No. 1. October, 1910 Vol. IV.

Bulletin

OF THE

Ontario Hospitals for the Insane

A Journal Devoted to the interests of Psychiatry in Ontario

Printed by Order of the Legislative Assembly

ISSUED BY THE DEPARTMENT OF THE PROVINCIAL SECRETARY.

PROCEDURE TO SECURE ADMISSION OF PATIENTS TO ONTARIO HOSPITALS FOR THE INSANE.

(1) Where the property of a patient is sufficient, or his friends are willing to pay the cost of the Medical Examination, the family Physician should apply to the Medical Superintendent of the Hospital for the Insane, in whose district the patient resides, for the necessary blank forms. These being secured, they should be properly and fully filled in, dated, signed in presence of two witnesses by the medical men in attendance. They are then returned to the Hospital, and if satisfactory, and there is accommodation, advice will be sent at once to have the patient transferred. See R.S.O., Cap. 317, sections 7, 8, 9.

(2) Where the patient has no property, and no friends willing to pay the cost, application should be made to the head of the Municipality where he lives, who, after satisfying himself that the patient is destitute, may order the examination to be made by two physicians, and a similar course to the above is then followed. The Council of the Municipality is liable for all costs incurred, including expenses of travel. See R.S.O., Cap. 317, section 11, subsections 1 and 2.

(3) Where the patient is suspected to be dangerously insane, information should be laid before a Magistrate, who may issue a Warrant for the apprehension of the patient, and if satisfied that he is dangerously insane may commit the patient to the gaol, or some safe place of confinement, and notify the Medical Examiners. The Magistrate should then send to the Inspector of Prisons and Public Charities, Parliament Buildings, Toronto, all the information, evidence and certificates of insanity. The costs incurred by this method form a charge against the County, City or Town in which such patient resided. See R.S.O., Cap. 317, sections 12 to 29.

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INTRODUCTION.

The Hospitals for the Insane and the Feeble-Minded in the Province of Ontario are at the present time caring for and treating 6,500 insane patients. There are in the medical service at these hospitals a staff of physicians to whose notice there is continually being brought a large number of interesting cases. The BULLETIN is intended to be a means of disseminating clinical and pathological data which is constantly accruing from the clinical studies and observation in the records now kept at each institution.

It is the desire of the Provincial Secretary to harmonize the medical work of these hospitals. Clinical records are kept of each patient, and at least two weekly conferences are held at each Hospital, when the members of the medical staff discuss the condition of patients, especially those recently admitted. Regular minutes of these conferences are kept, and the diagnosis and prognosis of each case under discussion are entered on the forms prescribed for that purpose. One of the objects of the BULLETIN will be to report some of the interesting cases at these conferences.

The scope of the BULLETIN will be confined to an expression of hospital experience and practice, deductions based thereon, and to pathological findings. It is the purpose to preserve and disseminate useful and interesting facts in connection with the treatment of the insane that would otherwise slumber undisturbed in case books and clinical records. Negative results will be recorded. Results in therapeutics and physical treatment will be freely used. Psychiatry has for many years received little or no attention from the general prac-

titioner of medicine, and largely because there was no direct channel by which inte. sting cases could be communicated. The BULLETIN will endeavour to bring the physicians of Ontario more directly in touch with the scientific work being followed at the different Hospitals. More than ever before in Ontario a progressive spirit animates the medical service in the Hospitals for the Insane, and the work being done fully justifies the publication of a special Journal being issued quarterly and sent to every medical practitioner in the Province.

TRAINING SCHOOLS FOR NURSES.

ONTARIO HOSPITALS FOR MENTAL DISEASES.

The Training Schools for Nurses of the Hospitals for Mental Diseases in the Province of Ontario, offer to young women desirous of becoming professional nurses, a thorough course of training in all subjects pertaining to their profession.

Those wishing to receive the course of instruction must make personal application to the superintendent. Applicants should be between 21 and 30 years, of average height and good physique, and must give satisfactory evidence of having a good general English education, and of ability to undertake the course of study. Applicants should bring a certificate from a clergyman or some responsible person certifying to their good moral character and qualifications, and also a certificate from a physician as to their good health.

Successful applicants will be given two months' probation, at the expiration of which time they will, if accepted, sign an agreement to complete the prescribed course of three years.

The course of instruction includes a thorough course in Anatomy, Physiology, Bacteriology, Toxicology, Materia Medica, Medicine, Surgery, Hydrotherapy, Electrotherapy, Obstetrics, Gynecology, Dietetics, Massage, surgical nursing, the general nursing of the sick, including;—the management of helpless patients, chang-

ing of bed and body linen, making of beds, giving continuous spray, sheet, sponge, vapor, hot air and medicated baths, hot and cold packs, the prevention of bed sores, bandaging, fomentations, poultices, minor dressings, preparation and serving of food, feeding of helpless and resistive patients, the administration of enemata, catheterization, observation of nervous and mental symptoms, the management of the disturbed, violent and suicidal.

Instruction is given in the best methods of preparing, warming and ventilating sick rooms, keeping utensils clean and sterilized.

A thorough course in surgical technique and operative procedure is given in the operating room of the hospitals. The nurses assist in the preparation of the operating room, in the preparation and sterilizing of all dressings, sponges, bandages, and in the preparation of the patient for operation.

The course in medicine includes the etiology, course and treatment, especially from the nursing point of view of all those diseases most frequently encountered.

The lectures are given at stated intervals, by the Hospital Staff, assisted by other physicians. The lecture term commences on the 1st October and continues until May 1st.

The examinations are conducted by a Board of Examiners appointed by the Honorable the Provincial Secretary. The examinations will be held in the second week of May.

When the three years' course has been completed nurses who have successfully passed all the examinations will receive a diploma and a graduating badge.

The pupil nurses will receive Thirteen Dollars ($13.00) per month during the first year; Fourteen Dollars ($14.00) per month during the second year; and Fifteen Dollars ($15.00) per month during the remainder of the course. They will also receive board, laundry and uniform. Two weeks' vacation is granted each year.

Course of Study.

Every student must spend a period of three years in actual professional studies as hereinafter provided.

First Year.—Anatomy, Physiology, Materia Medica, Bacteriology, General principles of Nursing.

Second Year.—Psychology, Psychiatry, Medicine, Surgery, Toxicology, General Nursing, Hydrotherapy, Massage.

Third Year.—Gynecology, Obstetrics, Dietetics, General Nursing, Psychiatry, Electrotherapeutics.

EXAMINATION OF NURSES AT HOSPITALS FOR INSANE.

The first annual examinations, under the supervision of the Honorable the Provincial Secretary, were held at the Ontario Hospitals for the Insane during the month of May. A Board of Examiners, specially appointed for the purpose, prepared the papers and conducted the oral examinations at the different institutions. The papers were as follows:

JUNIOR EXAMINATION.

Anatomy and Physiology.

All questions of equal value.

Note.—Only five questions to be answered.

1. What is meant by the circulation of the blood? Describe briefly its mechanism, and trace its course in the human body beginning and ending in the left auricle.
2. Name the bones of (*a*) the upper extremity.
   (*b*) the lower extremity.
3. Name the organs contained in the abdominal cavity. State the chief function of each.

4. Describe the functions of the skin.

5. (*a*) What changes take place in the air as a result of respiration? (*b*) What precautions in the care of the sick are suggested thereby?

6. Name the organs of elimination, and name the excretion from each.

7. Describe the process of digestion, naming the organs.

8. (*a*) What are the chief divisions of the brain?
(*b*) Name the other organs of the nervous system.

Materia Medica and Bacteriology.

All questions of equal value.

Note.—Only five questions to be answered, in which must be included one of the three last.

1. Name the different modes of administering drugs.
2. Name (*a*) a Cathartic.
(*b*) a Hypnotic.
(*c*) a Sedative.
(*d*) a Cardiac Stimulant.
(*e*) an Anodyne.
3. Name five drugs in common use, and give dose of each.
4. Name the different forms in which drugs are prepared for administration.
5. What are the best methods of administering the following drugs with a view to disguising the taste: (*a*) Castor Oil; (*b*) Quinine.
6. (*a*) Describe the methods by which the contagion of typhoid may be conveyed; (*b*) Briefly outline the steps necessary on the part of the nurse to arrest such contagion.
7. What part does the common house fly play as a carrier of disease?
8. By what methods is the contagion of tuberculosis conveyed? What measures would you suggest for the destruction of tubercle bacilli?

General Nursing.

All questions of equal value.

Note.—Only five questions to be answered.

1. Give (*a*) Normal pulse rate.
   (*b*) The normal rate of respiration.
   (*c*) The normal temperature of the body.
2. Describe briefly (*a*) Methods of feeding helpless patients.
   (*b*) Methods employed with those patients refusing food.
   (*c*) Outline in each case the precautions to be taken.
3. How would you sterilize a catheter for use? State how you would prepare and catheterize a patient?
4. Describe method of preparing (*a*) a linseed poultice; (*b*) a mustard plaster; (*c*) a turpentine stupes.
5. What are the different kinds of enemata, and how is each prepared?
6. What measures should a nurse take as a prevention against bed sores?
7. How would you prepare for and give a hypodermic injection of morphine?
8. What should be your procedure on the reception of a newly admitted patient?

INTERMEDIATE EXAMINATION.

Psychiatry and Hydrotherapy.

All questions of equal value.

Note.—Only five questions to be answered, of which one of the last two must be included.

1. Briefly classify insanity into its various forms.

2. What is a delusion? What kind of delusion would lead you to suppose that a patient was inclined to (*a*) suicide; (*b*) violence?

3. Describe a case you have witnessed showing hallucinations.

4. You are placed in charge of a lady suffering from senile dementia. How would you care for her in her home?

5. What are the symptoms of general paresis? How would you care for such a case in the final stage?

6. Give an account of any case of insanity which has recently been under your care, describing the mental and bodily symptoms as they appear during the progress of the illness.

7. (*a*) Give a brief estimate of the value of the continuous bath.

(*b*) In what cases is it especially indicated?

(*c*) What precautions are always necessary in its administration?

8. Describe method of giving a hot wet pack.

Medicine and Toxicology.

All questions of equal value.

Note.—Only five questions to be answered, of which one of the last two must be included.

1. Draw a temperature chart for one week, and mark upon it the morning and evening temperature in the typical case of pneumonia for the first three days.

2. Describe the symptoms usually met with in a case of scarlet fever. How would you care for such a case? What complications may arise in the last stages of that disease?

3. How would you care for a case of infantile diarrhoea?

4. Briefly describe the symptoms of (*a*) measles, (*b*) smallpox, (*c*) arterio sclerosis.

5. Describe methods of reducing temperature in the case of typhoid fever.

6. How would you avoid the danger of infection in nursing a case of tuberculosis?

7. Give a list of poisons in common use on your wards which must be specially guarded.

8. How would you treat a case of acute poisoning.
(*a*) From opium or any preparation thereof?
(*b*) Carbolic acid?

Surgery and Massage.

All questions of equal value.

Note.—Only five questions to be answered, of which one of the last two must be included.

1. Describe the preparation of a patient for an abdominal operation.

2. Briefly describe methods of sterilizing instruments and hands for a surgical operation.

3. A patient is discovered with her clothing on fire; How would you act, and what would be your subsequent care of the case?

4. A patient has fallen (out of doors) and sustained a compound fracture of the leg. What first aid would you render, and how would you move the patient to bed?

5. What symptoms would lead you to suspect retention of urine?

6. A patient thrust the hand through a pane of glass cutting the wrist. How would you determine whether the hemorrhage was arterial or venous, and what would be your procedure in each case?

7. For what purpose is massage employed in the relief of disease?

8. When is massage contra-indicated?

GENERAL NURSING.

All questions of equal value.

NOTE.—Only five questions to be answered.

1. What is the proper temperature of water for an ordinary cleansing bath? What rules are to be observed in bathing insane persons?
2. In caring for a patient with tuberculosis hæmoptysis occurs; how would you treat such a case?
3. Describe the preparation of a room for a typhoid patient.
4. How should a patient be prepared for a gynæcological examination?
5. Briefly describe the preparation of a patient for confinement.
6. When a physician has ordered an intra uterine douche, describe the method to be employed and the precautions to be taken.
7. What do you understand by the rest treatment? When is such indicated?
8. Briefly describe what you understand by a Test Breakfast, and under what circumstances may it be required?

The Primary or Junior and the Intermediate examinations were both written and oral. The final examination, conducted at the close of three years' training, was entirely oral and clinical.

The following is the list of the successful candidates:

Junior Examinations.—Passed.

London.—Atkinson, Mary; Ball, Florence; Flynn, Elizabeth; Gifford, Margaret; McGarrity, Kathleen; McGhie, Margaret.

Hamilton.—Brookshaw, Elizabeth; Cameron, Margaret; Carr, Ella M.; McGregor, Agnes; McNichol,

Lily; Planque, Sadie; Sharp, Sayde; Shaw, Cassie L.; Sharpe, May.

Toronto.—Boyer, Kate; Burne, Florence; Dodds, Gertrude; Heaslip, Irene; McDowell, Maggie; McCutcheon, Elizabeth; Stewart, Lilian.

Kingston.—Brown, Mamie; Grant, Clara; Harvey, Margaret; Hillier, Edith; Jennings, Kate; Kirkwood, May; Mulligan, Jennie; Murray, Kate; Murphy, Sadie; Patterson, Alice; Slade, Helen; Seeler, Maud.

Brockville.—Bigford, Luella; Frink, Leita; Hutchinson, Kathleen; Mallette, Minnie; Caffrey, Susan; Towsley, Edith.

Intermediate Examinations.—Passed.

London.—Clark, Lizzie; Parsons, Jessie; Scott, Edna.

Toronto.—Cardwell, Mary; Mathews, Lily; Morris, Christina; Sleesor, Mary.

Kingston.—Bleaney, Lillie; Carpenter, Alice; Mills, Elizabeth; Redmond, Ellen; Snider, Addie; Sills, Pearl; Sullivan, Margaret.

Brockville.—Catto, Florence; Collison, Mabel; McDermott, Jean; Race, Edith; Sheridan, Edith.

Third Year and Final Examinations.—Passed.

Toronto.—Black, Kate; Beirne, Lily; Carr, Nellie; Grieve, Charlotte; Krause, Frances; Malkin, Annie; Stiffler, Marie; Woods, Lizzie.

Kingston.—Burns, Nellie; Murray, Ethel; O'Donnell, Margaret.

Those who failed to pass are allowed to take supplementaries in October.

TRAINING SCHOOLS FOR NURSES AT ONTARIO HOSPITALS FOR THE INSANE.

E. RYAN, M.D.,

Medical Superintendent, Rockwood Hospital, Kingston, Ont.

"That light its rays shall cast
From portals of the past,
A lady with the lamp shall stand
In the great history of the land."

In these beautiful lines the poet Longfellow pays his tribute of respect to Florence Nightingale. This noble woman entered into the horrors of the battle camp where "thousands of British soldiers lay for weeks practically without medical attendance, their wounds undressed, without proper nourishment, in filthy quarters, breathing disease-laden air." Her trained skill as a nurse, her remarkable executive ability, her power of organization, soon enabled her to master the situation, to "bring order out of chaos, to fit places for the sick and wounded, to reduce the death rate, to save thousands of lives."

In the field of medicine, as in all human events, there are periods standing forth so prominently that they may well be classed as epoch-making. Thus the splendid life of Pasteur, the fame of Lister, the undying labors of Koch, are beacon lights illumining the course of medical achievements and contributing markedly to the prevention of disease and to the relief of human suffering and human sorrow. The advent of the trained nurse, of "the lady with the lamp," marks another event of world-wide value and interest to medicine and society. Without the skill, the patience, the kindness, the devotion of the trained nurse the onward march of progress would be retarded, and the skill of the physician and surgeon

would be robbed of their most brilliant triumphs. For the life and the work of the hospital are many-sided and complex. The hospital of to-day is not the hospital of half a century ago, for "the lady with the lamp" has entered therein, and has "brought order out of chaos, has reduced the death rate, has saved thousands of lives." And so the trained nurse and the Training School for Nurses have become a necessary complement of medical life, of hospital life, and of our present social life.

Slowly and steadily through the passing years the training school has evolved, reaching its present state of thoroughness and efficiency through "trials and labors many."

In the General Hospital the training schools for nurses were chiefly in evidence. This may be due to the fact that formerly the General Hospital was the centre of a more advanced, a more progressive medical life. On this point, however, it were idle to speculate. Now it can be said, and what a pleasure it is to say it, that the Hospitals for Mental Diseases have opened their doors to the "lady of the lamp." For some years past training schools for nurses have been associated with some of the Hospitals for Mental Diseases in the Province of Ontario.

It required, it is needless to say, energy and labor to overcome the difficulties encountered, to cultivate and foster the spirit of progress. Within the last few years the movement, through the timely foresight and generous assistance of the Administration, has achieved a marked advance. Now it is incumbent on all the Hospitals for Mental Diseases in Ontario that Training schools for Nurses shall be established, that the training shall be of a high standard, that thoroughness and efficiency in study and work shall mark the course from the beginning to the end.

The examinations, both written and oral, are conducted by a competent board of examiners selected by the Honorable the Provincial Secretary, and certificates are issued to successful candidates.

Thus the Hospitals for Mental Diseases in the Province of Ontario will take their place as modern hospitals, well administered, nursed with skill, as seats of learning and scientific research, filled with the spirit of hope and progress for the proper discharge of their glorious work. The "lady with the lamp" has entered, and the bright ray of her presence will shed a light of hope and courage into many; for nowhere in the whole realm of medicine is it more necessary to bring the gentle touch, the soothing influence, the kindly administration, the skilful hand of the "lady with the lamp." Already the success of the movement has been placed beyond the realm of doubt, not, it is true, without the expenditure of time and labor that have brought their own return.

We are witnessing the passing of the Asylum, with its depressing surroundings, its stigma, its hopelessness, and in its dreaded place we see the evolution of the Hospital, with its trained nurse, with its buoyant, hopeful influence, with its atmosphere of advanced medical life. The idea of care, restraint, and a doomed life has given way to the new idea of modern nursing by day and night, to medical treatment, to recovery, to a life of usefulness restored to family and to friends. The forbidding halls, the rooms locked and barred, are giving place to well furnished wards, to the open room with its sick patient and its trained nurse.

There is another point worthy of consideration: To no one class is mental affliction confined. The mansion of the wealthy and the cultured is just as liable as the cottage of the poor and lowly.

The pain, the sadness of it all, is hard to bear; only those who have experienced the trial can estimate the sorrow it brings. It is a great consolation for those bowed down to know that the patient is entering, not an asylum with hope abandoned, but a hospital for the sick, equipped with modern nursing methods and with the trained nurse, whose gentle sympathy and skilful hand will administer continually till health and home come again.

Not only for the success of the hospitals and the hospital patients does the training school administer. Its usefulness does not cease at the hospital door. The training school is a centre of education where bright minds are trained in the art of healing, and, what is more important still, in the art of prevention. From the hospital the nurse goes forth into the world to carry with her and diffuse the useful knowledge she has gained during her scholastic life.

In the home nursing of incipient cases her experience is invaluable, and we know of many cases where recovery by home treatment was made possible through the timely aid of the trained nurse.

One more point I must mention: The influence of a training school on the general *morale* of the institution. I shall not attempt to picture the conditions when the patients were guarded, not nursed. But "the lady with the lamp" has thrown the light on places that were dark, has been an instrument for good to all concerned. No training school can be properly conducted without care, attention and study on the part of those in charge. To teach well one must have his knowledge thorough and well organized. True, an attempt may be made at conducting a training school in order to meet the regulations, or for public display, but in the final analysis all things measure in their true proportions. Therefore the coming to an hospital, year after year, of a band of young women, bringing their cheerful life and vigorous personality, commands and in the end obtains the best teaching efforts of the hospital staff. The training school is therefore a source of continuous mental inspiration to the entire staff.

Even now it is not too early to speak of results. Already in those Ontario hospitals where the training school has been conducted with the proper spirit, the statistics with respect to recoveries tell their own story. There is even a greater return that may act as a sweet compensation. There is about the hospital another life, another atmosphere; there is the pleasure of giving and

imparting to others something of one's own fire and enthusiasm, thus making a surrounding at times depressing and irksome become both a pleasure and a joy.

And so we can look forward with confidence to the future of the Ontario Hospitals, to work well done, to the award that waits on energy well directed, and above all to the timely influence, the meritorious public service of "the lady with the lamp."

THE KORSAKOFF PSYCHOSIS.

By C. K. Clarke, M.D.

During my experience in Hospitals for the Insane and in consultation, I have been struck by the fact that the Korsakoff psychosis is becoming much more common than formerly. It may be possible that this conclusion is erroneous, and is really dependent on the fact that more attention is paid to the diagnosis of this disease. It is apparent, though, that the mental condition characteristic of the psychosis is frequently overlooked by those not familiar with it, and who would not suspect its existence until marked neuritis developed. Then, again, it must not be forgotten that the neuritic symptoms on which so much stress is laid by certain authors are not always prominent.

In these days when so much intelligent effort is being made to reorganise the study of psychiatry and to place it on a basis at least as sound as that of many other branches of general medicine, it is evident that the psychoses which can be proved to have a definite pathological basis will furnish many important data for the development of further studies both in psychology and psychiatry. For this reason the Korsakoff psychosis should receive especial attention. When it is stated that many of the best monographs of this disease are from the pens of men

who are not psychiatrists, it will be seen that the subject is one which should be of interest to all physicians.

Korsakoff, the eminent Russian psychiatrist, described the psychosis that bears his name some twenty years ago. It has since been the subject of numerous monographs and is ordinarily referred to as psycho-neuritis.

Korsakoff outlined the three cardinal symptoms of the psychosis:

1. Irritable weak-mindedness.
2. Mental confusion, showing itself particularly in spatial and temporal disorientation.
3. A form of amnesia in which memory for recent events is chiefly affected.

These symptoms were regarded as forming a syndrome *invariably* found in relation with peripheral neuritis. This neuritis was the result of a toxæmia, usually, but not always, due to alcoholism. The non-alcoholic cases were rare, but Korsakoff insisted might occur, and he reported instances to make his contention clear.

As might be supposed, a great deal of controversy arose over several of these claims made, two points in particular being disputed:

1. Does this psychosis necessarily include multiple neuritis?
2. Is the disease essentially an alcoholic affection?

The outcome of these disputes has been to establish the conclusion that the neuritis can in nearly every case be demonstrated by careful observation, although the evidences may be so slight that it is a simple matter to overlook them. Ascherson, in his admirable monograph, sums this up as follows: "Recent knowledge of morbid anatomy suggests that neuritis may be looked for in any case of Korsakoff disease, and that its absence in certain cases may be accounted for only by the fact that the morbid process has failed to include the neurones of the grey matter of the spinal cord and of the posterior ganglia, and Korsakoff's original contention is thus being reinstated."

In my practice I have had none but alcoholic cases, and am not in a position to furnish evidence regarding the possibility of the disease occurring as the result of other toxines. In nearly all of the cases I have seen the onset of disease has been sudden, strikingly so, and in two patients under observation recently this feature was especially marked. This is commonly the history and is referred to by many observers. A history of epileptiform seizures is not uncommon, and not infrequently is the starting-point of the malady.

Sleeplessness, a great failure of memory, instability and impulsiveness have been noted as occurring in the early stages, although the intellectual defect may not be plainly apparent until a careful analysis of the conversation is made. However, as the disease progresses, a remarkable mental condition develops, the prominent features being:

1. Loss of memory for recent events.
2. Pseudo-reminiscences (Paramnesia).
3. Mental confusion.
4. Abnormal moods.

These conditions are beautifully illustrated in the case recorded.

Generally speaking the patient seems apathetic until roused, and then appears startled. Defects of memory are strikingly apparent. The loss of memory, as might be expected, is chiefly regarding recent occurrences, or for a short period antecedent to the development of the psychosis. In the case reported the memory up to the time of the development of the psychosis has remained clear.

Ascherson says: "Clinical observation shows that the failure of memory is active; that is to say that facts continue to be forgotten in measure as they are acquired. This continued failure of recollection, as I shall call it, for lack of a better term, affects all the recent acquisitions; not only do the patients fail to reproduce ordinary

test words and constructions of figures, but they entirely forget faces they have just seen and the actions of every-day life they have just performed."

To a certain extent this loss of memory may be attributed to a want of attention, or disturbance of the function of groups of brain cells, but unfortunately there is ordinarily a more grave condition present, as will be shown presently; that is, actual destruction of some of the cells. A striking feature is that for some periods of the patient's life all memory of the events is completely obliterated, or practically so.

Now we come to a consideration of paramnesia, or pseudo-reminiscences, the most striking of the mental symptoms met with in Korsakoff's disease. The confabulations of the patient are at times so plausible that the observer is easily deceived; that is, the occurrences described are not necessarily improbable or absurd, as in general paralysis of the insane. The associations that give rise to these confabulations are extremely interesting, and will furnish no end of good material for students of the Jung and Freud school.

The confabulations of my case will explain more clearly than any description the remarkable mental condition present, especially during the period of convalescence. In some instances one finds little in the mental condition to attract attention beyond a slight mental confusion regarding the identity of persons and places, and the patient realises to a limited extent that he is confused. He may explain to you that this is the case, and immediately go on with marked confabulations. This is noticed during the period of improvement. I do not say recovery, because true recovery is rare, for reasons that become evident when the pathological condition present is considered.

A striking point is that the interpretation of time and place fits in with some actual occurrence that has taken place in the patient's life.

My patient, while travelling in the train with me, dis-

cussed the affairs of several of the local newspapers very intelligently, as he had been a proof-reader in several newspaper offices. Half an hour after the conversation took place I asked him where I had met him the week before. He replied that he had met me on Bay Street (confabulation), and that we had engaged in a spirited discussion regarding the local newspapers. This incident illustrates the point I have attempted to describe.

As might be supposed, the moods are varying and striking, although euphoria is pretty constant. Sometimes anxiety is evinced, shallow emotional disturbances occur, and the ethical sense may be gravely altered or completely destroyed.

This is a very hasty outline of the mental state met with in Korsakoff's psychosis, but it will indicate what the observer should look for.

Physical Symptoms.—Marked multiple neuritis is present in 50 per cent.; in a lesser degree in 30 per cent.; absent or not demonstrable in 20 per cent. (Ascherson).

Deep muscular tenderness, extensive weakness, transitory pupillary disturbances (the paradoxical eye reflex was noted in one of my cases), slight facial paralysis shown by an obliteration of the naso-labial folds are frequently noted; in fact, everything that one expects to find in multiple neuritis.

Aphasia is not uncommon and occasionally is a prominent feature. A slight degree of paraphasia has at times been noticed, and these conditions have in my experience led to mistakes, G. P. I being diagnosed.

Where the disease pursues an unfavorable course the physical health deteriorates rapidly. Emaciation becomes extensive, strength is lost and a fatal termination is to be looked for. However, with the removal of the toxic substance causing the disease, improvement generally occurs, and while absolute recovery is rare, a wonderfully improved condition is not uncommon.

Morbid Anatomy.—Unfortunately, the number of cases available for study is not large, owing to the fact that the

disease does not ordinarily terminate fatally, but Wefrung, Cole, Ballet, Babinski, Mott and Chancellay, as well as others, have added much to our knowledge of the morbid anatomy of the disease. All agree that marked changes are to be looked for in the Betz cells, these changes being a disappearance of the Nissl granules except at the periphery of the cell, swelling of the cell and eccentric displacement of the nucleus. Oftentimes the dendrons appear to be broken off.

Dr. Mott inclines to the view that many of the changes found do not necessarily denote degeneration or deterioration, but functional depression, but if once the nucleus is extruded from the cell so far as to cause rupture of the membrane and escape of the nucleoli, then true degenerative changes occur and the cell is destroyed.

This will make clear why marked improvement takes place in some instances and incurable dementia in others.

Changes in the nerve fibres of the cortex (Gudden and Chancellay) are the earliest and most essential lesions of the malady (atrophy of the tangential fibres or fatty degeneration of these fibres as well as of the supra-radial bundles). It has been suggested that atrophy of the tangential bundles accounts for the slight degree of dementia which so commonly persists in the Korsakoff psychosis.

Similar changes occur in the neurons of the grey matter of the cord of the posterior root ganglia; they are the basis of the multiple neuritis.

The disease is frequently overlooked by the casual observer, and a diagnosis of general paralysis of the insane made. This is, as a matter of fact, the disease often labelled pseudo-general paralysis. Before the days of lumbar puncture it was sometimes difficult to differentiate between pseudo- and true general paresis of the insane, but modern clinical methods have cleared the way, and the cell count (Wassermann and Noguchi tests) generally decides the matter very quickly.

Ascherson differentiates the two conditions as follows:

	Korsakoff.	G P. I.
Facial Expression:	Of alarm to astonishment.	Foolish, contented.
Pseudo-Reminiscences	Of a probable nature, usually related to some circumstances of the patient's past life and profession.	Of an absurd and improbable nature, perhaps poverty of ideation.
Disorientation:	Complete. Patient has no idea of time or place or the identity of persons.	Incomplete. Patient recognises familiar surroundings and persons with whom he is habitually brought in contact.
Amnesia:	Transient. More complete for the period of time concerned.	Progressive.
Movements:	Performed slowly and with hesitation but so as ultimately to achieve their object.	Performed deliberately, but are ataxic and do not achieve their object.
Neuritis:	Often present.	Usually absent.
Ocular and Other Cranial Symptoms:	Transient and variable.	Permanent.

The prognosis as far as complete recovery is concerned is not favorable, but in a majority of cases, under suitable treatment, great improvement will take place. In my experience there always remains some clinical evidence of the attack passed through, and then one cannot forget the danger of relapse when alcoholism has once been established. It is beyond the province of this sketch to go into the origin of alcoholism.

Treatment.—The treatment is obvious, there being profound disturbance of mental and physical health. Absolute rest in bed for many weeks; removal of the exciting cause—alcohol.

Milk and easily assimilated foods called for.

Arsenic contra-indicated; strychnine recommended; iron.

Treatment in Psychiatric Hospital rather than Asylum is of course desirable.

The following case is a very typical one and well worthy of study:

E. C.—male.

Admitted December 15th, 1909.

Born August 18th, 1858. Proof-reader. Cong. English. Married. Came to Canada August 18th, 1878, landing in Montreal.

Family History (furnished by patient).—Father died at 68 or 78 years of age. Cause of death unknown. Had black fever in the goldfields in Australia, but with the exception of this enjoyed unusually good health until his last illness. He was a successful business man and much liked by his family, although he was given to violent outbursts of temper. Used alcohol moderately, taking as a rule a glass of ale for dinner and a whiskey and soda before retiring. Never intoxicated; in fact, patient states that he was greatly opposed to such a practice as immoderate drinking.

Mother is living, aged 76, and patient states she has always enjoyed unusually good health. She was a jolly, light-hearted woman and very fond of society. She usually took a glass of ale with her husband after dinner.

When questioned regarding the number of sisters and brothers he had, patient replied, "We are seven, three of us in the churchyard lie." Three children died in infancy, all from epidemic of scarlet fever. Other three children living and have always been in good health.

No consanguinity. No history of constitutional diseases in any of the family connections, and none of them has ever been treated for nervous or mental diseases.

Patient was born August 18th, 1858, at Bath, Easton, Somersetshire, England. It is not known whether birth was at full term or whether instruments were used. He seems to have had the usual diseases of childhood, and added that he was the butt of every disease that came along.

His early education was received from the family governess, and at five or six he attended a school in the village conducted by a Mrs. H. Mrs. H. kept a little fish store, and while she sold fish in the front part she taught her scholars in the back. He continued his education in a boys' school in the neighbourhood of his home, and at 16 years of age passed his junior and senior examinations for University, but owing to the wish of his father that he join him in his business did not further continue his University career. He therefore started to work with his father and continued with him for five years. When 20 years of age he left him on account of some unpleasant relations which had arisen with a servant in the house. Since coming to Canada has made Toronto his headquarters.

Owing to his tendency to confabulate it was impossible to secure a detailed account of his doings since coming to this country, but it would seem that he has more or less steadily followed his trade ever since he took up his residence here, though his life has been frequently interrupted by alcoholic excesses.

Was married in Toronto in 1890 or 1891 to E. G. They had in all five children; three died in infancy; two children, a boy and a girl, aged respectively 19 and 16, are living and in good health. He stated that his marital relations were very pleasant, and that his wife was a good woman. It seems, however, that eight years ago things came to such a pass that she had to sever her connection with him in order to support her children and herself.

Alcoholic History.—According to his own account he has drunk "oceans of beer and whiskey," and various accounts of his friends would seem to confirm this opinion. Always happy while under the influence of alcohol and felt that it increased his capacity for work.

Sexual History.—Sexual history does not appear to be pronounced; he admits one attack of gonorrhœa, but denies syphilitic infection.

Present Illness.—To-day Mr. W. B. called to give me the following information regarding patient.

"This man lived with me for thirteen months. He is a graduate of Oxford University (mistake) and a person of high type intellectually and mentally, but unfortunately has indulged in alcohol to excess. There were times when he straightened up for a few days, but I think it is only fair to state that the occasions were few when he was not pretty well 'loaded up' with whiskey. He is a man of brilliant attainments and genial disposition; in fact one could not wish to meet a more pleasant person. He was in the house at J. Street when I took possession, and remained perfectly sound mentally until four or five days previous to coming to the hospital, when I noticed a remarkable change. That would be less than a month ago; probably between three and four weeks. He often complained to me before that there was a strange feeling in his legs, which he thought were becoming uncontrollable, and for a time he was so blind that he did not know me; this was shortly before going to the hospital.

"I fear that I precipitated the tragedy, as I am strongly averse to the use of liquor and deliberately cut him off from his supply. This seems to have aggravated matters, and occasionally he would get away from me and come back with a flask. His mental condition developed very rapidly, as I have said before, and the whole process did not involve more than four or five days."

Patient stated that he is married, but his wife is of such a cold nature, etc., that he cannot live with her and has not done so for some time.

December 20th, 1909.—This afternoon I had an interview with Mrs. C., wife of the patient. She has not lived with her husband for about eight years. Nine or ten years ago he had an attack of some kind, owing to alcoholic excess, and for two years was so nervous that he could not work. He was on the verge of delirium tremens, although he never really had it. While taking alcohol he

looked strong, but when it was cut off he became pale and anæmic, so noticeably that his doctor ordered him to go on again with the alcoholic treatment. Mrs. C. is quite satisfied that her husband would have, at that time, succeeded in doing away with his fondness for drink, but after recommencing he never gave up the use of it. He complained during this attack (nine or ten years ago) of nervousness: could not sleep.

His children are two in number: a boy aged 21 years and a girl 16 in April. He has led a very erratic life and did not provide for the family as he should have done, although if he had kept from drink there was plenty of work for him as a proof-reader.

While it is true that he is always, even when drinking, good-natured with strangers, yet his wife found it impossible to get along with him, and things came to such a pass eight years ago that it was evident she must support her children. The house they were in was sold over their heads; they were evicted, so mutually agreed on separation and she has supported her children ever since. The wife thinks his trouble was intensified twelve years ago, when his mother left him some money; after getting this he drank more than ever.

General Observations.—Patient was admitted on Dec. 15th, 1909. His tendency to confabulate was most pronounced; examples will be given.

On admission he complains of cramps in the legs and seems apprehensive when the examiner approaches his legs. Sensations of heat, cold and pain in both legs below the knees show a marked retardation in transmission but are hyper-acute when felt. Pressure on the calves elicits great pain, the sensation being delayed here also. There is tenderness along the course of the nerve trunks.

Motor: His gait is unsteady and staggering. He keeps his eyes on the floor, holds his feet well apart and throws the toes high in the air, bringing the foot down with a slap (toe drops—anterior tibial paralysis). The

muscles of the calves are soft and flabby, and neither leg appears as plump as it should be.

Reflexes: Pupils are equal, and react to light and distance. Pharyngeal present. Abdominal present. Cremasteric delayed but active. Plantar reflexion. Patellar absent. Rombergism present.

February 1st, 1910.—Sensation less acute, but still delayed. Patellar absent. Gait improved so that there is now no steppage, but his feet are still held apart, and he is unsteady in walking.

Physical Examination.—Patient is a man of poor bony and muscular development. Has been gaining in weight since admission, but is not yet up to the average weight General complexion is fair. Hair is thin and streaked with grey. No asymmetry of the features. Ears: nothing abnormal. Eyesight poor. No strabismus or ptosis. Movements normal. Right pupil reacts normally to light. Left is irregular in outline. Has a primary contraction to light, but immediately dilates and (paradoxical) remains so. Does not react consensually.

Mucous membrane of the mouth normal. Pharyngeal reflex is present. Tongue protrudes straight and is tremulous. Chest shows flattened area underneath the right clavicle, corresponding with the upper lobe of the right lung. Increased vocal fremitus over the upper lobe of the right lung. There is a marked bulging of the precordia, extending from the second to the fifth interspace and from the parasternal line to the anterior axilliary line. Heart action is rapid and the second sound is accentuated. No murmurs.

Abdomen is rigidly held. Slight quantity of panniculus. Abdominal skin reflex absent. No tenderness on deep palpitation.

Liver dulness seems to be somewhat increased downwards. Plantar reflexes are both present. At the time of examination the tendon reflexes were abolished. Patient has the characteristic step of multiple neuritis, which

shows more prominently in the left foot. Romberg present. Dyn. 85 in both hands.

Muscles of the lower extremities are partly atrophied. On admission patient suffered from considerable disturbance of sensation, which was most marked in the lower limbs. The legs were sensitive to handling and pressure, and there was marked tenderness along the course of the nerves. Patient complained of cramps in his legs which occasioned him considerable distress. Temperature sense and perception of pain were not totally lost, but were delayed in transmission. This was found to be pretty general. The above symptoms were observed on admission. At the time of examination the temperature sense appears to be quite normal. Tactile sense is somewhat delayed and when felt is hyper-acute. Patient did not seem to suffer much pain when handling his limbs and was able to move them more freely than on admission. Muscular incoordination is not so marked. The same may be said of the muscular atrophy.

Stereognosis normal.

There is a condition of leucoderma present on the hands and scrotal region.

Mental Status.—Patient is fully oriented only in the personal sphere. He is only relatively oriented in the temporal sphere, saying that the present time is the latter part of the year 1909. Spacial sphere: He is completely disoriented, and when asked where he is will say that he is in a boat, at another time in the General Hospital and again that he is in the King Edward Hotel in Toronto. General understanding and insight are very poor. He does not realize what sort of a place he is in and does not seem to appreciate the mental condition of the patients in the ward. Special memory regarding family, school, occupations and marriage is very good and he was able to give the above account of his life. He expresses himself as feeling all right, and is content with his surroundings. He does not react to auditory or visual hallucinations.

Memory is very poor regarding recent events and he is unable to remember the name of any one addressing him for the shortest space of time. Attention is easily gained but is hard to hold and he rambles off on various subjects which suggest themselves to him. Patient is sleeping well and seems to be refreshed in the morning. Motor vocal, motor written, sensory hearing and sensory visual tests were all correctly performed. Sensory visual test was unsatisfactory on account of his eye-sight, but when shown print large enough for him to read he was able to make it out. Apprehension and apperception were fair. Failed in three-word memory test, but was able to do the simple mathematical tests quickly and accurately.

Word association attached.

Dec. 16th, 1909.—Notes taken at bedside of patient this afternoon.

When we entered the room patient addressed Dr. C. in a friendly manner.

"How do you do? I really cannot see you. We had a walk this morning—if you wish to take notice there is a stenographer—we walked from this room downstairs, then *I* returned.

"Where did I go?"

"You went to look for some person else; who it was you did not tell me at the time, but I came back here and you were sending them down, and I began to think what is this, it must be something extra good, so then you made a remark about something; it refers to the price of it or something; at any rate you came up and Miss—what is her name—who is—she is a factotum of Mr.—what is his name, the head man here; well, I did not know the head man—Gillard, is it? I don't know what it is; anyway he is always here."

What is the name of this place?

"This place? In English I think they call it—O well, it is the Royal Hospital, Toronto."

How long have you been here?

"In Toronto?—In this hospital the last time? Of course there was a short time that I went out, that I could never understand thoroughly; of course I did understand it afterwards."

How long have you been here?

"It would be about" (long pause) "about seven hours —something like that."

In what city have you met me before?

Patient sits up and looks intently at the questioner and then shakes his head. "How will I know, Dr., how will I know? I met you in Montreal; I met you at Mr." (a long pause) "on August 16th, 1897,—that was—I have got to have a memory. I know I am right; I can bank on that statement. That is when I met you first and then we went to the house of—not Simon the Tanner nor Tim O'Rook, but this man's name is—that chap who was—he was the subterfuge, you understand, under which I was to take over those other men with me. What was his name? The other man; the other man I don't know much about. This was the man I was after because although he was—well, I suppose you would call him a better, more experienced medical man—but as far as the man went, the man of the world and one thing and another I consider that the other man was, well the whole business the head of him; he was so quick to remember things; that is, Tim O'Rook was."

Was he a doctor?

"Indeed he was not but was elected to push bulls across the Atlantic.—I thought I knew your face when you came in this morning; in fact downstairs they had a little card inserted in blankets and I put on my glasses and looked at it and I saw your name; in fact I spoke to you" (this last addressed to Dr. S., whom patient had not been addressing). "Didn't I? Your name is O'Shane, I think."

What is my first name?

"Tom—is that right? This thing has played a miracle with my eye-sight, and one thing and another."

Can you read?

"I was just telling the last gentleman that was here with me—was a gentleman with another doctor sent by Dr." (long pause) "—who—oh! who was here this morning—you were there, Miss, were you not?"

What is the stenographer's name?

"Shall I give her first or her second name? I don't know the first name, but I would never 'Burke' at the second—Burke is her name of course."

What is my name?

"What is your name?—let me see—I have got that solution now—I have not got that right—one of them is W—, that is one is right, isn't it? I know that is still possible but it has gone from my memory, but then I have an excess; every day I handle ten thousand names before breakfast; if they were not so Irish I could eat them. I think your name is—I think it is William in the first place—William White."

William White?

Patient seemed confused and said, "You are saying that as my tutor or as a suggestion? Where did I last meet you? You met me last Summer at the hour of a quarter past seven at the corner of King and Front streets, northwest; there were four people in the bar: Mr. McKinney was one; you were the other; Mr. Walker was another and I was the other. Some idiotic one of the party suggested a drink. I hope you are not putting down all this idiotic stuff I am talking. This was Thursday; it was half-past two—well I met with a person."

What is my name?

"Your name is Guinane; I don't know whether that is the way to pronounce it."

Where did you meet me last?

"I met you in McKinney's last; yes, in McKinney's; that is at the corner of Front or at least West Market street, well that is the same thing as they merge there; oh, what is it they call that street?—well, West Market and Front street."

Who was with us?

"Yes, there was somebody with us, because I was going to say something that was rather pretty and I thought it might possibly hurt his feelings; it was somebody that had connection with that Friday trip we had."

What Friday trip?

"Why sure the trip from Montreal: we took the cattle but the cattle were brought on board the boat at New York; we took them down by land."

What did you say my name was?

"I suppose it is possible to tangle a man up that way; of course you mean the way to pronounce it, I suppose. I would say Guinane. Isn't that the correct way to pronounce it? I notice another Guinane."

Have you been drinking lately?

"Very little; when I did take anything I took a glass of whiskey o- a glass of ale, but don't raise any hopes that way, Doctor."

Do you take drugs?

"Oh no. That is just it; I don't get enough drugs."

Dr. S. here asked patient to tell of the little Bohemian supper he had in his room.

"Oh yes but I was smothered; I was covered with obloquy. Mr.—what's his name?—Dr. rather—Guinane she was seeking advice in—well, in a way which I should describe as 'slantandicular,' not right out of the mouth, you know; her father, probably if he had wanted it years and years ago—his men to get the bull out of the west gate—say—well I can't say it in your language as well as in the West of England—well, cass-un-genaun-ut—well, can't you see—well then, get to work and get un up here. We had a doctor there who was our private doctor, and when I got sick at Priestly—that was a kind of foot and mouth disease, the father actually suggested that the doctor change the disease to let the foot go a little more and to shut off the tongue a little bit. Oh we would sit there all day long and get off jokes with that man."

What is the name of this place?

"This is the Bristol Public Infirmary—we got down there."

What is the name of this place?

"This is the Toronto Public Hospital" (the Dr. suggested General Hospital). "Well, it might be the General."

How long have you been in Toronto?

Patient thought for a long time—"Yet you would think a man would know a simple thing like that—O well, I came here" (long pause) "in 71."

And what is this?

"This is 1902."

How many years ago would that be?

Patient thought a long time—"What?—am I—I am going crazy—it is—it is—it is 23 years—is it not? That young lady has not told me her name, but I have the pleasure of knowing it—it is—it is—one second—Of course I have never—I know her name. Don't assist me. Miss —— I will try and find this out—I don't know, I am sure—well, that is a funny thing, is it not? I don't know—it has slipped my memory, Dr.—it may come back in half a minute."

Where did I meet you last?

"Well, of course you met me right here" (long pause) "well, I met you in this Hospital before we went to the Hospital; that was this morning."

Feby. 8th, 1910.—Patient was allowed up; at this time the muscular atrophy was not so pronounced and the cutaneous hyperaesthesia had decreased to a considerable extent.

Feby. 20th. Patient is about the ward and seems to be quite happy and content with his surroundings. He states at one time that he is taking a trip on a boat, and another that this is a hotel and again that he is in the lobby of the Legislative Assembly. Gait has the characteristic step of multiple neuritis. Conversation is incoherent and he shows a marked tendency to confabulate.

He co-operates as fully as he is able throughout the physical and mental examination.

June 19th, 1910.—Conversation between patient and Dr. Stead:

The events of your boyhood are quite well remembered?

I would not say quite well remembered.

No. For example, when did you come to Canada?

In '78.

Yes. Where did you take up your residence?

At 194 Adelaide St. West. That, of course, would be the old numbering. I believe the number is something like 204 now. Opposite Upper Canada College.

What occupation did you follow?

Well, I tried to get a position in the dry goods business, at which I was apprenticed in the old country, but failing that I took a position on the newspaper.

How long after that were you married?

I have only been married 12 years.

In what year were you married?

That would be 1890. No, that's wrong, Dr.; it is 1898 I should have said.

Well. On what paper were you engaged?

On the *Evening Telegram.*

How do you consider the *Telegram* as a regular paper?

Do you mean editorial or advertising? I think it is the best paying advertising paper, but editorially, I think they pander too much to the advertisers.

Who do you think the best editorial writer in Toronto?

In Toronto—Ned Farrar, I think.

Who else would you mention among the best, I mean just among the leading ones?

Cameron of the *Globe.* Alec Pirie of the *Telegram.*

What about Willison?

Willison of the *Globe,* I would rank him as the best.

You rather think he is partisan?

I would not say that, but perhaps his religion has taught him to be a little narrow.

Well then, confining ourselves to newspapers still, what would you consider to be the all-round best paper in the city.

I think the *Globe*.

What makes you arrive at that conclusion?

Well, the *Globe* covers all the ground that the reading public is interested in, in a fuller way than any other.

Yes, I think that would explain it. Now going to more recent events—you and Dr. Clarke were up to London. Will you give me an account of your trip up there? Just give it in a general way.

Well, we rode in a one horse conveyance to Parkdale station, where we waited—pardon me, lady, I have made a mistake—I walked with an attendant to Parkdale station; Thibault, I think, was the name of the man who accompanied me, and there we waited for Dr. Clarke, then went on the train to London.

Which railroad?

I think it was the "Trunk."

Yes. What towns did you pass through on your way?

We passed Berlin, Hamilton—I forget, Dr., what towns we passed.

And when you got to London who met you?

Well, they met us there with a wagonette and took us to the Asylum.

Did you stay at the Asylum all the time you were there?

I did.

How long were you there?

I think three days.

What did you and Dr. C. go for?

Well, ostensibly, I think he wanted to lecture on me. I met several people but did not know any of them. I saw Mrs. C. there.

How did you come home?

I understood we came on a different railway.

Did you drive or walk to the station?

We walked.

About how far did you walk?

Well. It seemed a long walk to me, I should think it more than half a mile.

Yes, probably it was. What have you been doing since you have come back, have you been in any place specially since being in London?

I have been in Toronto Asylum.

Have you been down town any place?

No sir.

When were you over to the Island?

Well. I was taken by Dr. C. from the Island.

What were you doing at the Island?

Rusticating for the benefit of my head.

Where do you first remember meeting me?

My sight is rather bad, Dr.; I cannot tell.

Dr. Stead is my name.

Well, I think I met you five or six years ago.

What circumstance led up to our meeting?

Well, I was supposed to be insane, and you were supposed to help me.

What was the outcome?

You didn't cure me, you helped me for the time being, but I have got back into the old rut again.

I think we met down town one day; do you recall where it was?

I had come from the Island and was walking up Bay St.

What went on then?

Well! My venture was to get a glass of liquor.

Yes. Did we get it?

I did not.

What was the trouble?

Well, I think you advised me not to take it.

Had you been drinking pretty heavily at that time?

Not at that time.

How long ago was that?

Six weeks perhaps.

Where next did we meet down town?

You and I?

Yes. Was it before that?

I do not remember having met you down town again.

I thought I met you coming out of a saloon one day?

That was such a frequent occurrence that I have forgotten.

You were with a couple of men about your own age. Two Englishmen.

TRA .ING IN PSYCHIATRY AND CARE OF THE INSANE.*

ERNEST JONES, M.D..

"A Mind that Found Itself," by Clifford Beers.

This interesting book is already so well known that in this Journal a few critical comments on it will be more in place than a detailed description of its contents. It purports to be the description, written after recovery, of an attack of insanity, and is published mainly to call general attention to various asylum abuses of the kind from which the author h·mself suffered. It is supported by a vigorous preface by William James, and by several appendices written by various well-known psychiatrists. For these reasons, and because the agitation has already aroused considerable popular interest, it becomes desirable carefully to inquire into the author's contentions and proposals. In doing this, it is convenient to distinguish three questions: First, How far can the author's personal evidence be accepted? secondly, To what extent are the abuses prevalent of which he speaks? and thirdly, Are his suggestions for remedying them the best that can be made?

With regard to the first question, the following considerations have to be borne in mind. From the full account given of the illness there is every reason to sup-

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* Review published in the *Journal of Abnormal Psychology*, April, 1910.

pose that this was an attack of manic-depressive insanity, in which there were three fairly well-defined stages—melancholia, a mixed state, and mania, respectively. It is known nowadays that recovery from such an attack is rarely quite so complete as the earlier views of the Kraepelin school maintained, and I fully concur with the opinion expressed by Farrar in his admirable review of the present book (American Journal of Insanity, Vol. lxv., p. 215), that it was both conceived and written in a state of pathological excitement. Of the numerous pieces of evidence quoted by Farrar in support of this conclusion, we need here cite only one: On the first page the author speaks of his recovery as a "marvelous escape from death, and a miraculous return to health after an apparently fatal illness." This, let it be borne in mind, from a very ordinary and common psychotic attack, of a kind that regularly ends in recovery. Throughout the book, indeed, there is every evidence given of impaired insight into the morbid manifestations from which the writer had recovered. Although, therefore, one may accept the truth of the patient's story as a whole, and notably the facts that he was the victim of unsympathetic misunderstandings and even physical abuse, still it is certain that his judgment on the various events he relates cannot be taken literally, and that to base broad conclusions solely on the account given here, without taking into consideration evidence drawn from elsewhere, would be both unfair to the present administrators of insane institutions and misleading for purposes of future reform.

Impugnment of the reliability of a pleader for reform is one of the commonest modes of defence adopted by the prejudice of conservatism. So far from that is my attitude, however, that although the main weakness of Beers' argument has just been put in the foreground, I nevertheless concede the whole of his case. No one who knows the facts can honestly deny that at present there exist even gross abuses in many of our insane institutions. In

forming a just estimate of these, it is desirable separately to answer the questions as to how far they may be termed abuses when weighed in the light of our general ethical conduct, and how far they constitute abuses only when weighed in the light of ideals not elsewhere attained. Naturally the former of these cry more urgently for remedying than the latter. These are large questions which this is not the place adequately to discuss, but it must be admitted that abuses of both kinds nowadays exist. The causes of them Beers has clearly, and on the whole accurately, expounded. Most of them can fairly be summed up in one word, ignorance, and this criticism applies almost as fully to doctors as to nurses. The remedy for ignorance must be different in these two classes, for the causes of it are rather different. The ignorance or lack of understanding on the part of nurses and attendants arises partly from insufficient training, but mainly from the fact that they are drawn from a wrong class of the community. This must necessarily be so as long as the poor prospects of nurses are not compensated by adequate payment, and at present only too often both prospects and payment do not rival those of a domestic servant. For State-provided asylums the remedy is a direct one—educate the people in general, and particularly those in authority, to demand a higher scale of pay for such nurses, with the aim of securing a better educated class. In the case of privately controlled asylums this pressure is harder to apply. Beers clearly sees this, and bitterly inveighs against the fact that often private institutions are maintained exclusively with the object of earning money, and with a cynical callousness to the needs of the patient. This of necessity leads to false economy, inefficiency, carelessness and neglect, except on the one subject of making the institution pay. I can contribute a striking example from my own experience of the disastrous results that follow inadequate attendance; it happened in one of the most

expensive of private institutions, where the lowest charge was a hundred dollars a week.

Being in consultation on the case I had advised that the patient, who was suffering from acute melancholia, be ceaselessly watched, as there was reason to fear an attempt at suicide. A few days later she was left alone in a room for some time while the nurse went about other duties. The patient pitched herself, head foremost, into the open fire, and burnt herself so badly that she soon succumbed. Now this is the kind of thing that the public has a right to cry out on, and Beers' book may do good service by throwing light on the evils that must necessarily arise if the care of patients is subordinated to the thirst for gain. Our ideal here should be State control and maintenance for both rich and poor, though not, of course, alike. The medical officer of health is commissioned to prevent disease of both rich and poor, and the psychiatrist should be endowed with similarly broad aims.

The insufficient training of doctors who have charge of the insane has an equally obvious remedy, namely educate them. Yet it is singular to how few educative bodies this proposal is obvious. It is nothing less than appalling to realize the ignorance of the general medical profession on psychiatric subjects, but as only one side of the matter is strictly cognate to the present discussion, it alone will be considered. The loss of the community at large that results from the almost complete lack of training of the medical profession in clinical psychology is enormous when one thinks of how largely psychological problems enter into the work of every practitioner, but we are here concerned only with the alienist. It should be evident that what is urgently needed is a double training in clinical psychology and allied problems, one for every medical practitioner before graduating, the other more specialised one for the alienist. Neither the will nor the opportunity exists for giving either of these under existing circumstances, and there is only one

method of making it possible to be so, namely, the adoption of the German system of having a Psychiatric Clinic attached to every medical school in the country.

The problems opened up by this book, involving as they do such questions as the attitude of the community to the insane, medical education, etc., are too large to be properly dealt with in a review; but before concluding one should make some comment on the relation to the public of the agitation thus raised. That a public campaign of an informative and educative nature is desirable cannot be denied, but one may gravely question whether this particular book is of the kind that is best destined for that end. To alienists, however, and to all those concerned in asylum administration, the book is warmly recommended; its lucid style and high earnestness of purpose will not fail to arouse their interest and sympathy for the objects that the author has at heart. It is to be hoped that it will not result in a sensationalistic and blindly anti-scientific agitation, of the anti-vaccination stamp, such as is at present raging in Germany. There the anti-alienist agitation has fallen into evil hands, which spread the wildest untruths and exaggerations about asylum abuses, often of a quite fanciful nature. It is voiced by a special society and journal (Die Volkstumliche Zeitschrift des Bundes für Irrenrechts-Reform und Irrenfürsorge), which has evoked animated responses on the part of various alienists (Lomer. Die Wahrheit über die Irrenanstalten. Bergmann, Wiesbaden, 1909. Lomer. Der Fall Lubecki. Psychiatr.—Neurol. Woch. Jahrg. 1908, Nr. 37. See also the same journal, 1909, Nr. 21, 31, 42, 45). America has now a great opportunity to repudiate the "yellow press" methods of asylum reform indulged in by German agitators, and to show the world how sober but enthusiastic campaigns against avoidable evils should be carried on.

A CASE OF ACUTE DELIRIUM. (EXHAUSTION PSYCHOSES).

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A.B. a patient, admitted October 19, 1908, was 39 years of age; born in England and came to Canada when twelve years old. He has a good public school education. He was married ten years ago and has two children who are quite healthy.

Family History.—Father 73 years old, still living and healthy. Mother 70 years old, living, but has been subject to short periods of depression. There is no relationship by consanguinity existing between father and mother. He has five brothers and sisters living who are healthy in every sense of the word. One brother died in infancy from congestion of the lungs.

Previous Illnesses.—A.B. has had no illnesses except measles and whooping cough and no accidents except a broken nose which was not serious in any other way.

Personal History.—He developed in quite a normal way as a child; was attentive at school and made as good progress as the other scholars in his class. When he left school he took up work in a cheese factory. He was regular and industrious in this occupation and saved money so that this year he was able to start on a farm. On entering upon this new enterprise he planned carefully, was anxious about its success and worked very hard. In the month of February his little boy took ill with pneumonia and he sat up every night for one week to look after him, and went on with his work during the day. This precipitated a mental illness lasting for three or four days when he talked foolishly and was mildly delirious. He recovered and assumed his usual duties again. During the summer he has had a great deal

of worry and has felt constantly that he was too much hurried. As a man he is spoken of as very cool headed and naturally very composed, possessing a strong will and good judgment. He never smokes or touches liquor, except in illness, and so far as known by those intimate with him, has no bad habits. All summer he has complained of not being able to sleep when he went to bed at first on account of his heart beating so loudly. This condition of his heart worried him greatly although two physicians told him his heart was quite sound. His weight had become much reduced and he had a run-down appearance.

For the nine days previous to his admission to the hospital his wife gives the following account:

On Friday night after his return from a threshing where he worked hard he did not sleep at all. Saturday after milking some of the cows he came into the house, being unable to finish, and said, "I don't know what is the matter with me. I feel undone and have no energy." He complained of his heart, but had no headache and was taking his food well. Sunday and Monday he remained about the house, being listless and unable to work, and his sleep was very much broken. Tuesday his physician was called, he himself having suggested this. He threw himself on the bed and said, "Why am I going crazy." His nervous condition was then quite evident by his having "sinking spells," and complaining of his back very often. The pain in the back he called, "Fire in the spine." He seemed very weak. Thursday his brother called to see him, but he failed to recognize or notice him. Friday morning he spoke of his head paining him and in the afternoon he became delirious and had to be held down in his bed on account of his restlessness. Sunday. His condition was practically unchanged. After an enema his bowels moved freely, but not for some days before. He had frequent micturition. His skin felt very dry and hot.

Monday, October 19, 1908. He was brought to this hospital. His family physician described his symptoms

as those of shortness of breath, inability to work; had several fainting spells, insomnia, flashes of heat and cold, tenderness of the spine and a choking sensation. Although his appetite remained good he lost flesh quite rapidly. By times he became very restless and violent, constantly uttering unrelated words, *i.e.*—explosion, Methusaleh, Jack, etc., and threw himself about a great deal, striking, swearing at and otherwise abusing those who were caring for him. Various delusions were observed:—That he was dead, was burning and was in Heaven. Among his hallucinations were these:—He heard explosions, the telephone and other bells ringing and other sounds when all was quiet, and saw various objects which were not within sight. The only physical symptom noticed was his increasing weakness. To reach the hospital he had a long drive of about twenty miles, this having been deemed the wiser method of conveying him.

October 21, 1908. Upon seeing him shortly after admission he was very restless, tossing about in bed. The attendant had to place pillows against the wall so as to prevent him injuring himself. His temperature at that time was 103; pulse, 120; respiration, 24. He did not seem to apprehend anything going on about him and was acutely delirious. The attendant mentions that after the initial bath he was lucid for about five minutes, asking what joke they were playing on him; told his name and said he came from S—— and that he was a farmer. He then relapsed into a delirious condition again. I had Dr. Clare see him with me. His eyes were straight, pupils equal and reacted to light. The lung condition was normal, the abdomen was not distended but rather flat and quite sensitive. The spleen and liver were not enlarged. The knee reflexes were equal, but diminished. No Babinski and no Kernig. His tongue was dry and much coated. The patient would not take any nourishment, closing his teeth tightly when trying to give him anything and spitting milk and water out. At this time we could not get the pulse satisfactorily. His

skin was very hot; face flushed and he was quite delirious. He was then sponged with ice water for half an hour which relieved the motor restlessness, but the mind did not further clear up. Temperature was reduced down to 100 4-5, (temperature has always been taken per rectum). He was given by the stomach tube 10 ozs. of warm milk; 1 oz. castor oil and 1 oz. of whisky. He has been sponged when the temperature rose about 102. During last night his bowels moved freely and his stools were liquid and offensive. His abdomen is not distended nor tympanitic. His temperature became normal at 4 o'clock. He slept for the first time yesterday afternoon for about ¾ of an hour and over five hours last night. On seeing him this morning he is still delirious, muttering to himself. His pulse is 104. He still refuses to take nourishment and is given milk 10 ozs. with 2 ozs. of whisky every six hours.

October 21, 1908. He had retention of urine and was catheterized.

October 22, 1908. During the day he slept six hours by times. His pulse is better—92. Temperature about 100. His urine was dark red, but no blood cells were found upon examination. His delirium is not nearly so active and his mind is clearing up slowly. He appeared to recognize his wife when she visited him to-day. He had a small bed-sore on his hip which is now showing a healing tendency.

October 23, 1908. He spent a very restless night trying to get out of bed, etc. Once during the day he appeared to recognize that he was ill and asked his nurse if he had pneumonia. He slept altogether six hours. His mind was brighter to-day, but he is very feeble physically. He chatted for a short time with his wife. Normal saline sol., 1 pt., was ordered daily per rectum. His nourishment has been taken voluntarily.

October 24, 1908. Although his temperature, pulse and respiration have become normal, he is in a stuporous condition and he looks badly.

October 25, 1908. Patient has a papular eruption on his forehead. He has an exhausted appearance. Face and hands are cyanotic. He refuses food and is fed by tube. He asked to-day if he were "in a well or in a tank," and he states that his head is dizzy. His mental condition gets quite clouded. He does not notice anyone going to his room. He slept very little, only about one and a half hours. Whisky has been discontinued on account of the bloody appearance of the urine.

October 26, 1908. He slept three hours. Pulse is more rapid—108. Temperature 100. Lime water was given with milk. Patient appears quite low, varying between stupor and some glimpses of reason.

October 27, 1908. He slept three hours. There is no change.

October 28, 1908. He slept three hours. There is still no change. He is being fed by tube still.

October 29, 1908. He slept four hours. He passes urine in bed and urinated very frequently, about every hour.

His family physician, Dr. Shaw, saw him to-day in consultation. The patient remains unchanged, is resistive and does not wish to be disturbed for diet or treatment. Passes urine every hour.

October 30, 1908. He slept 7 hours. He appears some brighter.

October 31, 1908. He slept 8 hours. His temperature is normal and his pulse is 90 and better. His mental condition is about the same as yesterday, although he is much improved in sleeping.

November 1, 1908. He slept 9 hours. He has an angry sore on his lip which does not heal.

November 2, 1908. He slept for 10 hours. To-day he was ordered a hot pack to be given daily. The lip is healing. He is still clouded and about the same mentally, and nourishment is taken only by tube.

November 3, 1908. He slept 9 hours, at intervals. Temp. 98. Pulse 80-90. Resp. 15-16. He was in a

stuporous condition all night. Towards morning he appeared to be in a dream-like state of half consciousness. He was fed by tube, and given saline enema and hot pack.

November 4, 1908. Patient is unchanged. The lip and bed-sore are healing. He slept 9 hours. Respiration only 12 and 14 and physical condition is low.

November 5, 1908. He slept 9 hours. To-day is the first time he has asked for food and he took some bread and milk. He talked some, complaining of his back being sore. He had to be fed by tube as usual except for the once when he took bread and milk.

November 6, 1908. He slept 10 hours. There is not much change.

November 7, 1908. He slept 7 hours. He is clearly improved this morning, appearing to be quite sensible; he asked for an egg for breakfast, but later had to be tube fed. His bed-sore is improving. He has been talking quite a bit to-day, but appears to be rather absent-minded and asked several times for his brother, and says his head is mixed up yet. The urine which he passed to-day is natural in color, acid reaction, no albumen.

November 8, 1908. He slept 6 hours. Urine has been passed in bed until to-day, when it was collected, about 40 ozs. He talks a lot but has no memory of what has happened, saying he has never learned to write and that he is only 16 or 17 years old. He keeps asking for Grace, but when asked who Grace is, he replies, she is his sister he thinks, and does not believe he is married. (Grace is his wife's name.) He also asks for his brother, and wonders if he is to get better and how long he has been unwell. He has not slept more than one hour during the day. He is improved and takes an interest in his surroundings to-day.

November 9, 1908. He slept 7 hours. Was wet during the night. He is still further improved and is talking sensibly about his surroundings, but still believes that he is a little boy and would like to get out to play with

other boys when he gets stronger. His appetite has returned and he asks for eggs and beefsteak. He wants to look out of the windows. Passed 36 ozs. normal urine. He is much brighter to-day but still weak.

November 10, 1908. He slept 6 hours. His memory is returning and he is sensible, but rather childish.

November 11, 1908. He is quite intelligent to-day, not so childish and knows his age. He remembers he is married and has two children and asks to write home. He feels lonely and tired of bed. He has taken his meals well. His temperature has risen in the evening to 100 1-5 for the last three days, since he has been taking solid food.

November 12, 1908. When asked what day it was, he said, "All days are alike to me." "My memory is not very good." He had been working too hard last summer and overdid himself and became ill. He has no knowledge of coming here but thinks he has been here two or three months, whereas it is only about three weeks. To-day he says he remembers his wife being here once and her telling him to be good and the rest would do him great good. He couldn't say whether she was here oftener or not. (Wife has seen him almost daily). He remembers the nasal tube feeding. He has no recollection of hallucinations of sight, hearing, etc. He says, "I had no delirium like that." He was quite jocular to-day. He asked if he might have beer and if I thought it would do him harm. He said he didn't think it would hurt him as much as he would hurt the beer.

November 13, 1908. His strength is gradually returning and to-day he is able to sit up in bed. In his conversation he frequently referred to his home, stating that the last he can remember is that he was harrowing a wheat field about the end of September or the first of October. He felt very tired after this and disinclined to work. He can give no details of his illness from then until a few days ago. There is a sense of fullness

in his head and he cannot think properly. He can, however, converse freely and sensibly about anything that happened before his illness.

November 14, 1908. He is taking note now of time and knows the day of the week and month.

November 21, 1908. His improvement is marked in every way. He has slept regularly each night, 8 hours, during the last two weeks. He enjoyed his meals and has gained 12 lbs. in weight. There has been some numbness in the left hand and he has had pain in the left arm during the week. Temperature, pulse and respiration normal.

November 28, 1908. He has been bright and cheerful in his mind during the past week. He has asked to be dressed and is allowed to sit up, which he is now doing. There is a further gain of six lbs. in weight.

December 10, 1908. His wife asked to have him home to-day. She believes he has fully regained his health and is now quite normal. There was no special indication for further treatment and he was discharged on probation.

March 11, 1909. The reports of his health at home have been favorable, and he is discharged to-day, recovered.

Upon admission of this patient his symptoms were at once observed to be of a grave nature. The deep clouding of the mind and the psycho-motor activity pointed to an acute delirium which might be accounted for, perhaps, by some physical disease. No mention was made of these in his admission papers and previous to his coming here there had been a consultation of physicians and a careful, general examination made which undoubtedly excluded all possibility of such. The hospital staff consulted too in this regard. The lungs were not affected, typhoid fever was excluded by the physical examination as well as by the Widal blood reaction. Later, however, the presence of albumen in the urine developed in considerable quantity. Other results of urinalysis were: Acid reaction, Sp. Gr. 1022; the absence of blood and pus cells and casts. Hæmoglobin present. There

was no œdema of any of the extremities nor puffiness of the eye-lids and examination of the retinæ failed to reveal any signs of albuminuric retinitis as reported by Dr. Bucke. Hence his condition of the urine was regarded as an accompaniment of the mental disease and not the cause. The diagnosis pointed to one of the exhaustion psychoses. This was indicated strongly by the circumstances leading up to the onset of his illness, and the history of a slight attack which he had the previous February after sitting up every night for a week with his son, who was ill with pneumonia, and doing his work as usual during the day. Without any holiday he worked arduously all summer and at the same time had anxieties about the success of his new venture. The physical signs of loss of sleep, rapid failure in weight and strength. The peripheral circulation with cyanosis of the extremities. The mental symptom most marked was the deep clouding of consciousness at first, and later a dream-like state in which he appeared to react to his surroundings although it was shown afterwards how superficially he apprehended these. He had hallucinations of hearing and sight early, although later he failed to show these and had no recollection of them as is frequently observed. There was nothing in their character to suggest Dementia Praecox. The most interesting points in the case from the psychical standpoint was the recovery of his memory. His mind seemed to light up as if waking from a dream. On the 8th and 9th of November he remembered himself as a boy and wished to play with his companions. He recalled his brother and a girl named Grace but did not properly realize who Grace was and said that he was not married although Grace was his wife's name and most likely referred to her. On the 11th November he remembered that he was married and had two children whom he could call by name. On the 13th November he was able to recall his life up to about the 1st of October, which was just a week previous to his illness. The incidents of the period covering his disease remain a blank to him.

As to the treatment, this was mainly supporting. Great attention was given to his proper nourishing. All his food, for a long period, had to be administered by the nasal stomach tube. In this acute and rapidly debilitating disease there must be no delay in resorting to this method. Without nourishment such a case would sink speedily to the point of death.

The amount of water given is of importance in this disease where an Auto-intoxication is generally held to play such an important part. We were limited in the use of this by the patient's refusal of everything by the mouth. Hence the injections of normal Saline Solution were held to be specially indicated and together with this the hot packs for the relief of the already overtaxed kidneys.

One other feature in the successful management of this case, as it must necessarily be in all cases of such a severe type, was the untiring and constant care of those who had charge of the nursing and the judgment with which they applied the methods of treatment advised.

DECEIVING THE INSANE.

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No one has so far satisfactorily explained the almost universal tendency on the part of friends and relatives to practise a cruel deception upon those who are mentally ill and for whom they are seeking admission to a hospital. Indeed, this deception is not practised by the friends and relatives only, but even the attending physician is often found doing the same thing, and there is reason to believe that he may be somewhat responsible for the major part of it.

Fear seems to be the foundation on which lying and deception rest, and the less courage an individual possesses, the more he feels the temptation to use misrepresentation; the greatest liar is commonly the greatest coward, though he may cunningly try to convince and deceive himself into believing that his deception is cleverness in overcoming, or consideration in saving his victims.

The insane are often improperly considered, both by the profession and laity, as a separate class of human beings, and it is often believed that the ordinary amenities of human relationship should be suspended in their management. Without considering the ethics of lying, no one will deny that lying to an insane person controverts the principle of fair play as much as hitting a man when he is down; an insane man's weapons of defence are badly damaged or destroyed, and still he is treated as though they were in good repair and his facility in the use of them equal to that of his assailant.

It is a common experience when a patient is admitted to the Hospital for Insane for him to relate that his intimate friends had advised him that he was only being taken away from home for the purpose of consulting an eminent specialist in reference to his illness, and that as soon as the important advice could be obtained he would be returned to his home. Sometimes it has been represented that he was merely starting on a vacation trip which had been arranged for him in order to provide the rest and recreation necessary for his restoration. At other times, he has been made to understand that he was being conveyed to a sanitarium with all the amusements and attractions of a summer watering-place, and that his absence from home would partake largely of the nature of a holiday.

All the foregoing misrepresentations and many others of like character are frequently made by the friends, or relatives, or nurses, or physicians, apparently with the view of securing the quiet removal of the patient from the home to the hospital, and these misrepresentations are made without the least consideration of the conse-

quences to the patient. Instead of the eminent specialist or the attractive watering-place or the sumptuous sanitarium, the patient will find himself introduced to a hospital for the insane where physicians and nurses preside, and where there are locked doors, restrictions and discipline, and also hundreds of insane patients for companions. The patient will now feel that he has been tricked or trapped into the place by those who were his dearest friends, and that if they have deceived and deserted him, his prospects of returning home, when left in the hands of entire strangers, would not be promising.

The patient's loss of confidence in his quondam friends is at once transferred to the hospital physicians and nurses, and he naturally feels that if he cannot depend upon those whom he has known so long and so well, he will not be able to trust those who cannot be expected to have as much interest in him; and yet, the confidence and trust in the hospital physicians and nurses would be of the greatest importance to him. The agony and distress of this deception in many cases cannot be adequately depicted: to be suddenly separated from all that has made life worth living, including faith in one's friends, must mean the full measure of misery and discouragement.

How, then, it may be asked, shall a patient be quietly conveyed to the hospital if he is not to be deceived by this falsely styled "justifiable fiction"? The answer is to proceed in exactly the same way as would be followed in sending an ordinary patient to a general hospital.

The attending physician may explain to the patient that hospital treatment is necessary, and all the arrangements may be made quite openly and with the same frankness and interest that would attend the preparations for removal to a general hospital. There is no need of secrecy or mystery about the medical examinations by the physicians, and no need of concealment on the part of anyone of their purpose. Sometimes it may be advisable that the attending physician himself should accompany the patient to the hospital, or sometimes a

friend outside the family, or some trustworthy person who may be an entire stranger to the patient, or even a constable who is trained in the quiet handling of people may be employed. Whoever may be selected for the service of conveying the patient to the hospital should clearly understand that the patient should not be deceived, and that lying to him would be practising a virtue about on a par with the bravery of a bully who would wantonly strike a defenceless blind man a blow in the face.

OCCUPATION AS A FACTOR IN THE TREATMENT OF INSANITY.

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Every person who has given the matter careful consideration will admit that never before in the history of the world has such a determined, persistent and well-directed effort been made to throw some further light on the many unsolved problems pertaining to insanity. Notwithstanding the fact that centuries of investigation have but comparatively little to show for the time and labor spent on this important subject, it is gratifying to know that numbers of distinguished men in all countries, possessing that true scientific spirit that cannot be discouraged by lack of success in the past, are striving energetically and intelligently to break down the wall, that up to the present time has hidden from their view and from ours, the secrets we are so anxious to possess.

While it is our duty to encourage and uphold those who are engaged in special study, we should, while awaiting results employ in as fully and in as scientific a manner as we may, the remedial measures with which we are at present familiar, and profit from the knowledge

that has been garnered from past experience. From the various hospitals for the insane throughout the world, large numbers of patients have been discharged cured. In each case in all probability different remedial measures have been resorted to and frequently more than one remedy has been employed at the same time. This being the case it is often difficult or even impossible to say definitely to what particular remedy a cure may be attributed. A careful study, however, of a considerable number of cases has convinced me that there is no other remedy known at the present time that is more productive of good results than occupation, and this is the reason why I have selected a somewhat commonplace subject for publication in the Bulletin. In spite of all that has been said and done, we know that a larger number of insane persons are cared for now in the hospitals for the insane than ever before and we expect that this number will be increased. This being the case anything that will increase the happiness and improve the general welfare of so large a number of our population must be worthy of our most serious consideration.

It will not be possible for me to consider this subject at length in this paper and all I hope to accomplish is to explain fully why patients are expected to engage in occupation of some kind during their residence here and to urge that a persistent effort be made to devise ways and means to find employment of a suitable kind for persons suffering from the different forms of mental aberation. I do not pretend to add anything of importance to what others have said on this topic, nor do I expect that any person connected with our hospitals for the insane will object to my according a great deal of importance to occupation as a remedial measure, but I do hope that I may be able to direct attention more strongly to the desirability of prescribing this valuable remedy in a more systematic manner.

It is a fact that up to the present time very little has been written on this important subject. Nevertheless it is quite evident that there is considerable diverg-

ence of opinion regarding the best method of providing suitable occupation for patients suffering from mental disease. I believe, however, that this difference of opinion is very largely due to the fact that the work has not been carried on systematically and that as a rule sufficient care is not taken to note the results in individual cases.

Some authorities say that great care should be taken to assign patients to labor similar in character to that which they were accustomed to perform before their admission to the hospital. Surely this is not wisdom. For example a patient may come from the counting-house fairly saturated with the toxemia of figures, having spent his days and often, it may be, a considerable portion of his nights in struggling with great and perplexing problems, as a result of which there is a failure of his physical health and a more or less complete shattering of his nervous system. To ask such a patient to perform any sedentary duties would be nothing more than adding fuel to the fire already consuming his nervous vitality.

Better far to start this patient at some occupation requiring little or no mental exertion. Send him out in the open air where he will be surrounded by conditions favorable to health and give him a hoe, a spade, or a rake and see that he is kept in motion. Do not attempt to explain what he is expected to accomplish. The great majority of patients will attempt to use any utensil of this kind as soon as it is placed in their hands. They appear to work automatically, little or no mental exertion being required. The power of observation appears to be aroused and developed, slowly, it may be, but steadily. A simple hole is perhaps made in the soil, and the patient proceeds either to enlarge this opening or fill it in or build a mound. He may continue this occupation apparently forgetful of his delusions for a time, but suddenly the abnormal ideas return and any attempt at occupation ceases. Here is where the properly trained attendant is able to render valuable assistance. He has, or should

have, a good knowledge of the temperament of his patient, and can, by tact and patience, encourage him to recommence his work. It was a revelation to me to notice the progress made by patients from day to day. At the outset perhaps a few minutes would represent the time spent in work, but this time is gradually extended until a patient may continue his occupation for an hour or longer, apparently unconscious of his surroundings and forgetful of his delusions. Of course, even after the patient has made progress and understands the nature of the work in which he is engaged and why he is asked to perform it, he may become obstinate and refuse to do more. In such an event no force should be used. Allow him to remain indoors or to spend his time with the walking parties, or to engage in the different amusements and await confidently the time when he not only consents to accompany the working parties but expresses a desire to do so.

During the past few years I had the pleasure of visiting many of the best managed institutions in the United States and Canada, and I availed myself of this opportunity to ascertain what provisions were made for providing occupation for patients suffering from insanity. In one institution I noticed during the afternoon several hundred able-bodied patients marching through the grounds under the supervision of a number of attendants. These patients were neatly and comfortably clad, and the conduct of the attendants in charge would seem to indicate clearly that the discipline of the institution was all that could be desired. I could not help feeling, however, that it would be very much better if these patients, the majority of whom were physically strong, were engaged in some suitable occupation where they would be under less restraint and where they would in all probability become interested in the work in which they were engaged. In another well conducted institution I noticed a large number of patients sitting in an airing court in the charge of a number of attendants. Many of these men possessed sufficient intelligence to realize that

they were kept under close watch, and this fact would no doubt produce more or less discontent. How much better it would be if such patients were engaged in some occupation where they would feel that they were doing something of importance and where they might be allowed a considerable amount of personal liberty. Anything that tends to make a patient more contented with his surroundings must of necessity aid in promoting a more rapid recovery from his mental trouble.

I might cite a large number of cases to explain more fully what I desire to express, but it will be perhaps more desirable to refer to one or two cases which will be of considerable interest.

A young man, in the prime of life, was sent to the hospital for treatment. He was the most perfect specimen of physical development that I have ever seen. He was brought in on a mattress, to which he was firmly bound. This patient had occupied a position of great financial responsibility, and filled with an energetic young man's determination to master all the details of his work he spent day after day and many a night at his desk. His domestic environments were such that he was denied rest even when he tried to obtain it, and he never thought of recreation. His general health became impaired, followed by a complete mental breakdown. After his admission he would destroy his bedding, clothing and everything he could lay his hands on. He went on all fours and fancied he was a ferocious animal in a cage, and sniffed and snapped at everyone. He continued in this way for some weeks with little if any improvement, although his condition varied somewhat from time to time. Spring came, however, and instead of looking for some occupation befitting his condition in life, he was provided with a spade and sent out with a working gang. He was dull and stupid and seemed to move about mechanically. He soon began, however, to use the utensils supplied him, and in less than a week I was surprised and delighted when he asked me to sit with him under the shade of a tree, as he had something to say to me.

For the first time since he came to the hospital, more than three months previous, he appeared to realize that something was wrong and asked for an explanation, but the mental cloud was yet too dense to make him understand. I had previously ascertained that this patient had a hobby for gardening in his spare time, and it would appear that even in his afflicted condition enough of his old inclination remained to induce him to persist in his work. He made a good recovery and subsequently resumed his former occupation.

This case has impressed me with the necessity of studying the temperament of a patient before selecting his occupation, and of endeavoring to obtain as much information as possible regarding the previous history, not forgetting the whims and fancies.

I will cite another case to point out the danger in allowing a too great time to elapse before placing a patient at work.

A male patient, aged 30 years, was admitted suffering from manic depressive insanity. He fancied he was charged with electricity and was alarmed lest he might unintentionally injure his friends. He was very irritable, annoyed the other inmates, and was considered a dangerous patient. He became a great nuisance on the ward and was sent out under the care of an experienced attendant, who, with nine other patients, was engaged in grading. He commenced to improve at once, forgot his delusions, and ceased to provoke trouble while indoors. In a short time he was discharged and has been well for several years. I am convinced that his patient's restoration to health could not be so quickly and completely effected in any other way.

The percentage of patients who are not likely to derive benefit from occupation of some kind is very small indeed. If we exclude those cases who are physically unfit and those who are in the advanced stages of dementia, the proportion who are unable to perform work of any kind almost disappears. A considerable number of patients suffering from manic depressive insanity are,

during the early stages of the disease, unable to perform any labor, but this period of enforced idleness may be very much shortened if careful and systematic efforts are made to ascertain the earliest possible time when simple occupation may be attempted. Paretics, too, during the period of exaltation are not capable of undertaking work of any kind, but it is not unusual to find them perform considerable work later on in the disease. Some patients suffering from dementia præcox absolutely refuse to do anything, no matter how persistent our efforts may be.

Occupation should be simple at the outset. It does not require much mental effort on the part of any patient to push a heavy brush up and down the corridor on the polished floors, and this effort is much less when the patient is only one of a large number moving in the form of a procession. It is little more than an exercise in walking, while it serves as a stepping-stone to something more complicated. This simple occupation is continued longer than the condition of the floor requires, the principal object being to endeavor to direct our patients along the line that leads to something better. A change to outdoor exercise is made just as soon as the patient is reported as being able to perform the simpler indoor labor with very little direction from the attendant in charge. It is true that patients vary much in the time necessary to reach what I may call an "outdoor stage," but the great majority are sure to advance this far.

While I think it is unwise to restrict any class of patients to any particular work, nevertheless it is true that certain patients cannot be induced to perform any work other than that to which they are accustomed. I have in my mind the case of a tailor who was exceedingly dull and sluggish, refused to eat or speak and could only be moved from place to place with difficulty. It was useless to attempt to force him to brush or to do anything else, yet when a needle and thread and a piece of cloth was placed in his hands his interest appeared to be aroused and he made some attempt to ply his trade. This led to better things, and later on he was sent to the

tailor shop, where he proved to be a skilful workman. Another matter that should never be forgotten is that certain classes of patients should not be asked to perform the more menial services that must always be rendered in every hospital. In matters of this kind the same judgment should be exercised in selecting certain persons to fill certain positions as is used in the world at large.

Once the facts that occupation is an important remedy in the treatment of insanity, and that it must be administered in an intelligent and systematic manner, are firmly impressed on the minds of the attendants, little difficulty is found to keep patients employed. Patients who, previous to their arrival at the hospital, belonged to the indolent class and who were never obliged to perform any labor, may consider it a hardship to do so, but they are soon influenced by their surroundings and learn to fall in line and perform such duties as may be assigned to them. The fact that they are not asked or permitted to overwork themselves and that attendants are expected to make their outdoor life as cheerful as possible, robs labor of much that is disagreeable in their minds. Even persons belonging to this class are glad to be permitted to participate in the advantages to be derived from occupation.

My experience has taught me also that it is unwise to offer any pecuniary reward for services rendered by a patient. If this plan is permitted, patients are encouraged to think that they are employed for the benefit of the institution and not for their own good. It also encourages jealousy and serves to engender a general feeling of dissatisfaction and unrest that is not at all conducive to the physical or mental improvement of the patient. A full day's pay is impossible and a lesser amount is unsatisfactory. Better far to eliminate this feature altogether and to encourage the feeling that occupation is the best and most easily administered remedy known to us at the present time. We make it a rule, however, to make arrangemen s to permit all of our working patients to attend the exhibitions which are held

here annually and also to provide other forms of recreation when it is possible to do so. They are also supplied with a little extra clothing, and those who are engaged in arduous labor are provided with special diet.

How does occupation effect a cure? This is not an easy question to answer. Delusions may be nothing more than mental expressions of physical disease. At all events we know that in a large number of cases mental improvement is coincident with the return of physical health. As a result of suitable outdoor employment, we find that patients are less restless, sleep better, their appetites are improved and the secretions become normal. The gentle perspiration helps to eliminate the excess of toxic products and the muscular exercise tends to tire the patient sufficiently to induce quiet sleep. While in the wards, too, they become less noisy, less quarrelsome, less destructive, and much better behaved generally. One thing is certain, that the coated tongue, the obstinate constipation, the diminished secretions, the sallow complexion, and the other symptoms of ill-health that very stubbornly resist other methods of treatment gradually disappear when patients are engaged in suitable occupation, and we can nearly always look forward with confidence for a marked improvement in the mental condition.

While I have no hesitation in stating that the cure of a large number of patients may be attributed to occupation, I am also of the opinion that the greatest good is conferred on the incurable cases by delaying dementia and by adding to the comfort, happiness and general well-being of the chronic insane.

The fact that the employment of patients materially lessens the cost of their maintenance and saves the expenditure of hundreds of dollars annually in the carrying on of the various industries in connection with a hospital for the insane is a matter of some importance. But when we attempt to consider what the restoration of a patient's health may mean to his family, who may be dependent on him for support, or when we try to estimate the value

of the happiness that lights up the home when a loved one returns, whose departure has enveloped his own fireside in the shadows of sorrow and desolation and left behind him the fearful dread that he may never recover; when we consider all this we must forget such matters as finance and carry on our various works with the main object of improving the mental condition of our patients.

Our annual reports contain elaborate statements in detail of the handiwork of our patients. We report from 50 to 75 per cent. as having been employed, and the total number of days' labor is very large indeed. I am inclined to believe that these figures are not always accurately compiled, yet they go to show that a great deal of labor is being performed by patients in the different institutions. But this in itself is not everything. We must endeavor to carry on our work in such a way that every manufactured article will represent in some measure an improvement in the mental condition of a patient, and not a single piece of work of any kind should be placed to the credit of any institution if its performance interferes in any way with the recovery of a patient.

Much that I have said in this paper applies to amusements and entertainments, which I look on as important aids to be employed in connection with occupation.

Notwithstanding the fact that occupation is of undoubted value as a therapeutic measure in the treatment of insane, still we frequently hear persons objecting to employing patients in this way. I am glad to notice, however, that objections of this nature are growing less from year to year and will probably soon disappear completely. It is sometimes assumed that patients who are unable to pay for their maintenance are expected to perform a certain amount of labor in order to lessen the expense of maintaining the institution. On the other hand, when patients pay the usual rate, friends sometimes find fault because such patients are asked to perform any work, believing that they should be exempt from labor because of the fact that the full maintenance rate is being paid. It takes a little time and patience to point out to

persons making these objections that occupation is a remedial measure and that it must be administered in accordance with the requirements of the patients and under the direction of those who are in charge of the hospital. It must also be explained that in arranging our working parties we are not influenced by the amount contributed towards the maintenance of patients. The time occupied in making such explanation is well spent, however, and I am sure that the general public will soon understand the necessity of employing measures of this kind in the treatment of the patients under our care.

It sometimes happens, too, that objection is made when patients are employed in the erection of public buildings in connection with the institutions, because of the fact that laborers and mechanics are deprived of work that they would otherwise obtain. If there is any justification for statements of this kind, it would apply with as much force to the work performed by patients in the ward and also in caring for and improving the grounds. A little reflection will convince any reasonable person that if patients were not permitted to engage in work of this kind the cost of maintaining our public institutions would, in a short time, be more than double what it is at present, and, what is of even more importance, we would be deprived of employing a remedial measure that has a decided curative value, and, because of this, fewer patients would be returned to their homes cured.

As an evidence of the advisability of employing patients in public works, I might refer to what has been done in the matter of erecting a large Assembly Hall in connection with this institution two years ago. This building was erected of concrete, and for more than four months from twenty to thirty patients were engaged in the work daily. The patients selected were strong physically, possessed a fair amount of intelligence, and were quite able to perform the duties assigned to them. They were placed under the care of competent attendants, and every precaution was taken to prevent accidents of any kind occurring. It is a matter of note that during the

erection of this building several patients improved sufficiently to be discharged, and others were well on the way to recovery and returned to their homes later on. I do not think it would be possible to find a more contented gang of men employed in the construction of any building anywhere, and there can be no justification in prohibiting such patients from engaging in work of this kind. It was a pleasure to notice from day to day how deep an interest the patients took in the progress of the building, and how proud many of them were to know that they were able to assist in supplying a long-felt want. As a matter of fact, if we were obliged to depend on outside labor to perform this work I am quite convinced that we would have to wait a long time for the beautiful building of which we are all very proud. To my mind it appears unreasonable for any person to expect that a man suffering from mental aberration should be expected to remain in the wards quietly when perhaps physically he was better able to engage in labor than many others who are obliged to earn a living to support themselves and their families.

Summary.

1. Only a small proportion of our patients should be exempt from labor.

2. A careful study should be made of the temperament of each patient before deciding the kind of labor deciding the kind of labor suitable in each case, and the previous occupation or social condition should not be the only determining factor.

3. The carrying on of this work successfully depends in a large measure on the attendants in charge. Attendants should be selected with care and carefully instructed.

4. Members of the medical staff should visit the working parties regularly for the purpose of studying individual cases.

5. Patients should never receive wages. It is possible that such a syste. : may appear to work successfully

in some cases, but in the end it is sure to create trouble.

6. In some cases it is advisable to encourage patients to learn a trade, so that they may the more easily earn their living after their discharge.

7. Agricultural pursuits and caring for grounds appear to be ideal labor for the great majority of patients.

8. Female patients may with advantage be employed in the vegetable and fruit garden, weeding, picking berries, etc., in addition to the work performed in the day-rooms, dormitories and dining-rooms. They should also perform fancy work, do all the mending and assist in the industrial department in the making of mats, mattresses, etc.

EFFECTS OF DIGITALIS IN SOME CASES OF EPILEPSY.

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A number of cases coming under my care have been benefited to a marked degree by the giving of full doses of Tr. Digitalis, and in a few cases have had a complete cessation of the seizures. In some of them no other drug seemed to have any tendency to lessen the attacks. The cases adapted for treatment with this drug are those with rapid pulse rate and of extremely nervous temperament. The following cases will show the effects of this course of treatment in suitable cases:

M.H.—Age 21 years on admission. Epilepsy commenced at six years. Has two brothers and two sisters, two older and two younger, all free from disease. Grandfather on paternal side had Epilepsy. Maternal grandfather has Paralysis Agitans. Father had acute Rheumatism. Mother died of Bright's Disease at age of 46. Patient as a child was bright, developed well, was

fond of school and learned readily. In fifth year had Measles, Whooping-cough and Scarlet Fever. Epilepsy commenced in sixth year. Attacks at first very light, Petit Mal, and were brought on by any excitement. The organ in home, if played, would start the attacks. Menstruation period commenced at 14 years. Attacks from this time on were more frequent and developed into Grand Mal. Heart at this time became quite excitable, pulse running 110 to 120. Patient admitted to this Hospital July 12th, 1909. On admission patient was very nervous, irritable, talked rapidly and stuttered considerably. Pupils widely dilated. Pulse 120. Was well nourished. Showed a very marked Acne of Bromide, the drug having been pushed to extreme limit by family physician to endeavor to control attacks, but without avail, as they still continued on an average of five to six per day. Patient was continued on Bromides for a time after coming to hospital, as she had been taking them for years. In month of August she had 78 attacks; in September 103, and in October, for first 25 days, had 486 seizures. On the 24th day of October, 1909, I started her on a special line of treatment, having withdrawn all Bromides, and directed the treatment to the heart proper, believing the cause of trouble to be there. On above date she was placed on tonic with full dose of Tr. Digitalis twice a day. The pulse gradually dropped from 120 to 80; nervousness passed away, complexion cleared, Acne disappeared. Patient began to put on flesh, speech became better; mentally became quite bright; pleasant expression. After being on this medicine three days, patient would exclaim to me, "Oh my! I feel so well now." With this general improvement came also a complete cessation of the seizures, as she has not had an attack of any kind since October 25, 1909, or from the second day after being placed on full doses of Tr. Digitalis. Mentally, she is now getting quite bright, nervousness almost all gone, speech almost normal, weight increased by thirty pounds.

C.A.—42 years of age when admitted to this Hos-

pital. Epilepsy commenced at age of 35. No family history of Epilepsy; no alcoholism or insanity in parents or grandparents. Nothing bearing on this case to be found in family history. Patient, previous to this trouble, has been a bright, intelligent man and followed a good trade; had had no illness from childhood. When Epilepsy set in, an attack occurred about once a week. At end of ten months had Paralysis of left arm and leg. During these months he had been on Bromide treatment. Shortly after this he was operated on to remove a pressure on the brain, that seemed to give him a lot of trouble. After the operation the attacks ceased for a few weeks and then returned about as before. The nervous system began to break up. Patient emaciated rapidly and got very irritable. Patient was admitted to this hospital in November, 1907.

On admission, patient was very weak, emaciated, nervous and irritable. Pulse 120-130. Temperature normal, appetite good. Continued on Bromides for a time. Spells continued about as before entering. In January developed a light attack of Rheumatic fever. Made good recovery from this, but was weak and irritable. Pulse still very rapid. On 20th February, 1908, was placed on special treatment, consisting of tonic and full doses of Tr. Digitalis twice a day. In a short time patient became brighter, more pleasant, nervousness passed away, pulse became slower. Patient said to me one day "he could control himself now for the first time since the disease set in." In April, 1908, had a slight seizure. He gained rapidly in flesh to the extent of forty pounds, weighing fifteen pounds more than at any time in his life. Patient worked every day, felt well, looked well; continued on this treatment and remained in the hospital for two full years from his last attack, and was discharged "Improved." Patient now in best of health, all nervousness gone, pulse normal, amiable disposition; mentally quite bright. Impossible to trace the effects of Epilepsy. Arm and leg quite strong, and patient is feeling ready for his work daily.

REPORT OF CASE OF DEMENTIA PRAECOX.

P. MACNAUGHTON, M.D.,

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The following history of B. J. W., a case of Dementia Praecox (catatonic variety), although not a very unusual one, has some points of interest.

Family History.—Maternal grandfather was insane. One maternal aunt was insane.

There is no history of mental or nervous disease in parents, nor any degree of relationship.

Former History.—Patient was born at full term, labor being tedious and instrumental. He was artificially fed, and as an infant was healthy and very fat. At three years of age he had whooping-cough, and at twelve years of age measles; has had sore throat and mild skin disease since. As a child he was shy and retiring, and this grew worse as he grew older. He began school at seven years of age and stopped when he was thirteen, having reached the Fourth book. He was quite bright at school, liked his study and learned quickly. He was clever in mathematics, but had trouble in reciting on account of nervousness.

On leaving school he went West for the summer, returning five years ago and living at home on the farm. He was a little more shy than usual, but would go out some, occasionally refusing. He gradually became more and more shy until about two years ago, when he would not go into the house for his meals if any neighbors were there. He would not go to a neighbor's house at all, not even to a threshing. On one occasion he would not go into the house when his aunt was present; he might say "Good-night," and then slip away to read. He always read a great deal, especially history and geography. He would not discuss anything he read, but when asked

about it would explain in as few words as possible and always very accurately. He seldom or never associated with women, but on the contrary would shun them, but he did not seem to have any animosity towards them. Once he appeared to have taken a liking to one girl, but on being chaffed about her he never again mentioned the subject. When reading, if disturbed he would become irritated, and was always careless of those around him.

When about twelve years of age he had a religious turn after attending a meeting held by evangelists, but when teased about this threw it up. He had attended to religious services up to about fourteen years of age, when he stopped on account of his nervousness. This condition increased until about four weeks ago, when he complained of feeling tired and unwell, lying about the house and reading; this continued for a week. Three weeks ago he got up later than usual and caught his little brother, of whom he was particularly fond, and said, "Look out or you will fall!" squeezing him so hard that he hurt him. He took no breakfast, and when visited in bed by his father he appeared ill, but said that nothing was wrong with him. He then cried out, "Haven't we forgot the Bible? Think, think thrice, because the Bible says that; look at the commandments, look at him in the pictures." His father looked but could see nothing. Then he cried, "There is Christ, who called out to them three times when he was crucified, and now I have my eyes opened." His father became alarmed and sent for the doctor. The patient at this time seemed to be losing his shyness and becoming quite bold. When asked by the doctor what was wrong he answered "Repentance," and told a long, rambling and disconnected story about it. He dropped his conversation about religion after this. He said afterwards that the doctor appeared like "a big, white thing that rose up like a mountain." He never appeared to hear voices, but apparently had hallucinations of sight, saying, "I see him; come, boys, we will get him; Jacob, Samson, Caesar." He picks his clothes, thread by thread, refuses to eat or take medicine, complaining

of his food being poisoned. He will not eat meat or drink milk, giving no reason.

You will see from this history the gradual but steady progress of the malady up to his present illness, when it was necessary for him to have hospital treatment, and also be able to grasp what sort of a person he was when in "his normal condition."

History in Hospital.—Admitted November 4th, 1907, at the age of 18 years. A thorough physical examination was practically negative. He was very poorly nourished, would not speak and threw himself in a chair. would not get up, and when raised to his feet his body remained rigid. Had to be carried to the cottage. Was given a hot bath and put to bed. He was very restless during the night, trying to get out of the window. He gradually quieted down, but slept little.

November 5th.—Very restless, throws his clothes off, pushes his bed, requires constant supervision, gazes about the room as if he sees something or is looking for something. He moves his mouth from side to side, champs his teeth, breathes heavily at times and then normally, occasionally smiles then frowns, twists his face as if crying, winks his eyes very quickly, then again stares into space or with them closed; at times he licks his lips and moves his tongue from side to side. Then again he assumes a listening attitude, he sniffs at times as if smelling some disagreeable odor or is trying to smell something. His arms will remain in position placed, but not his head or legs. He will not speak, not even tell his name. He will not move his arms or legs when told to do so, but if you touch them and tell him to move them he will do so.

November 6-18th.—Remains more or less disturbed, throwing his clothes about, laughing and talking to himself, occasionally swears and yells at attendants, but will not answer when spoken to. Taking his nourishment very well, but requires urging to do so. Scratches the walls and is filthy in his habits. Continually on the move

and only sleeps at intervals during the night. Wants to wear his night vessel for a hat.

November 19-22nd.—Somewhat less disturbed, eating and sleeping better.

November 23rd.—Up and dressed to-day. Went to the dining-room for his meals.

November 25th. Up and about the cottage. Had a walk in the fresh air to-day. Still somewhat restless, laughs to himself, winks his eyes, and has many mannerisms, such as restless movements of his hands, winking his eyes, frowning, twisting his face, etc. Talks a little now and is improving physically.

General Résumé.

December 10th.—*Orientation*—not much impaired; he knows his name, birthday, month, date, year, etc.; knows where he came from, where he is, age, etc. *Memory*—fairly good for recent and past events, remembers fairly well his teachers, names of pupils at school, how he got along at school, also how he spent his time before coming here. *Attention*—weakened very much. Does not do the "100 test" well; will stop and has to be repeatedly urged to continue, although he can do it correctly. *Association of ideas*—very sluggish, cannot narrate, only answer questions. *Affectivity and reactions*—these are impaired. Is very indifferent. *Negativism*—was and is very much marked, but probably not so much so as at admission. *Stereotype movements*—attitudes, grimaces, unprovoked laughter, etc., which were so marked on admission, are much less marked now. *Mutism*—marked at first, now practically absent. *Sensibility*—was impaired, may be dull yet. He complains of tenderness in his stomach and the feeling of a ball being there. *Pupils*—varied more or less since admission. *Circulatory system*—extremities cold, dermographia present. *Temperature*— 96. *Pulse*—65. *Digestive tract*—had coated tongue and constipation; tongue is now fairly clean and moist. *Bowels*—are regular. *Urine*—would

not use his vessel or make urine while under observation, but wet the bed. This has all disappeared. *General nutrition*—thin and poorly nourished on admission, weighing 131 pounds, to-day he weighs 142 pounds and is much improved physically. When admitted he had a marked catatonic stupor which was followed by excitement; now he is quiet, eats and sleeps well, but has marked mental enfeeblement.

December 20th.—Is improving physically, but still has occasional periods of excitement.

January 15th, 1908. Improving and doing some light work now.

March 15th.—Has been steadily improving, talks fairly well and seems interested in affairs.

Probation—May 23rd.—This patient has been working on a gang outside for some time now. Weighs 168 pounds and is doing so well that he was allowed home on probation after a residence here of six months and fifteen days.

Discharged—November 24th.—Reports from home being favorable, he was to-day discharged, nearly two years ago.

Space will not allow me to give a detailed account of the treatment pursued in this case.

THE DIFFERENTIAL DIAGNOSIS OF PARAPLEGIA.*

By Ernest Jones, M.D., M.R.C.P. (Lond.),

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Gentlemen,—The importance of making a correct diagnosis in a case of paraplegia lies in the fact that it is a syndrome which may occur in a very great number of

*An address delivered at the Toronto Orthopedic Hospital, Nov. 13, 1909. Published in the Canadian Practitioner and Review, Jan., 1910.

nervous affections, so that a clue to the cause of it is usually at the same time a clue to the recognition of the actual disease. I need hardly remind you that paraplegia is to be regarded as a group of symptoms, and never as a disease, though it may sometimes be the most prominent manifestation of the affection present. It may be defined as a weakness, more or less complete, of the lower extremities, not due to a peripheral affection or to a lesion of the lower neuronic system. We have thus at the outset to distinguish between true paraplegia and weakness of paraplegic distribution, just as in other cases we have to distinguish between true hemiplegia and weakness of hemiplegic distribution.

The distinction between true and pseudo-paraplegia can almost always be effected by considering the symptoms of the paraplegia, quite apart from other evidences of the cause of the affection. The features to be relied on for this purpose may be divided into three. First, the nature of the paralysis; secondly, the presence or absence of nutritive disturbances, and thirdly, the state of the reflexes. As in the first case I shall bring before you it is only possible to demonstrate the third of these, I shall only briefly mention the first two. The paralysis of true paraplegia differs from that of pseudo-paraplegia in being massive, and not limited to a small group of muscles; in being always more pronounced at the distal part of the limb, and in being distributed according to certain groups of functions rather than according to the anatomical innervation of muscles. Under the second heading, that relating to nutritive disturbances, are included wasting, various trophic changes, and changes in electrical excitability. Although in true paraplegia we may sometimes meet with a considerable wasting of muscles, more than can be attributed to mere disuse, still we never see the extensive atrophy, not only of the muscles but of all the structures of the limb, that so frequently occurs in the pseudo-paraplegias, particularly in those, like acute poliomyelitis, that are due to an affection of the anterior horn cells. Profound trophic changes are rare in true para-

plegia, except in the variety caused by an extensive transverse lesion of the cord, and finally, certain of the electrical changes, particularly that known as the reaction of degeneration, are highly characteristic of the pseudo-paraplegias caused by an affection of the lower motor neurone.

The first patient* we have to examine is a boy aged six. He was sent to the hospital from Manitoba last January. The paraplegia was then practically complete, but under re-educative treatment it has greatly improved. The early history of the case is very imperfect, but all the indications present point to the affection having been an infective myelitis in the lower dorsal region. He shews very well certain changes in the reflexes which at once permit us to say that the lesion is one implicating the upper neuronic system of fibres. You will observe that the knee jerks are greatly exaggerated, and, further, that there is present a marked contralateral adductor reflex, *i.e.*, a tap applied to either the patella or the adductor tubercle evokes a contraction of the adductor muscles of the opposite limb. These physical signs are never caused by an affection confined to the lower motor neurone. Their significance is amply confirmed by making the following further tests. Ankle clonus is easily to be obtained, and, as you see, this shews the characteristics of the true ankle clonus, namely it is slow in rate, regular in both time and amplitude, persistent, not to be varied by changing the pressure or the position, and consists of an almost equal to-and-fro movement instead of a recurrent downward push.

Babinski's plantar sign is also well marked, and in this connection it is perhaps desirable to interpolate a few remarks on the question of technique in testing the plantar reflex, for the value of observations on this reflex, and therefore of conclusions drawn from examination of it,

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*For permission to demonstrate the cases here mentioned, I am indebted to the courtesy of Dr. B. E. McKenzie, to whom I wish cordially to express my thanks.

is often quite vitiated by non-attention to this matter. In the first place, it is absolutely essential that the limb be quite relaxed when the reflex is being examined. For this purpose the recumbent posture is best suited, and the limb should be slightly everted, a pillow being, if necessary, placed under the outer side of the knee. It is never permissible to test the reflex when the patient is in a sitting posture and holding out the limb, though this is an only too common mode of procedure. It is, however, sometimes possible to test it in this posture if due care be taken adequately to support the foot and the upper part of the leg. In the second place, the sole should not be tickled, for this only evokes confusing semi-voluntary movements. The stimulus should be a firm, steady one, and, with an easily excited patient, it is best to press the thumb against the sole for a short time until he is accustomed to the contact and until the foot is completely at rest. Attention should now be concentrated on the big toe, and indeed on only the tarso-phalangeal joint of this toe; flexion or extension at this joint is the crucial thing. The abnormal response, known as Babinski's sign, differs from the normal one not only in being a movement of extension instead of flexion, but also in being much slower and in being maintained for a much longer time. This is well seen in the present case. Movement of the big toe is, however, far from being the only characteristic of the sign; of the other points, three may be mentioned. Whether the other toes flex or extend is a matter of little interest, but an occurrence of much significance, seen more frequently in children, as here, is the spreading out of the toes that sometimes accompanies, or occasionally replaces, the extensor response of the big toe; this is known as the "fan" sign. Again, eversion of the foot at the mid-tarsal joint frequently replaces the normal inversion that occurs when the sole is stimulated. Lastly, with Babinski's sign, the tensor vaginæ femoris responds later than the leg muscles, instead of, as in the normal, earlier than these.

Of the numerous new reflexes that have been discovered in the past few years, I should like to call your attention to two, for they are easily to be observed in the present case. The first is the "paradoxical reflex," first described by Schäfer some ten years ago. It is so called because pressure over a flexor muscle, the lower part of the gastrocnemius, elicits extension of the big toe, or even of all the toes; in the normal this elicits flexion of the toes. The sign has exactly the same significance as Babinski's sign, and indeed it has recently been shown (1) that the reflex is really a cutaneous one, for the same response can be obtained by pinching the skin over the gastrocnemius. The fact is that when Babinski's sign is well marked it can be obtained from stimulation over a far wider reflexogenous zone than the sole of the foot, for instance, from the front of the leg (Oppenheim's sign), or from the upper part of the thigh (Remak's sign).

Another useful test is that described independently by Mendel and Bechterew. It consists in striking the dorsum of the foot at about the junction of its middle and posterior thirds. In the normal, extension of the middle toes follows, whereas, when a lesion of the upper neurone segment is present, flexion of these follows. The significance of Schäfer's and Mendel's signs is exactly the same as that of Babinski's, namely they demonstrate the existence of a lesion of the upper neurone system. It is usually said that they do not occur in functional disease, but I should not like to be dogmatic on this point. Both these signs usually occur only when Babinski's is also present, but occasionally they may occur in the absence of this, and then their value in diagnosis may be very great.

The first case has illustrated some of the points by means of which we are enabled to distinguish between true and pseudo-paraplegia. The second case we shall make use of to study the problem of the differential diagnosis between the different varieties of the former condition. In doing this it is expedient to bear in mind some method of grouping the various causes of true para-

plegia, so that by systematically taking into consideration one group after another, one is sure not to overlook any of them. For this purpose, I would commend to your notice the following simple scheme, which we shall apply to the next case by working from below upwards. This is not as a rule the better order, but I am adhering to it in this instance for a special reason.

A.—TRUE PARAPLEGIA.

I. *Psychical.*—Hysteria.

II. *Organic.*

A. *Disease of Brain.*

I. Bilateral lesion.

(a) Cortex; general paralysis of the insane, meningitis, porencephaly, hæmorrhage, thrombosis of the superior longitudinal sinus.

(b) Pons; tumour, vascular lesion.

2. Multiple lesions, tumour, vascular lesion.

3. Large single lesion, causing pressure on opposite side.

B. *Disease of Spinal Cord.*

I. Diffuse system degeneration; amyotrophic lateral sclerosis, disseminate sclerosis, combined sclerosis, Friedreich's ataxia.

2. Local affections.

(a) Intrinsic—Myelitis, thrombosis, tumour.

(b) Extrinsic—Pott's disease, tumour, trauma.

B. PSEUDO-PARAPLEGIA.

I. *Disease of Anterior Horn Cells.*

(a) Acute—Infantile paralysis.

(b) Chronic—Progressive muscular atrophy.

II. *Disease of Peripheral Nerves*—Multiple Neuritis.

III. *Disease of Muscles.*—Dystrophies.

The patient is a woman of twenty-two, in whom the symptoms date back three years. Two points in the

onset are especially noteworthy, namely, that it was a gradual one, and that a feeling of numbness long preceded the loss of power. When I first saw her, five weeks ago, her lower limbs were in a state of complete contracture; the flexion was so great that the knees touched the abdomen and the heels were pressed against the buttocks. Neither her efforts nor ours could unbend them an inch. Sores were present on the feet, no doubt from friction and pressure. The muscles of the thighs and legs were, and, as you see, still are, greatly wasted. We have never been able to elicit any of the deep or superficial reflexes in the lower limbs. There has been considerable retention of urine, frequently making necessary the use of the catheter, but never any incontinence. Sensation was quite abolished up to the pelvis, and blunted above that up to the costal margin. Above the waist there are no abnormal physical signs.

The clinical picture, the outlines of which I have just sketched, is evidently a grave one, and yet Dr. McKenzie has been able, by applying continuous forced extension, to get the limbs into practically their normal position. Coincidently with this, the patient has recovered considerable power over them, and you see that she can now voluntarily bend or straighten them, though in an uncertain and tremulous manner. With the help of special apparatus she can even walk a few steps. This striking improvement is but another perplexing element in an obscure case, and we must take up the question of diagnosis with great care, though in the time allowed me I can only indicate the main steps in the argument.

In spite of the fact that there is much wasting of muscles, and that the reflexes are all absent, it is quite easy to eliminate all the causes of pseudo-paraplegia, of which these facts would at first make us think. Let us briefly mention the causes in order. The dystrophies are evidently put out of question here, by the patient's age and sex, by the absence of any similar cases in the family, by the distribution of the muscular wasting, and above all by the pronounced sensory disturbances. Affections

of the peripheral nerves never cause such widespread contractures or such profound sensory loss; there is further no tenderness over any nerve, nor has there been any pain. Acute affections of the anterior horn are not to be thought of, for the onset here was gradual. Chronic affections of the anterior horn are equally easy to exclude, for not only is progressive muscular atrophy rare in a girl of this age, but its onset is localised, and it is not accompanied by marked sensory loss.

It is unlikely that the condition is one of extrinsic paraplegia, *i.e.*, due to pressure on the spinal cord, for the three cardinal signs of this affection, namely, root pain, unilateral onset, and precedence of motor over sensory symptoms, are all absent. An intrinsic paraplegia, due to a local lesion in the cord, is more difficult to exclude, and a diagnosis of it might be readily, but erroneously, be made in this case. The following considerations, however, speak strongly against it. To produce such profound sensory changes, the lesion would have to be very severe, indeed practically complete, and it is difficult to conceive of such a lesion existing without ever causing incontinence of urine or fæces. Again, as the sensory loss extends up to the level of the sixth dorsal nerve, it is incongruous that there is no trace of weakness of the abdominal or back muscles, for extensive local lesions implicate the motor fibres to a greater extent than the sensory ones. It is hard also to picture the nature of any local lesion that could cause the symptoms present. Thrombosis and myelitis have either an acute or rapid onset, and not a very gradual one, as was here the case, while against the idea of a tumour speaks not only the absence of any tumour elsewhere in the body, in spite of the long duration, but also the marked improvement that has recently taken place.

Most of the diffuse degenerations of the spinal cord can be excluded here by the absence of other signs that accompany these conditions. For instance, with Friedreich's ataxia, there would be an early onset—before puberty, a hereditary history, the presence of nystagmus,

optic atrophy, or choreiform tremor. Amyotrophic lateral sclerosis would have caused an increased activity of the deep reflexes; against this diagnosis are further the points mentioned above in connection with progressive muscular atrophy. Disseminate sclerosis occurs particularly at this patient's age, and it is not rare for it to begin as a paraplegia. However, after three years one would expect to find other evidences of the disease, such as an intention tremor, nystagmus, ocular palsy, optic atrophy or the characteristic staccato speech. One of these system degenerations of the cord, namely the sub-acute combined sclerosis, is more difficult to exclude, and in my opinion it is the only organic affection that seriously enters into consideration. The accompanying degeneration of the posterior columns would account for the absence of reflexes in the lower extremity, as well as for the sensory symptoms. Such extreme contractures as are present in this case are, however, rare in this disease, and the severity of the motor and sensory disturbances strangely contrast with the integrity of the sphincter action. This form of combined sclerosis is usually accompanied by severe anæmia, which is not present with this patient, and the symptoms never improve so rapidly as they have here; indeed the prognosis is as a rule grave. Further, two characteristic features of this affection, pain and ataxy, are quite absent here.

Of the brain disease little need be said. A glance at the list of brain conditions that may cause paraplegia shews how easily they can be excluded. Porencephaly, meningitis, general paralysis of the insane, tumour of the brain, are all easily negatived by both the history and physical signs. The only vascular lesion that is at all likely to cause paraplegia without also affecting the upper limbs is thrombosis of the superior longitudinal sinus, an affection that is a not very rare complication of chlorosis. The slow onset and the presence of profound sensory disturbance are, however, two features that definitely exclude this diagnosis.

We have thus apparently eliminated with this patient

every group of nervous affections that may cause paraplegia, and yet here remains the paraplegia. We have therefore to recall the fact that paraplegia may occur independently of any organic affection of the nervous system, and may be due to a psychical disorder. This is the diagnosis at which we have arrived in this case, namely, that the paraplegia is of a hysteric nature. This diagnosis was made not only on negative grounds, *i.e.*, not only because the condition is inconsistent with any organic affection. There are also positive evidences indicating its hysteric nature. In the first place it is certain that the patient is a hysteric. In giving you the history of the case I omitted to mention that she has suffered for years from what assuredly were hysteric seizures. These consisted of irregular convulsive attacks, which frequently lasted for a couple of hours, and which were followed not by a deep sleep, as in epilepsy, but merely by an amnesia for the period. In the next place, all the symptoms I have described to you are not only consistent with, but are typical of, hysteria. I need only recall to you the advanced contractures and the retention of urine, both of which have been overcome by persuasive measures. Finally, some features of the paraplegia are quite distinctive of hysteria. I refer particularly to the sensory symptoms. The complete anæsthesia for all stimuli and the amnesia for parts of the body, are very suggestive indeed of hysteria. Further, during the improvement that has lately taken place it has been possible to evoke sensations by active stimulation of the lower extremities, by strong tappings, and in connection with this two features are especially significant. First, the strongest stimuli we can apply, namely painful ones, are quite incapable of evoking any sensation, and we know that these are the very ones most frequently and most completely lost in hysteria. Secondly, every sensation that is evoked by tapping a point on a lower limb is accompanied by a simultaneous sensation which the patient refers to the corresponding point on her upper limb. Thus, tapping the knee causes two sensations to

be felt, one on the knee, the other in the olecranon of the same side. This is a rare symptom, the significance of which, interesting as it is, it would be out of place to discuss here, but I would point out to you that it is pathognomonic of hysteria.

You are thus once more reminded of how grave are even the physical conditions that may be produced by a psychical malady, and I would further remark that the outlook in such a case as the present is similarly grave. Although the present symptoms may altogether disappear, yet they are only too likely to recur at some future date, or to be replaced by fresh and perhaps even more distressing ones. Hysteria is an affection that is rarely cured unless Freud's psycho-analytic method of treatment (2) is resorted to.

REFERENCES.

1. See Lasarew. Neurol. Centralbl., 1906, Nr. 7, and Ernest Jones, Proc. Roy. Soc. Med., Neurol. Sect., vol. I., p. 59.

2. See "Psycho-analysis in Psychotherapy." Montreal Med. Journ., Aug., 1909.

THE THERAPEUTIC EFFECT OF SUGGESTION.*

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The ultimate aim of all scientific therapeutics should be to establish the exact way in which any given form of treatment brings about its effect, and, with this knowl-

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edge as a basis, to define its scope and provide precise indications for its use. Close investigation of a therapeutic measure that has empirically been found to be effective frequently yields important information about the nature of the malady itself; suggestion constitutes no exception to this rule.

The study of this process is one of especial importance, for on the one hand suggestion has of late years been invoked to explain a great many phenomena in sociology and pathology as well as in therapeutics, and on the other hand it is of all therapeutic agents perhaps the most widely used, either consciously or unconsciously; in the case of the psycho-neuroses, many writers sum up the discussion of treatment in the one word "suggestion." It is probable that the eager readiness of the medical profession to employ the term "suggestion" is due, not so much to the propagandism of the Nancy school, as to the comforting discovery that by it a great economy in thought could be effected. To be able to attribute a given occurrence to "suggestion" is with many a complete solution of the problem, and they do not find it necessary to pursue the matter further, or even to acquire any clear idea of what they actually mean by the term.

It is expedient to distinguish two different connotations of suggestion, one conceptual, the other affective. In the first place, the term is used to denote the effective conveyance to a person's mind of any idea—Bernheim's definition. This may conveniently be described as "verbal suggestion," though it need hardly be said that the process may be brought about quite apart from the use of actual words. In the second place, the term denotes the acquirement by a person of a given affective state, such as when one person responds to the "personal influence" of another. The difference between the two connotations may be illustrated by referring to a criticism that several writers, with no knowledge of the subject, have made concerning the successful results of psycho-analytic treatment, namely, that "the cures are due to suggestion."

Here two different criticisms are evidently confounded; it is at one time meant that the theories evoked during psycho-analysis are false, having been merely suggested to the patient, and at another that, whether the recovered memories are true or false, the improvement in the patient's condition is brought about through the personal influence of the physician. It is generally recognised that the second of the two processes here distinguished, which may be called "affective suggestion," is the more fundamental, and is the necessary basis for the first one. The condition of suggestibility, or increased readiness to accept verbal suggestion, is thus the secondary consequence of an induced affective state, and it is with the latter that we shall here be chiefly concerned.

The most perfect form of suggestive influence is that seen during hypnosis, and, as the Nancy dictum is generally accepted that suggestion and hypnotism are merely stages of essentially the same process, the two may be considered together. One of the most definite advances of recent years in our knowledge of this subject has been the gradual recognition of the fact that the chief work is performed, not, as used to be thought, by the operator, but by the subject. The striking incongruity between the cause and the result should in itself make us strongly suspect this; the remarkable manifestations of hypnosis surely must depend on some more powerful forces than the external "suggestion" given by a shining light or a bare word. The occurrence of auto-hypnosis and of spontaneous ecstasy, and the extraordinary variation of hypnotic manifestations in different persons, greatly strengthen this suspicion that we have to do rather with some inherent faculty that varies with different subjects than with any positive action or influence on the part of the hypnotist. We can no longer regard the subject as a helpless automaton in the hands of a strong-willed operator; it is nearer the truth to regard the operator as allowing himself to play a part, and by no means an indispensable one, in a drama constructed and acted in the depths of the subject's mind. It is the forces at work in

this drama that it becomes necessary to investigate; they are the real agents in suggestion and hypnotism.

Certain clinical considerations make this deduction practically inevitable. The psychologically essential characteristic of these processes has been described, by Bernheim, Sidis and others, as a dissociation of consciousness, an evidently just designation. It has, however, too hastily been assumed that this dissociation is an artificial state brought about by the hypnotic procedure, for the truth is that both in the normal and abnormal mind dissociation is already present and is merely made use of by the operator. There is in general a fairly close correspondence between the nature and extent of dissociation and susceptibility to suggestion, so that it becomes advisable to investigate the most pronounced manifestations of these, namely, hypnosis in cases of hysteria; it is notoriously easier to study psychical processes under the microscope of "disease."

The resemblance of hypnotic manifestations to the characteristic symptoms of hysteria is in general so striking that in the eighties Charcot pronounced hypnosis to be a typical hysterical syndrome. I have long thought that there is in this view more truth than is now commonly believed, and that the triumph of the opposing conception held by the Nancy school is destined to pass away. It is certainly striking that the operator cannot elicit a single manifestation in hypnosis that may not be spontaneously produced by the disease, thus giving the impression that the manifestations merely result from the evocation of hysterical symptoms; the tremors, paralyses, spasms, amnesias, hallucinations, paræsthesias, trance-states, attitudes, and ecstasies are typical instances of this. These symptoms have been observed all over the world both before and after Charcot's time, and the notorious Salpétrière *dressage* accounts for only some of the less important traits. The two most characteristic phenomena in hypnotism, the peculiar *rapport* between the operator and subject, and the curious post-hypnotic sugges-

tion, have been shown, by Janet and Ferenczi respectively, to have their precise counterparts in hysteria.

The main reason why in late years the problems of hypnotism and hysteria have been kept apart is that the great frequency with which hypnosis can be induced in the normal has seemed to prove the mutual independence of the two conditions. In the light of more recent knowledge, however, this very observation is a strong argument in favour of Charcot's view that the two are closely connected, for while, on the one hand, Sidis' conclusion that "every one of us is more or less suggestible" has been amply confirmed by later investigations, on the other it is now recognised that Moebius' dictum, "Jedermann ist ein bisschen hysterisch," is not an empty satire, but a literal fact. As Jung puts it, we have all had to fight with the same complexes that cause the sufferings of hysterics, and scarcely anyone gets off scot-free from the "abnormal" effects of them. Freud has produced abundant evidence to shew that the same unconscious, dissociated trends operative in hysteria come to expression in the normal by means of mechanisms psychologically closely akin to those that generate hysterical symptoms.

When studied from this point of view it is found that suggestion, so far from being an isolated phenomenon not further reducible by analysis, as is commonly believed, is only one specialised variety of more general psychological mechanisms that play a central and predominating part in psycho-neurotic disturbances. Put succinctly, the view here maintained is that suggestion is one manifestation of a more general mechanism called "transference," that this in its turn is a particular variety of what Ferenczi has recently termed "introjection," and that this finally is a characteristic type of the "affective displacement," the excessive activity of which is so typical of the psycho-neuroses. These processes are most conveniently expounded in the reverse order, namely from the general to the particular.

By "displacement" is meant the transposition of an

affect from one conception, which is invested with an unpleasant feeling-tone, to another less inacceptable one. The "repressed complex" is replaced in consciousness by a secondary idea invested with the original affect of the complex; the association between the two ideas is usually of a very superficial order. The mechanism is common enough in everyday life, a banal instance being the child's doll, which claims the preoccupation and care appropriate to a baby—the idea of the former replacing that of the latter—but in the psycho-neuroses its field of action is extraordinarily wide. The following is a simple instance: A patient was obsessed by the thought that he was sinning against God by playing the church organ, and as he was a professional organist he had to give up his career. The symptom had arisen from the remorse he felt at playing with another organ—his own. What is called the "inadequate emotional reaction" of such patients, the excessive sympathy, love or hate that they display on apparently trivial occasions, is to be similarly explained. The external occurrence has aroused by association the dormant memory of some previously experienced similar occurrence, and their abnormally intense reaction is due partly to the present occurrence and partly to the past one; strictly speaking, they are responding to both. Hence the "exaggerated emotions" of hysterics are only apparently exaggerated—they are only so in relation to the exciting cause; when correlated with the unconscious source they are found to be quite logical and fully justified. This excessive tendency on the part of the patient to incorporate his environment into his own personality, to "take things personally" and thus to widen his ego, is termed "introjection." It is merely an exaggeration of tendencies present in us all. common instances being the way in which a careful housewife is personally offended at any reflection on the cleanliness of her house, which in a sense is a part of herself, or the glow of personal pride we feel whenever anything enhances the renown of our particular city or country. When this tendency is carried to excess it

obviously increases the sensitiveness of the person in question; every new section of environment that is incorporated into his ego adds a fresh group of possibilities for pleasant or unpleasant emotions; it becomes, as it were, a sentient antenna. As is well known, the sensitiveness of nervous invalids may at times be quite appalling; every trivial happening affects them in a personal way, and the slightest occurrence may bring about such an exacerbation of suffering that life seems impossible for them unless they are shielded to an artificially elaborate extent.

The most interesting introjective manifestations are those relating to the persons in the patient's environment. He transfers on to them various affects, love, hate, and so on, that arose, perhaps years before, in connection with quite other people, just as a child who has once been hurt by a doctor is for some time afterward fearful of every doctor he encounters. In order for this to happen there has only to be instituted the slightest resemblance between the original person and the present one; such a patient, having once intensely hated someone with a given characteristic, say red hair, will be ready to hate anyone he may afterwards meet who has the same characteristic. This tendency to live over again the same emotion in the presence of a person resembling one formerly associated with the emotion is called "transference," but Freud finds it convenient to restrict the term to the occasions on which the process happens in relation to the physician who is treating the case. Every physician who has had much experience with psycho-neurotic patients knows how variable, unreliable, and changeable is their attitude toward him; in fact, their "capriciousness" is generally notorious. On a slight change in his manner, or even apparently quite spontaneously, their attitude alters, trust is replaced by suspicion, gratitude by resentment, and so on, the extent of the alteration being out of all proportion to the exciting cause; for this reason they are to most physicians the most ungrateful, unsatisfactory and disliked of

patients. This puzzling behaviour, however, becomes at once comprehensible as soon as one realises that it is determined, not by the external occasion, to which it is so inadequate and abnormal a response, but by previously existing and usually unconscious emotions, which the external occasion merely evokes. It is altogether a question of association; a word or tone used by the physician unconsciously reminds them of some forgotten experience, and really it is to this that they are reacting; the response is determined, not by the conscious personality, but by some unconscious complex that has been stimulated.

A matter of peculiar significance is the observation that most frequently the affect transferred to the physician arose originally in connection with one of the parents, more usually the father. The respect due to the physician, and his position of prestige and authority, in themselves make readily possible the formation of an association between him and the parent, and often the mere enforcing of a piece of medical advice, a slight sternness or even increase of firmness in tone, the reproving of an omission or fault, are quite sufficient to consummate this. The "firmness" with which it is fashionable to treat such patients, a term that frequently covers a considerable measure of hostility and lack of understanding on the part of the physician, obviously conduces in a high degree to the transference of the affect of parental complexes; the result of such an attitude is sometimes beneficial, frequently disastrous, and always unpredictable. As in most cases the incestuous relation of the patient to his parents, particularly to his father, lies at the very centre of his malady, it will be seen that the type of transference here indicated is of especial importance.

The affective processes that are in this way transferred by the patients to surrounding persons, and to the physician, at first sight appear to be of all kinds, gratitude, hate, affection, fear, jealousy, and so on, but psychoanalytic research has established beyond all possibility

of doubt that these diverse processes are not, as they seem to be, primary and incapable of further analysis; on the contrary, they prove on examination to be only secondary reactions to deeper trends. It was one of Freud's most important discoveries that these deeper and more ultimate trends are invariably components or derivatives of the psycho-sexual group of activities. That resentment, anger, jealousy, and other sentiments and emotions may be secondary reactions to unsatisfactory sexual experiences, to despised or ungratified love, is, of course, a truism, one that is well expressed in Congreve's familiar lines·

> Heaven hath no rage like love to hatred turned,
> Nor Hell a fury like a woman scorned.

In hysteria, the psycho-neurosis that most concerns us here, the symptoms are disguised expressions of various sexual desires. The symptoms that provide only a partial and unsatisfactory outlet for the pent-up affect are the recent, temporary, or changing ones, the ones most easily "cured;" the more durable and constant symptoms, which are notoriously harder to remove, are proving more adequate outlets for the pathogenic affects in question. There is, therefore, a considerable measure of hungry needs and desires ready to attach themselves to any suitable object that may present itself, and it is the attachment of these to the idea of the physician that constitutes the process called transference. When the affects transferred are of a positive nature, *i.e.*, of attraction, a psychical *rapport* is set up between the patient and the physician, on of course the patient's side only; when the patient cannot transfer these to the physician, he says that he finds the latter "unsympathetic," and usually he soon leaves him. This *rapport* psychologically consists in an unconscious fusing of the two personalities ("identification") in the mind of the patient, and depends on the feminine component of the sexual instinct; it is identical with the pleasurable obedience that the

child first experiences in regard to his parents, and which is the source of his docility and compliancy towards them.

The psychical *rapport* just described is the same as what we termed above "affective suggestion," which is the basis of the readiness to accept verbal suggestions. It is found in its highest degree in the familiar condition known as hypnotic *rapport,* in which the subject is totally absorbed in the thought of the operator, and is so oblivious to the outside world that it may be quite impossible for a third person to enter into communication with him. The state bears the closest resemblance to the feeling existing between devoted lovers when in each other's company, and the same analogy can be drawn in connection with the states that follow the *séance* in the case of patients who have been repeatedly hypnotised. Janet gives an excellent description of these, dividing them into three: (1) A period of temporary fatigue, (2) One of what he terms "somnambulic influence," which is characterised by an exalted sense of well-being, with a more or less complete disappearance of previous symptoms and troubles, and (3) one of what he terms "somnambulic passion," characterised by a recurrence of the troubles, a tormenting unrest, and a craving to be hypnotised anew. In both of the latter the patient is greatly preoccupied with the constant thought of the physician, and Janet's description of the patient's mental attitude towards the physician leaves no doubt as to the sexual nature of the whole process. Time does not allow me to point out the essential part played by sexual matters in the types of procedure employed to induce hypnosis, and also in the various hypotheses concerning hypnotism that have at different times been promulgated; I will only remark that, in the latter, domination of the subject by the hypnotist, and infusion into him of some vital essence, whether a magnetic fluid or a psychical influence, play a prominent part.

Returning now to the question of treatment, we may first define the relation of suggestion to psycho-analysis. As in this treatment various repressed affects, which have arisen in past experiences of the patient with other people, are one by one transferred to the physician, they are traced to their source, when the patient realises their evidently sexual nature. He thus obtains control over the secret wishes and desires that previously had found unsatisfactory expression in the creation of different symptoms, and they are now free to be applied, by "sublimation," to non-sexual, social aims. The criticism sometimes made, that the brilliant results of psycho-analysis are merely brought about by suggestion, betrays a complete ignorance of what actually happens, and is easily answered by the following objective consideration. Most members of the Freud school had practised with various forms of suggestion and hypnotism before learning the psycho-analytic method, and their experience is unequivocal as to the remarkable difference in the results they can obtain in the two ways. It would be absurd to maintain that suggestion is enormously more potent when unconsciously used by the physician than when he consciously cultivates it with all the means in his power: further than this, the affective *rapport* due to transference, which is the very substance of suggestion, is in psycho-analysis deliberately observed, and its effects neutralised as they arise.

Janet has convincingly shown in the case of hypnotic treatment that the beneficial results obtained essentially depend on the somnambulic influence, or preoccupation with the thought of the physician, which is identical with what we have called affective suggestion, *i.e.*, the transference of positive affects. Investigation of patients that have been treated by various methods enables one to formulate the general statement that in all except the psycho-analytic the same rule holds, namely, that affective suggestion is the principal cause of the beneficial results; this applies both to the different psycho-

therapeutic measures—persuasion, "rational re-education," hypnotism, suggestion, and simple encouragement: and to the physical ones, such as electro-therapy, gymnastics, massage, Weir-Mitchell treatment, and so on. The mode of action of suggestion in therapeutics is as follows: the repressed sexual affects are withdrawn from their previous expression in various symptoms, and become attached to a more suitable object, namely, the person of the physician. Psychologically this merely means the replacement of one symptom for another, namely, abnormal psycho-sexual dependence on the physician; the underlying pathogenic mechanisms remain the same, the complexes merely undergo a little further displacement, and are not resolved.

In spite of the exaggerated claims made by professional hypnotists and others, it is widely recognised that the *permanent* results obtained by the use of hypnotism and suggestion leave much to be desired. Mild cases of psycho-neurosis may without doubt be lastingly benefited in this way, though even here success is very inconstant and uncertain, but as regards the more severe cases critical experience has an all too dissolving effect on the optimism that is often preached. Again and again relapses occur, one symptom is removed only for another to take its place, and chronic nervous invalidism in spite of all efforts is a spectacle familiar enough to every practitioner. In these cases the tendency of the affective processes to flow in the old channels is so fixed that the new outlet can be kept efficient only by renewal of the opportunity for transference, in the form of close intercourse with the physician and maintained interest on his part. Into the inconvenient and detrimental effects of this we need not here enter; they contrast very unfavourably with the results obtained by psychoanalysis, which aims at restoring the complete independence of the patient by giving him control over the pathogenic agents. It is only when these are traced to their source that it becomes possible to deprive them of their

power for harm, and to set free their activity so that it may be devoted to more useful, social functions. Freud's work, therefore, has given us not only an insight into the nature of suggestion, but also the power to affect for good the processes that underlie it.