science is true to her beneficent mission in the higher sphere as well as in the lower; they not only show that a change of method in the study of human nature ended some of the grossest barbarisms of the past, but they involve this deeper result—that by reaching a knowledge of the true causes of insanity and imbecility, we gain command of the means of their prevention, and arrive at the principles of mental hygiene."

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

I.—German Psychological Literature.

By JOHN SIBBALD, M.D. Edin., Medical Superintendent of the District Asylum for Argyllshire.

Zeitschrift für Psychiatrie, vols. xxi, xxii.—"On the Influence of Intermittent Fever on Insanity," Dr. W. Nasse; "On the Retentention of Memory in Insanity," Dr. C. Pelman; "On the Results of Treatment at Gheel," Dr. F. Wiedemeister; "Contribution to the Knowledge of doubtful Morbid Conditions of the Mind," Dr. Wille; "Cold Bathing in Cases of Insanity," Professor Albers, Dr. Finkelnburg; "Insanity resulting from the presence of Echinococci in the Brain," Dr. Knoch; "Tabes Dorsalis and Paralysis universalis progressiva," Dr. Westphal: "the Treatment of Melancholia with Opium," Dr. Tigges; "A Simple Instrument for determining differences in the Size of the Pupil," Dr. F. Obernier; "the Development of Grey Cerebral Substance in the Walls of the Lateral Ventricles," Dr. Meschede; "Hereditary Tendency in Insanity," Dr. Jung; "Typhus in the Insane," Dr. Wille; "A New System of Measurement of the Head," Dr. F. Obernier; "A Contribution to the Subject of Diminished Responsibility," Dr. Flemming; "Insanity connected with Hydrocephalus," Prof. Albers; "Cretaceous Tumours in the Insane," L. H. Ripping; "Statistics of the Asylum for Curables and Incurables at Halle," Dr. Damerow.

On the Influence of Intermittent Fever on Insanity.—Dr. Nasse, of Siegburg, discusses the supposed favorable influence of intermittent fever on the progress of insanity, which has especially been maintained by Koster. He details seventy-six cases of this disease occurring in connection with insanity, which he had observed during

nine years and a half which he spent at the Sachsenberg Asylum. In eight of these cases recovery had already taken place before the fever occurred, and no recurrence of the mental symptoms took place. In two cases recovery began immediately after the attack of intermittent fever, and rapidly became complete; in 3 this fever was followed by lasting improvement; in 14 there was an improvement which, though not altogether permanent, continued for a considerable time after the fever had subsided, and in 7 there was an improvement which only lasted during the entire course of the fever; so that, in all, there were 26 cases in which a favorable change accompanied the attack. In 39 cases, however, no result appeared to be produced, and in 3 the febrile condition was followed by unfavorable mental symptoms. These statistics fall far behind those of Koster in testifying to the supposed curative influence. In his statement he gives, out of 24 cases, 7 as recovered, 7 as improved, and only 10 as having received no benefit. But it must be observed that a detailed comparison of the two lists shows this important peculiarity in Koster's cases, that the great majority belong to the primary forms of mental derangement-melancholia, mania, and moria. Besides 10 purely primary cases, 8 are cases of melancholia or mania, with weakening of intellect (Schwachsinn) or hallucinations, so that only a few cases of secondary forms of insanity remain. On the other hand, only 8 of Nasse's cases were labouring under melancholia or mania, and the remainder were, for the most part, in advanced stages of secondary insanity. Recovery or decided improvement occurred specially in the melancholia and maniacal forms; in 2 cases of acute mania, 2 of melancholia, and 1 of delusional insanity with hallucinations. That there is no insuperable obstacle in the nature of the last-mentioned to the reception of favorable influence from the fever is shown by several observations both of Koster and Nasse. The total number of cases in which the latter observed a favorable effect of the fever were in

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3 out of 4 cases of melancholia.

3 ,, 4 ,, mania.

8 ,, 25 ,, delusional insanity (generally with hallucinations).

11 ,, 26 ,, chronic mania, and secondary dementia.

1 ,, 5 ,, paralytic dementia.

- ,, 5 ,, epileptic insanity.
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It might have been assumed à priori that the previous duration of the insanity would bear an important relation to the favorable or unfavorable effect of the fever. Accordingly, we find that the recoveries and decided ameliorations which Koster has reported occurred in cases which were nearly all of less than two years' duration; and in Nasse's similarly favorable cases, only 1 had lasted longer than two years. In all the 26 cases in which any favorable result was observed, only 4 had been longer than five years insane;

6 were less than two years, and the durations of the other 16 were between two and five years. From these considerations Dr. Nasse thinks it must be allowed that neither the form nor the duration of the insanity affords any certain criterion by which we may judge of the effect which will be produced by the fever; but he believes that, in the primary forms with short duration, a proportionally favorable prognosis may be given in regard to the psychical results of the supervention of the intermittent. These cases may, at least, be considered favorable, as among 18 cases (Koster) of melancholia and mania partly complicated with hallucinations and weakened intellect, 14, or 78 per cent., recovered or decidedly improved; and among 8 such cases (Nasse) 4 were very favorably influenced, making 69 per cent. if we take the data of both observers together. The conditions necessary to permit of the beneficial influence of the fever probably consist in the special physical state of the patient. Indeed, Koster suspects that favorable results are produced only in those cases where the cerebral affection is only functional, and particularly in sympathetic affections depending on lesions of the abdominal organs. Nasse, though doubting the particular conclusion as to the influence of abdominal lesions, agrees as might be expected in the belief that functional affections are most likely to be ameliorated. He has endeavoured to classify those of his own cases in which the distinction between functional and organic diseases could be made, and he finds that one third were idiopathic affections depending on primary disease of the brain, and that two thirds were sympathetic cerebral derangements. Of the latter, a part were to be referred to lesions, not of the abdominal organs strictly so called, but of the genital system and also of the thoracic viscera. He also remarks that in one case of sympathetic derangement due to an abdominal lesion no change was produced by the

A recent French writer, M. Girard, who mentions an instance of the beneficial effect of intermittent fever, supposes that it may be explained as the substitution of one neurosis for another. Nasse contends that we must look for the explanation in the effect on the circulation of blood in the brain. The abnormal condition of this circulation has, especially of late years, been regarded as of great importance in regard to mental derangement; and it is probable that the chronic forms of depression and debility with which such derangement is associated, are connected with impeded and slow circulation in the cerebral vessels (passive hyperæmia of the membranes, anæmia of the brain-substance, &c.). It is also well known that in those forms of mental derangement which are accompanied by apparent physical health, the action of the heart and vessels is usually distinguished by remarkable slowness and want of power. In intermittent fever, however, there is a strong and sudden excite-

ment of vascular action, and a revolution in the general circulation which must have an influence on the circulation in the brain. The strongly-marked symptoms of congestion of the head almost always to be observed in those suffering from intermittent are shared in by the cerebral circulation, as is shown by the profuse epistaxis which has been observed to occur during that fever. Girard and Amelung mention the occurrence of epistaxis in both the cases in which they saw recovery from insanity follow the attack of intermittent; and Nasse reports that heat, redness, and pain in the head with giddiness and acute delirium were usually observed in similar cases. It is, therefore, probable that, with the acceleration of the general circulation, there may also be the removal of partial and old stagnations, and a sudden addition of new blood increasing not only the general quantity but improving its quality, and that thus the function of the part of the brain which had been impeded by the slowness or insufficiency of its supply of blood might have undergone a kind of revivification. Special benefit might also be expected from the frequent recurrence of this acceleration in chronic interruptions of the circulation associated with torpidity; and as the vessels are repeatedly gorged and emptied in the course of intermittent fever, more advantage may be expected from it than from acute inflammations. Of thirteen cases of erysipelas of the head and face mentioned by Nasse, none showed any favorable change in the mental condition, although three were cases of recent melancholia; nor has he observed any improvement during the course of many cases of pneumonia occurring among the insane. The assertion has been made by Berthier\* that every fever had a remarkable effect on insanity, and that in conditions of mental excitement an improvement of some duration is produced; while in melancholia and in insanity complicated with paralysis an injurious effect is produced. In Nasse's cases, however, there were several cases of melancholia among those improved and cured, and in one paralytic distinct improvement took place.

The Retention of Memory in different Forms of Insanity.—This subject is considered in a long paper by Dr. C. Pelman, Assistant-Physician to the Asylum at Görlitz. As it consists chiefly of the details of cases observed by himself or already published by other writers, it is impossible to present a satisfactory abstract of its contents. He classifies those cases in which loss of memory is observed into three divisions. The first includes those conditions which are analogous in their nature to dreams, in which the mental action does not reach the condition of consciousness or waking life. The second includes those cases in which the mental action is so exalted that

\* 'Annal. Medico-Psych.,' 1861, vii, 1.

ideas follow one another in such rapid succession that they do not exist for a sufficient length of time to permit of their being preserved for reproduction. And the third consists of those in which loss of memory is occasioned by physical changes in the brain, as in cases of paralysis.

On the Results of Treatment at Gheel as regards the cure of Patients.—In this paper Dr. F. Wiedemeister, of Hildesheim, compares the statistics of recoveries and deaths in Gheel with those obtained in the asylums of Hildesheim, Vienna, Illenau, and Siegburg. As regards recoveries, he shows that the proportion of recoveries to the admissions in these asylums is considerably greater than appears from the statistics of Gheel; but the value of his inferences is seriously affected by his omitting to make allowance for the large number of incurable cases which are received at the latter place. And he calculates the deaths in relation to the number of admissions instead of the average number resident, which necessarily leads him again to very false conclusions. In consequence of these mistakes, the advocates of the family system need not be alarmed at the opinion which he expresses, that "Gheel presents great probabilities that a patient will find his grave there within two years, and little hope that he will be cured." The subject is more fully treated in another part of the present number of this Journal.

Contribution to our knowledge of Morbid Conditions of the Mind .-Dr. Wille, formerly of Goeppingen, relates an interesting instance of attempted homicide by a man, the nature of whose insanity was not ascertained with certainty for a considerable time after the commission of the assault. "On the evening of the 7th of August, A. A., without having exchanged words with D., his neighbour, or having had any quarrel with him, entered his chamber and struck him on the head with a hatchet, and thus an injury to the head and concussion of the brain were occasioned, which threatened to be seriously dangerous. The perpretator fled after the commission of the deed, but was taken by the police the same night. As the local authorities considered that the assault was committed during a temporary aberration of mind, on account of the general character of the man and the circumstances of the deed, he was subjected to medico-legal examination." The following was the medico-legal opinion:—"A— suffers from a melancholic disturbance of the mind, which is not of recent origin. This permanent condition is accompanied by transitory, but frequently recurring, more or less violent determination of blood to the head, which reveals itself unmistakeably, and has a decided influence on the manifestations of melancholia. In short, he is at the time not only mentally, but also physically ill; he sin the stage of melancholic derangement

which is manifested not by gloomy stupor, but by alternations of tranquil, moody derangement, with attacks of exaltation, and approaches to actual acute mania. During these attacks the power of rational self-control is absent, and in the intervals very circumscribed."

In consequence of this opinion he was placed in the district hospital, where he remained ten days, after which he was removed to the asylum. According to the more detailed information which was then obtained, he appears to have been a quiet, industrious, working man, of infinite good humour, with no disposition to injure any one. He was fonder of church than of the public-house, avoided quarrels, and occupied himself much with the Bible and religious subjects. His house was well ordered, and he was suitably married. At school his conduct and progress were satisfactory, and at eighteen years of age, when he finished his apprenticeship as a carpenter, he joined a strict religious sect. When he went from home to improve himself as a tradesman, he sent home his savings to his aged parents. He continued always to be a diligent attendant at all religious exercises, and conducted himself with the greatest propriety. In preaching, as he occasionally did, he showed great knowledge of the Bible, and skill in expounding it. His grandmother, a paternal aunt, and another relation, are said to have suffered from insanity.

The mental derangement dated from the year 1860, although it was never subjected to medical treatment, as his friends did not wish it to be known. Besides his relatives, however, others testified to his derangement, and said that he had intervals during which he was perfectly sane. In the above-mentioned year he attempted to cure a boy of certain attacks of chorea under which he laboured, by means of prayer, as the attacks were ascribed to demoniacal possession. When he saw the fruitlessness of his exertions, he became thoughtful and moody, and felt so miserable and restless that he often broke out into moaning and weeping. From this time forward he occupied himself greatly with mystical and superstitious notions, and in 1862 he is said to have preached publicly at a place in the neighbourhood. Some time before the critical event he had to prepare a wooden hut in the neighbourhood. Against the wish of his family he walked to and from his work, a distance of seven miles, instead of going by railway, and did a heavy day's work besides. This occurred at the hottest season of the year. Thus far he had shown no other traces of mental aberration than the moanings and internal disquietude. It was on the evening of the 7th of August, as mentioned before, that the event occurred which was so little anticipated. The family was seated at supper when he entered the room and attempted to strike his wife with an axe, though without succeeding in injuring her seriously; he next ran to his neighbour's house and struck him on the head with the axe. He then left the axe and made off.

His behaviour after admission to the asylum was in no way significant of much mental aberration. He was industrious at work, though showing in his words and actions a certain apathy and want of interest in what went on around. His judgment appeared to be quite correct. He seemed to labour under no delusions or hallucinations, and though apparently very religious, was not extravagantly so. He was friendly and pleasant to every one, and though frequently sad he states that he is so on account of his unfortunate condition, and especially on account of the infant who, as his wife is pregnant, is soon to be brought into the world without a father. When he is spoken to about the cause of his having been brought to the asylum, he explains in the clearest manner that he knows nothing of the circumstances. "He is said to have struck a neighbour with the axe, which he knows nothing about and cannot believe. He never had any difference with his neighbour, and never even in word injured any one; in fact, he knows nothing but that he was seized on the road by the police and taken to the office, where he first came to himself as if waking from a dream. He never was deranged in mind, though he had suffered frequently from headache during harvest, in consequence of great heat. Of the events of the day on which he was arrested he is in complete ignorance, and it seems to him as if he had not been in the world at all then." Before and after that particular period he could remember every event with the greatest exactitude, and as often as he spoke about the affair he always gave the same account, which he called all the saints to witness was the truth. He remained in this condition and preserved this demeanour till the middle of September, when he was attacked by typhus fever, and he seemed more depressed during the illness than before; it was attributed to longing for his family.

The case had thus a very peculiar history, and could not easily be reconciled with our ordinary experience. "We have," as Dr. Wille wrote when considering the case at this stage, "a man now before us who has passed on to a 'lucid interval' after a temporary, sudden, and violent attack of insanity. The attack must have come on suddenly, and remained a very short time, for no one who came in contact with him, either before or after the deed, observed any remarkable excitement about him. In like manner, the man himself has complete knowledge of everything which occurred previous to the event, and also a few hours after. As regards all that lies between, he shows no trace of knowledge. Why should he conceal the truth? He has already been removed from the danger of punishment by having been declared insane."

About the end of September, however, he made a statement which afforded a complete explanation of the whole affair. It was with

great emotional excitement, and many tears, but with evident internal relief, that he related the following details:

"He had finished his harvest on August 5th, with rejoicings over the good crop, and afterwards, at the house of an acquaintance, he out of good nature undertook some carpenter work for him. While he was at work it appeared to him as if his wife was playing false to him with his neighbour. Quite beside himself he ran home and found his wife in the stable, who answered him very suspiciously, but otherwise appeared as formerly. Weeping and praying, in great grief he laid himself on the bed and spent the night without sleep. On the next day, as he went again to his work, he explained the matter to an acquaintance (who had originated many of his superstitious practices). This person had explained it as a presentiment such as God often has sent. He assured him that such things frequently occurred, as indeed he would find examples enough in the Bible; and he was to watch his wife carefully. Full of trouble he worked away till, as on the previous day, it seemed to him that he saw his wife with his neighbour. Again he ran home, and looked at the bed which he found newly made and wanting a pillow, which he found dirty and laid above the bedstead. Now it seemed to him as if everything was clear. Again, he wept, ate nothing, and weeping again, went to bed. On this occasion, also, he did not sleep. The next day he tried by work to banish the trouble, but it gave him no rest. Anger, pride, and shame had put him quite beside himself—it came all up into his head; and as an axe was lying accidentally in sight, he seized it and aimed a blow at his wife, then ran to his neighbour and struck him, after which he threw away the axe and ran away. He then came to his senses, and has since remained quiet. It is from shame that such a thing should have occurred in his house that he has never confessed anything about it. This state of things is no disease," said the patient. The foreboding was true; he is still assured of the unfaithfulness of his wife, and declares that such will never happen again.

In spite of a thorough perception of the nature of his deed, he always, when thinking of the matter, laid the greatest stress on the injury done to his honour by the unfaithfulness of his wife, the improbability of which he could not be convinced of. The conclusion of every conversation was that he ought to be discharged as soon as possible, and that he would never commit such an action again, and would forgive his wife.

In October he was carried off by the fever.

Dr. Wille discusses at some length the medico-legal bearings of the case. He concludes with the opinion that the patient suffered from periodic melancholia, and that at the time of the deed he was in an exalted stage of mental disturbance, suffering from a severe attack of melancholic reaction. The principal medical questions raised are—(1) could he have been sent back to his family after the return of tranquillity and reason which supervened? or, if not, could he have been sent after passing a longer period of persistent mental health? In such cases, we must confess that medical science does not afford such data as would permit us to express ourselves with certainty as to whether a relapse would take place or not, nor whether a relapse would be of a character as dangerous as the former attack. It is always probable, however, in illnesses of three years' duration, that they will return. Whether the attack will be like the previous one is impossible to say. On the ground of medical responsibility the detention of this patient was required for the protection of those about him.

On Cold Bathing as a Remedy in Mental Disease.—Though there would be no advantage to be obtained from the adoption of the eccentricities of what is called the water cure in the treatment of insanity, there is no doubt that the remedial efficiency of various kinds of bathing in different forms of mental derangement has not yet received the attention which it deserves. We believe that a great deal of the benefit derived from residence in any asylum is due, at present, to the regular bathing which is carried on for the fulfilment of hygienic requirements. The function performed by the secreting textures of the skin is one of the most important in the preservation of health; and the ablutions which are necessary to permit its healthy exercise are comparatively little practised or even known among the masses of the population. It would be strange, then, if important good did not result from the restoration to healthy activity of a function which has frequently been for years in abeyance. But the ordinary bath fulfils only one of the objects which may be attained by the medical applications of water and air. It merely clears the openings of the ducts, and gently stimulates the secretion. Prolonged bathing may not only exert a more powerful influence of the same kind, but it may also, among other actions, be employed for elevating or lowering the temperature of the body in a more satisfactory manner than can be obtained by any other method. The establishment of Turkish baths in some of our asylums will, no doubt, be followed by satisfactorily conducted investigations into the circumstances which indicate or contra-indicate their employment. There is still, however, much to be done in studying the action of the ordinary cold or hot-water bath on the different forms of disease. Much discredit must accrue to the remedy and disadvantage to our science if we do not seek carefully to separate those cases in which their use is hurtful or useless from those in which good results may

The following contribution from the pen of Professor Albers, of Bonn, appears to be of sufficient importance to be given in full:

"A form of melancholia agitans occurs in which a considerable distension of the veins of the lower parts of the cheeks, nose, and conjunctiva makes it probable that a similar condition exists in the brain. This again may form the stimulus which keeps up the excitement, and, perhaps, feeds the melancholia. Considerable emaciation frequently shows itself in this disease, associated with considerable muscular power. There is also considerable elevation of temperature, and cold is only slightly felt. The appetite remains very good, and the secretions are active, but the patient suffers from extreme sleeplessness. He sleeps only for a few minutes at a time, either by day or night, and he occupies himself with continual talking to himself, sighing, bemoaning, or leaping, and other ways of keeping up increasing movement. In some cases this melancholia originates in childbed. During pregnancy, an extensive dilatation of the veins makes its appearance, which may affect one of the lower extremities, generally the right. The venous distension about the face and nose is also generally present, when it exhibits a dark and dirty-red colour. At a later stage melancholia often comes on. The longer the illness continues, so much the more does the restlessness increase, and at last the patient can scarcely remain at rest, or rather is condemned to continual wandering; is impelled to pull her clothes to pieces and to destroy every article of clothes which she wears, or, indeed, anything which comes within her reach. She scratches the walls, and if the motion of hands and feet is impeded, she carries on the destruction with her teeth. I have seen some who gnawed even the doors and lining of the door-posts. In course of time they become very dirty. Urine and fæces are voided sometimes voluntarily, sometimes involuntarily—at any time or in any place, and frequently in the clothes or bed. The delusions under which these patients labour are of a powerfully depressing kindeverlasting perdition; despair of recovery; belief in having fallen into hell, or in being condemned to wander beneath the earth; and generally the apprehension of continually impending misfortune about to fall on the children, relations, and all who are or have been dependent upon them. The same delusion keeps command of the patient with slight fluctuations in strength, which are correspondingly indicated in speech and action, thus rendering this form of melancholia agitans very troublesome, both to the friends and to the physician. It is fortunate, however, that it only in rare instances passes on by reaction to actual violence.

"In this disease I have succeeded in obtaining rest by gradually diminishing the temperature, which was effected by means of water of 54° Fahr., and in one case I succeeded in obtaining complete

recovery.

"It is known that the rapidity of the circulation decreases, and the sensation of nervous irritability becomes lessened if one VOL. XIII.

of the limbs or the whole body be immersed in water of the ordinary temperature. Not only are the redness and pain of burns and wounds diminished by prolonged immersion of the injured member, but paleness and either partial or complete removal of pain are produced in any inflamed part which is thus treated. Continued bathing in water of 55° to 65° Fahr. produces fatigue. A part which has been thus immersed for a long time loses sensibility to a great extent, is benumbed, and no longer feels the prick of a needle as it did before immersion. Reflecting on these considerations, I was induced to try the effect of cold water on a patient who had previously undergone prolonged medical treatment, and in whose case all the ordinary remedies had been used without procuring rest.

"Several experiments made on healthy persons showed that cold water of 35°—40° Fahr. was too painful for continual application, and water of 52° was found to be more suitable. For the continued cold baths I made use of the water in one of my deepest wells, which showed a constant temperature both winter and summer of 55°. In summer the mere carrying of the water from the well to the bath raised the temperature two degrees, and if it was allowed to stand

for a short time in the warm air it was raised much higher.

"The case which I subjected to treatment was a woman of thirtyfour years of age, who had fallen into melancholia after her first childbed. While still labouring under the melancholia she became pregnant again, and after an easy parturition she had a still more severe attack than after the first. Two months after her confinement she was placed under my medical care. Emaciated and delicate as she was, there was still milk in her breasts, and she had been nursing the child up to a few days previous. The skin was dry and very hot, and the pulse rapid. Day and night without rest she complained incessantly that everything was lost, and that she lived no longer upon the earth but under it. She got no sleep either by night or day, or at the most only for a few minutes, and then in the sitting posture. A varicose ulcer which had broken out during the first pregnancy was found on the right leg near the bottom of the calf. Very thick veins extended in numerous folds and loops over the whole right lower extremity up to the abdomen. The nose and cheeks were of a bluish-red colour, which, on closer examination, appeared to be due to the presence of small bluish vessels. She was dirty, and passed her fæces and urine in any place and at any time. To procure sleep, nourishing diet, rest, opium, and cold applications to the head, with tepid baths, were tried for a long time without any apparent result. At the end of the fourth month of the treatment the condition was much the same as at the beginning; and I then determined to try the prolonged cold bath. She was,

with every care, and in my own presence, placed in the bath, and the following conditions were noted:

Date.	Before Bath	. After	Bath of one hour.
July 15Temperature of water Temperature of patient—	56° Fahr.		61° Fahr.
Temple	84°,		
Axilla Hand	90½°,		

In the bath the patient became more and more tranquil; the moaning abated; the pulse at the wrist became almost imperceptible. When chilliness came on she was taken out of the bath; she then obtained rest, alleviation, and one hour of sleep during the night.

Date.	Before Bath.	After Bath of two hours.			
July 26 Temperature of water			64° Fahr.		
Temperature of patient—					
Temple	75° ,,		72½°		
Axilla	90½° "		81½° "		
Clavicular region	$90\frac{1}{2}^{\circ}$ ,,		81½° "		
Hand	$86\frac{1}{2}^{\circ}$ ,,		79° .,		

Was very restless during the day, sleepless, and no greater tranquillity was produced by forty drops of tincture of opium. At the end of the second hour the radial pulse could not be felt, and chill set in. In the following night she had several hours of sleep.

Date.	Before Bath.		After Bath of two hours.			
July 27 Temperature of water	584°	Fahr.		61° l	Fahr.	
Temperature of patient—						
Temple	86°	**		79°	••	
Neck			•••••		,,	
Axilla			•••••		,,	
Hand	94½°	"	•••••	79°	**	

Pulse before the bath 75, rather full; but after an hour and a quarter not to be felt. The patient was restless during the day, but no longer destructive. Had good sleep at night, and kept herself clean.

Date.	Before Bath.	After Bath of two hours.			
July 28 Temperature of water	57° Fahr.		61° Fahr.		
Temperature of patient—					
Temple			79°,		
Neck			84° ,,		
Axilla			84° "		
Hand	93°		75°		

After an hour in the bath the pulse sank from 90 to 56. The restlessness then abated altogether, and for a moment she regained complete self-possession. Towards the end of the bath chill came on, on account of which the patient got out and was put to bed in

warm bed-clothes. During the night she slept quietly. The dirty habits had ceased.

Date.	Before Bath	After Bath of two hours.			
July 30 Temperature of water	59° Fahr.		62° Fahr.		
Temperature of patient—					
Temple		•••••			
Neck		•••••			
Axilla		•••••	79°,		
Hand	90 <del>1</del> °,		75° "		

Before the bath the pulse was 80, but during its administration it became imperceptible. The night was again tranquil. About a quarter of an hour after the bath a severe rigor came on, but soon passed off.

Date.	Before	Bath.	After Bath of two hours.		
August 1Temperature of water Temperature of patient—		Fahr.	••••••	61° Fahr.	
Temple		"		63½°	**
Neck		,,			,,
Axilla	. 93°	,,	•••••	76°	**
Hand	. 90 <u>1</u> °	,,	•••••	73°	"

The night was tranquil and passed in sleep. The varicose ulcer began to heal. The day was also partially quiet, and the insanity was hourly disappearing. The secretion from the skin was natural, and the next day the perspiration was visible, which had not hitherto been the case. A gradual tendency to recovery was unmistakeable. She became quieter and more content. Although not completely recovered, she left the institution on the 23rd of December, and on the 20th of March next was quite well, as was stated in a letter from her medical attendant, Dr. Besserer, of Duisburg.

"I adopted a similar treatment with a lady of twenty-two years of age, who also suffered from melancholia agitans. It was, however, impossible to give her more than two baths. These were well borne, and had a tranquillising effect. She slept better and was more moderate in her moaning and quieter in her movements.

"Such remarkable results of the lowering of the temperature," Professor Albers concludes, "demand further investigation. The prolonged cold bath is without danger to the health of such patients, and can only act beneficially. It appears, however, that they are borne better in summer than in winter. My successful experiments took place only in summer."

In a later number of the same volume of the 'Zeitschrift' there is a paper by Dr. Finkelnburg, Physician to the Water Cure Establishment at Godesberg, entitled "Researches concerning the Use of Cold bathing among the Insane." He gives a more or less detailed account of seventeen cases which were treated either by means of the cold bath, or cold "packing." Most of the cases occurred in

the asylum at Siegburg, and all, with one exception, were examples of recovery following the use of the bath.

According to the mode of administration practised in those cases in which the bath was used the patient was placed suddenly by four attendants into a large bath at a temperature of 60° Fahrenheit. The bath was never prolonged beyond ten minutes. During this time the head of the patient was from time to time submerged, the rest of the body being allowed the greatest possible freedom. The author considers the ten minutes' duration sufficient to prevent subsequent excitement, and to diminish irritation in the nervous system. The details of the cases are not given with the same minuteness as in the instance reported by Professor Albers, the alterations in the temperature of the patients not having been noted. In eight cases the morbid condition is described as sympathetic irritation of the brain, showing itself in the form of acute mania, with more or less tendency to vascular erethism and to congestive affections; one was a case of melancholia agitans. In most of the cases disturbances of the sexual functions were regarded as either remote or proximate causes. Considerable elevation of the temperature of the body was observed in four cases. An almost constant result of the bath was a calming of the action of the heart, with diminished frequency of the pulse and lowering of the bodily heat. Among the female patients increase of the catamenial function generally resulted. In two of the cases, as well as in others not reported, rheumatic affections were brought on. In all the above cases complete cure was eventually obtained.

The author gives an additional case of a young man of 27 years of age who suffered from acute mania of a religious character. After three days of very violent excitement his aspect was pale and dejected, the skin cool, the pulse above 100, and small. In the evening he was placed in a cold bath for four minutes, after which he was quieter, and put on his clothes himself, but complained of a persistent chill. During the night he was apparently tranquil, but while dressing in the morning he fell into convulsions, with loss of consciousness, and contraction of the left pupil. He died comatose. In the autopsy an extensive recent extravasation was found in the arachnoid sac over the whole anterior part of the right hemisphere of the brain, with dark discoloration of the grey matter. Of course it cannot be stated with certainty that the unfortunate event was the result of the bath; but the circumstance is significant enough to indicate the necessity of great caution in the use of the remedy.

The other seven cases are illustrations of the effect of the wet sheet. Five were treated in Siegburg, one at Godesberg, and one at Cologne. The usual mode of application seems to have been to wrap the patient in the cold wet sheets and keep them on for periods of two to three hours, or until perspiration occurred freely. Five were cases of melancholia and two of maniacal excitement, and in all there was either complete recovery or such improvement as to warrant discharge from the institutions. In one case of melancholia accompanying enlargement of the uterus the use of the sheet was followed by decided improvement. As this is the only case in which the effect on the pulse and the temperature is reported, we extract the following table:—

		Before the application.			After one hour.					
	Temperature.			Pulse.			Temperature.			Pulse.
" "	20	67·7° 67·1° 67·3° 67·°	" "		86 86 84 90		67.° 66.6° 66.4° 66.2°	Fahr. " " " "		72 70 68 78
,,	26 29	67·°	,,							

The temperature was taken by placing a delicate thermometer under the tongue of the patient. It may be mentioned that in this case the hip bath and the vaginal douche were also used.

A most important defect in Dr. Finkelnburg's paper is the want of all information regarding the number of cases treated, or the nature of the affection on which the bathing appeared to be inert or injurious. It is evident that no reliable conclusion can be arrived at in the absence of such data.

Mental Derangement produced by the Development of Echinococci in the Brain.—Dr. J. Knoch, of St. Petersburg, controverts the assertion of Küchenmeister, that hitherto the occurrence of Echinococci in the human brain has never been ascertained with certainty. He has had an opportunity of examining a preparation forty years old, which was described by Rendtorf and Rudolphi as Echinococci, and he has satisfied himself of the unquestionable correctness of their opinion. He also describes an unmistakeable specimen which is preserved in the Pathologico-Anatomical Institute in Berlin; and he thinks there is as little doubt about another which is described by Dr. Zeder in the 'Erster Nachtrag zu Goeze's Naturgeschichte der Eingeweidewürmer.'

Tabes dorsalis and Paralysis universalis progressiva.—Dr. Westphal, of Berlin, devotes a second paper to the examination of the cases of the tabes dorsalis associated with mental derangement. A translation of the first paper by Dr. Rutherford was published in this Journal (July, 1864, p. 207), and was intended to point out the resemblance between this disease and general paralysis of the insane. The two affections resemble one another in the gradual weakening of the mind, accompanied with grandiose delusions and maniacal excitement, and also by the motor lesions of the lower extremities, and the occurrence of epileptiform attacks. The two diseases differ,

however, very decidedly, in the order of their symptoms; in tabes dorsalis those in the lower extremities and in the bladder make their appearance long, sometimes many years, before the mind is affected, whereas this is never the case in general paralysis; and the staggering when the eyes are shut is a symptom which is also absent from the latter disease.

Since the first part of the memoir was published the patient whose case is there recorded as third in order has died; and the post-mortem examination revealed the expected gelatinous degeneration of the posterior columns of the cord. It is important to observe, however, that the pathological condition was not satisfactorily ascertained until the microscopic examination was made, an instance of the importance which ought to be attached to this mode of examination in all lesions of nervous structure. In this second contribution Dr. Westphal has collected six additional cases illustrative of the association of tabes dorsalis with mental derangement, which have been reported by Hoffman, Mannkopf, Joffe, and Meyer. He believes that at least some of the cases given by Duchenne as examples of what he has called Ataxie locomotrice, and of which, unfortunately, no post-mortem examinations are reported, are really cases of tabes. According to the course of the mental symptoms, the cases divide themselves into two groups: in one, an exaltation amounting to acute mania breaks out suddenly, exhibiting the character of grandiose delirium; in the other, there is gradually and insidiously developed a general weakening of the intellect passing on to the most extreme form of apathetic imbecility. In the first group the weakening of the intellect makes its appearance in the more advanced stage of the disease, and sometimes assumes a peculiar periodic character. The author suggests that this peculiar course is connected with hereditary predisposition, on which basis the disease is developed.

On the Treatment of Melancholia with Opium.—Dr. Tigges, of the asylum at Marsberg, gives a very careful report of thirty-nine cases of melancholia in which opium was administered in greater or less quantity. He has as far as possible avoided the disturbance of the inferences to be drawn from his calculations, which would be caused by administering the remedy, as has been frequently done in published cases, when the patients were newly admitted to the asylum, or otherwise placed in circumstances which might of themselves alter the course of the disease.

The patients treated were 18 men and 21 women, of ages ranging from 23 to 70 years; and the duration of the disease previous to the administration of the remedy was from two months. The most prominent symptoms were restlessness, destructive and suicidal tendencies, and talking to themselves. The disease terminated in

recovery in 13 cases; in improvement in 5; the condition was doubtful in 5; apparently incurable in 12; and 4 died.

The opium was generally given in doses of from two to six grains twice daily, and in one case the dose was as much as fifteen grains. The periods during which it was administered were two weeks in 4 cases, one month in 9 cases, two months in 14 cases, three months in 9 cases, and more than three months in 4 cases. In 2 of the cases morphia was also given, and continued for several months, the

highest dose in each case being one grain.

The result of the treatment is reported as having been useful and tranquillising in 14 cases; it was prejudicial in 16 cases, the excitement being increased; in 2 cases digestion was interfered with; and in 7 cases no effect was produced. Among the 14 cases in which the opium produced a beneficial result there was only one in which the tranquillising effect passed on directly to recovery; in all the others where recovery took place that result did not appear to be in any way due to the opium. Its action was purely symptomatic in decreasing the intensity of the excitement, and in no degree affected the progress of the disease. Indeed Dr. Tigges seemed inclined to the belief that he attributes to the opium more credit than is due, in saying that the tranquillity was in all these cases the effect of that drug. In some of the cases the decrease in the intensity of the excitement was very slight, and in others when the opium was stopped, a continued or more decided tranquillity ensued, so that the improvement perhaps took place in the natural course of the disease. When the action was more evident it was not regular in its action, differing in different cases, and capricious even in the same case. In one case a comparatively small dose produced tranquillity, in another the same dose had no effect, but a larger dose was effectual; in another the small dose was as useful as a large one; in another the larger doses were injurious, although smaller ones had been followed by improvement. In one case the continuance of the doses which at first had produced an effect ceased to do so, and even a dose of fifteen grains produced no result. In another, the remedy which at first had been beneficial became injurious in the same

The cases in which the opium seemed to act beneficially were mostly characterised by considerable motor excitement. It is also to be remarked that among the cases which terminated in recovery opium exercised an injurious influence in 8, while the recoveries in which opium had acted beneficially were only 4.

The author criticises the cases which have been published to prove the usefulness of opium in this disease, and maintains that sufficient care has not been taken to exclude those cases in which other curative influences have been at work. And he remarks with great truth that statistics on this subject can never be estimated at their true value until we are in possession of the statistics of the normal uninfluenced duration of the morbid process.

An Instrument for determining difference in the size of the Pupils.—Dr. F. Obernier, of Siegburg, describes a simple instrument, which he has used for a considerable time, and which he believes to be of great use in this important observation. It consists of two small oblong mirrors, which are fitted closely edge to edge, and inclined to one another at an obtuse angle. These are attached to a handle, so that they may conveniently be held opposite the eyes which it is wished to compare. Owing to the different angles at which the mirrors meet the rays which are directed from the eyes, a position can be ascertained by experiment at which one half of each eye will be represented in each mirror close to the line of junction of the two. By this means the mirrored half-images of the two eyes can be brought into immediate juxtaposition, and the diameter of each pupil accurately compared. Dr. Obernier reports that the use of the instrument is easy.

On the Development of Grey Cerebral Substance as a new Formation in the Walls of the Lateral Ventricles. - Only two such cases have hitherto been satisfactorily reported; one mentioned by Virchow ('Gesamm. Abhandl.,' p. 998), and the other by Dr. Tungel ('Virchow's Archiv,' vol. xvi, p. 166). Dr. Meschede describes in this paper a very interesting case of what he calls "areolated hyperplasia." Michael Schattkowski, of Graudenz, a Pole, unmarried, æt. 19, was admitted to the West Prussian Asylum at Schwetz, on November 20th, 1863, suffering from epilepsy of many years' standing, and idiotic imbecility which had existed from his earliest childhood. His father had been a drunkard, and had hanged himself four years previously. It is stated that in the second quarter of the first year of his existence the child was suddenly, after a bath, seized with an attack of trembling of the whole body and paralysis of the tongue. It was only in his ninth year that he was able to pronounce any words in an unmistakeable manner, but he never attained any proficiency in the art. In intellectual capacity he remained almost entirely wanting. Generally he was quiet in behaviour, but sometimes easily made angry, when he would stamp and cry like a child. Latterly the epileptic attacks had been becoming more severe, and after his admission to the asylum their severity continued to increase. In January 1864 he had nineteen fits in ten days; in February sixteen fits in two days. The last series was followed by a comatose condition of several days' duration, but after recovery from this the fits were less frequent, and weaker, and lost the convulsive character. About the middle of May atonic diarrhea and

symptoms of pulmonary tuberculosis appeared, and gradually increased until his death, on the 26th of June following.

The most important peculiarities in the condition of the brain, as discovered at the post-mortem examination, were as follows:—On the external superior and posterior walls of both lateral ventricles, stretching far back into the posterior cornu, were a large number of round or ovoid insulated masses of pale grey, yellowish-red, shining portions of brain matter. Their size varied from one to ten millimètres in diameter. Transverse section of the hemispheres showed similar insulated masses of grey substance in the same neighbourhood, imbedded in the white substance. The surface of the hemispheres was also characterised by nodular protuberances of larger size, and instead of the usual regular appearance of the cortical layer the grey matter was divided into insulated masses, between which processes of medullary tissue were prolonged in a radiating manner. This peculiarity was most remarkable in the posterior lobes of the cerebrum.

Hereditary Tendency in Insanity.—Dr. W. Jung, of Leubus, gives a very careful examination of the influence of previous generations on the mental condition of the population. His researches are based on the history of 3606 cases which have been admitted to the asylum at Leubus. The nature of the paper renders it unfit for abridgment, but we may give the general results to which the examination leads him. According to the statistics, it appears that when the father has been insane the sons who have become insane have a greater predisposition to recovery than the daughters; and the converse holds when the mother has been insane. The father shows a greater tendency to transmit insanity to the sons than to the daughters; and transversely, but in a greater degree, when the mother is insane. The hereditary influence of the father is slightly less than that of the mother. He also draws the following inferences from the data before him:—1. Women have a greater tendency to be affected with hereditary insanity than men. 2. The most favorable opportunity for the outbreak of hereditary insanity is the period of puberty in both men and women. 3. Among 1300 inhabitants above the age of fifteen there is one insane; and among four insane there is one with hereditary predisposition. 4. The Protestant population, compared with the Roman Catholic, gives a larger number of insane and a greater number of relapses, but also the greatest number of recoveries both from single and repeated attacks. 5. The cases with hereditary predisposition show a more favorable proportion of recoveries and deaths than those without hereditary predisposition, and require shorter periods of treatment. 6. The cases with hereditary predisposition show more relapses, but also a more favorable proportion of recoveries from them. 7. The cases with hereditary predisposition otherwise follow the same laws as those without such predisposition, especially as regards the greater curability of women, in spite of their requiring on the average a longer period of treatment.

Typhus among the Insane.—Dr. Wille communicates the results of his observation of two epidemics of typhus—one which he had seen at the Goeppingen Asylum, and another which had occurred at the asylum of Münsterlingen since his removal to that institution. He draws the following inferences from his investigation: 1. The symptomatology of enteric typhus among the insane does not essentially differ from that of enteric typhus generally. It derives a character, however, from the peculiarity of the individuals influencing the manner in which the symptoms are manifested. In the incubation stage we find exalted mental irritability which may amount to delusions of being persecuted, accompanied with a high degree of excitement; and in the further course of the disease we may have irregularities of the circulation with differences between the rhythm of the pulses and the dilatation of the arteries, and towards the end, only rarely, delirium; rather, on the contrary, the predominance of a deep apathetic and soporose condition. 2. The diagnosis is more difficult on account partly of the difficulty of obtaining information from the insane at the commencement of the fever, which frequently makes the examination of the patient and the objective investigation impossible, and partly also from the existence of other mental and bodily morbid conditions, as apoplectiform attacks in the course of general paralysis, the irritation stage of periodic and "circular" mental diseases, mental conditions of irritation in the epileptic insane, and profuse febrile diarrhœa in the course of secondary insanity. This last difficulty is felt to the greatest extent in epidemics of typhus prevailing in an asylum. 3. The prognosis in cases of insane persons attacked with typhus is unfavorable. The sane are, indeed, more liable to typhus, but the insane succumb more readily to the disease. 4. The influence of typhus upon the insane is only temporarily favorable, and arises chiefly from the feeling of comfort produced by the removal of a continued febrile condition. In exceptional cases the insanity undergoes a permanent favorable change as a consequence of the typhus. 5. The treatment should generally be of a more tonic and stimulating character than in similar cases among the sane. The nursing of the insane while labouring under typhus presents special difficulty. The circumstances which exert an unfavorable influence on the course of the fever are more difficult to avoid, and the remedies which exert a favorable influence are more difficult to apply. Especially in the apathetic stage there is often absolute refusal of food, and instrumental alimentation becomes necessary. 6. In regard to sanitary arrangements he believes

that in all large asylums special rooms should be provided for the reception of those suffering from intercurrent bodily diseases, which might be used for the separation of those suffering from typhus; their number should be in proportion to the number of inmates.

7. As regards prophylaxis, particular attention should be paid to the condition of water-closets and drains.

A new System of Measuring the Head.—Dr. F. Obernier has devised a more accurate mode of calculating the sizes of crania, which he recommends instead of the somewhat unsatisfactory methods hitherto employed; but without the aid of a diagram it would be difficult, if not impossible, to give a satisfactory description of his proposal.

A Contribution to the Subject of diminished Responsibility.—This is an excellent paper by Flemming. It is difficult to present a satisfactory abstract of it, but the following may be accepted as an imperfect sketch.

If one proceeds on the incontrovertible supposition that the idea of responsibility belongs to jurisprudence, it follows that the physician has nothing to do in psychologico-legal cases with the question of responsibility or irresponsibility (Imputabilität oder Nicht-Imputabilität),\* but he has merely as an expert to ascertain the facts and circumstances, and give an opinion thereon from which the judge may infer the responsibility of the accused or the contrary. These circumstances and these facts, which are the subject of inquiry and consideration by the medical jurist, are connected with the ideas of mental health or disease.

Mental health may be understood to include those vital conditions in which the vital functions of the human organism are performed in such a manner that whether it be normal or abnormal, they occasion no manifest disturbance of the mental functions,—the intellectual and emotional processes.

On the other hand, the idea of mental disease must be defined as that vital condition in which evident and significant injuries and derangements of the mental functions are conditional and called forth by derangements in the corporeal system.

Hence there follow two considerations in establishing the existence of mental disease. In the first place, any irregularity in the mental functions is not to be conceived of as mental disease, but only such are to be regarded as are dependent on derangements of the corporeal system. Hence it is an error to include moral degra-

\* Though the literal meaning of the word used by Dr. Flemming—"Zurechnungsfähigkeit"—is "imputability," I have translated it "responsibility," as being the word in general use in this country among those who have entered on the controversy to which Dr. Flemming's paper is a contribution.—J. St.

dation and like states in this idea, though they may be maintained to be abnormalities of the mental processes. In the second place, every abnormality of the corporeal system is not a manifestation and proof of mental disease even where speech and action seem to indicate injury to the mental processes, but only those corporeal anomalies can be received as proof of mental disease which exist in causative connection with the perceptible derangement of the processes.

Medical science, and more immediately the study of mental disease (psychiatry), affords an explanation of the causative connection which exists between corporeal lesions and injury to the mental functions. It is thus that we are taught to recognise mental disease as such. If this science is not able in all cases to indicate the manner of this cansative connection between corporeal and intellectual abnormalities, it supplies, in the exact observation of mental diseases, the arguments by which this connection may be established. These are obtained partly by the observation of the consecutive order of corporeal and mental symptoms of disease which are observed in unmistakeable mental disease, and partly by the observation of such symptoms as are regularly or generally, and if not exclusively yet chiefly, recognised in morbid mental conditions, and which on this account can be regarded as their distinctive characteristics. Hence it is requisite for the medical jurist, when forming a legal opinion on doubtful conditions of the intellect and emotions, not only to assure himself of the existence of sanity or insanity in each case, but also to set forth the arguments on which his decision is founded. He should indicate and explain them to the judge as clearly as possible, so that the latter may be put in a position to appropriate to himself the decision of the physician, and to deduce from the opinion presented by the expert the conclusions regarding responsibility or irresponsibility. In so far as this deduction of the physician is not arrived at, or (as the preliminary considerations which are founded on medical science are inaccessible to the public), may be unattainable, the judge will be obliged to rest his verdict on the authority of a superarbitrium of the expert.

The ideas of health and disease in general are, however, de facto only relative; the vital conditions fluctuate between what is normal and what is abnormal. These conceptions are only found in their most assured condition where the characteristics of normal or abnormal vital conditions are exhibited in an easily recognisable manner. From these extremes or poles towards the centre or indifference-point the characteristics disappear more and more, and this indifference-point includes a certain but indeterminate extent within which the existence of neither health nor disease can be ascertained with certainty. We are, therefore, justified in recognising an intermediate condition in which it is impossible to establish the existence of either health or disease. But we must not suppose that

this condition actually excludes the idea of health or disease, or includes both. We must merely regard it theoretically, or for the sake of argument, as belonging to either; for it is only because we are unable to decide to which it belongs that the idea can be adopted. It must really be one or the other, although we are unable to make the decision. The same considerations are applicable to mental health and disease. They are only recognised with facility in their extreme forms. There are many mental conditions which have certain characteristics of disturbance of the psychical functions depending on abnormal physical conditions, to which, however, one is not justified in denying the name of mental health. Hysterical and hypochondriacal conditions may be mentioned as examples which approach the character of mental disease without being actually regarded as such. On the other hand, there are very extensive and, at the same time, intense derangements of the mental functions along with which some of the psychical processes appear to be carried on in a perfectly normal manner. But though these manifestations of healthy action bring the condition closer to what we regard as mental health, we are not thereby justified in removing it from the category of mental disease. These we regard, therefore, as doubtful mental conditions, that is, doubtful in as far as it is not evident to which extreme they belong.

While the extremes of mental health and disease are commonly recognisable by those ignorant of medicine, this is by no means the case as regards the intermediate mental conditions. In such conditions as appear doubtful to the judge, he is accustomed to avail himself of the opinion of medical experts. A portion of those mental conditions which are obscure to the non-medical public are not at all doubtful to the physician, who is familiar with insanity. But there still remains a certain number regarding which the opinions of the most experienced experts may differ, or which may be even to them doubtful as to whether they should be classed as sane or insane. And it may happen that the medical jurist, impelled by the desire to obtain a definite conclusion which he may lay before the judge, may permit himself rather to give utterance to a general impression than one founded on scientific knowledge, or may wander into the misty region of metaphysics or transcendental psychology, to which the judge has also access, and where things run so much into one another that he may disagree with the

The question now is how the judge is to act in deducing from the opinion of the medical jurist conclusions upon the sanity or insanity of the person examined—whether he is to be looked upon as responsible or irresponsible. It is evident that in those cases which are doubtful to those ignorant of medicine, if the expert establishes the existence of mental derangement, and makes it manifest that it depends on

existing lesion of the bodily system, the judge must decide on the responsibility of the accused. In the same manner, when the physician is able to recognise the irregularities and apparent anomalies of the mental processes as not being the result of such morbid physical conditions, and can find no signs characteristic of mental disease, and consequently decides on the sanity of the accused, the responsibility of the latter must be admitted. If, however, the expert is unable to arrive at so satisfactory a conclusion; if the characteristic signs of mental disease are not to be found, or the existing anomalies of the mental processes are of so ambiguous a character that they cannot with certainty be classified as symptoms of mental disease, but may coexist with sanity-if remarkable mental disturbance is found side by side with the normal operation of the mental processes, so that grounds for directly opposite opinions are present; or, lastly, if the time favorable to the ascertaining of the mental condition at the time of the event under consideration has already past—in short, if the case remains doubtful also to the expert, and his judgment either in one direction or another is supported by mere probabilities, the certain foundation for the decision of the judge is taken away.

In these circumstances there are two courses open to the judge which require a critical examination from a medical point of view. In the first place he may regard the condition of sanity as the rule, and where no sufficient evidence of insanity as the exception to the rule is apparent either to the public or to the expert, he may decide on the responsibility of the accused. Against this view, however, there are several important objections. It is evident that one cannot assert that a thing does not exist which is not demonstrated or cannot be demonstrated. For the means of demonstration may have existed previously or may become evident afterwards, and thus the error of the decision may be exposed. The injurious consequences of such an error are apparent. The second course is indicated by the consideration that if the conditions of sanity and insanity upon which the responsibility or irresponsibility depends are not separated from one another by a sharply-defined line, but gradually run into one another, this must also be the case with responsibility and irresponsibility. There will consequently be between the complete responsibility of sanity and the complete irresponsibility of insanity an intermediate condition of diminished responsibility which will rise and fall according to the predominance of mental health or disease. This solution also suffers from important defects. It was shown above that in the "intermediate condition" the amount of mental disease does not increase and diminish, but only the degree of its manifestation, and that the boundaries of health and disease are really sharp and well-defined. We ought, consequently, to have, not a diminished responsibility, but a diminished capability of recognising responsibility. If one accepts the supposition of the theoretical presence both of sanity and insanity in the intermediate condition, we must also accept the supposition of coexisting responsibility and irresponsibility, which leaves the judge in the dilemma of having both to punish for the responsibility and to release on account of the irresponsibility.

The duty of the medical jurist, however, consists in laying fully before the judge not only his opinion but the grounds for it; and in cases which remain doubtful to him let him not be afraid to give utterance to the *non liquet*, but at the same time state the grounds of probability and doubt for and against sanity and insanity.

Insanity in connection with Hydrocephalus.—According to the observations of Albers, hydrocephalus internus is associated with two forms of imbecility. One is distinguished by restlessness and frequently complete silliness (Narrheit), the other by deficiency of mental power and paralysis (sometimes dumbness). He finds also that in the first or restless class, the water is collected in the visceral sac of the arachnoid. In those connected with dumbness and paralysis, the collection of water was in the ventricles. In some cases the two kinds of imbecility are mixed. In these the serous collection is found in both situations.

Cretaceous Tumours (Sandgeschwulst) in the Insane.—Dr. Ripping relates a case in which a tumour of this description about the size of a cherry-stone was found in the left choroid plexus of a woman who suffered at first from alternations of melancholia and mania, which were followed by permanent delusional insanity.

Statistics of the Provincial Asylum for Curables and Incurables at Halle.—Dr. Damerow gives a very full statement of the statistics of the Halle Asylum for the ten years ending December, 1863. The average number in the institution has been about 400, those in the department for incurables being generally 100 more than those in the department for curables. It would be impossible in the space at our disposal to give any satisfactory résumé of the learned author's remarks, and we must rest satisfied with noting one or two of the more remarkable particulars from the opening of the asylum.

The total number of admissions since the opening of the asylum is 1,834 men and 935 women, or 2269 in all. Of these, 142 men and 87 women were readmissions. The recoveries were 419 men and 347 women, or 766 in all; those discharged improved were 151 men and 123 women, total 274. The deaths were 427 men and 177 women. Of the men who died, 125 suffered from dementia paralytica; of the women, 22 suffered from that disease. There

were 9 suicides spread over 19 years. Of the admissions, 85 men and 40 women were epileptic.

The classification of the admissions according to their religious beliefs, exhibits what at first sight is a curious result. Calculating the numbers in proportion to the total population of each sect in the province, there were admitted from

Among the Evangelicals 1 in every 830.

"Catholics 1 " 1,769.

"Jews 1 " 412½.

But, as Damerow remarks, there are so many circumstances beside the per-centage of insanity in the population which influence these statistics that no deductions of any importance can be obtained from them. The sect which has the largest proportion of poor would be expected cateris paribus to send the largest proportion of insane to a public asylum, even though the sect might not contain a larger proportion of insane than the others. Some sects also have modes of caring for their poor which prevent them from coming upon the public charge to the same extent as they would otherwise. For the whole statistics and a very interesting commentary we must refer to the original paper.

The Prevailing Prejudice against the Insane.—An Address delivered before the General Assembly of Physicians and Naturalists in Kiel, by Professor Jessen, of Hornheim.

This is an appeal in favour of a more kindly manner of regarding those suffering from insanity. The author exclaims emphatically against what he believes to be still a common mistake-looking upon the insane as criminals, or as being in a condition of which they should be ashamed. He regards it as being, on the contrary, a condition of which the sufferers ought to be proud. "He who has no soul," says he, "has no illness to fear, but whoever has been endowed by nature with a deep, rich and fertile mental organization, bears also the seeds of illness in his inner man. Only the so-called common-sense people, the cold heartless natures, devoid of every deeper feeling, are privileged to be invulnerable to mental disease. ... He who can be made ill by mental emotion doubtless stands higher than he for whom such impressions do not exist, or over whom they pass transiently and leave no lasting trace." He calls upon the medical profession to exert themselves to remove the prejudice which affixes a stigma to the idea of insanity. "I have conducted for twenty-five years an important asylum—that erected in Scheswig in 1820; I have become acquainted with 1500 lunatics, and have attended them professionally; I have lived with and amongst them, and have had more intercourse with them than with the rest of the world. Should I pass an opinion as to the moral worth of these VOL. XIII.

persons, as compared with those who pass for sensible, I could only do so in favour of the former. I acknowledge freely that I respect the insane in general more than the rest of mankind, that I like living amongst them, and that in their society I do not miss the companionship of other people, and that I even find them in many respects more natural and sensible than the rest of mankind."

It may be hoped that Professor Jessen, having such sentiments, will spend the remainder of his days among those whom he ap-

preciates so highly and loves so well.

## II .- English Psychological Medicine.

By S. W. D. WILLIAMS, M.D., L.R.C.P.I., Assistant Medical Officer of the Sussex Lunatic Asylum, Hayward's Heath.

Notes of Lectures on Insanity, delivered at St. George's Hospital, by Geo. Fielding Blandford, M.B. Oxon.

(Lecture V. Melancholia—Mania. Lecture VI. General Paralysis—Definition of Insanity. Conclusion.)

In the October number for 1866 of this Journal, we gave a brief résumé of four lectures on Insanity, delivered at St. George's Hospital by Dr. George Fielding Blandford, and published in the 'Medical Times and Gazette.' Since then, two more lectures, con-

cluding the course, have appeared.

In Lecture V, Dr. Blandford proceeds to consider those patients of whose insanity there is no doubt, who require medical care and treatment. Putting aside all chronic and incurable cases, he roughly divides the recent and primary into those characterised by great depression of feeling with corresponding delusions—in other words, melancholia—and those marked by the exaltation of gaiety, or fury, or ambition, or by the frenzy of delirium, comprised under the generic name of Mania.

"Probably," truly remarks Dr. Blandford, "the most curable and the most frequent of all forms of insanity is slight non-acute melancholia, which shows itself, first of all, by a restless depression, and passes through various stages of despondency, until, from being simply low-spirited and fanciful, the patient's fears assume another shape, and become definite delusions, which are almost invariably of a most distressing nature, and often prompt to suicide. With this mental state, symptoms of a physical nature appear: "the tongue, as a rule, will be coated, creamy, and foul with old epithelium, producing great fector of breath, the whole being often the result