The Clinical Significance of Katatonic Symptoms. By HENRY DEVINE, M.D., B.S.Lond, M.R.C.P., Senior Assistant Medical Officer, West Riding Asylum, Wakefield.

UNDER the heading of "katatonia" are included certain peculiar states of stupor and excitement, which tend to alternate irregularly with one another. The stuporose phase is characterised by increased muscular tension, or in some instances catalepsy, together with negativism, mutism, refusal of food, contrary acts, or not infrequently an increased suggestibility, as shown by echolalia or echopraxia. The prominent features of katatonic excitement are increased psycho-motor activity, attitudinizing, stereotyped movements and phrases, verbigeration, and senseless impulses. Various forms of convulsive attacks are motor phenomena which frequently occur during the course of the psychosis.

This group of symptoms was first described in detail by Kahlbaum, who regarded it as a special form of mental disease which exhibited, like general paralysis, a mixture of nervous and mental symptoms. This view was modified later by Kraepelin, who gave a different interpretation to the syndrome by including it in his dementia præcox group. According to this view katatonic symptoms are to be regarded as the expression of a deteriorating process, and have thus an unfavourable outcome.

Such a generalisation has been subjected to a considerable amount of criticism, chiefly on the ground that many cases which exhibit katatonic phenomena apparently recover, and do not seem to follow a deteriorating course. Some observers have even gone so far as to assert that katatonia should be regarded as a phase of manic-depressive insanity, rather than as a subdivision of the dementia præcox group. Such diversity of opinion coincides with our clinical experience. Many katatonic cases undoubtedly deteriorate, and many recover, at any rate for a time. The question arises, therefore, as to whether it is justifiable to regard these "recoveries" as cases of dementia præcox. Certainly they seem to indicate that katatonic phenomena have not the grave significance which has been attributed to them, and indeed it is such "recoverable" types which have been to a large extent the basis of the objections to the whole conception of dementia præcox. It is somewhat puzzling to know into what category such cases as these should be placed, and to know what prognosis should be assigned to them. The point is obviously important seeing that katatonic symptoms are so frequent in adolescent insanity, and it would therefore appear to be of some interest to record the details of two of these "recoverable" cases, with the view of discussing the clinical significance to be attached to the symptoms which they presented.

A. H-, a single girl, æt. 20, was admitted to Wakefield Asylum on August 16th, 1910. The parents were living, and there was no neuropathic heredity. The mother stated that the girl was of average intellectual level, but inclined to be "moody." She had always been liable to unaccountable phases of depression, when she would weep, sit about the house, and refuse to say what was troubling her. For eighteen months her behaviour had been more obviously abnormal. She resented discipline and control, her conduct was erratic, she was constantly relating "romatic tales" about imaginary persons she had met, and in consequence of her unreliable behaviour she was dismissed from three situations. Later she began to express definite delusions. She affirmed that people were talking about her, men were concealed behind the door, rats were hidden in her bed, cats' eyes were staring at her, etc. This increasing peculiarity eventually led to her certification.

Upon admission she was stuporose and resistive. The expression was vacant; at times she spontaneously expressed irrelevant sentences, e.g., "I want my mother to die in peace," but would only occasionally respond to questions by mechanically repeating the last few words. Later she sank into deeper stupor. She was completely inaccessible, mute, sat all day in a fixedly rigid pose, was neglectful in habits, required to be washed and dressed, refused food, and resisted every necessary attention. From time to time she became completely "katatonic," holding herself stiff and straight, so that she had to be carried from place to place.

This condition lasted for about eight months. During March, 1911, some improvement became apparent. Though remaining mute until August, she began to notice things about her. She maintained a stiff and rigid pose, but would turn her head automatically when questioned. On one occasion the constraint

and tension were broken, and she burst into natural laughter at the behaviour of a fellow patient, whose peculiarity was the indulgence in extraordinary facial contortions. She had one convulsive attack, after which she appeared to be rather better. All this time, she was being treated with high-frequency currents, apparently with some benefit. During the latter part of August, the patient began to speak, and the constraint in her movements gradually lessened. On November 14th, 1911, she was discharged, apparently quite well, bright and alert and anxious to return home.

When discharged she went to stay with some relatives. Unfortunately the environment was by no means good for her. She kept late hours and indulged in a series of gaieties, frequenting music halls and picture palaces, and attending Upon her return home she was found to have become irresponsible and flighty; she resented control, and insisted on walking about the streets. She was unable to concentrate her attention upon her work, and muddled everything she attempted to do. Soon her conduct grew more abnormal. She stated that she was about to be married, basing her assertion on a slender friendship with some young man. She began to look over houses with a view to purchase, and to her parents' consternation, furniture, which she had ordered, began to arrive at the house, though she did not possess a penny. At this stage she was certified, and re-entered the asylum on February 13th, 1912.

Upon admission she was distinctly excited, but free from confusion, and correctly oriented in all spheres. Though garrulous, her speech was coherent. Her mood varied; on the whole she was pert, jocular, and boastful, but she readily became indignant at the position in which she found herself. She was going to see her solicitor—a purely imaginary individual—and intended to have the persons responsible for her detention put into prison. She saw nothing strange in her conduct, and admitted trying to obtain "a suite of furniture, a side-board, a piano, and a brass bedstead." She affirmed that her banns were to be put up on the following Sunday.

The patient remained in this excitable state for some time. She related interesting but quite untrue stories about herself, e.g., that she had had a baby before coming to the asylum. She applied for a post as nurse on the staff of the institution,

and also answered a matrimonial advertisement as follows: "Please sir, will you kindly tell me the name and address of the gentleman who is seeking for a wife. I think he is in the grocery business; if so I will just suit him as I have been in that trade. If he has got a wife will you kindly tell me. I will pay the expenses if you will let me know. I am lonely, and about twenty-four years old."

After a time, the patient reached what might be regarded as her normal mental level, and it became possible to form some estimate of her character and personality. She was bright and alert, and threw herself eagerly into any form of excitement. She was conspicuous at the dances and almost offensively self-assertive. She was unstable, quarrelsome, easily upset, and resented control. She was inordinately vain and boastful, and though frequently detected in untruths, she behaved with ostentatious reverence at religious services. In her relations with men, she tended to be flighty, and she obviously regarded herself as a centre of attraction.

In spite of these constitutional defects, the patient kept free from any symptoms of insanity, and was therefore discharged on July 7th, 1913.

It was not long before we began to hear of the patient again. She sent two applications to be taken on the staff as a nurse, the last being written on the back of an envelope. Later, one of the nurses received a rambling letter from her, in which she stated she was to be married, and had bought her "friend" "a silver gold matchbox, silver cuff-links, and a new silk tie." It was evident that she was relapsing, and this opinion was justified, as she was readmitted to the asylum on January 6th, 1914.

She was in a thoroughly confident and self-assertive state when admitted, quite aware of her surroundings, and, indeed, she had herself requested to be sent back here. She had had one or two little love affairs, and had answered numerous matrimonial advertisements. At home, she had proved quite unmanageable, but she soon settled down in the asylum. At present, she has obviously regained her normal mental level.

The second case is of rather a different type, and exhibits more motor excitement.

F. H—, a single girl, æt. 23, was admitted to the asylum on October 9th, 1912. Her sister stated that she had had an

attack of depression five years before, following an attack of influenza. She was of a sociable disposition, fond of company, and usually high-spirited, though apt to be moody at times. Her mental illness had been sudden in onset. The certificate gives an indication of the leading symptoms. "Is gloomy and lethargic, sitting in a corner, and staring hard at nothing. When roused laughs inanely. When sitting in a chair allows her muscles to relax and slips down on the floor. Lies motionless there until ordered to get up, when she rises without help. Takes a hat off the table and puts it on her own head, and throws it across the room." "F. H—seems very depressed, cries a lot without apparent cause, saying she has nothing to cry for, and then laughs in an idiotic manner. She imagines there are a lot of men about her, underneath her bed, and coming through the window. Eats soap."

Upon admission, she sat in a fixed position, and her face was expressionless, with her mouth partially open. She understood questions, and gave her name and age correctly. Her attitude to questions was in the main negativistic, though sometimes she would mechanically repeat the query. Usually she refused to reply or said "Don't know," though she obviously did know, and would laugh to herself as if secretly amused at something. At times, during examination she became restless, twisting herself about and peering on the floor.

For some days, she remained stuporous, standing about in a stiff and constrained attitude, smiling to herself and taking no interest in her surroundings. At times, she would kneel down and pray, though she laughed stupidly if she was asked why she did so, and seemed to lack any deep depression. Later, she became mischievous, and delighted to trip up her fellow patients. She was constantly grimacing, and at times made sudden impulsive rushes about the ward. There was a tendency to catalepsy. The symptoms remained stationary until April, 1913, when she rapidly began to improve, and on May 24th, 1913, she was discharged, apparently quite recovered. She was thoroughly bright and alert, interested in everything, and eager to resume her ordinary life.

On October 9th, 1913, she was readmitted to the asylum. During the interval she had kept very well, and had been employed as a domestic servant. Her mental symptoms had reappeared about fourteen days before her admission. They

need not be detailed, as they were almost identical with those observed during her previous attack, except that on this occasion she made a rather foolish attempt at suicide. She was quite aware of her surroundings, and knew the names of the patients and nurses. At the present time, she has much improved, and will, no doubt, be discharged eventually.

These two cases present quite familiar clinical pictures. The former is a pronounced case of katatonic stupor, and on the surface it resembles many cases which undoubtedly deteriorate. A period of depression, accompanied by delusions of reference and hallucinations, had been followed by a condition of deep stupor, associated with stupid resistiveness, extreme muscular rigidity, refusal of food, neglectful habits, mutism, and convulsive seizures. Though, however, the patient has been under observation for three and a half years, and she has during that time passed through three attacks of insanity, she shows no trace of dementia, and the personality is not permanently impaired in the sense of deterioration.

The second case also presents objectively a clinical picture strongly suggestive of katatonic dementia præcox. The echolalia, negativism, catalepsy, unmotived impulsiveness, stupor, and above all the curious inco-ordination between the emotional reaction and thought content, such as silly hilarity associated with morbid religious ideas, all go to make up a symptom-complex suggestive of a deteriorating pychosis. Yet again one sees a bright, alert personality emerging from a second attack.

Now such cases are sometimes cited as instances of recovery from dementia præcox. This view would seem to render the conception of dementia præcox meaningless. To loosely apply the term to a group of symptoms irrespective of their outcome can serve no useful purpose. It would seem to be more reasonable to confine the term to those cases which definitely deteriorate. The degree of deterioration of course varies. In many true dementing types, a sufficient degree of adjustment occurs to justify discharge, and the patients exhibit only a certain dulness and reticence indicative of emotional dementia.

In the normal phases of our two cases, however, no trace of emotional or volitional dementia could be detected. On the contrary, instead of a lack of contact with the environment, one sees, especially in the case of A. H—, a strong emotional reaction to external impressions, and a thorough alertness and energy. Furthermore the second attack in the case of A. H— bore no resemblance to any phase of dementia præcox. There was no confusion or dilapidation of thought, her delusions were comprehensible and clearly expressed, and she was fully alert, and anxious to obtrude herself. These cases cannot therefore be regarded as deteriorating types, that is to say, the diagnosis of premature dementia or dementia præcox can be excluded.

In view of the fact that katatonic symptoms have no constant value in a prognostic sense, the question naturally arises as to how far it is possible to differentiate the deteriorating from the non-deteriorating types, during the acute stages of the psychosis. There is no doubt that the most valuable criterion is the presence or absence of confusion. Shaw-Bolton in his studies on "Amentia and Dementia" asserts that mental confusion exists to a greater or lesser degree in all cases which are about to develop dementia, and that cases in which this symptomcomplex is absent belong to relapsing or recurrent forms of The existence of confusion he considers justifies a grave prognosis in adolescent insanity, unless of course it is primarily due to a definitely toxic cause. In stuporose cases, the absence of confusion is best demonstrated by eliciting normal emotional reactions to external impressions. Both our cases elicit this point very clearly. In the case of A. H- one suspected that she would recover when she reacted normally to an amusing experience. Her laughter at the behaviour of a fellow patient indicated that she was much less confused, and much more in touch with her surroundings, than had been hitherto suspected. In the case of F. H—, her mischievousness in tripping people up indicated in a similar manner that she was keenly interested in her surroundings, in spite of her apparent stupidity. It was the act of a maniac rather than that of a precocious dement. Such natural reactions would scarcely be exhibited in a case of katatonic dementia præcox, the essential features of which are a withdrawal from reality, and a lack of impressionability to solicitations from without.

Though this lack of impressionability, the result of confusion or detachment from reality, becomes a valuable diagnostic sign, it is often difficult to demonstrate, especially in deeply stuporose cases—and reliance cannot be placed on a purely symptomatological diagnosis. The make-up of the personality is probably an even more valuable indication of the course which the case will take. If we consider the case of A. H—, one fact stands out clearly, viz., that the three phases of definite insanity through which the patient passed are no more than the expression of an abnormal mental constitution. While the three attacks are so different in character, they are all merely episodes in the life of an unstable personality, and no true estimate can be formed of the significance of these attacks without reference to the setting in which they occur.

The patient had always been subject to emotional fluctuations, she was intensely egotistical, eager to attract attention and sympathy, vain and boastful, and notably untruthful. Her delusions, only half believed, and her tendency to relate romantic stories about herself, all reveal a craving to draw interest to herself. They indicate also, quite clearly, the mechanism of "wish fulfilment," or "living through" ungratified desires. Those features taken as a whole indicate an hysterical constitution, and justify the diagnosis of hysterical dissociation in respect to the prolonged phase of katatonic stupor.

In the second case, there is a clear history of a previous attack of depression, and the personality is of the "up and down" type, sometimes moody and at others gay—" easily upset by trifles." Such a mental constitution is known as the cyclothymic, and constitutes the basis for the severe manifestations under the heading of manic-depressive insanity. The attacks may, therefore, be diagnosed as a mixed form of this disorder. The depression is represented by the mutism, sad ideas, and general inaccessibility, and the excitement by impulsive acts, hilarity, and mischievousness.

Such personalities, alert and aggressive, thoroughly in touch with the environment, and reacting strongly to external impressions, form a striking contrast to that which is so often found in those cases which actually deteriorate. August Hoch has found that marked constitutional traits are found to occur in those individuals who exhibit subsequent deterioration. These pre-dementia præcox characteristics he describes under the heading of the "shut-in" personality as follows: "We find in dementia præcox persons who do not have a natural tendency to be open, and to get in contact with the environment, who

are reticent, seclusive, who cannot adapt themselves to situations, who are hard to influence, often sensitive and stubborn. but the latter more in a passive than an active way. They show little interest in what goes on, often do not participate in the pleasures, cares, and pursuits of those about them; although often sensitive they do not let others know what their conflicts are; they do not unburden their minds, are shy, and have a tendency to live in a world of fancies." It is personalities such as these which are in danger of sinking into premature dementia, rather than these emotional types which have been considered. The outbreak of insanity is merely a further shutting of themselves from contact with reality, an exaggeration of their normal traits.

It is thus important to recognise that the ordinary case of insanity is dependent upon a fundamental defect of mental constitution. Other types might be mentioned such as the psychasthenic and paranoiac, both exhibiting special reaction tendencies, but it is sufficient for the present purpose to consider the three forms to which reference has been made: the "shut-in" personality, which is often the soil for permanent deterioration, and the hysterical and cyclothymic, which constitute the basis for recurrent episodes of insanity.

We have furthermore to recognise that isolated phases of insanity, dependent upon an emotionally unstable mental constitution, are by no means confined to pure attacks of mania or melancholia, but may assume almost any variety of clinical picture. Especially is this the case in young people, when the cases frequently assume a colouring suggestive of premature dementia or dementia præcox. The existence of the mixed forms of manic-depressive insanity must be especially remembered. Many cases go through life with recurrent episodes of insanity which closely resemble katatonia, but without any deterioration. I recently published an account of one of these cases under the heading of manic-stupor. The patient, æt. 37, had been certified five times in the course of twenty years.

These few observations may be summarised as follows:

- (1) That katatonic phenomena occur in a variety of mental disorders, and are not necessarily significant of deterioration.
- (2) That the existence of actual confusion is significant of subsequent dementia, and the demonstration of this condition affords a valuable prognostic sign.

- (3) That a prognosis cannot always be made on a purely symptomatological basis.
- (4) That the course of the symptoms is largely dependent upon the make-up of the personality, and that no true estimate of their value can be made without reference to the reaction type or mental constitution of the individual.

## Discussion,

At the Quarterly Meeting held at Storthes Hall Asylum, February 19th, 1914.

The President said that this was a subject which, as they all knew, had attracted a great deal of attention in recent years, and regarding which much had been written. Some very valuable studies had been contributed, both clinical and psychological, mainly from Germany and America. Clinical records with critical comments thereon like those which Dr. Devine had contributed, and made by an observer who was evidently thoroughly conversant with the literature of the subject, had a very great value, as every member of the Association would agree.

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Dr. Bedford Pierce said that he was very much in sympathy with the President's remarks with reference to Dr. Devine's paper. This was exactly the kind of paper, dealing as it did with their everyday practical work, which was really of use to them. With regard to any comments upon it, he felt that he would like more time to arrange his thoughts. He would like to say, however, that the diagnosis of dementia præcox had been a very great difficulty to him. Indeed, he might make the confession that once he ventured to write an article on the subject of dementia præcox, illustrated by some interesting cases. One of these was that of a young lady who, in a sudden, impulsive attack of dementia, jumped out of a window, for no apparent reason whatever, and broke two limbs. Subsequently she passed into a dull, apathetic, delusional state, and had the strangest bizarre ideas. One of these ideas was that she was going to marry a child of six, and the incongruity of such a marriage, she being about thirty years of age, did not appeal to her in the least. The patient afterwards recovered, and had remained well for many years. Although it was true that her level of intelligence may not be very high, she is well enough to take her place in life satisfactorily. The question of recurrent confusional attacks was a difficult one. Dr. Devine was right, perhaps, in thinking that such were cases of the mixed form of manic-depressive insanity, and he (the speaker) remembered patients who had periodic attacks of confusion, but were never depressed or excited, and did not become demented in any way. This led to some difficulty in applying to all cases the statement quoted from Dr. Shaw Bolton to the effect that confusion was a bad sign, and likely to lead to permanent dementia. He thought that it was unwise to assume that a person with premature dementia could not recover. In the absence of a pathology of this disease it was a mistake to define it—as it was a mistake to define any disease—as necessarily one which could not recover. Would

Dr. G. DOUGLAS MCRAE said that he for one would like to add his tribute of thanks to Dr. Devine for his paper. The paper was deserving of appreciation on the one point alone, if on no other, that the author had encouraged them to believe a little more firmly in British clinical teaching of the past twenty-five or thirty years. In recent years one had been rather handicapped by assistant medical officers, who had been absorbing German and American literature, and who diagnosed nearly every case as one of dementia præcox. One might be permitted to wonder why, if the diagnosis was so final and unfavourable, they troubled about treatment at all? It would be better to embrace Clouston's dictum and make themselves believe that every case with which they had to deal in the treatment of insanity held out the possibility of recovery. It was depressing to oneself to have generation after generation of assistants laying themselves out to diagnose incurable insanity, and, furthermore, it was a hopeless example to set to the nurses and attendants. It had been well worth coming all the way from Scotland

to that meeting to hear Dr. Devine's paper.

Dr. JEFFREY desired to ask one or two questions. Could Dr. Devine throw any light upon the convulsive attacks which he mentioned as occurring in the first case cited in his paper? His second question would be addressed to Dr. McRae, of whom he would like to ask the wherefore of his certainty that dementia precox was an unrecoverable disease. Dr. McRae had made that statement, and made it very strongly, and the speaker wished to know a little more fully his grounds for making it. The teaching of the German writers was that some cases of dementia præcox did recover. There was no difficulty in diagnosing dementia præcox, and yet there were recoveries.

Dr. J. G. SOUTAR said that he did not think that Dr. McRae made exactly the assertion which the last speaker attributed to him with regard to the question of recoverability in dementia præcox. Undoubtedly a certain number of cases of dementia præcox recovered to this extent, that they were able to leave the asylum. In the legal sense of the word, they recovered, but not in the true scientific sense. In his own thirty years' experience he had never seen a patient who, after passing through dementia præcox, had come out of it on the same intellectual plane as before he entered it. But many such patients were capable of taking their—or, at least, a—place in the world and of doing a certain amount of work. The value of Dr. Devine's communication was that it was a clinical paper, and concerned itself with facts with which they often had to deal. It was an interesting thesis, and after hearing what he had said they would not be inclined to diagnose a case as dementia præcox simply on the ground that the patient exhibited katatonic symptoms. The term "katatonia" was one of those which, in the course of years, had come to include a vast number of things which were never intended originally. He believed the term was invented in the seventies, and at that time it was accepted in the true sense of the derivation of the word. It meant the maintaining of fixed postures or attitudes. Gradually various other conditions were included, such as mutism, negativism, verbigeration, and many more, which were not indicated by the word itself. Nevertheless, he thought that all of these were conditions which arose from the same underlying mental state. What was the mental state underlying these exhibitions? For his own part, he thought that these various manifestations all indicated an affection of the will-power of the patient. When one came to talk with patients who had sufficiently recovered to be able to answer one it was evident that they themselves often recognised that their katatonic condition had arisen from anomalies of will. Certain of the patients refused food—one of the conditions now grouped under the name "katatonia"—absolutely owing to shere inability to will that they should take it. They would tell one afterwards how they stopped and hesitated because they simply could not make up their mind to do anything. Others would describe how they had been under the influence of an idea which compelled them to maintain themselves in strange attitudes. He recalled a patient who persisted in placing himself in the attitude of crucifixion owing to the fixed idea that he was the crucified Christ. Greatly to his pain and torture, as he admitted, he had to maintain that peculiar posture. In such cases it was not the deficiency of will-power which explained the phenomena, but rather the exhibition of extraordinary, though misdirected, will-power—a will-power which probably most of those to whom he was now speaking, and he himself, would be unable to exercise for the sake of any idea they might hold. What they had to deal with in these katatonic conditions was an affection or anomaly of the will—a condition which was common to a very large number of curable and incurable mental disorders. He agreed with Dr. Devine that an unfavourable prognosis should not be made simply on the ground that a patient presented katatonic symptoms.

Dr. M. A. Collins thanked Dr. Devine very much for his paper, and particularly for one reason, namely, that, although they had cause to be grateful to the Continental specialists for telling them that they needed an improvement in classification, Dr. Devine, for one, was not prepared to accept all that they said on the subject of these investigations. Dr. Devine had told them that there was at least a question as to whether katatonia ought to be grouped with dementia præcox. At present they did not know enough to be able to put these things into a definite classification. There was no pathology to guide them. In medicine, as their knowledge of pathology developed, they learned that diseases which they thought to be definite were actually not so, and in mental diseases, where they had as yet no pathology, it was absurd to set up water-tight compartments. Katatonic

symptoms certainly occurred in young persons who had attacks of insanity, and, as Dr. McRae put it, this led to every such patient being classified as a case of dementia præcox. In certain states of epilepsy he had seen all the symptoms of katatonic stupor, automatic movements, verbigeration, etc. If all cases were put down as dementia præcox they must be regarded as hopeless, and he was very glad to hear someone tell them-advancing clinical reasons for doing so-that they must not put katatonic symptoms permanently into dementia præcox.

Dr. McRae, speaking in re-enforcement of his earlier remarks, with regard to

which he had been questioned, said that his impression of the use of the term "dementia præcox" was that it was meant to describe a condition which originally would have been better named "essential dementia," meaning thereby that the case in time must necessarily deteriorate into one of dementia. That was what the term mainly implied. When one began to apply the term to cases, a certain percentage of which did recover, it would be well to try to find another name, instead of talking of dementia. But until they got a better name for it, they should stick to the old classification of adolescent insanity. The katatonic features, so common in adolescent insanity, were a set of phenomena occurring especially at that particular time of life—a period of brain development—in response to morbid brain action. Judging by the work of the younger men who read up dementia præcox, the speaker was perfectly satisfied that their whole aim in making a diagnosis was to suggest incurability, and it was a great pity that insanity should be studied from

that point of view. It was a wrong position to take up.

Dr. R. H. Cole said that Dr. Devine had raised so many interesting questions that it would take a long time to discuss the paper fully. The first case that Dr. Devine described led one to suppose that here, at all events, he was inclined to the diagnosis of dementia præcox. Dr. Devine had shown them the importance of finding out the primary mental condition with which they had to deal, and on which the psychosis was superimposed. Although in this case, evidently, his patient was hysterical, yet in view of all the symptoms exhibited, it seemed impossible to imagine that that patient had a clear course in life to remain a normal impossible to imagine that that patient had a clear course in life to remain a normal individual. The likelihood was that she would end in an asylum. From that point of view, therefore, the case might still come into the category of dementia præcox. He believed that they had made enormous strides in the conception of dementia præcox, although they might not all agree as to the exact meaning of the term. Dr. Mercier regarded dementia as mental activity on a lower plane in varying degrees from the normal. As against that definition it might be urged that some dementia consequence of the probability of the probabilit that some dements scarcely had any mental activity at all. Seeing that probably about 90 per cent. of these præcox cases ultimately did not recover, they were doing well, he thought, in accepting the term as it stood at present. Very little was known, unfortunately, about the pathology of the disease, but inasmuch as general paralysis of the insane, which all agreed to be incurable at present, was yet arrested from time to time, perhaps for years, although the patient was hopelessly doomed, it seemed to him that dementia præcox was practically in a similar category. He disagreed with Dr. McRae in thinking that what was really, if he might say so, the truthful aspect of the case was necessarily a wrong one to take, and that it would have a demoralising effect upon the nurses and attendants. He (the speaker) put forward as an example a case which was at first taken to be one of manic-depressive insanity. The patient, who was deeply depressed, became katatonic, at first exhibiting pronounced rigidity. What was the pathological basis for that? What was the neurological or psychical change which was causing the katatonia? Was it the increase in the organic stimuli, which caused the energy to be used up in that direction? This patient's katatonia, which ultimately developed in the direction of mutism and refusal of food, became so marked a feature of the case that he was obliged to change the diagnosis from manicdepressive insanity to dementia præcox, with, consequently, a bad prognosis. With the means at present available in psycho-therapeutics this patient must ultimately become demented, but the newer ideas, such as serum therapy, held out certain possibilities for such a case when its pathology was better understood.

Dr. DEVINE, in replying upon the discussion, expressed his appreciation of the kind remarks which had been made about his humble contribution. Dr. Bedford Pierce had said that he did not quite agree with the ideas he had put forward with regard to dementia, and added that he had known recurrent confusional attacks

which did not go on to dementia. The reply was that everything depended upon the cause of the confusion present. In confusional insanity due to a definitely toxic cause there was no doubt that the prognosis was very good. Such conditions as alcoholic confusion and puerperal confusion might be instanced. But in a young person who became insane without obvious toxemia the demonstration of actual confusion made a bad prognosis. The speaker was more and more convinced of this. The first girl, A. H—, whose case he had described in his paper, was totally inaccessible for months, and it was impossible to tell whether she was confused or not. Directly it was demonstrated that she was not confused, they could say that she would get better. The worst cases were those exhibiting a lack of impressionability to external impressions. A great deal of attention had been paid to prison psychoses, a condition in which there were a series of symptoms almost identical with katatonia and dementia præcox. In these cases, however, one nearly always demonstrated symptoms due to surroundings. patients betrayed a critical awareness of their environment. If it could be demonstrated that the patients were impressed by their surroundings, peering round after one, tripping another patient up (as in one of the cases cited in his paper), and the like, he thought they could be described rather as hysterical cases than as instances purely of dementia præcox. With what Dr. Mckae said he undoubtedly agreed. Dr. McRae had read the meaning of his paper quite well. Although he (the speaker) was "soaked" in German ideas, he had little doubt that Kraepelin, in giving a bad prognostic value to katatonia, overstepped the mark, and at the present time he had modified his original views to some extent. Very often the cases did clear up and get better, and frequently certain cases might be equally significant of recurrent psychosis, as others might be of permanent dementia and deterioration. The question of the convulsive attacks occurring in his first case was a difficult one, but probably on investigating such cases (if one was able to do so) they would be found to depend on psychological factors. Often a certain symbolic meaning was involved. There was at least some definite meaning in the convulsive attacks very different from the purely psychological phenomena involved in the true epileptic attack. If the patients had been living through months of tension, and undergoing certain imaginary experiences quite detached from reality, it would frequently be found that the psychosis almost ended up with the convulsive attack, and from that time the patient began to recover. He thoroughly agreed with Dr. Soutar that these katatonic states were due to defects of will, and, of course, the whole psychology reduced it down to this. If one studied French writers, for example, Pierre Janet's Les Obsessions et la Psychasthénie, one found records of cases absolutely of the pure katatonic type which it was known perfectly well never deteriorated. In their general reaction and make-up these cases had no resemblance to a dementia case. They were due to fixed ideas. The idea, as in the case mentioned by Dr. Soutar, which impelled a patient to adopt the attitude of crucifixion, was an instance in point. There was no reason per se why a person who had such ideas should deteriorate, although, of course, if they occurred in patients who had the deterioration "make-up" it was otherwise. Normally such persons might be very clever, but they were always rather peculiar, detached from reality. The mental life was inwards rather than outwards. The characteristics reality. The mental life was inwards rather than outwards. The characteristics of the "shut-in" personality were strongly marked in such cases. The course that the psychosis would take depended upon the sort of soil in which it occurred. With regard to Dr. Collins' remarks, he quite agreed with him that one should not attempt to dogmatise too much. The cases must be divided into deteriorating and non-deteriorating types. He (the speaker) did not see any sense in the term "dementia præcox" as applied to cases which could recover and which were capable of complete adjustment. The term was useless unless it implies deterioration of the emotional or volitional type. If they were going to take a group of symptoms as dementia præcox and say that the case might or might not recover, there was no definite basis for clinical investigation. The negativistic symptoms to which Dr. Cole had referred meant a shutting out of the world—a shutting out of the patients from contact with reality—and that was why they were so resistant to any external solicitations. Dr. Cole thought that his (the speaker's) first case would probably end in an asylum. For his own part, he did not think that this girl ought ever to be let out again. He thought that she ought to be a chronic inmate. But that did not mean dementia præcox. It meant that she could not

permanently adjust herself to reality, but there was no symptom or trace of anything which could be called dementia. In true dementia præcox the patient was always out of touch with his surroundings, but this girl, on the contrary, was absolutely "falling over" her surroundings, alert, eager, fond of anything that was going. He did not think that she ought to be discharged, although legally she might have to be, but her interest in her surroundings was against the idea of dementia præcox, and he did not think that such a term ought to be applied to these cases.

## Clinical Notes and Cases.

Some Doubtful Cases of So-Called General Paralysis of the Insane. By W. Robinson, M.B., D.P.M., Assistant Medical Officer, Wakefield Asylum.

CASES of mental disease which give definite mental symptoms and physical signs of the condition recognised and at present called general paralysis of the insane, and which, moreover give a Wassermann reaction, seem to be invariably due to syphilis, and to contain in many cases spirochætes in the cerebral substance. Out of seven such cases of well-marked general paralysis, which on death were examined for spirochætes by Dr. McIntosh, six cases showed the presence of spirochætes. The seventh case was regarded as doubtful.

Besides these definite cases there occur certain others, about which clinically doubt exists. They present many, if not all, of the physical signs of general paralysis. Recently, several cases of this kind under my notice have been regarded as general paralysis. They invariably gave a negative Wassermann reaction. Many of these cases show during life arteriosclerosis.

It is proposed to give a brief account of two of such cases, dealing with them from their clinical and pathological aspects, and then to compare them with two cases which gave an almost identical clinical picture. The first two cases, regarded as possible general paralytics during life, were looked upon as such at the *post-mortem* examination. Later, on microscopic examination, the picture was one of arterio-sclerosis, and not the generally accepted microscopic appearance of general paralysis.

CASE I.—A. S.—, female, æt. 47. She was dull and depressed. She displayed marked mental hebetude. She replied to questions in monosyllables. She was in the asylum eight months and remained in the