

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

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I. *German Psychological Literature.*

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*Vierteljahrsschrift für Psychiatrie*, Vol. ij., 1868.—“Statistical Data regarding Suicide amongst the Relatives of the Insane,” Tigges; “Monomania,” Lion; “The Dependence of the various portions of the Retina upon each other,” Prof. Mach; “Pathologico-anatomical Changes in the Brains of the Insane,” C. H. Hoffmann; “Contributions to the History of Forensic Psychology,” Prof. Beer; “A disagreeable offensive grumbler,” Droste; “A case of Echinococcus Cerebri,” K. Bettelheim; “The Structure of the Cortex Cerebri,” Th. Meynert; “The Physiological Boundaries of Freedom of the Will,” A. Witzlaczil; “Six Cases of Tumour in the Brain,” M. Rosenthal; “Statistics Regarding the Forms of Insanity,” Tigges; “Lunacy Statistics in France,” Glatter; “Histology of the Cortex Cerebri,” R. Loechner; “Chorea Minor in its relation to Mental Derangement,” Max Leidesdorf; “A Case of Hydrophobia,” K. Bettelheim; “On Hydrophobia,” Prof. Oppolzer; “Asylums and the Treatment of the Insane,” Wille.

*Archiv für Psychiatrie*, Vol. i., part 3, 1869.—“Chorea and Psychosis,” Rudolf Arndt; “A Peculiar Affection of the Skull,” Th. Simon; “Legal Protection of the Insane,” Prof. Schlager; “Berlin Statistics of Insanity,” Croner; “The Condition of the Spinal Cord in Dementia Paralytica, and the presence of Granule-cell Myelitis,” Th. Simon; “On a Little Known Psychopathic Condition,” Prof. Griesinger; “Pathology of the Sympathetic,” A. Eulenburg and P. Guttman; “The Occurrence of Granule-cells in the Spinal Cord,” Wilhelm Sander.

*Archiv der Deutschen Gesellschaft für Psychiatrie*, Vol. xvj., 1869.—“Diagnosis of Intracranial Syphilis,” Erlenmeyer; “Selected Chapter from Forensic Psychology of the Past Year,” Welter; “Statistical Tables of the Asylum at Pesaro,” Ullersperger; “Lunacy

in Donau-Fürstenthümer," Schreiber; "Colonisation of the Insane," Erlenmeyer; "Thrombosis of the Cerebral Sinus," Kelp; "Report of the Wehnen Asylum," Kelp; "Papaverin and Morphia," Welter; "Chloral," Liebreich; "Bromide of Potassium," Kelp; "Report of the Rudolstadt Asylum," Otto; "Symptoms of Luminosity, and of Pretended Seeing in the Dark," Schmitt; "Aphasia," Kelp; "Tuberculosis of the Choroid," Kelp; "Condition of Lunacy in France," Kelp; "The Relation of Society to the Insane," Leidesdorf; "Chloral Hydrate," Erlenmeyer.

*Comparative Statistics regarding the Forms of Insanity.*—Tigges sums up in the following manner the results of his inquiry. The relation of duration of disease to the number of recoveries is shown both as regards primary and secondary forms by various statisticians to present on the whole a pretty constant proportion. Among the elements adverse to a more complete accordance are the non-exclusion of dementia paralytica and admission of monomania as primary forms in addition to mania and melancholia. In the statistics of later years there is in the majority of cases, though not always, a greater percentage of melancholia in proportion to mania than was reported in earlier periods. The census of the insane among the general populations exhibits in general a higher position for mania than is shown by the statistics of the admissions to asylums belonging to the same districts.

In melancholia there is throughout a predominance of females. In mania the number of women surpasses in most cases that of men, though not to the same degree as in melancholia. The secondary forms, chronic mania and dementia (Verrücktheit und Blödsinn), exhibit remarkable variations in their relative proportions; but these are much diminished when monomania is taken along with them. The majority of statements give a larger number to chronic mania than to dementia; and in both forms a larger proportion of males than females.

In the geographical distribution of dementia paralytica the lowest estimates are presented by the Scandinavian statistics; about an average of 2.2 per cent. Next come the few English and the allied statistics,\* 2.4 per cent., followed by those of Oldenburg, 3.2—4 per cent. The other statistics of the north-west German group, Westphalia, and the Rhine are taken along with those of south-west Germany, and present an average of 7.3 per cent. This is nearly the position of France during late years, 7.5 per cent. The data from middle and east Germany furnish northwards (Brandenburg, West Prussia) an average of 6.3 per cent., but southwards very high proportions occur; 11.2 per cent. in Silesia, and latterly 16.6 per cent. in the kingdom of Saxony. The few data obtained from Austria are very various, from 4.2 to 14.8 per cent., as also the Italian, from 2 to

\* Dr. Tigges seems not to have had access to any full statement of British or American lunacy statistics.—J. S.

18 per cent. In general it appears that there is a gradual increase in the proportion as we pass from north to south.

The male sex predominates greatly everywhere in dementia paralytica; but the larger the general proportion of the disease the greater does the participation of the female sex in proportion to the male increase.

In the majority of the statistical statements melancholia exhibits a smaller proportion of recoveries than mania.

Mania predominates in the earlier and melancholia in the later periods of life, both in relation to each other and as regards all the forms of insanity. In the earlier periods of life the females predominate in mania, but the men predominate in melancholia. Dementia paralytica occurs between 20 and 30 years of age only in rare instances; it reaches its maximum between 30 and 40 or between 40 and 50, and between 60 and 70 it occurs more frequently than between 20 and 30.

*Structure of the Cerebral Cortex.*—Dr. Meynert has an elaborate and very valuable paper on this subject. The conclusions at which he believes himself to have satisfactorily arrived are thus given in abstract :—

1. The cortex includes within the preponderating part of its superficial layer three forms of elements. 1. Pyramids of graduated calibre; 2, small irregular, and 3, fusiform bodies.

2. One region of the cortex, the *subiculum cornu Ammonis* (Hakenwindung) consists only of pyramids. One important motor lesion, epilepsy and epileptiform convulsions, is constantly associated with disease of this region.

3. One part of the cortex in which sensory elements directly take their origin, the olfactory lobe, is distinguished by the accumulation of the small irregular bodies, for which the retina is also a *habitat*. There is also an area of laminated development of these elements whose connections are unknown (Eightfold type).

4. The fusiform bodies appear from their form and distribution to be connected with the course of the *fibræ propriae* of certain convolutions.

5. One region of the cortex, in the centre of the convexity, is accompanied by an independent, and for the most part laminated accumulation of fusiform elements. The neighbouring medullary substance exhibits a peculiar richness in *fibræ propriae*. This region is distinguished by its connection with the organs of higher sense, an arrangement which suggests as its function the association of ideas with different sensory character. According to pathological observations speech is connected with this region.

6. One region of the cortex whose function is least developed in man is reduced in size in the human brain. (The olfactory lobe.)

7. One region of the cortex whose function is in man of incomparable development, the central organ of speech, attains in man the greatest extent. (The Island of Reil.)

8. The peculiar structure of the olfactory lobe is an example of how peripheral differences are connected with corresponding differences in the structure of the cortex.

9. Although the *claustrum* and *amygdala*, from their contiguity, elementary form, and connection with the *fibræ propriae* of the cortex, might be regarded as a morphological unity, and the walls of the fissure of Sylvius are also of like structure, it results from the teaching of comparative anatomy that we must regard *claustrum* and *amygdala* as quite independent in their development, and, consequently, in their function also. We must, therefore, conclude that in similarly constructed regions of the cortex there are differences in regard to function which depend solely on differences in their peripheral connections.

10. The uniform lamination in regions supposed to be formed of motor and in those consisting of sensory elements, which occupy such a preponderating space in the cerebral cortex that it can scarcely be assumed that this space is everywhere devoted to the same purpose, is almost in the present physiological psychology an established postulate. While, indeed, according to its revelations, the simple sensory perceptions involve, in so far as they have, like the impressions of taste, sight, and hearing, the stamp of local processes, actions which must be referred to the cerebral cortex.

In so far, however, as these actions are based upon permanent relations between perceived movements and sensations, it is most probable that there is a permanent co-existence of sensory and motor elements in the cortex, and thus there would be one mode of lamination in all territories which are devoted to local perception.

*Chorea Minor in its Relation to Mental Disorders.*—Dr. Leidesdorf considers that there is frequently an unmistakable exhibition of abnormal mental symptoms associated with chorea, and that these exhibit considerable similarity of character. There is a group of cases in which there occurs, either at the commencement or during the course of the chorea, a change in temper and character, often accompanied by diminished capacity for attention and loss of memory. If these patients recover from the chorea, the mental symptoms generally disappear at the same time. There may also be during an acute attack of chorea the occurrence of delusions or even maniacal outbursts. The latter generally show themselves when the chorea occurs in the course of febrile diseases, especially of acute rheumatism. Extensive delusions are sometimes gradually produced in such cases under the influence of hallucinations, especially of the sense of vision. Referring to Setschenow's theory that the optic thalami and corpora quadrigemina act as checks upon reflex action, he suggests the possibility of their being involved in the production of choreic movements.

*Hydrophobia.*—A case of this disease occurring in the wards of Dr. Oppolzer, of Vienna, is reported by his assistant, Dr. Carl

**Bettelheim.** The remarks made at the clinique, by Professor Oppolzer, are sufficiently interesting to be quoted at length. "During this year you have had the rare advantage of seeing several cases of hydrophobia, and are thus enabled to form an opinion for yourselves on this subject. You are aware that recently the discussion has again been raised regarding, not the pathology of this disease, but its very existence. It is asserted that there is no such peculiar disease as has been for ages described and diagnosed as hydrophobia. Some that have been so named have been cases of dysphagia of various kinds, which, on the discovery that the patients had been bitten by dogs, were, according to the traditional fiction, regarded as canine madness. Others have been cases in which the morbid symptoms have been produced at first by the fear of this phantom, and the rest have been the actual results of dog bite, but in no way different from what might be occasioned by the wound, for instance, traumatic tetanus. These assertions are of the same kind as the statement of an eminent physician, Hamernyk, that there is no such thing as contagion, or as the view which has been often brought forward of late and so warmly defended, that vaccination is a curse to mankind and a crime in the physician. Remember the cases which you have seen here. Three children, only somewhat depressed and irritable, and manifesting nothing to justify the opinion that they were labouring under a fatal malady, were during the year brought to the clinique. One came to the hospital from Hernal, another returned to his village the same day that he was brought here, and was brought back the following day. None of them spontaneously gave information that he had been bitten by a dog; indeed all denied it at first. We found one symptom and formed the fatal prognosis. Within three days all were dead, and thus was furnished sad proof of our correctness. In none did the post mortem examination reveal any anatomical change sufficient to account for death. It is scarcely probable that three persons hitherto healthy, concerning whom we had, on the faith of a single symptom, predicted a fatal ending, would for the mere credit of our prognosis have died an enigmatical death. It seems more likely that an intimate connection existed between the symptom and the fatal result. Add to this that you have seen the progress of these cases, and that their symptoms followed the course hitherto observed and described in this disease—a course which they run with slight variations in animals, in which they may also be by inoculation originated at will—if you take all this into consideration, your opinion of the negative assertion is not likely to be too favourable.

"We must now pass on to the analysis of the symptoms. On those of you who saw the patients on their first appearance here, the figure which they presented must have produced a lasting impression. Although the children were unacquainted with the danger in which they stood, they were sad and depressed, and at the same time perturbed and restless. Only the first patient whom we received continued to maintain some-

what his usual saucy air; but he also had, in the course of two hours afterwards, fallen into the same depression as the others. All had, according to the statements of their neighbours, been perfectly well till a day or two before, and they all complained of the impossibility of drinking or of swallowing at all. If water was offered them they put the glass to their mouths, but on the attempt to drink they were seized with trembling and pushed the water away; and one of them exclaimed that he was suffocated. A few deep and anxious sighs followed. Such are the constant and cardinal symptoms; and now comes the question—what precedes and follows this condition?

“The patients had all, six or eight weeks previously, been bitten by dogs. The invariable and only cause of this disease is the transmission of poison from a diseased animal of the dog or cat kind to the human species, and this transmission must be to a wounded or excoriated part. The poison is stable, non-volatile, and does not penetrate the uninjured epidermis. Whether this be also true concerning the animals themselves, whether the disease is always a transmitted one, or whether it may also arise spontaneously, is as uncertain as we find it in most cases where such questions are raised. The dead bodies of rabid dogs have been shaved, and if no cicatrices have been found the cases have been referred to as instances of spontaneous origin. If, however, it is remembered that no deep bite is necessary, but that the poison may be transmitted through a slight excoriation, such instances will scarcely be regarded as very conclusive. But to this supposition of the spontaneous origin of the disease, which is questionable in itself, there have been added still more questionable ætiologic elements, such as extremes of heat and cold. Among the dogs of the Eskimos, however, as well as among those of the Egyptians, rabies is unknown. Unsatisfied sexual instinct has also been suggested; but rabies occurs amongst wolves, perhaps indeed has originally been developed there, and they certainly do not suffer in that particular. We must, therefore, content ourselves with accepting the sad fact of the existence of the disease while we remain ignorant of its origin.

“It is transmitted to our domestic animals, oxen, and horses, and to mankind from dogs, wolves, foxes, and cats, by means of the application of the impure saliva of these animals to a wound produced by a bite or otherwise. It happens not unfrequently that of several persons who have been bitten one is attacked and the rest escape. In many cases the poisoning of the wound is prevented by the teeth being cleaned of saliva while passing through strong articles of clothing, such as boots or thick cloth. Whether there is also a question of predisposition, that is, whether some are susceptible of the poison and others not, may at least be regarded as very doubtful, if we reflect that this resistance to the poison exhibits no gradation. There are no severer or slighter forms of the disease; wherever it is developed it ends in death. However this may be, on the average, about one half of those who are bitten by rabid dogs sicken and die.

On the other hand it has been shown by the experiments of Youatt that a varying predisposition does exist among dogs.

“ You have heard from all our patients that the dogs by which they were bitten had shown no remarkable symptoms of disease, in some cases having shown no disposition to bite, and having merely snapped at the children when irritated by them. The melancholy deduction to be drawn from this, that every bite, even from a healthy dog, may occasion the disease, is not allowable; although it is to be remarked that seemingly healthy dogs may scratch, and that every kind of bite from an unknown dog must be treated with the greatest suspicion. We have as yet no recorded case of the transmission of the disease from one person to another; but as Magendie and Breschet have successfully inoculated dogs with the saliva of persons suffering from rabies we can never treat with indifference a bite received from such a quarter.

“ The wounds in our patients healed rapidly without special treatment. This is always the case; indeed, it is said that poisoned wounds exhibit a remarkable freedom from inflammatory reaction, and are often very difficult to keep open. These children were besides for six or seven weeks quite well, and showed no evidence that the germ of one of the most terrible diseases was enclosed within the wound. We have, therefore, not to do with a state of things where the patients are aware of what has happened, or what comes to the same thing, where they erroneously suppose it, when fear and anguish may drive them even to suicide—and we have seen in one case of pseudo-hydrophobia what kind of symptoms this fear can occasion. Besides there is always a lengthened period before the occurrence of the first symptoms of the malady, almost always over six weeks, sometimes as much as a year or more. Indeed Professor Schub is acquainted with a well authenticated case of an outbreak after seven years. It is quite undecided on what the long duration of the stage of incubation depends. Whether the poison already circulating in the blood requires so long a time to be sufficiently developed, is as unknown as whether the poison may remain in the immediate neighbourhood of the wound, and then suddenly enter the circulation. Yet the possibility that this latter hypothesis may be correct is of importance, as it admits of the hope of our being able at a later period to get rid of the poison.

“ After the period of incubation the person affected becomes unwell. You remember what was ascertained in our cases. One had vomited several times on the day before his admission, and then complained of difficulty of swallowing, and food instead of being swallowed was ejected from the mouth. The other had complained of pain in the neck, for the alleviation of which a quantity of cold water had been taken into the mouth; but next morning no water could be swallowed. Others feel frequent and inexplicable shivering; this is, however, not constant; neither are the symptoms connected with the wound, such as pain and reopening of it. Subsequently is developed the emotional derangement, the

psychosis, which in the further progress of typical cases forms the mid point of the symptoms, and which may be best studied in children who are unaware of their condition. Sleep is disturbed, always broken by frightful dreams. While awake the patients are in a state of gloomy excitement. They seek for solitude, and withdraw themselves quietly, or they fall a prey to restlessness, which drives them aimlessly hither and thither. This excitement becomes more and more intense, till it becomes a fearful and indescribable agony. If the patients are aware that they have been bitten this distress, which in the children is driftless, obtains an object; but the unfortunates very often apply all the power of their unclouded and rather stimulated intellect to combat this recollection. They seek to demonstrate to themselves and others that the bite could not be the cause of their illness, and, indeed, when interrogated regarding it, they often deny it altogether. This is the *stadium melancholicum* of Swieten, which corresponds to a completely analogous condition in dogs, a condition of unrest, and of going hither and thither, with simultaneous depression. The animals are still obedient; they recognise their masters, but they are irritated, and will even then bite if they are played with.

“ In our patients there is next developed that excitement which may be said to have been latent during the first stage, but which now comes more and more into prominence. The movements become violent and dangerous, and the speech loud and rapid. The distress is often concentrated into frightful paroxysms, especially in children, when anything unusual occurs; and the patient frequently exhibits the appearance of a person on the verge of a maniacal outbreak, the behaviour being wild and dejected, the countenance flushed, and the eyes restless and flashing. There occurs even early in the first stage an increase of reflex irritability, so that every sudden impression, such as being touched, brings on violent rigor, to which is now added, if they have not occurred sooner, the specific reflex actions connected with the apparatus of deglutition and respiration. The normal reflexes of the latter, the inspirations which are originated in the skin by means of cold applied, for instance in a shower of water, are increased to the utmost. Touching of the skin, a draught of cool air, but above all the attempt to swallow, excites the convulsive inspirations and the most intense feeling of suffocation. The act of swallowing, sometimes aggravated by the occurrence of a severe angina, becomes almost impossible on account of the convulsive breathing which accompanies it, and which ultimately is excited by the mere thought of swallowing. Many of the details are rather puzzling. It is always the case that water is the most difficult to take; but it is not from its coldness that this arises, for the patients, who experience the impossibility of swallowing a spoonful of water, often take ice willingly into their mouths. Nor is it the actual movement of swallowing, for they often swallow milk or coffee, and especially half solid moistened substances, with relatively little difficulty. On the other hand the convulsive inspirations

themselves are generally of too short duration to be able to occasion such a feeling of suffocation as is evinced by the patients. It must always be kept in mind how frightfully excited they are and how sensitive to every impression; and again it is to be taken into account that during the swallowing, and also apparently during the convulsive inspiration, the larynx is closed. You only require yourselves voluntarily to inspire quickly and energetically in order to be convinced how painful is the sensation thereby occasioned. When the patients avoid swallowing they always spit out the saliva, which is of extraordinary toughness, like the submaxillary secretion during irritation of the sympathetic, and appears to be secreted in increased quantity.

“Such are the constant phenomena which we have seen presented by our patients. Less constantly there is an acute angina with swelling of the lymph follicles in the mouth, and pain in the epigastrium and breast. The mental irritation may amount to a real maniacal seizure; and this occurs all the sooner where restraint by manacles and such like is resorted to. Indeed, they bite also, as do all raving persons to whom no other means of defence is at hand. But there are also maniacal attacks which occur without any external stimulus, and in the intervals of which the patient himself is aware of their approach, and warns his neighbours. Sometimes delirium occurs, but generally of a kind out of which the patient may be easily brought to himself. The reflex irritation may be associated with tetanic and eclamptic attacks, trismus, and opisthotonus spreading out from the laryngeal and respiratory apparatus, and then the disease exhibits features similar to those of traumatic tetanus. This, however, only occurs rarely, and in our patients you have not seen more than a mere indication of any convulsions other than the respiratory. Tetanus stands in no constant relation to hydrophobia, not to speak of an identity of the two diseases as has been asserted. As with the manifestations of reflex irritability, we may also find the causes of the paroxysms exerting a general influence, and developing a hyperæsthesia of the senses, whereby a dazzling surface, a bright light, noises, or powerful odours become insupportable, because they bring on the convulsive respiration. You remember, however, that this was not the case with the girl who died here. She was neither affected remarkably by dazzling lamplight nor by the noise in the street, and in her case also the sight of water did not produce an injurious effect, so long as the idea of drinking was not connected with it. If, however, any one drank in her presence she was immediately seized by rigor and convulsive breathing.

“It is important that we should for a moment compare with this the analogous stage in the canine disease. In it the reflex symptoms abate before the phenomena of pure excitement. The dogs have unmistakable delusions and hallucinations, and according to their temperament and race are affected by more or less violent maniacal attacks. What is, however, of most importance from a practical point

of view, is the absence in them of the avoidance of water. They often throw themselves into a pond; they are generally able to drink, and when this becomes impossible as the paralysis of certain groups of muscles increases, they often, as it were, bite at the water, whilst a person who is affected trembles at its approach. You may, therefore, conceive of what value the popular test is, as to whether a suspected dog can drink or not.

“The termination of the malady takes place within three or four days from the advent of the characteristic symptoms. In man either death takes place by asphyxia during a paroxysm, or a remission of the symptoms comes on when the patient even drinks again, and this has, for ages, been regarded as the precursor of death. That ensues quietly, the sufferer having preserved consciousness almost to the last moment. In dogs it occurs generally from exhaustion and paralysis seizing each group of muscles one after another.

“The post mortem results have hitherto been entirely negative. They consist sometimes in the mode of distribution of the blood which distinguishes death by asphyxia, and the cadaveric phenomena of accumulation of blood in the spinal veins, and sometimes of reddening of certain nerves by imbibition produced by the rapid decomposition of such bodies. On one occasion it is said that *ganglion cervicale inferum* was found enlarged and hyperæmic, an isolated record of very problematical significance. Hyperæmiæ, and hitherto doubtful proliferation of the connective tissue of the brain, are to be considered as subsidiary, and resulting from the functional disturbance.

“Effectual treatment is as yet possible only before the development of the morbid phenomena. It consists in the destruction of the wound and its surroundings by excision and caustics. The surface is then to be kept open for forty days by basilicon. In cases where, as on the military frontiers, not unfrequent conflicts with wolves occur, a number of greater or smaller wounds are scattered over the body, and when it is not possible to ascertain accurately the infected point, a plan has been proposed by Fuchs, and in many instances followed by the best results. This is the use of rather strong baths of corrosive sublimate, whereby every part not protected by epidermis is effectually cauterised. The treatment of the developed malady has hitherto been only palliative, and, with the exception of chloroformisation, with very little effect even in that way. Possibly there may be some benefit derived in the future from the use of Curara and Calabar bean.”

In a supplementary note, Dr. Bettelheim details the microscopic appearances found in the spinal cord of one of the patients, and he concludes from all the data obtained from the investigation, that we are justified in regarding as a possible element in the connection of the physical and mental symptoms an involvement of the vascular nerves in an exudative affection which he describes as existing in the spinal cord.

*Asylums and the Care of the Insane.*—Dr. Wille, the director of the recently opened asylum for the Canton of Zurich, at Rheinau, delivered a lecture on this subject to the Swiss Association of Alienists. He recommends reform in the direction which was so vigorously advocated by the late Professor Griesinger. In discussing the mode of providing for the incurable, he refers to the familial system and the agricultural colony. According to his view the former admits of three modifications.

“1. Patients who are improved, and not dangerous, may be relegated to their families or parishes, where they either take care of themselves, or else are taken care of by their immediate neighbours, no one taking any further responsibility about them. Especially they are deprived of any authoritative or other systematic supervision. This kind of discharge from a closed establishment into freedom is the most frequent mode. It takes place in countries with over-crowded establishments, from which selected patients are in any way returned to private life, in order to admit of the reception of fresh cases. 2. Another kind of familial treatment is when under similar circumstances improved patients are discharged from an establishment, but after their discharge they are still more or less looked after in connection with the establishment, and receive superintendence by the authorities, or by organised associations. These secure as far as possible good and suitable shelter and labour, and with this object they aid the discharged persons with counsel and assistance, and they take care that they shall have as far as possible suitable treatment. They assist the relatives with money, so that their patients may be decently provided for and attended to. This kind of provision is more or less developed in different countries. It is very well organised in some of the French departments, in Baden, in Holland, in the canton St. Gall, and most completely in Scotland. 3. A further form is the discharge of the patients from an asylum, and providing for them with private persons in the immediate neighbourhood of the asylum, so that their care is organised and superintended by the alienist physician. The model for this kind of provision is the present Gheel. I say the ‘present,’ because the former Gheel, which was not supervised and directed by physicians, could only be held up as an example for the treatment of the insane by fanatics and enthusiasts. For some cases, this system has been already tried frequently, and apparently everywhere. To a great extent, it was temporarily in operation at Illenau, where superannuated attendants were employed as guardians; and lastly, uninterrupted experiments have been carried out in the erection of cottages in England and Scotland.

“The second kind of provision is the farm. Patients, especially those who understand agriculture, are taken to the farm, and live there in the simplest and freest manner as farmer colonists. The land is sometimes within the bounds of the asylum domain, and sometimes at a distance from it. In both cases the administration is

dependent on that of the asylum, whence also they are superintended. The type of this kind of provision is the farm of Fitz James, at Clermont, where three hundred insane persons are employed in agriculture. Imitations of this were tried in Belgium, and a large number of French and English asylums have farms attached to them, which are found successful. In Germany, until very recently, nothing of the kind was to be found, except in Göppingen, where for many years a piece of land belonging to Dr. Landever, the director of the asylum, and about two miles distant from that institution, has been superintended by a married pair of attendants, and has accommodated a number of male and female patients, who carry on the work themselves. In 1864 a similar farm was organised at Einum, near Hildesheim, where about forty male patients are employed at farm work, and, according to Snell, it justifies every hope. During the same year there was also instituted the colony of Margarethenberg, near St. Pirminsberg, in the canton of St. Gall. It has at present, as residents, according to Director Zinn, twenty-five patients, three attendants, two servants, one labourer, and one cook."

Dr. Wille rather discountenances any plan which places the patients entirely beyond asylum supervision, but speaks favourably of the accommodation in the farm buildings or in cottages in the neighbourhood of an asylum. He also speaks favourably of Griesinger's clinical asylums, but disapproves of Griesinger's proposition to abolish the refractory section in asylums, as being impracticable.

*Chorea and Psychosis*.—Dr. Arndt regards chorea as having a most intimate relation to intellectual disorder. He regards convulsive, ecstatic, cataleptiform, hysteriform, chorealike and such symptoms as bearing the same relation to insanity "as conjunctivitis and bronchitis do to the other symptoms of measles, as the angina to scarlatina, and cramps to cholera. Indeed, there are cases, though perhaps not in great number, in which the most extensive mental disorder is unmistakably evinced by movements, while the other changes, the abnormal direction of the emotions, or the rapid alternations of depression and exaltation may be so insignificant as at first glance to escape observation." He regards both the physical and mental symptoms as proceeding from the same cause, and presenting many analogies. He does not believe in the existence of chorea without more or less simultaneous affection of the intellectual faculties. The abnormal movements are mere symptoms of a much more extensive disorder, involving the entire nervous system, and never confined in their effects to the spinal chord. The so-called pure chorea, in which mental symptoms are said to be absent, but in which they are, in fact, only feebly manifested, is really the mere forerunner of a fully pronounced psychosis. The strange movements are merely the first symptoms of the threatened mental overthrow. But just as every morbidly depressed emotion, and every morbid exaltation of consciousness, does not necessarily lead to melancholia, monomania, mania, or dementia, so neither does chorea. In

most cases it is only transitory, passing off without any violent outbreak, or any derangement which would be revealed to an ordinary observer. As proof of this he refers to the success with which all therapeutic measures which are found useful in mental affections are applied for the cure of chorea. He suggests that there may be a series of mental affections which may be regarded as chorea, that there is not only in general an intimate relation between chorea and psychical affections, but that a large number of symptoms, apparently very different in the course of psychoses, presents all the character of motor-choreiform lesions. He specially alludes to lesions of speech, stammering, indistinct or difficult articulation, senseless words and phrases, inarticulate cries, which sometimes give the patient the idea of demoniacal possession or division of the individuality into two. He includes, also, such motor lesions as want of precision, automatic repetition of the same movement, or the same gestures, endless hesitations about the simplest act, even such as to prevent the person affected from putting on their clothes, or eating alone, or doing any of the necessary acts of life.

*Peculiar Affection of the Skull.*—Dr. Simon, of the Hamburg Asylum, records a case in which a porter discovered, after having received a severe blow on the head, which partially stunned him, that there was a depression over the coronal suture at the right side. The depression subsequently increased in extent, and at death there was found to be a space in which the bone was entirely wanting over a space measuring  $5\frac{1}{2}$  centimetres in its greatest length, by  $3\frac{1}{2}$  centimetres in its greatest breadth. The margin of this space presented gradual thinning of the bone towards its edge. The blow had been occasioned by the falling of a basket of earthenware on his head on the occasion of the great fire in Hamburg in 1842. Dr. Simon regards the blow as not having been the cause of the loss of substance, but merely the occasion of the man's attention being directed to it. He considers it as an illustration of a peculiar form of disease, consisting of a high degree of atrophy, destroying completely the osseous tissue, by means of diffused patches of osteoporosis.

*Legal Protection of the Insane in Austria.*—Professor Schlager contributes the text of a report addressed by him to the Austrian Minister of Justice, in regard to this subject. The condition of the law at present seems to be exceedingly unsatisfactory. A patient may be confined in an asylum without the cognizance of the authorities, and without any legal protection being accorded to his property. The author proposes a series of enactments, with a view to putting an end to the abuses, or suspicion of abuses, which such a condition naturally occasions. The points dealt with are—1. The duty of relatives, friends, and local authorities, to report every case of insanity which occurs. 2. Obligation of every superintendent of a public or private asylum to report to the authorities every new admission within twenty-four hours after its occurrence. 3. Nomination of an official

curator after the insanity has been duly ascertained by an examination by experts. 4. Obligation of every person under whose care a lunatic may be placed, to report within three days every change of residence of the lunatic. 5. Obligatory keeping in every asylum of a paged register, containing the name, sex, age, &c., of the patients; the register to contain, among other things, the name and address of the curator, or other responsible person, of the medical practitioner who gave the certificate, &c. 6. The curator of a patient shall every year make a report as to the condition of his ward. 7. A competent authority shall be commissioned to see that all lunatics in confinement shall be examined and reported on by experts. 8. Every person who may be discharged recovered from any asylum shall receive a certificate of his soundness of mind, for which he shall give a receipt, which shall be transmitted to the authorities. 9. The civil tribunals shall keep an exact register of all persons in confinement, and of everything concerning them.

*Statistics of Lunacy in Berlin.*—The number of the insane belonging to Berlin in the year 1867 was, as far as was indicated by the census, 829; of whom 410 were men, and 419 women. The gross population of the city was 702,437, so that 1.18 per thousand were found to be insane. Of the 829, there were 137 not within the city; 512 were in Berlin establishments, and 180 were resident with their relatives. Dr. Croner is, however, of opinion that these numbers, especially in the last particular, do not give a complete statement of the case.

*Granule cell Myelitis in Dementia Paralytica.*—“Under the name of *granule-cell* (Körnchenzellen) *myelitis*,” says Dr. Simon, “I understand the disease of the spinal cord, in which granule cells are found in large numbers, without simultaneous naked-eye evidences of disease, and especially without a decided grey jelly-like appearance.” He discusses the views which have lately been advanced by Westphal, regarding the connection between such appearances in the cord and the symptoms of general paralysis, and believes that he has found good cause to doubt the conclusions of the Berlin professor. He maintains that there are cases of general paralysis without alteration of the cord, and that chronic myelitis going on to the formation of these bodies may exist without any parietic symptoms being exhibited. “We arrive at the conclusion,” he says, “that in *dementia paralytica* we have not to do with a disease in the ordinary sense of the term, but with what appears to be a very various group of symptoms dependent on disease of the brain.” We cannot, therefore, take *dementia paralytica* as our starting point, but must begin with *tabes* if we wish to consider the relation between the two diseases, as we are able to identify the latter by the anatomical conception of grey degeneration of the posterior columns. We can call to mind many disorders of the mental faculties which have been associated especially with chronic diseases. We saw that, in their later stages, there occurred lesions within the

cranium, sometimes anatomically demonstrable (pachymeningitis), sometimes dependent on disorders of nutrition or of innervation, and that there is generally an early exhibition of mental stupor, or a certain degree of dementia. We have tried to show that in consequence of the latter condition, and of the paralysis depending on the grey degeneration of the cord, a mental derangement showing itself in the course of *tabes dorsalis* must appear among the symptoms of a so-called *dementia paralytica*. We saw, also, that *tabes* may be added on to mental derangements of already long standing. But it must be left till more material can be gathered on which we can form an opinion, to decide whether there is here a similar relation to that which exists in regard to the tuberculosis which is frequently associated with long continued psychoses, and for which one cannot indicate any definite cause.

“We saw, however, that there is still, after the separation of these kinds of mental disorder, which we conceive to be analogous to those associated with other diseases, a number of patients remaining in whom the symptoms of *tabes* appear simultaneously with a severe form of mental derangement. We believe that here we must recognise a special affection closely bound up with the *tabes* in the same manner as there is an actual tubercular insanity depending on the development of tubercles in the brain and its membranes. We hold that we are not justified in classing these cases together with the other examples of *dementia paralytica*, as Westphal has done.” Simon has found this condition associated with sclerosis of the brain, and consecutive atrophy, but does not venture to decide whether this lesion is the constant basis of the insanity.

*A Rare Psychopathic Condition.*—In this paper, Professor Griesinger described three instances of a peculiar condition, which, in his own words, “not only have I never previously met with, but I may say that among all the patients in asylums that I have observed, I have never met with anything exactly analogous, and I am not acquainted with anything in our literature which describes it. There is only a certain amount of analogy, and that only in the fundamental conditions, to be found in Falret’s so-called *maladie du doute*.” In Falret’s cases the doubt referred to the person of the patient, the individuality, or *ego*, while in Griesinger’s cases the doubt refers to objects, or ideas, which have no direct connection with the individual. The patient is in possession of reason, and quite aware of his own state, but has a constant and irresistible impulse to seek for the why and the wherefore of everything, no matter how little it may concern him, or how impossible it may be to obtain the desired explanation. “For example, the patient sees a worm, and it occurs to him how may this worm have originated? This leads to the further question, how do worms in general originate? What do they signify?—questions to which he cannot obtain an answer. He sees the stars; it occurs to him whence have they come? &c. He

would like to get at the bottom of it, and as this is not attained, the unsatisfied longing fills his spirit with deep discontent. A multitude of things seem wonderful and inexplicable to him. Speech: whence did it originate? Man and woman—why are there such? The understanding: how has it arisen? Where is its seat? The structure of the body, the origin of creation, especially the existence of mankind: whence comes it all? How is it possible that mankind exists. The whole 'TO BE' seems wonderful to him, the enigmatical certainty with which nature always remains the same, the inconceivability of creation, the impulses of mankind, the development of the race of man, the genealogy of man; he cannot conceive of the existence of man, because he does not form a conception of the whole creation." Thus he opens to himself every moment a labyrinth of problems concerning mankind, and everything else, finds no way out, loses himself in them, and makes himself unhappy about them. Another patient had a somewhat different character of difficulty. "Why is that person who speaks to me so tall? Why is she not little? Why is she not as high as the room? Why are there not two suns? Who made the stars? Who made God? Why do I hold my hat in my right hand? Why not in the left? Why am I standing?"

The three cases, one female and two males, occurred in persons of good position. The professor had seen two of them only once in consultation; but he had an opportunity of observing the third for a longer period.

*Occurrence of Granule-cells in the Spinal Cord.*—Dr. W. Sander has also applied himself to elucidate this subject. "Since the occurrence of definite affections of the spinal cord in paralytic insanity has," he says, "been established by the labour of Westphal one of which affections has been shown to be during life connected with a certain group of symptoms, the question has become very generally interesting in how far the occurrence of granule cells in the medulla is a circumstance peculiar to general paralysis, or whether any or what other morbid processes are thus distinguished. A further question was, in what connection the symptoms during life, and the other appearances after death, stood to the granule cells in the cord."

In the details of the examination of 59 spinal cords in search of granule cells, he aims at nothing more than furnishing a contribution towards the solution of those questions. In 26 cases of affections of the nervous centres, other than general paralysis, there were no granule cells; in 23 others the cells were more or less numerous, and of these, 20 were cases of general paralysis. Whence it would seem that this alteration is constant in that disease, but that it is not peculiar to it.

*Papaverin and Morphia.*—In consequence of the recommendation of Professor Leidesdorf, Dr. Welter has made observations on the action of the papaverin, especially in regard to the difference between its action and that of morphia. He finds—1. That papaverin pro-

duces longer and deeper sleep than morphia. The action of the papaverin is, however, not so rapid, the effect taking several hours before it shows itself. 2. Papaverin contracts the pupil to a much greater extent, and the contraction is more lasting. 3. Papaverin diminishes the frequency of the pulse much more decidedly than morphia generally does, lessening it by as many as from 15 to 20 strokes in the minute. 4. Papaverin is for these reasons to be recommended as a better antidote to atropia than morphia. 5. Papaverin interferes less with digestion than morphia, and occasions neither vomiting nor constipation. 6. As regards its ease of exhibition, it is comparatively inferior to morphia on account of its insolubility, and the greater length of time required for its action is generally a disadvantage. It does not seem, either, to produce so decidedly calmative an effect on the mind as that of morphia.

*Chloral Hydrate.*—Dr. Erlenmeyer gives the results of the experience of himself and his friends, who seem to have tried the remedy in a considerable number of cases. His own mode of prescribing it was—℞ Chloral Hydrate ℥ ℥ss., Syrupi corticis aurantii, ℥ j., Aquæ fontanæ, ℥ v. Three to four table spoonfuls to be taken in the evening.

The following results have been obtained :—

“1. The remedy was not borne by the large majority of patients, but produced vomiting. In one case there was ulcer of the stomach; others had quite healthy stomachs, and still vomited. None of my own patients vomited it.

“2. The influence on the nervous system, particularly as regards the production of sleep, was very various. Many of the physicians did not succeed in procuring sleep; others obtained pleasant and refreshing sleep; and others obtained sleep from which the patients awoke in a stupefied condition. I myself have *always* obtained sleep with an average of four spoonfuls of the above mixture, and in many cases have not required to give so large a dose.

“3. The cases in which the remedy had a calmative influence were the different forms of alcoholism, active melancholia, mania, sleeplessness in various forms of tuberculosis, and it worked rapidly in cases in which opium had long lost its effect.

“4. The remedy is very suitable for subcutaneous injection, on account of its great solubility, but great caution is necessary on account of its irritant action on the skin. The combination with morphia is especially to be recommended. The application of one gramme of chloral hydrate to different places rapidly one after the other produces lasting sleep when combined with a sixth of a grain of morphia. In milder cases a gramme is sufficient without the morphia. In very severe cases the combination of injection, at most of two grammes, with the internal exhibition is to be recommended. In the treatment of mental disorder, especially in the excited form, the chloral hydrate is the most valuable remedy.”