Dr. Mercier said the organism must be identifiable, and their reply was, that it was so. They had obtained two varieties, which had special broth reactions and which produced paresis in rats, and until someone showed there were fallacies in them these observations must stand. He thought Dr. Mercier was in error in saying that the bacillus must be found in every case. Sometimes the organism was difficult to find; but if it were missed in one place it might be present in another. It was too much to ask that it must be found in every case. Dr. Mercier also said the organism must not be found in any case which was not one of general paralysis, but on that ground one would have to deny the specificity of the true diphtheria bacillus, because it was found in many healthy people. Importance was not attached to mere presence, but to invasion. He was much gratified by the remarks of Dr. Savage and Dr. Urquhart, and thanked the President for his sympathetic appreciation of their work. Many points in regard to their work were not included in the paper, but he thought that if some of those who had spoken had seen their charts showing the specific reactions with anti-sera, they would have hesitated to make some of their criticisms. He was very glad the discussion had taken place; it had been very gratifying to both Dr. McRae and himself.

Clinical Notes and Cases.

Study of a Case of Melancholic Folie Raisonnante. By Dr. M. J. NOLAN, Resident Medical Superintendent, Down District Asylum, Downpatrick.

THE following case is of such a rare character, yet it is so perfectly true to type, and it presents such striking points of psychological interest, that its consideration is deemed noteworthy.

Briefly, the facts of the case are these: M. McI—, æt. 50, spinster, farmer, in easy circumstances, consulted me on several occasions as a private patient, and was eventually admitted to the Down District Asylum as a "paying patient" on August 17th, 1906. She is the ninth child of a family of eleven, two only surviving; her mother and eight brothers and sisters died of consumption; one brother exhibited unusual ability; became "too learned" and died of "exalted mania" (G. P. ?).

When patient was eighteen years of age her father died very suddenly of heart disease. She had left him in the morning apparently in good health, and on returning home some hours later she found him "laid out for the wake" in his grave-clothes. The shock of this sad event "upset my nerves; I was never the same." She ceased to menstruate, and suffered from leucorhœa, and later from retroflexion of the uterus. "Queer sensa-

tions" quickly developed. They were of a subjective kind associated with her cerebro-spinal system; they lasted all through her life. Towards the early climacteric she had much discomfort from flushings, headache, backache, and intermittent insomnia. When the menses ceased her condition became more pronouncedly miserable, a neuralgic pain ran "from the back of the head to the back passage"; she became altogether "out of sorts," she could not fix her attention long on anything, and she found it difficult to give her mind to the management of her farm, which, by this time, was solely on her hands. The insomnia became more persistent, and during the night and day she was disturbed by vague apprehensions, which for some time assumed no definite shape. Later, when in the fields, she became unduly anxious about the farm stock, and was obliged to frequently count the sheep and cows to fix their numbers. Later still, she became doubtful as to the identity of the animals, and constantly examined them lest any one of them should belong to her neighbours. This feeling of doubt as to her rightful possession by degrees extended itself so as to embrace all domestic articles, and even her employees. When everything and everyone in the home circle were included it projected itself to outside matters and individuals—in fact, every object, animate and inanimate, became involved in the workings of her morbid psychical state. Walking on the road she wondered "why?" the stones were left in heaps by the wayside; she feared they would cause a fatal accident; she was obliged to retrace her steps to see for herself what casualty might have resulted. Meeting a child she was obliged to ask its name, lest it should be lost, or to fix its identity if it should meet, as she feared it might, with some untoward fate. Gradually these doubts increased as to the degree of her personal implication and responsibility in the misfortunes concerned—she feared she had caused, in some strange way, the death or illness of such children or persons as she had passed by. Water in quantity, whether brook, river, lakelet, or sea, at first suggested someone's death by drowing; later this water gave her the idea that, in a mysterious way incomprehensible to herself, she was the cause of the imagined death, and, where possible, she took steps to reassure herself that there was no visible corpse. Yet, all through this period of intense anxiety, she remained perfectly strong in her

consciousness of innocence, and keenly alive to the preposterous absurdity of her notions. Meanwhile her relations towards her neighbours remained unaffected. She preserved her mental capacity to manage her affairs, but could not at all times personally superintend them. She constantly consulted physicians respecting her ailment. Getting no marked relief, she wished for asylum treatment, fearing her miserable state of doubt and apprehension might lead her to do some undefined harm. Prior to her admission she had been some months in a private hospital for nervous diseases, and had been treated by electric baths and massage, but with no good results. On her admission she met the clerk casually in the hall, and for some days later she was in distress, lest her meeting with him had caused harm to befall him. She also says that she imagines she is eating human flesh when she is eating bread or meat, and that she is afraid to go to the water-closet lest she might find in it a child she had recently seen. She says "such imaginations are ridiculous." She is afraid to knit or sew lest the needles should get into the food and be swallowed by someone. She is afraid to walk lest she should tramp some one of those about her underfoot. "What queer and silly notions!" she exclaims.

It is now some three months since her admission, and, so far, she has improved mentally and physically. She admits she is a shade better, and, though suffering from the "silliest notions" (particularly in the morning), she is not so miserable, as they wear off when she collects confirmatory evidence during the day that her fears are, "as I know in my real self," absurd and groundless. For instance, if in the morning on looking through a window, she sees a woman spreading clothes in the laundry yard, she "has a silly notion" that the woman may be drawn up through the radiator or ventilator; later she sees the woman at meals and feels reassured. If, however, she sees a visitor on the avenue, she has "the same silly notion" respecting her, and it persists longer, as she does not see the person again. The screams of the sea-gulls and the cawing of the crows she often imagines are the shrieks of children; at the same time, she knows the utter absurdity of such an idea. As the day wears along she becomes more and more reassured on all such points, until at length, at bedtime, she is able to regard her "wild imaginations" with a sense of ridicule. She

goes to bed smiling at the vain fears of the day; she sleeps well and without dreams, but only to awake to fresh terrors and doubts, which are started by the first incident of the morning. Withal, she preserves a kindly and sympathetic attitude to those about her, she feels for the sufferings of the acutely insane, she recognises the insane hallucinations and delusions of her fellow-patients, she thanks God frequently that He has left her "sound senses," but she says that there is no suffering so great as the "pain of mind," and the agony of the "cruel tricks played on me by my imaginations." Her natural disposition is in no way perverted—she is truthful, good-natured, pleasing, and sociable—and in all her conduct and manner exercises a naturally bright intelligence, overshadowed now and again, it is true, by the grief arising from the grotesque and painful imaginations, which, though they partially overshadow her rational judgment, do not completely eclipse it at any time. With regard to the "*delire du toucher*" usually involved in this disorder, so far as the symptom is immediately concerned in this case, the desire is limited to certain inanimate things, which, she imagines, may possibly conceal some victim; for instance, the notion that the body of a child she had met may be under an object makes it imperative on her to touch the object to dispel her "absurd notion." In a general way it may be said this symptom, in her case, has assumed a negative phase, since she hesitates to touch persons or things lest her doing so may result in evil consequence to those with whom she might come in contact.

In bringing forward this case under its present title I feel some apology is due to those who entertain and express a distinct antagonism to the differentiation of species in the groups of mental diseases. Such an attitude is one, I find, that is most difficult, nay, impossible, to understand, since in the accurate study of every branch of science the minutest attention to specific detail is deemed a *sine quâ non*. In general medicine, the term "fever" covers "variola"; the latter, however, conveys a very special idea of the disease in question. Moreover, we have still such a term as *variola sine eruptione* to describe a remarkable sub-variety. The term "amaurosis" does not convey any suggestion of the nature of hereditary optic atrophy. In like manner the term "melancholia," though it embraces such a case as that now recorded, does not stamp

it as a clinical entity as clearly as does the well-considered title, *melancholic folie raisonnante* (Krafft-Ebing). At the same time it is evident that exception may very properly be taken to the multiplication of synonyms which have arisen from symptomatological nomenclature; these synonyms are far too redundant, and create confusion.

So far, however, as title goes, the case now considered might be correctly enough classed under any one of the following clinical species, which are all more or less akin, in many cases the differences being due, not to the nature of the mental operations, but to the individual mental acquirements of the persons affected: Chronic hypertrophy of the attention (Ribot), cerebral pruritus (Ball), *folie du doute avec delire du toucher* (Legrand du Saulle), *grubelschut* (Oscar Berger), *monomanie raisonnante* (Esquirol), *monomanie avec conscience* (Baillarger), neurosis of anguish (Freud and Hecker), obsessive panophobia (Bianchi), systematised anxiety (Pitres and Regis), *alienation partielle* (Falret Jules).

With diligence it would be possible to extend this list, but as it stands it serves its purpose. Exception may be taken to the inclusion of *grubelschut* in the foregoing list, since the term applies a condition of inquiry, not with the spirit of enlarging the mind, but rather to gratify its trivial curosity. The latter motive is far removed from that which actuates the inquiry in the present case, where the investigations are made the subject of life and death, and involve the happiness of the investigator. If, however, the term be taken to indicate pathological inquiry without reference to the cause or nature of the matters examined into, it may be permitted to stand. It has been suggested by Dr. B. Ball that *la maladie du doute* (the name given by Falret's patient to the disease) is the least open to criticism, since doubt is the most constant feature in all allied cases. With this I cannot fall into accord, since doubt may be, and sometimes is, altogether absent in some cases. Personally, if I may presume to express an opinion on the subject, I should incline to the view that all such conditions as involve a derangement of the normal mental processes, and which involve concepts, judgment, and imagination, should be treated as a class apart, when such pathological conditions are *associated with a painful consciousness of their morbid existence in the mind of the sufferer*. For such conditions the term *melancholic folie raisonnante* seems fairly ade-

quate, since it implies a fundamental melancholia based on a morbid method of exercising judgment—a method in which the suspension of judgment is unduly and painfully protracted. That the title is not completely adequate is obvious, since it takes no account of the consciousness of the infirmity—the doubt which gives rise to such painful feelings. Underlying this condition of doubt, which is so prominent a feature, we have the operation of the imagination, which raises in the mind the certain diverse conditions which call the judgment into play. The patient does not debate within herself the question of her innocence or culpability with regard to external objects or persons, until, long subsequent to her first perception, she feels she is accused of guilt, and realises that the accusation is a product of her morbid state.

But "to classify is not, in itself, the end and aim of psychiatry," to quote Dr. Farrar, when he urged the biologic method of investigation: "a method," he says, "which studies personality first, and disease second, and not despairing of the ultimate futility of absolute clinical differentiation, it turns rather to the minute analysis of the perverted functions of the individual minds, comparing them with each other, point by point, both in health and disease; under the influence of this conception whatever further growths the symptomatologic and clinical methods are capable of will proceed to the best advantage."

The life history of this patient is typically classical. Like all the recorded women sufferers from this disease, she has a family history of neurotic taint, she is of comfortable pecuniary circumstances, a private patient, and of more than the average intelligence and education of her class. She suffered from a severe shock at a critical epoch of her life; her general health was affected, and she became the victim of chronic uterine trouble. At the climacteric her condition became aggravated, and the course of her disease, though of steady evolution, was not such as to complicate her relation to her surroundings; the inner workings of her mind, up to quite recently, did not openly colour, though they may have embarrassed, her ordinary conduct.

It is interesting to attempt to follow the line of mental operations in this case. To begin with, it must be noted that every distressing thought at the onset was based on the normal

perception of some object or person. The retina received the normal impression which excites the psychical functions to abnormal action. Such complex conditions of mind as those involved demand something more than passing mention. It is not, however, possible here to follow the thinking process through the devious and hypothetical ways ascribed to it by psychologists of conflicting views. I venture, therefore, to treat the analysis of the case by what seems to me a fairly clear working method, which fits in with the life-history of the patient, and at the same time depends only on authoritative statements for its support and acceptance.

At the onset of the disorder we have to deal with a girl of neurotic taint plunged at the period of adolescence into a stage in which the antecedent symptoms of melancholia—"lowness of spirit, groundless forebodings of coming evil, and brooding abstraction" (Maudsley)—were one and all manifest. When roused to interest in her surroundings her first obvious definite doubt was excited by seeing the cattle. There was no error in her visual perception—she saw ordinary cattle in the ordinary way. But, as Mercier points out, visual "perception, which is often, and not incorrectly, looked upon as one of the simplest of mental operations, is, in fact, a very complex process, including sensation, memory, attention, and in the region of thought, all the forms of syncrisis, as well as immediate inference. When perception is defective or erroneous any of these elements may be at fault, or may rest unequally among them."

Here, then, we have at once several mental processes bound together, any one or more of which may have been the weak link in the chain of reasonable conception; and in the latter concrete outcome of received ideas we have its constituents—belief, imagination, and understanding. Taking Bain's amended definition of belief to be a primitive disposition to follow out any sequence that has been once expressed, and to expect the result (in this instance the counting of the cattle), it is a fact, or an incident, of our intellectual nature, although dependent as to its energy upon our active and emotional tendencies. It is evident there was a failure in the belief process since the reckoning of the animals was inconclusive and had to be repeated. This repetition showed the existence of doubt, and, as Kirchner holds, "the more a creature can doubt,

the more conscious it is"; hence the phase of doubt, with its ally fear, created a condition of acute attention to discrimination between the two ideas, for "doubt requires at least two, and, in addition, a creature which transcends both." The repeated sensory impressions of cattle in number stimulate the sensuous imagination, and by suggested contrast, the doubt extends itself from the question as to the number of her cattle to the question of ownership. As in all cases of imagination, understanding (in its limited sense as "the capacity of thought, which proceeding from what is given aspires to positive knowledge by its own logical laws") now acts as a limiting force and stops the doubt at the threshold of delusion. Later, in matters of great import, "doubt is the name for unspeakable misery" (Bain), but so far the simultaneity of thought is normal, and the queries, all of a minor character, are answered to her satisfaction and dismissed. As we have seen, however, time serves to increase the nature of the doubts, and all the mental processes above noted are called into play, no longer for the mere solution of mathematical problems, but to extricate her from the meshes of self-accusation, which her imagination nets round her. As in a dream the ego is, as it were, broken into a plurality, and a condition of anxious confusion ensues—"Qui s'excuse, s'accuse"—she is forced to explain away auto-accusations. Elementary recognition, though still normal, is followed by contemporaneous ideas of a heterogeneous character. The mental operations arising from commonplace, normal, visual perceptions result in bizarre and morbid feelings. Apperception, taking that quality to express "the process by which a mental system appropriates a new element, or otherwise receives a fresh determination" (Stout), is possibly at fault. That the fresh "determination" is not always in the right direction may arise from cases of association by contiguity, and resemblance is indicated by Plato (Phaedo)—"For we saw that this was possible; that when perceiving something, whether by sight or hearing, or any other kind of sense, one may from this perception, get a suggestion from something else which one had forgotten, to which the first mentioned was contiguous, though unlike, or to which it was like." In this patient's case it would seem as if there was a failure of apperception—the morbid suggestions evoked by perceiving normal objects are morbid suggestions

drawn from contiguity and resemblance—they are not the normal suggestions which should be associated with the visual images *per se*. At this stage new elements come into play, the patient recognises the failure of her mental power to deduce normal rational suggestions from the external stimulus, and she seeks to correct the false impressions by judgment. Normally, judgment or reason acts promptly, it "inhibits." In her case both the conditions requiring rational adjustment being presented by her own consciousness, the judgment state is abnormally slow and painful, there is a strain and stress on the reasoning faculties. She now affords a fairly good illustration of the analysis of self as made by Ward: she has "*the bodily self*," "*the inner self*," and "*the self as person*." The perceptions of the bodily self are normal; the inner self is evidenced in abnormal emotional disturbance; and self as person indulges in a reciprocal recognition in which the not-self becomes a second self with a correspondingly appercipient group. There is a sense of guilt, which entails a long and painful introspective analysis, and which is thrown off only when the weight of internal and external evidence result in the tardy verdict, which leans rather to "non proven" than to "not guilty"! She is at once her own accuser, defender, and judge. She holds the scales of justice, blindfolded by the consciousness that she is the victim of her own deception, and though she feels she shall free herself from the self-made charge, she is suffering the penalty of a painful and humiliating ordeal. Such a complex condition of mind demands a close examination. The elements involved do not work in harmony—there is a distinct disequilibrium between the actual visual perception and the abstract psychical sentiments thereby elicited. There is, indeed, more than mere disequilibrium—there is a very gross incongruity which unfortunately is painful to the ego concerned, inasmuch as it creates, as it were, a bogus case against itself, and is forced to adjudicate on the same case, weighing the issue in as impersonal a manner as is possible under such Gilbertian conditions. Visual images of inconsequent persons and neutral objects give rise to a sense of self-accusation. A morbid sense of ill-doing must deeply underlie this person's normal everyday commonplace sentiments, which are of a good and kindly nature; and in the rejection of the imputations suggested by the inner ego these latter sentiments are excited to a degree

which demonstrates their very altruistic character, since the anxiety is much more to prove others unharmed than herself innocent. Far down in her inner consciousness are stored away the inexhaustible tissue of charges from the very mention of which she shrinks, and the strange natures of which excite her own wonderment, indignation, and, at times by their very absurdity, her sense of humour. So wide apart are the concurrent sentiments that they might be said to differentiate a double ego. We have synchronous ideas, and yet ideas so discordant that, were the ideation not complementary, the condition of double-consciousness might be said to be present. As it were, we have strongly conflicting and definitely defined ideation of an antagonistic type. The battle is fought by the same divided ego, on the same psychical ground, and though the victory is to the strong in each encounter yet it is truly Pyrrhic; delusion is routed, but illusion and obsession hold the ground.

Delusion is an erroneous belief, the patient not only does not believe in the reality of her "imaginations," but she repudiates and controverts them; hence she is not delusional. But some of her imaginations are so crystallised that they have become obsessions, "they enforce the doing of acts foreign to the acting individual." It is evident that there is a psychical state which may be classed as one of micropsychosis, since it is complicated by uncontrollable thoughts, which are not unlike those wherein the dreamer sees himself, as it were, in detachment from his acts in the dreams. In this condition of micropsychosis the thoughts are controlled by sight, inasmuch as the sights are necessary to elicit the thoughts, though the secondary thoughts so elicited are subsequently controlled by the primary and rational thoughts. At this stage the mental operations are so intricate that disentanglement is practically impossible. The concurrent thoughts are hostile to each other and reflect each other in repetition, as in opposed mirrors. There is, as Professor Boyce puts it, writing of anomalies of self-consciousness, "a primary alternating of passing consciousness such as dimly suggest anomalous situations," and the suggestions are readily assimilated. A very insignificant remote event now causes grave results. One evening, years ago, when walking, she accidentally trod on a snail and partially crushed it; after she had passed on a considerable distance she was

obliged to retrace her steps to ascertain if she had caused its death. Henceforth her accidental contact with people suggested their suffering in consequence. If she were present at a "wake" she was obliged to get repeated accounts of the last illness of the deceased in order to dismiss a vague idea that she had anything to do with the fatality. Her consciousness constantly arraigned her and forced her to prove an *alibi*. This doubt remained in the penumbra of her consciousness—"the peripherally originating spectra of memory" gave rise to illusions of introspection, excited the recognised confusion of internal and external experience—and established the sub-conscious process of criticism now so prominent a feature in the case.

Experience, moreover, as Maudsley points out, has established the fact that "the primary occasion of an hallucination or an illusion may be either in the subordinate sensory ganglia, or in the super-ordinate centres which minister to ideas; and, *secondly, although sensory and ideational centres are commonly in a conspiracy to produce it, yet they sometimes do not agree, the one contradicting and convicting the other.*"

The mental derangement in this case, then, may be classed as a disorder of judgment—there is a disintegration of the necessary unification which is essential to normal judgment—"the personal identity is confused, uncertain, and ambiguous."

To sum up. The patient, it will be admitted, is an excellent illustration of the condition "in which the personality does not undergo any transformation further than the afflicted tone that arises from the tormenting despotism of ideas and emotions that are recognised to be irrational, and of the inefficiency of struggle for freedom from these." The obsessions are also remarkable for their altruistic type—her systematised anxiety is less of apprehension as to her own well-being than regard for the welfare of others. Throughout there is a marked absence of spiritual doubt or despondency, though her suffering is so great "that life is without joy," and "death would be hailed a relief," yet there is no disposition to self-destruction. There are, at times, paroxysms of distress, which may be regarded as "neurosis of anguish." Of late there has been a chronic inability to personally administer her affairs, somewhat analogous to the condition of "professional dyskineses." There is no evidence of insane delusion in the sense of erroneous

belief; there is no evidence of hallucination of any special sense, though possibly there may exist some of a psycho-visual character, when the obsessive panophobia is at its maximum, and excessive emotivity causes acute confusion. It cannot be determined that she has any visual illusions; she sees all objects in their true conformation, and in proper relation to their surroundings.

Just one word as to prognosis and treatment. It cannot be expected reasonably that a condition which is the matured result of a life habit can be overthrown at once, and hence we find that the authorities generally incline to a pessimistic view. There are recorded experiences, however, which point in the reverse direction and stimulate hope. The case now under care shows a tendency to the latter class. This brings us to the treatment which, besides general tonic measures to improve health (and more particularly the nervous system), embraces in asylum life a comparatively limited environment where the exciting causes of anxiety are reduced to a minimum, and are of such a fixed character that time is afforded for the removal of the doubts indirectly inspired by them. The patient's field of psychical vision is, as it were, restricted to a landscape with some certain figures, whereas in the outer world the patient was forced to gaze at an ever-moving panorama where crowds made their entrances and exits in quick succession, creating confusion and doubt by their rapid passage. Possibly it is not in such rare cases as this alone that the monotony of asylum life becomes a restful curative measure. There is at all events a minimum of the irritation calculated to excite "cerebral pruritus" in such cases as this now recorded.

A Case of Sclerosis of the Cerebellum.

By HARVEY BAIRD, M.D.Edin., Assistant Medical Officer, London County Asylum, Colney Hatch.

A MALE imbecile was admitted to Leavesden Asylum in June, 1883. He was then æt. 16, and appeared undersized. He had very little memory or reasoning power, but was clean in habits, and worked outdoors. His mental state remained the same until his death in June, 1904. His speech was stammering, thick, and unintelligible on admission, and remained so. He was not epileptic. He died of phthisis. There is no record of any peculiarity of gait, nor was any such observed by those in charge of him.