No. 2. October, 1908. Vol. II.

Bulletin

OF THE

Ontario Hospitals for the Insane

(London Hospital for Insane.)

A Journal devoted to the interests of Psychiatry in Ontario

Printed by Order of the Legislative Assembly

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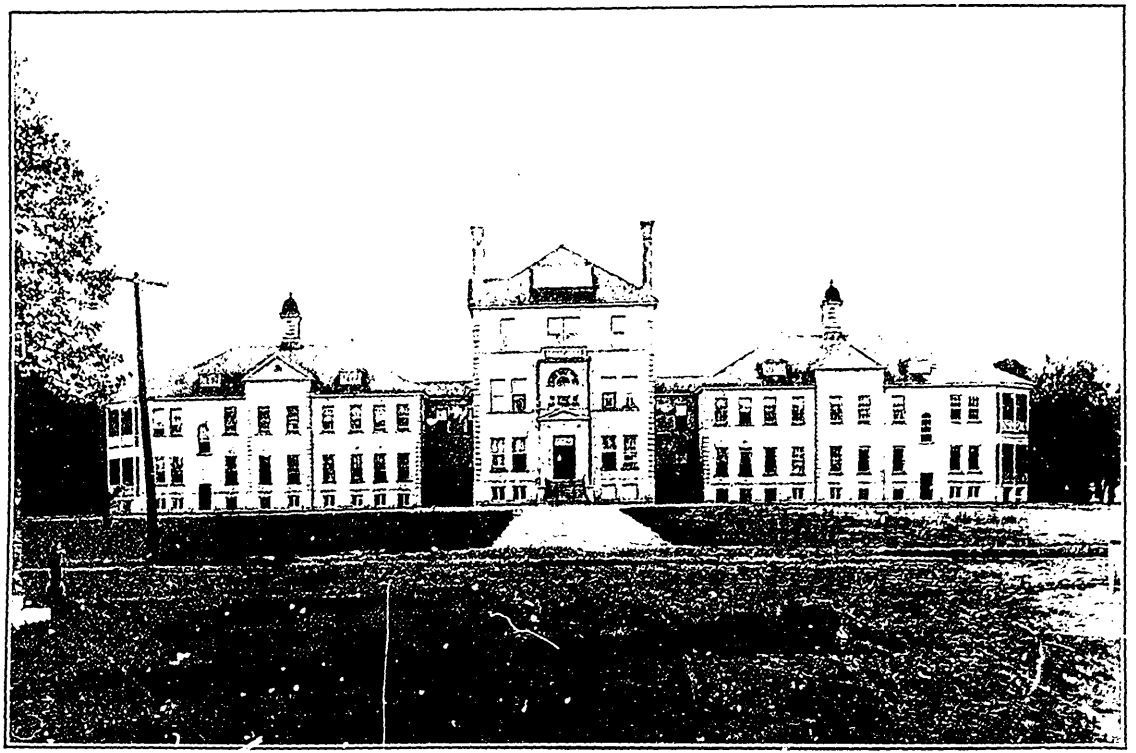

Reception Hospital, Hospital for the Insane, London, Ontario.

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ESTABLISHMENT OF A RECEPTION HOSPITAL IN CONNECTION WITH THE HOSPITAL FOR INSANE, LONDON.

About six years ago a very commodious and well equipped hospital was erected on the grounds of the London Hospital for Insane for the purpose of properly caring for all medical and surgical diseases occurring in the Institution. As time passed it was found that the ordinary acute cases of disease were not sufficient to occupy the space provided, and the hospital became gradually filled with harmless patients of the better class, many of them suffering from tuberculosis.

Soon after the beginning of the present year it was felt that better results could be obtained by removing these chronic and incurable cases to other wards where they could be equally well cared for, and convert the building into a Reception Hospital for the observation and treatment of all patients entering the Institution, as well as being prepared at all times to admit any acute medical and surgical cases requiring hospital treatment. The building, surrounded on all sides by beautiful lawns and pleasure grounds, is completely isolated from all contact with the main Institution. The structural arrangements also admirably adapted themselves to the purpose we had in view. The wards and dormitories are large, airy, well ventilated, and well lighted.

Another point of more significance than might appear at first sight is that it presents very little of the appearance of restraint. Nothing can be seen to indicate anything of this character, except light wire screens covering the windows and balconies.

The first step necessary in establishing the Reception Hospital was to add very materially to the nursing staff. With the previous class of patients five nurses were found sufficient to carry on the work, but as it was felt that the success of the hospital would to some extent depend on individual care and skillful nursing of the patients an increase to sixteen was decided upon, and these were obtained by drafting some of the most experienced and best trained nurses from other wards of the Institution. As the hospital contains accommodation for sixty patients, this is a ratio of one nurse to 3.75 patients. A graduate nurse was placed in charge, who has general supervision over the entire nursing staff, regulates the dietary and in fact occupies a very similar position to that of the Lady Superintendent in a General Hospital. Special attention is paid to the serving of the meals, so that they may not only be inviting and suitable to the requirements of each case, but have as little of the institution character as possible. One feature which was deemed of special consequence and which has been steadfastly kept in view is the importance of emphasizing the hospital idea.

The opening of the Hospital was delayed by an outbreak of scarlet fever, but about the beginning of April it was filled with acute cases, and since that date every patient admitted to the Institution has been sent there for observation, for diagnosis, and for treatment. It was expected and hoped that many of these patients would never enter the asylum proper, would never mingle with the great mass of chronic insane, and the experience of the past six months warrants us in believing that our expectations will, to some extent at

least, be realized. In addition to the reception of acute cases any patient in other parts of the institution who showed by his improved condition that still further improvement might be expected from the better facilities for treatment, for nursing and for individual care was at once transferred to the hospital.

The first principle impressed upon patient and nurse alike is that the patient is ill, suffering from a disease of the brain, the organ that is responsible for all thought, observation, conduct, and action, and that the individual who does not think, observe, and act as a normal person should in his station of life, is suffering from a disease of this organ in one of its various forms. This fact being insisted upon demands as its natural outcome that every means shall be employed for the relief of that disease, requiring energy and sympathy on the part of the nurse, and a measure of co-operation on the part of the patient. Each patient, on entering the Hospital, is put to bed, and remains there for a variable length of time, depending on the acuteness of the disease. He is under the constant supervision of the nurse who notes every symptom, and does all possible to promote his well being and comfort.

The first consideration in the treatment of an acute psychosis is rest. How is this to be obtained? Experience shows that a reliance on the use of sedative and hypnotic drugs, where the disease lasts for any length of time, is one of the most baneful practices in psychiatry. In an institution where these are freely used one can frequently gauge the dosage by the disturbed condition of the patients. The open air treatment combined with suitable hydrotherapeutic measures will secure rest and quiet in the great majority of cases. It is a matter of common observation, where an acute psychosis has, prior to admission, been treated by narcotic drugs and physical restraint in the vain effort to subdue excitement, that a cathartic and a warm bath will frequently cause

the symptoms to disappear and rest and sleep soon follow. This initial treatment tends to gain the confidence of the patient, and greatly facilitates the physician in his examination, which takes place as soon after admission as may be thought suitable. A complete clinical and physical history is prepared, together with an analysis of the mental condition. The nurse in charge keeps a daily record of everything pertaining to the patient on charts provided for the purpose.

In due time the patient is presented at one of the tri-weekly conferences of the staff when the physician in charge reads a full history from the earliest period that can be obtained, giving in great detail everything bearing on the present attack. The condition of all the various organs; the blood pressure; the uninary analysis, and in cases where paresis is suspected the result of the examination of the fluid from the spinal canal is also noted. Everything bearing on the case is fully discussed by each member present. Owing to the concentration of the acute cases in one building, each member of the staff becomes familiar with all the patients, and is thus able to intelligently discuss and criticize any report. The bedside notes and a synopsis of the discussion at conference are then filed in the patient's case book, and added to from time to time as may be necessary. By this means a complete record of the patient, from the time he enters the Hospital until he leaves the Institution, is always available, and the importance of this cannot be over-estimated when we consider that a recurrence of the disease, even in those apparently cured, is by no means uncommon.

If, in the opinion of the staff, no great advantage can be gained by hospital treatment, he is transferred to some other part of the Institution reserved for such cases. If, on the other hand, the slightest hopes of recovery or improvement are held out, the patient is retained in the hospital until such time as he is able to

return to his home, or until it is seen that nothing further can be expected from this treatment.

A very important feature of the hospital is that the patient is surrounded by a class whose outlook is more or less hopeful. At frequent intervals he sees his companion go home well, or greatly improved. He is not surrounded by a host of the incurable and chronic insane, many of them belonging to the classes of terminal dementia whose unrestrained impulses and evidences of mental deterioration are painful to observe, especially when as in some cases the observer possesses a mind rendered acutely sensitive by a disease which may tend to the same end.

The treatment of our patients during the past summer has been greatly hampered by the complete absence of any modern hydro-therapeutic appliances and the only alternative was to insist upon the open air and outdoor treatment to as great an extent as possible. The patients spent practically the whole day outside, some engaged in light occupations such as attending to the lawns, cricket grounds, and flower beds, some walking or sitting in the shade of the trees, and others whose excited condition prevented any of these exercises lying in hammocks in quiet parts of the grounds.

Another system of outdoor treatment which appeared to have a very beneficial effect on some cases was a course of military drill and physical culture exercises. It was not given for the purpose of developing any latent warlike tendencies that might exist in the patients, but as a training in concentrating their mind, and improving their physical condition. Indeed, in several cases, especially of dementia praecox, the beginning of a very marked improvement in their mental condition could be attributed to this drill. We were fortunate enough to have amongst our attendants several excellent drill instructors and a squad of fifteen to twenty of the younger male patients were regularly drilled for an hour

each morning. Probably as a result of this constant open air treatment together with improvised hydro-therapeutic measures, our wards are as quiet and orderly as the average wards in a general hospital. Isolation of the patient is strictly guarded against. He is encouraged to mingle freely with his fellows. All the doors with the exception of those leading to the outside are open both night and day so that constant observation by the nursing staff may be possible and the terms "suicidal wards," "violent wards," or "disturbed wards" have no existence. No serious acts of violence have yet occurred. It is perhaps unnecessary to say that nothing in the way of restraint, mechanical or otherwise, is to be found in the hospital, or indeed, in any part of the Institution. Hypnotic and sedative drugs have practically been banished from the hospital, as during the whole period of six months, less than half a dozen doses of any of these drugs have been administered. This is the more remarkable, as during that period a great variety of all kinds of cases were under treatment.

Owing to the liberality of the Legislature at the last session of Parliament, the sum of $3,800.00 was placed in the estimates for the purpose of providing modern hydro-therapeutic appliances for this hospital. These appliances are now being installed, and it is expected that very shortly all will be completed. Two rooms on the wards have been prepared for the continuous baths; one for male and one for female patients. The floors and walls of these rooms are tiled with white vitrified tile, and present a very handsome appearance. As patients will spend hours, and even days, in these baths our aim was to make these rooms as pleasant and cheerful as possible. Each room contains three Imperial Porcelain baths together with other toilet conveniences. To each bath is attached a "mixer" by which the temperature of the water can be regulated to any required degree. The

patient reclines in the bath on a canvas cradle so that at all times he is perfectly at ease, and comfortable. In the basement a suite of five rooms have been arranged for the installation of the various douches and tonic baths. These include the Scotch douche; the needle, circular, and spray baths; the perineal douche; the sitz bath; a shampoo and massage table; a hot air cabinet; and a number of pack beds. As the successful operation of these apparatii depends to a great extent on the water supply having a regular pressure and temperature, an independent connection was made with the water tower in the main building, and a special heater having an automatic temperature regulator was also installed.

Although this hospital has only been in operation for a period of six months, and during this time the hydrotherapeutic treatment has been used to a limited degree, from the fact that a continuous supply of hot water was not available, it has more than justified the labor and expense involved in the equipment. In the various sister hospitals for the insane throughout the Province where hospital facilities such as were found in London do not exist, certain wards are set aside for the reception and treatment of acute cases. While these fulfil a most useful purpose it must be apparent that the welfare of the acute insane would be promoted by the establishment of Reception Hospitals in connection with all our great institutions for the care of the insane. It is not practicable to provide separate hospitals for acute cases under different management and in different localities except in the case of large centres of population. There must be a constant change of patients from the acute to the chronic wards, or otherwise the hospital for acute cases would soon become overcrowded with chronic patients. There are also other reasons of a social, economic, and geographical character, which militate against this idea. Under the system in vogue until very recent times in some of our institutions, where the acute and hopeful

cases were mingled with and overshadowed by the great mass of chronic insane a feeling of helplessness and almost despair could scarcely be avoided by those in charge. In a large Institution containing many hundred patients it was practically impossible for the staff as a whole to become familiar with every new patient. Under the system established here the entire staff visits the hospital each day and while the treatment and care of the patients is under the direct charge of the Assistant Superintendent each member is expected and encouraged to offer any suggestions he may think fit. Under the old system it was almost impossible to provide suitable nursing for the acute insane. The ratio of nurses seldom exceed and scarcely ever reached one to ten patients. At certain hours of the day large numbers of the chronic patients are employed at various occupations about the farm, the dairy, the laundry, the garden, the stables and the different work shops of the Institution always under the charge of attendants or nurses, thus further depleting the nursing staff. Under such conditions it was practically impossible to provide the higher class of nursing so essential for the acute cases.

A hospital such as this where every form of mental disease is under daily observation must necessarily become a splendid training school for both physicians and nurses. The facilities for proper classification and study enlists no less enthusiasm among one than the other. The frequent entrance of new patients, the transfers to and from this department and other wards, enlists the interest of the entire staff and stimulates more careful study not only of the patients in the hospital itself but of other cases throughout the Institution whose favorable symptoms point them out as likely to be further improved by the greater care and individual attention possible in the hospital.

W. J. R.

Hospital for the Insane, London, Ontario—Main Building.

CLINICAL REPORT.

There were treated in the hospital, during the six months ending 30th September, 1908, 73 men and 59 women, making a total of 132 patients, classified according to their diseases, as follows :—

Diseases.	Men.	Women.	Total.
Dementia Praecox	22	27	49
Manico-Depressive	9	7	16
Senile Dementia	9	9	18
General Paresis	11	1	12
Melancholia	5	2	7
Chronic Alcoholism	5	1	6
Imbecility	3	2	5
Psycho-neuroses	2	4	6
Exhaustion Psychoses	1	1	2
Paranoia	.....	1	1
Morphinism	.....	1	1
Epilepsy	1	.....	1
Not classified	5	3	8
	73	59	132

General Paresis.

There have been 12 cases of Paresis treated in the hospital since its opening. Two of the men were admitted from other wards of the Institution in the final stage of this disease, that they might receive the individual care and treatment which is so essential at this period of their sickness, when, by their unrest and helplessness, they are so liable to injury, bed sores, and such like. It has been

gratifying to note how much they have been relieved by the warm baths, temperature 94°, in which they were kept until they became quiet, and the bath was repeated whenever their restlessness recurred. This, with the personal attention which we were enabled to give these cases, has in a large degree removed the anxiety necessarily attached to the closing chapter of this sickness.

Two more were placed in the hospital merely for lumbar puncture.

There were eight cases regularly admitted to the hospital during the period of six months,—7 men and 1 woman, which, I may say, is not an unusual proportion in this district, this disease being a comparatively rare one among the women.

Although there can be to-day scarcely any more doubt that Paresis sets in only after previous luetic infection, it was only in 5 of the 8 cases that we could obtain a definite history or unmistakable evidence of the existence of this disease. In the other three cases their lives had been so irregular that there is every reason to suspect it. There are many difficulties in the way of getting reliable information in this particular. Either the patient's memory is so defective that little dependence can be placed on his statements, or reticence on his part causes him to conceal it. In three of these cases the luetic disease had antedated the Paresis by from 15 to 20 years, and in the other two the time of onset of specific disease was not fixed. Associated with this cause there was an alcoholic habit at some period in the patient's life in all the cases. One had indulged so excessively that he took the "Gold Cure" 17 years ago, since then he has been a total abstainer; in two others there was a long period of abstinence antedating the onset of the disease; in two there was a continuous indulgence, even when the disease had set in; in the other three, the history was not definite. As to the antecedents of these patients there

was no particular evidence as to a pre-disposition to psychosis.

Two of the patients were unmarried. Of the six married patients, three were without offspring. Three men are said to have children; one, 1; one, 3; another, 2.

As to the ages of the patients on admission, our experience has been quite in keeping with the general rule:—

1 man, 34 years.
3 men, 45 to 49.
1 woman, 51.
3 men, 50 to 54.

—
8

As to the duration of the disease before admission, it was quite striking the length of time the disease had existed in the majority of the cases before the necessity was felt for them to be sent from home for care.

1 for 8 years; 1 for 5 years; 1 for 4 years; 2 for 2 years; 1 for 1½ years; 1 for 6 months; 1 for 1 month.

Three of the patients had reached the third stage before the restlessness had shown, necessitating their removal to a hospital. These three patients have died within the six months of their reception from the progress of the brain disease. Three others are also in the final stages. One of these had two remissions, the first extending over three years. In the second remission, there was marked mental reduction and incapacity for work.

As to the symptoms,—intellectual enfeeblement was a symptom common to all, and defects of memory were observed in all gradations from gaps in the record of time to a total abolition; one case did not even recollect her own name. Among the physical signs, defects in speech were the most common, all of the patients showing to a variable degree involvement of this centre

While it was not always present on giving the test words or phrases, it was observed either in the reading or conversation.

The hand-writing was also involved in all the cases, characterized by tremor, irregularity in formation of letters, omission of letters, syllables or words, and in others reduplication of syllables or words.

The knee reflex was variously affected.

In 4 the response was quite brisk in both legs.

In 2 it was absent.

In 1 it was unequal.

In 1 it was not affected.

The pupillary reflex :—

In 3 cases the pupils were unequal and did not react to light.

In 2, they were equal and did not react to light.

In 1, they were unequal and both reacted to light.

In 1, they were unequal. One reacted to light and the other did not.

In 1, the pupils were not affected.

Epileptiform convulsions occurred in two of the cases at the time they were having bed treatment. In both of these cases the disease was in an advanced stage. In both, the symptoms pointed to the expansive form of Paresis.

In 11 of the 12 cases in which Lumbar puncture was made there was a great increase of the lymphocytes in the spinal fluid. In one only was the examination negative and a repetition was not consented to by the patient.

As to the disposal of the 12 cases :—

4 have been transferred to other wards in the Institution.

4 have died.

4 are still in residence in the hospital.

CASE No. 1. This patient was sent to the hospital with a very meagre history and, as he was not accompanied by any relative, very little information could be ascertained and nothing was known about his family history.

He was born 45 years ago. He, himself, stated he was born in the year 1800. He denies any venereal disease or any alcoholic habit. He states that he is married and that he has three children. From the history form, we learn that his wife is dead, but the patient does not appear to understand this. Any details which he gives of his past life are so unreliable that it is unnecessary to mention them, e.g., he went to school 20 years, peddled for 20 years, and is 28 years old.

He had been in a hospital for some time back, and from the history form, this is taken, "That he imagined people were chasing him; he wandered from home; hid under the bed; that he is getting fleshy. He sleeps well, has shown loss of memory, defective judgment, and that he has been steadily deteriorating." Present mental status—Patient was uncertain as to where he was and replied, "This is a home." He does not know the day of the week, hour, or the month; believes it is summer, and says the year is 1800. Questioned as to who the physician was, he replied, "You are a minister and all the people around here are ministers." He speaks in a vague way of voices coming out of his head. In this he shows considerable uncertainty and the statements vary at different times. He was questioned closely regarding grandiose ideas, and denied being wealthy, having unusual possessions, or being a strong man in the world.

Throughout examination he lies quietly in bed, never initiates any conversation and shows little interest in his surroundings. The patient's process of perception is so disturbed that he is quite disoriented as to time, place and person.

Indifference and apathy are pronounced.

He constantly urinates in the bed, but does not at all seem to be disturbed about it. Ideation is extremely meagre and associations narrow. His judgment is defective and he has no insight into his own condition. He does not think that he is sick and says that he feels all right. The mental deterioration is very pronounced and all spheres of mental activity are more or less involved. Physical examination—The patient is a large man, well nourished. Hair rather scarce. There is a dulling of the expression of the face. Ears are normal and he hears ordinary conversation well. His eyes move freely, but the pupils are markedly unequal, the left being larger than the right. The pupils are also irregular in outline and do not react to light and but slightly upon accommodation. No nystagmus, nor arcus senilis.

Speech shows marked defect. Patient could not pronounce test words or sentences and slurs badly in ordinary conversation.

Bladder was slightly distended with incontinence of urine, showing disturbance of vesical reflex.

Cutaneous sensibility. There seems to be some dullness in the perception of pain, since he does not react upon pricking with the pin point.

The motor function shows general weakness. The hand grip is fair, grasp being stronger with the left than the right.

His gait is very unsteady.

Reflexes—Jaw and arm reflexes are active. Knee jerks absent in both sides, and Babinski's sign present in both feet.

Hand-writing shows marked tremor and was quite illegible. Lumbar puncture showed that the lymphocytes in the spinal fluid were much increased. (70 cells to 1 c.m.m.)

From the time of the patient's admission, although taking nourishment freely, there was rapid failure in

weight. He was inclined to be noisy and restless. Later there was trouble in giving him food owing to the difficulty in swallowing, only liquids being offered him.

He died within a month of his admission from General Paresis. Post mortem examination showed marked adhesions of the Dura Mater to the calvarium. Owing to atrophy, the convolutions in parietal and frontal regions were very flat. Pia arachnoid thickened. Some thickening of blood vessels at base of brain. Brain weighed 44 oz.

Since the disease was so advanced before his admission to this hospital was applied for, it would seem that this case was one of the demented form of General Paresis which is characterized by gradually progressive mental deterioration without prominence of hallucinations, delusions, or psychomotor disturbance.

CASE NO. 2.—This patient is 48 years old, a tradesman, married, but has no children.

His family history shows that his mother had been melancholy for two years previous to her death. The melancholia is attributed to the grief arising from sudden bereavement. Some members of the family are said to have been addicted to the periodic abuse of alcohol.

The early history of this patient does not reveal any backward tendencies in his development. He attended the public school, getting as far as the Fifth Book when 12 or 13 years of age. He states himself that he took all the prizes. Upon leaving school he took up a trade, remaining for three years at this. About this time he began to drink pretty freely, and his life became quite irregular.

When about 30 years old, he returned home and was persuaded to take treatment for his alcoholic disease, and since this time he has been quite temperate, in fact a teetotaller.

There had been evidences of his mental disease for 4 or 5 weeks previous to his admission to the hospital. For

the first three weeks he was unable to attend to business, was nervous and restless, and his judgment was quite defective. Towards the end of this period he became rapidly worse, did not sleep, threatened to shoot everybody, and was constantly talking and on the move. When admitted here he did not at all complain, taking up at once with his new associations and surroundings which he did not apprehend correctly. He thought he was in a military hospital and that a patient in the next bed to him was his long lost brother, and showed disorientation in the three fields of time, place and person. He would lose himself in the clumsiest way about the ward and his memory as to time and sequence of events was very bad. He did not remember the physician who, earlier in the day, gave him a physical examination extending over, at least, half an hour. He quite loses track of the ordinary affairs of the day, and how long he has been here. This he will not acknowledge, but will fill in his gaps in memory with imaginary recollections, and if corrected will make childish excuses. No hallucinations were elicited. His defect in judgment shows in his absurd conduct and demeanor. His delusions are very much in evidence. These are along the lines of remarkable ability and great wealth, absurdly childish and ridiculous. He believes he is a detective and has been one all his life. He is a star actor and also a professional fighter, having whipped Tommy Burns. He has worked with circuses and has spent millions of money.

He has a superficial insight into his condition, claiming to have been brought here for a nervous breakdown, though at the same time he says he is not sick and that he is all right.

His emotional state is quite in keeping with the character of his delusions, being happy and exalted. Nevertheless, he evinces marked irritability upon the most trivial occasion, becoming angry and wanting to fight. He will pick up almost anything he sees lying about

quite regardless as to whom it belongs and without any sense of stealing, and is greatly annoyed if corrected for doing so. All of which shows a marked departure from the patient's normal condition.

Physical examination showed:—

Pupils unequal; the right much larger than the left; both were fixed to light, but reacted upon accommodation.

Tremor, fine fibrillary tremor of tongue and twitching of naso-labial muscles.

Gait, quite unsteady.

Speech, indistinct and slurring, for which he will apologize by stating he lost a front tooth.

Writing, irregular with omissions of letters and syllables, so as to make it illegible in places.

Nutrition, failed rapidly in the first two weeks, losing 9 lbs.

Specific disease, positive history obtained.

Habits, alcoholic until 17 years ago.

Lumbar puncture, 70 lymphocytes in 1 c.m.m.

For the first two weeks after his admission he was very talkative and boastful, complaining of any slight disturbance by other patients. He did not sleep more than 3 or 4 hours of a night, fell off in weight, and was rather irritable and destructive in little things, very indifferent to the rights of others and in his deportment, passing urine and faeces in any vessel near him or on the floor.

Within the first month he began to gain physically and to sleep better. Then he undertook to help about the ward, which formerly he was quite incapable of doing, his memory being so bad that he would forget before he crossed the room what he meant to do. Now he is generally pretty well conducted, dresses well, his manners are improved, and he fills in the day by many useful occupations. He says if he returns home he will again take up his trade. He is yet rather irritable, but

so far as his life goes in the Institution he appears to be pretty well. He also denies the delusions which he formerly had.

Thus at the present time he is enjoying a remission which frequently occurs in the expansive form of this disease, when often the patients are able to take up their former occupations again and earn a living for a time. These remissions vary from a few months to three or five years in some cases or even much longer in rare cases.

This Expansive Form of General Paresis is characterized by great prominence of expansive delusions, a prolonged course and great prevalence of remissions. It must not, however, be overlooked—that a remission does not mean a recovery. General Paresis is a progressive disease tending to enfeeblement of both mind and body and ending only with the death of its unfortunate victim.

J.M.F.

DEMENTIA PRÆCOX.

Of the 132 cases observed in our Hospital, 49 or 37.1 per cent. have been diagnosed as belonging to that great unknown class described as Dementia Præcox. This is not usually looked upon as a distinct disease, but rather as a group of cases that present many similar symptoms.

Of these 49 cases, 22 are males and 27 females. We see that the percentage of males belonging to this class is 30.1 of the total male admissions and of females 45.7 of the total female admissions. I will not attempt to account for this difference but will draw attention to the fact that among the men we have eleven Paretics and five alcoholics, while the women give one Paretic and one alcoholic to these classes. These fourteen additional cases suffering from a disease which very rarely, in this country,

North Building, Hospital for the Insane, London, Ontario.

attacks women, make quite a large difference in the percentage of admissions. At any rate our admissions show a larger percentage of women than of men belonging to this class. This group of Dementia Præcox or Precotious Dementia is usually subdivided into three smaller groups, and we have followed this plan in our classification, but Kraeplin has pointed out how impossible it is to make a correct classification of all these cases after a period of observation so short as two or three months. Some of the cases which first we suspected to be Dementia Præcox have since developed in such a way as to change our opinion and some others concerning which we had formed an entirely different opinion, now present all the ear marks of a precocious dementia. It is impossible from observing a few weeks in the centre of a man's life to form a correct conception of what he was before or what he will be later. We must have a complete picture of the man's past life, his family history, his environment, his associations, his occupation nd in fact everything that touched or influenced his life, both before the psychosis began and since it has developed, along with a complete clinical history of the attack, and then we may form some conception regarding the nature of his trouble.

We find that fifteen males and fifteen females belong to the Hebrephrenic group; five males and ten females to the Katatonic group, and two males and two females to the Paranoid group. There is nothing deserving special attention here except that there are ten female katatonics, and five male. Whether women are more susceptible to Katatonia than men we cannot tell because our list of admissions is not large enough to draw any conclusions, but it is large enough to make us continue to direct our attention to these groups in future.

Below we have given a short summary of our cases, with a rather full history of one typical case belonging to each division.

CASE NO. 1.

(The following information was got from the father and sister on admission, Tuesday, May 22, 1908.)

Family History.—There is nothing in the family history of this patient that has any bearing on the case except that her parents were second cousins and the patient is the youngest of nine children. All the other children are healthy and the patient's mother was forty-two years of age at the time of this child's birth.

Personal History.—The patient went to school until she was fifteen years of age. When she was trying to pass the entrance examination she became affected with some kind of disease which caused some shaking or trembling of one side of the body. The doctor called it chorea; whatever it was, it lasted for three months and she gradually got better. The patient herself claims that one day in school she had some sort of fit or stroke which made her fall down. One year after that she began to imagine things that never happened. One of the first things that she thought was that she had a Teacher's Certificate and she was going to teach school. From that time on she has never been well. She began losing her memory; she would forget little things and recognized this fact. She began to blame people for senseless actions; she said her father and mother cut a hole in her back; she claimed that her brothers had horsewhipped her when she was little. Her people knew that she was not well but she could go out in company and nothing peculiar would be noticed. She was very anxious to dress well and claimed that her father was rich enough to buy her anything she wanted. She has always been able to do a little work but has never been able to do anything well. Since her sisters were married she has worried a great deal about the responsibility resting upon her. She cannot do anything correctly and needs constant watching. She talks to herself considerably and

often when you speak to her she will talk to you for a few minutes and then forget you are talking to her and will walk away. Her father says that she often laughs heartily to herself. When asked what is the matter she will not tell. The sister told me one day when about to make a cake and the recipe was for a large cake and the patient wanted to make a small one she could not divide the quantities and get the right proportions.

On admission she was put to bed. Her appetite was good and she was sleeping well and seemed anxious to get well.

May 27, 1908, the following information was got from the patient on Tuesday, May 26, 1908. She was lying in bed and when I entered the room she smiled and spoke. Her reaction seemed quite normal and she appeared willing to answer questions and to do everything she could to assist me, but through the whole conversation her remarks were childish and her information very meagre. She attempted to tell me about the sickness of three or four years ago and she said that it affected the right side of her body and that it did not last long.

She says that she has slept well and that she weighs 95 pounds and that the most she ever weighed was 104 pounds. She knows that she was born on the 13th of March, but does not know in what year. She knows that this is a Hospital in London She says that she came here the day before yesterday, (to-day is Tuesday); in reality she came on Friday.

After thinking some time and counting the days she named the day correctly. She does not know the day of the month although it is the 26th of May and yesterday was celebrated as the Holiday. She does not know what she did on the 24th of May. She says that she is happy having nothing to worry about but thinks that she should go to the Ladies' College before she answers any more questions. This idea is very persistent with her. When asked if she had heard voices, at first she said that she

had but they were only imaginary, afterwards she said that she had never heard them.

She says that her memory is bad. She knows that her mind is wrong, and thinks that she has studied too hard, she knows that she is not right or else she would have had a better time. She says that she thinks a great deal when she is not able to think. At times she recognizes that many of her actions are very foolish and often breaks out in a laugh when I cannot tell what she is laughing at. On the three word test she failed entirely. Four articles were shown her without telling her that I wanted her to remember them, after five minutes she remembered three of them. She knows the names and position of people about her. There is considerable irrelevancy in conversation and she is inclined to be boastful. She says that many people have told her that she was good looking. She is very proud of dress and clothing and she says that she intends to go to Ladies' College, and that her family is a very good family and interested in politics. Her emotional attitude is very unstable. She laughs and cries very easily. She says that she is not homesick and does not want to go home until she is well. She seems very pleased when she receives a note from home.

Physical Examination.—This patient's head looks symmetrical. Her hair is black and abundant. Her skin is clean and she looks healthy. Her ears are regular in shape and well formed. The left ear is about $\frac{1}{2}$ C.M. longer than the right. Hearing is good. Eye brows are very heavy. The pupils are equal, concentric, regular, and react well. There is a marked tremor of cheeks and tongue. Her teeth are in a bad condition. Her palate is very high and narrow with a distinct ridge in the median line. There is no enlargement of the tonsils or thyroid. The chest is well developed, breath sounds are clear over both lungs. The heart is normal with no valvular lesions. Dermo Graphia is active. Her hands and feet are moist, cold and clammy. Station and gait are

good. Her knee jerks are very active also the triceps reflex. The Plantar is normal. There is no Romberg, or no ankle clonus. It was impossible to test her sensibility because she refused to assist. This patient shows marked hypertrichosis on the face, arms and legs. Such was the condition of the patient when we received her. She was placed in the Hospital and given tonic baths; plenty of fresh air, with one hour's walk in the forenoon and afternoon. Her condition did not improve, in fact she became more indifferent and more careless about her appearance.

On September 5th a note is made as follows:-

"We received a letter to-day from the patient's mother about going home. On speaking to Nellie about it and asking her what her wishes were, she answered in a very indifferent manner, 'Well, I don't know. I am not sure.' She has been sewing and working about the ward. She has a marked tremor of both hands after working for a while, so as to interfere with her needle work. She looks very well physically and has been gaining in weight. Her sleep is broken occasionally and then she becomes a little restless."

Again on September 30th a note is made which sums up her condition pretty well at the present time:—

Her appearance is quite untidy; her hair hanging about her uncared for. Her facial expression is rather dull, and heavy, losing the bright girlish features which she had. Yesterday while out with the walking party she exposed herself to some men in the presence of her nurses, and she practices masturbation often. She hums and sings to herself, and shows absolutely no interest in anything, and does but very little work.

Case 2, a female, age 35, admitted June 23, 1908. She says she has one brother in the Asylum and one brother alcoholic. Her trouble seems to have begun about 12 years ago when she was 23, since which she has worked very irregularly. She has also, during this time, under-

gone several operations. Her attention seems to have been directed particularly to the ovaries and womb, as she always complained of trouble with these organs, and nearly every operation possible has been performed. About 7 or 8 years ago she began to hear voices of the dead, and in 1903 she was sent to an Asylum where she remained for two months. In 1906 she attempted to train for a nurse, and had to resign on account of nervousness. She was in a sanitarium for two months, then went to Vancouver where she became excited, and had to return home. She was talking to the sun, hearing voices, receiving signs, misinterpreting actions, and very suspicious of men. On admission we found her very talkative, but oriented correctly as to time, person and place. Voluntary and spontaneous attention bad, memory good, disconnected in conversation. She seems to have no goal ideas when talking. There are no errors in development.

Case 3, a female, age 41, was admitted July 30, 1908. We know very little about her family history, but the history paper states that her parents were related. It says that the grandmother was married twice, and one parent born of each husband. If this is true it makes her parents half brother and sister.

The patient lived on a farm and apparently did very well until 35 years of age when she began to show mental change and began to complain of being hypnotised. She said they began to use wireless telegraphy on her. She heard voices and claimed that the dead often spoke to her. During the last five years these symptoms have gradually been aggravated and on admission we find her indifferent to her surroundings, irrelevant in conversation, careless in appearance, very impulsive, sometimes noisy, shouting and talking to herself. She usually sleeps well. She has a very contented expression and a silly superficial smile. She breaks out in senseless laughter. She is very self-willed. She is not negativistic nor under weight. Her

memory is good. Orientation as to time, person and place is clear. Her associative memory is bad, as she cannot give a clear and distinct picture of past life. Her attention is poor. There are no errors in development. Physically she appears strong and healthy. Appetite is good, but she refuses to take any interest, or assist in any way in the work about the place.

No. 4, a female, age 19, was admitted on April 1, 1908. Her father was alcoholic, her one grandfather died at 30 years of age of "two strokes." No further information could be got, but this would suggest alcoholism or syphilis. Her other grandfather was alcoholic. At the time of her birth this patient had both legs broken, showing a difficult confinement. She did fairly well at school until 14 years of age, then went out to work as a domestic, and at 16 years of age, her people discovered that she was the victim of hallucinations, both visual and auditory. She complained of seeing things on the wall and of hearing people talking about her. She also had delusions of poison. She became careless in personal appearance, indolent and indifferent and irrelevant in conversation. At the time of her admission she had deteriorated so much that her voluntary attention was very hard to gain. Her spontaneous attention is a little better. Her memory cannot be tested because of lack of attention. Her judgment was badly impaired. Her orientation as to time, place, and person was seriously affected. She did not know the year, the month, or the day of the week. She cannot tell the name of any nurse, and she did not know where she was.

Physically she has become very adipose. Her appetite is good and she is sleeping well. She shows no errors in development, except a high palate.

No. 5, a female, age 32, was admitted January 10, 1908. She says that she has two relatives in the Asylum, but we did not know who they were or what relation they were to her. When a child she attended school until 15

years of age, when she was in the third book, showing she was not bright. She was always nervous and suffered from several attacks of acute rheumatism which affected the valves of her heart. When about 22 years of age she had a bad attack of rheumatism, since which she seems to have done very little work. She claims that menstruation began at 12 and was always very painful. About two years prior to her admission she became so nervous and hysterical and complained so much of pain at the time of menstruation that both ovaries were removed. This did not improve her condition, but rather her friends claim that the symptoms of insanity began to develop then. She complained of both auditory and visual hallucinations. These symptoms gradually increased until admission. We found her very indifferent to her surroundings. Her emotional tone was very superficial. She would laugh and cry without apparent cause. She was extremely erotic. Her memory seemed very good, but she had lost all power of concentrating her attention. Her spontaneous attention has not deteriorated much. She is very careless about her personal appearance, and unclean in her habits. She seems restless and irritable. She continually picks her hands and face and often tears her clothing. The circulation is poor; her hands and feet are blue and cold. The heart is much enlarged, and shows aortic murmurs. Her head and face show a marked lack of symmetry. Her right ear is much larger than the left, and her right nipple is about 1½ inches higher than the left. Her reflexes are exaggerated. She has not gained in weight since admission, but she is sleeping well. It is almost impossible to get her to do any work because of indifference and lack of attention.

No. 6, a female, age 44, admitted June 16, 1908. One sister was in the Asylum 10 years ago. One sister died of Pulmonary Tuberculosis. The patient was born with one deformed hip and curvature of the spine. She was

bright until about 20 years of age, fitting herself for a teacher, but failed several times in the examinations. She attempted to teach in Manitoba at 22 years of age, but gave up because she suffered from nervous prostration, afterward she went to British Columbia and taught four years, but gave up because she thought the school board was unfair to her and persecuted her. She came home and complained that the conductors on the train were interfering with her, and she has never been well since. On admission she had auditory hallucinations. Memory was good but her attention was bad. Her associative memory was not good. She was very egoistical, but indifferent about her personal appearance. She knows the time and the place, and recognizes the nurses. Her physical health is very good. Her appetite is good and she is sleeping well.

No. 7, a female, age 45, admitted on January 22, 1908. A maternal aunt and paternal uncle, were both insane for many years. A maternal grandfather was intemperate. The patient is a married woman and did fairly well until 43 when her husband died; she also had an attack of Septicæmia about this time. She has not been well since. She is indifferent to her surroundings, and is quite impulsive, and has outbreaks without apparent cause, when she will throw dishes, break glass, or tear clothing. She sometimes screams and jumps out of bed. Since admission she has gained some in weight, and is sleeping better, but there is no mental improvement.

No. 8, a colored woman, age 50, admitted April 23. No family history could be obtained, but we learn that the disease was of many years' standing. On admission she was quiet, but full of delusions. She talks continually about witches and ghosts. Her memory, attention, and judgment are all bad. She does not know where she is and does not recognize her attendants. She is careless about her personal appearance, and if allowed would sit quietly in one place all day.

No. 9, a female, age 26, admitted September 16, 1908. Nothing was learned of her family history, but her husband says she was never bright. She was married as 18 and has five children. After each confinement she was quite sick and nervous for some time. She has complained of hearing voices talking to her for three or four years. She is very careless about her personal appearance, and indifferent to her surroundings. She laughs in a silly way, and is very reticent. Her associative memory and apprehension are very poor. Her voluntary attention is bad and she has no insight into her condition. She is very well nourished and is sleeping well. Her head and face are asymmetrical. Her left ear is smaller than the right and irregular.

No. 10, a female, age 30, was admitted April 7th, 1908. Her mother died of Pulmonary Tuberculosis. She was a tailoress, and fairly bright until two years previous to her admission, when she heard voices talking about her and saying "mean things." She developed delusions that everything about her was very dirty, and also thought that people were trying to poison her. During the last two years she has been in the City Hospital twice, six months each time, for nervous prostration. When admitted it was found she was suffering from Phthisis. Memory fair; judgment poor; attention bad; and she showed both auditory and olfactory hallucinations. She died June 14th, of Tuberculosis.

No. 11, a female, age 31, was admitted June 13, 1908. We saw none of her friends from whom we could get a family history. The patient was a domestic of a nervous disposition. At 18 she had some operation on the genital organs, since then she has had an Alexander operation, also both ovaries have been removed. At 25 years of age, shortly after marriage, she began to hear voices talking to her. These have continued ever since. They tell her to kill her children, and they say mean things about her. She has become very bad tempered and indif-

ferent. She acknowledges freely that her moral life has not been as it should have been ever since these voices began. She is careless about her personal appearance, and indifferent concerning, the welfare of her children. Her appearance is good; her apprehension fair. Her voluntary attention is not very good. She talks aimlessly and continually. She is correctly oriented as to time person and place, She is well developed and well nourished, and is sleeping well.

She was discharged from this Institution in the care of her husband on July 7, 1908.

No. 12, age 37, admitted April 1, 1908. Her maternal grandfather and two maternal uncles were insane. She was a bright girl until 23, when she had Typhoid, after which she had many delusions for about three weeks. Her history states that she has never been the same since. She has always been visionary, and took very little interest in work. She wanted to go as a missionary, and spent a great deal of her time at health resorts. She is very introspective. She has had visual hallucinations for some time. Her weight on admission was 75 pounds. She has gained up to about 120 pounds but is still indifferent to her surroundings. She does not want to go home, and says this is the nicest place she has ever lived. She takes no interest in the work; she never reads a newspaper. Her memory is good, but attention is poor. She is oriented correctly as to time, person, and place.

No. 13, a female, age 39, admitted June 10, 1908. Family history unknown. She says that her trouble has been coming on for about four years. On admission she was nervous, irritable, and indifferent about personal appearance. She laughed and cried without cause. She was restless and reticent. She seemed to have some delusions of persecution and felt that she was going to be poisoned. She had a baby two months' old, when admitted, and since the birth of the baby she has been

much worse. She was wandering in conversation, and gave irrelevant answers to questions. Her memory was not good. Her attention, both voluntary and spontaneous, was bad. She does not know where she is, nor does she recognize the nurses or other patients. She is much under weight but has gained some since coming here, and she is sleeping well.

No. 14, a female, age 37, admitted July 31, 1908. Family history unknown. This is her third admission; first in 1902, and again in 1903. At both of these times symptoms were much the same as at present, and she has apparently never recovered. When admitted she complained of voices outside her window talking about her and saying bad things. She claimed that people were putting poisonous gases in her house to poison her. Her emotional tone is very superficial. She displays many mannerisms. Her memory is good. Her voluntary attention is not good. Judgment is poor; she is indifferent about her family. She is not depressed or excited, and has gained 10 pounds in weight. She went out on probation on October 19. When leaving, the hallucinations had disappeared and she recognized that many of her ideas when admitted were delusions.

No. 15, a female, aged 21, admitted June 8, 1908. Family history unknown. About three years ago she began to develop peculiar ideas. She thought people were chasing her, and she was subject to crying spells. She would laugh foolishly, and the symptoms progressed gradually until she would do no work, and was committed here. We found her indifferent, quiet and reticent. She has no idea of time or place. Takes no interest in surroundings; laughs and talks to herself. She has auditory halluciations. Her attention is very bad. She is well nourished and sleeping well.

No. 16, a male, age 18, was admitted July 18, 1908. This patient's father was in the asylum about 30 years ago, and his mother was in the London Asylum 11 years

ago. His maternal uncle is in the asylum now, suffering from Paranoid Dementia Præcox. The patient appeared normal until 15 years of age, when he became cross and irritable, and very hard to manage. He threatened his mother and father and has been progressively getting worse. On admission we found him a well developed healthy looking boy. He stands in one position for hours if left alone and takes no interest in his surroundings. He never enters into conversation unless urged. He has many mannerisms. His memory is bad; voluntary and spontaneous attention are both bad. There are no negativisms. He was placed in the drill and given tonic baths, but there is very little change. He says that he hears voices in the wall. His attention can be held but it is very difficult.

No. 17, a male, age 26, admitted July 23, 1908. His parents were second cousins. It is claimed he was a bright boy until 21, when he became nervous and lost weight, and had to be sent to the Asylum. He has been in the Asylum twice before, each time he improves a little but has never been well. On admission we found him feigning curvature of the spine, but when put in the calisthentic drill this proved to be only a mannerism or habit as he straightened up and carried himself perfectly erect. Every movement is done in a peculiar way, and it is very hard to correct him of his habits. He is very indifferent and seems pleased to stay here. He is careless about his personal appearance, and ackowledges that he hears voices, but says he pays no attention to them. He is impulsive and at home was very hard to manage because of these impulsive outbreaks.

No. 18, a male, age 22, admitted August 1, 1908. His mother and grandmother were both insane. The patient worked until two weeks before his admission, when he became excited and developed grandiose ideas. On admission we found him to be a physical degenerate. He weighs 85 pounds, and is 5 feet 1 inch in height. He

wanders in conversation and gives irrelevant answers to questions. His attention is very divertible, and judgment is gone. He shows no negativisms but many mannerisms. He is very restless and his condition has remained much the same.

No. 19, age 50, admitted May 5, 1908. Five brothers and sisters of this patient died of Phthisis. This is the fourth or fifth time this patient has been in the Asylum. He has never completely recovered. On admission we found him irrelevant in conversation, laughing in a silly way, and talking of persecution. He has an exalted opinion of his own importance. He is very careless and indifferent about his dress and is perfectly contented to remain here. He is filthy in his habits and always performs an action in exactly the same way.

No. 20, a male, age 58, admitted August 4, 1908. One uncle of this patient was insane and the father was alcoholic. The family of this patient claim that for 30 years he has not been well. He was in the Asylum 23 years ago and again 10 years ago. He has always been suspicious, childish and afraid of being hurt. When admitted he acknowledged that he had auditory hallucinations. His attention was very poor, but his memory was good. He was very impulsive. He would, without cause, hit another patient or attendant. He had formed a peculiar mode of speech and of action.

No. 21, a male, aged 27, admitted June 3, 1908. He was born in one of the English cities and knows nothing of his father. His mother tried to support him, but when quite young he was sent out as a Barnado boy. He worked with the farmers until 20, and then began moving around from one part of the country to another. He says at that time he first heard voices talking to him. He developed marked mannerisms. For the past year or two, he has done very little work. On admission we found him well nourished and well developed. His memory is good, but attention is failing; judgment bad.

He repeats actions in the same way very often, and has a peculiar mode of expression. He acknowledges that voices are talking to him, but he does not react to these voices as he has become too indifferent. He was put into the drill and given tonic baths. His attention improved, but otherwise no change.

No. 22, a male, age 56, was admitted September 4, 1908. The father, mother and one brother of the patient died of Phthisis. This is the patient's 3rd admission to the Asylum. The first time was 26 years ago, the second time was 14 years ago. He has not been well since first admission. On admission we found him hallucinated, indifferent to surroundings, happy and contented on the ward, and willing to stay here. He was careless about his appearance and does not seem to care what happens to him. Before coming here he was impulsive, and would get into considerable trouble. Since coming here he has been quiet and nice. In his case-book notes of 26 years ago it is stated that he learned to knit, and he spent his time for many months knitting socks and mittens, and he must have been very indifferent for when 30 years of age he was satisfied to sit and knit; even then he did not want to go home. Also when admitted this time he settled into the ways of the place as though he had been here all the time, showing how strong the force of habit is in these cases.

No. 23, aged 28, admitted June 12, 1908. The history form states that some of the relatives are in the Asylum, but we know nothing about it. We know very little about this patient's history. He says he was a heavy drinker, that he has suffered from Gonorrhœa and stricture. On admission we found him indifferent to his surroundings and slovenly in dress. He never enters into conversation. It is hard to get an answer to a question and his judgment is bad. He does not know where he is nor does he know what month it is, or what year it is.

No. 24, a male, age 22, admitted June 9, 1908. There

is nothing known of the patient's family history. When admitted we found he had delusions of persecution, also auditory hallucinations. These voices told him that he might be killed at any time. He would laugh in a silly way without cause, and would talk to himself. He would give irrelevant answers to questions. He was very impulsive, and without warning he would strike the attendant, or anyone, who happened to be near. He would suddenly start and try to run away. His attention was so bad that he was entirely indifferent to his surroundings and unclean in his habits. He seemed well nourished. Later we have learned, that he had been mildly alcoholic sometime before admission.

No. 25, age 44, admitted June 12, 1908. One brother of this patient died of Hydrocephalus. His mother is of so low a type that it is impossible to get any family history from her. The patient himself spent three years in the reformatory for boys when he was young. He received a very poor education, and when admitted we found he was reacting very actively to certain auditory hallucinations. His memory for past isolated events is good. His attention is very bad. He shows marked mannerisms. He will be found each day standing in the same place, holding his hands in the same position and staring into space. When dressing himself he always does it in the same way, and puts each article on in a peculiar manner.

No. 26, a male, age 28, admitted July 8, 1907. The family history is negative. This patient did well until 25 years of age when he seemed worried, morose, irritable and introspective. He began talking to himself and became cross and suspicious. He developed violent impulses and was sent to a sanitarium. He did not improve and had to be admitted here. His trunk was full of literature advertising patent nostrums, also had many pills, electric belts, etc., showing that the patient had been trying to improve his condition for some time. We

found the patient very indifferent concerning his surroundings. His both hands and feet are cold and blue. He is not negativistic and shows no mannerisms. He acknowledges that he hears voices talking to him all the time and has done so for several years. His memory is good and he has gained some in weight, but otherwise his condition remains unchanged.

No. 27, a male, age 27, admitted on March 28, 1908. This patient's father is in the Asylum at the present time, also several cousins have been insane. The patient was a fairly bright boy, and attended high school for several years, but could not pass an examination. Since leaving school at 19 he has never worked steadily at anything. He was irregular in his occupation and changed his residence often. He recognizes that he has never been well, but does not seem to worry about his condition. He says he is happy and contented. He talks to himself and laughs in a silly way. His memory is very good but it is hard to gain his attention. When talking he wanders from one subject to another and seems to have no goal idea. He says he hears voices talking to him in the night, but he recognizes the fact that they are not real voices. He was given tonic baths, plenty of exercise and put in the drill. The deterioration seems to be checked, at least his condition seems to be no worse now than on his admission.

No. 28, age 24, admitted April 16th. His father was epileptic, and one paternal aunt was in the Asylum, and a paternal cousin was also insane. There is a marked alcoholic history on the father's side. The patient was never very bright. He claims that until eight he suffered from some sort of convulsions. About two years before admission the patient claims that he began to hear voices. At the same time he became more indifferent as to his work. He wandered around, he quit attending church, in fact his whole mode of living changed. He began to fail in weight and to lose sleep; he became reticent and

seclusive. He displayed many mannerisms. He would stand in one position and when performing any action repeat the same motions that he used when he performed the action last. He knew where he was and also recognized the people about him. There was a fine tremor of the lips, hands and tongue. The patient was given tonic baths; plenty of outdoor exercise, suitable employment was found for him, and he improved; the voices gradually disappeared. His physical condition improved and he went home on July 29th, since which time he has been doing well.

No. 29, age 44, admitted May 26th. His family history is good. This patient was always defective. He was the baby of the family, and never did much work. He always lived at home with his father. On admission this patient showed marked Euphoria. He was perfectly happy and willing to stay here, and believed that he owned the place, and that he had inherited many titles. He had many auditory hallucinations, also some visual. His memory was bad and his attention was very hard to hold. In conversation he would wander and have no goal idea. The right ear was 1 C.M. longer than the left, otherwise the patient was well developed and not alcoholic. The patient was impulsive and got into family quarrels.

No. 30, a male, age 26, admitted September 11, 1908. There is no family history of this patient. He says he had some alcoholic habits. On admission he laughs in a silly way and talks to himself and says he receives many electric shocks. He is indifferent to his surroundings, and never asks to go home. His attention is so hard to gain that it is impossible to place him in the drill with the other patients. He hears voices talking to him and sometimes responds to them. He stands in a peculiar position and goes through many peculiar motions, and seems to be a creature of habit. He knows

where he is, also the day and the month. His memory is bad and judgment is poor.

These 30 cases that have been presented are classified as belonging to the Hebrephrenic group. In nearly all of them the trouble began very insidiously. We can hardly tell when the friends began to consider the patient insane. Often there is a history of some acute sickness or great shock and the friends say, "He was never just the same afterwards."

This sickness apparently may be anything as we have Rheumatism, Diphtheria, Chorea, Typhoid or it may be a confinement as in several cases this is mentioned. We find some sickness of this kind marking, in the memory of friends, the beginning of the trouble. Whether this really was the beginning or whether the disease had already begun and this hastened its onset is something that we cannot say.

No. 31, a female, age 26, was admitted April 29, 1908. We have learned that one uncle was peculiar, also one sister was insane for a few weeks following an attack of Typhoid. The patient is a married woman with a history of always having been hysterical. When a child she suffered from some form of convulsions, and she also had a bad temper which she could not control. She appeared fairly bright at school and after leaving school worked as a milliner until about the time of her marriage, in 1905. In 1906 she had a miscarriage and on March 24th, 1908, she gave birth to a healthy child. On March 29th she began to cry and worry for fear she might die. This worry gradually increased and she was taken to a Hospital near her home on March 31st. Here she remained until the time of her admission to our Hospital. When admitted to this Institution she weighed 86 pounds. She was entirely disoriented as to time, place and person. She was very much emaciated, and her friends told us that she had taken no nourishment for five or six days. They said she had been so much dis-

turbed and confused that it was necessary in the Hospital to keep her strapped in the bed for several days. Our ward admission note says that she came in excited and noisy; that she was quite resistive. Her speech was thick, her lips dry and parched. There were abrasions on the arms and legs which her friends say were caused by straps. The lower part of her back was red and covered with small pustules; these had been caused by the patient being strapped in a bed wet with urine that had escaped involuntarily. There was a free discharge of lochia and her temperature was normal, but the pulse was very weak. She was given a warm bath, placed in bed and during the first two hours she took sixteen ounces of peptonized milk and a little toast. We learned from the friends that during her time in the General Hospital she had been kept under the influence of morphia, and after her admission we had difficulty in getting the bowels to move. She was given calomel and salines which finally were effective. During the first night she slept one hour in the evening; later she became restless and was put in hot wet packs and slept two hours while in the packs. The warm baths at 94 and hot wet packs were continued very frequently during the first few days because they seemed to have a very beneficial effect in quieting her and in producing sleep. She was also given warm saline injections per rectum for several days. Under this treatment her condition improved somewhat and she began to sleep better and we have never at any time found it necessary to use any form of medicinal sedative. On May 3 the patient was able to eat part of an orange. She was taking plenty of peptonized milk and resting more quietly than she had been. On May 5 she refused to take any nourishment and had to be fed by the tube for three or four days. The saline injections with packs and hot baths and peptonized milk were continued all through the month of May and the patient's physical condition improved greatly. Her bowels became more regular, her tongue

cleared up, her complexion became more clear, but mentally she continued quite excited and restless.

Her sleep chart showed that during the first night here she slept about three hours, for the next three nights about 5 hours each and then for four or five nights she slept very little. After this her sleep gradually improved and we see that on the 30th and the 31st of May and the 1st, 2nd, 3rd, and 4th of June she was sleeping about nine hours each night. Since then, she has been sleeping well except occasionally when she would drop for one night to four or five hours. During all of the month of May she was acutely hallucinated. She would cry out and talk to people who were not present. At times she thought she was poisoned and called for help. She would wring her hands and apparently seem in great trouble. On May 14th she had brightened up enough to answer some questions correctly. She told her name, her age and her husband's name. She also wrote her name on a piece of paper, but at the same interview she was talking a lot of senseless talk. It was only occasionally we could get an intelligent answer to any question. During the first part of June the patient quit to a great extent, talking to herself. She would laugh in a foolish way at times. She was quite irritable and very destructive. She would tear her bedding and clothes, and at times showed marked impulses. She threw dishes on the floor, she sprang out of bed and broke the window, and one day jumped into the bath tub when it was filled with water for another patient. This she did so quickly and impulsively that although the nurse was right beside her she could not prevent the patient getting in the tub. At times she showed marked negativisms. She would refuse to put out her tongue or to do anything that the nurses asked her to do. During June, July and August this patient spent a great deal of the time outside, either walking about or lying in a hammock. She gradually became more quiet and slept better at night. Her atten-

tion seemed better but it was impossible to carry on a conversation with her. Her conversation was very irrelevant, and she was extremely divertible. She became so careless about herself that she would not comb her hair or keep her clothes on properly, and she would pass urine in the bed.

On September 5th the patient was visited by her mother and sister and they brought her little baby. She seemed to know at once that this was her baby. As soon as she saw it she fell on the floor, and began kicking and screaming. Her mother said to pay no attention to this as she always had been hysterical and had had many such attacks. In about five minutes she got up took the baby in her arms, caressed it, and played with it the remainder of the day.

About the first of October we noticed a marked change in the patient's mental condition. She was brighter and more cheerful. She took an interest in the other patients and in the work about the ward. She began calling the doctors and the nurses by their proper names, whereas before she had always mistaken their identity. She began writing nice letters home and in every way her condition was very satisfactory. On October 13th she asked what month and day it was and she could not understand that she had been here so long. Since that time she has often talked to us about her sickness. She remembers very little of the time she was in the City Hospital, but she says she remembers coming to our Hospital, just as though it were a dream. During the first four months of her residence here she remembers only occasional isolated events.

A very interesting point in this case is brought up when we compare her mental improvement with her increase in weight. On admission according to her weight chart she weighed 86 pounds, this increased to 91 pounds during the first two weeks in the Institution. Her weight remained in the nineties until September 26th when it was

100 pounds. On October 3rd, 101; on October 10, 104; on October 17, 105; on October 24, 106; and on October 31, 108½ lbs. When we look at her mental condition we also see that she began clearing up about October and began to take an interest in her surroundings. She also began to talk connectedly and to write nice letters home. At present she is about at her normal weight, and we are now considering the advisability of her returning to her friends. She recognizes that she must not go home too soon lest the change might do her harm.

No. 32, a female, age 49, admitted June 11, 1908. Her maternal grandmother was insane and also one cousin insane. One sister committed suicide. The father and one sister died of Tuberculosis. The patient was apparently healthy until about 23 years of age when her first baby was born. It is stated that she then had an attack of Puerperal mania. She would throw herself about and throw her child out of bed and sometimes scream and shout. After about two weeks of these symptoms her husband says that her condition changed and she was in "a trance for 14 days." During this time she would not eat or speak. She apparently recovered from this attack and was quite well until about the time of her menopause which came on in 1905. She then became excited, would quote scripture and sing a great deal. She would not work nor would she talk. This condition lasted for about four weeks. At Easter time, 1908, she again showed strange symptoms, wandering about aimlessly and gradually became worse until the time of her admission. Her son says that she would get out of bed and stand in a fixed position for two or three hours at a time, and stare at one object. On admission we found her very untidy, restless and quite impulsive. She would spring suddenly out of bed and scream without apparent cause. She was disoriented as to time and place. Her memory judgment and attention had deteriorated very much. She would not talk and she would take no interest in her sur-

roundings. She performed every movement in a mechanical stereotype way. She was put to bed, and given plenty of nourishing diet, massaged with olive oil each day, and underwent a course of treatment by tonic baths. Her mental condition improved some, but physically she gradually became weaker, and died of Dysentry on July 19th, 1908.

No. 33, a female, age 33, admitted July 27, 1908. The parents of this patient were cousins. Her father was intemperate. Her one sister suicided and her one uncle was insane. There is nothing particular in the history of this case until January, 1904, when she was admitted to the London Asylum. Her records state that she had not been well for three or four years, also that she would stand with, "a fixed expression and a peculiar fixed countenance." She was very reticent but apparently improved and was allowed to go home in about two months.

She was again admitted in July, 1906, when she remained about six months. This time our notes stated that she was very impulsive in her actions, and liable to attack another patient at any time. She was careless and indifferent about her personal appearance. She had attempted to kill her husband. She was very erratic. She laughed and talked excitedly to herself, and sometimes would not speak at all. At the time of her present admission her husband stated that she had not been well since her first admission. She had been very hard to manage and erratic. She has always had auditory hallucinations. She knows where she is and also knows the time and recognizes the attendants about her. She sometimes laughs in a silly way to herself. Her answers to questions are irrelevant and unreliable. She has a peculiar delusion that is very persistent. When first attacked several years ago she thought that people were trying to tear her face off. She still has the same idea,

and often breaks out screaming, crying, and attacks anyone who is near. When asked what is the matter she says that they are taking her face away. In conversation she often repeats the same words, and in the same manner. Her memory is fairly good for old events, but poor for recent events. Her attention is very poor. She failed in all the tests that we tried. She is so impulsive that the nurses consider her very dangerous and hard to watch. On admission she was put to bed and given a course of cold tonic baths, plenty of nourishment and two hours a day walking in the open air. She improved some physically but mentally her condition is unchanged.

No. 34, a female, age 44, admitted August 1, 1908. This patient was deported from the United States. We have never seen her friends and she is very reticent. She says she has been in the Asylum twice in Detroit. She is negativistic and resistive. She refuses to tell her age or anything about her past life. She stands in a fixed position; performs all actions in a machine like manner and will stand for hours without moving but often suddenly strikes another patient.

No. 35, a female, age 29, admitted August 29, 1908. We know nothing of the family history. Her husband says that five years ago, after the birth of a baby, she developed delusions of poison and has never been well since, gradually getting more careless about the house work and indifferent about the welfare of her children. About May, 1908, she claimed that she heard spirits talking to her and during the first week in August she refused to eat for two days. About one week prior to her admission the spirits told her to neither eat nor speak. On admission we learned that she had taken no nourishment for five days. She would not work and she had been unclean in her personal habits. She would not speak to us or tell us anything about herself. She was put to bed and fed four times a day. At first the feeding was done by means of a nasal tube, but after a day or

two it was possible to feed her with a spoon. She has been mute ever since. She stands in peculiar positions and if undisturbed will not move for hours. She sleeps well at night and is well nourished, but occasionally when giving her a tonic bath she breaks out impulsively, and will attack the nurses and on one or two occasions has used bad language towards the nurses. This patient was a dress maker before her marriage and even now after five years' sickness she will at times do beautiful needle work. This is being encouraged as much as possible. The patient still goes out for a walk every day, and receives tonic baths with plenty of nourishment.

No. 36, a female, age 55, admitted June 23, 1908. Nothing is known of this patient's family history, but at 16 years of age the friends say that she had an attack of some kind which lasted three months and she did not get entirely well for some years. She was married and gave birth to five children, one of them is a patient in this Institution now. About 7 years prior to admission, that is when she was 48, she became very violent, irritable, and impulsive, also developed strong religious opinions. Her people say she would march through the house with the Bible in one hand and the axe in the other, and smash everything she could reach. She never recovered from this attack. She now sits in a chair and will do nothing that she is asked. She refuses to go to the dining-room and refuses to dress herself. Often she will not speak for days. She is very indifferent in some respects and sometimes unclean in her habits. She shows many mannerisms and negativisms, and speaks in a very impulsive manner.

No. 37, a female, age 37, admitted June 2, 1908. The family history of this patient is said to have been good. This patient is said not to have been well for 10 years, when her last baby was born; but no particular symptoms were noticed until October, 1907, when she gave a party. One of the ladies, who was invited, came to the house; the

patient received her and when assisting the guest to take off her hat she suddenly without warning struck the guest in the face. She then screamed but could give no reason why she did this. In a few days she developed many peculiar delusions, became very impulsive, screaming, striking, and swearing, and this continued for about two weeks after which she became mute and resisted everything that was done for her. She had to be fed with a tube. In February, 1908, the uterus, tubes and ovaries were removed but this did not improve her condition. Since admission she is mute, resistive, negativistic and quite careless about her personal appearance. She has been given saline injections, tonic baths, plenty of nourishment and outdoor exercise, and although she has improved somewhat physically, her mental condition has changed very little.

No. 38, a female, age 37, admitted July 24, 1908. One great uncle of this patient was insane and two uncles alcoholic. So far as we can learn this attack came on suddenly just previous to admission here. We found her resistive, negativistic, and mute. Her arm would remain in any position in which it was placed. She would stand for hours in one position if left alone. She had to be fed by means of a tube, but a peculiar symptom in this case is that she will write correct answers to questions asked her showing that her memory and apprehension are fairly good. Sometimes owing to her negativistic mood she will refuse to write.

No. 39, a female, age 23, admitted November 4, 1907. The family history of this patient is good. On admission we found this patient quite excited, wringing her hands, and she would resist everything that was attempted to be done for her. When asked to go one way she invariably turns and goes the other. She will not put on her clothes or take them off. In conversation she often repeats the questions that are asked her. I can get no his-

tory of hallucination. She takes no interest in what is going on about her.

No. 40, a female, age 23, admitted April 7, 1907. Her father was slightly alcoholic, and she was a married woman with two children. Two weeks after the birth of the last child she began to get worse. She thought she was sinful, and became very resistive. She would not eat; would not answer questions, in fact she would do nothing that was asked of her. She seemed to recognize this fact and on one or two occasions was heard to remark, "I do not know what is the matter." "I cannot do anything that I should do." The excitement was so great in this case that it was almost impossible to get her to sleep.

No. 41, a male, age 55, admitted May 15, 1908. Two brothers and one sister of this patient were insane. For many years this patient has been peculiar. On admission we found him manneristic, negativistic, irrelevant in conversation and on inquiry we found he had been this way for 30 years at least. He was suffering from hypertrophy of the heart, and died on June 15, 1908.

No. 42, a male, age 20, admitted June 9, 1908. We have learned nothing of the family history of this patient. This is the patient's fourth attack. He was confined in the Asylum once in 1905. On admission we found him shouting, talking continually, swearing loudly, and seemed to have the delusion that he was going to be poisoned. He objected to everything that was done for him. He was very impulsive and would attack the other patients without any apparent cause. He did everything in a peculiar way, and when asked to perform any action the second time would always do it in the same way as he did it the first time. Under treatment by baths, plenty of fresh air, and the Calisthenic drill he improved very much and went home on probation on October 15, 1908.

No. 43, a male, age 20, admitted June 23, 1908. The mother and one uncle of this patient are insane. When

admitted the patient had auditory hallucinations. He was shouting, talking, swearing, and continually on the move. For several days before admission he was tied in bed at home and handcuffed. After coming here he would suddenly spring up and strike another patient, would shout out loud as though shouting to someone. Sometimes he would sit in one position for a considerable time staring into space. Under the influence of the Calisthenic drill, and cold shower baths, this patient improved greatly, and, though, not entirely well, the advisability of his going home is being considered.

No. 44, a male, age 21, admitted August 7, 1908. The family history could not be got in this case, but we learned that this patient's trouble began when 11 years old, since which time he has had many attacks similar to the present. His friends claim that he recovered after each of these attacks, but this is doubtful. On admission we found him noisy, restless, negativistic, impulsive, and very careless about his appearance. He had auditory hallucinations. His memory is fairly good but his attention is very bad.

No. 45, a male, age 27, admitted September 18, 1908. Nothing is known about this case except that he had been a patient in Buffalo State Hospital for four years, after which he earned his own living for two years by peddling small articles. When admitted he was mute, resistive, negativistic, very impulsive and had auditory hallucinations. He has improved very much but is still getting the cold shower baths with a good rub, massage, plenty of nourishment and outdoor exercise.

The above 16 cases have been classified as Katatonic Dementia Præcox and at once we notice the difference in the mode of onset from that of the Hebrephrenic group. In this, instead of a gradual development, we find in many cases a sudden impulsive outbreak. This may come at any time but many authors have referred to three danger periods,

(1) Puberty. (2) After childbirth. (3) The climateric In our 10 female cases we have a history of the disease breaking out immediately after confinement in five cases. In two cases the symptoms became so aggravated at the climateric that they had to be sent to us. In one case we have no history and in three cases the disease developed rapidly without any history of preceding sickness.

The three striking characteristics of this form of Dementia Præcox are :—

(1) The impulses. These patients can never be trusted. They will hit, bite, tear clothing or scream without any cause and one minute afterward can give no cause for the action. Note in case No. 37 a woman strikes the guest whom she had invited to her house. And in case No. 31 a patient springs into a bath tub with all her clothing.

(2) The negativisms. By this we mean a senseless resistance to everything that is done for them. Ask a katatonic to put out his tongue and he will usually close his lips tight. He may refuse to eat or to speak. Most katatonics at some time in their history become mute.

(3) The mannerisms. These may be shown in the mode of speech or in the way of walking. Sometimes the patient stands for hours in one position. Sometimes we find him going through peculiar motions and repeating these motions day after day. Sometimes we find him repeating questions that are asked him or imitating the actions of others. In short we mean by a mannerism a senseless round about way of doing anything.

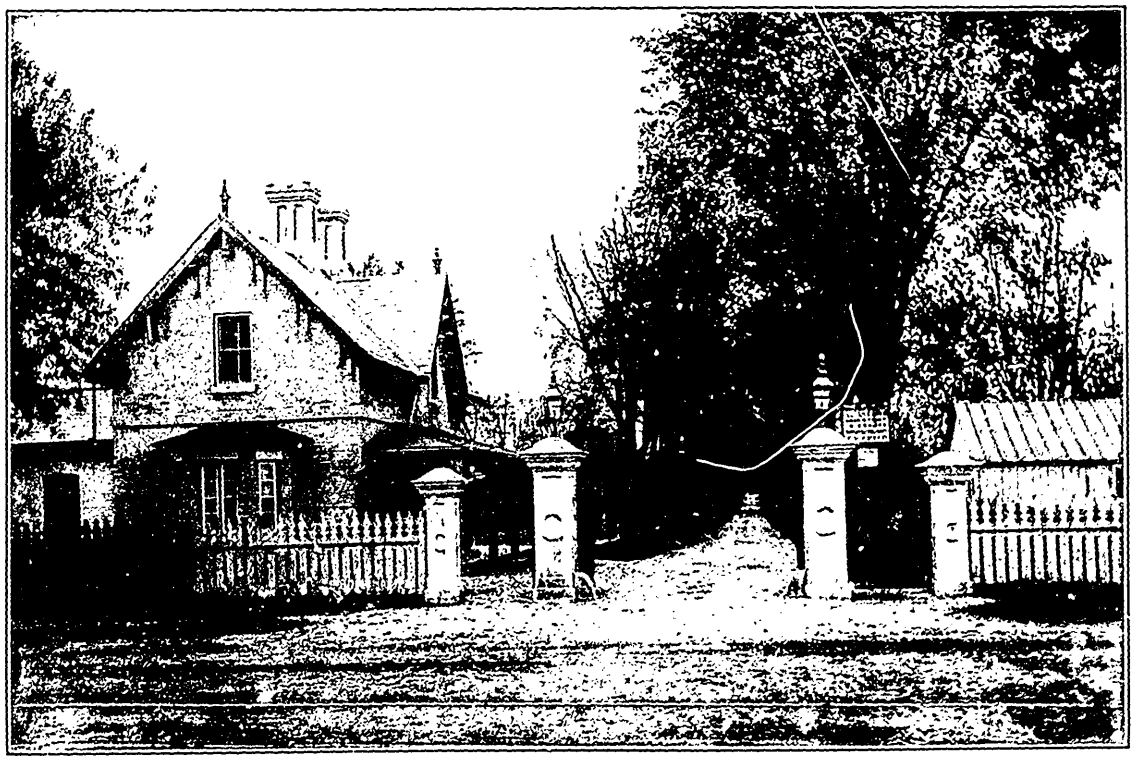
No. 46, a female, age 36, was admitted August 27, 1908. This patient is one of 12 children, three of whom are dead, one in infancy, one of drowning, and one died of Bright's disease. We can get no history of any psychosis or neurosis in the family, but some of her relatives have been up to visit her and they all seem to be of a Neurotic type. The patient attended school until 13 and seemed fairly bright. Afterwards she worked as a din-

ing-room girl in different hotels until 24 when she was married. She has three children aged 10, 9 and 3 years. About five years before admission to our Institution the patient moved with her husband to a village where they had no friends and she claims that the women in that village have never treated her in a proper manner. She says they were always jealous of her, because she was so much better looking and more clever than they were. She also formed the idea that there was a secret bond of union between her and the local physician. This she could never explain, but she says that their minds were always communicating with each other. She says that for the past five years she has seen signs in the sky when people were going to do her an injury. She believes that she has great influence over other people, and can make them do exactly what she wishes them to do. She says that people have thrown poison into her room and she has smelt it. She has also heard noises outside of her window and knew that her enemies were there plotting against her. She claims to have seen King Edward in her own village and that he came and spoke to her. She also tells who was with him. She thinks he was there for the purpose of straightening out her troubles. These ideas of persecution became so fixed that finally she bought a revolver, and went out for the purpose of killing some of her enemies.

On admission we found her a healthy, well developed, well nourished, bright looking woman. She would talk freely and answer all questions in an intelligent manner when they did not refer to herself or her particular trobules. Her memory was good; she could tell the day she came here and who came with her and also how she came. Her attention was also very good. The three word test she did correctly after five minutes. When a paragraph was read to her she repeated the contents very fully. She shows some mannerisms in her mode of dress and in her manner of speech. She likes to wear

fancy clothes and to use high-sounding phrases. When her own troubles are mentioned her conversation becomes irrelevant, disconnected and very hard to understand. At times she talks to herself about her troubles and about the people who are persecuting her. She mixes Scripture quotations and bad language very freely. Since admission at times her conduct has been very good and sometimes for three or four days it is difficult to discover anything wrong with her mental condition. Then she will become irritable, and laugh and talk about her own troubles for hours at a time.

No. 47, a female, age 37, was admitted October 12, 1907. Her father died in an Asylum and her brother died of hydrocepalus. She was fairly bright as a young girl, and at 20 years of age she began to work as a milliner. She never worked steadily at one position. She has learned dress-making and tailoring and also worked at house work showing that for many years she has not been of a stable mental makeup. About three years before admission when living at home she made preparations for her own wedding. She told her relatives about it and sent out the invitations; she even had the dinner prepared and waited for the man whom she expected to be her husband. Her friends then learned that the man in the question had never heard of the wedding. Since then she has done no work. She has spent a lot of time and money taking music lessons although she had no talent in that way. She even went to a strange town and attempted to teach music lessons. On admission we found her memory very good. Her voluntary and spontaneous attention were both bad. Her judgment is entirely gone. She does not know what month it is or what day of the week it is. She is negativistic; has many mannerisms, and often repeats sentences that are spoken to her. She is indifferent and careless about her personal appearance and is entirely unable to carry on a connected conversation.



The Lodge, Hospital for the Insane, London, Ontario.

No. 48, a male, age 37, was admitted June 30, 1908. His father and brothers were alcoholic. Since 18 years of age this patient has been wandering around the world. He has lived in South Africa, India, Scotland, Chilli, Peru and in nearly every state of the Union. He has always worked at his trade as a plumber. About ten years ago he contracted syphilis and took a course of treatment at the Hot Springs, Arkansas, for six months. He says that the syphilis was never cured as he has always been troubled since. He came to this city a month prior to his admission and secured work. Since then he has complained that the people in the boarding house were persecuting him. He reacted to these ideas of persecution, and bought a revolver and attempted to shoot one of the members of the family at the boarding house.

On admission he talked very freely about his case. He was very persistent in the idea that he had heard these people talking bad about him, whereas the people in the house state positively that he was morose, sullen and would not associate at any time with the other people in the house. The patient thought the Dominion Government should take his case up and prosecute these people. He claimed that he was a British subject and should be protected. He was given work at his trade about the Institution and seemed to forget all about his former troubles. He was discharged on September 2, 1908, and left this country saying he would never again set foot in Canada.

No. 49, a male, age 45, was admitted on May 20, 1908. One brother and one sister of this patient are at present patients in this Institution. One other brother is said to be insane. This is the patient's fourth admission. He was sent here because he had gone to another man's house and claimed that it was his and tried to put the family out. This patient is of a low order of intelligence and has been quite alcoholic. When admitted we found he had many delusions of a sexual nature and that he

imagined himself a very clever person. He said he owned a great deal of property. He had a very self-satisfied expression and since coming here he has worked quietly with the other patients but still retains the exaggerated idea of his own importance.

These four cases were classified as Paranoid Dementia Præcox. Kraeplin draws attention to the fact that this disease seems to attack the patient later in life than the other forms of Dementia Præcox. The ages of these four cases when the trouble began were all above 30 years and on admission they were 36, 37, 37, and 45 years. All of these show the exaggerated idea of their own importance and also the senseless delusions of persecution.

Although our list of cases of dementia præcox is not large and our period of observation has been short, still, when we look at them together and make a comparative summary, we find considerable food for thought. When we consider the age of the patients at the onset of this disease we find that in six male and four female cases we have no reliable information; in three other male cases the patients are married men and each have been in an Institution three times and have never recovered. Their ages at the time of the first admission were, 32, 30 and 49. Just when the disease began in these cases we cannot tell. We have left 13 males and 23 females, and in the cases of nine males and 16 females or in 69 per cent. in which we have a fairly accurate history, the disease set in before the patient was 25 years of age. We have made a pretty careful study of these cases and have made all the inquiries that were possible, and have come to the conclusion that 8 males and 6 females were always more or less feeble-minded. None of these 49 cases had received a good education, but two had tried to get a teacher's certificate and failed repeatedly at the examinations. The youngest age at which our records show the disease to have developed is 11 years. This was in the case of a boy who had diphtheria at 11 and the friends

claim he was given too much antitoxin and afterwards he developed symptoms of katatonia. It is more probable that in this case, as in many others, the mental symptoms were exaggerated by the acute illness. In two other cases where we have pretty definite information the trouble began at 15 years of age. We also have 3 female cases in which there was no trace of mental trouble until the patients reached the ages of 43, 37 and 37 years.

Upon looking up the family history of the 49 cases we find that in only 33 could we get any reliable information, and in 20 out of these 33 we discover a history of insanity in the family no farther removed than an uncle or a first cousin. In some cases, several members of the family had suffered from some form of mental trouble. In one, the father, mother, and uncle were insane; in another a brother and one sister were insane; in another one maternal uncle and one paternal uncle died in the Asylum. This is a larger proportion of tainted histories than is usually given but we believe that if we could get correct information of the other 16 cases our proportion would be still larger.

Again in 9 cases of the 33, of which we have any information, alcoholism is mentioned in the family history and in four cases the parents of the patients were related to each other. In three cases they were cousins and in one case they were half brother and sister. This is a large percentage of consanguinity and in future will draw our attention more particularly to this important question of the effect, upon the offspring, of the marriage of people related to each other. In looking back over all these cases we find that in many ways they resemble each other. In all of them it is a disease commencing in early life and although some cases have remissions the disease seems to steadily progress. The progress may be slow but in all our cases there is a certain amount of "Dementia" even though the patient may have a remission. At his best, he is not what he was before the

trouble began. This progressive dementia is characterized by an indifference that we never see in other psychoses. The patient may wring his hands and cry but he can give no reason why he is doing so. Usually all his emotions are very superficial, he laughs foolishly or cries without a cause, he seldom complains of his treatment by the attendants and apparently he never notices what kind of food is given him. Many of these cases are happy if left alone, but when left alone they sit still with stooping shoulders and vacant expression, and never make an effort to fight off the indifference and apathy. Whether the indifference is due to lack of attention or vice versa we will not attempt to say but the fact remains that where we find a lack of attention we find that the patient never forms any new ideas; he loses the power of origination and this along with the indifference will cause him, if left alone, to fall into many habits. He loses the power of originating new actions and he repeats his old ones until they become a habit.

At this time it is very necessary that he should have careful attention so that his indifference may be overcome and this formation of habits may be corrected. These habits of repeating actions or sentences always in the same way we call mannerisms, and to us, it seems that, if we cannot prevent mannerisms or habits, we should at least direct them so as to compel the patient to form useful habits and in that way he may be enabled to at least partially earn his own living. Again, by constantly educating and developing his attention, we assist in the control of his impulses and if we can do nothing more than to direct his impulses in a proper channel we have done a world of good. Nothing is more discouraging than to see one of these cases come into our Institution and to watch him give way to all kinds of ungovernable impulses and to see his attention fail and the indifference to his own condition and appearance develop. Then we know that soon we will have a care-

less, unkempt and filthy patient; one who can get no pleasure out of life himself, and who is a source of worry and trouble to those who have anything to do with him.

This habit developing peculiarity is very strong among these patients. We have seen a patient, when out for exercise, walk in one place until he wore a path in the ground several inches deep. We have seen them stand in one place and execute a shuffling movement with the foot until a hole is worn through the floor. Whereas other patients have formed habits of industry, and spend all their time knitting or dusting or sewing and every day at the same hour they will be found in the same place attending to the same duties. These habitual actions seem to be carried on without the aid of the attention, but it is surprising to find that the patient's memory for remote events is so good. We have a patient who cannot express an opinion on any subject but who can do any proposition in the 1st book of Euclid. At present he is not capable of receiving any new ideas but he has formed the habit of repeating his old work. He never reads a new book but he spends a great deal of time reading a book with which he was familiar before he became sick.

These patients form probably 95 per cent. of the chronic patients in any Asylum for the Insane. This may sound strange to one who has not considered the matter but the paretics and the seniles are soon taken away by death; the drug fiends and toxic cases recover and go out and the manico-depressives usually get better in a short time, leaving us a few epileptics and imbeciles along with the Dementia Præcox cases to make up the great mass of the chronic cases in the Asylum. True, many of these cases under proper care will improve and go home to the friends, but in the majority of cases the home influences and surroundings are not such as will direct the patient in the right channel and too often he soon becomes discouraged and comes back to the Institution. In many

cases, if these patients could be provided at home with the same simple routine life that they enjoy here and not be perplexed and confused by demanding of them the power to originate and carry out new ideas, they might be able to live and also partially earn their own living. But when these extra demands are placed upon them they become worried and fatigued and give way to impulses that make it necessary to return to the Institution.

The question now naturally arises, "What is the best way to care for these patients so that they may get most enjoyment out of life and at the same time contribute most to their own support?" They must be taken care of; their habits must be controlled and their energies must be directed. Our answer to this question is the one word "Occupation." By occupation, I do not mean spending a certain number of hours at labor in the field nor do I mean walking an exact number of miles along country roads, but I do mean the preparation and carrying out of a time table that will occupy every minute of the patient's time and leave him no time to develop useless and harmful habits.

We believe that this is worth the effort. We know that there are many patients in every Institution who either were kept at home until their mental condition at the present time is deplorable or else they, for some reason or through some oversight, have been allowed to sink into this condition in the Institution. We also know that if any of these cases receive proper individual attention the deterioration very rarely progresses and many times it is possible to educate the attention and train the patient into habits of right living after he is very far gone. Each of us remembers many chronic cases that at one time were a great source of worry and trouble who have since been trained into habits of usefulness. In this Institution we have a woman patient, aged 61 years, who has been here for 34 years. Until about 3 years ago she was

one of the most demented cases. Her indifference was extreme. She took no interest in herself; she was even unclean in her personal habits. If left alone she would sit still all day and would not even walk to the dining-room. At that time another patient suffering from the same form of trouble was encouraged and directed to look after the first one. Since then they have spent the whole of their time together; they went for walks; they did sewing; they sang hymns, and at the present time the first case is clean in her habits; she is neat in her dress, she lives on our best hall with our best patients, while the other patient who gave her the care and taught her how to live properly has at the same time had an interest in life that prevented her from sinking into the same hopeless state. There are scores of cases such as this in every Institution and if individual care has done so much in these isolated cases why not give every case the benefit of this treatment? We always find that patients, who are selected for positions of trust about the Institution and those who have some special work about the place never sink but rather their mental condition seems to improve, and, while everyone cannot have special work or a position of trust, surely everyone can have special individual attention.

The only way to do this is to organize the occupation so that at all times every patient will have something to do. Each case must be carefully considered, his past life studied, his tastes and wishes looked into and then surely some plan can be arranged that will rouse his flagging interest. If we fail, it is our fault. We have not devoted enough thought and attention to the case. We have not selected the proper form of occupation. We have left undone something that we should have done. It is a difficult matter but we must fill in this time table so that there will be no opportunity for deterioration. We must find out what he does first when he rises in the morning, whether he rises promptly, whether he can assist with the

morning work, and also what he would do if left to his own devices. In short every hour of the day must be considered separately and filled in, if possible, with some occupation so that the patient will feel that at all times there is something depending upon his promptness and punctuality. He must feel that he has his own particular work which no one else will do. This will arouse the patient's spirit and make him feel that there is a responsibility resting upon him. It develops his self-reliance and makes him feel that he is still of some use in the world. These responsibilities placed upon him must of necessity be very light. It may be nothing more than going to the gate for a newspaper or carrying a report book to the office or keeping an account of the newspapers on the ward. Soon we will find that he is very jealous of these duties and some day he will come to us with a suggestion as to how he could do this work in a better way, and then we are satisfied, because we know that in one instance his attention and interest are aroused and we arrange new duties for him and place more confidence in him. If this plan is carried out persistently and intelligently it will do a great deal towards making the patient more satisfied with his position in the Institution.

But we must have some carefully arranged programme so as to include everyone and interest everyone and to employ the time of everyone. What shall this occupation be? We cannot give any one line that will suit every case, nor will we promise that we can give one prescription that will suit two cases but we will try to mention several forms of occupation that may be modified, so as to benefit many cases, and, in order to carry any of these ideas into effect, we must first have plenty of good intelligent nurses, either male or female. The old idea of two men taking care of 50 or 60 patients while other attendants are ploughing or doing carpenter work is impossible. We must have enough nurses so that the patient is under constant observation all day long. If one nurse attempts to

look after 15 or 20 patients, the result always is that, when he is occupied with one or two men, the others sink down in some out of the way place and are forgotten. Again, these nurses must be intelligent. They must have some idea of the end that is desired; they must have an abundance of patience and sympathy. A man may make a good farm laborer and still be entirely unsuited for this work, and a young woman may be a good dressmaker and entirely lack the tact, patience and sympathy that must be constantly used when dealing with the people in an Asylum. Again, I want to say and to emphasize it that nothing can be done without plenty of healthy, intelligent nurses.

One of the simplest and best occupations that we know of is some kind of game on the ward. It may be cards, as euchre, whist, cribbage, or it may be checkers, chess, carpet balls, or billiards. Any of these games help to arouse the interest and hold the attention of many patients at the same time, and as nearly every patient who is admitted has learned to play some of them, it is easy to get him to take part in the game again. These games are very valuable, not only as a means of providing occupation and directing and educating the attention, but they also have a very important bearing on the patient's self-respect. It always pleases him to sit down at a table with three or four other men and engage in a contest that requires some ability and astuteness. Just here it might be suggested that a whist tournament or a progressive euchre party, not only provides occupation and amusement for one evening, but will arouse the attention and create an interest for days before and weeks afterward. A contest of one ward against another, if judiciously managed, is of great benefit.

Games such as these give the physician or nurse an acquaintance with the patient that it is very difficult to get in any other way. You become much more familiar

with his tastes, his wants, and his trouble, and anything that brings the physician or nurse closer to the patient is surely worth while. Consequently these games arouse the patient's self-respect and self-interest. They place him on a level with others who are not patients and make him forget for a few moments his unhappy lot in life.

After inside games we must mention for a minute dancing, music, concerts, etc. All these interest and amuse the patient, particularly if he is encouraged and urged to take part in the exercises. Many patients are made to improve by placing them in a choir that spends one hour each day in singing. In other cases dancing lessons arouse the patient's self-respect and in a short time he shows an interest in his personal appearance. He soon expresses a desire for new clothes and appears for his lesson bright, clean and neat.

Now I will mention a form of occupation which seems to suit a greater number of male cases than any other. I mean forms of exercise in the open air. In these we get three-fold benefit of the exercise, the holding of the patient's attention and the fresh air treatment. Among the most suitable of these for our Institution, I would like to draw attention to lawn bowling, curling, skating, tennis, cricket and baseball. Any of these sports, if encouraged, will accomplish wonders with some patients. The danger is that a few will monopolize the game, so we must be very careful to get our new patients to take part. Unless the new patient is promptly initiated into the mysteries of these games, we soon find that it is hard to get him started. Every degree of deterioration makes it that one degree harder to arouse the necessary interest that is required to take part in a game. Skating should be mentioned particularly because it is so difficult in the winter time to find amusement, recreation and exercise outside the wards. Nearly all forms of outside work are necessarily stopped, and, unless we can get our people

outside, our halls become crowded, foul smelling and unhealthy. In our cold climate, where for so many months, it is impossible to keep patients outside, I believe that a large, commodious skating rink with well heated sitting rooms is an absolute necessity.

I have reserved until the last, a form of occupation that we, in London, have found particularly useful. I speak of calisthenic exercises and military drill. Every male patient, as soon as admitted, if considered a suitable case, is given in charge of our Drill Instructor for two hours each day. He is taught to march, keeping step with others, to turn and to form fours. He is taught various exercises that are recommended by those who study physical culture, and in every case marked improvement has been noted. This is an exercise that can be utilized on the ward or amusement hall when the weather prevents the patients going out. We find that our people are very fond of it and nothing that I know of seems to brighten their lives and cheer them up more than this very simple drill. In fact every day some patient comes to us and asks to be admitted. We hear them discussing it among themselves. They claim that No. 2 is a good man or No. 7 puts every one out, and anything that attracts their attention and arouses their interest to such a degree must be good. This is not a new idea at all for in the annual report of Rockwood Hospital for the year 1895, Dr. Forster wrote a short article on the same subject, drawing attention to the many benefits that were being derived from it there, and I think too much attention cannot be given to the matter, so I will, with Dr. Forster's permission, quote it here.

"One of the serious problems that confronts asylum officers is how to reach a class of dements with some rational and scientific treatment, by which they may be aroused from their lamentable condition of stupidity and inertia. These are eyesores to us on our daily rounds,

and we stimulate our nurses to fresh efforts to arouse them. All their ingenuity is applied to get them occupied in some of the familiar and good employments of the Institution. How often there is utter failure! Many young patients promise a score or more years of this life of nothingness, and to become a burden to the hospital, casting a gloom over the acute cases recently admitted.

It appears to me that physical culture holds forth some encouragement to us in the way of treatment for such cases. So much good has been accomplished by giving physical drill a prominent place among the many methods of treatment here! This was introduced more than five years ago by the medical superintendent and has been carried on in what was called, in old times, the refractory ward. Some facts may be gleaned from this experience. The men who used to sit along the wall are now drilled, and can muster in a way that is a marvel to every visitor. From the ranks patients have been drafted for work with outside parties, so that instead of three or four there are now over twenty men off this ward allowed their comparative freedom. These men are not physical wrecks, but straight, hardy, tidy fellows. Their general conduct has been favorably influenced for fights and black eyes are rare occurrences in comparison with the record of these before drill was introduced. Another important fact is that of those under this physical training not one has passed into secondary dementia with stupor.

There is food for reflection for us in the results derived from systematic class exercises as practised in institutions for idiots and weak-minded children. Dr. Seguin's case, a boy eight years of age, became an idiot through infantile convulsions. Any motive power which he had was most simple and automatic, yet by a scientific development of this he accomplished a gradual extension in those movements involving the will. By carefully broadening his field of action and observation he was

able to enter a school for ordinary children and do fairly well at his lessons.

In the Elmira Institute, Dr. Wey improved his class of so-called dullards very much. Why then should a dement be beyond this process of development to the extent of getting her interested in some work? Such work she is unable to do because she has not the will power to execute the skilled movements required for it. This may be brought about by exercising those muscles of the trunk and limbs over which she has nervous control. Have her gradually extend these movements, by obeying the commands and imitating the motions of the drill instructor until she will acquire those more complicated peripheral movements of the hands. This done, our patient can soon be taught the handicraft of some simple and profitable work.

Exercise has a wholesome influence over the patient's general health.

One-fourth of the blood in the body is contained in the skeletal muscles, and it is through the activity of these that a large portion of the potential energy of the body is turned into work and heat. Thus the activity of these muscles, involving waste and repair will lead to increased nutrition, and have a special influence on the circulation and the number and depth of the respirations. Extra work will be placed on the skin, liver and kidneys. In some cases of dementia, where the urine was examined, we found a most marked relative and absolute diminution of the solids in comparison with the normal quantity. The percentage of urea was very low. While we thus look for improved general health, it is more particularly to the cerebro-spinal system that our effects for improvement must be directed. Whereas it is not demonstrated in pathology that the brain cells are totally changed in dementia, nor that there is a pathological condition beyond the atrophy of the grey matter of the cortex. This

atrophy may be largely a result of lack of function, since disuse of the end organs, both sensory and motor, leads to atrophy of their nervous connections. It is evident, though hard to prove, that the exercise of these nerve fibres and grey matter nerve cells, through muscular activity, will result in an increase in the nerve tissue and a wider field in its association with co-ordination and the demands of the will.

Impressed with the theoretical value of exercise as a therapeutic agent, we have selected a class of seventeen of our hopelessly demented women, their ages ranging from twenty years to forty, for trial treatment. These cases have been for years in this condition. Prior to commencing the drill we made examinations of the blood and urine, took notes on their general condition, had each patient weighed and measurements taken of the chest girth, arm and forearm. The following routine has been prescribed for daily practice: Cold sponge bath at 6 a.m., commencing with the water at a temperature of 80°. This will be gradually lowered. Then they use the rubber for polishing the floors for one-half hour. At 9 a.m. they go to the amusement hall for class-drill and calisthenics, these exercises to last one hour. In the afternoon they are all to be taken out for one hour's brisk walk.

This class has now been under the treatment, just mentioned, for one month. Such a trial would not merit giving the details of the result in each case. I hope to do this after an experience of six months. However, the improvement in many cases has been beyond our most sanguine expectations. A notable benefit has been in the patients sleeping better, and in their improved general health. The drill instructor is able now to command the attention of each member of the class. The majority are now engaged in either knitting or sewing for a part of the day. Those who have been very destructive in habits

have entirely given this practice up. Some have been so much benefited that you could hardly recognize them as the same patients they were six weeks ago. The drill is a tedious process, and has to be conducted with the greatest patience and ingenuity. Much of the credit is due to the man who has charge of the exercises. I fear for one who would succeed in such drill there would be many who would fail.

In addition to this class there is another being trained in the Delsartean drill. For this we have selected quite a different class of patients, and it has been adopted as a curative measure. A detailed account of this treatment will also be given after a sufficient trial."

We have yet the old reliable form of occupation to mention. I mean outside work. This can be carried on and at the same time give each patient some of the foregoing exercises for a hobby. A man may work in the garden and be a splendid bowler, also a good whist player, but nothing will blight his hopes more effectually than to ask him to go to the garden and hoe all day and bring him into the building at five o'clock and lock him up. The more useful a man is on the farm, garden or engineer's staff the more he has a right to demand from the staff in the way of pleasure and recreation, and if we, as Asylum officials, ever pass over some of our old cases with a note that he is working well, without stopping to ask ourselves what we are doing for him, then we most certainly are using our positions to impose on him. We are not giving him what he has a right to demand but, of course, in his position he can make no effective complaint. Any form of outside work is good but the patient's tastes should be studied and his propensities considered. It would never do to place an impulsive patient where he would have to work with an axe or a depressed and suicidal case where he would have an opportunity of hurting himself. All that can be done in this way is to select the kind of work

which the patient is to do and then be careful as to the feeling that exists between the patient and the attendant who goes with him. They must be friends or every day they are compelled to work together is bad for the patient.

A more preferable form of work, where it is possible, is to send the patient out alone. Of course this cannot always be done, but I believe that it can be done to a much greater extent than we are doing. Occasionally we all have seen some patient trusted who betrayed the confidence and left the Institution, but twenty times as often have we seen good reliable trustworthy men herded in gangs and locked up behind heavy oaken doors. We must always be careful that our Institution does not assume the appearance of a prison. Some will say, "Oh! you must guard the patient; the public must be protected," but to these we are compelled to answer, "the patients must be protected," and if we, who are responsible for a case, believe that it is in his interest to be outside and working by himself, what can we do? Even if at some time he should walk away from the place, what great harm is done? How long is it since any of us saw any damage done by an eloping paatient? In this Institution we have about 200 patients who are never locked up and about 100 more who are trusted the greater part of the time. This year we have had several patients wander away but all of them were returned to the Institution in a few days and in many cases the visit home seemed to do them a lot of good. It has probably cost in the neighborhood of $50.00 to pay the expenses of patients who have walked away, but in what way can $50.00 be spent better? Had we hired enough attendants to watch these patients all the time and had we carefully locked them up at night, we could possibly have prevented the escapes, but the Institution, instead of being a home for a lot of people, would then be a prison.

It is surprising how patients improve when they find that they are trusted. All of us know men and women,

Cottage for Chronic Patients, Hospital for the Insane, London, Ontario.

who at one time were guarded particularly to prevent escape and who, when put upon their honor and allowed the freedom of the grounds, at once changed in disposition, became much more pleasant and proved beyond a doubt that they were entirely worthy of the confidence placed in them.

Here let me draw attention to our three cottages; each of them provides accommodation for 30 men and 30 women. In each cottage lives a man and his wife, also one other woman who assists with any work about the place. These cottages are never locked. The patients can go outside as early in the morning as they wish but they are expected to be punctual at all meals and we try to get them to retire at night at 8.30. In the evenings the men will be found sitting on the verandah enjoying a smoke or walking about the grounds. Each of these men has his own work to perform. Some go to the stables, others take care of the fowl, while some go to the green houses and they all go and attend to these duties regularly and promptly and none of them seem to require the constant supervision of a attendant. When we look at these patients and compare them with other patients who have resided as long in the Institution we can not help but be impressed by one or two striking differences :—

1st. Although all of these patients have been living here from 10 to 20 years all of them keep themselves clean and neat, whereas among other patients who have not been treated in this way we find that many have lost every interest in life, many of them wet and soil their clothing and bedding.

2nd. The patients who look after themselves are all interested in the news of the world. They read the daily papers or they keep in touch with the outside world in some way. This one fact, I think, recommends the advisability of giving this class of patients more liberty, more freedom and more confidence.

In summing this whole question up, we can but say that these cases that tend toward Dementia require individual attention. This is the secret of the question and the Institution that is best able to give individual attention will most surely do the most good and in the end will have least to do because a great majority of the patients will soon become self-sustaining.

Again, if this individual attention is given I believe that the morning report of so many beds soiled and so many sheets torn will be unnecessary. I myself have never yet seen a recent case of Dementia Præcox that received individual attention degenerate or deteriorate into a filthy destructive patient, but I have seen patients who were neglected for a time sink down into that hopeless state and if the patients' interests do not make a demand strong enough, surely the extra expense of keeping a patient who destroys clothing, breaks windows, and smashes furniture will in time make us all recognize the fact that the day has gone by when we can herd our patients like so many criminals. We must find employment for the idle hands and for the idle minds and this employment must be of the kind that will hold the interest and focus the attention of the patient for every minute of the time that the patient is awake.

H. C.

MELANCHOLIA VERA.

Of the seven cases that have been diagnosed as belonging to this class, five were men and two were women. The ages of the men on admission were, 55, 51, 55, 57, and 56 years. The ages of the women were 45, and 58 years. These are about the ages in which we expect the onset of this disease. Usually until middle life people are hopeful and cheerful. They always expect to live down every trouble, but after an individual has passed the

climax of strength and ambition, life does not seem so hopeful, and this disease seems to be the natural product when despondent or troubled.

All of these seven patients were industrious and healthy people. In none of them does a history of family psychosis seem to play any part, but in all of them the trouble does not seem to be without a material basis. In the case cited the man misappropriated money and the fact had been made public. In No. 2 case the patient's daughter had given birth to an illegitimate child at 15 years of age. In No. 3 case the patient's husband had been sick with unresolved pneumonia, and in bed fourteen weeks and the patient nursed him, and worried a great deal over his case. She also had some financial worries. In No. 4 case the patient had been threatened that he would be murdered. This seemed to have a very important bearing on his case, as we have discovered that his fears were not without foundation. In No. 5 and No. 6 cases the worries were about the sins of the past life, and as the patients were of a very religious character this worry had become abnormal. In No. 7 case the patient was alcoholic and we cannot get any history of any other worries.

All of these cases were quite self-contained people. None of them had taken any interest in public affairs and none of them were educated people. In fact the son of the one patient claims that his father's present condition seems to be merely an exaggeration of characteristics he had displayed all his life. He had always magnified small troubles. He had never been intimate with any of his neighbors and he had always seemed apprehensive of the future. As indicated in the case cited, the treatment of these cases consists in procuring sleep and increasing the weight. The trouble nearly always begins with loss of sleep and loss of weight, and all of the patients were under weight and sleeping very little when admitted.

This restlessness and sleeplessness can be improved greatly by the judicious use of hot packs, and by prolonged warm baths; plenty of fresh air also is of material benefit. Sunlight seems an absolute necessity in these cases. All of them seem much brighter and more cheerful on bright sunny days. The weight can only be increased by giving the patient plenty of rest in bed and plenty of easily assimilated foods. The prognosis is in most of the cases rather hopeful although the patient may never return to his normal condition. Still many of them recover sufficiently to go home and take up some light occupation. The usual course of the disease is from one to three years.

Of the cases belonging to this classification, probably the most typical one is that of a man aged 55 years, admitted February 25, 1908. The family history of this patient is good although we learn that one cousin was insane. He was bright when a boy, learned a trade and has worked steadily all his life. He drank moderately, but friends deny that he was ever an excessive alcoholic. The patient claims that his trouble began six or seven years ago when he began to worry over little things, but friends claim that they noticed nothing wrong until the night before Christmas, 1907, when he seemed very depressed and "not like himself." About this time they also noticed that he was not sleeping as well as usual. During the month of January he worked steadily but claims that it required an extra amount of effort to do the same amount of work he had formerly done. He seemed to tire very easily and he could not keep his mind on his work.

One night about the 1st of February he came home in a very depressed condition and asked his wife's forgiveness because he said he had committed a terrible sin which would ruin the whole family. When questioned he accused himself of having taken money that did not belong to him. On investigation it was found he had misappro-

priated a few dollars of trust money, which he could easily have returned, but instead, he thought that he and his family were ruined forever. About this time his employer noticed that the patient would suddenly leave his work, and go and listen at the office door. He seemed to suspect that they were talking about him or plotting against him. One day he accused his employer of conspiring against him. Shortly after this he left his work, went to the police station and gave himself up. His wife came and took him home, but he would not take off his hat or eat his dinner because he said the police would be after him in a few minutes. He finally developed the delusion that his son was dead and had been killed by the sins of his father. These delusions easily lead to the belief that his family had turned against him, and on the morning prior to his admission he jumped through a two storey window and fell to the ground. On admission the patient was very much disturbed. We found him wringing his hands, moaning and repeating to himself, "Oh, my ! Oh, my ! what will I do." It was impossible to secure the patient's attention long enough to carry on a conversation with him or get any reliable information from him. His ideas were so self-centred that everything he said had some reference to his own troubles and worries. He was very introspective. He would not sit still or lie in bed quietly, but was very restless and continually on the move. His memory seemed good but his judgment was very bad. He was correctly oriented as to time and place, but he had some peculiar ideas concerning his own stomach. He said that nothing passed through it, and since that time he has been continually asking for some form of laxative. Physically the patient was very well developed but rather emaciated. He weighed about 110 pounds which was probably 20 pounds under normal weight.

On the night of February 29th when sleeping in an associate room, he, without any warning, sprang out of

bed and attacked another patient without cause. It required the constant attention of three attendants for several hours to quiet him. He claimed that this patient was about to kill him. The next morning he apparently knew nothing about the incident. At this time he was very much afraid of the future. He imagined all sorts of things were going to happen to him. He was suspicious and asserted that he could hear the attendants plotting to kill him.

The patient was presented in conference on March 13th and diagnosed as the self-accusatory form of Melancholia Vera. All present agreed in this diagnosis, and it was concluded that our attention should be directed,—1st, To procuring sleep, and secondly to increase his weight. A complete physical examination was made and the patient showed no evidences of stigmata. His heart and lungs were normal and urine analysis showed nothing special.

Since admission the patient has improved a lot although at times his sleep is irregular for a few nights, he usually gets about five or six hours' sleep out of the twenty-four. His weight has increased to 120 pounds, and his appetite is good. His general appearance is much better than when admitted. At the present time his fear and apprehension of the future are not so marked as when admitted. He does a little work about the lawn and has several times entered into general conversation. During the past nine months he has been seen to smile only two or three times. His mind now may sometimes be drawn away from his trouble, but in a very few minutes he returns to the old thoughts. He has two or three times gone to his home for a day, and he seems willing to return to the Institution, as he realizes that he is not well enough to trust himself yet. Although the patient is very far from well, his condition is improving and examination of his sleep and weight charts, and ward notes shows that the improvement has been slow and gradual.

H. C.

ALCOHOLISM.

During the six months ending September 30th, 1908, there were treated in our Hospital six cases of Chronic Alcoholism, five males and one female. This number is too few to enable us to make any general deductions, but, because it bears a very small proportion to the total admissions, we must not hastily conclude that only in these cases can the insanity be said to be due to alcohol. In some of the cases admitted to our Hospital for other forms of insanity there was an alcoholic history during some period of their lives and in others a close scrutiny of the family history showed marked evidences of alcoholism in preceding generations.

Undoubtedly many patients admitted to Insane Hospitals, whose personal history shows no evidences of alcoholic excesses, are bearing a burden transmitted to them by their fathers.

It will be noticed that during the period under review there have been no cases of acute alcoholism admitted to the Hospital. The law respecting the admission of patients to a public hospital for insane would seem to be broad enough to include those suffering from delirium tremens, but no application was received for the admission of any patient suffering from this disease. The lot of this most unfortunate and unhappy class, in some of our Canadian communities, is indeed a hard one. He is looked upon as a pariah by the General Hospitals, who refuse him food or shelter or medical aid. If it were not for the open door of the common gaol he must die in the streets and unfortunately before he can reach this place of refuge he often spends from twelve to twenty-four hours in the cells of a police station. It seems hard to believe that any charitable institution could close its doors in the face of a man suffering from delirium tremens.

Under the law as it now stands the ordinary alcoholic who has not yet reached the delirium tremens stage is

debarred from treatment in our public hospitals for insane. His drunkenness is looked upon as a crime and he also is sent to the common gaol to expiate his offence by a thirty days' sentence. One would think that a daily perusal of the police court news would soon convince our law makers of the futility of this form of treatment. Relapses are the rule not the exception and it is probably true that no drunkard was ever cured of his disease by being sent to goal.

If in the practice of medicine any form of treatment were pursued which never produced a cure, but always left the patient in a worse condition than it found him, such a method of treatment would not last long.

Another class of alcoholics who are excluded from treatment in our public insane hospitals are those who voluntary desire to cast out the devil which enslaves them. Owing to the vagaries of the law these patients are permitted to place themselves in a private asylum only, and it is scarcely necessary to point out that such treatment is available to a very small percentage of the habitual drunkard cases.

A third class of habitual drunkards who are excluded by the laws of the Province from the hospitals for insane is that very large one whose alcoholic excesses have rendered them incapable of managing their affairs, who squander or mismanage their property; who place their families in positions of danger or distress, who transact business in a manner prejudicial to the interests of their family or creditors, who incur danger of injuring their health or shortening their lives or who do many other things set forth in section 100 of the Act relating to Private Asylums. This section is so broad as to practically include every man who takes liquor to excess and the friends or relations of such a man by taking proper action before the County Judge can have him committed to a private Asylum for a period not exceeding one year. By this

act our law makers clearly recognize the importance of proper treatment for habitual drunkards. They have thus far failed to carry out the logical conclusion and provide places where such treatment can be secured, or amend the laws so as to allow all these classes to receive a prolonged course of treatment in the public hospitals for insane. It would seem as if every facility were provided by which the wealthy man can be treated for the alcoholic disease, but for the poor man or the indigent who has not yet reached the stage where he can be certified to as insane no provision whatever (except the gaol) is made. Only those poor derelicts, whose long continued indulgence in alcohol has produced such organic changes in the brain and other organs that a complete cure is not possible, and whose usefulness, in any event, either to their families or to the community, is practically ended, can secure admission to the public hospitals for insane.

The question may well be asked: should the doors of our already overcrowded hospitals for insane be opened to this large class of new patients? It is not proposed at the present time to discuss the question as to whether the drunkard could be best treated in insane hospitals or in special hospitals for inebriates, further than to say that we should make use of the means we have at hand until better are provided. The former class of hospitals are already in existence—the latter are not.

Our insane hospitals at the present time are so overcrowded that action to relieve this condition cannot long be delayed. Additions to every existing institution or new buildings in new centers are urgently required. If, when this is done, accommodation were provided for even a portion of the large class of inebriates and admission placed on the same basis as admission to private asylums an immense step in advance would be secured, and the course of many lives now wasted and utterly useless would be changed.

Case No. 5895, admitted to the Hospital, May 1, 1908. Age 56, occupation farmer, born in Ontario. Family history negative. Patient married at 19 and had six children, four of whom are alive and healthy and two died in infancy. The early history of this patient is somewhat meagre and uneventful except that it is stated, "He had been a heavy drinker most of his life."

Up to four years ago he was very strong and healthy, but about this time he began to fail physically, was unable to sleep and began to lose flesh. He became nervous and irritable and very suspicious, imagining that people were after him and wanted to take him away. He was apparently suffering from auditory and visuary hallucinations as he could hear these people talk and also see them. He said they wore false faces. He was restrained in the house with difficulty as he wanted to get out and kill these imaginary people. This attack lasted about six weeks when he became quiet, slept and ate better. He never has been himself since this attack, being depressed and melancholy, taking no interest in his surroundings, but becoming very much excited in the presence of visitors even when these were old friends. From the beginning of his illness he showed marked jealousy of his wife, stating that she was unfaithful to him, and that she received visits from men in his absence, and even claimed that men were in the house while he was at home. He would frequently get out of bed to search the house, even looking under the carpets to find these imaginary persons. During this period his health was not very good. He was not able to work, and apparently was consuming a good deal of alcohol in a clandestine manner. For the three months previous to his admission he became more restless and excited, and slept very badly. About five days before his admission his delusions became more marked. He was constantly searching the house for invisible men. He talked continuously about his wife's infidelities and thought he would have to kill her, "although he would

probably be sorry if he did such a deed." He was very restless and excited and wanting to leave his home and did not want to live any longer with his wife because she had other men in the house. He was very emotional and would cry a great deal, saying that he felt so badly he could not refrain from crying.

Patient was admitted to the Hospital on May 1st. The ward notes state that at first he was stubborn and quiet but soon became excited and refused to take food, claiming that it would kill him. He was ordered a warm bath at a temperature of 98°, continuing for 25 minutes. This had a quieting effect and he slept for upwards of half an hour. He again became very restless and excited, throwing himself out of bed, and pounding his head on the floor. He was put back to bed, given hot milk and although restless and disturbed slept three hours during night.

During the next day he was very much disturbed and thought he heard conflicts on the halls and that people were calling for help. At 12.30 he was given a warm bath, temperature 98°, lasting for 25 minutes. After this he was quiet for an hour and a half. At 4 p.m. the excitement returned and he was given another bath. His temperature at this time was 99, pulse 100, and respiration 20. He now became calm and quiet, but refused to eat. Consciousness was quite clouded. About 7.45 p.m., the patient got out of bed and fell on the floor in a state of collapse. The extremities were cold, the face blanched, and the body covered with cold perspiration. The pulse could scarcely be felt at the wrist and there was every appearance of impending death. While in this state his bowels moved very freely. He was placed in bed, dry heat applied and 1-30 gr. of strychnine given hypodermically. The pulse improved somewhat and he rested at intervals, but during the night his condition was most critical. It is not probable that this collapse was due to

the warm bath as it was given under skilled observation and the pulse was only 100 when returned to bed. An interval of 1½ hours also had elapsed after the bath.

The patient rallied somewhat the next day when the stomach was washed out and ten ounces of peptonized milk given with four ounces repeated every two hours. He was now feebly restless, but obtained snatches of sleep and had involuntary passages of urine, tongue deeply furred dry and brown. Towards evening the catheter was passed, resulting in 24 ounces of urine. The urinary analysis at the time showed that the urine was acid S.P. 1022 with marked excess of Indican and trace of albumen. Pus cells and granular casts were also found.

May 6.—No sleep during the night. Was actively restless and noisy. Motor power returning but no clearing of consciousness; fourteen ounces of urine passed by catheter at noon. At 6 p.m. was restless, talking and pulling at bed clothes. Took milk freely during the day.

May 7.—Slept seven hours during the night. Normal saline by rectum. Took food very well, restlessness subsiding.

May 8.—Decided change in symptoms, becoming quiet and passive. Slept twelve hours and is drowsy all the time. Complained of stiffness and aching in the left leg. Knee reflexes normal in left side, but feeble in right.

May 9.—Drowsiness continues; slept twelve hours; bowels moved freely.

May 10.—Consciousness is clearing and patient much brighter.

May 11.—He is quite disoriented as to time, place and person, but knows he is ill and that a doctor is in attendance. He has little insight into his own condition. His conversation is wandering and he has many falsifications of memory. No evidences of hallucinations have been noticed for several days. His spontaneous and voluntary attention is good.

May 12.—Pulse 100. First sound of heart weak. Tongue still coated with brownish gray fur. Was given calomel, followed by 2 ounces of castor oil. He showed symptoms of excitement during the day and at 5 p.m. became delirious with fear, calling out, "Oh! don't kill me." He was now placed in a bath at a temperature of 98°. He resisted everything in the most determined manner. Bowels moved freely. About 6 p.m. the patient became drowsy and was put to bed and given warm milk. He rested in bed quietly until about 3 a.m. when he again became restless and noisy. He was given warm milk, became quiet about 5 o'clock and slept well for four hours.

May 13.—Congestion of face has disappeared. Tongue still coated. He can talk lucidly for a short time but soon wanders and imagines people are being killed on the ward.

May 19.—During the past few days patient improved to such an extent that he was dressed and sitting on the veranda. His mind is brighter and his conduct good. He still complains about the left leg. The motor power in the right much reduced and he complains of numbness in his feet and hands. In walking he has a shuffling gait and drags the left foot.

June 2.—Patient slowly improving and the left leg, though weak, is gaining strength.

June 22.—Still complains of left side but is sleeping well every night and is generally improved. He still has delusions about his wife and thinks he can never live with her.

June 28.—Admits that he was all wrong about his wife, and says that she was always a good wife. He also says he was wrong about his children as he thought they were all dead but now knows they are alive.

July 25.—Patient went home to-day in very good condition.

September 30.—Patient is steadily improving.

W. J. R.

MORPHINISM.

Another class of patients who occupy exactly the same position as the alcoholic in the eyes of the law are the drug habitues.

These, if possible, are more to be pitied than the drunkard, for the latter, if his moral fiber is not entirely destroyed, sometimes effects his own cure. The drug habitue, however, cannot unaided, overcome his desires, and to effect a cure, isolation in some institution is absolutely necessary.

Under our present laws the private asylums only are open to him. The number of this class of patients in the Province is not large, and, even under existing conditions, could probably find accommodation in the public hospitals for insane. These patients, if taken in an early stage of the disease, would respond readily to treatment and a large percentage of cures would result. It is hard to imagine any valid reason why the law should not be amended so that this class could receive the benefits of the modern methods of treatment employed in our public hospitals for insane.

Only one case of this class was admitted to our Hospital during the period under review. This patient, a female, had taken morphine in large quantities, sometimes 30 grains a day, for upwards of ten years. When admitted she appeared to be a total wreck both mentally and physically, and for many weeks showed no signs of improvement. The morphine had been completely taken from her some weeks before admission and none was given to her afterwards. After about 3 months' gradual improvement began and at the present time says she feels better than she ever did in her life, having gained upwards of fifty pounds in weight. She says she has no further craving for morphine and is anxious to return to her work as a trained nurse. This case illustrates very

well the absurdity of the law which refuses admission to these patients until after years of indulgence they can be certified to us as insane. The hopeful period for treatment has long passed and relapses will recur in a large number of such cases.

W. J. R.

PSYCHO-NEUROSES.

There were 6 patients classified under this heading, 2 men and 4 women. Two women and 1 man were suffering from acquired Neurasthenia. One man and one woman had Huntingdon's Chorea, and one woman had Paralysis Agitans.

Case.—Female, age 39 years. She had been ill at intervals for three years and had consulted various physicians and been treated in different hospitals. She became incapacitated for work, was very self-centered in her thoughts, and felt much depressed and feared that she had cancer. She had a subjective sensation of heat passing up and down her spine, some headache and emotional instability. She was discharged, after a short residence in the Hospital, unimproved.

Case 2.—Female, age 56 years. This patient gives a history of different nervous attacks occurring at intervals during the past ten or fifteen years. The present attack began after nursing a son through a fatal illness. She lost sleep, became extremely nervous and unstrung. The night after the son's funeral she tore off her dressing gown and said that she was afraid she was going to die, and threatened to kill herself and another son, who restrained her, saying, "I am in an awful state. There is a red hot feeling over my stomach and across my chest and throat." She also had a feeling of numbness in her head and of pins and needles in her hands. The patient gave this history voluntarily. She was well oriented and had

no clouding of consciousness, and denied all hallucinations and delusions. Her memory was good. There was no slowing of thought processes. Her attention was weak, but there was no apathy or indifference. She had an insight into her own condition. Her psychosis was marked by emotional storms rather than intellectual disturbances. The patient's weight was 10 or 15 lbs. below normal; otherwise her physical condition was good. Her knee jerks were quite active. She was treated by rest in bed, full feeding and general tonics. In the course of ten weeks under treatment she had gained her normal in weight and was sleeping regularly eight or nine hours. She became generally interested in different good works and was not at all introspective, self-centered, apprehensive or fearful, but was quite confident and hopeful, and in every way regained her normal, and was consequently discharged recovered.

Case 3.—Male, age 59 years. Twelve years ago he had an attack of Typhoid Fever, since when he has not been as strong and has complained very much of Dyspepsia. He was nervous and very introspective, he had read various books on the ailments which he complained of and planned his own treatment and succeeded in half starving himself. He had not been engaged in any business at this time, but on being advised to have some occupation, he purchased a business. The duties incurred by this, although not great, he was totally unfit to carry out, and he said it took a lot of effort to do a small piece of work. He made a couple of suicidal attempts, once by trying to drown himself in the bathroom, again by cutting his throat. He felt so discouraged about himself and by some investments which he made that did not turn out to be profitable. He had no delusions nor hallucination. His store of ideas was not limited. Upon admission, he was put on a general and full diet. He gained in weight, and was later discharged, improved.

Of the two cases of Huntingdon's Chorea, the man was admitted July 30th, 1908. His mother had died in this Institution from Huntingdon's Chorea. Two sisters and several maternal relatives are said to have died of Consumption, but the informant has made such unreliable statements about this case that this may also be mistrusted. He told me that the patient's mother died of Consumption, whereas she did not, but died as stated above, so that it is not improbable that the different maternal relatives had this choreic disease though we have no means of ascertaining this. When admitted, the patient was in a delirious condition, throwing himself about, and it was a puzzle how to prevent him injuring himself. A warm bath did not relieve him, and he was finally placed in a hammock in the shade of the trees, under the care of a special nurse, who sponged his head and hands with cold water. In this way he would doze off in short periods of sleep, and within a few days the acute symptoms of the disease had subsided, leaving the clinical picture of Huntingdon's Chorea. There was general mental reduction and his physical symptoms were characterized by twitchings of the hands and feet. These twitchings of the muscles also affected the shoulder and the sterno-cleido-mastoid muscles, causing the head to jerk. There was also twitching of the eyebrows. His speech was feeble and explosive. There was absence of Kernig's sign. The reflexes were normal, also the Plantar reflex. Urinalysis was negative and there were no evidences of other physical disease. After two weeks' residence he had a recurrence of his delirium from which he died.

Dr. John A. MacGregor of The Western University made the Post Mortem Examination, and reported as follows on the Brain condition :—

The external surface of the dura appeared normal and was non-adherent. On the inner surface, over the right

hemisphere overlying the posterior portion of the frontal lobe, and the greater part of the parietal lobe, and extending almost to the longitudinal fissue was a hemorrhagic fibrinous exudate, the deeper layers of which were undergoing organization. At its centre this exudate was about 7 M.M. thick and gradually shelved toward the periphery.

At the base of the Brain, especially in the middle fossa and extending along the Medulla and upper part of the cord, (the Spinal canal was not opened) was a fibrino purulent exudate involving the Pia.

The convolutions beneath the hemorrhagic exudate were compressed and atrophic. The rest of the Brain surface was moderately oedematous, especially in the Vertex.

The woman with Huntingdon's Chorea has been in the Institution for years and was only sent to the Hospital for observation. The disease has advanced so far that her mind is in a state of profound dementia. The interesting feature in her case is the family history.

Her paternal grandfather had Huntingdon's Chorea. Her father escaped, but of his six children, five were victims of this disease, the remaining one being healthy.

Of the descendants of her grandfather, in the first and second generation, there have been nineteen cases of Huntingdon's Chorea, to date.

In the case of the woman with Paralysis Agitans, age 49, the disease began between four or five years ago with tremor in the left hand, passing afterwards to the left foot, and the right hand and right foot. The tremor was not marked at the time of her admission, but was observed only upon movement or exertion in sitting or standing. There was general rigidity of all the muscles. Her abdominal and thoracic muscles were involved. There was a contracture at left knee. While standing, the patient rested on the balls and toes of both feet. There was no incoordination on movement of the muscles.

Though weak, the power was not as much reduced as one would imagine when looking at the patient. She had the characteristic Parkinson face and attitude of this disease. There were no areas of anesthesia or analgesia, and she detected heat and cold well by the tests. However, she seemed insensible to cold; when exposed to low temperature she does not complain of any discomfort. She had the subjective sense of heat in her spine and feet. At the time of the onset of the disease there is a history of mental depression, and the patient made at that time two separate attempts at suicide, once by throwing herself into the cistern, and again by taking hellebore which she vomited. At present the patient is very self-centered and states that one in her hopeless condition of misery should not be allowed to live. Her memory is good and she knows what is going on about her, appreciates kindness and is interested in doing some needle work. She remains in the Hospital unchanged.

J. M. F.
