdominal organs, with the symptoms of irritation of the vagus.

3. *Excito-motor sympathetic angina pectoris*, from lesion of the accelerator nerves of the heart which run with the sympathetic. (Symptoms as in the first form).

4. *Vaso-motor angina pectoris*, from affection of the vaso-motor nerves, running in the sympathetic for the most part—either in the form of irritation (contraction of the vessels, increased pressure, with normal or but slightly increased frequency of pulse; symptoms of arterial anæmia, paleness and coldness of the skin, etc.); or, more rarely, in the form of paralysis, with the opposite set of symptoms.

The two following articles are on Unilateral Progressive Atrophy of the Face, and on Basedow's Disease. The next, on Progressive Muscular Atrophy, is the best account of that disease we know. The author leans to the Neuropathic rather than the Myopathic theory of origin of the disease, but accepts unreservedly Friedrich's pathological investigations into the origin and cause of the disease in the muscles affected. "The disease consists in an essentially inflammatory process, a *polymyositis chronica progressiva*." As regards the changes found in the cord he lays special stress, as most recent authors have done, on the changes in the multipolar ganglion cells of the anterior cornua.

Nothnagel contributes what is in reality a treatise of 128 pages on Epilepsy and Eclampsia. He says, in regard to the former—"The last twenty years alone have advanced us at one time more than the previous twenty centuries taken together." He differs from Russell Reynolds *in toto* as to what constitutes "Epilepsy." We suspect that the Reynolds of 1878 would differ in this respect from the Reynolds of 1861. Nothnagel confines the term Eclampsia to "those cases of

epileptiform spasms which, independently of positive organic diseases, present themselves as an independent acute malady, and in which—so far as our present knowledge allows us to judge—the same processes arise generally in the way of reflex excitement, and the same mechanism in the establishment of the paroxysms comes into play as in the epileptic seizure itself." Even thus curtailed from its ancient wider signification, he is a little doubtful about retaining it as a separate disease from "Epilepsy." No doubt in a short time we shall have a new nomenclature according to the pathological cause of the epilepsies, and "Eclampsia" will drop out of use as indicating any specific disease or group of diseases. Frank was more scientific than his successors when he called the latter "acute epilepsy." Nothnagel confesses "that it is not possible at the present time to give a brief definition of epilepsy." In this respect it is in precisely the same case as insanity. The author attributes the highest importance to experimentations on animals, in having advanced our knowledge of this disease. After giving a clear sketch of the results of those experiments, and of Kussmaul's deduction that anæmia of the brain is always present in convulsions, "Then I have shown that the convulsion centre, *i.e.*, that circumscribed spot from which the whole body of the voluntary muscles may be thrown into tonic and chronic spasms through reflex excitation is to be sought for in the pons." His opinion is that "as compared with inherited tendency, all the other influences that affect the organism of the nervous system as a whole are inferior in their capacity for exciting the central epileptic change." Drunkenness he places as the next most potent cause of epilepsy. He puts aside, or regards as doubtful, sexual excess, masturbation, continence, over mental exertion, scrofula, rickets, and insufficient nourishment, as causes of the disease. He does not adhere to Brown-Séquard's conclusions as to the frequent connection of epilepsy with diseases of the spinal cord. After referring to the pathological results of Van der Kolk and Echeverria in regard to changes in the medulla oblongata, of Meynert in regard to changes in "disparity between the sections of the two hippocampi majores," and of Meyer, in regard to a diseased condition of the vessels, he concludes thus—"No alteration is shown to be constant." He divides epilepsies into four kinds, all symptomatological. He gives a short and not a very satisfactory account of the mental symptoms usually connected with epilepsy, and then quotes Reynolds

and others as to the opinion that "no relations of any kind whatever exist between the mental disturbances and the seizures." No one can have seen much of epilepsy who believes this dictum. We are convinced that such a fallacy could only have been propagated through want of a proper psychological analysis of the mental condition of epileptics. The psychosis takes the most various and subtle forms. There may be only slight alterations in tastes, emotional states, power of inhibition, power of concentration of thought or of mental application, moral sentiments, or self-respect, not very observable except they are closely enquired into. One thing we have observed, which we have never seen mentioned by any author, and that is, that where there is a tendency and habit of the brain to sound sleep and long rests after each fit, there is apt to be less mental impairment and fewer maniacal attacks.

In regard to the pathological seat of the disease, Nothnagel is totally opposed to the idea that it is in the convolutions. "We firmly maintain that the real seat of the disease is in the pons and medulla oblongata." No doubt the immediate co-ordinating centre that throws the muscles into contractions is there situated, but is that the "real seat" of the disease? As well may we say that the real seat of the disease is in the muscles, or that the real source of the motor power of a steamer is in the mechanism of the engine and not in the boilers. It seems to us that if anything is proved by the studies of Hughlings Jackson, the experiments of Hitzig and Ferrier, and the whole results of the modern study of brain function, it is that the "seat" of all co-ordinated convulsion must be looked for in the convolutions. Did the author ever see a pigeon, frog, or any other animal go into true epileptic convulsions whose convolutions have been maimed or destroyed? No physiologist ever saw such a thing. Is not this one fact in itself sufficient to prove our proposition? He mentions nothing new in regard to the treatment of the disease. The article is painstaking, but not striking or original.

Eulenburg's article on Catalepsy is very good. We agree with him in this:—"The consciousness is frequently entirely lost from the commencement of the attack." "Most authors are inclined to the opinion that the cataleptic rigidity is only an increase of the normal tonus of the voluntary muscles." Von Ziemssen, in his article on Chorea, says that psychical disturbances are rarely absent in that disease,

They consist of irritability and changeability of temper, change of character and morals, and mental enfeeblement. He thinks those are due to "slight anatomical changes in the central apparatus of the nervous system;" he thinks that the connection between chorea and rheumatism is less close in Germany than he admits has been proved in England and France. He greatly recommends arsenic in the treatment of the disease. Jolly, in the next article on Hysteria, is more satisfactory in regard to the disorders of sensibility that occur in the disease than in regard to almost any other of the symptoms. He says:—"In almost no hysterical person is there absent the symptom of exalted sensibility to pain in some portion of the skin or more deeply seated parts, with or without spontaneous pains in the same." He goes over the various anæsthesias and hyperæsthesias of the various parts of the body, but beyond this *catalogue raisonné* we do not get a very clear idea of the most frequent or of the most important symptoms. He gives a description of the usual mental disturbances in hysteria, dwelling specially on the tendency to "uncontrollable impulses," the existence of which, he thinks, affords a clue to the understanding of many of the morbid psychoses present. We think that Laycock's mode of looking at Hysteria as being in all its myriad symptoms essentially a disturbance in the higher reflex functions of various parts of the brain, excited by the afferent nerves of the generative apparatus, is by far the most scientific generalization on the subject yet offered, and the most instructive way of looking at the phenomena. In the pathological part he mentions that there are "some cases of multiple sclerosis of the brain and spine which can only with certainty be diagnosed from hysteria in their later stages and by the final issue." We think this is not a scientific mode of looking at the matter. The most characteristic case of hysterical fits, and of hysterical lying and cheating, and hysterical psychosis which we have ever seen ended in "hysterical" paraplegia, with trophic disorder, leading to enormous bed-sores, and after death the medulla was found full of "miliary sclerosis." Now, would Professor Jolly say that this was not hysteria at all, although there was every symptom of the disease for many years during life? As regards treatment, he says:—"Our experience of the most varied remedies is that they owe their efficiency really to the psychical impressions which they create." He recommends electrical treatment for the hysterical paralyses.

Kussmaul's article on Disturbances of Speech, which he calls an "attempt in the pathology of speech," is in all respects the most elaborate, the most original, and the most difficult of condensation or synopsis in the book. It extends to 300 pages, and is, in fact, the most complete treatise on the subject in the English language. We have to defer, from want of space, till next number, our notice of it.

Insanity in Ancient and Modern Life, with Chapters on its Prevention. By Daniel Hack Tuke, M.D., F.R.C.P.

This is a most interesting, and promises to be a useful book. It is written with even more than the author's usual grace and clearness. While in no respect trivial or surface-skimming, it is yet popular in the best sense, and professional as well. The author dives into the quarries of the classics and old historians for his facts as to the probable prevalence of mental disease among the ancients, and we need say nothing as to the interest of those parts of the work, for our readers have already seen much of this part of the work in the pages of this Journal. We cannot help saying, however, that the reader of such a condensed historical account of an obscure subject, that has had to be hunted up from original sources and casual references in the byeways of an old literature, seldom realizes his full obligations to the author. In regard to the question of the possible increase of insanity in our own time, Dr. Hack Tuke sets forth shortly the facts and figures, points out the modifying circumstances, and leaves the matter still a *questio vexata*. This, we think, is a pity. Our own belief is that, when properly interpreted, the facts do not show any increase of insanity at all. We think that the sluggish life, poor habitations, constant inbreeding, and bad food of the agricultural labourers in the old times, produced far more idiocy than the active life, the worry, the whirl, the turmoil and over-luxuriousness of to-day produce acute insanity, which has less tendency to propagate itself too. It may be that we have more general paralysis, but that disease is, to our mind, the very finest illustration of Nature's power and tendency to destroy the seeds of future brain disease in the land. The man in whom it is developed has usually taken every means to exhaust his brain-power and injure his brain, and Nature brings things to a crisis at once, and makes