details and the recognition of the neuropathic forms this will be attained.

You see, then, that there is much to be done in psychiatry. During the hours we spend here let us follow tranquilly the leading of facts. Let us search only for what actually exists in nature. Let not our thoughts be diverted in other directions; and we shall certainly be successful if only we observe accurately at first. Casper has, in his book on forensic medicine, discarded mania transitoria on account of the dangerous abuse to which it was liable. Among English alienists, on account of its liability to abuse, voices are now heard pronouncing themselves energetically against the doctrine of moral insanity, a conception of one of their own countrymen, founded on a correct interpretation of nature, and which had been established to the advantage of science. These appear to me to be minor difficulties, which can only be overcome by an unconstrained, experimental, and entirely unprejudiced study.

You will here obtain the foundation of that various knowledge which is required for the solution of these often very difficult questions. You will gather from the patients whom you will see here a little treasure of personal experience, to which your subsequent observations will be added, and around which they will arrange themselves. The principle of the neuropathic view may indicate new regions of investigation, and afford a clue to a great part of the labyrinth. Every onward step made by cerebral and nervous pathology furthers psychiatry, and with each it approaches more closely the other sciences which compose ordinary medicine, and appears as only a small part of a greater whole.

On some of the Causes of Insanity. By HENRY MAUDSLEY, M.D. Lond.

(Read before the Harveian Society of London, Oct. 18th, 1866.)

It is not an easy matter, at least I have not found it so in my experience, when brought face to face with an actual case of insanity, and asked to state the cause of it, to do so definitely and satisfactorily. The uncertainty springs from the fact that, in the great majority of cases, there has been a concurrence of co-operating conditions, not one single effective cause. Two persons are exposed to a similar heavy mental shock: one of them is driven mad by it, but the other is not. Can we say then that the madness has been produced by a moral cause? Not accurately so; for in the former case there has been some innate vice of nervous constitution, some

predisposition of it to disease, whereby insanity has been produced by a cause which has had no such ill effect in the latter case. entire causes have not, then, been in reality the same. And what we have to bear in mind is, that all the conditions which conspire to the production of an effect, whether visibly active or seemingly passive, are alike causes, alike agents, and that therefore all the conditions, whether they are in the patient himself or in the circumstances of life in which he is placed, which in a given case co-operate in the production of insanity, must properly be viewed as its causes. Mental derangement sometimes appears as the natural issue of all the precedent conditions of life, mental and bodily, the outcome of the individual character as affected by certain circumstances; the germs of the disease have been latent in the foundations of the character, and the final outbreak is but the explosion of a long train of antecedent preparations. In vain, then, is it in many cases to attempt to fix accurately on a single cause, moral or physical; a common mistake on the part of those who think to do so being to fix upon what is really an early symptom of the disease as the supposed cause of it. Religion, self-abuse, intemperance, have all at times been put down as the causes of mental derangement, when they were really morbid symptoms.

As I do not purpose on this occasion to enter upon the pathological causation of insanity, but rather to treat generally of its social causes, it will be most expedient to adopt the time-honoured division of predisposing or remote and of exciting or proximate causes. I shall, then, touch first upon some of those general conditions which appear to predispose in any way to insanity, and afterwards briefly

enumerate the most prominent exciting causes.

Predisposing causes.—There are general causes, such as the climate of a country, the form of its government, and its religion, the state of its civilisation, the occupation, habits, and condition, social and sanitary, of its inhabitants, which are not without influence in determining the proportion of mental diseases in it. Unfortunately, we are without any reliable data respecting the prevalence of insanity in different countries; and even the question whether it has increased with civilisation, and is still on the increase, has not been so positively settled as to be entirely beyond dispute. Travellers are certainly agreed that madmen are only rarely seen amongst barbarous people, while in the different civilised nations of the world there is an average of one insane person in 400 or 500 inhabitants. Some have thought it strange and unlikely that as men improve they should become more liable to madness; but even theoretical considerations might, I think, lead us to expect an increased liability to mental disorder with an increase in the complexity of the mental organization; as there are a greater liability to disease, and the possibility of many more diseases in a complex organism like the human

body, where there are many kinds of tissue and an orderly subordination of parts, than in a simple organism with less differentiation of tissue and less complexity of structure, so in the complex mental organization, with its manifold special and complicated relations with the external, which a state of civilisation implies, there is plainly the favorable occasion of many derangements. As is the height so is the depth, as is the development so is the degeneration. The feverish activity of life, the earnest interests, the numerous passions, and the great mental strain incident to the multiplied industries and eager competition of an active civilisation, can scarce fail to augment the liability to mental disorders. I think, then, we may safely hold, that with the progress of mental development through the ages there is a correlative degeneration going on, and that an increase of insanity is a penalty which our present civilisation necessarily pays; or, to illustrate my meaning, I might say that, as in the stupendous progression of the human race which is going on in time whole nations are seen to drop away and become extinct, as the dead branches drop from the living tree, so amongst nations individuals decay and fall down in the struggle of life as the dead leaves fall from the living branch. It is the way of nature to show little care for the single life, calmly to sacrifice countless feeble individuals in her progress, letting the "individual wither while the race is more and more;" of fifty seeds she often brings but one to bear, and of 500 mortals it is quite clear that at least one "rots, perishes, and passes" in insanity as an abortion.

Such facts as are available tend to confirm these considerations. The sort of insanity most common amongst savages is imbecility or idiocy, for the same reason that idiocy is the most common form of insanity in children; where the mind has not been developed its modes of degeneration must be limited, though it may obviously remain arrested at a lower state of degradation than usual. How is it possible, for example, that typical moral insanity should ever occur where no moral development has taken place? Before the native Australian savage, who has not in his language any words for vice or justice, nor in his mind any such ideas as these words convey to an intelligent European, could become morally insane, he must first be humanised and then civilised—development must precede degeneration, mental organization precede mental disorganization.

Another weighty fact is, that there has undoubtedly been a very large increase of late years in the number of insane in asylums. On the 1st January, 1849, the number for England and Wales was 14,560; six years afterwards, on the 1st January, 1855, it was 20,493; in ten years more, on the 1st January, 1865, it had risen to 29,435; and on the 1st January, 1866, it was 30,869. Now, it is plain that this is a large increase, but it is certainly only in part attributable to an increase of insanity in the population; it

is mainly owing (1) to the large number of cases formerly unreported, or not thought mad, that a more stringent legislation has brought under certificate of lunacy; (2) to the larger number of insane, especially paupers, who are now sent to asylums; and (3) to the prolongation of life in those who have thus been brought under care. But when due allowance has been made for these causes, it must be admitted that a steady increase of about 1000 a year in the insane population of England and Wales for the last seventeen years does point to an actual increase in the production of insanity, and even to an increase more than proportionate to an increasing

sane population.

Admit this increase of insanity with our present civilisation, and we shall be at no loss to indicate causes for it in the relations of modern society. No doubt, some would easily find in over-population the prolific parent of this as of numerous other ills to mankind. In the fierce struggle for existence which there necessarily is where the claimants are many and the supplies are limited, those who, either from inherited weakness or some other debilitating cause, are unequal to the struggle will, some of them, break down in madness, and so be passed by as abortive beings in nature. They are too feeble to maintain their social relations, and they represent social wrecks. They are, as it were, the waste thrown up by the silent but strong current of progress; they are the weak crushed out by the strong in the mortal struggle for development; they are examples of decaying reason thrown off by vigorous mental growth, the energy of which they testify. For, everywhere and always, "to be weak is to be miserable."

We have a striking illustration of the operation of this hard law at the present day in the appropriation by man, the stronger sex, of all the means of subsistence by labour, to the almost entire exclusion of women. Because, however, women are indispensable to the comfort of men's lives, at any rate necessary to the gratification of their passions, they are not crushed out of existence; they are kept only in a state of subjection and dependence, and in such state protected. The woman who can find no opening for honorable energy in the present social system may still gain a precarious livelihood by prostituting herself to minister to the pleasures of the stronger sex. Under the institution of marriage she has the position of a subordinate, debarred herself from the noble aims and activities of life, but ministering in a silent manner to the comfort and greatness of him who appropriates the labour and enjoys the reward. Practically, then, woman has no honorable outlook but marriage in the present social system; if that aim is missed, all else is missed. Through generations her character has been formed with that chief aim; it has been made feeble by long habit of dependence; by the circumstances of her position the sexual life has been developed at the expense of the intellectual. Now, therefore, when the luxuries thought necessary in social life are so many and costly that marriage is much avoided by men, when with an increasing population the number of marriages decreases, there is a severe stress laid upon many a gentle nature. In this disappointment of their life-aim, and the long train of consequences, physical and moral, which it unconsciously draws after it, there is, I believe, a fruitful source of insanity among women. It is not only that women of the better classes, not married, having no aim in life to work for, no outlet for their energies in outward activity, are sometimes driven to a morbid self-brooding, or to an excessive religious devotion which is too often the unwitting cloak of an exaggerated and unhealthy self-feeling, but their whole system feels severely the effects of an unsatisfied sexual passion, and exhibits these in irregular bodily functions, in restlessness, irritability, and moodiness of mind, and in a morbid self-feeling, taking a variety of forms. Women bear sexual excesses more easily than men, but they are less able to endure privations of sexual function. Self-abuse is sometimes provoked, and aggravates the evil for which it was sought as a relief. I do not believe, however, that self-abuse is a frequent cause of insanity among women; out of fifty women whose histories I carefully investigated, and whom I daily observed, in two only was there any reason to suspect this vice, and in them I do not think it was the entire cause, though it doubtless co-operated. In one other case, certainly, the clitoris had been excised, but without any benefit whatever to the patient, and without sufficient evidence, as far as I could judge, of self-abuse having been the cause. It is very necessary to bear in mind that self-abuse is an occasional consequence of mental disease; in reality, therefore, a morbid symptom which will disappear with the cure of the disease. I have seen several cases of insanity in single women over thirty years of age in whom it was natural to have in mind the possibility of self-abuse; but the conviction established in my mind from a careful study of their cases has been that the main cause of this mental derangement was to be sought in the trivial and defective character of female education—an education nowise building women up for the earnest work of life and the successful conduct of it when left to their own resources, but fitting them only for the frivolous purposes of the present fashion of female life; in this want of any outlet for their energies or any aim to live for; in the evil effects of an ill-trained mind thrown back upon itself, and too often innocently fostering morbid feeling under the guise of religious sentiment; and in the general organic disturbance consequent upon these causes and upon an unsatisfied sexual passion. It behoves us, therefore, as scientific men, to take heed that we do not treat symptoms of disease as the cause of it, but to direct our attention to removing or mitigating those social wrongs which are the real fountain of many of the ills we have to contend with.

Another way in which over-population leads to deterioration of the mental and bodily health of a community is by the overcrowding and the insanitary condition of the dwelling-houses which it occasions in towns, and by the brutal degradation of a peasantry only half fed and miserably housed in the country. In this city, as many here know, there are whole families living and sleeping in one small room, whom our sanitary officers cannot find it in their hearts to interfere with, because the poor creatures pray piteously to be left alone, for they have nowhere but the streets or the workhouse to go to if turned out of the pestilential dens in which they are herded. Not fevers only, but scrofula, perhaps phthisis, certainly general deterioration of nutrition and moral degradation, are thus generated and transmitted as evil heritages to future generations; the acquired ill of the parent becomes the inborn infirmity of the offspring. It is not that the child necessarily inherits the particular disease of its parent—for now that we have got rid of the notion of diseases as specific morbid entities, and justly view them as different sorts or degrees of deviation from healthy life, we are able to appreciate the fact that diseases may undergo transformation through generations—but it does often inherit an inherent aptitude to some kind of disease, or a defective moral nature, or, at any rate, a constitution which is physically and morally destitute of that reserve force necessary to meet the trying occasions of life. Lugol found insanity to be by no means rare among the parents of the scrofulous and tuberculous, and in one chapter of his book on scrofula treats of hereditary scrofula from paralytic, epileptic, and insane parents. Schroeder van der Kolk was also of opinion that hereditary predisposition to phthisis might develop into or predispose to insanity; and, on the other hand, that insanity predisposed to phthisis. There are unquestionably very close relations between these two diseases; not only is one fourth of the deaths in asylums due to phthisis, but tubercle is often found in the bodies of the insane who have died without ever having been thought to have tubercle; and Dr. Clouston, of the Carlisle Asylum, who has described a suspicious melancholia as phthisical insanity, found hereditary predisposition to exist in 7 per cent. more of the cases of insanity with tubercle than of the insane generally. If you watch the decay of a family which is gradually dying out, you will, I think, be struck, as I have been, with the frequent occurrence of insanity and phthisis, marking the degeneration that is going on; and when the extinction of the family takes place, when the last member dies, how often he dies phthisical or tuberculous, or both? Passing by any conjectural explanation of the close relations between these diseases, the diseases pre-eminently of degeneration, it will suffice here to say, what may, I think, be safely said, that those illconditions of life which produce deterioration of the mental and bodily health, though they may not cause insanity or phthisis directly, will not fail to predispose in some degree to these diseases in the next generation; determining in the present what shall be

predetermined in the future.

I have long had a conviction that one, and certainly not the least. of the ill effects arising out of the conditions of modern society is to be found in the general dread, I had almost said contempt, of poverty, and in the eager absorbing passion to become rich. The practical gospel of the age, as testified everywhere by faith and works, is that of money-getting; men are estimated mainly by the amount of their wealth, take social rank accordingly, and consequently bend all their energies to acquire that which gains them esteem and influence. The result is that in the higher departments of trade and commerce speculations of all sorts are eagerly entered upon, and that many people are kept in a continued state of excitement and anxiety by the fluctuations of the money-market and the variations of trade. In the lower branches of trade there is the same eager desire for petty gains, and the continued absorption of the mind in these small acquisitions is apt to generate a littleness of mind and a selfishness and meanness of spirit, where it does not lead to actual dishonesty, which are displayed in a pitiable form by some of our London tradesmen. The occupation which a man is entirely engaged in, and the spirit in which he follows it, do not fail to modify his character, and the reaction upon the individual nature of a life which is spent with the sole aim of getting rich—honestly if it may be, but if not, still of getting rich—is extremely baneful. But the evil does not end there; the deterioration of nature which the parent has acquired is likely enough to be transmitted as an evil heritage to his children, who, continuing the degeneracy, exhibit its effects in a more marked form, perhaps in positive insanity, or in vice bordering closely upon it. In some striking instances in which the father has toiled up from poverty and a low estate to vast wealth, with the aim and hope of founding a family, I have thought myself able to trace the results in a degeneracy, mental and physical, of the offspring, which has sometimes gone as far as extinction of the family in the third or fourth generation. I call to mind, as one striking illustration out of others that I could adduce, the case of one of the partners in a great manufacturing firm. He had been a common porter in the establishment, and had steadily worked his way up till he became a partner, and was possessed of immense wealth, but he never had any cultivation whatever, and remained the uneducated person he had been as a porter, with but one narrow aim and one employment in life-to get rich, and to transmit his riches to his children. He had two daughters, who by help of their

wealth were married into a higher sphere than he ever occupied; both of them were of selfish, singularly penurious, even miserly, dispositions, and lived to old age. One was childless, and lived separated from her husband; the other had three sons, two of whom died in early manhood, mentally afflicted. The third was for some time under my care, hopelessly demented and phthisical. Thus miserably have ended the hopes and aim and labours of one who toiled hard through life, taking little rest, in order to lay the foundations of a family on the shifting sands which mocked his toil. When the evil is not so extreme as madness, the savour of a mother's influence having, perhaps, been present, it may still be manifest in a vitiated nature in the offspring, displaying itself in extreme selfishness, cunning, and duplicity, and in some cases going as far as a real moral idiocy. I have been so strongly impressed with the truth of this that I should hold it positively safer for any one, as regards the health of the children which he may have, to marry the daughter of an insane person than to marry the daughter of one who has lived a life of hard selfishness, without thought or care of others, who has, in fact, entirely suppressed the moral element in his nature. It was this avenging law, by which guilt brings after it its punishment on earth, and the children expiate the sins or errors of the parents, that, under the name of fate or destiny, often played so great and grand a part in Grecian tragedy; and when the prophetic writers of the Bible are read in a natural sense it cannot fail to be seen what a stress they laid upon the "confidence of a good descent." It was a proverb in Israel-"The fathers have eaten sour grapes, and the children's teeth are set on edge."

Time would not allow me to enumerate all the causes which arise out of the complex relations of modern society, and seem to favour the increase of insanity. I might, indeed, broadly say that all evil habits of life—habits of luxurious effeminacy, of indolence, and of excess in the indulgence of any appetite—as well as all unfavorable external conditions of life which deteriorate the mental and bodily health of individuals, are so far predisposing causes of the degeneracy of the race which individuals constitute. We are quite alive to the fact that cretinism is produced in the valleys of the Alps and other places by bad air or bad water, or both; but we do not sufficiently consider that our present civilisation has its cretins. And yet the sort of men whom Leech used often to portray in 'Punch,' the elaborately dressed beings with small heads, foreheads sloping backwards, projecting nose and upper maxilla, and small receding chins, have been seriously, and with some reason, described as "luxury cretins," or "spoonbill imbeciles," and have been said to mark an early stage of that type of degradation of which the Aztec face is the extreme example. Whether this be so or not, they undoubtedly represent a certain measure of imbecility; and to expect sound and

vigorous offspring from them would be hardly less vain than it would be to look for grapes on thorns or figs on thistles.

The question of religion as an agency influencing in a powerful manner the minds of men for good or evil, and therefore predisposing or not to mental degeneracy, I must leave untouched, not only because of the difficulty and delicacy of the subject, but because of the impossibility of doing justice to so important a matter in a brief and incidental manner. If the task were attempted it would be necessary to consider the effect of the religious creed professed on the thoughts, feelings, and conduct of men-in other words, on the intellect, the emotions, and the will. It has been said by no less a person than Emerson that as men's creed mark a disease of the intellect, so their prayers mark a disease of the will. Now, without giving in our adhesion to that opinion, it would be permissible, and indeed desirable, soberly to attempt to estimate the influence of religious belief upon the common mind; and this might, perhaps, best be done by systematically discussing three principal questions—first, what influence a belief in the supernatural has upon the growth and progress of human thought—whether its natural tendency is to strengthen or to enervate the intellect? Secondly, what is the practical effect worked on the hearts of men by the fear of punishment and the hope of reward after death—whether their feelings and desires are beneficially influenced, or influenced at all, by possibilities which always seem so far off; or whether, on the other hand, as some argue, their feelings are deadened and themselves blinded thereby to the certain laws by which their sins or errors are always avenged in this world on themselves or on others? And lastly, what is the practical effect produced on the character of the many by the belief that through prayer they may obviate the effects of their own want of foresight or want of self-renunciation, and may rely on supernatural aid where the will fails; also, what is the effect on their character of the profession of a belief in moral maxims and precepts which they cannot always reconcile with the exigencies of actual life—whether the natural tendency of these beliefs is to fortify the will and to fashion a strong character well qualified for the consistent conduct of life? According to the way in which these questions are answered will be the answer to the question whether the religious creed of a nation, as entertained by the masses, predisposes or not to mental degeneracy.

Without attempting any answer now, I shall go on to speak of that which has the first place as a cause of insanity—I mean here-ditary predisposition. What I have said hitherto may, I fear, be thought to be vague, general, and little adapted for a medical meeting; but I cannot help thinking that diseases generally, in regard to their causation, stand in need of wider consideration than

we have been in the habit of giving them, and that this is especially true of insanity, which might almost be called the social disease.

Hereditary predisposition.—The proportion of cases in which this is detectable has been put by some authors, by Moreau de Tours, for example, as high as nine tenths, by others as low as one tenth. The most careful researches agree to fix it at not lower than one fourth, if not as high as one half. Of fifty insane persons, taken without any selection, whose histories I traced carefully, there was strongly marked hereditary predisposition, that is, there was the positive evidence of an inherited predisposition to insanity, in fourteen cases; while in ten more there was sufficient evidence of some inborn infirmity or instability of nervous element—an infirmity not due to actual insanity in the immediate ancestors, but acquired or produced in them by degenerative influences at work. Thus, in a little more than one fourth of these people there was marked hereditary predisposition, and in half of them there was detectable some hereditary taint.

Two important considerations should have full weight given them first, that the native infirmity or taint may be of very different degrees of intensity, so as, on the one hand, to conspire only with certain more or less powerful exciting causes, or, on the other hand, to give rise to insanity even amidst the most favorable external circumstances; and, secondly, that not insanity only in the parents, but any form of nervous disease in them-epilepsy, hysteria, and even neuralgia—may predispose to insanity in the offspring, as, conversely, insanity in the patient may predispose to other kinds of nervous disease in the offspring. Epilepsy in the parent may become insanity in the child, or insanity in the parent become epilepsy in the child; and chorea or convulsions in the child may be the consequence of great nervous excitability, natural or accidental, in the mother. In families in which there is a strong predisposition to insanity it is not uncommon to find one member afflicted with one form of nervous disease, another with another; one may suffer from epilepsy, another from neuralgia or hysteria, a third may commit suicide, and a fourth may be maniacal. General paralysis is usually the result of continued excesses of one sort or another, but it may unquestionably occur without any marked excesses, and when it does so there will mostly be discoverable an hereditary taint in the patient.

M. Morel, of Rouen, has made some excellent studies of the way in which causes that give rise to mental degeneracy in individuals, that produce, in fact, what he calls morbid varieties of the race, continue their operation through generations, if not checked, and finally issue in the extinction of the family. When some of the evil influences which notably produce individual degeneracy, such as the poisoned atmosphere of a marshy district, or the endemic causes of

cretinism, or the overcrowding and starvation of our large towns, or persistent intemperance of any kind, or frequent intermarriages in families, which I hold to be no doubtful cause, or any other of the sources of human degeneracy—when any of these have engendered a morbid variety of man, such as a madman is, the evil will, unless counteracted by better influences brought to bear, increase through generations, until the degeneration has gone so far that the continuance of the species is impossible. In fact, insanity, whatever form it takes, is but a stage in the descent towards sterile idiocy. This you might prove experimentally by intermarrying persons mentally unsound for a few generations; and, in fact, it is sometimes demonstrated to us experimentally by the results of frequent intermarriages in foolish families. I call to mind the elder branch of an ancient county family, untitled, but prouder of its simple squirehood than the younger branch of its title; it has for generations married only with the members of another great family in the same county. What is the result now? The present representative has three sons, one of whom is deaf and dumb, another epileptic and nearly imbecile, and the other scrofulous and feeble in mind and body. The next generation will doubtless witness the extinction of this proud and ancient line.

Morel adduces the history of one family which we may take as a typical example of the course of degeneracy proceeding unchecked.

It may be briefly summed up thus:

First generation.—Alcoholic excess. Immorality. Mental degradation.

Second generation.—Hereditary drunkenness. Attacks of maniacal excitement. General paralysis.

Third generation.—Sobriety. Hypochondria. Melancholia. Systematic mania. Homicidal tendencies.

Fourth generation.—Feeble intelligence. Stupidity. First attack of mania at sixteen. Transition to complete idiocy, and probable extinction of the family.

Thus we see how sure a provision is made for the extinction of degenerate varieties; nature puts the ban of sterility on the morbid type, and thus manifests her resolve that man shall not continue a lower kind. We might in this regard fairly compare the social fabric with the bodily organism; as in bodily disease there is a retrograde metamorphosis of formative action, and morbid elements are produced, so in the appearance of insanity in individuals we have a degeneration of the human kind, and morbid kinds formed. And as in the body morbid elements cannot minister to healthy action, but, if not got rid of, give rise to disorder, and even death, so in the social fabric morbid varieties cannot take their part in the system, are themselves on the way to death, and, if not sequestrated in the social system or extruded from it, would engender disorder incom-

patible with its stability. But, however much man may degenerate, he never really reverts to the type of any animal, though he may sometimes become very like his next of kin, the monkeys: the so-called *theroid* degeneration spoken of by some writers signifies no more than a resemblance to some animals; lunatics and idiots represent new morbid kinds; the mighty are fallen, but the might is manifest even in the wrecks.

When we reflect upon these facts, proving the power and extent of hereditary action, both in health and disease, in the formation of a sound and of an unsound constitution, we cannot fail to be convinced that there is no heritage like the heritage of a good descent, and cannot help feeling some regret that while we pay so much attention to the breeding of animals we pay so little attention to the breeding of men.

I shall now, before concluding, briefly touch upon some of the principal exciting causes of insanity, taking for illustration the remaining twenty-six of the fifty cases into which I particularly examined. In any fifty cases of insanity taken at random, the same causes would probably be found to operate, and nearly in the same

proportion

Exciting causes.—I find that intemperance was the clear cause of the mental disease in three cases; while in four cases more the cause was equally clearly intemperance, together with great sexual This accords with general experience, which rightly assigns intemperance the first place amongst the physical causes of insanity. There is a vulgar notion prevalent, one which I believe to have not seldom been the cause of grievous injustice being done in our courts of justice, that if a man is said to be made mad by drinking, he is only "mad drunk," as it is called, for a time, or at most has an attack of delirium tremens. Now it is important to bear in mind that a continued intemperance does in some instances produce a true mania, of an acute and violent type, having nothing of the character of delirium tremens about it; nay, more, that the effect of a single debauch in one who has an hereditary predisposition to insanity, or who has suffered at some time from an injury to the head, or who has had a previous attack of insanity, may be to produce a genuine insanity of a transitory nature—a condition during which vivid hallucinations may arise, and the sufferer commit crime, quite unconscious of the nature of his act at the time, and hardly remembering it afterwards. About a year ago I was asked to examine, in gaol, a respectable builder who was undergoing sentence for rape committed on his servant girl, under fourteen years of age; and I was never more convinced of anything in my life than I was of the truth of that man's statement, that he remembered nothing whatever of the crime. He had for some time previously heard voices which had no existence speaking to him, and for some days VOL. XII.

before the crime had been continuously drinking; he still heard those voices in his cell, and was plainly, as every one perceived, of unsound mind. I should not have cared to attempt to convince some of our present judges of his real state at the trial, for it is not improbable that, mistaking their sympathy with vulgar prejudices for the dictates of common sense, they might have thought it not unbecoming the dignity and shelter of their office to dismiss my evidence with the advocate's sneer.

In one case sexual excess by itself was the evident cause of mental derangement in a young man, of sober and exemplary life, who had been married about a year. It is singular how ignorant many people are of the fact that the marriage service does not obviate the necessity of self-restraint, or preclude the possibility of evil consequences from excessive sexual indulgence.

Self-abuse was the cause of the mental derangement in two men. It is a cause which often gives rise to a particularly disagreeable form of insanity, characterised by great self-feeling and conceit—for nearly always the more degraded a man is, the more he esteems himself—and profound moral disturbance in the earlier stages, and, later on, by melancholic depression, failure of intelligence, nocturnal hallucinations, and sometimes homicidal and suicidal propensities.

In two cases epilepsy was associated with the insanity. In one, long-continued epilepsy had produced dementia, as its habit is; in the other, an attack of acute and violent mania, lasting for a few days, was followed by a heavy, stertorous sleep, the patient, a young surgeon, waking up seemingly quite well, but after a few hours being attacked with several severe epileptic fits, followed again by mania. Here, then, I take occasion to point out that not only may acute mania follow epilepsy, but that an attack of acute mania may take the place of, or be, so to speak, vicarious of an attack of epilepsy-representing, in fact, a masked epilepsy. Furthermore, in some cases a profound moral disturbance, lasting for months, with periodical exacerbations in which vicious or criminal acts may be perpetrated, precedes the appearance of the regular epileptic fits: it represents, indeed, a masked or suppressed epilepsy. We perceive, then, one reason why epilepsy exists in much larger proportion, as it unquestionably does, among prisoners than in the rest of the population.

In two cases the insanity occurred after childbirth; in one, two months after; in the other, so soon after that the woman was never aware, till she recovered, that she had had a child. Puerperal insanity, in fact, occurs at or after childbirth: during the agony of delivery there may be an acute frenzy, in which the child may sometimes be killed; or insanity occurs a few days after delivery, some have thought from blood-poisoning; or, lastly, it comes on from a few weeks to a few months after delivery, and is then seemingly

due to the exhaustion produced by lactation, in conjunction often with depressing moral influences.

In one case the insanity came on after an acute fever, called "gastric," probably typhoid; and in another case, after acute rheumatism. We ought always to be alive to the fact that, during the decline of acute diseases, as typhus and typhoid fevers, the acute exanthemata, acute rheumatism, and pneumonia, a mental disorder quite distinct from the delirium which sometimes occurs during the height of fever may come on. I have known a woman hastily sent to an asylum under these circumstances, to recover in a few days, to the consternation of everybody concerned in sending her. The disease so occurring may take the form of the delirium of nervous exhaustion, from which recovery commonly takes place in a few days; or it may steadily pass into a chronic and persistent form, especially if there be hereditary taint; or it may be very acute, recovery taking place for a time, but, as happens after injury to the head, being followed by subsequent change of temper and chronic insanity.

In one case mental derangement preceded for some months, as it sometimes does, softening of the brain. An old man, the respected deacon of a chapel, was found to be keeping a mistress in secret, and doing other foolish things which evinced a morbid mental exaltation forerunning mental extinction.

Though there was no example of injury of the head amongst my cases, yet this should not be overlooked as a physical cause of insanity. Schlager, of Vienna, found insanity to be directly dependent on injury or shock to the brain in 49 out of 500 insane. In 21 cases there was complete unconsciousness at the time of the injury; in 16, some insensibility and confusion of ideas; and in 12, only a dull, heavy headache. In 19 cases, the mental disorder began to come on within the year; much later in many others; and in 4 cases, after more than ten years. This is an important cause in regard to the question of the remote effects of railway accidents. I dare say that railway companies have occasionally been imposed upon, but I am quite sure that if a person begins to suffer with severe nervous symptoms some time after the sort of shock which a railway accident gives to the nervous system, no amount of money will compensate him, for the disease will of a certainty go on from bad to worse.

I have now disposed of seventeen out of the twenty-six cases which I began with. The remaining nine were produced by what are called moral causes. In four of them the insanity seemed to be gradually developed as the result of a particular character in certain circumstances of life, all that one could say of one of them was, that a person who seemed to have been all his life preparing to go mad had at last succeeded in overstepping the line; in the three other

cases, single women, over thirty years of age, having nothing to live for, took violently to excessive religious devotion, the consummation of which, unhappily, was insanity. We may take notice here, that when one of the exalted passions, as pride, ambition, religious exaltation, vanity in any of its Protean forms, produces insanity, it does not, like a great moral shock, act as the direct cause of an outbreak, but it produces its effect by degrees as an exaggeration of a certain peculiarity or vice of character. In such case, therefore, there is very small hope of recovery.

In the last five cases, the insanity was directly due to moral causes. In one woman the accumulated force of long-continued anxieties destroyed the mental equilibrium when the change of life took place; in another, a young lady, disappointed affection was followed by suppression of the menses and acute dementia; and in a third, the sudden loss of her son was the occasion of an outbreak. One woman became insane immediately after attending a revival meeting; and another was driven mad by listening to a violent and

exciting sermon in a Methodist chapel.

Great intellectual activity, when unaccompanied by emotion, does not often lead to insanity; it is when the feelings are deeply engaged, when the mind is the theatre of great passions, that it is most moved, and its stability endangered: the old term commotion, used to describe emotional agitation, truly expressed the internal condition of things. It may be justly said, that it is not the work which a man does that makes him mad, but the work which he cannot do: indeed, one of the causes which most surely break a person down is the painful feeling of being unequal to the respon-

sibilities of his position.

It will easily be understood that physical conditions often cooperate with causes that appear to be simply moral. Continued
moral depression notably leads to organic disturbance; and, on the
other hand, organic disorder, depressing the health, inclines a person
to become emotional, and to feel deeply impressions which would
glide harmlessly by in health. In fact, though we conveniently
separate in thought the moral and the physical by a mental artifice,
in nature they are indissolubly bound together as equally essential
elements in every human thought, feeling, and act. And I may
properly end these incomplete remarks by saying, that it is only by
taking this just principle to guide our inquiries that we can hope to
acquire true conceptions of the nature and the causes of insanity,
and to lay the foundations of a true physiology and pathology of
the mind.