Handbuch der Geisteskrankheiten von Dr. H. Schüle. (Manual of Mental Diseases by Schüle.)

Von Ziemssen, at the request of numerous medical men, has included a volume on mental diseases in his "Cyclopædia of the Practice of Medicine," and with this concludes his great work. This volume is written by Dr. Heinrich Schüle, the Medical Superintendent of the Baden Asylum, at Illenau.

Without venturing on criticism, we intend to give a short sketch of the plan and contents of his work of 700 large

It is divided primarily into three books, headed respectively -Psychological Introduction, General and Special Pathology. The short psychological introduction is, we imagine, too metaphysical for the ordinary English medical man, even for those specialists who are pleased to term themselves "psychologists." It is, however, very poetical, as, for instance, when the author says-

In the midst of conscious thought we yield to the pleasing sway of fancy, and at once we are living in a fairyland, called forth from hitherto unthought-of wave-like floating views and images: the smooth mirror of our feelings begins to move, and the ripples rise to waves of mood—the storm has been raised by unsummoned feelings and desires, which had slumbered and now arise; or the active foundation of our unconscious spiritual existence, harmless and harmonious, announces itself as the suddenly found idea, long sought in vain by the conscious action of the spirit—and now all at once is presented to us as the gift of silent inner consciousness.

The second book, General Pathology, includes about twofifths of the work. It commences with anomalies of sensation These are divided into hyperæsthesia and or perception. anæsthesia: under hyperæsthesia, we have increased sensitiveness, as in hypochondria, where, e.g., the heart-sounds annoy the patient. Then comes Anger, and its relative mania, and lastly we have hyperæsthesia of the general disposition. All these Schüle considers as symptoms of diminution of the inhibitory powers of the nervous system.

The negative side of anomalous sensation is only treated in this chapter in as far as it concerns "moral anæsthesia," and is, like the introduction, evolved from the author's inner consciousness to a great extent. In the next chapter he takes up the motor anomalies, and divides them into (1) those of the simplest motor tract; (2) of the psychomotor region proper; and (3) of the sphere of psychical motions.

The consideration of number one is reserved for a later chapter, and number two is discussed under two heads—with and without preservation of the psychical quality of expression. The first of these subdivisions includes excessive and diminished action, hyperboulia and aboulia, and is genetically divided from the second, which is made up of organic psychomotor disorders, catalepsy, stupor and tetania. Catalepsy he considers a further stage of aboulia, and made up of two factors, neutralization of the centrifugal will by centripetal irritation and a relapse from consciousness to a dreaming condition. Stupor is the result of general weakness of the cerebral functions, and may come on gradually or very suddenly.* Tetania is the condition described by Arndt—and includes symptoms of motor tension, such as contractions of the facial or other muscles. Catalepsy is distinguished from tetania by the greater intensity of the stimulus in the latter, and by the necessary element of physical "yielding" in catalepsy. All these he classes as atonic conditions.

The third group of anomalies, i.e., the pathological acts, comprises suicide, dipsomania, kleptomania, incendiarism, homicide, and the acts of the morally insane. To all these he attributes "organic motivity," and points out the force of heredity in these cases, and regards their acts as symptoms of some degeneration, inherited or acquired, in the brain, follow-

ing, in fact, the example of Krafft-Ebing closely.

The next heading we meet is "Anomalies of Perception or Thought." These are divided into anomalies of content and of form. For those of content, we have three modes of origin, (a) from general constitutional causes; (b) from special lesions, e.g., heart disease, metritis, and (c) direct cerebral disease, e.g., the ideas of greatness in general paralysis; under (c) too, folie raisonnante is discussed. Anomalies of form, the author divides into four—those of (1) conduction and reproduction; (2) grammatical and logical form of the ideas; (3) of judgment or criticism; and (4) consciousness or individuality.

Taking number one, we find that conduction may be retarded primarily by increased psychical resistance, or secondarily in consequence of general depression; or the course of ideas may be accelerated by a diminution of resistance, or secondarily by

increased innervation.

Under the last heading he discusses "dual illusions," and inclines to the view that they are due to separate action of the two cerebral hemispheres.

* Vid. Newington "Journ. of Mental Sc.," 1875, p. 372.

Disorders of reproduction of ideas result either from defective conduction (bad memory), or confusion of some new perception with the reproduced idea (illusion), or thirdly, from a similar false identity due to deficient critical reproduction.

Disorders in the logical form of ideas are divided into two classes, the first including the cases in which an idea is produced without any connection, and remains rigid and incapable of modification ("Zwangsvorstellung"), and the second includes those in which interrogation dominates over the whole sense ("Zwangsvorstellung in Frageform" of Griesinger). This latter is intimately related with the "folie du doute."

Disorders in the estimation of ideas, may arise from depreciation either of their relative or absolute values. Either all ideas have the same weight, or the type is confused.

Disorders of consciousness of identity assume the form either

of change of personality, or of divided personality.

Next in order the author treats of psycho-cerebral and psycho-spinal, and hyperæsthesia, and neurosis of peripheral sensations, which he regards as the connecting-link between the psychical and sensory diseases. The first of these includes such cases where the patient believes himself a wolf, or dead, &c.—due to some alteration (generally central) of sensation.

On the subject of præcordial terror there is a very interesting section, in which the author upholds the vasomotor and inhibited respiration origin of the "terror fits." He describes three varieties:—The first with a tight pressing sensation in the præcordium, he considers to originate from vagus irritation, as indicated by the irregular beat of the heart, and gasping respiration; the second exhibits a thready irregular pulse, and sensation of pain over the epigastrium—a vasomotor reflex paresis of the vessels of the abdomen acting secondarily upon the heart; and the third group including the cases which are connected with intercostal neuralgia.

The next sections of this chapter discuss Westphal's "Agoraphobia," electric and magnetic sensations, headache and the perverted sexual desire. The last class he considers due mainly to some congenital defect, and quotes Westphal, who points out the existence of periodicity and dementia in most of his cases.

Passing on to the peripheral neuroses of sensation, he takes up the sensation of the skin, and gives some very interesting cases in which he tested it with callipers, and found different pathological conditions in connection with various psychoses.

The next chapter is devoted to delusions, which are divided according to Esquirol's example, into Hallucinations and Illusions. Hallucinations he defines with Hagen as "the embodied appearance of a subjectively formed picture in addition to, and simultaneously with, real perception, and of equal force with these." He then dwells upon the shading of strength and form, and finally divides them into (a) persistent; (b) varying; and (c) reflex. Illusions are derived from something objective, but transformed and confused—false conclusions from really objective bases. They are naturally most frequent in the sphere of touch, taste and smell, and are seldom of a pleasing nature. Mixed forms of illusion and hallucination are frequent. After an interesting discussion of the origin and pathological nature of delusions, the author passes on to a statement of his experience of the relative frequency with which the different senses are affected, and, in opposition to Griesinger, assigns the first place to the sense of hearing, the second to optical, the third to tactile, and the fourth to olfactory and gustatory delusions.

The next chapter is divided into three sections on (1) motor, (2) vasomotor, and (3) trophical disorders in mental diseases. Under the first he discusses the muscular tone and hallucinations due to its alterations, and in this connection also speech and writing. Dysphagia he treats under eight different heads, according to the muscles concerned. The author then gives us a very interesting discussion on the condition of the pupils in mental diseases. He considers that no condition of the pupils has yet been proved to be pathognomonic. Convulsions he divides into those—(a) in which only a circumscribed muscular area is attacked and consciousness retained, and (b) those in which the convulsion is more general and consciousness lost. As the cause of these epilepti-form attacks he supposes a vasomotor cramp. Under the heading of electric changes he details the results obtained by Tigges. Our knowledge of the vasomotor nervous system has, according to Schüle, made greater progress than any other branch in the last ten years, mainly owing to the spygmographic investigations of Wolff. He asserts that in mental affections the vasomotor system is always, without exception, affected. And in connection with this he believes the temperature to be likewise affected.

He accepts Esquirol's statement that in cases of recovery from mental diseases there is a simultaneous improvement of nutrition, which may be estimated by increase of weight. In the matter of changes in the constitution of the urine he seems to regard Rabow's analyses as conclusive. He then passes quickly over changes in salivary secretion, the skin, exanthemata, secretion of sweat, the nails and hair, and decubitus.

A long section is devoted to the othermatoma, regarding the origin of which the author inclines to the view that there is either a primary or secondary softening of the cartilage, and in addition direct violence. The brittleness of the bones in insane people he holds to be one expression of general nutritive disorders.

In the next chapter we have a discussion of the clinical and forensic definitions of lunacy, and the conclusion is, that "mental diseases are conditions of impaired or annihilated judgment, produced by the impairing force of some cerebral disease, which is either co-operative or lays the foundation, as the case may be." And, arguing from the pathological facts at our disposition, the following general somatic definition is further given. "Mental diseases are diffuse cortical affections, either independent and idiopathic, or else connected with some other disease of the central or peripheral nervous system."

The next section is more of an anatomico-physiological character. The author points out the psychological importance of the hemisphere, and especially the cortical layer, and then criticises the value of the development of gyri, and the weight of the brain. To strengthen the importance he attaches to the cortical region, he adduces Hitzig, Fritsch and Ferrier's experiments. What may be derived in this respect from an histological study of the structure of the brain, is learned from the works of Meynert, Flechsig and Major. Next, attention is drawn to the development of the brain, and to its blood

supply.

The last section of the general division of the book, forming nearly its half, is devoted to ætiology. Beginning with the general causes of mental diseases, the author points out the influence of civilisation, which he deduces from the increase of lunacy. The special factors of this "civilisation" to which he accredits this increase are over-population and the rush for money. The influence which civilisation exercises on the whole of society, is exercised upon the individual by excessive and mistaken education. Religious excesses he regards more as a symptom than as cause. As regards the influence of war, he agrees with Jolly in forming a lower estimate of it than was formerly assumed. He accounts for the predominance of female lunatics over male (6.5) by their weaker resistance in

the struggle for existence, and by the negative and positive evils of marriage.

The next point touched upon is the influence of age on the development of mental disease. He begins with a very interesting description of the typical features of the insanity of childhood. This he characterises as essentially a cessation of physiological development, and draws attention to the low form it generally assumes—e.g., convulsions and chorea, "insanity of the reflex centres," as Maudsley expresses it. Still he recognises higher forms with mania, melancholia and hallucinations. The great majority of these cases he attributes to heredity, but includes amongst the ætiological momenta both acute fevers and cranial injuries so common in childhood.

In his description of the insanity of puberty (16-22 years of age) he follows Kahlbaum strictly, and calls it a "prolonged halt at a certain middle stage." But at the same time he points out the multiplicity of forms assumed by this variety. To heredity he attributes (with Skae) even more influence than in the insanity of childhood.

The description of Climacteric insanity agrees with that of Skae. As regards the prognosis, however, Schüle's experience leads him quite to disagree with Merson's favourable view.

The insanity of old age is characterised as melancholia, marked by intense egotism, and an almost pathognomonic delusion of being robbed or ruined. Mania, when occurring at this age, Schüle considers as an indication of one of his "periencephalitic modifications." In the last place, amongst the psychoses of old age, he includes primary dementia, but excludes primary monomania.

In discussing the question of the influence exerted by social position in the production of insanity, Schüle points out the great numerical preponderance of poor over rich. He considers that the difference of forms are due to want in one case, and excess in the other. For the former he quotes Hoyd's statistics, and for the latter he points out the preva-

lence of general paralysis amongst the rich.

The origin of prison lunacy Schüle finds chiefly due to solitary confinement, and compares it with Le Vaillant's madness of the desert. He divides it into two stages—the melancholy (70 per cent. curable), and fixed monomania (generally incurable). Delbrück and Gutsch are quoted to prove that the great majority of criminals affected belong to the class of crime with violence, while criminals against property seldom suffer.

The next chapter is devoted to Heredity, which is discussed in a very thorough manner. As regards the form of disease inherited, Schüle says that it is, in the majority of cases, similar in the two generations, especially in the case of suicidal monomania. But he points out the tendency of disease to "degenerate," or assume a more serious form in the succeeding generation.

The danger of heredity is greatest when both parents have been affected, but, when only one is affected, there is more probability of the disease being inherited from the mother than from the father. In direct connection he then points out the progressive (degenerative) nature of the hereditary virus. From a clear and detailed description of the hereditary neurosis, he draws the following general characteristics:—Polymorphism of the clinical form of combinations, periodicity, relatively unaffected intellect, and abrupt commencement and defervescene of the disease. Schüle accepts Morel's doctrine of the connection between crime and lunacy, but modifies it by insisting that the disease of the parents is not necessarily transmitted to their children.

The last section of the general part of the work embraces the special causes of insanity. These are primarily divided into psychical and somatic. Under the former heading mental over-exertion comes first. Next in order, the moral causes, depression and exultation. From a consideration of the mode in which these act, the conclusion is drawn that it is the "sum effect of the vasomotor affection arising from psychical changes, plus cerebral hyperæmia, caused by increased brain work.

Somatic influences are divided into four classes:—(1) Idiopathic, cerebral and spinal diseases; (2) diseases of the thoracic; and (3) abdominal and sexual organs; and (4) constitutional diseases, such as chronic cachexia, or acute fever. But the organic cerebral diseases are reserved for the special pathology, and attention devoted alone to chorea and tabes. Chorea may give rise either to excitement or mania, or we may have melancholia agitata, or, finally, primary monomania. Tabes spinalis is so frequently combined with an affection of the cerebral nerves, that Duchenne considered this one of the most constant symptoms. It often gives rise either to slight dementia, vasomotor congestion, or even general paralysis.

The second factor of the first class is constituted by injuries to the peripheral nerves, whose mode of action must be considered reflex. Schüle notes the benefit derived in such cases from the local injection of morphia, and excision in the case of scars. Traumatic insanity Schüle divides into primary traumatic insanity, with an acute and a sub-acute form, the acute having all the symptoms of meningitis, and the sub-acute generally going into a condition of primary dementia; and (2) secondary traumatic insanity, which includes cases of progressive idiocy with paralysis, and the very chronic cases of brain affection, generally characterised by extreme irritability as the most notable symptom. Diseases of the ear act, in the causation of mental affections, according to Schüle, by giving rise to leptomeningitis. He records a case of his own, in which all the symptoms of a classical general paralysis were exhibited, and disappeared within a few days of the discharge of a large quantity of pus from the ear.

The influence exercised by heart disease in the production of insanity, Schüle does not consider great. The general form assumed is, he states, depression, with fits of terror. Pointing out the almost invariable gastric, or intestinal catarrh in melancholia, he strongly inclines to attribute considerable influence to the digestive organs. And, in physiological support of his view, he shows that the nervous supply of the intestines and of the arteries of the brain are intimately connected. Diseases of the liver and kidney have not been proved to have ever given rise to mental disease. To genital affections, on the contrary, great importance is attached, and they are divided into (1) those that act by causing general anæmia, including profuse menstruation and leucorrhæa; (2) those which create spinal hyperæthesia, chiefly masturbation; and (3) those causing primary cerebral exhaustion, corresponding to Maudsley's type of "masturbational insanity."

In his views on the puerperal psychoses, Schüle agrees

completely with Ripping.

The second division of somatic influences includes acute fevers, infectious, epidemic, and constitutional diseases, and intoxications.

The first of acute fevers coming under consideration is sunstroke, which Schüle characterises as acute maniacal delirium, generally accompanied by paresis of the extremities, tremulous tongue, and frequently strabismus.

Croupous pneumonia, too, gives rise to mental disorders, especially when favoured by alcoholism. In the early stages of the fever we usually observe mania, in the latter melancholia; but in a few cases we notice nothing till we find a

depressing psychosis after convalescence. Schüle does not consider the prognosis quite favourable; the duration he fixes at from one to three weeks. In the course of pleurisy we find two similar forms of mental disorder, (a) an irritation form, and (b) one of exhaustion.

Acute rheumatism gives rise to a few cases of insanity, two in 1,500 of Schüle's patients. He adopts Simon's distinction of three forms. The prognosis he considers, even after four months' duration, favourable.

Amongst acute infectious fevers typhoid takes first rank, especially in Germany, where it is so frequent and widespread. The influence of typhoid fever on existing mental diseases Schüle is rather inclined to undervalue.

Next, in order, come scarlatina and small-pox, with no very definite clinical characteristics. The prognosis of scarlatinal

insanity Schüle finds very unfavourable.

Mental diseases, arising from Malaria, assume one of three forms: - (1) Intermittens larvata, where the feverish attack is replaced by the psychosis; (2) melancholia, arising from cachexia; or (3) the rare form of acute delirium with melanæmia.

In his description of the form arising from phthisis, Schüle agrees with Clouston and Skae. To syphilis only a very short space is devoted, three forms being distinguished: (a) hypochondriacal melancholia; (b) melancholy, with monomania of persecution; (c) maniacal attacks, with intervals of stupor.

The general part of the work concludes with an extremely interesting section on alcohol, and the mental disorders arising

from morphium, chloral, chloroform, and lead.

We propose, in the next number, to analyse the special pathology.

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