

PART III.—QUARTERLY REPORT ON THE PROGRESS
OF PSYCHOLOGICAL MEDICINE.

I.—*Foreign Psychological Literature.*

By J. T. ARLIDGE, A.B. & M.B. Lond., M.R.C.P. Lond. &c.

Correspondenz-Blatt der Deutschen Gesellschaft für Psychiatrie, &c.—The numbers of this monthly periodical from April to October, 1863, are now before us, and among their contents are several articles of interest.

On dumbness in mental disorders is the subject of a short paper by Dr. Kehl. Actual dumbness he considers rare among the insane; he encountered only one case in the course of ten years, and among a large number of insane patients. This is a very indefinite way of stating the relative prevalence of a condition or circumstance; still there cannot be a doubt that dumbness among the insane, not idiots, is uncommon. The author having, therefore, nothing to tell us respecting dumb insane people, occupies his paper with some general remarks on taciturnity, and appends an interesting case of a young man who very seldom spoke during the space of the four years that he was in the asylum, owing to the delusion that his magnetic power would fly off and be lost, if he spoke before others had eaten. When in company with other patients he kept his head moving, and felt an uneasy sensation at the breast, and wished that his magnetic needle was divided, so that the magnetic force might not pass off so strongly. He grew worse after his entrance into the asylum, refused food, answered questions only by yes or no, and ultimately at the end of fifteen months from his admission, refused to speak at all, and persevered in this for four years; until, that is, the date at which the history is written by Dr. Kehl. However, he joined others in working in the grounds, took part in amusements, was tractable, understood everything said to him, and answered questions by gestures and in writing. His writing was very illegible, and partly made up of words and partly of signs. His functions were normal, and there were no paralytic symptoms, though much dementia. The cause of his disorder appears to have been disappointment in love; and on two occasions prior to his admission into the asylum, he had suffered short attacks of acute mania. His mother had once an attack of meningitis; a maternal uncle was epileptic, and a sister died in infancy from hydrocephalus.

Dr. Kehl surmises whether in this case there was loss of power in the olivary bodies, similar to what Schroeder van der Kolk found in

mute idiots, or whether the dumbness had a psychological origin, owing to the dementia overpowering the impulse to speak; or, again, whether it was due to the influence of his delusion in imposing silence upon him. This last explanation appears to the author the most probable, inasmuch as the dementia was by no means extreme; his countenance was intelligent, and he was disposed to, and fond of society and amusements, and as the function of the olivary bodies in reference to speech is quite hypothetical, even supposing them to be affected.

Use of bromide of potassium in epilepsy.—Dr. Franke, of Munich, has tried this medicine, as recommended by Dr. Wilks, in several cases of epilepsy with great benefit.

CASE 1.—C. D—, female, æt. 22. Had suffered from epilepsy for many years, and the mind had begun to suffer. During two years the fits had daily recurred, and, for two months, several times a day. In April, 1860, bromide of potassium was commenced in five grain doses three times a day, and the fits receded in number, duration, and severity. From the 3rd of June no fit occurred until the 6th of the month, and none again between that date and September. The next remission lasted till the end of December, when the medicine was discontinued. In February she suffered much emotion from the death of a brother, and a fit was the consequence; the use of the medicine was recommenced, and continued for six weeks, since which she has continued well, and gained in flesh and strength.

CASE 2.—F. K—, æt. 34. Had suffered two years; the fits, which occurred at long intervals at first, had latterly occurred every month, and at last twice a week. He was treated with the bromide for a period of ten weeks, after which no fit occurred, and he has remained well during the whole of the following year.

CASE 3.—L. C—, female, æt. 59. Has had epileptic fits since she was a year old. Recently they have occurred several times a day. The bromide was commenced in November, 1860, and at the end of January, 1861, the frequency of the fits had become reduced to one a week. From this date to the end of February she was free from them, and the medicine was stopped. Several months afterwards she was found to have remained quite well.

CASE 4.—J. S—, male, æt. 33. Has been epileptic a year and a half. Is very weak, and confined to his bed. In August, 1861, he had seven fits in one day, followed by delirium. The bromide was given in doses of ten grains three times a day; improvement quickly followed, and he was discharged cured, after a residence of only two months in the hospital, with his health and strength greatly improved.

CASE 5.—H. W—, male, æt. 40. His fits were of daily occurrence, and often recurred two or three times a day. In September,

1860, he commenced with three grain doses of bromide of potassium thrice a day. During the four ensuing months, during which he continued the medicine, only three fits occurred, and he has subsequently been quite free from them.

CASE 6.—J. E—, male, æt. 22. Epileptic one year; has two to three fits daily. He took the bromide for two months, and has subsequently had no recurrence of his fits.

Regulation of private asylums in Holstein.—Dr. Castagne, of Kiel, has been instrumental in procuring the institution of the following government regulations of private asylums:

1. A report is to be presented every year to the district physician by the superintendent, setting forth the details of management and the general results. The district physician is also to make an annual report to the board of health, giving as full particulars as possible.

2. The superintendent is not only required to comply with the general medical legislation, but to supply any information required by the authorities duly appointed. For this purpose he must keep a register of every patient, setting forth the name, age, social position, place of birth, and of residence; the day of admission, of discharge, or of death, and the treatment pursued.

3. The asylum to be open to the inspection of the police authorities of the district in which it is situate. The district physician is to visit at least four times a year; to call the attention of the superintendent to any defect or error, and, where necessary, to send information to the higher authorities and the board of health.

4. The reception of a patient to be reported by the superintendent, not after the third day at the latest, to the superior police authorities of the district, and to the district physician. The police authorities are to investigate whether the reception is quite regular, or whether further information is needed. The certificate of a magistrate of the place in which the patient has last dwelt that his removal is legal and necessary, or the certificate of a qualified medical man attested by a magistrate, must be obtained. With reference to those insane persons who voluntarily enter an asylum, evidence must be afforded that it is by their own desire.

5. In the case of discharge or of death, the police authorities and the district physician are to be apprised at once. The same notice is required when a patient escapes. The notice of discharge must state whether the patient is recovered, and if he be not, on what ground the discharge takes place.

6. When doubt arises respecting the propriety of admission or of the discharge of a patient, and especially when there is a difference of opinion on this matter between the superintendent and the district physician, the decision of the board of health is to be obtained and acted upon.

7. Superintendents of private asylums who infringe any of these regulations are liable to a fine of from 20 to 200 thalers.

Clinical teaching of insanity in Germany.—The following summary exhibits the extent of provision for teaching psychiatry in Germany :

1. In universities having asylums for acute and chronic cases connected with them, and a regular course of clinical instruction by teachers who are specialists :—Vienna, Prague, Berlin, Munich, Erlangen, and Zurich.

2. Universities connected with asylums, and affording clinical instruction but where the teachers are not specialists; such are Griefswald and Jena.

3. Universities similarly circumstanced, where psychiatry is taught only theoretically; Leipsic and Breslau.

4. University with an asylum connected, but in which there is no instruction in insanity; Halle.

5. Asylums admitting a limited number of students, for a certain time, for education in the treatment of insanity; Siegburg, Hildesheim, Illenau.

The most extensive efforts to carry on the study are made in Bavaria, and most vigorous endeavours are also seen in Hanover. Among the countries in which the least has been done to advance the subject are Wurtemberg and Prussia.

At Tubingen clinical instruction in mental disorder is obligatory upon medical students, and psychiatry constitutes one of the subjects for the final examination for a degree in medicine. As the existing asylum in this town is insufficient, a new one is in course of erection in the neighbourhood.

The number of the 'Correspondenz-Blatt' for May is principally occupied by a long theoretical dissertation on the faculty of sensation and perception, and its derangement in mental disorder, for an analysis of which we have no space.

Pachymeningitis.—Forms the subject of a brief notice by Dr. Kelp. —Virchow observed that hæmatoma of the dura mater originated in an inflammatory condition of the arachnoid covering its internal surface, which led to exudation, often repeated so as to form several superimposed layers. In course of time blood-vessels are developed in the substance of these false membranes, and occasionally an effusion of blood takes place in their interior, and they assume the form of unilocular sacs, such as Rokitansky stated to be frequently present in cases of general paralysis with insanity. This same physician also asserted that in this mental malady there was atrophy of the brain from an abnormal development of areolar tissue in its substance, consequent on the existence of the hæmatoma. The areolar or con-

nective tissue appears first in a granular form, and presently becoming fibrous interferes with the nutrition of and destroys the nervous matter around it, leading to its degeneration into colloid and amyloid corpuscles. Dr. Kelp, however, has not been able to verify the presence of this exuberant growth of connective tissue in paralytic dementia, and regards it as only an occasional circumstance. Lanceraux has in a recent paper on meningeal hæmorrhage ('Archives Générales,' 1862-1863), traced out the symptoms of pachymeningitis, and illustrated its pathology by numerous observations.

According to this writer there is a connection between the formation of pseudo-membranes and a rheumatic affection; and from the concurrence of fatty liver with pachymeningitis, he is disposed to attribute both lesions to chronic alcoholism. He distinguishes two forms; one in which the false membranes are produced without any serous or sanguineous effusion within them; the other in which such effusions, in a greater or less quantity, occur.

In the first class of cases Lanceraux states that the most prominent symptoms are the existence of pain in the head in a circumscribed space, and the frequent occurrence of vertigo and stupor. At times the patient is heavy, troubled and agitated, although there is no pain present to account for it.

The symptoms of the second class of cases enumerated by Lanceraux entirely agree with those assigned to the lesion by Griesinger. There are symptoms of compression, heaviness, drowsiness, stupor, paralysis, coma, together with signs of irritation, contracted pupil, and convulsive jerkings of the limbs. If the effusion exists only in the form of scattered spots upon the false membrane, the symptoms rather resemble those of active cerebral congestion. Should the effusion of blood occur suddenly, there are headache and vertigo, with loss of consciousness and spasms or convulsions of the limbs. After a fit of this sort, a somnolent state succeeds, which either continues and is interrupted by convulsions, or else consciousness returns, and the convulsive seizures diminish in frequency; some degree of paralysis and spasmodic contraction of the limbs, varying in extent, remain.

These symptoms, observes Dr. Kelp, are by no means distinctive, in either of the two forms of pachymeningitis mentioned. Where there is only softening of the brain in many paralytics, the symptoms are quite similar.

On Emboly of the Cerebral arteries.—Dr. Erlenmeyer presents a useful *résumé* of the present state of knowledge on this subject, of which the following is an abstract. The blood-vessels of the brain may become obstructed in various ways. Inflammation may lead to stoppage in the veins and sinuses, and be induced by caries of the cranial bones, by traumatic injuries, and by clots of blood poured

out in the cerebral substance; or weak or impeded circulation may lead to stoppage. The great arteries, or their branches, or the capillaries themselves, may become impermeable. This impermeability may ensue in consequence of their obstruction at some spot by a foreign body carried along in the stream of blood, and then *emboly* or *embolism* is produced. Or the impediment may follow in consequence of disease of the arterial coats themselves, leading to inflammatory exudation, when we have the so-called *autochthonous thrombosis*.

The nature and origin of the bodies which may close the arteries are not in all instances determined. That spontaneous coagulation may take place in the blood, and a portion of coagulum produce emboly, cannot be disputed; but, on the other hand, it is equally certain that the arteries may be obstructed by a fibrinous clot derived from a valve of the heart, where it has formed in consequence of an attack of endocarditis, or by a detached fragment of one of the valves themselves when affected by softening consequent on inflammation, or by detritus from any portion of the softened endocardium, or by calcareous accretions growing upon the margins of the valves, or otherwise derived from atheromatous disease of the aorta, and also from fatty, tubercular, carcinomatous, purulent, or ichorous masses, which find their way into the circulation. A very fertile source of emboly is the presence of acute ulcerative endocarditis, where it speedily takes on the form of a typhoid attack, or of pyæmia, with secondary violent icterus, and supplies at one time from the ulcerating tissue of the heart itself, at another from the fibrine poured out in connection with the process of ulceration, the material of the plug in the vessels. Again, the cells and elements of connective tissue may constitute the nuclei of emboly, and, as Tannus demonstrated in the case of quicksilver in the tissues, may increase in magnitude by the outpouring from the blood of fibrine around them. Lastly, the thrombi produced by phlebitis may, on being broken up and washed away in the circulating fluid, on arriving in the arteries produce an obstructing clot; hence it is that in pyæmia, and in puerperal disorders, embolism is not an infrequent occurrence. It is seldom that the material of an embolus enters the arterial system from without. Oppolzer has observed the production of embolism from extraneous material entering the cardiac cavities from their muscular walls, where they had originated as the products of disease, such as the gum-like substance of a syphilitic swelling, or the sacs of echinococci. Or again, ichorous matters may find their way into a vein by erosion, and induce alterations in the blood; and in like manner such substances, or fatty or atheromatous matters may plug the capillaries.

The figure of an embolus may vary exceedingly, and depends on circumstances widely different. It has, however, no influence on the

form and progress of the disease. Its size, on the other hand, is important so far as it is related to that of the obstructed vessel. Still the plugging of a carotid will not produce so much mischief, probably, as that of a small vessel in the "circle of Willis," as in the former case the collateral circulation would be less interfered with than in the latter. Obstructions in the cerebral arteries occur in the following order with respect to frequency; in the internal carotid, the anterior communicating artery, the artery of the fissura Sylvii, the basilar, the vertebral, and least of all in the artery of the corpus callosum. Several arteries may be obstructed simultaneously, either by several plugs or by one situated in a larger artery from which they branch. The left carotid stands foremost in its proclivity to embolism; of arteries in other parts of the body, the splenic and renal are the most frequently plugged, after them comes the femoral. The primary changes that occur in the brain when one of its arteries is obstructed are, the production of anæmia in those portions to which it and its branches are supplied, and an increased flow of blood in surrounding vessels, leading sometimes to the establishment of an adequate collateral circulation; but if not, the bloodless portions become involved in further changes. The first of these changes is a softening of the nerve-tissue, which occurs within the first forty-eight hours after the accident. The softened part is usually reddened by blood exuded from surrounding vessels, and whilst this colour is present, which it usually is for from eight to fourteen days, the nerve-cells and fibres remain unaltered in appearance. Yellow softening then succeeds; the tissue is more pulpy, and the distinctness and arrangement of its cells and fibres are much disturbed. The yellow colour proceeds from the blood and the fatty matters of the brain, which undergo retrograde changes. Commonly, after a few months, a white pulpy softening follows, in which nerve-cells and fibres are no longer distinguishable, but only groups of nuclei, fat-cells, &c. This white softening is usually found only when the lesion is somewhat considerable in size. A fifth stage may be described, distinguished by absorption of the softened mass, and the appearance in its stead of a serous cyst, or of depressions with irregular walls, or of encephalitic nodules. Actual reconstruction of brain substance, such as Cohn held to be possible, is not as yet proved. Emboly in the capillaries leads to similar softening, which may pass through the same phases as that consequent upon the obstruction of a larger vessel.

Symptomatology.—The chief sign of emboly in a cerebral artery is the sudden accession, without antecedent indications, of an apoplectic fit, or at least of an attack of vertigo, mostly causing the patient to fall down, or else of a fainting fit. There is sudden loss of consciousness, and more or less paralysis of muscles on one side of the body, according to the position and character of the artery involved

by the lesion. Paralysis of the facial and of the hypoglossal nerves, and of the extremities, is comparatively constant. It is remarkable, that in the anæmia of the brain from emboly, at least when consequent upon plugging of the smaller arteries of the cerebrum, no convulsions nor spasms ensue, although the experiments of Kussmaul have shown that epileptiform convulsions are produced by anæmia. Indeed, convulsions have been observed only in the case of emboly of the carotid.

Together with these principal symptoms are noticed others, such as, that the head and face of the patient are usually cool, anæmic, and collapsed, and that neither grinding of the teeth nor vomiting occurs; that the pupils are unaltered and act naturally; that the pulse is neither accelerated nor retarded, and that the carotid pulse is not strong, but weak and small. The temperature of the body is mostly diminished. As the collateral circulation becomes established consciousness returns, and the paralysis gradually decreases; and the sooner this is set up, so much more hope is there of an amelioration or removal of the paralysis. On the other hand, if it be delayed till softening supervenes, some lasting paralysis is the result, and with this at times a certain degree of psychical derangement or weakness. Lastly, no improvement may ensue, and death follow, either from the anæmia alone, or from the subsequent softening, or from complications due in part to the operation of the emboly upon other vessels.

Both sexes are equally liable to this lesion. Age has an important bearing both upon its occurrence and its diagnosis. The period of life between twenty and thirty years of age, when rheumatic affections and rheumatic pericarditis are most frequent, is also most prone to embolism. After the fiftieth year, atheromatous deposits in the arteries are frequent causes of rupture of vessels and effusion of blood in the brain, as also of those obstructions of arteries directly due to these deposits, and spoken of as cases of autochthonous thrombosis. The diseases which may be enumerated as especially causative of embolism are:—rheumatism, arthritis, syphilis, carcinoma, and puerperal phlebitis. Excessive indulgence in spirituous liquors is also an often assigned cause.

Diagnosis.—The differential diagnosis between emboly and other diseases affecting the brain is not easy, particularly between it and autochthonous thrombosis of the arteries and cerebral hæmorrhage. It may be predicated with some confidence when a patient is young—under thirty years of age, not very robust, and suffers from rheumatism or cardiac affections (such as valvular disease, or endocarditis, particularly in the left ventricle), or when it is a young woman with signs of puerperal phlebitis, or in general when a person whose arteries are healthy, and free from atheromatous deposits, is seized, without any previous intimation of mischief (such as agitation or restlessness, giddiness, lethargy, or fornication), with an attack of

vertigo, fainting, loss of consciousness and hemiplegia, particularly of the right side, and when the force of the circulation in the carotids is not augmented, the head cool, the features collapsed, the temperature of the body decreased, the pupils unaffected, and all signs of irritation, such as convulsions, vomiting and spasms, are absent.

The diagnosis is rendered more sure should the patient have formerly suffered, or be at the time suffering, from emboly in other arteries. And attention may be first directed to the existence of such obstruction in the femoral artery, with consequent gangrene of the leg, or in the splenic artery, along with enlargement of the spleen and pain of that organ; or in the renal artery with hæmaturia. Further, should there be any existing foci of embolism, *e.g.*, from ulceration, the diagnosis acquires increased certainty.

When, without the employment of energetic measures, consciousness returns in a few hours, and the paralysis recedes, we have in these circumstances indications of emboly, and also one point of distinction between this lesion and cerebral hæmorrhage. The diagnosis between it and thrombosis of the cerebral arteries is more difficult. Lanceraux states that thrombosis particularly attacks persons advanced in life, who are above forty years of age, and still more those between fifty and sixty, who have hypertrophy of the left ventricle, or fatty degeneration; have been troubled for a considerable time, not with rheumatism but with gout, whose arteries are in an atheromatous condition, and with whom symptoms of cerebral disturbance have for a lengthened period been present. In such patients the seizure is either gradual or sudden, in the form of an apoplectic fit, with loss of consciousness and paralysis.

Treatment.—Little can be done in the way of treatment, for we possess no means of favouring the collateral circulation, nor of removing the clot, nor of preventing the subsequent changes in the brain substance. The question of management proper in cerebral hyperæmia or hæmorrhage has no bearing on this lesion. Bleeding and the application of cold to the head are mischievous. Some have proposed to stimulate the energy of the heart, and of the current of blood, in order to promote the establishment of a sufficient collateral circulation.

Rheumatism and mental disorder—is the subject of a short paper, illustrated by five cases, by Dr. Sander, Assistant-Physician of the Siegburg Asylum, published in the 'Zeitschrift für Psychiatrie,' 1863, p. 214. Griesinger, in 1860, called attention to the association of mental disorder with rheumatism, in the 'Archiv für Heilkunde' (Heft. iii, p. 235), and related seven cases of its occurrence. In his first and second cases the mental disturbance appeared on the recession of the rheumatism, and after continuing a

considerable period began to decline as a fresh attack of rheumatism supervened. However, no constant interchange between the two maladies was discoverable. In one instance chorea also was present: in four the affection of the joints declined on the outbreak of the insanity, and did not recur. In one case the cerebral disturbance ensued after the rheumatism had quite vanished.

The following conclusions have been drawn:—1. That severe mental disorder may occur, not only during the persistence of acute rheumatism in the joints, but be prolonged for a month or upwards after this has ceased. 2. This mental lesion manifests itself without fever, usually with the character of depression, and often as decided melancholia with stupor. A state of excitement may follow, or be intercurrent with the melancholia. 3. Now and then convulsive or choreitic movements complicate the mental disturbance. 4. The prognosis is very favorable; and recovery, so far as the few recorded cases go to show, ensues most rapidly and surely when a fresh attack of rheumatism supervenes in the course of the cerebral affection.

It may generally be assumed, that the brain affection and the rheumatism stand more closely related than do the chronic cerebral disorders consequent upon other acute diseases; as for instance, typhus, where anæmia of the brain or some other general cause may be assigned as the basis of the psychosis. The question for solution is, whether this association of rheumatism and insanity is attributable to the rheumatic poison acting upon the cerebrum, and producing a form of rheumatic meningitis.

Insanity in Austria.—Dr. Knorlein presents in the same number (Heft. ii, Band xx, 1863) of the 'Zeitschrift,' some interesting historical notices of the state of the insane in Austria, and of the legal and general provisions made for them in that country. This paper will be valuable to the student of the history of insanity and its treatment, but does not demand an analysis in our pages. It would appear that public attention is much aroused in the Austrian empire to the necessities of the insane and the want of additional asylums to supply them.

Die Spermatorrhœa in Nerven, Gemüths und Geistes-krankheiten. Bonn, 1862, pp. 152.—In this small treatise, Professor Albers, of Bonn, has undertaken the description of the pathology and treatment of spermatorrhœa, particularly in its relations with the nervous system and mental disorder, and we can recommend the book as containing a very good outline of the subject.

Great difference of opinion prevails in this country with respect to the connection between spermatorrhœa and insanity, and we have never met with a satisfactory discussion of the question. Some psychia-

tric physicians are positive in their assertions that this diseased condition is a frequent cause of insanity, whilst others will scarcely recognise it as a cause, though ready to admit it as in some measure a symptom or a consequence, particularly among the chronic insane. Concerning this matter Professor Albers advances the general proposition, that involuntary seminal discharges and the irritation of the seminal vesicles and ducts exercise a very injurious influence upon the brain, and, at least under certain predisposing conditions, may become actual causes of insanity; that this form of insanity is characterised by a particular group of symptoms, sufficing to distinguish it from other varieties of the malady, and that the severity of the disease is proportionately influenced by the arrest or the increase of the discharge.

Guislain's objection to this proposition, viz., that some people who are victims of spermatorrhœa for a long life-time do not become insane, is not valid; for the same may be said of many bodily diseases, as of those of the brain, which may exist a long time without disturbance of mind. It is true, indeed, that many may escape the consequences of their disease or their vice by their own moral control, and by medical aid exercised to arrest it, before permanent mischief is produced; yet it is equally certain that onanism exerts numerous ill-consequences both on the brain and nerves. In cases of *pollutio diurna* there is not only seminal loss, but also profuse secretion from the various structures connected with the testicles; and there can be no doubt that the former exceeds that following normal function, for not only does the secretion escape with the urine, but also with the alvine evacuations during stool, and as Lisle has remarked, it is impossible to estimate the quantity. Moreover, the flux goes on both in the urine and the stools without the knowledge of the patient. Again, the secretion is itself abnormal, as are also the parts associated with its escape;—the vesicles, ejaculatory ducts, and *bulbus urethræ* are in a diseased condition, irritated, congested, or inflamed, and to a certain extent dilated and paralysed. All such abnormal states are themselves injurious to the whole frame of the individual, and particularly to his brain and nerves. In short, it appears certain that inflammatory irritation of the *bulbus urethræ*, and of the seminal ducts and vesicles opening into it, constitutes of itself,—as seen in cases where gonorrhœa has produced it, and where there is no seminal discharge, a cause of cerebral irritation, and one of no inconsiderable importance in developing insanity itself. Albers gives a case in illustration of this fact, and another which shows that gonorrhœa may produce the injurious effects upon the sexual organ above noted, and be thereby a direct cause of seminal loss, the patient's mind becoming also at the same time disordered.

The insanity due to spermatorrhœa Albers describes as pointing in no evident manner to the nature and seat of the disease as a brain

affection. It usually exhibits itself in the form of melancholia, an irrepressible tendency to depression associated with great muscular debility, and often tremors and unusual irritability of the muscles. The sentiments are blunted, and there is an indisposition to exertion, both mental and bodily, together with anxiety and uneasiness, and a sensation of weight or oppression at the heart. Mistrust of self, and a feeling of insufficiency for any business or occupation; erroneous interpretation of circumstances; a disposition to distrust others; an entire change of character, of ideas, habits, and passions; a much weakened condition of the understanding and moral powers; habitual vacillation and indecision both in thought and action; a desire for solitude, and irritability of temper; such are the principal mental signs leading to the inference that spermatorrhœa lies at the foundation of the mental disturbance. Concurring with these are self-accusations of past sexual indulgences, accompanied with feelings of despair and a disposition to suicide. Suicide, however, is rarely completed, the energy of the will appearing to fail. A maniacal state is much rarer and almost restricted to cases of spermatorrhœa gonorrhœica. The bodily conditions are not less noteworthy. The pallid, wan countenance is the external indication of the gloom and shyness of the patient. The eye is devoid of lustre and vivacity, and without expression, as in melancholia, but has not, as in this disorder, the same fixedness and persistence, until actual recovery ensues. In interrogation, the eye indicates shyness, and looks for encouragement to the speaker. Transitions from warmth to cold are always seen; there is a desire for warmth, and the sensation of cold is strongly felt, even when the change of temperature is really slight. On the other hand, the temperature of the head is increased when imperfect pollution has occurred.

Albers has made numerous observations on temperature, particularly in its relation to the accession or removal of the phenomena of mental disorder and of cerebral lesion. He has measured the heat of the body on the head, behind the ears and neck, and between the thumb and index finger, in different lunatics, at the same period of the day as well as during sleep, and under circumstances as nearly similar as possible. The general result is that during sleep the temperature of the head has ranged from 86° to 88° Fahr.; behind the ear from $90\frac{1}{2}^{\circ}$ to 92° ; on the neck, over the sterno-mastoid muscle, from 93° to $95\frac{1}{2}^{\circ}$, and in the hand from 80° to $94\frac{1}{2}^{\circ}$.

After pollution the temperature of the head has risen to 93° , behind the ears to $94\frac{1}{2}^{\circ}$, and in the neck to 97° . With this increased heat there were augmented prostration, restlessness, anxiety, and cardiac oppression, together with stronger and more frequent pulsation of the heart and increased rapidity of pulse. It often happened that when the heat of the surface was found increased, the hand applied to the part indicated a temperature

rather below than above that of a healthy person. As to this peculiarity he remarks that the rising of the thermometer to the same height is in one case rapid, in another comparatively gradual; hence it follows, that as the actual temperature is alike in the two cases, the radiation of heat from the surface must be much quicker in one than in the other. The more gradual radiation coincides with the greater deterioration of the mental powers, whilst the more rapid occurs where the signs of bodily disorder and of psychical depression are less pronounced. The more active radiation, and more rapid rise of the thermometer occur, therefore, when the patient feels the want of more warmth.

Again, when the temperature is raised there is some reddening of the cheeks, and more especially of the lower part of the ears, whilst the vessels of the conjunctivæ become visible. The reddening of the ears is particularly remarkable among the insane when the skin is delicate, and appears on the slightest excitement. These variations in temperature and in the coloration of the skin, are strongly exhibited after involuntary pollution, especially when it happens at night, and indicate hyperæmia, with, probably considerable exhaustion of brain. The greater the exhaustion, connected as it often is with irritation, the longer is the time requisite to restore the normal state of the blood supply to the brain. This restoration is particularly gradual when the variation between the temperature of the head and of the limbs is greatest.

The palpitations of the heart noticed in the victims of spermatorrhœa, are more matters of feeling on the part of the patients than of observation on that of the physician. But though the cardiac impulse be actually increased but little, there is a modification in the sounds; the first sound is not uniformly equal, but less distinct at its commencement and conclusion than at its middle, having thereby a wavy character; and, again, it is not so distinguishable from the second sound, which is itself altered in a like manner. These altered relations are the cause of the anxiety and uneasiness, and of the aching sensation at the heart complained of, especially when melancholia has followed upon spermatorrhœa. Movement, particularly going up stairs, increases the palpitations and renders the general muscular weakness evident; and in many, roaring noises are heard in the ears. All these symptoms are aggravated by indulgence in strong drinks.

The patent effects of spermatorrhœa upon the mental and bodily functions are increased or decreased in direct proportion to its increase or decrease. By spermatorrhœa is here intended not only seminal emission, but also all the abnormal conditions, and all those relative circumstances which belong to it, and as it is especially indicated by the presence of spermatozoa in the urine. This last-named circumstance distinguishes the true from the false spermatorrhœa

dependent on discharges originating in the *bulbus urethræ*, and probably also in the prostate, and which are never attended by the loss of energy in the muscles, heart, nerves, organs of sense, and mind, observed in the former kind. Nevertheless, in long-continued spermatorrhœa, the spermatic animalcules would seem to fail, together with the power of erection, and then, consequently, the usual means of diagnosis fails. This aggravated state is coupled with impotence; but as long as spermatozoa are found hopes may be entertained of restoration to a healthy condition.

There is a species of *spermatorrhœa spuria*, dependent on enlargement of the prostate, consequent usually on long-persistent gonorrhœa; in which an emission of hyaline, mucilaginous fluid occurs from the urethra in the urine, and more rarely in the stools, destitute of spermatozoa and the spermatic odour. Those who suffer from this possess their usual muscular energy and sexual power. Another variety depends on an excitability of the male sexual organ, provoked by riding and other causes, in which a sensation of emission occurs, and now and then an actual discharge. In such patients there are usually a sensation of aching and weariness in the loins and thighs, constipation and tension across the stomach, together with drowsiness, variable appetite, acidity, eructations, palpitation, and headache. Their history commonly shows that onanism has been practised in early life, and that both the mental and bodily powers have been overstrained. A hæmorrhoidal condition is produced, and the veins of the urinary and sexual organs are enlarged and distended, together with those in other parts, and hence the abnormal sensations in the perinæum and urinary passages. This is a painful state, and is usually accompanied by mental irritability and worry, and by more or less inaptitude for business; indeed, it may induce the worst forms of hypochondria and actual insanity.

Lisle and Deslandes represent spermatorrhœa to be common among the insane. The former states that he observed it in 19 out of 180 male lunatics. Albers' experience is opposed to this presumed frequency, and attributes it to the circumstance that the microscope was not generally employed in the diagnosis of the disorder. He has had altogether seventy male patients in his asylum, and has detected spermatorrhœa in one only; but in his private practice, extending over thirty years, he has met with five instances, not reckoning the spurious form where spermatozoa were absent.

Albers has reviewed the whole subject of spermatorrhœa under three heads, according as—1, there is a simple discharge of true spermatic fluid; or 2, lesion of the seminal receptacles and ducts, of the *bulbus urethræ* and prostate; or 3, a combination of the two preceding conditions. But he has made other divisions of the subject, and distinguished three varieties: 1, the traumatic; 2, the onanistic; and, 3, the gonorrhœal. Of the traumatic variety he

has given one case, where it followed a blow on the perinæum against the pomel of a saddle. The second variety is illustrated by three cases, and is more particularly distinguished by the wasting and anæmia, and by the highly augmented sensibility of the urethra, especially in the vicinity of the bulb. The third variety, consequent on gonorrhœa, is accompanied by considerable thickening about the bulb and seminal ducts and the prostate, leading to thickening of the former. At the same time the urethra is narrowed. The flux contains frequently brilliant, spherical corpuscles, which resemble the heads of spermatozoa, with or without epithelial cells. The sexual organs are not wasted, and the sexual functions can be performed, unless, indeed, there is positive stricture.

Another division of the disease is given, in which the author chiefly follows Dr. Marris Wilson. This division is based on the parts affected and primarily concerned in keeping up the disease. We have not space to analyse it, but only to state the varieties established. These are *Spermatorrhœa testicularis*; *S. vesicularis*; *S. prostatica*, and *S. urethralis*.

Treatment.—Albers has little of novelty in his chapter on treatment. At the outset he observes that treatment directed only to the mental symptoms is worthless, when these are dependent on spermatorrhœa, whereas when applied to the cure of the abnormal condition of the sexual organs with which the discharge is connected, success may be anticipated. The administration of digitalis and digitalin may be suitable for the relief of the irritability, but will be useless for removing the dilatation and thickening of the outlets of the spermatic discharge. Cauterization of the urethra is of great advantage, but more particularly when spermatorrhœa is the result of self abuse. When there is much local irritability near the bulb, the application of camphor ointment and camphor liniment is of great service; as also is the introduction of bougies prepared with tannin and camphor. Or a catheter may be used to inject at the sensitive spot a few drops of camphorated oil, made of thirty grains of camphor to an ounce of olive-oil. Faradisation has been recommended, particularly where the sexual organs have lost tone and are wasted. If the spermatorrhœa has become an habitual drain, counter-irritation to the perinæum should be applied, or an issue be established by means of lunar caustic or by caustic potash. In inveterate cases compresses of cold water to the perinæum, and Lallemand's bougies and injections of glycerin and tannin are applicable.

De la responsabilité légale des aliénés.—The legal responsibility, general and partial, of the insane, is the subject of an able essay read before the Academy of Sciences in August last, by M. Brierre de Boismont. In his introductory observations he remarks, that the responsibility of the insane has numerous partisans, and that the

belief in their partial responsibility has of late years gained ground. On this latter question opinion again varies; for whilst some would hold a lunatic responsible who, apart from his hallucinations and delusions, has acted upon the ordinary motives of action common among mankind, others would subject him to the penalties of the law even when he has acted under the influence of his delusions, inasmuch as his motives do not differ from those of ordinary criminals while his actions are attended by similar satisfaction, and as he possesses sufficient discernment to combat and resist them. Again, many who admit their partial responsibility, nevertheless maintain that the lunatics to whom it accrues constitute a particular class of individuals who cannot justly be amenable to the law, as they are the victims of disease, and for the safety of society need be detained in special establishments.

The management of asylums demands the recognition of a certain measure of responsibility as possessed by their inmates, but this is only an accessory circumstance, and does not affect the main question at issue, their general responsibility before the law.

The law recognises in all classes of criminals different degrees of responsibility, founded on differences in intellectual and moral capacity. Juries have acted upon this principle to such an extent, that the French Minister of Justice has proposed the substitution of a correctional tribunal to take cognizance of certain lesser crimes instead of submitting them to the courts of assize. From public returns it appears that, during the last five years, of 100 charged with these crimes, only twenty-one have been handed over to undergo their legal penalties, the other seventy-nine having their punishment remitted on account of extenuating circumstances.

The difficulty of the question of the responsibility of the insane is felt only in the case of those suffering from partial delirium, monomania, or moral insanity, and who appear rational on every subject except one, or at most a small number. In civil matters the irresponsibility of the insane is recognised by the legislature; not so, however, in criminal. This seems a strange anomaly, for no good reason can be shown why, in the one class—the criminal, the brain can be looked upon as in part sane and in part insane at the same time and in the same individual, and not in the other.

M. Belloc is of opinion that it is unnecessary, on the one hand, to affirm with some, that a single rational idea possessed by a prisoner leaves him responsible for all his acts, and on the other to contend, that one irrational notion absolves him from all responsibility. To do so is to lose sight of the fact, that the majority of undoubted lunatics maintain with reference to most of their actions, their free will or control. And the problem he desires to settle is, what are the limits within which society may, without injustice, demand an account of their actions from the insane? M. Brierre de Boismont

prefers to put the question in this form: "Has the crime been committed by a lunatic; and if so, within what limits may society hold him accountable for it?"

The preliminary observations, of which the above is the sum, are followed by the careful records of six cases of partial delirium, or "Folie raisonnante," with running comments. These we cannot reproduce. The general conclusion drawn is, that the responsibility of the insane is extremely limited, and not having been demonstrable in any of the cases which have been constantly under his observation, the author does not hesitate to say that, as a *general fact*, it has no existence. Not that he would disown it altogether, because it evidently exists among the insane during their lucid intervals; still, in such instances, he is of opinion that the responsibility should be mitigated, in consideration of the past attacks of mental disorder. Again, he recognises the validity of Casper's opinion, that certain monomaniacs whose condition is unvaried, who retain a fixed idea, which is however under their control, who speak of it as a notion, and even laugh at it, and who—(a point of much importance in diagnosis) consent to have it disputed,—that such lunatics are responsible for their actions. He however protests against Casper's principle, that such individuals are responsible, not only for acts having no relation to their delusion, but also for such as flow from it; and he does so, "because there is no possible solidarity between the error of reason and the action accomplished under its influence, whether this be a rational or a guilty act."

At the same time, whilst admitting the partial responsibility of such cases—of monomaniacs as described in the first place, and for other monomaniacs who dissimulate their fixed delusion, or explain it away by some plausible motives, and also that of lucid intervals, M. de Boismont contends that the reason, even if injured in only one point, has no longer proper liberty of action; and that, whatever be the responsibility, it is not of the same kind and degree as that of criminals whose intellect has not suffered. It cannot be otherwise, inasmuch as the mind is single and indivisible, and its existence or non-existence is involved in the question of its integrity, or the use or the absence of one of its faculties. Respecting the partial responsibility of those insane who act from irresistible instincts (instinctive monomania, disorders of volition, moral insanity), he is as yet not fully prepared with an opinion. Again, he regards it as a great mistake to assimilate those persons whose physical, intellectual, and moral development is arrested, and who are recognised as weak-minded (*pesants*, of Ferrus), to ordinary criminals in the matter of accountability for their acts.

The *résumé* reiterates much of what we have said, but some few additional remarks may be gathered from it. The responsibility of lunatics in asylums, from which it is attempted to establish their

partial responsibility before the law, cannot be regarded as of the same character as that of ordinary criminals; because the reason in the latter is sound, in the former, unsound. It is in fact under the pressure of causes operating energetically upon it (such as hereditary tendency, alcoholic degeneration, endemic disease, &c.), and is not comparable with that of a healthy man, with his intellectual and moral faculties intact. The best criterion of the responsibility of the insane is obtained by daily records of their words and acts, extended over a considerable period. It is by such observation only that we can discover in those cases of monomania and moral insanity (*folie raisonnante*), which in fact supply the examples necessary to an elucidation of the question of the responsibility of the insane,—those indications in the conduct, conversation, and general carriage of patients of a want of the power of mental control. But though these indications fail not to be discovered by careful observation for a time, yet casual lookers-on are liable to be imposed upon, for such patients can often speak and act in a rational manner, and also write letters, full of good sense, during the remissions of their malady.

With regard to their responsibility, again, it is important to recognise the changes in their whole nature. Nothing is more commonly observed than a transformation of character and of disposition, a lower moral and intellectual standard, the perversion of instincts and the manifestation of improper sentiments; in short, a group of new conditions arise which seriously modify the responsibility of the lunatic and deny him the liberty necessary to the right appreciation of his actions. The distinctive character of such disorders of the mind as show themselves only by contrariety of disposition and vicious tendencies, is found to be the more or less sudden appearance of new dispositions entirely opposite in character to what formerly existed, and forming a tissue of contradictions, of incoherence, of actions wanting in reason and moral sentiment, the persistence of which,—(the pathognomonic character), renders their living in common with others impossible. Another circumstance to be noted is, that these new dispositions may exhibit themselves at one time with excitement, at another, with depression, or with one and then the other, alternately.

If criminal lunatics cannot be punished like ordinary convicts, they must be sequestered for the peace and safety of society; and this is best done in an asylum specially set apart for such patients.

Excursions Scientifiques dans les Asiles d'Aliénés, par le Dr. P. Berthier, 8vo, pp. 104, Paris, 1862.—These scientific excursions, undertaken by Dr. Berthier, the chief physician of the Bourg Asylum, have led to the publication of the book before us. It will be read with interest, and will especially serve as a good guide book to any travelling Englishman who wishes to see for himself the state of the

asylums and of the insane in France. It is the better adapted for this purpose from being furnished with an outline map indicating the site of each asylum, and also from the circumstance that the notes on those asylums visited are prefaced by notices of the best manner they can be reached by road and rail. Only a portion of the French asylums are as yet described and criticised by the author, who proposes to continue his excursions, and to publish his notes in a second part or volume.

The book is prefaced by an introductory notice of the progressive amelioration in the treatment of the insane in the principal countries of Europe. It is too sketchy to be of value, and its writer seems somewhat hazy about the past state of the insane in England; since he refers to the Act of 1846 as the first public measure to provide special asylums for their care, and therefore finds that France, by her legislation in 1838, took the initiative in making such public provision.

An interesting section of the author's description of each asylum are the prefatory observations on its foundation and history, and on its progressive changes. These observations will be found useful by the historian of the state of lunacy in France, particularly when taken in connection with the record of M. Berthier's own observations.

The nature of the work forbids analysis. Some of the descriptions are superficial, and convey only an imperfect conception of the institutions. The author is very honest in his remarks, and does not spare his censure where he thinks it deserved. In all cases he searches for what is note-worthy and commendable, and acutely spies out what is imperfect. From our own inspection of many of the same asylums, we can testify to the correctness of the descriptions given, and agree with him in the criticisms expressed. We trust also that these sketches of French asylums will arouse the attention of the government to the necessity of removing many of the glaring defects so distinctly pointed out by M. Berthier in the majority of the existing institutions. Indeed, in the case of many of the provincial asylums nothing less than the construction of entirely new buildings can afford a satisfactory remedy for existing evils. Several of them are situated in the midst of towns, or so closely adjoining them, that they are deficient in the means for out-door exercise and occupation; such are those of Lyons, Dôle, Montpellier, and Caen; and others, which enjoy a better position, occupy buildings erected for other purposes, ill-fitted to the one they are called upon to serve. Some are appendages to general hospitals, and placed under the same general government, as, for instance, those of Lyons and Montpellier; whilst others are in the hands of religious orders, as those of Caen and St. Jean de Dieu, near Lyons. Of all the public asylums of France, that of the great and wealthy city of Lyons is probably the worst; a disgrace both to the city and to the empire. The insane

are collected in an irregular group of buildings in contiguity with the syphilitic patients and the prostitutes of the town, without any objects to gratify the eyes or divert the thoughts. The large asylum at Caen is the property of a sisterhood, and is found by Dr. Berthier well deserving of reprobation. He there finds modern improvements shut out by religious antipathies and by ignorance, and therefore the proportion of dirty patients is very great, and their condition miserable; numerous are the cases of restraint by bands and camisoles; seclusion and the douche abused, and bolts and bars abundant. Foderé's remarks on these institutions in the hands of religious orders, made in 1817, still hold good, "that the routine of these houses consists in the persistent observance of what prevailed at the date of their foundation, and in regarding as dangerous innovators those who advise improvements."

The publication of M. Berthier's notes on French asylums furnishes the best comment and critique on those glowing declamations in praise of them indulged in by M. Renaudin and some others, who by comparing themselves with themselves, are persuaded that the provision made in their native land for lunatics is unsurpassed and even unequalled elsewhere.

II.—*Medico-Legal Cases.*

THE TRIAL OF GEORGE VICTOR TOWNLEY FOR THE MURDER OF MISS GOODWIN.

MIDLAND CIRCUIT, DERBY; *December 11th and 12th.*

1. *History of the Case.*

THE trial of George Townley for the murder of Miss Goodwin, took place before Baron Martin at Derby on the 11th and 12th December. The prisoner was described as a man of very quiet and refined manners, a good linguist, and an accomplished musician. Though in a somewhat lower station of life than Miss Goodwin, he had formed her acquaintance at the house of one of her own relatives, and had become desperately attached to her. She returned his love, and they remained engaged, with a short interruption, for nearly four years. Townley lived near Manchester, and Miss Goodwin, with her grandfather, Captain Goodwin, at Wigwell-hall, in Derbyshire. Letters constantly passed between them, many of which have since been destroyed, but are proved by secondary evidence to have expressed faithful affection on both sides. The prisoner's want of means had always been recognised as an obstacle to the marriage, but in the course of last summer a more formidable impediment