

population that is being depleted the fact that the weaker and unfit are left behind.

(¹) Delivered before the Royal College of Physicians, Edinburgh, February 1st, 1905.—(²) Vol. I, p. 205.—(³) *Cook's Voyages*, vol. iii, p. 131.—(⁴) *Central Africa*, p. 94.—(⁵) *Journal of Mental Science*, vols. xii, xvii, and xxiii.—(⁶) *De la folie des Animaux Paris*, 1839.—(⁷) *Feandélise l'Insuffisance Thyroïdienne*, Paris, 1903.—(⁸) *Centralb. für Nervenheilk. und Psychiat.*, July, 1904.—(⁹) Quoted by Delage, *L'Hérédité*, p. 214.—(¹⁰) Ireland, *The Blot on the Brain*.—(¹¹) Brachet, *Path. Ment. des Rois de France*.

Morison Lectures.—Lecture VI.(¹) By JOHN MACPHERSON, M.D., F.R.C.P.E.

The Causes and Treatment of Insanity.

I NOW come to the important, and I am sorry to say the controversial, question of the causes of insanity. After what I have already said on the etiology of the clinical forms of insanity and on the fluctuations of statistical insanity in communities, it seems to me that I might conveniently dismiss this subject by adopting the laconic style of the student who was assigned the task of writing an essay on "Snakes in Ireland" by saying in three words, as he did, "There are none." But as the great majority of people still believe in the validity of the numerous causes which are popularly believed to create insanity somewhat in the same way as violent exercise causes fatigue or eating salt fish causes thirst, it is necessary to refer briefly to the subject.

When we apply the word "cause" to insanity we must mean one of two things, namely, either the whole hereditary and pathological processes which culminate in insanity, or the agencies which precipitate individual attacks of insanity in a psychopathic subject.

(1) *The causes which are supposed to produce insanity de novo.*—The fact that an individual may live free from any suspicion of mental unsoundness for the first two decades of life has undoubtedly tended to obscure our notions regarding the causation of mental disease, and has led us to seek for external explanations, where a little consideration would enable us to perceive that in this respect insanity does not differ from other constitu-

tional diseases, such as cancer, phthisis, or gout. If a disease is transmissible from ascendants to descendants, its appearance must follow the course of the development of the individual, otherwise we should meet with cancer and angina pectoris in childhood, while rickets and the disorders of dentition should be equally common in the later as in the earlier decade of life. Insanity not being one disease, as we have seen, but a heterogeneous group of many diseases, we cannot speak correctly of its "cause" any more than we can intelligibly speak of a cause of the diseases of children or a cause of tropical diseases. It is worse than useless, therefore, to publish tables of the causation of insanity which make no reference to the special affection which the cause is supposed to produce. I say "supposed" because causation can at best be only a matter of opinion. What do we mean when we ordinarily use the word "cause"? We must mean one of two things—either that because two phenomena occur regularly in a certain sequence they therefore stand to each other in the relation of cause and effect, or that because two phenomena occur in association the one necessitates the appearance of the other. The fallacies of the first proposition are that, if it were universally true, we should be compelled to the conclusion that, because day and night regularly succeed one another, the one is the cause of the other. Obviously day and night stand in no such relation to one another, but the same fact is not always so clear in the case of many other natural processes with which we are less perfectly conversant. Again, it is not possible to isolate any single phenomenon in the sequence of events and call it a "cause," for one thing depends upon another in infinite regression back into eternity. The possible fallacies in the second case are numerous. Among the simultaneously occurring phenomena we select one in which we are most interested and call it the "effect," and then we look for the "cause" among the other simultaneously occurring phenomena. Such a quest is natural and in accordance with the constitution of the human mind. Yet, though the process is the source of all human knowledge, it is no less the source of all error. If the human mind were perfectly co-adapted to natural phenomena, there would be no danger of mistake, for knowledge would be perfect and speculation unnecessary. But as we are mentally constituted we almost invariably fall into error through selecting, not the true

cause, but the one which we would rather believe to be the true cause. It is a well-known fact that when a person is hypnotised and told to do a certain action, say an hour afterwards, he will perform the action without the least recollection that has been suggested to him ; but when he is asked why he did it he will furnish a number of plausible reasons, just as if he had spontaneously performed the act for sufficient conscious reasons. That is, I think, one of the most wonderful and suggestive facts in hypnotism. It explains our insatiable desire to find a cause for everything and it also explains why we are generally mistaken. In order to be able approximately to assign a cause to any effect it is first of all necessary thoroughly to know the nature of the effect itself. If we do not know what insanity is, how can we pretend to know what its causes are? It was the profound ignorance of the disease which led to the theory of its supernatural origin, and it is only in proportion as our knowledge increases that we are able to formulate more rational ideas of its associated phenomena. But as our knowledge of the fundamental facts of insanity is as yet only fragmentary our opinions regarding its causation are still necessarily crude and imperfect. All we can honestly claim to assert is that certain symptoms have been preceded or accompanied by certain definite phenomena which have been ascertained to precede or accompany similar symptoms in a fixed and constant ratio. Take, for instance, the use of the word " cause " as applied to the numerically expressed relation of syphilis to general paralysis. In the first place, we do not know enough about general paralysis to assign it to any one cause ; and in the second place, syphilis cannot be the cause of general paralysis, for only an extremely minute fraction of the subjects of syphilis become general paralytics. Alcoholism was discussed in the third lecture, where it was, I think, successfully proved to be a neurosis closely allied in its symptomatology and heredity to the other neuroses and to insanity. That being so, its prominent place in a classification of insanity need be a matter of no surprise. Its combined homologous and dissimilar heredity is between 80 *per cent.* and 90 *per cent.* of the cases of alcoholic insanity. It may seem absurd to discuss the question of the etiology of alcoholism, for of course if there were no alcohol there could be no alcoholism. Yet even here, so complicated are the causes of mental

disorder, that it is necessary to point out that the true cause is a defective heredity which (1) induces the subject to crave for a particular mental state—not for alcohol, but for the state which alcohol most conveniently produces; (2) which provides the subject with a constitution which is particularly susceptible to the influence of such poisons as alcohol; and (3) which is in many cases the cause of a mental unsoundness independent of alcohol.

(2) *The causes which precipitate individual attacks of insanity.*—If we restrict the term “causes of insanity” to those agencies which precipitate individual attacks in predisposed persons, we are on more limited and less important grounds. There are, no doubt, innumerable such agencies, but I question if a tabulation of them is so profitable or so beneficial as some people are apt to believe. Take, for example, the causes of an epileptic fit. In the same individual different agencies at different times determine the onset of a seizure. At one time it may be alcohol, at another time an error in diet, at another time a violent mental impression, while at other times the fit comes on without any assignable cause, merely as a manifestation of the morbid periodicity of the disease. Is it not a misuse of language to call these and similar agencies “causes” of epilepsy? It is the same with insanity. “When we are told (says Maudsley) that a man has become mentally deranged from sorrow, need, sickness, or any other adversity, we have not learned much if we are content to stay there; how is it that another man who undergoes an exactly similar adversity does not go mad?” The great question of the present day, and one which is constantly asked by the public, is, “What are the causes of the increase of insanity in the population?” The obvious reply is to ask in return whether there is any real increase of insanity. I have fully convinced myself (I do not know if I have succeeded in helping you to the same conclusion) that there is no increase of insanity. I am willing, however, for the sake of argument, to look at the question in another form and ask, Why is not the proportion of insanity less than it is? The causes generally assigned are those which produce physical deterioration of the members of a community. These are overcrowding, density of population, improper food, alcohol, and physical diseases. It might be pertinent before discussing this question to ask whether physical deterioration, in the sense in which the word is popularly

understood, really occurs at all. Very grave doubts have been expressed on the subject by competent authorities, and no proof of such deterioration has been brought forward. When it is seriously argued, however, that alcohol, improper food, and diseases of all kinds do not so much produce insanity in the *first* generation, but by their action on the sexual elements of the parents induce an unstable condition in the brains of the next generation⁽²⁾—in short, that these evil influences have caused variation in an unfavourable direction—all that can be answered is that such statements are founded on speculation, and should not, therefore, be put forward as working scientific hypotheses. I do not profess to know the causes of variation, but it is evident that the promoters of this theory have misunderstood the meaning of the term. The word, as scientifically understood, means divergence from a standard mean of any quality. It implies divergence to both sides of the mean, therefore it is both good and bad. For every man that is sixty inches in height there is another seventy inches high. On this hypothesis one is equally justified in asserting that alcohol causes genius as that it is a cause of genetic insanity. Even if we assumed that alcohol directly increased the amount of genetic insanity in a community, we would have to satisfy ourselves also as to whether the drinking habits of the people in that community were increasing or decreasing. If the historical accounts of the drinking habits in this country are not fallacious and garbled, there can be no doubt that the people are much more sober than they were 150 years ago and are steadily becoming more sober year by year.⁽³⁾

On the whole, while we may be ready to acquiesce in deploring the insanitary, diseased, and alcoholic condition of many portions of our urban population, the question in the light of statistics does not bear upon the increase of insanity in any way that I am able to make out. On the contrary, there is evidence which goes to show that, whatever the social and moral condition of a people, a strong and effectual effort is made by Nature to counteract these inimical surroundings.

I select the following striking remarks from the evidence given before the recent (1904) Commission on Physical Deterioration.

Dr. Eichholz said (566): "The number of children born healthy is, even in the worst districts, very great. The exact number has never been the subject of investigation, owing largely to

the certainty which exists upon the point in the minds of medical men ; but it would seem to be not less than 90 *per cent.*" (646) "The percentage of badly born children among the poor is not sensibly greater than among the rich, and such diseases as are hereditary, such as insanity and neuroses, in which we include alcoholism and other inherited diseases of bad living, affect the one as much as the other." Professor Malins, of Birmingham, President of the Obstetrical Society of London, said (3124): "I think the testimony of experienced observers would be in accordance with the views expressed by Dr. Eichholz, though perhaps not to such a large extent. I should say that from 80 to 85 *per cent.* of children are born physically healthy."

If the poorest and most ill-nurtured women bring forth as hale and strong-looking babies as those in the very best conditions, the interpretation would seem to follow that Nature gives every generation a fresh start. It must also follow that environment has very little to do with the ante-natal condition. Children, it would seem, are not necessarily born degenerate, though born in the most sordid surroundings, and though born of parents who have acquired evil habits of life or unsound bodily health. All that the majority of these children require to make them average citizens is a chance in life—a chance to escape into better, healthier, and cleaner moral and social surroundings. I am confirmed in this statement by the marvellous results obtained in Glasgow by boarding out "slum" children in the houses of the peasantry throughout Scotland, regarding which we heard a good deal at the International Congress for Home Relief held in this city last June. We were informed on good authority that about 80 *per cent.* of these children turned out well in life, which is saying more than even an optimist would be inclined to say of ordinary children.

Our opinions on the prognosis of insanity must vary according to the view we take of the nature of the disease. To those who regard insanity as an accidental malady like measles or whooping cough, to which every one is subject and which can be prevented by nurture and careful hygienic precautions, there is, of course, an unlimited field for optimistic opinion as to its cure and prophylaxis. To those, on the other hand, who look upon it from the point of view of a genetic

variation the outlook is much less hopeful. Looking at the facts as they stand, there does not seem much hope of a speedy confutation of the latter view. Out of every 100 inmates of a modern asylum for the insane 20 are recent cases; that is to say, they have been less than a year in residence. They form the only material from which any hopeful results are to be obtained. It would be wrong to say that no patients recover after a year's illness, but their number is so small that—dealing as I am with large numbers, and not with the special experience of any one physician or any one institution—they are for practical purposes negligible. The following table shows the length of residence of 820 patients who recovered in the asylums of the Department of the Seine in the year 1897.

Duration of Treatment of the Patients who recovered in the Asylums of the Department of the Seine (1897).

Duration of residence.	Number recovered.	Percentages.	Mean.
One month and under	92	11'21	} 1 year, 91'35
From 1 to 1 months	115	14'02	
From 2 to 3 months	172	20'97	
From 3 to 4 months	113	13'78	
From 4 to 6 months	124	15'12	
From 6 to 9 months	74	9'02	
From 9 to 12 months	60	7'31	} 2 years, 4'02
From 1 to 2 years	33	4'02	
From 2 to 5 years	22	2'68	} 2-5 years, 0'89
5 years and over	15	1'82	
Total	820	—	

We see from these figures that 91 *per cent.* of the patients recover within a year, 4 *per cent.* between one and two years, and only 0'8 *per cent.* after two years. What of the after-history of those who recover? The answer has been very tersely given by Dr. Thurnam, who was the founder of modern lunacy statistics. He says: "Of 11 persons attacked by insanity 6 recover, and 5 die sooner or later during the attack. Of the 6 who recover not more than 2 remain well during the rest of their lives; the other 4 sustain subsequent attacks, during which 3 of them die." The matter has been

put similarly, but in different form, by Sir Arthur Mitchell (⁴), who recorded the condition, twelve years after, of 1297 patients admitted into Scottish asylums for the first time, and who had not previously been insane. Of these 851 recovered, 261 did not recover, 412 died, 499 were readmitted, and 273 remained. In other words, 36 *per cent.* died insane, 32 *per cent.* were then alive but insane; and 32 *per cent.* were either alive and sane or had died in a state of sanity. Making allowance for the future history of those who were then alive, the writer concludes that only 27 *per cent.* of the whole 1297 admissions were likely to die sane. This is far from encouraging as a basis on which to build any strong hope for the ultimate triumph of medical skill. For even if there were a basis of scientific treatment in existence, which there is not, it is evident that the inimical forces to be overcome are exceedingly powerful. Let us glance briefly at the question in the light of what I have already said on the nature and forms of insanity. To begin with, it is manifest that wherever there is an inherent mental defect of genetic origin we can do nothing by way of adding to Nature's endowment. At most we may train and educe the latent qualities that are already there. It is the same with the recurrent insanities and the neuroses. We can certainly conduce towards recovery from the individual attacks, but we can do little or nothing to check the tendency to recurrence. So with the neuroses. The epileptic fit is, as we all know, eminently recoverable from, not so epilepsy itself. It must be ever borne in mind that when we speak of recovery in a true case of mania-melancholia we refer to the individual attack, and that we can only hope, at the best, for a modified tendency towards recurrence. When we turn to the confusional insanities the case is somewhat different. There is less tendency to periodicity, but, unfortunately, the individual attacks are more severe, and the destructive action of the toxins upon the brain-cells is more rapid and more effective. I have shown that upwards of 40 *per cent.* of the admissions into asylums belong to this group. It is here, if anywhere, that our hope for the future of psychiatric medicine lies. According to Kraepelin from 14 *per cent.* to 20 *per cent.* of all patients admitted to asylums are the subjects of dementia præcox, of whom, he says, only 8 *per cent.* recover. General paralysis is, as yet, a hopeless disease. Puerperal insanities are favourable on the whole, but

under the influence of the more extensive employment of antiseptic precautions in obstetric practice their occurrence is gradually becoming less frequent. The most favourable cases of all are those suffering from acute alcoholism, of whom there are far too many in asylums. The confusional insanities must be attacked with the weapons of modern medicine ; especially must that extremely unhopeful group of affections known as dementia præcox be brought under early treatment, for the destructive processes are so rapid that time is everything. The only way to advance our knowledge of these diseases is by hospitalising the treatment of the patients in exactly the same way as is done by the study and treatment of ordinary patients in general hospitals attached to large centres of scientific research such as exist in university cities. I say hospitalisation, for it must be manifest that persons suffering from such serious maladies as most of the types of confusional insanity really require the best form of hospital treatment if they are to have any good chance of recovering from the grave symptoms of which they are the subjects. It is perhaps true that as yet the basis of any treatment is only empirical ; but with the spread of more accurate knowledge regarding the pathogeny of these affections every day is bringing us nearer to a rational basis of treatment. In all cases of insanity complicated with leucocytosis there is a state of high blood-pressure which aggravates the symptoms. The surest and the safest way of modifying that high arterial tension is by rest in bed. In a paper by Dr Lewis Bruce and Dr. Alexander ⁽⁵⁾ I find the following suggestive remarks : " During the early period of the attack, when the pulse was quick, the temperature sometimes elevated, the patient sleepless, and the mental symptoms acute, the arterial pressure was high, varying from 140 to 180 mm. Hg. If the patient were kept in bed and the arterial tension taken night and morning, we found that in the course of a period of very variable duration the tension gradually fell to 120 or 130 mm. Hg., this being preceded by a fall in the pulse-rate ; the temperature tended to be slightly below the normal, all the mental symptoms lost their acute character, and the patients began to sleep again at night."

There could be no better statement on which to base the argument for the hospitalisation of acute cases of insanity than this. We have hitherto regarded mental affections too much

from the mental side, to the exclusion of the grave physical changes which underlie the mental manifestations. In the great majority of acute mental affections there are the following physical symptoms present, namely, leucocytosis, an increase in temperature, insomnia, profound digestive disorders, and metabolic changes which are apparent in the marked alterations in the normal constituents of the urine and other secretions. While those morbid changes last in their intensity it must be evident to every one that a person suffering from them is much more seriously ill than a superficial description of mere mental symptoms would lead us to suppose. In short, we are gradually being forced to the conclusion that the mental symptoms in the acute psychoses are mere manifestations of a disordered physical condition, just in the same way as the delirium of fever is a mere symptom of certain phases of intoxication of the nervous system. If this view is to prevail, it will entail a revolution in our present methods, for it is to the body and not to the mind that, in the first instance, remedial measures must be directed. The necessary consequence of such a general attitude towards mental affections of the acute type will assuredly be the breaking down of the distinctions which have, up to the present, separated the treatment of acute insanity from the treatment of other bodily diseases. Thanks to the labours of a few distinguished workers in various parts of the world, a new era has already dawned. The time for the expectant treatment of acute insanity, based on the theory that it is a pure nervous storm with secondary physical symptoms, is over, at any rate for the present, and can only be revived by incontestable scientific proofs. But if the patient is not a rich man he cannot, under the present system, receive either treatment or advice except within the walls of an asylum, from which he and his friends naturally shrink so long as the character of his mental symptoms does not necessitate his removal thereto. It comes to this, that a man suffering from any form of mental affection of an acute character must, if he cannot afford to be treated in his own house, be certified and removed to an asylum without the opportunity of being first examined and observed with a view to ascertaining whether his malady is of such a nature as to require such removal. The existing lunacy laws were framed, among other reasons, with a view to securing the liberty of the subject, and for a long time to come probably

that safeguard must be retained ; but in respect of the point I am now discussing we have outgrown these laws, and, so far from securing the subject's liberty, they have the contrary effect and actually conduce towards depriving him of his liberty. In the interest of the sufferers, for the furtherance of science, and for the spread of knowledge in the medical profession, it is essential that in every large city, and especially in every university city, there should be hospital wards for the treatment of acute insanity open to the public and to medical students in exactly the same way as are the other wards of a general hospital. To these wards should be attached an out-patient department to which patients may come for advice. The want of such an establishment in every great urban centre in this country is an expression of passive cruelty and indifference which can only be described as a blot upon our much vaunted civilisation. In this respect Germany, Italy, Austria, Switzerland, and some of the States of the American Union are ahead of us. I can only afford time to glance at one or two of the admirable provisions made in these countries, not only for the treatment of new and acute cases of insanity, but also for the so-called borderland cases and neurotics of all kinds.

There are twenty universities in Germany and in connection with each university town there is a clinic for mental diseases, the chief of which is the Professor of Psychiatry in the university. These clinics are of various forms. Some of them are wards of general hospitals, others are separate pavilions in connection with hospitals ; others, again, are detached buildings with separate organisation, but always forming a part of the group of clinics which form a modern German hospital and medical school.

The Psychiatric Clinic of the University of Heidelberg, which was opened in 1878, contains about 150 beds, and about 320 patients, on the average, are annually treated there. It forms, as will be seen from the accompanying plan, a part of the buildings of the medical school of the university.

The Clinic of the University of Tübingen is one of the most modern and best equipped in the German Empire. It was opened in the year 1893 and has 120 beds. On an average over 300 patients pass through it annually.

The Clinic of Giessen in the Grand Duchy of Hesse, which was opened in the year 1896, consists of eight separate

pavilions for a population of from 80 to 100 patients. In many respects it is quite unique and one of the most admirable institutions in the world. Time will not allow me to describe its various good qualities—I must content myself by referring any of you who are interested in the subject to the recent Report of Dr. Serieux to the Department of the Seine upon the care of the insane in Germany and other European countries.

The Clinic of the University of Wurzburg in Bavaria is a comparatively small one, having only 60 beds, but it manages to pass through its wards no less than an average of 207 patients in the course of a year.

In the State of New York a pavilion for the reception of recent and acute cases of mental disease has been erected in connection with the new hospital of the City of Albany. The design provides a two-story building, connected with the main hospital by a corridor, and conforming with the latter in architectural style. This pavilion furnishes transient accommodation: (1) for patients about to be certified; (2) for patients who need observation; (3) for mild cases of insanity who may recover in a general hospital; (4) for rapidly developing cases of delirium; and (5) for the sudden and often dangerous forms of mental disorder which occur in the course of general diseases or after the shock of surgical operations.

[Lantern slides showing photographs and plans of various foreign psychiatric clinics were shown.]

The reasons for establishing clinics for mental affections in Germany are the same as some of us have been urgently pressing for several years in this country. They are necessary for supplying early advice and treatment to patients labouring under acute insanity; for the remoteness of most of the large asylums from the large centres of population and the formality and certification required for admission render them unsuitable for this purpose. Moreover, a large and increasing number of the patients who urgently require treatment in such clinics are not certifiable as lunatics and should not be subjected to the necessity of certification before they can obtain treatment or advice, as at present. I refer to neurasthenic, alcoholic, epileptic, and other borderland cases of insanity. At Giessen in 1896, 6·5 *per cent.* of the total admissions were not certifiable; but in 1901 there were 23 *per cent.* who were not certifiable, showing how the necessity for the institution existed all along,

and how, as its usefulness became gradually known, it has been more and more taken advantage of. Within the United Kingdom at the present time there is not a single clinic which serves the purpose I have been describing. How long we are to remain in this unenviable position depends upon the medical profession and upon the ethical sense of justice and humanity of the British public. I would not be doing justice to one city in this country if I did not modify what I have just said by referring to the magnificent provision which the Parish Council of Glasgow have recently made in one of their new central hospitals for the observation and treatment of incipient cases of insanity. Two wards, one for men and one for women, each containing twenty-five beds, have been fitted up with every necessary care for the comfort and nursing of this class of patient.

Out of every 100 patients who have been more than a year in a Scottish asylum, 64 require the care and attention which can only be received in an institution, and 36 are quiet, harmless, and not in need of the same special care. For the latter class residence in an asylum is not by any means absolutely necessary. It is pretty well known among those who are interested in lunacy administration all over the world that between 18 and 20 *per cent.* of all the pauper lunatics in Scotland are living in private dwellings throughout the country. On the first of January, 1904, there were 11,404 in establishments and 2658 in private dwellings. It is, however, necessary in the interests of the insane, as well as in the interests of the ratepayer, that a very great deal more should be done to remove from institutions those patients who do not require confinement or restraint. With regard to the patients referred to, it may be at once conceded that a certain number of them are content in asylums, that a certain number of them would not be happy anywhere, and that a certain number who are quiet in institutions would not remain placid and manageable under any other condition of life. But when these admissions have been made, there remains a large proportion to whom life in an institution is irksome and all but intolerable. For those for whom no other kind of life is suitable or expedient nothing else can, of course, be suggested. The interest of the ratepayer comes to be considered when it is apparent that the money he is called upon to expend is unnecessary, and that other means prefer-

able or superior to the old methods of perpetually adding on accommodation to asylums which for such patients costs from £100 to £200 per bed, can be provided at infinitely less cost. For these reasons there is a duty laid upon us to extend the scope of the boarding-out system which in Scotland has done so much to increase the happiness of the insane poor and to relieve the public of a steadily-growing expenditure. In the meantime there is in Scotland a sufficient margin of opportunity for doing this for many years to come, and should that margin ever become exhausted there are, fortunately, other applications of the same system which have been highly successful in other countries. In Germany the system of colonies attached to asylums and under the supervision of the asylum medical officers has undoubtedly conduced towards the disencumberment of the institutions from an accumulation of the quieter chronic patients, given the patients themselves more natural and more cheerful surroundings, and greatly reduced the cost of maintenance. Outside Scotland the favourite form of family care has been the "colony" system. This system, which is typically represented at Gheel and Lierneux in Belgium, and at Dun-sur-Auron in France, may be briefly described as the concentration of the insane in the private houses of a village or series of adjoining villages, under the supervision of a medical and lay staff, whose duties consist in administration and supervision. A small central hospital serves at once the purpose of a sick-room for patients suffering from physical ailments and a retreat for those who are overtaken by recurrent temporary attacks of insanity.

In a preceding lecture I spoke of the increase of insanity as an expression of the ethical attitude of the public towards disease. If there is any truth in that remark, we are very far indeed from having gauged the depths of the neuropathy or psychopathy in the community. Of this opinion there is sufficient proof in the recent legislation for the care of inebriates, in the movement for the founding of epileptic colonies, in the increased interest in the study of criminology, and in the general tendency of society to regard the actions of its anti-social members as irresponsible. There are many persons in this country, especially in the large towns, whose repeated convictions for petty offences in the police-courts raise prominently the question of their mental unsoundness. It is true that the

great majority of these chronic offenders are inebriates, but the State has already acknowledged the mental irresponsibility of the more confirmed section of this class. Many, however, are not inebriates in the true sense of the word. Some of them are kleptomaniacs, others are imbeciles who tend to commit breaches of the peace upon trivial provocation ; others, again, are so irritable or profligate, or so lacking in self-control, that they are incapable of directing their own conduct. It is lamentable that our civilisation should be unable to devise any other means for dealing with these people than repeated committals to prison for short periods, varying from three to ninety days. It is not too much to say that some weak-minded offenders pass most of their time in gaol. I show a table extracted from the last copy of the *Judicial Statistics (1903) for Scotland*, which enumerates the number of persons who had had upwards of fifty previous convictions.

Showing the Number of Persons convicted for Petty Offences in Scotland in 1903 who had had more than 50 previous Convictions.

Number of previous convictions.	Males.	Females.	Total.
50 to 100	378	604	982
100 to 150	78	187	265
150 to 200	5	52	57
200 to 300	0	28	28
Over 300	0	1	1
Totals	461	872	1333

It is only the shortness of human life which limits the number of these convictions. I have taken the standard of fifty previous convictions because there might be some doubt as to the mental irresponsibility of the subjects of a smaller number. I can hardly conceive that anyone could be callous enough to hold that a person who has had upwards of fifty convictions, for any reason, is mentally sound. In any case, the truth can be arrived at in another way, namely, by the individual examination of each of these persons.

But whatever opinions may be held as to the sanity or insanity of these 1300 persons, everyone will admit that their repeated committal to prison is useless; that it produces no reformation; that it rather tends, if that is possible, to callousness and further degradation. Moreover, it is by no means a cheap or inexpensive method. What, then, is to be done with such people? Without doubt, they ought, as early as possible in their career, to be relegated under indeterminate sentences to institutions of the colony type, such as I shall immediately describe. The Committee on the Physical Deterioration of the People (1904) make the following recommendation in their Report: "It may be necessary, in order to complete the work of overcrowded slums, for the State, acting in conjunction with the local Authority, to take charge of the lives of those who, for any reason, are incapable of independent existence up to the standard of decency which it [the State] imposes." The 1300 persons to whom I have referred might, for this purpose, be divided into two classes according to whether they are certifiable as insane under the present standard of certification or are not. Those who are so certifiable might be sent to the ordinary asylums, those not so certifiable to labour colonies on the lines of the Salvation Army Colony at Hadleigh, with power of compulsory detention. There are reasons, however, why it would be better that they should all be treated together, in a central institution. All the benefits of a labour colony are afforded in the construction of an institution similar to a modern village asylum. Certification is a variable and in many respects a useless distinction except in so far as it safeguards the liberty of the subject, which in this instance is not in question. It would, of course, be undesirable to commit any person to such an institution without full judicial inquiry at which medical evidence would be taken. Such an institution should be under the charge of a physician trained in the treatment of mental diseases and assisted by a specially trained staff of assistant physicians. In short, it should be managed exactly like a modern asylum, and should have no prison element about it at all. It should possess abundance of land for agricultural and other pursuits. It should be built upon the village type, and possess a central hospital for the treatment of physical disease, of recurrent attacks of insanity, to which this class are peculiarly subject, and for the observation of cases whose mental

condition requires prolonged clinical study before judgment is pronounced in criminal cases. Under the present system the mental condition of a prisoner on trial is too often decided in court upon the partisan evidence of medical witnesses who generally contradict each other upon data which are notoriously inadequate for the formation of correct opinions. Such a procedure has long ago been discarded in many of the American States and in Germany, where special facilities for observation ("Bewahrungshäuser") are provided. It is a question to be considered whether such an institution as I have described should be also an asylum for criminal and dangerous lunatics or not. But whatever its other functions, one thing is abundantly clear to my mind—that it ought not to be in any sense a penal institution, and for the same reason it should not be in any way connected with the administration of prisons. I have indicated that a large proportion of the class of persons referred to are inebriates. Those who understand such matters tell us that they are that and something more besides. They are cursed with a mental and physical organisation which stamps them with the unmistakable signs of mental alienation, which may or may not be of the ordinary type. It is on this account that their treatment is so hopeless, and that we so constantly hear of the inoperativeness of the recent legislative enactments for the treatment of inebriety. The terms "reformatory" and "reformation" as applied to such cases are misnomers. Most of the persons who, under the existing laws, qualify for committal to inebriate homes and State reformatories can no more be reformed than an imbecile can be made intelligent by subjection to disciplinary treatment. I believe that there is a large class of reformable inebriates if they could be brought under early treatment, but that is a totally different question from the one under consideration, and one which has not as yet received practical attention. The class of inebriates I am referring to is practically the same as the class which I have designated "weak-minded chronic offenders," and ought to be treated in exactly the same way, namely, by indeterminate sentence to such an institution as I have described. A word as to epileptics. In Scotland we are very far behind other civilised nations in so far as we have no national institution for the reception of this pitiable class of the community. Far too many of these are confined in asylums as ordinary certified

lunatics, where they are unhappy, and where they are consequently more troublesome than in other countries where special provision is made for their separate treatment. We require a national institution for epileptics on the lines of the great epileptic colony of Bielefeld, in Germany.

I come now to the important question of how these institutions are to be organised and administered. In the first place, Scotland being a small country, they must be central institutions. If they are central, they must be State institutions, with this provision, that each district or community shall pay for the maintenance of its own members who are inmates of the institutions. But if they are to be State institutions they must be subject to State inspection and supervision. Upon the question of who the supervising body should be depends the welfare and success of the whole scheme. There are already a sufficient number of public departments in Scotland and the creation of a new one *ad hoc* is to be deprecated. If the Scottish public departments are to remain as they are at present, then I have no hesitation whatever in declaring my opinion that institutions for the various classes I have mentioned should be under the Lunacy Authority. I do not pretend for a moment that they would therefore be better managed. It is the duty of the country to see to it that such institutions are efficiently conducted, whoever the superiors may be. My reasons are as follows : (1) The persons to be treated are either insane or weak-minded or suffering from physical infirmity ; (2) if there is to be any advance in our knowledge of the processes which underlie the various symptoms of mental and physical deterioration under which most of these patients labour, they must be studied medically exactly as other forms of mental affection are studied by trained and skilled physicians ; (3) the medical element in administration must prevail, to the exclusion, or at any rate the subordination, of the penal ; (4) the intimate alliance of the malady of the certified with that of the uncertified insane would necessitate the constant interchange of individuals from the one class of institutions to the other ; (5) the construction, management, and hospital character of modern asylums is essentially the same as ought to characterise any modern institution for the reception and treatment of epileptics, inebriates, and weak-minded offenders. Sooner or later some such proposal as I am now

formulating must in one form or another come into practice, and it is highly desirable that it should emerge under the influence of the best available traditions. The traditions of the lunacy system in Scotland are exactly the traditions which are required for dealing successfully with the weak-minded offender and the inebriate. It is useless to think of punishment, which at best can only be defended as a means of reform. But if we believe, as we surely must do, that reform in this instance is difficult to attain and that the main object is to preserve the decency and order of the community and to promote the welfare of the individuals concerned, then we must adopt some such scheme as I have sketched. Not only are the traditions of the lunacy system in this country the most desirable for dealing with the class in question, but the construction of the modern asylum of the village type is the best imaginable form of institution for their detention, for it combines the advantages of the hospital system with that of the labour colony.

The great advantage of the "village" asylum is the segregation of the various buildings into small villas, which permits of the classification of the inmates to any extent that is desired; so that the quieter inmates can be wholly separated from the noisier and more turbulent, the acute patients and those requiring active medical treatment from those who are in need of no treatment, and, finally, those who are capable of enjoying more extended liberty can live apart from those whose actions demand, for any reason, close supervision. There is, in fact, no limit to the extent of the classification which can be carried out in such an institution, so that patients of all classes can be accommodated in it without any danger of interfering with each other or affecting the harmonious working of the asylum. So much is this the case that in some German and Italian asylums of this type there are separate villas for the reception and observation of criminal lunatics whose residence in no way incommodes the life of the other patients with whom they do not come in contact. The village type of asylum has been in existence in Germany for many years, and was there first of all made famous by the well-known asylum of Alt-Scherbitz in Prussian Saxony. We owe its introduction into this country to Sir John Sibbald, who, as Medical Adviser to the Edinburgh District Lunacy Board, recommended the erection of that type

of institution for the new City Asylum at Bangour. The idea was adopted by the Aberdeen District Lunacy Board in the construction of their new asylum of Kingseat, which is now in full working order, and is the first village asylum opened in Great Britain. At the present time there are two other similar asylums in course of construction, namely, the Edinburgh Asylum at Bangour and the new asylum for Renfrewshire at Dykebar, near Paisley.

[Various slides were shown, of Aberdeen, Ansbach, etc., also the provision for criminal lunatics at Duren, in Germany.]

The village type of asylum has not only greatly facilitated our methods of dealing with the insane, but it has permitted us to see how in the future the problems of undertaking the suitable disposition of the accumulating masses of the insane for whom asylum treatment is absolutely necessary are to be solved. It combines the advantages of the home and of the labour colony. It has taught us how to cheapen the construction of asylums while rendering them more efficient and more adaptable to their purpose; and above all, it has shown us that the hard lot of the insane can be made a little brighter and happier than under the old, more expensive, and more cumbersome method of erecting palatial prison-like buildings.

All these developments in asylum construction and lunacy administration point to the conclusion that a time is approaching when the treatment of acute insanity will be sharply separated from the care of the chronic insane and to such advances in our knowledge of the pathogeny and pathology of acute insanity as will enable us, without prejudice, to treat mental disturbances as we now treat pneumonia or enteric fever, in ordinary central hospitals, while other forms of insanity too numerous to mention must be cared for in colonies and village asylums under the most favourable circumstances as regards home life, occupation, and classification.

(¹) Delivered before the Royal College of Physicians, Edinburgh, February 3rd, 1905.—(²) Dr. Wigglesworth, *Evidence Phys. Det. Com.*, 8983, and Dr. Ford Robertson, *Brit. Journ. of Inebriety*.—(³) *Vide* Samuelson's *Hist. of Drink* and Shadwell, *Phys. Det. Committee*, 12280-86.—(⁴) *Journal of Mental Science*, January, 1877.—(⁵) *Journal of Mental Science*, October, 1900.