examiner or insuperable difficulties, such as very fat or rigid abdomen on the part of the patient, the results of the abdominal examination are unsatisfactory, a vaginal examination becomes necessary.

DIAGNOSIS BY INTERNAL EXAMINATION.

But before each internal examination the practitioner should remember that it is an operation never altogether devoid of risk and he should be fully persuaded in his own mind as to its necessity. For my own part I seldom examine internally more than once in the course of a natural labour, and I endeavour to do so as soon as possible after the full dilatation of the os, as indicated by the rupture of the membranes or a change in the character of the labour pains. I need not delay to describe the disinfection of the hands. Many excellent methods are in vogue, but thoroughness in carrying it out is of more importance than the selection of any particular method; at the same time in general practice it should be simple as well as efficient.

TREATMENT.

In the treatment of the disease when once established we have also made considerable advances. Local disinfection by antiseptic douching is generally employed, and the curette, abdominal section, and ablation of the infected organs have been employed with success, but are hardly in a position for a dogmatic pronouncement upon their value in an address which is not to be followed by discussion. For the same reason I shall not speak of the antistreptococcic serum, but the general treatment with which I have met most success, and which is, I believe, now most generally adopted, is that introduced by Runge in 1886, and consists in cool bathing, nourishing diet, avoidance of internal antipyretics, and free administration of alcohol.

CONCLUSION.

The subject with which I have dealt is, no doubt, lacking in novelty, and the method an elaboration of the old saying that "meddlesome midwifery is bad," but I have been urged to its consideration by the opinions expressed by Hegar, Boxall, and Cullingworth, that in private practice there has as yet been no improvement. If this be true, or even partially true, it proves that those who undertake the care of parturient women are not yet alive to the responsibilities of their calling, and I have no doubt that a faithful adherence to the principles the development of which I have briefly sketched will result in a vast saving of most valuable lives and will prevent you individually from standing—as many of us have done in the past—helpless spectators of a fatal malady which an accusing conscience whispers might have been averted.

Introductory Remarks

ON

THE PREVENTION OF INSANITY.

Delivered at the opening of the Section of Psychology at the Annual Meeting of the British Medical Association at Ipswich on August 1st, 1900,

By R. PERCY SMITH, M.D., F.R.C.P. LOND.,

LECTURER ON PSYCHOLOGICAL MEDICINE AT CHARING-CROSS HOSPITAL; PRESIDENT OF THE SECTION.

GENTLEMEN,—Probably few circumstances connected with insanity have stirred the public mind more in the last few years than its real or apparent increase. The question is constantly asked by people, Is it not very much on the increase? and it seems to me to be worthy of consideration by this section of the Association whether we as medical men concerned in the treatment of mental disorders are doing all we can to check what at any rate is a most serious increase in the actual numbers of the insane. As the public owes the checking of the ravages of small-pox, the notification of infectious diseases, the improved sanitary measures which have led to such a marked diminution of the death-rate, and now in all probability the successful coping with the large amount of illness due to malarial poison—to name only a very few instances—to the medical profession, so undoubtedly it will be to that profession that the

public will look for guidance in what is assuredly a very serious question for the future of our population. The annual report of the Commissioners in Lunacy for the year 1898 (published in June, 1899), begins with the remark that the total number of patients under their cognisance in England and Wales on Jan. 1st, 1899, was 105,086, "being an increase on the corresponding number on Jan. 1st, 1898, of 3114, the largest annual increase we have yet had to record." The increase reported by the Commissioners had concerned all classes of patients, the private class to the extent of 2.73 per cent., the pauper class to the extent of 3.09 per cent., and the criminal class to the extent of 2 per cent. Of greater importance than the mere fact of increase is the fact that there is also an increase in the ratio of the insane to the general population, the advance being the small one of 0.4 per cent. in the private class, and of 0.59 per cent. in the pauper class. The total gives the ratio of one "officially known" lunatic to 302 individuals, as against one in 308 on Jan. 1st, 1898, and one in 337 on Jan. 1st, 1899. Attempts have been made to show that the increase is more apparent than real, that it is largely due to the accumulation of senile cases and to a diminished death-rate, and that there is no real increase of new cases; but when all is said there remain the undoubted facts that the numbers increase by leaps and bounds, that the county and borough authorities are constantly being confronted by the demand for more accommodation in county and borough asylums, that new asylums spring up as the result, and that the taxpayer has constantly to put his hand in his pocket to defray expenses. It will hardly be denied that such a condition demands that we should use every effort to diminish if possible at the source the numbers of those who thus become incapacitated either temporarily or permanently, who, if not possessing private means, become either a burden to their relatives or to the taxpayer, and who in some cases become criminals as the result of their mental disorder.

It would, of course, be quite impossible in the limits of time accorded by the rules of the Association to introductory remarks by presidents of sections to review all the causes of insanity and to cover the whole ground of their removal, but it seems to me to be profitable to draw attention to three items, viz., (1) the propagation of the race by those of insane inheritance or those who have suffered from insanity; (2) the influence of alcohol in the production of insanity and the need for preventive legislation; and (3) the causation of general paralysis by syphilis.

I.—THE PROPAGATION OF THE RACE BY PERSONS OF INSANE INHERITANCE OR WHO HAVE SUFFERED FROM INSANITY.

In Table XXV. in the report referred to above, giving the percentage of causes of insanity in patients under the cognisance of the Commissioners of Lunacy for the five years 1873-97 inclusive, hereditary influence was attributed as a cause in 20.4 per cent. of male and in 25.9 of female patients. These figures are well known to be far below what is the real proportion, and in Table XXVI., where the causes are reviewed in the two great groups of private and pauper patients, the percentages are found to be higher in the former, largely no doubt on account of the greater facilities for obtaining a history in that class; but even allowing that these figures are below the actual facts, we cannot escape from the fact that "hereditary influence" still gives the largest percentage of any of the causes enumerated by the Commissioners.

It cannot fail to be of the highest importance to the future of our race that the stock should be maintained in as healthy a condition as possible and should not be reproduced from defective individuals. This is fully recognised in the case of the lower animals, but human beings have a reluctance to apply the same rules to themselves. Nevertheless there can be no doubt that if we are to hold our own in the struggle for existence with other nations it is of the highest importance that the race should not be largely reproduced by individuals whose nervous system is so unstable that it very easily gives way under those stresses which must after all occur with great frequency in the various conditions of life, but should be propagated mainly by those who are abundantly well equipped from the nervous point of view. It will, no doubt, be thought that I am only giving utterance to a truism when I say that if the race were only reproduced by those of stable nervous system and sound by inheritance our existing asylums would soon be found to be larger than the

requirements of the population. In the last half of the nineteenth century enormous strides have been made in the care and treatment of the insane. They are infinitely better housed; their bodily and mental disorders are treated more assiduously and more scientifically, committees and unofficial visitors of all sorts take a much greater interest in and a much more humane view of their condition; their pathology is minutely inquired into; they are, thanks in great measure to the Medico-Psychological Association, infinitely better nursed; and after recovery such a society as the After-Care Association busies itself in helping the friendless victim of this most painful disorder again to take his place in the world. But I submit that with all this, which is most desirable and which exhibits all those qualities of sympathy with suffering for which our nation is so justly famed, very scant attention has been given to the question how a great deal of insanity can be avoided, and to the fact that a great deal of insanity is preventable and should be prevented. The Lunacy Law has been amended in the last few years so as to make it more difficult for those who urgently need care to be placed under care, while it has rendered it more difficult for patients to be detained and more easy for them to be discharged, as if the Legislature unconsciously arrived at the conclusion that by so doing it could diminish the numbers of the insane. There certainly was an impression among some members of the community, in spite of the denial of this by the Commissioners in Lunacy who are responsible to the public for the due discharge of patients from asylums, that large numbers of persons were detained on the very slightest pretexts, and it is thought by many that this impression weighed with those who were responsible for the drafting of the present Lunacy Acts. Nevertheless the numbers increase, and I submit that there is no more important problem for the twentieth century than the possibility of diminishing the numbers of the insane by their non-production. Among the more educated classes of the community there is, judging by the fact that those specially concerned in the treatment of mental disorders are often consulted on the subject, a recognition of the fact that the presence of insanity in a family at least demands from its members some serious reflection before marriage is entered upon, and it is often in the power of medical men to give advice which may, at any rate, prevent the union of two bad stocks. A short time ago I was consulted as to the rectitude or desirability of a marriage being contracted between a lady whose father had become insane about the time of her birth and had remained chronically insane since and a gentleman whose maternal aunt had been insane for 30 years. The gentleman would not agree to marry unless he could be assured that there was no risk whatever that his proposed wife would suffer from puerperal insanity in the event of a child being born, which assurance it was manifestly impossible to give, and also unless he were assured that there would be no risk of mental disorder in any offspring, which in view of the chronic insanity on both sides it was also impossible to give. Such a case shows that at least some members of the community have their eyes open to the fact of the importance of selection. Love is, however, proverbially blind, and among the unreflecting classes of the community nothing is thought of marriage with a person of insane inheritance. Unfortunately medical men themselves, unless they have had experience in an institution for the treatment of mental disorders, are not always sufficiently alive to the dangers of the propagation of the race from defectively constituted individuals and are sometimes apt to pooh-pooh any possibilities of risk in cases in which they are consulted and to give the opinion that there is no danger in a marriage between two persons of neurotic or insane stock provided the individuals themselves are apparently sound or have been so up to that time. It is perhaps well understood that in a question of marriage between cousins where there is insanity or any serious neurosis in a common ancestor or in the two separate families the idea of marriage ought not to be entertained but it is often overlooked that danger exists in the intermarriage of members of two families not related but where there is insanity or neuroses on both sides. It is very unlikely that the legislature will ever intervene to interpose any legal bar to marriage of individuals of insane inheritance; there will continue to be "free trade" in marriage as far as the law is concerned, but public opinion will have to be educated more and more to understand the importance of not propagating from bad stocks, and it is safe to lay down as a rule

that no person of direct insane inheritance ought to marry with another of direct insane or neurotic inheritance, and that even if a person of stable inheritance proposes to marry with a person of insane inheritance, this latter fact of inheritance ought to be known and stated beforehand. In many cases this is done honourably, but in other cases the fact of insane inheritance of the most direct nature is concealed, on the one hand where large property is concerned, and on the other where, perhaps, there are several marriageable daughters in a family of limited means and where it is thought that the avowal of insanity in the family will "ruin their chances" as if the chief object in life were to propagate defective individuals. In other cases concealment takes place from ignorance or carelessness. In this, as in many other things, the greatest happiness of the greatest number must be thought of rather than the happiness merely of the individual, and there is the more honour to those who have relinquished what might have been a life of happiness rather than lend themselves to the degeneration of the race. With regard to the first heading, therefore, I conclude that it is the duty of the medical profession to give sound advice to those who consult them on this matter and not to lose sight of the fact that inheritance is the largest cause of insanity as shown by statistical tables.

If, however, there is doubt as to the marriage of persons of insane inheritance, there should be little doubt as to what ought to be the course and what ought to be the advice given in the case of persons who have themselves suffered from a definite attack of insanity, and in such cases marriage ought, as a rule, to be forbidden absolutely. Deplorable cases must be familiar to the minds of all those connected with psychiatry where patients who have recovered from a severe attack of mental disorder necessitating confinement in an asylum have subsequently married and either broken down again or propagated children defective from birth or breaking down at the critical periods of life. I remember well a patient in Bethlem Hospital who had great hostility to her parents, for which for a time I could find no explanation till one day she told me that what made her most angry was the fact that her birth had occurred subsequently to an attack of insanity from which her mother had suffered. Unfortunately, marriage with a person who has been insane is sometimes contracted by those who should by their education know better. For instance, I remember a patient in Bethlem who broke down in adolescence and eventually joined the large army of chronic demented whose father was a medical man who had married one of his patients who had recovered from an attack of insanity. In another case a nurse who was familiar with mental disease married a male patient who had temporarily improved but whose symptoms returned very quickly and led to a separation and much unhappiness. Fortunately there were no children of the marriage. She had taken this step against the advice of everyone who knew the man's condition. Again, a lady who had had several attacks of maniacal excitement and had been in Bethlem Hospital in one of them, married subsequently against advice and has only recently been discharged from Bethlem again, having broken down after the birth of a child. Such marriages as these are the surest way to increase insanity, but if they are sometimes entered into with a light heart by people of the educated classes it is not surprising that the more unreflecting classes should contract them freely. In the January number of the *Journal of Mental Science* of this year a deplorable case is recorded by Dr. C. C. Easterbrook, in which a girl of insane inheritance married after a fifth attack of insanity (which attack was a puerperal one following the birth of an illegitimate child) and subsequently had two children, after the births of each of which she again broke down mentally. I have no hesitation in saying that in some way or other such a patient ought to be prevented by law from reproducing her species. In all probability nature will speedily put an end to such a bad stock, but it may be at great cost to the community first. Another case occurs to me in which a young girl who had broken down acutely after the death of her lover recovered in a few months and within a year had found another young man to marry her. The marriage was undertaken against advice and within six months after marriage she had broken down again. In such cases the popular idea is that the patient is sure to be all right when she is married and that the insanity is due to the celibacy, and medical men even have not always the strength of mind to inform the relatives

that the likelihood of insanity after childbirth, if not at any other epoch, is greater in such cases than the likelihood of stability.

A great difficulty is presented in the case of those who break down subsequently to marriage but recover, and where the woman is still of child-bearing age. It is impossible to go deeply into this matter, but it is an important question when, for instance, a woman has had puerperal insanity after the birth of her first child whether she ought further to reproduce her kind. The answer to this, in my opinion, depends largely upon whether the puerperal attack depended simply upon what may be called an accident, as, for example, some septic condition, or whether it is merely the expression of an inherited neurosis which first appears at the puerperal epoch. In the latter case one feels that it would be best that the woman should cease child-bearing; but here again it is impossible to do more than advise to that effect, the advice given being in most cases not followed. In the case of a woman who has a puerperal attack after the birth of each child there can be no doubt of the unsatisfactory nature of the children she is bringing into the world and that such a bad stock ought not further to be reproduced, but how to effect this except by advice is difficult to see. The new civil code in Germany enacts that continuing insanity of over three years in duration is a ground for divorce, but I apprehend that in this country such a measure would have no chance of being placed on the statute-book in view of the fact that recovery may take place after a longer period than that, that where there are children their position would be rendered socially unpleasant, and that marriage is "for better or worse" and that the accident of disease should not be allowed to absolve a husband of his obligations. There is no doubt, however, that some such enactment would assist in putting an end to the chance of reproducing a bad stock.

It might be thought superfluous to comment on the iniquity of a congenital imbecile being allowed to marry were it not that several cases are recorded in which this has taken place where large property is concerned and with, of course, deplorable results to the offspring. Again, marriage ought not to be permitted in the case of chronic epileptics, whether the disorder be of the nature of *petit mal* or *grand mal*.

II.—THE INFLUENCE OF ALCOHOL IN THE PRODUCTION OF INSANITY.

Next to heredity alcohol figures most largely in the causes of insanity given in the Commissioners' tables, accounting for 22 per cent. of the male and 9.1 per cent. of the female cases. This refers to the effect of alcohol on the individual alone and takes no note of alcoholic inheritance as leading to the production of insanity, idiocy, alcoholism, hysteria, epilepsy, or other neuroses in the offspring, though it is well known to act in this way. This large percentage of what may well be looked upon as a preventable cause of insanity ought to give the Legislature profound heart-searching as to whether it is doing its duty to the community in checking the ravages of this destructive poison. I shall not be contradicted when I say that the percentages above quoted do not represent anything like the real amount of damage which is done to the nervous systems of the community by alcoholic excess. In addition to the actual numbers who are sufficiently poisoned by alcohol to be certified as insane, there are large numbers of individuals who are from time to time dangerously unsound, it may be for a few hours or a few days, who are the terror of their relatives, who form a large proportion of the cases at police-courts, and who ruin themselves in health and fortune. And those who have had charge of the insane will agree with me that the cases of mental disorder due to alcohol are among the most difficult to manage, the most hostile and litigious, and after recovery very often the most ungrateful of any patients with whom we have to do. No doubt in many cases the alcoholic is a person who starts life with an unstable nervous system; he has either an alcoholic or an insane or a neurotic inheritance, and to a certain extent he is defective *ab initio* in self-control and goes without much resistance into the paths of chronic alcoholism, but at present the Legislature has given him no assistance. The facilities for drinking are enormous and the revenue of the country largely depends upon the quantity of alcohol consumed.

As long ago as 1893¹ a memorial signed by many members of the medical profession urging the enactment of compulsory detention for inebriates was presented to a Departmental

Committee appointed by the Home Office, but the only outcome of movement in that direction has been the Inebriates Act of 1898, upon which Mr. Wood Renton² remarks: "The first point that calls for observation is that in spite of the unanimous demand for them on the part of every Parliamentary Committee that has inquired into the subject during the last quarter of a century no powers for the compulsory committal of non-criminal inebriates have been brought into existence by the new statute." The new powers for dealing with criminal inebriates, moreover, have been almost a dead letter in consequence of the supineness of local authorities, though it is satisfactory to see that the London County Council is at last alive to its responsibilities in this respect. The report of the Royal Commission appointed to inquire into the operation and administration of the laws relating to the sale of intoxicating drinks, published in 1899, recommends that simple drunkenness should render an individual liable to arrest, that it should be penal to serve habitual drunkards with liquor, and that habitual drunkenness should be treated as "persistent cruelty," entitling a wife or husband to separation or protection for herself, himself, or the children. Unfortunately, however, the present Government seems disinclined to take the subject in hand. That such protection is frequently needed by the relatives of those who become maniacal from drink is undoubted, and there are few histories more sad than those told by the wives of the alcoholic insane, in which for a long time before it has become necessary to take steps under the Lunacy Acts there has frequently been recurring excitement, brutality, and danger to wife and children, with gradually increasing poverty and loss of social position. In a note on the report in the *Journal of Mental Science* for January, 1900, the following remarks are made: "The Commission does not seem to have troubled itself with statistics with regard to the share of intoxicants in the production of mental disease." There need have been no difficulty in this respect, as it is only necessary to look at the tables in the reports of the Commissioners in Lunacy, or in any asylum report, to see that between one-fourth and one-fifth of the male cases of insanity admitted annually to asylums are attributed to alcohol. Dr. T. S. Clouston, in the report of the Morningside Asylum for 1899, speaks of alcoholic excess having been the cause of insanity in 25 per cent. of the cases admitted. He remarks that few persons who had had an opportunity of studying the effect of alcohol on the brain would not heartily approve of most of the recommendations of Lord Peel's Commission. The Inebriates Act of 1898, he points out, has done very little good, and if there is to be legislation on the subject it should be effective. Even those who hold the liberty of the subject so sacred as to wish to leave the alcoholic to drink himself to organic disease or insanity and his family to poverty might at least turn their attention to the fact that nearly a quarter of the insane are so, either wholly or in part, from a preventable cause, and that in a large proportion of these cases the ratepayer has to bear the expense.

Closely related to this subject is the question of the relation of suicide to alcoholism. In a paper by Dr. W. C. Sullivan, deputy medical officer of Her Majesty's Prison, Pentonville, in the April number of the *Journal of Mental Science*, attention is drawn to the increase of suicide and of suicidal attempts concurrently with recent increase of alcoholism. He points out that the recent increase of suicide has coincided with a considerable increase of abortive suicidal attempts which have approximated to the type of alcoholic suicide in being more impulsive, more related to organic conditions in the individual, and occurring at an earlier average age than suicide from other causes. If his views be correct it is evident that alcohol is thus responsible for the loss to the community of many valuable lives in the period of early adult life. I hold, therefore, that it is our duty as medical men concerned with the care of the insane to point out, amid all the outcry about the increase of insanity, that with regard to alcohol at least there should be an opportunity, with proper legislation, of preventing a good deal of insanity, and that this Association should continue to urge the necessity of further legislation to check the ravages of that seductive but destructive poison.

III.—THE CAUSATION OF GENERAL PARALYSIS BY SYPHILIS.

There can, I think, be very little opposition now to the statement that acquired syphilis is one of the most potent

¹ *Journal of Mental Science*, April,

² *Ibid.*, April, 1899.

predisposing causes of general paralysis. While some observers hold that in every case of general paralysis, if the history be carefully taken, some evidence of syphilis will be found, the great majority recognise at least that even if a history of syphilis cannot always be obtained at any rate such a history is to be found in cases of general paralysis very much more frequently than in any other forms of mental disease. I intend to regard this preponderance of a history of syphilis in cases of general paralysis as an established fact and to lay down the proposition that if there were no syphilis there would be very little general paralysis. According to the report of the Commissioners in Lunacy for 1898 the yearly average number of general paralytics admitted to asylums, hospitals, and licensed houses amounted to 13.1 per cent. of the male cases and 2.8 per cent. of the female cases (Table XXIII.), while general paralysis was the cause of death in 1057 males out of a total of 4065, or more than one-fourth of the total male deaths, and in 265 females out of a total of 3513. Evidently in males at least general paralysis is a most serious cause of death in asylums, and moreover it kills those chiefly who are in the prime of life. It is, therefore, most important that no stone should be left unturned to stay this waste of life. It is well known that general paralysis occurs most frequently in towns where syphilis, alcohol, and fast living are most rife, and no doubt one of the most important measures is to train the dwellers in towns in habits of self-control and to teach them to lead physiological lives; but there seems no reason why the Legislature should not take some steps to check the spread of such a potent poison to the nervous system as syphilis as it has already done in the case of the infectious fevers. It was formerly held that the general paralytic did not transmit the disease to his children, but in the last few years many cases have been recorded of "juvenile general paralysis," in practically all of which there had been found to be a history of parental syphilis,³ and in many of these cases the father had previously died from general paralysis. It cannot be said, therefore, that the syphilitic general paralytic is not a danger to his offspring, and so a further waste of valuable lives takes place. In my opinion, if syphilis were made a notifiable disease and the chances of its spread diminished, we should see a corresponding diminution in the number of cases of general paralysis. I am well aware that any suggestion to control syphilis, or in fact any venereal disease, by legislation meets with opposition from a section of the community, but it is well to refer to the fact that in Finland, as the result of the hospital treatment of syphilis and the power given by the Legislature enabling the compulsory examination of any suspected individual, syphilis has much diminished in the course of 20 years, that congenital syphilis has become less frequent, and that both the hereditary and acquired forms have become of much milder type.⁴ Dr. Drysdale,⁵ in a paper on the "Norwegian Bill for the Prevention of Venereal Diseases," calls attention to the existing law in that country requiring practitioners to notify the existence of any case of venereal disease to the medical officer of health but without giving the name of the patient, and suggests that such simple notification would at least "for the first time in the history of these contagions, afford a basis for calculation of the extent to which they prevail among the population of the United Kingdom." He further says: "Eventually I believe that the danger to public health caused by these extremely prevalent contagions will result in punishment of persons who, knowing themselves to be infected, carelessly, or even without any compunction, are heartless enough to put themselves in the way of infecting other persons with their contagion." In my opinion general paralysis should be looked upon as a preventable disease, and I feel strongly convinced that were syphilis controlled this truly malignant degenerative disease of the nervous system, which at present seems to defy all treatment, which adds so largely to the deaths in asylums, which mainly affects men in the prime of life, and which may also affect their children by means of hereditary syphilis, would to a great extent disappear. In all probability, however, the public mind is not prepared for any legislation on the subject.

I have merely attempted to call attention briefly to what I consider to be preventable causes of insanity, and of the

importance of prevention rather than cure I think there can be no doubt. Whether the ensuing century will be marked by an arrest of insanity at its sources is, however, a matter on which we cannot speak with any certainty, but it seems to me to be the direction in which our efforts should tend.

THE REMOTE RESULTS OF STRUCTURAL LESIONS ("INTERVENTIONS SANG-LANTES") IN URETHRO-STENOSIS.¹

BY REGINALD HARRISON, F.R.C.S. ENG.,

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I HAVE been asked to report to this Congress on the remote effects of structural lesions (*interventions sanglantes*) employed in the treatment of stricture of the urethra. I think it will be generally admitted that these results are mainly determined by the nature of the wound and the circumstances under which it healed. For instance, incised and contused wounds and wounds that heal without any or with much inflammation, or with little or no provision for drainage, may be expected to yield different results. For this happens in all parts of the body. But in estimating the results of structural lesions of the urethra we must never lose sight of the fact that this canal conveys for several inches, at varying intervals, a compound and complex fluid which, under certain conditions not very clearly defined, is capable of exercising a highly poisonous effect on the tissues and fluids of the body with which it may accidentally come in contact. This is evidenced by the frequency of rigors and fever not unlike a malaria after slight lesions, such as passing a catheter or dividing a stricture, by the sudden suppression of urine which is sometimes similarly occasioned, by the happening of serious, if not fatal, septicæmia later, and more remotely by the formation of a contractile scar at and about the seat of the wound. Surely we may say that the pathology of the urethra is a unique one.

To compare their results it will be necessary to define with some accuracy the kinds of wounds that preceded and their probable process of healing. For the purposes of this report the following varieties have been examined and carefully studied both during life and, as opportunity offered, after death: (1) lacerated or contused wounds as follow such methods of divulsion as were practised by Perrève² in Paris and Holt³ in London; (2) incised wounds from within the urethra as illustrated by Maissonneuve's⁴ and other kinds of internal urethrotomy; and (3) incised wounds from without inwards as described by Syme⁵ of Edinburgh under the name of "external urethrotomy" or perineal section.

1. Wounds inflicted by instruments for rapidly causing divulsion or rupture of a stricture are usually of a contused or lacerated character. When thus employed, unless the stricture is an annular or a ring-like one, a condition which is rare, the canal usually gives way at a point in its circumference where the resistance is least, and this is naturally not the densest portion of the contraction. Hence these operation wounds heal not unlike accidental lacerations of the urethra from injury, and in both instances the liability to stricture and to its recurrence is considerable. This was found to be so in cases examined both during life and after death and repeated operations by divulsion appear to have been followed by additions to the amount of contractile scar-tissue at or about the seat of stricture. There is, however, a form of stricture where divulsion is not open to these objections as judged by its more remote effects. Reference is here made to what are known as peri-urethral or sub-mucous strictures. My attention was first called to them some years ago by examining a patient who died from some other cause shortly after (within a week) a tight stricture in the deep urethra had been

³ Mott: On Twenty-two Cases of Juvenile General Paralysis, *Archives of Neurology*.

⁴ *Brit. Med. Jour.*, March 10th, 1900.

⁵ *Ibid.*, Feb. 3rd, 1900.

¹ A paper read before the Thirteenth International Congress of Medicine in Paris on August 8th, 1900.

² *Traité des Retrecissements Organiques de l'Urètre. Emploi Methodique des Dilateurs Mécanique dans le Traitement de ces Maladies*, Paris, 1847.

³ On the Immediate Treatment of Stricture, London, 1861.

⁴ *L'Urethrotomie Interne*, Paris, 1879.

⁵ On the Treatment of Strictures by External Incision, 1851.