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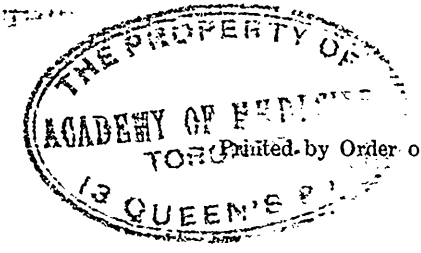
Bulletin

OF THE

Ontario Hospitals for the Insane

A Journal devoted to the interests of Psychiatry in Ontario



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The Bulletin
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THE DEFECTIVE AND INSANE IMMIGRANT.

At last we are face to face with a danger which must be met resolutely and sanely and without the maudlin sentiment which so often masquerades under the names of loyalty and patriotism. Blood is thicker than water, we are told, and humanity owes a duty to the weakling who is struggling against the curse of bad heredity and environment. This is all very true, but it is scarcely fair to suppose that Canada is to support hordes of degenerates of the English speaking peoples, to say nothing of those of the lowest in the social scale of the European and Asiatic races.

Canada has developed slowly but healthily, and has had time to assimilate even some of the worst elements which have come to her, but the forced feeding she has been subjected to during the last two or three years has produced the inevitable results. We are beginning to be able to sympathize with the trials gone through by the United States, and we should profit by the experience of New York and apply even more vigorous methods than those adopted by that State in the suppression of undesirable immigration. Nearly every man has something to say regarding the desirability of Canada becoming a great nation, but many thoughtful ones frequently express the opinion that a normal and steady development is most to be desired, as there is really nothing to be gained by sudden expansion. However, these opinions are not those of the majority, and the newspapers which

tell the foreigner to come to Canada, as one of the dailies expressed it, "with his sisters and his cousins and his aunts," sound the key-note of popular enthusiasm. To be sure, in a day or two another article proposed shutting the doors to the Slavs and some others, but, strange to say, at the present time the greatest menace are the slum degenerates from Great Britain.

A study of the practical side of the question at Toronto Asylum during the years 1906 and 1907 is most instructive, and furnishes food for deep thought, and yet that is the simplest part of it and does not reveal the greatest danger. The insane man in due course reaches the asylum, where he is cared for at the expense of the country, or deported if the technicalities of the Deportation Act do not exempt him. Not so with most of the degenerates. A certain proportion of these find their way to prison, but are not retained there long unless guilty of some great crime. They are attracted by other weaklings, marry, and the population is added to. What may be the result, the well known Jukes family history will tell. When we discover that the foreign born population is twenty per cent. in Ontario, and the gaol population in 1907 between forty and fifty per cent. foreign born, we at once realize the gravity of the situation. It would be interesting to know just how many came from the slums of the British cities. I refer to these because the English-speaking defective is the one most in prominence just now.

Forty-one per cent. of the prisoners received at the Central Prison in 1907 were foreign born, and thirty-eight per cent. of the people sent to the common gaols of the Province were foreign born. The foreigners make up about twenty per cent. of our population, so the inference is plain and not comforting to Canadians, who have been congratulating themselves on the high class of the newcomers.

Now as the character of the nation depends largely on the quality of the stock from which it is derived, we cannot be too careful in the scrutiny of the additions which are coming so rapidly to our population. In our midst we have object lessons which cannot be ignored. Those of us who have been in touch with family histories for many years see clearly how much the country has benefited by good immigration, and suffered because of the reception of weaklings and degenerates. We have the facts to go by in regard to this, and so startling are they that there can be no question regarding the importance of a plea for the utmost caution in opening the gates to all classes from the Old World. Any biological student knows the value of artificial selection in the development of distinct types good or bad, and in Canada we have an unique opportunity to apply the laws of artificial selection in a way that will benefit the race enormously. There should be no hurry to throw away our magnificent heritage and we have a duty to perform on behalf of the future inhabitants of this country. Hall has well said: "The question as to racial effects of immigration is not as most people assume, a question between us and the immigrants, but between our children and grandchildren and theirs. We are trustees for the future and with us is the decision what races and what kind of men shall inherit this country for years after we are gone."

The greatest danger to be feared is the deterioration in the average quality of the people of the nation when it is overstocked by immigrants of low type, and experience has shown that where hordes of immigrants of poor class are collected those of better class will be deterred, simply because they do not wish to compete with the occupant of the sweat-shop or low quarter.

In a brief article such as this, one cannot go deeply into the social and economic effects of immigration, but must be content to present a few striking facts in connection with the present influx of foreign born and leave

the reader to draw his own conclusions regarding the possibilities.

In 1902 the direct cost to the United States of the excess of the foreign born insane amounted to $5,000,000.

In New York Sate the annual cost of caring for foreign born poor amounts to $12,000,000.

In 1902 no less than 12,000 foreign born insane, idiots and epileptics were in the public institutions of New York State, or twice the number to be expected. Their maintenance, estimated at an annual per capita cost of $165, will be about $12,000,000.

Our experience is evidently parallel to that of New York State, and the condition of affairs at Toronto Asylum during 1906 and 1907 gives us something to ponder over.

Toronto and the County of York supply the Toronto Asylum with its patients, and it is not difficult to establish a fairly correct analysis of the different elements which go to make up our admissions. At the present moment we are undertaking an elaborate study of the foreign born admitted since 1900, but for the present purposes a brief examination of the family histories of four hundred and twenty-two patients admitted during 1906 and 1907 reveals something of interest. Two hundred and ten were foreign born, two hundred and twelve Canadians. Of the foreign born no less than a hundred and twenty-four were comparatively recent arrivals. The majority of them could not be returned to Europe because they did not come within the requirements of the Deportation Act—hence Ontario must assume the burden of their maintenance. Putting the amount for each one we must take care of until death at about $6,000, a moderate estimate, and the result is indeed startling, but this aspect sinks into insignificance when we go more into detail.

Many of these patients were married and brought their families with them. As a rule their heredity is of the worst possible description, and what their children are likely to do for the quality of the stock, only those who are familiar with the possibilities of certain varieties of insanity may guess. Sixty-five per cent. of the insane immigrants suffer from dementia præcox, a psychosis notoriously the outcome of defective heredity. Here are three brief histories:

J. A. Married; wife and five children. Came to Canada under the care of the Salvation Army. Was a patient in Colney Hatch Asylum, London, England, and came to Canada almost immediately upon discharge. On board ship said he was persecuted by imaginary enemies and after landing was followed by them everywhere. Was admitted to Toronto Asylum almost at once, suffering from paranoid dementia præcox. It is almost inevitable that his family will prove the worst possible stock to people our country with. They cannot be deported under the present law.

L. C. Married; female. Came to Canada a few years ago. Was a congenital imbecile; married an old man, an alcoholic; six children. Was brought to the institution by her husband, who was so intoxicated that he could scarcely stand. Patient died in a few weeks of tuberculosis. What may we look for in this family of six children, a defective, insane and tuberculous mother, a degenerate and alcoholic father? Surely no great skill in prophecy is required to foretell the future of these unfortunates.

F. C. Male; single. Brought to Canada by a philanthropist, who found him in a charity school. Had all the stigmata of degeneracy, but got along for a few years while cared for by others, and saved a little money. Induced his father and mother and three sisters to come to Canada. Father and mother chronic alcoholics. A brother in India, insane. One sister has already found

her way to Toronto Asylum and the other two are defective and probably suffering from dementia præcox. *F. C.* is a sexual pervert of the most degraded type. None of the family can be reached by the deportation law.

These are merely typical histories similar in character to so many others.

It is inevitable that most tides of immigration will carry with them a certain proportion of those who have failed in life, but at the present time there is a suspicion that some, if not many of those we have received were deliberately sent out from Great Britain to get rid of them, and an analysis of their characteristics is an interesting study in degeneracy of a type we rarely see among Canadians. Sexual perverts of the most revolting kind, insane criminals, the criminal insane, slum degenerates, general paretics and weaklings of other types are represented. Whole families of degenerates have been found, one such family was returned to England; another should have been similarly treated, but the law failed. A husband and wife (both insane) were deported, and so the story goes. Among last year's admissions we find six cases sent to Canada simply with the idea of getting rid of them. Some of the friends of these people protested bitterly at their deportation, frankly admitting that they had been sent to Canada to shift the responsibility of their care to other shoulders. One naively suggested that if his sister returned he would again have to support her in the local asylum, and he strongly objected to doing so.

Another on the list had been liberated from an English asylum and was sent to Canada by his friends with the idea of getting him away from his mental trouble. He was shortly followed by a young woman who married him. The inevitable occurred, and the unfortunate young man had a recurrence of mental trouble. Fortunately we were able to deport husband and wife.

A third on the list had been in no less than five asylums, but before we could get his case arranged for deportation he escaped from the institution. Some

months afterwards we learned that he made a determined effort to commit suicide, and although this was not immediately successful he eventually died from the indirect effects of the attempt.

A fourth was a general paretic, far advanced; was no doubt deliberately shipped to Canada to get rid of him.

A fifth, an epileptic and of criminal type, was sent to Canada because of his defects and on account of his being a burden to his relatives. His friends are imbued with the imperialistic ideas and cannot see that this part of the British Empire should not assume what might fairly be regarded as the natural burdens of another portion of it.

A striking feature of the situation is the preponderance of the English defective in our admissions, and the cause of this is the wholesale cleaning out of the slums of English cities. Toronto may be a Mecca for this class, but it is evident that other cities and towns have suffered as well, and the gaol records are significant, although they also reveal the unpleasant fact that the United States are furnishing more than their share of the criminal population. Inspector Armstrong has carefully compiled the Central Prison and Gaol statistics for the year 1907, and finds that according to nationality the order of criminality runs as follows among the foreign born:

Central Prison.	*Gaols.*
Italy,	Italy,
Norway and Sweden,	Russia,
United States,	Norway and Sweden,
Russia,	United States,
England,	Ireland,
Scotland,	Scotland,
Ireland.	England,
	Germany.

These statistics were based on an analysis of the 4,313 prisoners sent to the common gaols and 289 admitted to

the Central Prison. While these figures may easily be misleading in certain particulars, still they emphasize two striking facts: first, that the foreign born criminal is far too much in evidence; second, that some nations are too prominent in the list. Of course to be of great value this tabulation should include an analysis of the crimes committed, but such is not available this year.

The Italian leads in the criminal records, but in the asylums he is practically unknown, and it would be a most interesting thing to learn the nature of the crimes for which the 174 Italians were committed to gaol and Central Prison. It is useless at present to draw any deductions from the facts at hand.

To show how startling is the preponderance of the foreign born among the insane of the country as represented by the admissions to Toronto Asylum, a very brief study is necessary. It is not a new question, and yet one that the persons who thunder for hordes of immigrants to swell our population would do well to regard. Of course I am well aware that "figures unbased as facts are an image for fools to hoard or to circulate," but by a careful study of the unpleasant facts which are available, we learn that the grievance we have to-day is an old story and Toronto Asylum has always suffered. It may be argued that we draw our population from the centres in which the foreign born are in greater proportion than in the rural districts, but such has not always been the case, and what do we find in the days when Toronto Asylum served practically the whole Province? In 1854, of the first 1,000 patients admitted, the nationalities were as follows:

Irish	434
English	180
Scotch	146
Canadians	162
Other countries	78
	1,000

At that date the Canadian population of Ontario was greater than the foreign, and yet the proportion of insanity was infinitely smaller.

Between 1859 and 1864, 995 patients were admitted:

Irish	353
English	143
Scotch	149
Canadian	266
United States	43
Other countries	41

The census of 1861 gave the population of the N. Canada as 1,396,091, made up as follows:

Irish	191,231
English	114,290
Scotch	98,792
Canadians	902,879
Other countries	88,899
	1,396,091

Quoting from Dr. Workman's report: "The table of nativities of the patients admitted in the last six years shows that the three nationalities, Irish, Scotch, English, with an aggregate of 404,313 in the population of the Province, have sent in 645 patients, whilst the Canadian nationality, amounting to 902,879, has sent in only 266; in other words, a part of the Provincial population equal to 29 per cent., whilst another part, the native Canadian, equal to nearly 65 per cent. in the Provincial population, has contributed only about 27 per cent. to the asylum population. If the native Canadian population sent in patients in the same proportion as the Irish, English and Scotch together, they would have furnished 1,141 instead of 266. But taking into consideration the fact that the

population of foreign birth is almost altogether or nearly of adult age, and that the native Canadian includes those under adult age, the proportion of which is almost 40 per cent. in the whole population, we should find that a fair proportion of asylum admissions for native Canadians would be 865, whereas they have sent in only 30 per cent. of this number, or in other words the Irish, Scotch and English nationalities sent in the proportion of ten to three as compared with the native Canadians. The disproportion would be still greater comparing the native Canadian with the Irish. The contributions of the latter from given equal numbers being four to one.

"It appears manifest, that if we have much, or an undue share of insanity in Western Canada, it can by no means be said it is of home production. In this respect, as in our material products, we have been very large importers, for about two-thirds of our asylum inmates have been natives of the United Kingdom and less than one-third of Canada and United States. It certainly, then, approximates to swaggering on the part of the natives of the British Islands when they reproach Canadians as a people more prone to insanity than themselves, especially when we find that they contribute only about 29 per cent. of the population."

The disproportion was really greater than Dr. Workman made it, because a large number of children must have been included in the numbers of the foreign born, and due allowance should have been made for this. The figures given make it quite apparent that Ontario has always been unduly taxed for the maintenance of imported defectives.

Apparently, as time went on, the character of the immigration changed, fewer persons from Ireland and more from other parts of the British Empire.

In 1876 there had been admitted to Toronto Asylum:

Irish	1,597
English	777
Scotch	688
Canadian	1,316
United States	175
Other countries	150

In 1888:

Irish	1,833
English	1,063
Scotch	796
Canadian	2,230
United States	231
Other countries	212

Nine years later the foreign born still distanced the native Canadian in spite of the disproportion in numbers of population.

In 1897 there had been admitted:

Irish	2,097
English	1,393
Scotch	911
Canadian	3,258
United States	302
Other countries	284

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Irish	2,079
English	1,393
Scotch	911
Canadians	3,258
United States	302
Other countries	284

In 1906 there had been still further change in the proportion and the English immigration was evidently increasing, no less than 53 of the admissions being from England and only 29 from Ireland. The total admissions then were:

	1906.	1907.	To Apr., 1908.
Irish	2,224	2,246	2,253
English	1,671	1,748	1,767
Scotch	978	989	992
Canadian	4,252	4,380	4,425
United States	349	357	361
Other countries	345	367	368

In the Year Book for 1907 we find the population of Ontario made up as follows (this is from the last census):

Canadians		1,858,797
Foreign—		
British	239,873	
British Islands	2,530	
Germany	18,699	
Italians	3,301	
Russia	3,337	
United States	44,175	
Other countries	7,365	
		320,080

Thus it is seen that while Canadians should supply five-sixths of the asylum population. In other words, in the admissions we might have looked for 8,505 Canadians, among the 10,087 admissions only 4,380 were found, while the foreign born furnished 5,707 instead of 1,681. Surely these figures tell their own tale, and if the statistics of the present year are any criterion of what is to follow if the influx keeps up, surely something must be done to make the inspection at the ports of departure and entry far more rigorous than that adopted at present.

Some may argue that we magnify the gravity of the situation, but surely those of us who have been scanning family histories many years, are in a position to speak with authority, although we cannot begin to estimate the cost to Canada of the importation of so many defectives, not only now, but in the past. The figures I have already quoted must make plain the suspicion that we have unwittingly taxed ourselves unfairly Then again when we begin to estimate what undesirable importations of former days have cost us for support in asylums, prisons and reformatories we may well heed the warning. The quality of some of the classes allowed to settle in Upper Canada is easily obtained by a reference to historical records, the results guessed at by a study of asylum and prison records. Some of these are almost as striking as the well known Jukes family history in New York State.

In the United States, where immigration has been encouraged to such an enormous extent of late, their experiences have been such that we cannot disregard them, as our day of reckoning is swiftly approaching if we do not take heed. We must realize that social conditions of mind are not to be dissociated, and if we must assimilate a large foreign born element it should be of the best possible kind.

Dr. Thos. W. Salmon, writing recently on the relation of immigration to the prevalency of insanity, says: "Before 1900, the foreign born insane in the hospitals fairly represented the foreign born population, and the Special Report on the Insane and Feeble Minded, recently issued by the Census Bureau, provides very valuable material for studying the part played by the 'old immigration' in the prevalence of insanity in the United States, but the 'new immigration' has been of such recent origin that it is difficult to estimate the value of data relating to its influence. In many States the effects of the 'new immigration' have not been felt at all, but in the State of New York, which receives more than one-

third of the yearly quota of the 'new immigration' and which has in its institutions more than 28 per cent. of all the foreign born insane of the United States. Some interesting material is available for study. In that State the ratio of the insane to the population has risen from one in 675 in 1875 to one in 294 in 1905. In 1906 46 per cent. of the whole number of patients admitted to New York State Hospital were of foreign birth, while the foreign born population was but 26 per cent. of the whole population of the State."

The striking resemblance to the statistics of Toronto Asylum must be observed, although the condition here is even worse than in New York State. Another point must not be overlooked, and that is the recent arrivals who become insane are, as the proportion of cases of dementia præcox shows, young, consequently their expectation of life must be great. Putting it at twenty-five, which is two years higher than that given by actual observation in New York State, the expectation of life would be thirty-six years—that is, allowing $145 as the annual per capita cost of each patient, he would cause an outlay on the part of the Government of $5,220. If this is an approximation, and I think it a very modest statement for the accumulation of 1907, we will expend eventually $224,460 during the next thirty-six years in entertaining these importations. That amount merely covers the actual outlay, without computing the cost of buildings and a dozen other things which should fairly come into the calculation.

Now to consider some of the practical aspects of the case. Here we may profit by the experience in New York State. Our own experiences since the new Deportation Act came in force are not without value. What is of paramount importance is that the defectives should be weeded out, as far as possible, at the port of sailing. This would save untold misery and expense both to the patients, the steamship companies, and the country. It is a diffi-

cult problem to handle, but it is not going too far to say that a large proportion of the defectives we have received would have been detected at the port of sailing by physicians who had been trained in psychiatric methods.

Dr. Salmon says: "At first thought it would seem a hopeless task to attempt to pick insane and mentally defective immigrants from the unending lines of humanity which file through Ellis Island, but a systematic plan of inspection has been devised which results in the detection of many. Officers of the Public Health and Marine Hospital service who have had special training in institutions for the insane are assigned to this duty and other medical officers unite with them in searching for immigrants who seem atypical, or who present signs, even remotely, suggesting mental disease.

"The immigration inspectors, who have to question all immigrants as to their destination, education and many other matters, have been provided with memoranda as to the peculiarities which might suggest the existence of insanity or mental defect and are requested to return immigrants presenting such abnormalities to the medical officers.

"Occasionally immigrants who have shown marked evidence of insanity during the voyage are reported by the ship's surgeons, but, of course, immigrants very obviously insane or defective would be refused passage at the ports of embarkation. Immigrants, in whom, for any of these reasons mental disease is suspected, are detained, after a preliminary examination, for observation and further examination. Recently, rooms have been set aside for this purpose, and a very noticeable increase in the number of cases detected has occurred. A large separate pavilion, in which many more such cases may be detained and observed, has been authorized and a psychopathic pavilion in connection with the Immigrant Hospital is being constructed. In the latter pavilion certified cases of insanity will be kept until the return of the ship which

has brought them, and acute cases requiring treatment will be cared for until they are in condition to be returned with entire safety."

Those not familiar with the practical side of the subject cannot estimate what it means to protect the coming generations of Canada from the evil results of the addition of defective and mentally diseased immigrants to our population. Preventive medicine has a duty to perform that cannot be ignored and Federal and Provincial authorities must unite to fight the threatened evil. Our new law is good, as far as it goes, but it does not go far enough, and in many cases we are powerless to act, when our duty seems manifest. It would be so much better, too, to intercept the defectives at the port of departure whenever possible.

During the year we have deported a large number of persons from this Asylum and in many instances the hardship to the unfortunate patient was manifest. Steamship companies almost invariably refused to allow qualified attendants to travel with the patient, and we had no assurance that the unfortunate would receive the treatment so necessary at such a time. How much better had the stress never been incurred.

There is no intention to criticize any one in these remarks, but the desire to impress on those in authority the vital importance of a subject fraught with such possibilities for evil to Canada. A cursory glance by those familiar with mental disease at the immigrants received at Toronto Asylum during the past two years makes plain the fact that numbers of defectives and diseased persons who should have been easily detected, have slipped through the doors of entry. I do not suppose any system of inspection will succeed in detecting anything like all of the defectives, but no expense should be spared to make the system as thorough as possible. Money spent in this way will be well invested.

The facts and figures given are of interest and are amply borne out by the condition of affairs in the Province of Quebec as shown by a quotation from the report just issued by Dr. Burgess, Superintendent of the Verdun Hospital for the Insane, Montreal. He says:

"But, apart from the question of heredity, there is another and more remediable cause for the rapid increase in our asylum population, namely, the defective class of immigrants being dumped upon our shores. That a country so vast as ours should be more densely peopled is 'a consummation devoutly to be wished,' but the question of number should be secondary to that of character and quite a large proportion of the immigrants brought in are of a low standard of mentality, some of them even having been inmates of asylums before coming to this country. In our own establishment, of the admissions since its opening, over forty per cent. have been of foreign birth, and there are in residence at the present time not a few patients, who, if subjected to any proper examination, would never have been allowed to set foot in the country. The new Immigration Act, assented to in July, 1906, by which an immigrant's probationary period in this country was extended to two years, has certainly been a great help towards reducing the number of undesirables foisted upon us, and by its aid we were able last year to bring about the deportation of some fourteen patients. There are, however, still resident no less than eleven persons whom we are morally certain come within the provisions of the Act, but in regard to whom we have been able to get no positive proof that such is the case. Insane, they are unable or unwilling to give any reliable information about themselves, and friendless, we have no one to whom to apply for it. This fact alone proves the crying need for a much stricter examination of every alien seeking our shores. All persons wishing to emigrate to Canada should be rigidly examined by liberally salaried medical officers appointed by the Dominion Government,

before being allowed to embark, and should furnish proof that they have never been insane or epileptic, and that their parents have never been affected with such diseases. The examining medical officer should be held strictly accountable for the mental calibre of the applicants for emigration passed by him."

Now again in regard to admissions to Toronto Asylum. Perhaps it is only fair to say that the very worst elements of the English immigration are likely to flock to Toronto because it has an English-speaking population and the conditions are more attractive to the slum degenerate than they would be in rural districts. Undoubtedly this makes the local picture a great deal murkier in its coloring tones than it would be otherwise. At the same time the condition of affairs in the Province at large shown by Inspector S. A. Armstrong proves that we must put up the bars to certain elements. Just how this is to be accomplished is, we will frankly admit, a difficult question to answer, but Dr. Peter Bryce of the Federal Department seems to be alive to the situation and will no doubt devise effective methods to combat the evil as thoroughly as possible. Now what practical suggestions may be offered in the hope of minimizing the evil?

First of all, the methods of inspection should be improved upon, more physicians with special knowledge should be detailed for the work, and they should be given ample time and opportunity to do the work. These physicians should be well informed young men who have had at least six months' training in the careful clinical methods employed in modern hospitals for the insane. If they could mix with the immigrants during the voyage across the ocean and get an idea of their mental status at this time, so much the better.

All suspected cases of mental defect should be detained at the port of landing and made to submit to thorough physical and mental examination. It would be almost

impossible for cases of dementia præcox to pass this barrier and they could be returned at once to their own country. Dementia præcox is mentioned particularly, as so many of the insane immigrants suffer from this form of mental disease, a form easily diagnosed by the practical psychiatrist. General paresis would of course be easily detected; at present they do not seem to be recognized.

Imbeciles of all classes should be rigidly excluded and children from charity schools rejected whenever they show the stigmata of degeneracy. Very special attention should be given to these, as it is from such sources the ranks of the criminals are often recruited, and the union of a defective with say an alcoholic often produces the most terrific results. The ear-marks of degeneracy are just as apparent to the trained observer as the mannerisms and stereotypies of dementia præcox.

The great difficulty to be met evidently is the gigantic task of inspecting a large number of people in a short time. It will require a large outlay to get over this difficulty, but in the end it will save untold millions and the inspectors must be made to feel the seriousness of their responsibility. Surely it is of infinitely greater importance to return a mental weakling than an unfortunate man suffering from trachoma; he is certainly a greater menace to society.

The details of inspection cannot be too elaborately worked out. Now in regard to those who must be deported. It is almost criminal to allow steamship companies to dictate in regard to the supervision of insane persons returned. The dreadful suicide of Joshua Shakt, deported from Toronto Asylum this spring emphasizes this. It should be insisted on that qualified attendants should accompany every insane person deported. There should be no option in the matter; humanity and common sense demand such an arrangement.

No one supposes that any system of inspection will succeed in detecting all the defectives who knock at Can-

ada's door for admission, but so great is the importance of the subject that no expense should be spared in minimizing the danger to which we are being exposed.

Rudyard Kipling told us that Canada's greatest need was to be supplied by pumping in the population. Even those who are believers in his remedy for ills, real or supposed, would, we feel certain, add to his alliterative phrase the suggestion that the supply pipe should not be allowed to tap streams reeking with insanity, crime and degeneracy.

A STUDY OF SOME PHASES OF FAMILY PSYCHOSES.*

By John Gerald Fitzgerald,

Clinical Director-Pathologist, Toronto Asylum; Demonstrator in Psychiatry, University of Toronto.

This study was undertaken with the view of ascertaining if possible whether any relationship existed between the varieties of mental disturbance arising in members of the same family, whether a psychosis arising in several children of the same parents would be the same in the various children and whether the children would develop a psychosis which would in its chief characteristics take place with the mental disease from which the parent had suffered.

If it is true, as has been suggested, that certain individuals and families have definite mental diatheses even as they have a physical body of a certain make-up which is peculiarly susceptible under unfavorable conditions to the development of disorders that are more or less characteristic, enabling one to say in advance that a member of a given family is liable to develop rheumatism, heart trouble, cancer, etc., similarly one should be able to say in advance that a member of a given family is likely to develop a mental disease of a certain type. The exact etiologic significance of the hereditary predisposition or the inherited weakness and the liability of the chemical machine to be disturbed by unfavorable influences in the environment are not clearly understood; and since it is so, speculation is rife in regard to these matters.

One of the chief difficulties in a study at the present time is brought about because of the transitions through which psychiatry has passed and is passing at the present

* Read by title at the meeting of the American Medico-Psychological Association held in Cincinnati, May, 1908.

time. The variability in the terms used to describe conditions which are often of a similar character, and at times the use of bare, descriptive phrases which leave one in doubt, all make it extremely difficult for the investigator to be sure what he is dealing with would correspond with his own view of the given condition.

I have thought that in order to give as clear and at the same time as concise an account of this study as lies within my power it would be well to deal with the material as I have gone over it, leaving any conclusions or inferences until a little later. The literature on the subject has not, for the greater part, been accessible to me, and I am uncertain whether the fundamental features which I wished to investigate have been the subject of earlier studies or not. The cases herein described have been patients in the Provincial Hospitals at Toronto and London, Ontario, and I believe that had I been able to study the question in an institution where the admissions were from more circumscribed districts where the admissions often come from comparatively few families these results might have been different.

The first group with which I wish to deal briefly is made up of the patients *F. S.* and *W. S. F. S.*, the father, is at the present time 60 years of age, a farmer by occupation. He was admitted to London Asylum six years ago, but in that time has been well enough to return home and work, or at least live outside an institution for ten months, at the end of which time it was found necessary to have him returned. We learn that the patient has been unsteady in his work for the past ten or twelve years, that he has been erratic, has neglected his duties, would not attend to his work on the farm, was irritable and childish, had vague grandiose ideas and would skip and jump with a pole by the hour after the manner of a child. The family physician who had the patient under observation for many years, stated "He has always shown evidences of insanity, but has been much worse of late." So

we learn that the patient we now see a cross-sectional picture of has suffered from a deteriorating psychosis for many years. In his present mental status we find distinct evidences of the end stage of dementia præcox where the intellective processes are not greatly interfered with. As McDonald has recently pointed out, a careful scrutiny of many terminal cases often fails to reveal the profound, mental deterioration and disintegration that is anticipated. This is just what was found in the case under discussion. The patient was very manneristic in speech, showed a marked degree of childish apathy and indifference, stereotypies, a ready adaptability to his environment, and evidences of old hallucinatory experiences. In the light of our present knowledge, and following the precepts of the Kraepelin school, it would seem that if we are to attach a distinguishing mark to the disease from which he is suffering, we must regard the case as one of dementia præcox, as the characteristic features of this condition persist and are readily observable all through. The patient is now over sixty years of age. From his history we learn that there is a distinct taint on his paternal side, two cousins having been insane. The nature of their psychoses was not ascertainable, but we were able to elicit the fact that a paternal cousin committed suicide. Here, then, we are in a better position to understand the unfolding of the next chapter, as illustrated by the psychosis in the son, *W. S.*, with whom we shall now deal. It might be noted that the patient's mother is said to be in good health, has shown no evidence of mental weakness and her family history is clear.

The son, *W. S.*, is at present twenty-seven years of age and has only recently been committed, but on going into his history we learn that for the past eight years the present condition has been developing, so that a change was evident to his relations. From the patient whose information has proven to be very reliable, it seems probable that even at an earlier date the disease was manifest-

ing itself. His very early history was negative. He was of a shy disposition, never fond of meeting people, although he showed nothing especially abnormal at this time. When at school he made fair progress and took a keen interest in sports, later on, however, when at High School he made a considerable effort to keep abreast of his class, and here his low resisting power commenced to show itself. It was soon evident that the strain was too great, and when about nineteen years of age he tried an examination that was about equivalent to University matriculation, he was unsuccessful and spent the following year at the same work with a view to re-writing the examination. As time went on it was apparent that the patient, instead of being better prepared, was actually less fitted than he had been a year previously to undertake the work. Recognizing this, he gave up the struggle and did not even try the examination. From this time on the history records a gradual deterioration. There first came a diminution in the breadth of his interests and a falling off in the quality of what he performed, a gradually increasing apathy; at the same time we learn that he had a very well preserved insight and often used such expressions as: "I am anxious and apprehensive of the future." At this time, it should be kept in mind, the patient's father was an inmate of a hospital for the insane. After leaving school he endeavored to take up work on the farm, but because of the constant presence of a mild, apathetic indifference he did not succeed and he was considered an idle individual lacking in ambition. He developed no bad habits, was quite temperate, as his father had been before him, and also had a negative sexual and criminal history. A little later his indifference grew to the extent that he no longer paid the attention or gave the care to his personal appearance he had formerly done. He would go about unwashed and unshaven and his whole bearing gave still further proof of his indifference. He grew tired of his failures on the farm and decided to seek

broader fields and pastures new. He went to a large western city, where he was for a time employed at some laboring work. Becoming somewhat more ambitious again, he registered at a business college, but at the end of one month was forced to leave because of shortage of funds. He went home finally and from this time the psychosis developed rapidly. Patient says that after this he never seemed able to even approximately attain his ideals, that he was gloomy and fearful of the future, but with it all his friends tell us apathy pervaded the picture and was the characteristic emotional coloring. He was able to remain about home for nearly three years more, when his power of adjusting reached low water and it was found necessary to have him committed because of impulsive tendencies which he sometimes displayed. He carried a loaded revolver about with him and had threatened to use it in order to facilitate his adjustments with the neighbors in the immediate vicinity.

On admission the most pronounced symptom was the indifference and he showed very little intellectual deterioration. He had a good grasp of events of the present in the outside world. School knowledge was fairly intact; this, with the general fund of knowledge at his disposal, permitted of his giving a very interesting account of his past. Further, he impressed everyone with his remarkably well preserved insight. He was rather childish, spoke in a slightly affected manneristic fashion, displaying only a slight amount of voluntary activity and his spontaneous thought production was limited, but after he had been sufficiently stimulated he could be induced to proceed with his story. He showed some stereotypies, but no evidence of hallucinatory experiences or any elaborated delusional fabric. His general reaction so strongly suggested that of his father that all who had observed both patients clinically, commented on it. Apart from this, however, we have the fundamental features in the psychological analysis the same in both cases, in both com-

paratively slight intellectual deterioration with marked indifference and other evidences of a slowly deteriorating disease process. From this we are led to the conclusion that the son is suffering from dementia præcox and one is most inclined to regard the case as belonging to the hebephrenic variety, whereas the father, because of his vague grandiose delusions and ideas of reference, was, no doubt, of the paranoid type. The strict differentiation of the varieties, however, seems not to be essential when we are able to deal with the fundamental features. The similarity of the symptom-complex in these cases of father and son was most striking, and were it not that the time is limited I would like to dwell further on several points because the histories were so complete, the necessary questions so fully gone into, that they have carried very considerable weight and have led to certain conclusions which I hope to mention later. I am convinced, after a thorough consideration of both cases, that the psychosis will proceed more rapidly in the son than in the father. The earlier onset in the son shows the likelihood of this happening, and it is probably a further expression of nature's desire to rid herself of the unfit and a demonstration of an inexorable biologic principle.

The next case, with which I wish to deal somewhat more briefly, serves to exemplify to a greater degree what has already been said. I have purposely gone into the first group at considerable length in order that when I come to deal with the great mass of cases I shall only indicate the members of the family and state the nature of the psychoses from which they are suffering.

H. J., a male patient, age at the present time sixty-five, is a case of depression coming on in the involutional period, probably about the age of fifty-eight or a little earlier, presenting many of the features of those cases described by Farrar under the name of depressio-apathetica. He did not give evidence of the presence of sub-

jective certainty, the elaborated religiose delusional fabric of the true melancholiac. Nor did the patient show the angst feature which colors some of the cases and led the above mentioned writer to regard it as probable that a certain group might be classed as anxious pre-seniles. This patient at the present time is fairly adaptable and except for the possibility of a suicidal impulse might almost be taken care of at home. He could not be regarded as nearly well, however, and the prognosis seems unfavorable. In this instance, going back one generation, we learn that patient's father was a farmer, and a local Methodist preacher, but patient is very certain that his father's sense of religious justice was tempered with mercy and that he was moderate in his religiosity. When about sixty-two years of age the patient's father developed a mild attack of depression extending over a period of six months just preceding his death. The character of this depression was very similar to that of the patient, but differed in certain particulars. It developed later in life and was of a shorter duration. It was not so severe at the time of his death as it had been at an earlier period. The patient himself as a young man showed nothing that would have led any one to believe that he was likely to develop a psychosis. He was a total abstainer, as his father had been, was a careful farmer and made a good living. He is modest, and states frankly that he was not "the smartest of men." He was a class leader in his church for thirty years. Had a good reputation in the neighborhood where he lived, being regarded as an honest man and a fairly good farmer. For many years he had worked a fifty acre farm and had evidently found this to be just about all his physiological capacity would permit of. Later on, when his family were growing up, he found it necessary to enlarge somewhat, and bought a farm of one hundred and twenty-five acres. This change in the usual routine and the extra work involved in the transaction

caused him to worry a good deal and the strain proved almost too much. Just at this time family differences arose, and the result was that the patient developed the psychosis which has been briefly described. Just one other feature in connection with his mental disease. He made a suicidal attempt, but it was not well thought out, but much like the suicidal attempts of these cases of pre-senile apathetic depression which differ very materially from the usually successful attempts of the patient with melancholia vera. The patient's family consisted of five children, and of these five, three have already exhibited evidences of mental disease and have required hospital care. Two have recovered sufficiently to again take up work on the outside, but the third and youngest of the three is still an inmate of a hospital for insane. I wish just for a moment to point out some of the features of these cases in the third generation. The eldest of the family, when a woman something over thirty years of age, commenced to show signs of mental alienation, and, as in the case of her grandfather and father, showing no early peculiarities, had been up to the level of others in her station, working hard and making a living as a cook. After her father was sent to an asylum she left her position and applied for a place in the institution where he had been sent for treatment. She worked there for a time and although the quality of her work was only fair it was probably no worse than her training and early environment would have led one to expect. The work at the institution after a time did not seem to suit her, so she resigned and accepted another position in an adjacent city where it would still be possible for her to visit her father regularly. The strong bond of affection between this patient and her father was always evident, and this is to be remembered, because the work at her new place and a constant endeavor to see her father frequently were assigned as possible causes of her break-down; it was thought she was work-

ing too hard. She at first showed some depression, but along with this developed many delusions largely allopsychic in character. She also appeared to be deteriorating somewhat and the hospital physician was uncertain whether the case would prove to belong to the maniaco-depressive or the dementia præcox group. The former diagnosis was somewhat favored, because she showed considerable improvement; marked apathy and indifference did not develop, and although patient had a history of having been mute and resistive, this cleared up entirely, and she was considered well enough to go home on probation and later was discharged. It was not felt, however, that she was entirely recovered, or that she had quite returned to the condition she was in before her trouble developed.

The next of the family, now a man of thirty-one years, had a psychosis when nineteen years of age and was in an institution for one year. At the time of his admission he had vague ideas of reference, occasionally showed considerable emotional instability, and was also occasionally impulsive. For a few months it was thought to be a deteriorating psychosis, but later he began to improve, took an interest in his surroundings, began to work well, and at the annual sports of the hospital was successful in winning one of the races. His improvement at the end of the year was so marked that he was allowed to go home on probation and a short time later was discharged. He was considered recovered because he was able to remain at home and take up his work much as formerly, and his relations believed he was well. This patient has remained out for seven or eight years, but it has been ascertained that he is not quite well at times and on one occasion it was believed it would be necessary to again send him to the hospital. The diagnosis, as in the case of his elder sister, was in doubt, the same possibilities being considered, but the weight of evidence points somewhat more strongly to dementia præcox. The

third patient in the third generation is almost a type case of hebephrenic dementia præcox. He is twenty-one years old and is a type of a mild deterioration psychosis, where the negative rather than the positive predominates. In the consideration of this family, it seems to the writer that certain indications are evident as in the previous one. From a mild non-deteriorating or only slightly deteriorating psychosis in a grandparent, we travel down the scale to a pronounced, typical deteriorating disease-process in the fourth child of the third generation. The first child in this generation showed less marked evidence of mental enfeeblement, but the second child more nearly still approximating, and finally the last child developing a psychosis of a typical deteriorating character. So that while there appears to be a similarity in the form of mental disease that various members of one family develop, there is also a gradually increasing tendency to the development of a type where pronounced mental enfeeblement develops comparatively early. That this is invariably the case, I do not believe, and where several members of a family whose ages closely approximate one another develop psychoses it not infrequently happens that an older member of the family may show more pronounced mental weakness than a younger member of the same family. In such cases as *D. E.* and *T. E.*, brothers, aged respectively twenty-four and thirty years at the time of admission, this was well illustrated. Both were cases of catatonic dementia præcox and showing most pronounced stereotype movements, similar in character. Other features were also similar, except that the deterioration was somewhat more profound in the elder of the two. It is an interesting corollary that a sister who is insane and who was twenty-one at the time of admission, while showing some fundamental symptoms in common with her brothers, was much more active and did not show so clearly the family reaction type. However, she could

be put in the same group of cases, with the same unfavorable outlook.

The succeeding group of cases to which I wish to refer, is another illustration of what has already been spoken of. The early history of the antecedents I was not able to get fully, but learn that there was a maternal history of mental disease and one positive fact was ascertained, that one of these progenitors had committed suicide in the involutional period. The mother of the immediate family was said to have been a fairly normal woman, but the inherited predisposition was evidently exaggerated in the descendants. Firstly, because the father and mother were second cousins, and secondly by the alcoholic habits of the father. The eldest child is now a man of fifty years of age and a patient in a hospital for the insane. His early history was not eventful; he was bright and clever at school and was always well up in his studies. After leaving school he was given a farm by his father and this he worked for many years. Owing to his alcoholic habits, which he early acquired, was more or less unsteady in his work and changed from one place to another. He was always able to make a comfortable living, however, and showed no change in character or disposition until about forty-five years of age, when he became suspicious. This for a considerable time was all that was observed, and being only a slight allopsychic disturbance, no special notice was taken of it. Later the quality of the patient's work began to deteriorate, emotional instability became pronounced, alternating excitement and depression, with at times some irritability. The most pronounced change, however, was in patient's religious activity; he read the Bible for long periods and was greatly influenced by what he read. All of these things would probably have passed unnoticed if patient had not developed hallucinatory experiences of the auditory variety and to these he reacted strongly. He would frequently run away from home to avoid the

imaginary individuals who were threatening to mutilate and otherwise torture him. His memory became defective and this in conjunction with his active fallacious sensory perceptions and the superstructure of persecutory delusions led to his being committed. His mental examination revealed the fact that he was suffering from a chronic alcoholic hallucinatory psychosis and that there was a fair degree of mental deterioration. He was childish, showed pronounced impairment of associative memory, and was completely lacking in insight. The next member of the family, now a woman of forty-eight, is also a patient in the hospital in which her brother has been for some time.

Her earlier history, too, is negative; she is said to have done so well at the primary school that her parents had decided to give her the advantage of a collegiate training, and this very fact may have been of etiologic importance, overstrain, because she had only reached the age of twenty-two when she was no longer able to adjust herself to her environment in the outside world, and her reaction indicated that she was suffering from some form of mental alienation. The change was chiefly affective, there was some growing indifference and a pronounced narrowing of interests, and there was also some modification of the ethical sense; furthermore, there was a vague history of hallucinatory experiences. Patient gave up her usual work, but her friends were able to care for her at home for many years. Finally, when about forty years of age, because of the rapidly advancing deterioration, it was necessary that she be given institutional care and treatment. The next two members of the family have to date been immune and have not suffered from any form of mental disease. The youngest, however, was not so fortunate and is recognized as being feeble minded; in other words, showing the lowest type of mental disturbance exhibited in three generations. This individual's parents were aged forty-

four and forty-two respectively, at the time of her conception, so that all the usual factors seem to be accounted for. Here, then, we have the history of a family where in three generations we descend in the scale of mental disturbance from a depressive episode with suicide to profound deficiency as seen in the imbecile child of the third generation, and the descent is particularly well illustrated in the generation which has been dwelt on at some length. From a patient with a chronic alcoholic psychosis not coming on until he has almost reached the fifth decade, we see the next member failing to reach the third decade in a healthy mental state, and the last one born in an impoverished mental state.

The succeeding series serves to again point out one or two features which have already been observed. The first patient is at present eighty-seven years of age and was an inmate of a hospital for the insane for only a short period, although his eccentricities and unusual character have always been the talk of the neighborhood in which he resides; ever since his twentieth year he has been known by the name of Hallelujah Brown, this having been conferred on him because of his rabid fanaticism. Theoretically, his vocation was farming, but his avocation was preaching the Gospel and selling patent medicines. The work on the farm was always sacrificed for the avocation, although it was with increasing difficulty each year that his family were kept together and provided for. Finally, when between seventy and eighty, his wife had him committed for a short time owing to his increasing childishness and to his absolute inability to adjust his surroundings. His stay in the hospital was not a long one, and after being discharged he continued at his work of ministering and healing. His wife was a woman of low type, but hard-working and conscientious. The first two sons were healthy, have always made a good living, and have displayed a fair amount of initiative. One is a successful farmer

and the other is a mechanic. The youngest son, now aged twenty-five, born when his father was sixty-two years of age, was less fortunate. It was early recognized that his mentality was not strong, and when about eighteen years of age began to display criminal propensities, and still a little later developed persecutory delusions of a sexual character. On admission to the hospital, the diagnosis of paranoid dementia præcox was made on a basis of congenital defect, mild deterioration being present. The patient was susceptible to treatment along the lines of occupation, etc., and soon reached less frequently and with less emotional disturbance to his delusions. For some time he accompanied his father in his journeyings and assisted in the religious exercises. The paranoid tendency was manifested in the son at an earlier date than in the father and was probably present to a marked extent only in the son, whose conception occurred in the sixth decade of the father. The other sons were born when their father was between thirty and forty years of age.

The manifest tendency, in some instances, to the development of similar clinical types in different members of the same generation of one family is seen in the next group. Here on the paternal side there is a history of an aunt who was feeble minded. The father showed no pronounced abnormalities, but the mother, while an active, energetic woman, displayed many eccentricities. The first two members of the family which resulted from this union have both developed a psychosis. A daughter much younger has also become insane, while four other members of the family are able to earn a living and adjust themselves to their surroundings. The first patient, a man of fifty-six, is a case of paranoid dementia præcox with only a moderate amount of deterioration. The second is a man of forty-seven, with much more pronounced deterioration, the clinical features being the same as in the previous case; and the third is a case of hebephrenic

dementia præcox, in whom the negative features predominate, a slow, progressive deteriorating process appears to be going on.

The seeming tendency in succeeding generations to more pronounced deterioration is present in a group which may be dwelt with briefly. In the first generation the patient suffered from a depression in the involutional period; the daughter being the representative of the second generation likewise suffered from depression, while the patient in the third generation is suffering from dementia præcox. I have one other example where an attack of depression coming on in the sixth decade in the father appeared at exactly the same period in the son, and the manifestations, as far as could be gathered from the history of the one and personal observations of the other, were almost the same. Fortunately in this instance there was no third generation.

The frequency of a family reaction type I have observed again and again. As an illustration: two sisters, both of whom I have observed, were cases of paranoid dementia præcox in whom the delusional fabric was altogether of a religious character. They showed the same general reaction, the amount of intellectual deterioration in many directions was only slight, and in both the ability and desire to continue at some useful manual work was manifest.

In an analysis of fourteen groups where two or more cases occurred in one generation of the same family, the clinical features were invariably the same in the same families. In other words there was apparently a decided tendency to a definite family reaction type, so that all the cases were easily assignable to given groups. This was most evident where the clinical features suggested the mental disorder which we at present designate dementia præcox, the fundamental features being a steadily progressive deteriorating process characterized by affect dementia, stereotypies, mannerisms, with the

addition of various other symptoms depending upon the variety of the disorder. In two groups where there were four members of one family of the same generation, dementia præcox was the diagnosis in every instance, and in this family there was a history of mental disturbance in the immediate antecedents. In other words, in the majority of cases where the eventual result was pronounced mental enfeeblement, heredity or mental disturbance in the forbears was present. Maniaco-depressive insanity showed a distinct tendency to appear in several members of the same family where there were a number of members of one generation of the same family were insane, and this was a further corroboration of the tendency of families to show a characteristic reaction type. In one instance where there were five members insane, all were cases of dementia præcox, and all were diagnosed as of the hebephrenic variety. This uniformity in the clinical features in the different members of the same family in one generation was apparent time and time again. Where there was insanity in one generation, and the type of disease was not essentially of a deteriorating character, mental disease manifesting itself in the next generation was more likely to be a deteriorating psychosis in the later rather than in the earlier children of the one-time insane antecedents. Several illustrations of this were found where one or other parent suffered from maniaco-depressive insanity, the first or second child suffered from the same condition, whereas younger children suffered from dementia præcox.

I do not feel justified in this very brief review of a broad subject in coming to any definite conclusions, but certain features seem suggestive:

1. There is an evident tendency, where several members of the same family of one generation become insane, to show a fairly uniform reaction type, so that it is possible to classify these cases as belonging to one given clinical group.

2. There is also evidence to show that with succeeding generations, a psychosis occurring in each generation, there is a lowering of the reaction-type and a likelihood of deteriorating psychoses developing, and still further from the original antecedent a probability of gross defectives appearing.

ON THE DEVELOPMENT AND NEEDS OF MODERN PSYCHIATRY.

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It will not be necessary for me to trace the early development of our ideas regarding the conceptions and the treatment of the insane to show what advances have been made during the past centuries. You are all familiar with the conditions that existed in the places where the insane were confined a hundred years ago, and you are all familiar with the change that took place in the care and treatment of this class in the first half of the last century because of the medical far-sightedness, humanity, energy and perseverance of Pinel, in France; of Tuke and Conolly, in Great Britain, and of Rush and Kirkbride on this continent. Owing to their efforts no longer are the insane herded into houses of detention, into prisons and similar insitutions to keep them solely from moral and physical injury to themselves and the community. No longer are they barred in as if beasts; no longer are they fettered and chained as if they are worse than wild animals. No longer does the religious fanatical conception hold sway that all insane are possessed of devils and no longer do we consider them, as of old, to be the possessors of supernatural powers for good or evil.

The modern conception of insanity may be said to date from the time when it became realized that the insane are in a diseased condition, not a state of demoniacal posses on; when it became thoroughly understood that the insane needed the care that physicians could give them. In more recent years the earlier idea that the insane needed especial care has given place to the

idea that treatment is of as much if not of greater importance than the simple care. The attainment of this standpoint is, I believe, the beginning of our modern psychiatry. The decline of the custodial or asylum idea and the concomitant rise of the hospital or treatment idea limits, not sharply to be sure, the old from the new psychiatry.

The introduction of the term hospital to indicate the place where the insane are cared for has brought about a difference not only in the popular attitude toward the insane, but also shows the changed attitude of the medical profession. The community no longer believes the insane asylums to have the hidden motto, "Ye who enter here leave all hope behind"; and the physician is made constantly aware from his use of the term "hospital" that he has to deal not with demoniacal possession or conditions that are incurable. Treatment is the keynote of modern development, all things are to be done that will offer any hope of betterment of the patients. The treatment that has been attempted so far has been largely empirical as contrasted with that from a rational basis. But this empirical or symptomatic method of treatment has been the means for further advance. With the change from the custodial to the hospital idea and with the realization of the true character of the treatment there has arisen the demand that the insanities must be carefully studied, that there must be facts gathered that will enable us to understand the individual cases, that the study of the insane must be placed on the same sure foundation of scientific inquiry on which all other medical studies are placed. So powerful have these demands been, both from within and without, that there has been created within the lifetime of each one here an almost new science, a new field for medical specialization and research.

In the first three-quarters of the last century the pioneers were engaged in removing the brush and the

boulders from the land, and after having cleared away the greatest obstacles to cultivation left the country to us for further improvement, planting and reaping. During a generation the previously untrained soil has yielded abundantly to all who have planted even one seed. But in this time only the outside edges of the domain have been cultivated. A few more hazardous spirits have wandered toward the center and have found the land there to be more fertile than that on the edges, but even to-day the later pioneer cultivators are few and large tracts of the country have been permitted to remain unproductive. Moreover, wherever cultivation has been carried on few have thought to look below the surface and we know not what stores of hidden wealth may be found by the persistent and deep digger. Owing to the character of the place, there is an almost communal spirit, there are not and there never will be trusts to limit production or to take most of the profits, each toiler works for himself and for the common good, produces or mines what he can and either gives or sells his products in a general mart where he competes in a friendly way with his co-workers. This country borders on fields some of which have been cultivated for years, some of which are almost as new as that of psychiatry, but which have had more workers and are therefore more widely tilled. On one side is the field of neurology, and many of the neurologists have wandered in and out of the domain of psychiatry doing a little and getting much for each day's work. The psychologists in an adjoining field have been kept out by a few rabid protectionists and opponents of immigration or have not cared to barter with or to concede that there could be equivalent exchange of commodities; and the pathologists who are not far off have sent a few settlers who have imported their own methods and seeds without due regard to the differences in the character of the soil and the climate. A few of the neurologists, pathologists and psychologists have

abandoned their own homes and have thrown in their lots with the psychiatrists, but the number is small. These have been well repaid by the fruits of their labors when they have understood the character of the country.

It has already been suggested that the field of psychiatry differs considerably from other allied and neighboring fields. The specialist in insanity has to deal with mental states, with disorders of a physical nature, and with the combination of these two totally different things. In the realm of mental things the psychiatrist is concerned with deviations from the normal mental make-up, with combinations of abnormal mental processes that have arisen to make the individual out of tune with his environment. On the physical side he finds disorders of the digestive, circulatory, secretory, and especially of the nervous systems. In a broad sense on the physical side he has all forms of disease to treat, and on the mental side he has to deal with all kinds and degrees of psychical disorder. In its subject matter it can be seen that psychiatry differs greatly from any other part of medicine in which the physician has to consider only the physical side, and in methods of diagnosis and treatment the difference is more marked. For the psychiatrist there are many conditions to be considered not to be found mentioned in general text-books of medicine, conditions real, even if they are of a mental order, conditions of mind that are to be observed as well as the area of cardiac dullness or as well as the strength and the character of the reflexes. In psychiatry depression, excitement, exhilaration, indifference, memory, imagination, attention, apperception, apprehension, delusion, incoherence, suspicion, and many other mental things are not only as real as the bodily temperature, but of more importance for the diagnosis and treatment of the individual. The data the psychiatrist needs are essentially different from the data of the general practitioner or the specialist in other lines. He deals not essentially with

the disorders of certain bodily organs, although he appreciates that the mind is somehow intimately associated with the part of the body we call the nervous system, but his chief concern is with conditions of maladjustment of the individual to his environment. He deals with what is generally known as conduct, the activity of an individual under certain conditions.

In method, also, the work of the psychiatrist differs from the work of the general medical man. Concerned as he is with conduct, he must observe many things that are not deemed worthy of observation in other, the physical diseases. All his observation must be directed to one end, viz., the determination of the relation of the conduct in any given individual to the conditions in which the individual is living. For example, depression in itself is not pathological if it have an adequate basis in the loss of friends, money or other things that make life agreeable, but if it become all-pervading, if it make the individual refuse to take all food and water, if it make him feel that he is the most wicked individual in the world without other people being able to understand that this is so, the depression is a pathological state or condition. In this as in all other cases of insanity it is the dissociation of the actual and the believed states that are to be looked for by the psychiatrist. In such an individual we should probably find no rise in temperature, no necessary disorder of the digestive system, the secretions would be normal, and at least in the early stages no difference in the functions of the nervous system could be determined. The individual has what may be strictly called a mental disease, although we must admit the possibility of there being some nervous disorder accompanying or following the initial stages.

The special method of the psychiatrist differs from that of practitioners in other branches of medicine. Blood counts, errors of refraction are to be found sometimes, but these are not the principal conditions. The changes

that are principally to be noticed are those of the mental life, as has already been said, and the changes must be observed in ways different to the physical changes that give so much information to the general practitioner or to the specialist in another field. Since actions and conduct are the matters that give indications for diagnosis and treatment, these must be thoroughly investigated in each case or sufficiently to give the diagnosis some weight. The methods made use of in this science are:

1. The ordinary observation of the patient under certain conditions, such as his actions when on a ward in the hospital or when he is at home, and the tales of the patient's friends and relations about his actions during a preceding period of time.

2. The conduct or reactions of the patient as shown by his answers to a number of questions.

The latter method may in many cases give us information that cannot be obtained from any amount of ordinary observation and it differs from the similar method of question and answer in physical cases by the point of view that is taken. The psychiatrist is not so much interested in the content of the answer as he is in the indication it gives of the way in which the mind works and the conduct to which such workings are apt to lead.

The difference in the attitude of the physician in the two classes of cases is well illustrated by the comparison made by Mercier. In the introduction to his short textbook of insanity Mercier compares the work in the two classes of cases with the working of a ship. He says: "When the student of medicine passes to the study of insanity, he crosses a scientific frontier, and enters an entirely new province of knowledge. Hitherto his purview has been limited to the processes that go on within the body, and whatever references he had to make beyond that field were indirect and of secondary import. He needs to know the structure and functions of the sev-

eral organs of the body, and when any function is disordered, his calling is to take measures to readjust the bodily processes to one another that they may work in harmony again. He has, in short, to maintain the organism in a fit state to do its work, whatever that may be, but with what efficiency it may be performed, is no concern of his, except in so far as these things may affect the general capability of the organism to continue its existence. His position towards the patient is the position of the shipwright and the engineer (and we may say also the supply department) towards the vessel on which they are engaged. Like them, he must be thoroughly acquainted with the structure and function of every part, and like them he must be upon the watch to repair the structure and to correct the function, when the one is damaged or the other is at fault; but with the ship's course he has nothing to do. That is a matter altogether beyond his province. When the student oversteps the bounds of medicine to enter upon the study of insanity, he leaves the engine-room for the quarter-deck. He is no longer directly concerned with the integrity of the structure or the efficiency of the engines. His function is now to set the ship's course, to note the way in which she comports herself in wind and weather, to study charts and tides, stars and clouds, to watch the barometer and sound the lead, and generally to relinquish the observation of the ship herself, and to take up that of her relations to the world in which she moves. This is the function of the student of insanity, to study the individual, not *per se,* or *simpliciter,* but in relation to the world in which he exists, and in which he has to maintain his existence." The good captain must needs have some knowledge of the construction and the inner working of the ship, and the engineer must have some knowledge of the course that is being taken and of the external conditions to enable him to properly manage his special department, and we must admit that the

patient as well as the ship is best served when the two departments work in unison and harmony.

Although the older ideas of insanity were tinged with religious conceptions, largely, and it was commonly believed that the insane were so because of the influence of the devil on the mind, the mental view of insanities was not taken by the physician. The materialistic view that was current corresponded to that of the Bible, where the demon is mentioned as leaving the body and going into a herd of swine, as something that could talk and make the insane talk. This materialistic view of the state of the insane was fostered by the special materialistic training that was given in the schools of medicine. The mind is not a thing in itself, it is not the same thing as the brain, but somehow it is part of the latter. As one of the functions of the brain it is as much a thing to be treated in a material way as any other part of the body (it was at times considered much as a secretion, for example) and although the definite relationship between the mind and the brain might be unknown there was such a close relation that the term brain might well be used as almost interchangeable for the term mind. By this method of approach the subject of insanity could never be solved. Nor could the opposite method of approach be any more successful. If the mind be considered a thing that appears to have some relation to the body, and especially to the part we call the nervous system, it is only an apparent relation, there is no real connection for the two things are different in kind and cannot have any means of interplay.

From these hypothetical and purely speculative conceptions of the relation of mind and body nothing can come. If the mind may not be known in some way, then it is not even possible to say that another has a mind, much less that there is such a condition as insanity. The classifications based on either of these purely philosophical hypotheses must necessarily be unconvincing

since our common sense has taught and always will make us believe that somehow the mind is related to the body. What this relation may be does not particularly concern us, for we are justified in speaking of cause and effect even if some philosophical investigator should discover that there is only concomitance instead of interaction. The absolute truth may remain forever unknown to us, but this will not prevent our using the facts as they may be found and attempting certain correlations of facts. In any science we should be concerned less with the questions that have been bothering metaphysicians and epistomologists for centuries and without obvious advance, than in collecting data and trying to correlate the facts that we can collect. Probably no one point of view will ever be taken by all, although we may still have working hypotheses, but the common sense point of view satisfies all the conditions with which the physician has to deal, and is therefore the most satisfactory.

The earlier classifications of the insanities cannot escape the criticism that is made against all old scientific ideas, that they are classifications of the obvious. The early classifications of the insane were largely symptomatic, and can be compared directly with the classification of the fevers into hot and cold, intermittent and remittent and continuous. On the other hand, there have been classifications devised to indicate the causes of the condition so that we have the insanities of pregnancy, of child birth, of puberty, of the climacteric, and so on. As examples of the methods of classifying the insanities I have thought it well to consider some of the more current ones rather than the ones of a century ago. In this way I hope to be able to point out some of the problems with which psychiatrists have to deal, and at the same time to indicate the methods of approach to the understanding of the conditions of the insane.

In some respects there is no better book on insanity than that of Bevan Lewis'. In it we find a serious

attempt to posit a pathological anatomical basis for all the mental diseases. We are introduced to the subject of mental diseases through over a hundred pages of normal anatomy and physiology of the nervous system, and as a final word we have about a hundred pages of the pathology of certain forms of insanity. With all the anatomical knowledge and from the anatomical standpoint Lewis can give us only the bare indications of a distinct brain change in general paralysis, in epilepsy, and in alcoholic insanity. And lest some of my later statements may indicate that there is some lack of sureness about the functional side of the work, and lest you may get the idea that the anatomical methods of determination are any more exact than the physiogloical, I may say that at the present time probably few of Lewis' conclusions would be held to be representative of the present day state of brain pathology in the insane. The classification that Lewis makes of his cases is as follows: Depression, stupor, exaltation, fulminating psychoses, mental enfeeblement, recurrent insanity, epileptic insanity, general paralysis, alcoholic insanity, insanity at puberty and adolescence, insanity at the puerperal, lactation and climacteric periods, and senile insanity. Of these different forms we have some with an etiology and some without. Some are distinctly classed because of the mental symptoms, and the classification may be said to represent a mixture of symptomatology and etiology.

Maudsley's classification is strictly on a symptomatic basis. In his work he recognizes only two different kinds of insanity, according as the emotional or the intellectual element of mind is the more affected. It will not be necessary to give all the varieties of insanities according to Maudsley, beyond mentioning that he divides his cases into two main classes: A, the affective or pathetic insanities, and B, the ideational insanities. This sort of classification is comparable with the classification of the diseases of the heart into those in which there is a small

pulse and those in which there is a soft pulse. It is to be directly compared with the classification of the fevers of which I have already spoken.

In close relation to the classification of Maudsley we must consider that of Ziehen. Ziehen differentiates his cases by first considering whether or not they have mental defect. We have, then, the following general classification: A, affective psychoses, and B, intellectual psychoses. Under the first heading we find mania and melancholia, and under the second stupidity, paranoia, states of confusion, deliria, impulsive ideas, and the insanities of psychopathic constitution. Under the special groups Ziehen has a classification according to etiology, but in the main it may be said that his classification is largely a symptomatic one. In this sense it is much better than that of Maudsley, for he has differentiated his cases to a finer point than has the latter, and we are able to card-catalogue all the cases according to some one of the types that Ziehen has given. There is a subheading under which any one patient day be placed, and as a card catalogue the elaborate subdivisions are excellent. In fact, for a careful consideration of some problems the card system of Ziehen is more practical than the methods of other current systems. That the classification shall be a well thought out system on the foundations of a normal psychology is, apparently to Ziehen, more important than that there be a consideration of the symptoms from the standpoint of their combination into groups to form types of disease reactions.

That the examination of cases in the present state of our knowledge of what constitutes a mental disease is of more importance than classification, is the dictum of both Ziehen and Werniche. The latter, however, differs from Ziehen in that the classification which he advocates is based on our uncertain knowledge of brain physiology and localization. Wernicke is best known for his brilliant researches on aphasia and especially for his differ-

entiation of what we now call sensory aphasia. This work led him to believe that the whole mental life or the mental side of nervous activities could be treated in the same way as the functions of speech. Every idea or perceptual complex or apperception depends upon the working of certain cells and their connections. If the cells and fibres are injured in any way we shall get a loss or perversion of the idea, perception or apperception. The problem before psychiatry, according to Wernicke, is to determine the part or parts of the brain concerned with the particular ideas or perceptions, viz., with a problem of cerebral localization. The final classification of the mental diseases will be a classification of the lesions in the brain or the spinal cord or the cerebellum. Lacking a full understanding of the finer physiology of the nervous system, we are for the present justified in classifying the cases according to the hypothetical extension of the aphasia idea and the classification becomes one, thought to be largely anatomical, on the basis of a psychology not easily understood. The importance to us of much that Wernicke and his students have written is that they have given us well described cases, and have not been so well content to pigeonhole the cases as a number of other psychiatrists. The careful studies which the followers of Wernicke have carried out have been more along psychological lines and have been the means of calling attention to the advantages of the functional method more than most others.

A different idea pervades the psychiatric work of Kraepelin. For him the psychological differentiation of the symptoms is not the important part in psychiatry, nor is the anatomical correlation of ideas. Etiology, course and outcome, are the things that must decide which cases are to be grouped, and for this grouping we must have a careful consideration of the facts in each case. We find Kraepelin classifying his cases after a careful consideration of the various facts, with his mind

bent on the differentiation according to the three criteria noted above, into the following groups: Infection insanity, exhaustion insanity, intoxication insanity, thyrogenous insanity, dementia præcox, dementia paralytica, insanity of brain disease, insanity of involution period, maniaco-depressive insanity, paranoia, epileptic insanity, psychogenic neuroses, constitutional disease states, psychopathic personalities, and mental maldevelopment. This is radically different from all the classifications we have just considered, not only in the grouping of the cases, but especially in the standpoint. Kraepelin's classification is one, essentially from an etiological standpoint. This classification (or a similar one) has been found to be so useful that it has been widely accepted as a working formula, but it is recognized by most psychiatrists as a working formula, until we can get more information that will enable us to differentiate the cases into still smaller groups or into different groupings than those proposed by Kraepelin.

The classification of the insanities which we have just been considering has been due to a very practical need, the grouping of the cases for further study. Even where the statement is not so directly made as it is by Ziehen, Wernicke and Kraepelin, it is underlying the work as a whole. Regardless of the method at the bottom of the different classifications, there is always the thought that the classification will somehow help in understanding the different kinds of cases and that this understanding is of prime importance for the proper treatment. Throughout the classifications the psychical point of view has been prominent. The mental symptoms, whether or not we choose to call them as does Kraepelin, the course makes no difference, are things that have to be studied in each case. They are the basis of determining whether or not we shall call the individual mentally well or ill. These must be studied, and if we are to make any advance they must be studied micro-

scopically, as well as in gross sections. If the mental symptoms are of no value, as we may hear almost any day from certain theorists, we may have to differentiate our cases, say, into short and long headed individuals or into those with a full set of teeth and those with false teeth or into any other series of differences.

In pointing out some of the differences in the methods of grouping the insanities, I might take up a dozen or more if we did not already have more than enough. It must not be understood that the grouping depends upon the caprice of any one man. I have failed in my purpose if I have left the opposite impression with you. Nothing is further from the truth. There has been in this line of medical work, as in all other lines, a gradual evolution, and the differences are not so much differences in the conception and the treatment of the insane as in the point of view that the individual may have. We need to consider what others have thought about these matters, and we need to take into account the facts as we see them in order to have a general working hypothesis for our own advance as well as for the advance of the subject. So long as a science is advancing we must expect to have differences that may at first sight appear irreconcilable, but work and *more work* will gradually show the untrustworthy parts of our science and will enable us to place them on a sure foundation.

I believe it may safely be said that there is a consensus of opinion among psychiatrists at the present time that the structural studies of the insanities have had their day and that the time is ripe for a careful examination of the material from a functional standpoint. I believe it is conceded that the study of dead matter cannot give us any indications of what change has taken place in the individual's functioning power, in the condition we call disease. These studies can give us information of the state of the body at the terminus of the life of the individual, but in medicine we are concerned

not so much with structure as with function. Regardless of what ideas we may have of the importance of the studies of pathological anatomy, it will have to be admitted by all that the main use of microscopical studies is that of giving us some facts to correlate with the clinical findings, in other words, with the changed functions. As physicians and even as surgeons, you are interested not so much in the composition of the body as in having the body work in a certain way. Whether a leg is to be amputated or a headache treated, the aim you have is to make the body function better than it did before you began work.

The functional studies must be carried on and carried on with the best tools at our command. We cannot afford to have them carried on apart from the anatomical studies of the pathologist, but they must be carried on in connection with the studies of the cut and stained sections of the brain and spinal cord. It is no discredit in the present state of scientific specialization to say that the physician who has the care of the patient is usually incapable of doing much good investigation along these lines in psychiatry. For this work there is needed just as much a special preparation as there is for the prosecution of work in pathological anatomy. This attitude does not appear to be taken even by many of the men who are in insane hospitals. In pathology the special methods and investigations are understood to be the special province of the pathologist; in the medical school the physician has learned something of the methods, but just sufficient to enable him to understand and to interpret the data of the pathologist. Whether the best results will be obtained by staining the material by the method of Weigert or Pal or Nissl, are matters that are left for the specialist in pathology. But on the functional side there has crept in the idea that no special training is necessary. This feeling that anyone is competent to determine the sanity or insanity of an individual is found

to-day in the laws regarding the method of commitment. A jury of laymen in some communities determine whether or not an individual is insane; and the certificate of two physicians, who have little more knowledge in this branch of medicine than the laymen, is taken as good evidence.

In lacking the knowledge that will enable him to do satisfactory work in functional psychiatry, the individual is not to be blamed. As a medical student he goes to a school for an education that will enable him to practise medicine in all its branches. The law requires that he have enough acquaintance with surgery to know not only how to do simple operations, but also to know what operations are justified under certain conditions, even if he be not a surgical practitioner. He must have the knowledge, and State and other licensing boards require this, to treat even the most common forms of disease of the bodily organs, but although we have one insane to three hundred of the population, he may go from a school without having seen a case of insanity, and from some schools without having heard of the subject. Although he is placed in a position as adviser regarding the mental as well as the bodily health of the community, he is permitted to go without the training that will enable him to observe properly cases of mental alienation, and he is compelled to obtain this knowledge as well as he can in some outside way, with the consequent inability to care for the individuals who are placed under his charge until he has acquired sufficient experience on the community. To meet those needs I have in another place advocated the giving of courses in psychology in the medical schools, not only for psychiatric purposes, but for help in the treatment of others than the insane. I need not go into the subject at this time beyond suggesting that you consider the use to which most of you put the ordinary psychological knowledge that is in the air. You take into account the general condition of the

patient's mind,—that is, especially if you are a practitioner with a large experience—when you treat him for dyspepsia or pneumonia, and in a crisis who would not prefer to have as a patient one who will not give up? Not necessarily the robust in body, but the robust in mind would be your choice if you are to have a low death rate; you would prefer to have as patients those who do not know and will not know that the rules of medical practice say they have little chance of living. It will be needless to point out the success that the Christian Scientists and other charlatans are having with certain classes of patients because they have either the knowledge or the intuition enabling them to meet certain conditions. The most powerful medicine in the pharmacopœia is the placebo. It depends for its action upon the psychological knowledge of the physician. If the members of the medical profession do not understand the workings of the mind they cannot expect to have success in the treatment of certain cases not insane, and when they begin to deal with the insane the problem is even more difficult. The fault lies with the character of medical education, which is still permeated with anatomical traditions, and although for several decades it has been thoroughly appreciated that the physiological or functional viewpoint is the important one for the physician to have, we retain the older practice in the schools.

One of the needs of present day psychiatry is the properly trained—that is, the functionally trained—student or graduate in medicine. He needs not so many methods as the attitude. He needs to appreciate, for example, that when he finds a tumor pressing on the cerebrum the important thing is not the appearance of the tumor as that something has interfered with the normal functioning of the organ. Let him be trained in as many of the anatomical studies as can be crowded into the medical curriculum. The more knowledge of these branches he has the better physician he will be so

long as his structural knowledge is leavened with a goodly lump of function.

Psychiatry needs at the present time more careful studies in every line which promises any hope of information about the conditions in insanity. It needs the co-operation of the pathologist with his microtome and microscope. It needs the functional pathologist who will investigate the abnormal ways in which the nervous system does its work. It needs the specially trained psychologist who has methods that will be used for the differentiation of apparently similar mental reactions of the individuals under our care. It needs the chemist who will discover some change in the blood or in the general metabolism of this class. And it needs the bacteriologist who will not only look for special micro-organisms in the different mental diseases, but who will co-operate closely with the chemist on such problems as toxins or antibodies in the insane. The combination and the co-operation of all these different modes of determining changed functional efficiency are needed in psychiatry if we are to have the insanities investigated on broad scientific medical lines. When we get this combination we may hope for great advances.*

For the thorough understanding of what the insanities are, we need to have accurate information of the previous life of the individuals with whom we have to deal. We should in this survey have knowledge of the

*It is a matter of note and should be a matter of pride to the psychiatrists of this continent that one of the members of the Medico-Psychological Association had many years ago this idea of a complete scheme for the investigations of the insanities. This was long before the ideas and the standpoints of Ziehen and Wernicke and Kraepelin were known here. I refer to Dr. Edward Cowles, formerly superintendent of the McLean Hospital, of Waverley, Massachusetts. With the idea of the importance of the study of function, he prepared himself for the better appreciation of the mental signs by a special course in psychology in the Johns Hopkins University in 1888, and in the same year he opened his hospital to a lay-

reactions of the individuals to the environment in which they have been placed at different periods of their lives and we need further information of the phylogenetic development in the family of the individual. All these things may be grouped together as the careful examination into the life history of the patient. It is an examination into the family and individual antecedents that will enable us to understand the mental characteristics with which we have to deal. It is an examination that will probably help us to differentiate our patients into classes with pronounced tendencies towards certain diseases. We need not commit ourselves on the subject of heredity and we cannot properly give a wise judgment of the effects of heredity until this has been done. At present we have some general studies along this line, but there has not been sufficient of the ontogenetic and the relational element in the examinations which have been carried out.

We need at the same time minute studies of the reactions of the patients under different conditions. We need, in other words, a functional psychology of the different individuals to see how they comport themselves now in this state of life, now in that. If it be true that, as most of us believe, there is little hope of our understanding the mental conditions from the anatomical standpoint, and if, as we also believe, there is much to be gained from the careful differentiation of the diseases by careful mental examinations, this work should be represented in every hospital for the insane. It is not

man specialist in psychology, and had him appointed to the position of investigating psychologist. When I was at the McLean Hospital we had represented in three research men the following fields: pathological, clinical, physiological, and psychological. It would be most interesting and valuable to trace the growth of this idea and particularly to trace the changes in the conceptions of certain men in America on these lines, but this must be left for another time. The important part is to know that the functional standpoint is now accepted by the very men who combatted the earlier papers of Dr. Cowles.

necessary that every hospital should have a well-equipped laboratory of experimental psychology; many experiments and valuable research can be done without apparatus; but there should be supplied men with the brains to carry on the investigations. Much of the apparent simplicity of our mental cases is due to the fact that we do not try to find out what is wrong with each individual but are content to make a diagnosis, pigeonhole the case and pass on to the next. It would be the object of careful physiological and psychological examinations to show how far we can pigeonhole certain cases and how far we cannot do so. From reading some text-books it might be assumed that all cases may be assigned to one division or another of our psychiatric classification, but we must remember that each individual mind differs from every other individual mind, and even when insanity intervenes the differences still hold, and are at times more marked. The greatest service that the psychologist or the physiologist or the clinical psychiatrist, or whatever else one wishes to call such a man, can do is to unravel the parts that are common to all types of what we call the same mental disease and those that are individual. It will be his opportunity also to determine the symptoms that mean in general a bad outlook, and those that indicate a mild attack.

For the proper estimation of the value of the different symptoms we need also to have at our command the opportunity of studying the borderland cases and especially those cases in which there have been what we may call aborted attacks. We need also the opportunity of examining the initial stages in those cases that become insane. In ordinary practice the last classes of cases are treated by the general practitioner, and the psychiatrist sees them, if at all, only after the insanity reaches its height. When the symptoms become severe and numerous the psychiatrist is almost unable to determine which is fundamental and which is not. He must make

his diagnosis as well as he can with the material at hand, and the course of the development of the disease will remain unknown for many years if he must depend solely upon the analysis of the full-blown cases which are sent to him as a last hope. He has not the same opportunity as the practitioner or the investigator of the infectious diseases in that he cannot inoculate an animal with the thing that produces the condition of insanity, and even if he did there would still be the great differences in the mental life of the animal and man to be taken into account. Of the bodily diseases we may reproduce to a great extent the initial and the end conditions in animals, but mind in the brutes is so different, possibly in kind as well as in degree, from that in man, that the psychiatrist has not the same opportunity as the investigator of the microbic diseases. For this reason, therefore, the general practitioner must be appealed to to send the cases to the hospital for examination as soon as there appears to be a possibility of a mental change.

The family physician can help the psychiatrist in another way. He can help to dissipate the popular prejudice against the hospitals for the insane. He can help to educate the public to appreciate that the hospitals are not the places solely for forlorn hopes, but that they are real hospitals for the cure of the mentally sick; that they are places where not only the severe but also the mild cases can be treated better than at home. This the physician will do only when he appreciates that the insane are not to be treated and cured by indiscriminate constitutional or symptomatic drug prescription.

The importance of the problems that face the psychiatrist, and the importance to the State that the problems should be investigated, are shown by some figures giving roughly the conditions in New York State. It is estimated that there is one insane individual to every three hundred of the total population, there is also about one epileptic to three hundred, and one defective to three

hundred. In other civilized communities the same proportion holds. We may say, therefore, that there is one dependent to every one hundred of the population, or, counting that only one-third of the population works, the male and a few female adults, and adolescents, there is one dependant to be supported by about thirty of the working population. In New York State during the year ending October 1st, 1906, there were in the State Hospitals for the Insane 26,357 patients. Practically all the expense of keeping this immense army of incompetents was borne by the general taxpayers, and the amount which they cost during the year was about $6,000,000. If we count that the average earning capacity of the individual is approximately $200 a year, a very low figure, I believe, it will be seen that the State loses every year this amount as well as the amount it costs to maintain the hospitals. Each year, then, the loss from unproductiveness is about $5,200,000, which must be added to the $6,000,000 actually paid out by the State for the expenses of the hospitals. It has been calculated that for every insane person discharged from the hospitals cured, the State saves $2,000. It is almost a truism, therefore, to say that it will pay the State to appropriate sufficient money for the investigation of the problems of insanity from all possible points of view. Even if our studies can only have as their outcome the reduction in the length of attacks by as little as a week there is enough at stake to make the venture worth trying. It is not only possible but extremely probable that the investigations will give us not only valuable means of diagnosis and of prognosis, but they will eventually lead to the other practical problems of therapy and prophylaxis.

We have before us at the present time some of the same problems that faced the psychiatrists of fifty years ago. The material side of the insane hospital has been worked over, and we may say that it has been success-

fully solved, but we have not spent the time and the money for the solution of many of the medical problems connected with the work. This is what we should do, this is what we must do, if we are to take in psychiatry the same broad attitude toward disease that we have taken in such diseases as tuberculosis, scarlet fever, and smallpox. We have to deal with the mental health of the community just as we deal with the physical health, and it is just as essential, from a medical point of view, that we shall investigate the mind, how it works and how it is affected for well or ill, as it is that we shall investigate the water supply or the purity of milk, or the diseases of cattle. In both kinds of investigation we have to deal with matters vital to the State; in the one we deal with the conditions that produce bodily disease and death, and in the other we deal with conditions of mental health and death. In both cases the State is intensely concerned that a healthy condition of the community shall prevail; by the investigation of both the State will prevent an unnecessary loss of life and preserve for use many of its citizens. This matter must be seriously considered by the State, and the State must supply the funds for the prosecution of the work if its object is the greatest good for the greatest number.