content to put upon record their disapproval of my views. In this, the literary organ of our Association, therefore, I invite the dispassionate consideration of a subject about which I have been candid and outspoken, and of a treatment which recommends itself to me as above all things humane.

It may be sad, indeed (and the reflection must occur to every mind), to see those who are stamped with the Divine image, and are supposed to be destined for something higher and better in the untried future, reduced so low in the animal scale as to be insensible to all that men commonly regard as decent and proper. But we must be careful that we do not on that account let our sympathy blind us to their actual requirements. The standard of our healthy wants and wishes is not the standard of desires which are irreparably morbid, and of appetites which are hopelessly depraved.

There is a prevalent opinion that the administrative anxieties and responsibilities of medical superintendents of asylums render them specially obnoxious to general paralysis. By a righteous Nemesis (the generous journalists who decry us will say) we are ourselves visited by the very malady which sinks humanity lower than any other, and the worst stages of which we have failed to make less cruel and ungentle to the sufferer. Be it so. We must take our chance both for the disease itself which is to end our mortality, and for the hands which are to conduct us to the confines of the everlasting shore.

PART II.-REVIEWS.

Professor Griesinger's Treatise on Mental Pathology and Therapeutics.

Die Pathologie und Therapie der Psychischen Krankeiten für Aerzte und Studirende von Dr. W. Griesinger, Professor der Medicin und Director der medicinischen Klinik an der Universität Zürich, Zweite, umgearbeitete und sehr vermehrte Auflage. Stuttgart, 1861, pp. 538.

In our last number (January, 1867) we published an admirable translation of Professor Griesinger's latest contribution* to the

^{* &}quot;An Introductory Lecture read at the Opening of the Clinique for Nervous and Mental Diseases in the Royal Charité in Berlin, 1st May, 1866," by Professor W. Griesinger, M.D. Translated by John Sibbald, M.D. Edin.. Medical Superintendent of the Argyll District Asylum. 'Journal of Mental Science,' January, 1867.

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study of psychological medicine in the introductory lecture to his clinical course read at Berlin, on the 1st May, 1866.

In this lecture Professor Griesinger enforces strongly the leading idea of his teaching, viz. that Diseases of the Nervous System form one inseparable whole, of which Mental Diseases are but one variety or species.* This position is by no means one which has been accepted as a matter of course. It is a scientific acquisition (he writes) only of the present day, the recognition of which will cause great changes, remove many errors, and must open up new developments in all directions.

The publication in English of Professor Griesinger's systematic treatise raises interesting comparisons between the English and German schools of psychological medicine. Practically, we are, at least, fifty years ahead of the German school in our management of the insane, and have much to teach and little to learn from Germany in this regard. The lunatic wards in the Charité at Berlin are wretched to a degree. Even the newest asylums in the capitals of Germany, such as that at Vienna or at Munich, present scenes of violence and noise (the fruits of the restraint system) such as would overwhelm in merited disgrace the superintendent of any public asylum in England. Viewed in its practical results, the teaching of the English school—thanks to the labours of John Conolly—has long passed the limits of comparison with that of France or Germany. The public asylums of England-the fruit of Conolly's work, and the undying memorials of his fame-may be objects of imitation to those of France or Germany; they do not admit of comparison. It is difficult fully to portray the broad line of demarcation which lies between the non-restraint and the restraint systems in their results on the treatment of the insane.

* "A comparatively small proportion of nervous diseases are found in asylums; and they are placed there only from outward considerations of treatment and protection, such as the necessity for separation from the ordinary conditions of life, isolation, occupation, &c. &c. The phase of our specialism in which these alone were recognised as coming within its province has now been passed through, and I believe that the time will soon arrive when only those will be true specialists in psychiatry who survey the whole domain of nervous disease, and cultivate it as widely as possible.

psychiatry who survey the whole domain of a strength of the study of mental disease widely as possible. "It has been supposed up to the present time that the study of mental disease was distinguished by some difficulty sui generis, and that the study of ordinary medicine had no direct bearing upon it—that the only entrance to psychiatry lay through the dark portals of metaphysics. And yet the other cerebral and nervous diseases which, with the so-called mental diseases, form an inseparable whole, have not, so far as I am aware, been hitherto much elucidated by metaphysics; and in Germany the time has quite passed away when psychiatry could be developed from a specially philosophico-psychological point of view. Ætiology, diagnosis, prognosis, and therapeutics, are the departments in which we must seek both our work and, that being successfully accomplished, also our fame. Therapeutics especially derive the greatest advantage from such undivided study of all nervous diseases. Every acquisition in one branch of the subject exerts a beneficial influence upon the whole."—Lecture, 1866.

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As regards the theory of insanity there may, on the other hand, be two opinions. In our English manual (Bucknill and Tuke) we find very little said as to the seat of mental diseases, and few theoretical discussions on the elementary disorders of insanity or its cause and mode of origin—subjects which occupy nearly half of Professor Griesinger's treatise. Of course, any attempt to connect the physiology of thought with its morbid manifestations must be of interest to the student of psychology. Hitherto such efforts have generally repulsed English readers through their vague obscurity and want of practical results.

Professor Griesinger's efforts in this direction are original contributions to mental pathology, and their publication in English will lead, as it has already done in Germany, to a more scientific and extended study of the nature and theory of insanity.

We shall endeavour, in the following pages, to present a brief analysis of Professor Griesinger's systematic treatise.

The first edition of this work was published at Stuttgart in 1845, when its author taught at Tübingen. The second edition appeared in 1861, during his official connection with the University of Zurich and previous to his recent removal to Berlin. The French translation by M. le Dr. Doumic was published in Paris towards the end of 1865. The work is now being translated in Russia, and the English edition to be published for the New Sydenham Society* will be ready for distribution early in May.

The work abounds in references to German and French publications on insanity and to papers buried in the different journals. The extent of Professor Griesinger's reading on the subject is very remarkable. In comparing, however, the first edition with this second, one observes that his accurate reading and references have hardly been so well kept up from 1845 to 1865 as during the preparation of the first edition. His knowledge of English psychological literature is unfortunately limited. He has, we have reason to know, a third edition in preparation in which we shall hope to see this shortcoming remedied.

The work is divided into the following five parts :

BOOK I.—General and Introductory to the Study of Insanity.

BOOK II.—The Cause and Mode of Origin of Mental Disease.

BOOK III.—The Forms of Mental Disease.

BOOK IV.—The Pathology of Mental Disease.

BOOK V.—The Prognosis and Treatment of Mental Disease.

* The New Sydenham Society. Series for 1867. 1. Griesinger on Mental Diseases.—2. Biennial Retrospect of Medicine and Surgery.—3. Fasciculus of Atlas of Portraits of Skin Diseases.—4. Hebra on Diseases of the Skin. Vol. II.

BOOK I.—The first book consists of five chapters :

CHAPTER I.-On the Seat of Mental Diseases and the Method of their Study.

CHAPTER II.—Preliminary Anatomical Observations.

CHAPTER III.—Preliminary Physio-pathological Observations on Mental Phenomena.

CHAPTER IV.—The Elementary Disorders in Mental Disease. CHAPTER V.—On Insanity in General.

Commencing his treatise with the inquiry as to the Seat of Mental Diseases—the first step towards a knowledge of the symptoms being their locality-Professor Griesinger definitely takes the position that the seat of Insanity is in the Brain, and that in every case of mental disease we recognise a morbid action of that organ.

The theories of Pflüger and Schiff, which would refer certain phases of mental activity to other parts of the nervous system than the brain, sprang from the sufficiently refuted assumption of the isolated character of the mental faculties.

Professor Griesinger thus clearly states his views of the brain being the seat of insanity:

"Pathology proves as clearly as physiology, that the brain alone can be the seat of normal and abnormal mental action; that the normal state of the mental process depends upon the integrity of this organ; and that both together are influenced by the state of the other organs in disease. The invariable and essential symptoms of cerebral diseases may arise from internal causes or external lesions; may proceed from anomalies of sensation and movement, and, in serious diseases, even from mental disturbance (exaltation or depression of the ideality, loss of self-consciousness, delirium &c.). Cases of less frequent occurrence, where, with serious disorganisation of the brain and loss of brain-substance, no disturbance of the mind is apparent, do not invalidate the results of our everyday experience.*

^{*} Collections of such cases are to be found, as in Longet ('Anat. et Physiol. d. Syst. Nerv.,' Paris, 1842, i, p. 670). With reference to most of these and other similar cases with which we are acquainted, different opinions may be held. In almost all, intelligence, in the narrow sense of the word, is alone considered; the circumstances of disposition and will are entirely overlooked; and even to the intelligence but slight tests are applied to prove its integrity, such as the answering of simple medical questions. In none of these observations has the intelligence been tested in its full extent, and in many, particularly in all hospital cases, a comparison of the mental condition after the disease or loss of substance with the earlier state was absolutely impossible. All nicer distinctions, therefore, cannot earlier state was absolutely impossible. All inter distinctions, therefore, cannot be considered. Notwithstanding, it must be admitted that there may be disease and loss of brain, and yet no appreciable disturbance of the mental life. Very much depends upon the seat of the disease; all parts of the brain do not stand in the same close relation to the mental functions; some stand much more in relation to muscular movement (Pons, Thalami, &c.). Further, with the brain, as with all the bittered energy is bickly much black that a comparation is made, but the other bilateral organs, it is highly probable that a compensation is made by the remaining healthy half (see § 15). Lastly, we frequently find limited anatomical lesions in other important organs without any striking functional derangement (chronic gastric ulcer, pleuritie adhesions, tubercle, &c.); and loss of substance (through gangrene) has likewise been observed, as in the lungs or in the bowels,

If, then, insanity be only a complication of symptoms of various morbid states of the brain, the question might be asked, whether its special study apart from that of the other diseases of the brain can be justified, or whether mental pathology should not rather always accompany cerebral pathology?

To this question Professor Griesinger gives the following reply :

"Although at some more distant period this may perhaps be looked for, any attempt at such a combination would at present be premature and quite impracticable. If the intimate fundamental union which exists between insanity and the other cerebral diseases be only constantly kept in view,—if in the one, as in the other group, the same exact anatomical physiological method be as far as possible pursued,—cerebral pathology will not be retarded, but rather advanced, by the formal specialising and monographical elaboration of these diseases classified according to their symptoms. As psychiatrie must assert the position so lately obtained for it—as a part of cerebral pathology, and as several of its practical phases, asylum economy, its medico-legal bearings, &c., invest it with an extent and character peculiar to itself, which under all circumstances, even when viewed as a part of cerebral pathology, keep it distinct, any attempt to obliterate that distinction would at present be still less justifiable.

Thus the study of mental disease must be a study of physical phenomena, and although we are quite unable to connect the mental symptoms with direct charges of cerebral structure, we have learnt enough to know that in that path alone can we hope to attain definite progress.

The second and third chapters are occupied with a consideration of the anatomy and physiology of the nervous system. They are the hardest chapters in the book, and mark a definite advance in the study of mental physiology.

In the *fourth* chapter Professor Griesinger passes to the general consideration of the elementary disorders in mental disease. These he divides into

- I. Elementary Intellectual Disorders.
 - 1. Anomalies of sentiment (emotional disorders).
 - 2. Anomalies of thought (intellectual disorders).
 - a. Formal deviations (confusion of ideas; loss of memory, &c.).
 b. Perversions of thought (false ideas, delusions, &c.).
 - 3. Anomalies of the will (absence of volition, morbid impulses, &c.).
- II. Elementary Disorders of Sensation.
 - 1. Anomalies of sensibility, anæsthesias, &c.
 - 2. Hallucinations and illusions of sight, hearing, &c.
- III. Elementary Disorders of Movement.

The cataleptic, epileptic, and paralytic states.

where, after recovery, the process of respiration or of digestion proceeded without apparent interruption. Such facts, however, would not readily be admitted in opposition to the tenet, that the lungs are the organs of respiration, and that digestion takes place in the bowels.

I. Elementary Intellectual Disorders.—a. Anomalies of sentiment.—Dr. Bucknill, many years ago, in the 'British and Foreign Medico-Chirurgical Beview,' pointed out the emotional origin of insanity. Professor Griesinger teaches a similar doctrine. The following paragraph is a fair sample of his method of argument:

"Observation shows that the great majority of mental diseases are first manifested, not by senseless discourse or extreme acts, but by morbid changes of disposition, anomalies of the self-sensation and the sentiments, and consequent emotional states. And, indeed, the earliest stages of in-sanity generally consist in an aimless feeling of ill-humour, discomfort, oppression, and anxiety, owing to the fact that the new groups of ideas and instincts resulting from the cerebral affection are usually at first exceedingly obscure. On this account the disturbance of the normal process of thought and will, and the new mental states obtruding on the *ego*, are first felt simply as vague modifications of the sentiment and disposition. The diminished power and energy of the ego, the contraction of its sphere of ideas, produces an indefinite state of mental pain, and, from its vagueness, great irritation of the feelings. The new morbid perceptions and instincts produce divisions of the mind, a feeling of division of the personality, and of imminent anni-bilation of the ego. The mental pain discovers itself in some of the familiar bilation of the ego. The mental pain discovers itself in some of the familiar forms of agitation, anxiety, sadness, and entails all the forementioned con-sequences of a radically changed reaction towards the external world, and of a disturbance in the motory function of the mind. Perversions of the natural feelings, aversion and hate towards those formerly loved, outward insensibility, or a morbid fondness clinging to a single object, but without the depth and tenderness of the normal sensation, and subject to rapid and capricious changes, are here ordinary appearances. The increased sensi-bility involves everything, because, indeed, it is painfully affected by every-thing, and, from the mournful complexion that pervades all his views and opinions, the individual puts an evil interpretation upon everything present, and discovers in the future nothing but evil. Distrust and suspicion are engendered by the feeling of diminished power of resistance, and are con-stantly excited by bodily feelings of anxiety. Everything appears strange to him, because he acts strangely towards every mental impression, because he birmed for the address of the every mental impression, because he himself feels altered, and he feels a strong inclination to ascribe his con-dition sometimes to the direct influence of the outer world—to believe that he is pursued, influenced, charmed, governed by secret influences—and at others to refer to his former life for the causes, and to accuse himself of a variety of serious crimes, depravities, and misdeeds, of which his present position is the necessary consequence.

b. Anomalies of thought.—These are divided into (1), formal deviations; (2), perversions of thought. Formal deviations of thought are evidenced either by general loss of coherence or more or less deficiency of certain elements, as memory. The former exists in chronic mania, the latter in dementia.

Perversions of thought. All mental disease tends to intellectual disorder or perversions of thought, whether in its earlier stage it be characterised by emotional disorder, or mental weakness, or loss of certain intellectual powers. Professor Griesinger is happy in his explanations of the mode in which intellectual disorder (perversions of thought) arise in the insane.

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"The false ideas (he says) and conclusions, which are attempts at explanation and vindications of the actual disposition in its effects, are spontaneously developed in the diseased mind according to the law of causality; on the part of the individual the explanations do not imply reflection, still less are such conclusions formed by the tedious form of syllogism. At first the delirious conceptions are fleeting; the I perceives them, it may be terrified by them, acknowledge their absurdity, and yet feel quite unable to rid itself of them, and struggles with them; gradually, by continued repetition, they gain more body and form, repel opposing ideas and form connections with similar masses of perceptions of the I; then they become constituent parts of it, and the patient cannot divest himself of them, or only in some degree by exchange with similar false perceptions. The excited, lively, and hence incare and the patient processed by the I much more assign and happy insane ideas are naturally received by the I much more easily and completely; it yields to them after a short resistance, and then it occasion-ally gives itself over to the insane perceptions, half-conscious imagination in

a world of happy dreams arises. "All false ideas, however, are not to be considered as thus explicable; many originate with the fortuitous abruptness of hallucinations, or of those peculiar quaint thoughts which often spontaneously intrude on the healthy mind during its most earnest employment. They often originate simply from phantasms of sense, dreams, owing to external circumstances; their persistence depends on the present disposition of the patient, and whether in the present perceptions any material for connection is found. We will find, on careful attention, that many such ideas in the insane are related to hallucinations, which, however, do not clearly show themselves."

c. Anomalies of the will.-Volitional disturbance is a marked element of intellectual disorder, and we observe at one time entire suspension of the will; at another, its uncontrolled exercise with increased energy. The power of the insane to control volition is a question often debated.

The following is Professor Griesinger's judgment on this point :

"Whether, and to what extent, certain directions of the will and impulses in the insane, particularly such as lead to criminal acts, are irresistible, is a question which can scarcely ever be answered with certainty. Few of the acts of the insane have the character of forced, purely automatic movements; in mania also, according to the testimony of individuals who have recovered, In mania also, according to the testimony of individuals who have recovered, many of the wild desires could often be restrained; the criminal deeds of the insane are not generally instinctive. The loss of free will (or, if we choose, irresponsibility), therefore, seldom depends on the fact of inability to have abstained from the act committed, or that the normal conditions of volition have been completely suspended. The causes of this loss of free will chiefly depend on quite a different cause, they depend on violent excita-tion of the emotions, or on incoherence, on false reasoning proceeding from delivious concentions hallucinations. &c. delirious conceptions, hallucinations, &c.

II. Elementary disorders of sensation.-These consist in anomalies of sensibility (anæsthesias, &c.), and of hallucinations and illusions. The latter are by far the most important. By hallucinations, according to Professor Griesinger, we understand subjective sensorial images, which, however, are projected outwards, and 6

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thereby become, apparently, objects and realities. By an illusion is meant the false interpretation of an external object. It is an hallucination when I see human forms while in reality no man is near, or hear a voice which has not spoken; it is an illusion when I take a bright cloud in the heavens for a fiery chariot, or when I believe that I see an old friend when a stranger walks into the room. In hallucination there is no external objects, it is a false sensation; an illusion is a false construction, a transformation of a peripheral sensation.

Hallucinations may occur in all the senses, in the senses of sight, hearing, smell, taste, and cutaneous sensibility. Professor Griesinger states the following to be the causes of their origin :---

"(1) Local disease of an organ of sense may become the source of sensorial delirium; therefore it is always necessary minutely to examine the patient in this respect.

"(2) All states of deep exhaustion, whether of mind or of body, appear to favour the development of hallucinations. As, in former times, the strong asceticism from religious motives was a cause of numerous hallucinations, so at the present time we very frequently see the sensorial delirium coming on after inanition, prolonged fasting, or other exhausting cause, great mental fatigue, &c. This is particularly favoured by one-sided mental concentration, by superstitious ideas when fervently maintained (Benvenuto Cellini, many devils and religious visions).

"(3) The morbid emotional states from which insanity so frequently originates evoke hallucinations and illusions in the same manner as the analogous states in health, fear, fright, &c., obscure the sensorial perception and awaken new and false sensorial images.

"(4) Outward calm and stillness favour hallucinations, and the production of hallucinations between sleeping and waking is a circumstance of special importance.

ⁱ(5) Certain poisons and substances used in medicine can very effectually call forth hallucinations, especially the preparations of hemp, belladonna, stramonium, &c."

III. Elementary disorders of movement.—Under this third head Professor Griesinger includes the remaining forms of so-called insanity—the cataleptic, epileptic, and paralytic states.

The last chapter of Book I treats of Insanity in general; of-

a. The analogies of insanity.

b. The general diagnosis of mental disease.

The analogy of insanity to dreams and to the delirium of fever is more pressed by Professor Griesinger than we are disposed to admit. We rather concur with Georget in regarding the delirium of fever and mental disease as specifically different.

As regards the diagnosis of insanity Professor Griesinger gives six *criteria* from which an individual may be pronounced insane.

(1). The chief point is invariably this—that, in the great majority

of cases, there appears with the mental disease a change in the mental disposition of the patient in his sentiments, desires, habits, conduct, and opinions. He is no more the same; his former ego becomes changed; he becomes estranged from himself.

(2). Should the consequent change in the habits of the patient or the suspected exaggeration of certain phases of his individuality have occurred under circumstances which, according to experience, may be viewed as causes of insanity, or if the individual has been so situated as to be exposed to important exciting causes, we can, with still greater confidence, pronounce his state to be one of mental disease. Hereditary predisposition, nervous constitution, injuries to the head, dissipation, hysteria, epilepsy, may be mentioned as examples of the most important predisposing causes; while disappointment, fright, acute disease, the puerperal state, are amongst the most frequent exciting causes.

(3). The symptoms of mental diseases consist only to a small extent of definite, isolated, and unmistakeable morbid appearances, and never in any case of directly palpable and physical signs. They depend essentially on the interpretation of the mental acts by an observer acquainted with disorders of the mental functions and their modes of expression. Two individuals may say and do the same thing; for example, they may express their belief in witchcraft, or the fear of being eternally lost; the intelligent observer would declare the one to be healthy and the other to be insane. This judgment is come to by a consideration of all the accompanying circumstances, and from a knowledge gained by experience of the various forms of insanity and their accompanying phenomena.

(4). Symptoms of bodily disease ascertained by the state of the pulse, the digestion, the secretions, &c., cannot naturally, in any case, be taken as proofs of mental disease; the diagnosis depends essentially and exclusively on the mental symptoms. Nevertheless, those symptoms of diseases in other parts may be of great value.

(5). From the physiognomy, gestures, words, and actions of an individual, we learn the essential symptoms, those of the mental state. But there are cases where the external signs mislead, as the insanity is sometimes simulated, or—but not so frequently—feigned. When dissimulation is suspected, the following circumstances should especially be considered. The simulator, if he does not possess special psychiatrical knowledge, very seldom succeeds in correctly feigning the symptoms of any one form of mental disease. He generally mixes the appearances of several forms with each other, so that an unnatural representation of disease is offered. Moreover, he usually overdoes the phenomena of mental disturbance. He believes that all must be reversed; instead of giving expression to delirious conceptions, he talks absurdly, and conducts himself as if, in insanity, the greater part of the intelligence and of the memory must be disturbed; acts as if he could no longer count, read, write, or tell his name, &c.

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(6). Simulation excluded, Professor Griesinger dwells lastly on the difficulty which remains of accurately determining whether after all a man be sane or insane?

"The question (he says) whether mentally diseased or not? is by no means a correct one. There are no well-marked boundaries between health and disease in general; there is, in mental as in other pathology, an intermediate territory of disorder which is not yet fully developed disease, and where the individual still exhibits many of the characteristics of health. Is not this the case with the simplest bodily troubles? Where is the exact point at which we pronounce a man blind? Only where there is absolutely no appearance of light? Or, who is dumb? Who is dropsical? The individual who has the slightest trace of œdema? If not, where does the limit of dropsy commence? When there are extremes, all are agreed. When the degrees are slight, we may even argue whether these signs may be taken into consideration in the case.

"In mental medicine, however, many medico-legal cases fall within this category; for example, of deeds done in passion by persons habitually moody, and those of weak intellect—of habitual moderate excitement, or of perversion with temporary distraction, of drunkenness, hysteria, &c.; cases of which it must ordinarily be said that the individuals are not in a healthy mental state, but the marks of definite mental disease cannot be clearly discovered; therefore it is more probable than certain that their actions are regulated, or at least greatly influenced, by morbid organic causes. In the mode in which these actions are expressed there is, indeed, no marked line of distinction between eccentricity, passion, perversity of desire, dulness of sentiment, and mental disease; there is no constant sign from which we can tell whether those states result entirely from organic disease (morbid), or only partially from such, or whether they exist without organic influence, as original traits of character, or as the hereditary results of the psychical individuality. All existing phenomena of cerebral disorder, hallucinations, paralysis, &c., and all physical morbid appearances, are here of special value."

BOOK II.—The second book treats at great length of THE CAUSES AND MODE OF ORIGIN OF MENTAL DISEASE. The causes are divided into general predisposing causes and special predisposing causes. They are thus defined by Professor Griesinger :

"Under the head of causes in mental as in general pathology are understood all the different classes of circumstances to which may be ascribed an influence on the development of the disease, although their mode of connection may be variously exhibited. The causes comprehend, on the one hand, the external circumstances (nationality, climate, season of the year) under the influence of which insanity is generally, with more or less frequency, observed; on the other hand, they signify certain external injuries (sunstroke, wounds of the head, of which insanity is frequently a consequence; finally, they comprehend certain internal states dependent on the organism itself (hereditary disposition, previous disease, or other general disturbance of the organic mechanism, such as disease of the lungs, the genital organs, &c.) which we know by experience have an influence in the development of insanity. In very many of these circumstances the intimate connection between them and the influences ascribed to them, the mode in which from 1867.]

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them the mental disease is developed, is scarcely ever or not at all evident. The conclusion *post hoc ergo propter hoc* depends, therefore, on a simply empirical (statistical) knowledge of the fact that these particular circumstances (for example, hereditary disposition, very frequently coincide with, or precede, the commencement of the insanity. In other of these so-called causes, their mode of action, the manner in which, in consequence of them, the disease is established, can be comprehended. But the province of *etiology* in the narrow sense is only to enumerate empirically the known circumstances of causation; it belongs to *pathology* to explain the physiological connection between cause and effect, to show the particular mechanical act by means of which insanity is induced through a given circumstance (for example, excessive depressing emotion, heart-disease, &c.), a task towards which we have hitherto done little more than prepare the way."

The whole subject of the causation of mental disease is admirably treated throughout this second book. Professor Griesinger passes in review the predisposing and exciting causes illustrating each section with a mass of observation and reading on the phenomena of insanity, such as one would in vain look for elsewhere. This subject occupies from p. 127 to p. 205 of the English translation of his work. Our limits prevent our following out the detail treatment of this question by Professor Griesinger. We conclude our present observations on this work with the following extract, in which he briefly sums up the result of his investigation into the causes of insanity :--- "From this enumeration of the causes of insanity (he writes) the general doctrine may have been deduced that everything which lowers the nutrition, all true states of weakness, and further that all circumstances which over-excite the nervous system, which favour congestion of the nervous centres-in short, all which have as a result the development and fixing of the nervous constitution, may become causes of insanity. We shall again revert to this subject when we come to speak of the treatment of mental diseases."

(To be continued.)

Modern Culture: its true aims and requirements. A series of Addresses and Arguments on the Claims of Scientific Education. Edited by EDWARD L. YOUMANS, M.D. Macmillan and Co., 1867.

WHAT kind of culture the growing mind of the nation shall have is without doubt one of the most important questions which can rise for consideration. The neglect of science in the prevailing system of education, and the undue time and labour bestowed on the study