Diseased cravings and paralysed control : dipsomania, morphinomania, chloralism, cocainism / by T.S. Clouston.

Part First.

ORIGINAL COMMUNICATIONS.

I.—DISEASED CRAVINGS AND PARALYSED CONTROL: DIPSOMANIA; MORPHINOMANIA; CHLORALISM; COCAINISM.

By T. S. Clouston, M.D., F.R.C.P.E., Physician-Superintendent, Royal Edinburgh Asylum for the Insane; Lecturer on Mental Diseases, Edinburgh University.

(*Continued from page* 521.)

Dipsomania.—Dipsomania has never been satisfactorily defined, any more than insanity has been defined. But if we cannot define insanity in the abstract, we agree in the main as to what it is in the concrete. That is certainly not the case with dipsomania at present. The word is used in the loosest way both in the profession and out of it. It has come to be a synonym for drunkenness in popular estimation. It is exceedingly common for our profession to describe any kind of alcoholic insanity as "dipsomania." Still more common is it for patients unquestionably insane, who have delusions, or who have maniacal excitement, or who have suicidal tendencies, or who are subject to epilepsy, but have in addition strong cravings for alcohol, to be called dipsomaniacs. Before we can understand or treat of the disease in any sort of scientific or clinical way we must come to some more definite use of the term. We must, in the first place, confine the term to that form of disease where the lack of inhibition or the morbid intensity of impulses are the real departures from normal mentalization. If we have a patient with simple coherent mania,—that is, with distinct mental exaltation, sleeplessness, restlessness, talkativeness, changed habits, loss of common sense, unsettledness, loss of control over temper, morbid brilliancy of imagination, and hyperæsthetic memory, we must not call such a man a dipsomaniac, though he drinks excessively, and has all his symptoms aggravated by it, and has an intense craving to get it, over which he has no control, lying to get it, cheating to get it, and stealing it. This particular lack of self-control or craving is then only one of the symptoms of an ordinary form of mania. It may be a very outstanding and troublesome symptom, and the most hurtful one to the patient, but it is unscientific to take any one symptom of a general brain disease and ticket it as the disease itself. We might as well call a pneumonia a dyspnœa or a cough. I have had cases

of simple mania by the dozen where excessive drinking was one of the earliest and most pressing symptoms. I had one case of irregular *folie circulaire*, amongst many such, whose excited period always began by excessive brandy drinking in company, and whose melancholic period was always liable to heavy solitary drinking to relieve his mental pain; who actually brought on short attacks of delirium tremens when suffering from simple mania on two occasions by such morbid drinking; who certainly could not control his craving; in whom the keeping drink from him was the most troublesome and difficult, but yet a perfectly essential, part of his treatment, and in whom this restraint from drink, I had reason to believe, shortened the attack of maniacal elevation. His reasoning was very acute, he had almost no delusions, and he was perfectly coherent. Why was he not then a dipsomaniac? Simply because I had clear evidence that a morbid brain elevation preceded the tendency to drink; that he had lost control in many directions besides drinking; that he was changed intellectually, affectively, and morally; and, in brief, looking at his case clinically as a whole, that it was one of *folie circulaire*. Cases of this kind, or those subject to periodic or occasional recurrences of simple brain exaltation, are very common, and only some of them have drinking as a symptom. They should all be excluded from the category of dipsomaniacs.

Then we have many cases of simple melancholia in which drinking is a symptom. The patients find that its effect on their brain is to deaden their mental pain, and to substitute for it a kind of transitory happiness, or confusion, or a partial lethargy. As a part of their melancholia, their inhibition is lessened, and so the desire for drink for this purpose cannot be resisted. The longer it is taken, the less becomes the power of control. But the direct effects of alcohol and all such substances that act specially on the functions of the higher brain centres being to lessen inhibition by constant use, a positive craving is soon set up. I had one such patient, who, on each of the many attacks of simple melancholia she had, became to her husband and to her doctor "a dipsomaniac" in this way. But, in my judgment, she suffered from melancholia, and her taking to drink at first was a deliberate attempt at self-therapeutics. There was not to begin with a craving for drink at all. My reasons for this conclusion were that the symptoms began by mental pain, a suicidal feeling, morbid suspicions, loss of power to do or think of work, lack of interest in everything, a conscious loss of affection for her husband and children, sleeplessness, loss of appetite, and falling off in flesh,—all these preceding the drinking. Then the symptoms, under proper treatment, ran the course of an ordinary case of melancholia. Clinically it was melancholia, not dipsomania. I have another case of melancholia in my mind that has become chronic, where all along a craving for drink is a symptom,

and her friends thought her case one of dipsomania. But she was sent to the Asylum after an attempt at suicide, and I had no doubt, during her residence there, that she suffered from melancholia. She had many of the ordinary concomitants of dipsomania, viz., untruthfulness, laziness, want of proper interest in husband and children, and lack of self-respect in regard to the conventionalities of life. It is most important to ascertain if there is a melancholic element preceding the excessive drinking.

Then I have known many epileptics with intense and quite uncontrollable cravings for drink, but the greater certainly includes the less here, and it would be improper to call such cases dipsomaniacs. I have many epileptics in the Asylum that I cannot let into town on pass simply because they cannot resist the craving for drink, and will beg, borrow, or steal anything to get it. I don't know any class of human beings more likely to acquire a dominant craving for drink than some adolescent epileptics. It aggravates all the symptoms of the peculiar psychoses of epilepsy—the impulsiveness, the irritability, the homicidal and suicidal tendencies. An epileptic maniac is often bad enough, but a drunken epileptic is likely to be a demon incarnate.

There are many cases of mild mental enfeeblement (dementia) resulting from acute primary attacks of mania, who take to drink as a symptom of such mental enfeeblement, and have no power to restrain themselves. Such patients are often so apparently well in asylums that they get discharged as "recovered." It is only the rough, but real tests of life in the outer world that bring out their weak points. I was once sent for to see an old patient who had had originally an attack of acute mania and apparently recovered, and had gone to live alone. I found him dirty and drunk, and his room simply filled with bottles that had once contained whisky. I put him under care, but found that after stopping the drink, bringing up his general health, and making him conform to the ways of ordinary life, his mind was permanently weakened. He had no active craving for drink. He rather liked it, and his power of control was diminished. He never asked for drink in the Asylum, and never tried in any way to get it. Yet when he left, he went back to his old drinking ways. I do not call such a man a dipsomaniac, but a mild dement.

There are cases of delusional insanity and paronoia who have the drink craving strongly as one symptom. I have now a gentleman patient who is very irritable, has delusions of persecution, and has periods of slight excitement as well, who has an extraordinary craving for liquor at all times. He is so easily affected that one glass of beer will make him quite hilarious and agreeable. He will do anything for drink; yet he is not a dipsomaniac in any true sense.

I have now a case of general paralysis, who, during the time before he showed any real sign of insanity or any special paralysis, took to drinking excessively, that being entirely contrary to the

practice of his former life. Had general paralysis not come on, he would have been a true dipsomaniac, for the chief symptoms of his disease then present was a loss of control over a lower appetite and a craving for alcoholic stimulants. A very careful analysis of his intellectual and affective condition for that year no doubt showed slight changes, but not more than the effects of the drink he took might have accounted for. In that case every one would agree that it would be incorrect to ticket the temporary mental change by the name dipsomania, for it was clearly a part of the general mental disruption marking the beginning of a grave organic cortical disease.

I can recall many other cases where, as an early mental symptom of brain softenings, of tumours, of brain syphilis, and other organic diseases, patients took to excessive drinking, and evidently could not control those morbid cravings. One such case particularly impressed me. It was that of a professional man who had lived a studious, laborious, self-denying life up to 56. He then took to unrestrained and shameless drinking, losing his position and destroying his reputation. No other signs of "insanity" were seen in him then. Those who knew him most intimately saw that a subtle change otherwise had come over him intellectually and morally. I saw that his pupils had become unequal and not regularly contractile to light, that there was a faint asymmetry of his face when its muscles were in action, and that his walking and equilibration generally were very slightly defective. But he was subtile in argument, especially in excuse for his over-drinking. In about two years from the time of the sudden development of the drink craving he took an attack of hemiplegia on the same side as I had noticed the slight flattening of the face. I had no doubt whatever that the drinking was simply an early sign of the brain starvation and softening of arteritis, which afterwards caused the paralysis and death. I found, on careful inquiry, that even before he began to drink he was not doing such original work, and that his force of mind, which had been very great, had abated. It may be said that in such a case it was the excessive drinking that caused the first brain damage. In the light of my own examination of his symptoms, I am certain that the brain disease had begun before the drinking, and had caused it. I am sure that many cases of brain softening are attributed to drink that were really of other origin. No doubt the drink will hasten on any change that has already begun in the brain.

Brain syphilis is especially apt to cause lack of control over conduct and immoralities, amongst which excessive drinking stands prominent as one early symptom. Probably this is because brain syphilis is so apt to affect the mental area of the brain cortex by gummatous deposit or arteritis.

Perhaps one of the most sad forms of drink craving with lack of control is where it develops as one of the early signs of the

breakdown of senility. I have seen many such cases where lessened inhibition was the first sign of senile brain degeneration. I have seen many men of unblemished, self-controlled lives up to 60 or 70 who then took to drinking, and were senile dotards within a few years thereafter. Taken together, most of the cases where men at that age, of good character, take to sexual immoralities, to low company, to acts of dishonesty, and who change in their tempers, becoming irritable and violent, and where drinking is a prominent symptom, should be more correctly put down as due to senile brain decay, than called dipsomania.

In considering all such cases where uncontrollable craving for drink is seen as an early symptom of marked forms of insanity, of incipient organic brain disease, or of commencing senile degeneration, we must take the heredity of the patients into account, and the education to which the brain had been subjected in youth, as well as the motives that had operated with force during the controlled part of the life. The heredity towards weakened mental control in regard to drink and otherwise may be put down as very general,—indeed, in most Teutonic countries, as de Quincey says, "our northern climates have universally the taste latent, if not developed, for powerful liquors." During last century few persons who were not under strong moral or religious motives seemed to exercise very much control over any tendency they had to drink excessively. We their descendants, as a matter of fact, don't drink as hard. Why? There must be motives operating strong enough to counteract our evil heredity, and to enable us to exercise inhibition over our latent cravings. Our education is all in the direction of inhibition now; public opinion, too, tells as strongly against as it did formerly for excessive drinking.

What happens in the cases I have been adducing seems to be this. The patients probably knew quite well intellectually that the excessive indulgence in drink meant social disgrace, and that such excess was morally wrong. But whereas in sound brain health the effects of education and the higher instincts of morality and public opinion, with a normal power of brain inhibition, kept them straight against a liking for drink; whereas, after disease of the brain had broken down the power of inhibition, the lower animal liking for drink overcame the higher motives. It is now pretty generally recognised that as the "moral faculties" were the last to be evolved, they are commonly the first in brain disease to disappear. It is quite possible, too, that a certain diminution in the power of keen intellectual perception accompanies the loss of inhibition, the imagination does not so vividly "realize" the consequences of habitual drunkenness as before. Our means of testing minute degrees of psychological change are as yet far too imperfect to enable us to dogmatize on such points. If any man will take the trouble to analyse the exact intensity of his "moral sense" in different circumstances and at different times, and its inhibitory

and propulsive power over conduct, he will soon see, if he is honest, how it fluctuates. If he then tries to gauge its intensity in different people, especially in the persons where it is hyperæsthetic, he will realize that the scale of moral sensitiveness is a very graduated one, even keeping within sane limits. There are hundreds of thousands of our population who always drink to excess when they have the chance, they have no sense that it is wrong at all, or so little that it does not influence their conduct; there is no question of any paralysis of inhibition with them. They have no motives towards exercising any power of inhibition they may have. To any such person it does not seem wrong to get dead drunk once a week, and he exercises no inhibition against it, while another man's ethical sense is so hyperæsthetic that it seems dishonest to him to write a letter with his office address on it from his private house, and he will never do so. Both are sane, and both have unimpaired power of inhibition to do or not to do, according to the motives that operate on them.

Having excluded those mental diseases and brain lesions and degenerations from true dipsomania, the next thing is to separate it from simple drunkenness. We cannot say that all men who have a strong leaning for drink are dipsomaniacs; nor can we say that all men who habitually or periodically drink to excess, and so mar their prospects, destroy their health, and hasten their deaths, are dipsomaniacs. It is not the craving nor the unreasoning disregard of every motive alone that should enable us to form our conclusions. It is the non-existence of the power of control that is the test of whether the drinking is a disease. Very many persons have a craving for drink; in not a few of those this craving is of morbid strength, and is in some of them even connected with weakened or disordered brain action. Such persons frequently do indulge to excess, but they do so deliberately, and could control their actions if they would, and do control them when there is sufficient motive for it. They drink as a part of their social life, and an aid to it, or to experience the pleasure that drink gives them. Some of them cannot stop at the point they lay out for themselves after they have begun to drink. To treat of drinking from a medico-psychological point of view, and to ignore the great part wine has played in aiding social joy from the earliest human records till now, is to set aside one of the great facts of sociology. The study of medico-psychology without reference to the habits and social history of mankind would be like the study of politics without reference to human passions. Deep-rooted, ingrained, apparently innate in the social instincts of mankind, is the practice of feasting as distinguished from mere eating and drinking to sustain life. It has been followed equally by the Hottentot and the Greek. The universal desire for it, and the pleasure it gives, must certainly be regarded as proving its necessity to mankind. Feasting always implies taking more than is absolutely necessary for life, and also

that the food and drink are more tempting or more highly seasoned or stimulating than those in daily use by the partakers of them. It also implies that if food or drink, or both, of the same quality or in the same quantity, were taken daily, it would be injurious. As an essential part of their feasts, nearly all peoples—except the followers of Mahomet—have used drinks or drugs that intoxicate more or less. Once invented or discovered—and their discoverers have always been placed among the gods—these drinks seem to have always become an essential part of feasts. No great harm is proved to have been done by feasting with the use of drinks if it was only indulged in at rare intervals, and if the feasters led physiological lives in between. Nature provides that excesses do not do much harm if not often repeated. Nature also gives clear indications that the pleasures of feasting are greatly lessened if they come too often. The glutton and the dipsomaniac are landmarks to show that Nature's laws have been broken. Broken law by man in time creates conditions of brain that become hereditary. Long before actual demonstrative tissue changes occur, we have diminished resistiveness to hurtful influences, lessened staying power, and not so great an organic pleasure in living for its own sake. The fathers eat sour grapes, and the children's teeth are set on edge. Man cannot both live and break the laws of his life. But few thoughtful persons can imagine that feasting and its risks can be mended by being ended. Mankind has too keen a consciousness of the balance of advantages for this ever to happen. And intoxicating drinks being historically an essential part of feasting, how can we expect them now to be eliminated from it? If we would use intoxicants as a part of feasts only, mankind would be safe enough from their abuse, and in a few generations dipsomania would be unknown.

But what about the Red Indian, and the effect fire-water has on him? A whole tribe, a whole race, of primitive healthy barbarian men and women, with no heredity whatever towards a morbid craving for drink, become in one or two generations all dipsomaniacs together. They conform to any scientific definition of dipsomania that can be given. Their cravings are diseased, and their control is paralysed; they drink till they become extinct, individually and as a race. No motive will control them from not drinking to excess if they have the chance. The use of drink in them is never connected with the gratification of social instincts at all. It is a simple craving for experiencing the intoxicating effect of it on their brain. No doubt this is a difficult problem to explain. Its explanation seems to be best found in this a-social aspect of drinking among savages. They had not grown up by the experience of countless generations to the social uses of drink, and their higher power of control over strong cravings, or over conduct, has not been evolved. Inhibition over things relating to their wars and hunting matters they have in abundance. But the

finer ethical inhibition has not been evolved in them. So that when strong alcohol, a substance which civilisation alone could have discovered, and the subtile bad effects of which it required the inhibitory power of a fully evolved brain to withstand, was presented to them, it is no wonder that their limited control failed in such a case. They should have begun with mead and weak ale. It should never be forgotten that alcohol poisons as well as exhilarates. It affects more strongly the highest brain functions of emotion and control. The unevolved savage was suddenly brought into contact with a poison and intoxicant combined that only civilized brains could resist, and his brain at once fell a victim to it. I often think the instructive analogy between the dipsomania of the unevolved Indian and the dipsomania of "reversion" in the civilized man has not been sufficiently dwelt on.

The distinction between dipsomania and the various forms of true alcoholic insanity and alcoholic nerve degeneration is clear enough if we accept the term in the sense I have endeavoured to make out. Yet they may have a close relationship, A dipsomaniac may develop alcoholic insanity. A case of acute alcoholic insanity may get cured, and become one of dipsomania. A dipsomaniac, while he remains a pure case of that disease, has no systematized delusions, no hallucinations, no amnesia, and no motor symptoms, has seldom strong impulsive suicidal or homicidal impulses. In fact, most dipsomaniacs are harmless enough except to themselves and others through their conduct. We need not point out that every case of true alcoholic insanity has always one or more of these symptoms. This distinction is most necessary to be kept in mind. We can get no scientific idea of dipsomania so long as we do not distinguish it from true alcoholic insanity and alcoholism generally. Popularly, it is almost impossible to get them distinguished from each other, and we are too apt to assume their identity through that intellectual laziness that makes us so often accept the term "softening of the brain" as a sufficient description of general paralysis, apoplectic seizures, bulbar degeneration, cerebral atrophic conditions, or even extreme secondary dementia. This tendency is wrong, and we should resolutely resist it. Our medical nomenclature is getting complicated enough, but this is inevitable, and we should use different names to distinguish things that really differ.

The greatest difficulty in the diagnosis of dipsomania is unquestionably to distinguish it from drunkenness, where the control is not paralysed, but simply not exercised. Especially is it difficult to tell where the stage of sane, responsible, punishable drunkenness ends and that of dipsomania begins, in those cases where the latter arises out of the former. In marked cases the disease makes itself manifest to a careful clinical study of the symptoms present. Those symptoms are psychical and nervous, and are often subtile in

quality. Such a case is like many difficult mental cases,—it needs the faculty of psychological diagnosis to be put into exercise. There may be no coarse and evident elements of differential diagnosis present at all. To diagnose a case often requires that fine points of character, of conduct, of the influences of motives, of the affective nature, of business capacity, of the power to sleep and to concentrate the attention, have to be put into the balance and weighed. The whole moral history and capacity of the patient has to be laid open and inquired into. The general health, and markedly the brain health, in its sensory and motor, but especially its trophic functions, needs examination. This question always arises, too—"Is there such a difference between the man now and at some previous time when admittedly well that a condition of disease only will explain it?" The chief clinical facts that prove such disease, or tend to prove it, are the following:—

Marked remission and periodicity.

The diseased craving and paralysed control having followed, as effect follows cause, brain injury, loss of blood, mental strains, bodily disease, conditions of anæmia or exhaustion, critical periods of life, or an attack of mental disease.

A change in the whole mental, moral, and emotional character, coincident with or closely related to the drink craving.

A mental or neurotic heredity.

A marked neurotic diathesis.

A congenital weakness in the inhibitory qualities of the brain, brought out by emerging into life or having new opportunities of indulgence.

That the patient had normal control at one time, and exercised it under temptation to yield when he chose, but that the excessive use of alcohol has destroyed the brain's power of control, and has set up a morbid craving, this being usually evidenced in other ways than mere drinking.

It being accepted that dipsomania is a form of diseased craving or impulse, with paralysed—wholly or partially—inhibition, the next question is to examine its varieties and its proper treatment. I have never seen any classification of dipsomaniacs that satisfied me either as to its scientific basis or its practical value, and I am unable to devise such a classification. It is easy to schedule them into intermittent and constant, into social and solitary, into diseased and vicious. I hazard the following as being founded on more clinical, etiological, or physiological principles than those commonly in use:—

1. Developmental and retrogressive dipsomania.
2. The dipsomania of a neurotic diathesis.
3. Somatic dipsomania.
4. The dipsomania of excess.

I am very well aware that this is chiefly an etiological scheme, and has many weak points. The varieties run into each other and

overlap, and we come on some cases that will not fit into any of the four pigeon-holes.

1. Under the developmental and retrogressive form I would include the congenital cases whose higher inhibition had never been developed as a brain faculty; the cases arising at puberty and during adolescence, a numerous and an unfavourable class; those occurring at the climacteric, a not uncommon kind in both sexes, but especially in women; and the senile class, also not rare.

The general features of the congenital class of dipsomaniacs are a slight weakness of mind, inhibitorily in all directions, impulsiveness, lack of moral sense, want of balance, keen unreasoning likes and dislikes, want of power of application, want of common sense, and distorted and often remarkable social instincts. With all these lacks there may be a certain intellectual acuteness and precocity, and much cunning. I assume that the intellectual and other weaknesses do not go down to the standard of technical insanity. There may be educability if the proper methods are adopted. From early childhood an impartial study of such children will detect these deficiencies. They are usually of neurotic parentage or of a drunken family, and are in fact one variety of the class of "moral idiots" or imbeciles. The drink craving arises at any time, and usually suddenly after the first taste of alcohol, the effect of which on such brains is intensely pleasurable. Alcohol has a special affinity for all nervous tissue, but it seems to have a very special affinity for such brains, while out of it comes excitement, drunkenness, outrage, and crime. The craving I have seen developed at ten years of age, and even earlier. There are, of course, great varieties in different cases, but the following presented the main features of the disease with sufficient distinctiveness:—

A. B., aged 12, was seen by me on account of the following symptoms. His mother was a very unstable woman, and the father drank hard and came of a drunken family. The boy had been slightly peculiar, impulsive, and difficult to manage from a baby. He had been taught the ordinary branches at school, and could read and write, but was backward somewhat. Especially he had no depth of moral nature or of resistive volition. The body was large enough, but the movements were not so quick and fully co-ordinated as to be graceful. The head was badly shaped, the palate arch very high, and the eyes restless. It was difficult to fix his attention for any time on anything, and he was a good deal of an automaton mentally, but anything like idiocy or congenital imbecility had never been thought of. About a year before I saw him some whisky had been given him, it was not known exactly how, but ever since that first taste the craving for it had been present. He stuck at nothing to gratify it. Lying and stealing he would practise at any time to get a little of the coveted stimulant. He invented wonderful stories of illnesses at home, for which whisky was needed at once, messages from his mother to the family

tradesmen, etc. He was plausible in excuses and prevarications when charged with the offences of which he had been guilty. The first taste of whisky he had got seemed to have found a brain most sensitive to its evil influence, and from that time dominated it as if a glamour had been cast over the child—for child he was in reality. He was, in fact, a very mild imbecile with the special quality of whisky craving. What could I do in such a case? Nothing that I know of but send him, as I did, to a far-off manse in a solitary country place, to be under the care of a sensible, firm couple, who for the sake of an addition to their income took this precocious congenital dipsomaniac into their home, and did their best to look after him, and get him interested in the work on the glebe. Fortunately such children are uncommon.

The next is the adolescent form of dipsomania, which is common enough. I should say that more true dipsomaniacs develop the habit of excessive drinking and acquire a keen craving for it, between the ages of 18 and 25, than at any other age. It seems to be one of the developmental neuroses, standing in the same class as the cases of adolescent chorea, hysteria, insanity, epilepsy, and Friedrich's disease. Like those diseases, it seems to indicate a failure in the perfecting process of the organism. There is always a neurotic heredity in such cases; but there is not, in my experience, any psychological or physical type that would lead one to predict this likelihood of dipsomania in any young person, except I should expect him to have the characters of the neurotic diathesis; but he would have this in common with a great many who would not become dipsomaniacs at all, nor develop other neuroses. In this typical case the craving usually arises within a certain short definite time. A certain year can be looked back upon when the craving was roused beyond the power of control. The subject of it may not have become a "drunkard" that year, or for some years afterwards. At first he only gets intoxicated when the chances offer conveniently, when, in fact, he is in circumstances of more or less strong temptation. Commonly for a year or two he drinks in convivial company. Then the craving becomes more intense and more morbid, and he drinks alone, secretly and for drinking sake. Then duty is neglected, and morals deteriorate all along the line. Truth, honour, duty, honesty, self-respect, natural affection, all disappear; and the man, before he is 25, becomes the well-known wreck and wastrel that is the curse and skeleton in the closet of so many families. To give a clinical example is almost a work of supererogation. No medical man but knows many examples. Few large family groups but can furnish at least one young man who has in this way made shipwreck of life at the outset. The following case presents the main features of this form of the disease:—

B. C., the son of sensible, educated parents, but in whose mother's family there was both insanity and epilepsy. He was carefully brought up in the country, away from temptations. To

those who knew him intimately he had certain mental peculiarities. He was untruthful if telling the truth meant risk; he was vain, and had no power of self-denial, wanting in a high sense of duty, and mean. But he was educated for a profession, and developed no drinking tendencies till he went to a university town to live in lodgings during his education. Within two years, and before he was 19, he was found to be a confirmed and uncontrolled drunkard, utterly lost to affection and honour, indescribably untruthful, vicious with women, and a useless burden on society, which he remained till his death, ten years afterwards. From the time he got to like drink he showed no redeeming point, no let-up at any time, no trace of control over his craving, and no single point in his mental or moral nature that could be got hold of to apply any kind of motive to. I was satisfied, from a careful study of the case, that he was quite irresponsible and hopeless in the conditions of our modern society, and in the present state of the law. It no doubt began in vice, but within a year or so vice had become disease. It was not a long course of nerve degeneration, caused by years of drink soaking, but a sudden destruction of inhibition by a few months of drinking in the case of a brain that was innately weak in inhibitory qualities, and so unstable that it was very soon entirely overset. But supposing he had never begun drinking? or after a few months had been placed where no drink could have been obtained, and a healthy industrious life led for a couple of years? In that case I think he might have developed into full manhood, when the risk would have been much less, able to do some suitable work under good example, and not a curse to all who had to do with him. It was during the development of adolescence that the great danger lay. There was no doubt a short time during which this control was not lost and the craving not diseased; but this initial period of drinking as a vice was so short, and the amount of drinking was then so entirely inadequate to cause real brain damage, that we must look to the innate quality of the brain for the explanation of the facts. In normal brains with reasonably good health, we do not find a short period of dissipation followed by complete breakdown in the whole controlling power and moral sense, in the total destruction of what, from an evolutional point of view, it had taken hundreds of generations to create and upbuild. Therefore such cases should be looked on from the pathological rather than from the ethical point of view. I have seen several examples of young men becoming dipsomaniacs during adolescence whose mothers had been neurotic periodic dipsomaniacs.

The dipsomania of the retrogressive periods of life, which are usually accentuated at the climacteric and senility, is not so common as at adolescence, but is far from being rare. Few practitioners but have met with cases of women who had led sober, self-controlled lives up to the menopause, and then took to alcohol to counteract the feeling of weakness and lack of energy and of en-

joyment that they experienced. The commencing failures, mental and bodily, of senility, too, are sometimes attempted to be fought off by liquor, with the result that the liquor becomes master of the situation, and useful and respected lives are terminated in disgrace and dishonour.

D. E. was a lady of good position, married, and happily circumstanced in all respects. She had led a correct life up to 46. She had always had a glass of sherry at lunch and dinner, but never had any craving for liquor till after she began to have the usual signs of the climacteric. Then she "felt low" at times, and began to take a glass of sherry before lunch, then another when out shopping in the afternoons, and at dinner would take two instead of one. At bedtime she would take some whisky and water to make her sleep, and the water grew less, till the whisky was taken neat. In a year she herself awoke to the fact that a craving for alcohol had seized her, and that her control against it was all but gone. She decided on teetotalism, but the effort was too great for her. She broke down over and over again. She gave out to her family and friends that she was "ill," and kept her room, when in reality she was drinking. She never so lost self-respect or caution that she got drunk on the streets; but she was drinking herself to death, and had no control whatever over the craving, when a relative took her a long voyage in a teetotal ship, and watched over her for a year a two longer, with the result that she lost the craving and acquired sufficient self-control never again to touch drink. She got stout, shapeless, and sober; she had passed the climacteric, and was safe. I could not discover any heredity, but she had been a "nervous," sensitive, and brilliantly intellectual woman.

As an example of senile dipsomania, take the following case:—F. G., a gentleman who had built up and conducted an extensive business till he was 70. His habits had not been in any way abnormal. He indulged freely enough in convivial drinking at times, but never had drinking bouts or solitary sprees. At 70 he got to drink more and more at dinner and at night; then he began at lunch-time, and then became a perfect sot, with no self-control or self-respect whatever, unable to do business, or to mix in society. This was coincident with atheromatous arteries, a senile heart, and a failing memory. At 73 he had alcoholic amnesia, and at 76 senile dotage, when he lost the craving for drink, and lived five years longer a sort of vegetable life.

2. The next kind of dipsomania is that of the neurotic diathesis. There are unquestionably some persons of high brain qualities, especially of keen sensibilities and poetic minds, of practical force and of conscientiousness in a high and even hyperæsthetic degree, but yet who have small staying power, are soon tired, are apt to be carried away by the very force and intensity of their emotions, and who are very sensitive to their own sensations of weariness from

any cause, some of whom are very subject to such a loss of control over their craving for stimulants that it can only be called diseased, if they have once taken to their use as "restoratives." Few of us but have known some examples of such persons. They need not have any insane heredity, or any connexion with technical insanity in any degree, or they may be of the insane diathesis. Suppose we take the poet Edgar Allan Poe as an example of the latter class. To some such persons the effect of alcoholic stimulants or opium is so intensely pleasant, and so reinvigorating at the time, that it is no wonder they are craved. They are lifted from a common state of mind into an ideal one. Their social instincts are greatly intensified by drink. To them it is a mental stimulant in a true sense. In some of them there is a periodic depression nearly allied to simple melancholia that is accompanied by a special craving for some external agent that will give enjoyment. In women of this type, the nervous accompaniments of menstruation, pregnancy, and nursing are especially apt to lead to a craving for stimulants. But it must be kept in mind, and it has certainly often been forgotten by writers on inebriety, that there are two varieties of periodicity in the drink craving quite distinct from each other: the one is when it comes on *per se*, and is a true recurrence of a subjective nervous phenomenon, a true cyclical neurosis. The other is when there are "bouts" of drinking that upset the stomach and liver, and produce a thorough satiation of the tissues with alcohol, which can no longer be taken, therefore, without producing a revulsion. When the organs and tissues become freed of those poisonous effects, and can with impunity receive more alcohol, then the man begins another "bout." This, which is more common than true periodicity, I do not call a periodicity at all. There would always be a mental desire for drink in such cases, but the body will not tolerate it for a time after a drenching. Whenever toleration is established excess begins. The following was an example of a neurotic dipsomaniac. H. I., a lady of good education with a distinctly nervous heredity, but with no insanity in her ancestry. Was a brilliant, social, rather jealous, and very attractive girl. She was tall, thin, mobile, and highly neurotic in temperament. She married soon, and the change of habits, the responsibilities, the child-bearing, and the desire to appear lively and entertaining to her husband, made her use wine at first and then spirits. When she was tired the effect of alcohol was always delicious to her. It dissipated any feeling of fatigue, raised her spirits, enabled her to appear well in company, and to do her work, as she thought. In two years after marriage she had begun to take it secretly, and she found she "needed" it, and she accordingly took more and more strong spirits until it mastered her, and she became its utter slave. She lost all power of controlling her craving, and constantly lost her truthfulness, but she was not entirely demoralized. She was always worse when menstruating

or pregnant. She made many resolves to abstain, but seldom could do so for more than three months at a time. When she once tasted spirits she could not stop. Everything was tried—voyages in teetotal ships round the world, voluntary residence in asylums, but nothing availed, and she died of some intercurrent disease after having ruined her constitution by drinking. A careful study of her brain state convinced me that she had a very neurotic constitution, that she had never been able to control herself from indulging in what she liked well, and that the effects of alcohol on her brain were intensely pleasurable, and that within two years after having begun the habit she was utterly helpless to restrain her craving for brandy, and was therefore in a condition of disease and not of vice.

I have known several cases of neurasthenia take to stimulants as an antidote to their bad feelings, and very soon lose control over the cravings thus set up.

In the neurotic dipsomaniacs it is the morbid intensity of the pleasure felt from drink that cannot be resisted. Their very strong point of keen sensibility is the rock that shipwrecks them. With their brain protoplasm alcohol has an especial affinity. They take to opium, to cocaine, to gambling, and to exciting employment to excess, all for the same reason, their over-sensitiveness. They are mostly thin and have not too good digestion. When they become teetotalers they are rabid anti-drinkers, with no charity at all to those who can drink in moderation. One does not despair of the cure of a neurotic drunkard if abstinence can be enforced in time. Many such people have very strong volitional and inhibitory powers. They are not the facile fools not worth trying to save.

3. By "Somatic dipsomania" I would distinguish those cases where traumatism, sunstroke, paralysis, brain erysipelas, brain lesions of all sorts, so weaken the self control, that men who had previously led sober lives then acquire marked cravings for liquors and cannot control those cravings. I have seen examples of every one of these lesions inducing dipsomania as one of their symptoms,—indeed, I have known several cases where falls and blows on the head and sunstroke induced it as the only mental symptom.

Under this category, also, come these cases where the craving appears after losses of blood, after severe illnesses, during conditions of anæmia and chlorosis in women after childbirth, during lactation, and during pregnancy. Usually there is not only a craving for drink, but not much tolerance of it. A small quantity excites and intoxicates or stupefies in such cases. A small amount will sometimes cause violent delirium, and the traumatic and sunstroke cases show homicidal and suicidal impulses soon passing into actual delusional or impulsive insanity. All those are very hopeless varieties except the anæmic, chlorotic, and nerve exhausted varieties. Nourish and fatten such cases, and they will often get well.

4. The "dipsomania of excess" is the most difficult form of any to deal with theoretically or practically. By it I mean that form where there is no special heredity, no neurotic diathesis, no disease, and no critical period of life, and where there has previously been a prolonged excessive use of stimulants. A bad habit has been voluntarily cultivated, and has grown in strength until it has become master. There was no natural lack of self-control, but most probably a natural love of liquor and its effects. It is only after many years that the habit has grown into a disease, and there is no special time at which the one ended and the other could be said to have begun, nor any perceptible line of demarcation between normal liking and diseased craving, nor between possible control and paralysed inhibition. The alcohol it is which in such cases itself destroys certain higher brain qualities by its excessive use. It is voluntarily and of set purpose taken, with the full knowledge of its evil consequences, or, at all events, that knowledge could be acquired by the least thought. The loss of control, and the morbid craving which result, are brought on by the deliberate act and deed of the drunkard. The craving was for many years so excessive that it could not have been controlled. Constant soaking alters the texture of the brain cortex; the nervous elements, the connective tissues, the bloodvessels, and the lymphatics all suffering in time, and we are thus often able to demonstrate a physical basis for the disease. But this is only after many years, and after the cases have become incurable.

This is the class to which some punitive treatment could in the first stages be properly applied. If one of them has a sufficient motive, he can in the early stages control his evil habit.

As to the treatment of dipsomania, the following are its principles:—

1. We need a legal control for many cases, without which nothing can be done. But it is an utter mistake to imagine that if we had the most stringent law of legislation that the strongest advocate for it could devise, that we should be able to cure all dipsomaniacs, for the reason that by the time a case is a dipsomaniac he is often *ipso facto* incurable. You cannot apply the remedy in time. How can any period of enforced abstinence cure the atrophied brain cells, and the hypertrophied membranes and neuroglia, and the degenerated vessels and lymphatics of the dipsomaniac of excess? It would, no doubt, be a great blessing to his relations and society to separate him from his fellows, but the process would have more the idea of an incurable asylum for a chronic lunatic than of a hospital for the treatment of pneumonia.

2. Total abstinence is needed in ninety-nine cases out of a hundred. In the hundredth case the conscious loss of self-respect implied in teetotalism, while others can drink, is so great, that moderation in suitable diluted liquors is better than abstinence.

3. Special asylums are needed, but I have not yet seen any

Part First.

ORIGINAL COMMUNICATIONS.

I.—DISEASED CRAVINGS AND PARALYSED CONTROL: DIPSOMANIA; MORPHINOMANIA; CHLORALISM; COCAINISM.

By T. S. Clouston, M.D., F.R.C.P.E., Physician-Superintendent, Royal Edinburgh Asylum for the Insane; Lecturer on Mental Diseases, Edinburgh University.

(*Continued from page* 705.)

Morphinomania.—The habit of taking opium differs widely from dipsomania in this respect, that the one is an absolutely unnatural and artificially induced appetite, while the other often proceeds out of the ordinary habits and needs of mankind. They differ as a drug differs from a food. But they have this in common, that in nine out of ten cases only certain kinds and qualities of brain can acquire them. Ordinary mankind cannot, fortunately, become dipsomaniacs in the mass, and still fewer of them could take to opium in excess. The greatest tolerance of opium as well as the keenest craving for it seems to exist among the Chinese, in the form of smoking, of any people. We know little of the psychological upbuild of the Chinese brain, or of the prevailing morbid heredities to which it is liable, but it seems clear that a general capacity to endure, and a patient resignation to things as they are, must be one of the most necessary qualities of millions of that stagnant, overcrowded country. A race without these qualities would never have solidified itself into the political and social condition of China, and remained in that condition for hundreds, or possibly thousands of years. The political heredity of a Chinaman must be so strong and definite that any other ideas than those of his ancestry must be utterly out of consonance with his mental habit. But even this cast-iron state of feeling from generation to generation cannot have utterly obliterated the spontaneity or the individualism of the *genus homo* in China. Is it a tenable hypothesis that the use of opium there is so prevalent and so keenly craved because it makes the quality of endurance more easy, while at the same time it creates an artificial and purely subjective state of mind in which unlimited scope is given to imaginary individual choice? It takes the Chinaman out of China, where no man has any choice to speak of, into a paradise where there are no mandarins, no struggles for existence under the most unfavourable

conditions, and where there is unlimited scope to live. In Europe, and in the only conditions with which we have to do, the opium habit is rare, but it prevails sufficiently to make its study an important one from both the mental and the bodily points of view. Unfortunately, one man of genius has so glorified and idealized the mental effects of opium as felt by himself, that we poor dryasdusts of science have no sort of chance of correcting and enlarging the picture he has made a part of English literature. Here is what the English opium-eater says:—

"O just, subtle, and all-conquering opium! that, to the hearts of rich and poor alike, for the wounds that will never heal, and for the pangs of grief that 'tempt the spirit to rebel,' bringest an assuaging balm;—eloquent opium! that with thy potent rhetoric stealest away the purposes of wrath, pleadest effectually for relenting pity, and through one night's heavenly sleep callest back to the guilty man the visions of his infancy, and hands washed pure from blood;—O just and righteous opium! that to the chancery of dreams summonest, for the triumphs of despairing innocence, false witnesses; and confoundest perjury; and dost reverse the sentences of unrighteous judges;—thou buildest upon the bosom of darkness, out of the fantastic imagery of the brain, cities and temples, beyond the art of Phidias and Praxiteles—beyond the splendours of Babylon and Hekatómpylos; and 'from the anarchy of dreaming sleep' callest into sunny light the faces of long-buried beauties, and the blessed household countenances, cleansed from the 'dishonours of the grave.' Thou only givest these gifts to man; and thou hast the keys of Paradise, O just, subtle, and mighty opium!"

"That my pains had vanished, was now a trifle in my eyes; this negative effect was swallowed up in the immensity of those positive effects which had opened before me, in the abyss of divine enjoyment thus suddenly revealed. Here was a panacea, a *φαρμακον νήπενθες*, for all human woes; here was the secret of happiness, about which philosophers had disputed for many ages, at once discovered; happiness might now be bought for a penny, and carried in the waistcoat pocket; portable ecstasies might be had corked up in a pint bottle; and peace of mind could be sent down by the mail."

Here is his physiological and psychological analysis of the difference between the effects of opium and alcohol:—

"But crude opium, I affirm peremptorily, is incapable of producing any state of body at all resembling that which is produced by alcohol; and not in *degree* only incapable, but even in *kind;* it is not in the quantity of its effects merely, but in the quality, that it differs altogether. The pleasure given by wine is always rapidly mounting, and tending to a crisis, after which as rapidly it declines; that from opium, when once generated, is stationary for eight or ten hours; the first, to borrow a technical distinction from medi-

cine, is a case of acute, the second of chronic, pleasure; the one is a flickering flame, the other a steady and equable glow. But the main distinction lies in this—that, whereas wine disorders the mental faculties, opium, on the contrary (if taken in a proper manner), introduces amongst them the most exquisite order, legislation, and harmony. Wine robs a man of his self-possession; opium sustains and reinforces it. Wine unsettles the judgment, and gives a preternatural brightness and a vivid exaltation to the contempts and the admirations, to the loves and the hatreds, of the drinker; opium, on the contrary, communicates serenity and equipoise to all the faculties, active or passive, and, with respect to the temper and moral feelings in general, it gives simply that sort of vital warmth which is approved by the judgment, and which would probably always accompany a bodily constitution of primeval or antediluvian health. Thus, for instance, opium, like wine, gives an expansion to the heart and the benevolent affections; but, then, with this remarkable difference, that in the sudden development of kind-heartedness which accompanies inebriation, there is always more or less of a maudlin and a transitory character, which exposes it to the contempt of the bystander."

No doubt De Quincey was thus idealizing the effects of his favourite but fatal drug. We cannot take what he says as a scientific description of even the effects of the drug on himself. His imagination was too strong for that, and his literary faculty exceeded his imaginative. Even the amount of sober fact that underlies all this brilliant picture only applies to the effects of opium on his own brain and a few others of similar quality. It is utterly useless as a guide to the effects of opium on the brains of ordinary men. It has no doubt acted as the lure to entice thousands of people to their destruction, for De Quincey's account of the terrible effects of his drug is not read by one for ten that read his prose poem on its joys. And if they did, there are too many minds who ignore the hell that is to follow for the bliss of pleasures near at hand.

No general rule can be laid down as to the psychological effects of the exciting stage of opium, because they differ so greatly in different persons, but the following symptoms are very general:—The higher and finer sense of duty is soon impaired; volition is diminished by even one dose while it remains in the blood; the desire for active muscular exercise or, indeed, for active energising of any sort is much lessened. The appetite for food and the sexual desires are lessened. The intellectual processes are in some cases heightened in intensity; but trains of thought arise more by suggestion, continue more automatically, and are less under control altogether. The imagination is dulled in some cases, but when excited, is no doubt greatly exalted. The feelings are also dulled in some cases, but pleasurably intensified to an extraordinary degree in others. Take De Quincey's description and

modify every statement about fivefold, and probably one would get a general idea of the actual effect of opium on ordinary brains. Looked at broadly, opium in single doses or temporarily taken diminishes the intensity of the faculties that lead to action or inhibition, and intensifies those that lead towards a subjective and introspective life. I need not here enter on the physiological effects or the therapeutic uses of the drug.

When taken in excess continuously for very long periods the mental effects are much more marked and the brain damage greater and more permanent than corresponding excesses in the use of alcohol. Intensify and exaggerate the effects of single doses tenfold, and we get a general idea of the effects of continuous use. In bad cases one may describe the volition, the resistiveness, and the power of attention to objective things, as being paralysed. One effect is very marked and has not been sufficiently dwelt on, and that is the asocial condition it produces. The real opium eater is always a recluse; he shuns his fellows; he lives in the dark; he shirks social engagements; he has lost the sense of comradeship; and he avoids the duties of natural affection because he does not feel its ties. His own too subjective world is all he wantsto live in. He is melancholic after the immediate effects of the drug have passed off. He rejects all the adjuncts and supports of social life, —orderliness, cleanliness, the appearance of his person and his clothes. He prefers to be among a class of society less moral, less educated, less refined, and less evolved generally than that in which he was born. He gets into that state which would at once disintegrate society, and reduce it to barbarism, if not to extinction, were it to become general.

The bodily symptoms and accompaniments of this mental change are well marked. He loses appetite for food, and often has nausea. His relish for exercise is gone; he lies in bed all day. He loses flesh, and looks grey and anæmic. The patient does not sleep well or soundly. The eye is lustreless after the immediate effects have gone, and he cannot look you in the face. Cold is felt intensely; no amount of clothing can keep him warm. The pupils take on a sort of permanent contraction. The tongue is tremulous, like that of a heavy tobacco smoker, or drunkard, or a general paralytic. The hands are often tremulous, and the handwriting altered. The pulse is usually small. The sexual appetite is paralysed.

But, then, is it not the case that many persons take opium habitually for the greater part of their lives, and yet remain strong and healthy, and do good work, often even highly original work? This is undoubtedly so in a few cases; and Christison's remark about persons being opium eaters for years without its being found out by relatives or friends, is certainly true. I lately saw a case where for fifteen years a lady had taken over 19 grains of opium a day, and it had never been suspected by her husband or her

nearest friends. Still more strange, she had been a typical opium eater at one time, had been "cured" by residence in an asylum, and had, after getting home, begun the regulated use I have described, which she never seems to have exceeded except on Sundays, when she usually said she was not well, and stayed in her room. But such are but the exceptions that prove the rule, for they are the few cases in which the dose is not increased, and does not lose its effect. These exceptions are usually strong men who go up to a certain point and stop there, just as many men take a large daily quantity of alcohol, some of them going drunk to bed every night of their lives, and yet keep healthy, live long, do good work, and die "natural deaths."

One of the most characteristic facts of the morphia habit is that the dose which this month produced full effects will next month cease to do so, and must be increased, until enormous quantities of the drug have to be taken daily,—quantities enough to poison those not habituated to the drug ten times over. We all know De Quincey's habit of drinking laudanum in sherry glasses just as we drink wine.

The morbid craving for alcohol may be intense, and the power of inhibition entirely paralysed, but neither the one nor the other can compare with the imperativeness of the morphine craving and the utter lack of any rudimentary trace of inhibition over it.

A morphinomaniac, in an advanced stage of his complaint, is a most miserable object in mind and body. He is manifestly diseased in all his nervous and most of his other functions. There is just one other being on earth who is more miserable-looking and more miserable, and that is the morphinomaniac who is being cured by enforced abstinence. The one is alive; the other is more than half dead. As we shall see, the fight is not altogether for the cure of the deadly habit, but in the first instance to enable the patient to live through the cure.

The following case is a typical one of morphinomania:—A. B., studying for a profession, had, about the age of 20, an illness which left him weak and sleepless. He was distinctly of a nervous diathesis. He had to go in for examinations, and a friend told him that opium was a good thing to take to steady his nerves and to make him sleep, which was his weak point. He tried it, and found its effects delightful, and just what he wanted. He fully intended to stop it when he got strong, and after he got through his next examination. But he got more and more dependent on it, and the giving it up seemed ever harder, and it also seemed unnecessary, for he felt well, ate well, studied, enjoyed himself, and thought the morphia just supplemented his food. He easily persuaded himself that his "constitution needed it," though he always had an uneasy feeling in his mind that it was a dangerous "food" he was getting himself accustomed to, and that its effect might, in the long run, be bad instead of good. Of course it was

easy to stifle this feeling by resolving that he would give it up the moment he began to feel the slightest bad effect. By the time he had taken it in moderate doses for a year or two, he found that the dose, to be efficient, must be much larger than it had been. He entered his profession, and found that his power of facing up the future, of looking and planning, and resolving on any course, was weakened. He was alarmed, and again tried hard to give up his habit, but could not face the pain it caused whenever he tried it. He lost touch with his friends and relatives, and went "to study" in a foreign capital, thinking or fancying that a "complete change" would help him. But the habit grew stronger when there was no one but strangers about him, and settled into a part of his life. He had rheumatic arthritis, and morphia was prescribed for this, which strengthened the habit still more, for he needed large doses; and from that time he knew he was doomed. He again made an attempt to give it up, but could not do so. For about ten years he stayed abroad "studying," now reading a little, going solitarily to theatres and the opera, which he thoroughly enjoyed, like De Quincey, after his dose. He settled down to 10 grains of muriate of morphia a day, taking this usually in one dose in the morning, taking no breakfast, but eating a good late dinner. He was not social, and walked out much at night in bye-ways. He thinks his reason for this was that he knew he was a slave to the habit, and felt degraded and ashamed. It is certain he never wrote to his friends except for money, that he led the life of a morbid recluse, that he did no work, and that he got to be worse and worse in body. When he returned to this country he was a "broken-down" looking man, older than his age, his complexion grey, his eyes changed in expression, his habits morbid and peculiar, and his capacity for work or continuous thinking or living like other men gone. After some years of this life, and when weak-looking and decrepit, his mind being so weakened that he had delusions of suspicion, being untidy and uncleanly, his social habits so sunk that he would see no relative, living in a lower social stratum, his friends, partly by persuasion, and partly by the stern argument of cutting off the supplies of money and morphia, got him to place himself in an asylum voluntarily. On admission, after these twenty-five years of morphia habit, he was a miserable-looking object. He stooped; his gait was weak; he could not look you in the face; his complexion was grey; his eyes blood-shot; his body emaciated; his pulse 90, bounding and soft; his temperature 100°·4. His tongue had a large black triangle occupying nearly its whole dorsum, and was excessively tremulous. He had gastric catarrh, and his hand was violently tremulous, as well as his whole body, when he made the least motion. Heard music "as if playing in his ears." Mentally, he presented a mixture of depression, enfeeblement, fear, irritability, and suspicion. He could not think; he could not reason; his whole attention was

concentrated on himself and his bad feelings. He was treated with beef-tea and brandy, but the beef-tea caused diarrhœa, and had to be stopped. He could retain milk, liquid custards, and brandy better than anything else. His heart's action got very weak, and digitalis seemed to strengthen it. No morphia was given, but chloral and a little bromide were used—I should now give paraldehyde or sulphonal—to produce sleep. For a week he was "horribly depressed" and debilitated, and his life was certainly in danger. He had a constant burning pain in stomach and bowels, most difficult to bear, and dreadfully lowering. He slept restlessly, and awoke with a "feeling of horrors." In a week the temperature was normal, and in a fortnight he had got over all the worst symptoms. He had periodic attacks of irritability of stomach for a year. He has never got over his long morphia habit mentally—not that he has any craving for the drug—but all the intensity is out of his brain in thought, feeling, and volition. He is hypochondriacal, childishly irritable and suspicious, unsocial, consciously unfit to face the world, quite unable to do any sort of real work, and never has any feeling of organic satisfaction. He is asexual, and prefers still to walk out in the dusk along solitary roads rather than in public places. In fact, his brain is irretrievably damaged in all its higher functions by its twenty-five years' continuous intoxication by opium.

Before commenting on this case I shall relate two others.

C. D. had been a labouring man, and had regularly taken laudanum for twenty years before his admission at 49 to the Asylum as a certified patient. For many years his daily allowance had been 6 oz. of laudanum, that is, about 200 grains of opium. He is described as having been "delusional" for three years before admission. Ten years ago he had a "fit" with unconsciousness, and another similar "fit" three days before admission. After it he had been unconscious for an hour. His face had been drawn to left side, and both limbs had been convulsed. He had been "excited" three years ago after a fit. For three months back his wife had noticed his speech to be tremulous. His delusions before admission were grandiose. He had an excess of *bien être*. He had "gold watches" under his bed, was to get a "lot of money," and had exaggerated notions of his bodily powers. On admission he was fairly contented, and said the house belonged to him. His memory was almost gone; he was mentally enfeebled generally. His articulation was tremulous and thick. He gave the impression of being a general paralytic, and one asked: "Is this a case where continuous and excessive use of opium has produced general paralysis, as excessive drinking seems to do sometimes?" He had been in the Infirmary for a few days, and the worst part of the "cure" was over. His tongue was tremulous; his temperature 98°·6 at first, but it rose in a week to 102°. This elevated temperature in advanced morphinism has scarcely been noticed, but is

very significant of the deep-seated cortical mischief that is present. For a long time after admission C. D. had, when asleep, a peculiar, irregular breathing, suggesting Cheyne-Stokes breathing, with a slight rhythmical movement of the right arm at a certain point of the inspirations. He never asked for opium, soon picked up in strength, and took his food well, and now remains a healthy, facile, forgetful, partial dement, resembling much the ordinary cases of alcoholic amnesia with general mental damage, plus more speech damage. In both cases the higher strata of brain centres, where volition and craving lie, seem gone. The self-control is also gone, but there are no active brain processes or troublesome cravings to inhibit. He has now remained three years in that state.

I shall now relate a third case, which perhaps should have come first, because the morphia habit was of much shorter duration. It was chiefly used hypodermically, and evidently much less permanent damage was done.

F. G., æt. 19, no neurotic heredity admitted, of "self-indulgent" habits. Once had a fall, and sustained injury to one hip, which became anchylosed and had to be "broken up." Abscesses formed, and he suffered great pain. For this hypodermic injections of morphia were ordered. This first occurred about five years before his voluntary admission into the Asylum for morphinomania. The habit grew on him, so that "it had become a craving, completely demoralizing him." He committed offences against the law to get money with which to buy morphia, for which he was punished. He has been sleepless except when under the influence of morphia. He was lazy, "self-indulgent," and without any traces of moral feeling or natural affection. He used "immense quantities" of morphia subcutaneously, and took by the mouth as much laudanum and nepenthe as he could get. On several occasions he has taken at once 3 oz. of nepenthe, equal to 100 grains of opium.

On admission he was much depressed and nervous, sleepless and exhausted. He had no delusions. He was fairly nourished. The tongue was moist, flabby, and furred. The whole of his thighs and groins were discoloured from hypodermic injections, and the abscesses they had caused. His pulse was 96, of fair strength, and his temperature 98°·3. His weight was 8 stone 7 lbs. The process of cure consisted of stopping the morphia at once, and keeping up his strength by special nourishment. He improved rapidly, and in a fortnight he had got over all the worst symptoms. By that time he was sleeping well. He took to heavy smoking, which I allowed. In five months he was discharged recovered; and I believe did not at once take to morphia again. He was not a youth with much power of inhibition naturally.

Those cases show—what all who have had experience agree on—that opium establishes a far more dominant habit than even alcohol, and, in fact, cannot be cured by any self-effort after it

has been established long, and that its mental effects are more certainly and distinctly an insanity than those of alcohol. This proves that there has been a great disintegration of the highest mental quality, viz., that of volition. The same thing is shown in the constancy of the habit. Periodic dipsomania, with intervals of self-control and a morbid craving, is common; but no such cases of periodic morphinomania are on record. Once established, there is no diminution or cessation of the craving for a day. A dipsomaniac may do some work at times; a typical opium eater never after it is fairly established. As is well known, opium affects the trophic energy of the brain even more than alcohol. There is more loss of flesh and far more gastric disturbance. It is often said that the visible pathological damage to the brain and its membranes is more seen from a long-continued and excessive use of alcohol than of opium. I am not in a position to speak dogmatically on this point, but C. D.'s case does not point that way. If the membranes are less damaged, assuredly the cortex is more so, whether our means of investigation enable us to prove this under the microscope or not. A damaged function implies a damaged organ, and the cases A. B. and C. D. prove both. The sort of damage to the motor functions of the cortex implied in C. D.'s convulsions and impaired articulation has not been much referred to by authors on the subject. It is common for an alcoholic case to simulate general paralysis in its grandiose delusions, its convulsions, its tremulous speech; but this has seldom been recorded of opium before. Such extreme cases enable us to estimate the damaging effect of the lesser doses taken for shorter times.

The modern habit of the hypodermic use of morphia is more subtle and dominant than even its use by the mouth. The effects are more instant, and the stomach and gastric mucous membranes seem to suffer somewhat less. I lately saw a lady about 30, who had arduous professional work to do, and had a year or two ago an accident which left her subject to severe neuralgic pains. To enable her to subdue this, and so to do her work, she had prescribed for her the hypodermic use of morphia. This had the effect desired, but it had to be continued, and within a year a habit was established, and a craving that was masterful and required a very strong exercise of will to subdue it, was set up. All fatigue, all pain, and every state of body that implied nerve exhaustion, abnormal nervous depression, irritability, instability, or hyperæsthesia, suggested and seemed to demand morphia as a remedy and a calmative. This was unfortunately yielded to, and the more the remedy was used the more regular grew the occasion for its use. Intellectually she most fully realized the danger she was in, but she had not the courage to stop the drug at once and for ever. She was only taking about two grains a day, but the taking even this, or the leaving it off, meant all the difference between happiness and intense misery. I counselled an absolute and immediate

stoppage of the drug, the placing herself with a companion on board ship on a long voyage, or a visit to Sutherlandshire, ten miles from a druggist, with life in the fresh air, no intellectual work, and no avoidable worry, taking some bromide and wine for a fortnight as a temporary sedative to the brain. I have reason to think that my advice was taken, and was successful. The case impressed me more than any case I ever saw with the subtile psychology that lies in the use of pain-destroying drugs. I never felt before so keenly the responsibility that ever lies on him who prescribes them. I never asked the question with more sadness, "Are there not worse things than pain?" for to deaden pain in this case had been to all but wreck a life. There was no nervous heredity, no natural infirmity of will, and no lack of high moral qualities in this case. A finer all round specimen of womanhood of the nineteenth century intellectual and forceful type, it would have been difficult to find; and here she was almost helpless in the grasp of a craving that would certainly ruin all her high mental qualities if it were long gratified.

As to morphinomania, the following is a summary of what I have said:—

1. The habitual use of opium is in nine cases out of ten most injurious to the higher mental powers, and more especially impairs the volition.

2. The dose has to be steadily increased till such an amount is taken as tends to impair nutrition and the trophic energy of the brain, to disturb the appetite and the whole alimentary system, and ultimately to destroy the power of natural sleep.

3. The craving set up by such excessive use of opium is one of the most persistent, intense, and difficult to resist of any known morbid cravings. It has no remission or periodicity in it.

4. The nervous constitution of the patient has very much to do with the inception of the habit. It may be said generally that persons of the nervous diathesis, of nervous or insane or drinkers' heredity, all persons who feel and dread pain excessively, and most "excitable" persons, are specially liable to acquire the craving.

5. Given or taken for insomnia or to relieve pain, is the origin of most cases of morphinomania.

6. It behoves medical men to take the constitution of each individual patient carefully into consideration before opium is prescribed, and to ask, "Is there any danger of a habit being set up?"

7. As to the treatment of morphinomania, I have little hesitation in laying down its principles:—Help from without in the shape of skilled strong nursing; control and never remitting companionship are needed in almost all cases. It is better and safer to undergo the short Hades of absolute stoppage than the more prolonged purgatory of tapering off. While this is being gone through, use the bromides, wines, every form of beef and peptonoids that the stomach or the rectum will retain; bismuth,

ice, and counter irritation for the gastric pain and vomiting; digitalis and strophanthus for the weak and irregular heart's action. I should now use paraldehyde or sulphonal to get some sleep for a few nights, but I should not go on for long with them. If there is emaciation, I should try Dr Playfair's recommendation of massage,[1] though I suspect some of the good effect in his cases resulted from the control of the massage nurses, and the taking up of the patient's mind by the details of the process, and the assertions that would be dogmatically dinned into their ears as to its unfailing efficacy. The great things to aim at are good nerve tone, firm muscles, a brown sunburnt skin, steady occupation, as much fat as can be put on, a sound moral sense all round, strengthened inhibition, and a dominating conviction that the drug is poison in any dose, and under any possible circumstances whatever.

Chloralism.—Chloralism for a time threatened to become a rife craving, but chloral is becoming less liked and used than it was at one time, and I believe will be numbered largely with the superseded drugs. Dr Wilson of Philadelphia thus describes the symptoms produced by chloral used continuously:[2]—"There is general and often serious derangement of health without adequate discernible cause; the appetite is poor and capricious, the digestion imperfect and slowly performed; jaundice of variable intensity, often slight, sometimes severe, occurs in many cases; the bowels are not as a rule constipated; dyspnœa, upon slight exertion, is, in the absence of pulmonary, cardiac, or renal trouble, of diagnostic importance. The circulation is, as a rule, feeble; disorders of the skin, persistent or easily-provoked; conjunctivitis, and a tendency to hæmorrhages to mucous surfaces, also occur. When with these symptoms, irregularly grouped as they are apt to be, we find a tendency to recurring attacks of cerebral congestion, persistent or frequently recurring headaches, and the evidences of sub-acute peripheral neuritis, the abuse of chloral may be suspected. The pains in the limbs are almost characteristic; they are acute and persistent, neuralgic in character, but not localized to special nerve tracts; they are more common in the legs than in the arms, and occupy by preference the calves of the legs and the flexor muscles between the elbows and wrists; they do not implicate the joints, are not aggravated to any great extent by treatment, and are often temporarily relieved by gentle friction. The pains of chloralism have been described as though produced by encircling bands above the wrists and ankles. The suspicion of addiction to chloral becomes the more probable if there be a history of prolonged, painful illness, or prolonged insomnia in the past. The suspicion is confirmed if we remember at the same time perversion of the moral nature, enfeeblement

[1] *Journal of Mental Science*, July 1889.
[2] *The Medical and Surgical Reporter*, 11th May 1889.

of the wits and of the intellectual forces." Chloral differs from the other drugs, the craving for which we are considering, and from alcohol, in this essentially, that its effect is not stimulant in any dose, small or large, but simply and only sedative and hypnotic. It creates no ideal state of mind, it simply produces self-forgetfulness and sleep. A craving for it, or a habit of it, is therefore a strange and altogether abnormal thing. Why any human being should crave a drug, whose taste is disagreeable, to produce sleep in excess of the normal time, is entirely inexplicable on any hypothesis except that which attributes an essential affinity between the brain and nervous action, not only to alcohol, but to all the class of stimulant, sedative, and hypnotic drugs.

The following was a marked case of Chloralism ending in insanity:—

L. M.,[1] æt. 47. Father had died of kidney disease at an advanced age; mother "nervous," and died of paralysis; two sisters are neurotic and eccentric; a brother is a confirmed dipsomaniac. Patient had been teetotal for ten years. About seven years before admission into the asylum he had been ordered a mixture of chloral and bromide to relieve a spasmodic retention of urine. He gradually got into a habit of taking a drachm of each of these drugs daily. This continued for six years with no "apparent" bad effects. The patient was, however, aware that a craving had been thus roused which he could not at will control. The sedative effect was craved apart from the medicinal action, the necessity for which had ceased. At the end of the six years he took an attack of bronchitis, and was ordered, he says, this time chloral in 60-grain doses for the breathlessness. The bronchitis was soon recovered from, but the chloral was continued on account of its lethe-like qualities; for he was depressed, and had business worries, and sought oblivion in the effects of the drug. He soon began to take 180 grains a day regularly. While this stupefied him greatly, he was able for four years to attend to business in a way. He carried the bottle of chloral solution in his pocket, and took some every hour. It produced a feeling of quiet for an hour. He took only a dose of 10 grains at a time during the day, and a larger one at night to produce actual sleep. If he awoke he took another dose. During the day sleep was not induced, but a soothed feeling and a dreamy sense of comfort and *bien être* which drowned his cares. The general effect seemed to be like the sedative effect of opium. He had no actual depression as the result of the drug, but a feeling of lassitude, nervous debility and exhaustion, inaptitude for work, and incapacity for thought, as the effect of each dose passed off. He got more irritable as time went on, and for all his bad feelings chloral was his panacea. His digestion got weak, his appetite poor; his food lost its relish, and he took an

[1] This case was fully reported in this Journal by Mr Inglis in the September number 1877.

insufficient quantity of it. Nausea, sour eructations, and vomiting, and a furred tongue, showed how deeply his alimentary organs and their innervations were affected, as well as the fact that he was constipated, had piles, and the fæces were hard and white. Slight jaundice showed that the liver was also affected. By-and-by a moral and affective change took place in him. His character became untruthful and deceitful, and his love for his wife and children changed to dislike and suspicion. He was at times so passionate that he threatened violence to his wife. He would leave the house and wander aimlessly about the streets. He neglected his duty and his business.

Three weeks before admission he stopped the chloral and took to whisky in quantities sufficient to keep himself muddled, but not drunk. In a day or two after beginning the whisky, he had diarrhœa and a great discharge of blood from the bowels. In a few days he became violent and suicidal. Then he got into a condition which resembled delirium tremens, with hallucinations of hearing and sight of a frightful kind. He could not sleep. The next stage was convulsions of a severe kind occurring thrice at intervals of four hours. Then there followed stupor, and then raving delirium, for which he was at first sent to the Hospital, and thence to the Asylum.

On admission he looked old, broken down, anæmic, unable to speak aloud, or to walk. Mentally he was enfeebled, and also slightly depressed. His power of attention was gone, and his memory also. Had vague, fleeting delusions, such as, that the Queen took an interest in him. There was persistent muscular tremor, and none of the finer acts of co-ordination, such as writing or whistling, or articulating difficult words, could be done at all. The pupils were equal, dilated, irregular at margins, and insensible to light. The right side of the face was paralysed, the spinal reflexes were dulled, and sensation was hyperæsthetic, but he had no pain of any sort. Bowels were constipated, fæces hard and white, tongue white and coated. Temperature was 97°.

The patient had the most intense craving for soporifics, but none were given him. After a few nights of insomnia he slept. He got strychnine, tonics, and gentle aperients; exercise in the fresh air, and constant supervision, and was subjected to a regular regime. He gained in flesh and appearance very fast, and was quite well in three months.

The alcohol he had taken for a fortnight coming on the back of the long-continued use of chloral may have accentuated and complicated the symptoms of the chloralism to some extent, but there can be no doubt that the chief symptoms present were those resulting from the use of chloral. It is clear that it sets up a diseased craving like morphia and alcohol, and that the power of controlling this is also paralysed by the drug. The symptoms present are alimentary as well as nervous—more so than in the case of alcohol, opium, or cocaine. The way in which the symptoms of a ten years'

abuse of the drug was recovered from in three months shows clearly that chloral is far less permanently hurtful to the nervous centres than alcohol or opium. The wonder to me is that it had not weakened his heart's action more, and so killed him.

Cocainism.—The newest born of all the drug cravings is that for cocaine. It required two of the latest discoveries of science—the hypodermic needle and the extraction of cocaine from the coca-leaf—combined, to create this new vice-disease. So far as I have seen or heard of, cocaine is now always hypodermically taken to get its intoxicating effects. But, historically, its use as a narcotic intoxicant is as old as that of distilled alcohol, for the Spaniards found its virtues held in high esteem by the Peruvians in the fifteenth century. The plant was reserved for the use of the Incas, the coca plantations being owned by the State. The habit, when formed, reduced its victim to a pitiable condition. "Its first effect is to weaken digestion. To loss of appetite succeeds an inordinate desire for animal food. Then dropsical swellings and boils come on; the breath is fœtid, the lips pale, and the teeth are discoloured; the eyes are dim and sunken, and the skin becomes of a yellow tinge."[1] It was thought to be strength-giving and fatigue-resisting, neither hunger nor thirst being felt while it is being chewed.

This is not the place to describe the physiological effects of single doses, so I shall proceed to relate two cases of excessive and continuous use.

N. O., a young professional man of intellectual attainments far above the average, and of very industrious habits. He was of the nervous diathesis, there was a strong heredity towards mental disease and paralysis, and some history of phthisis also. He took to the use of cocaine eighteen months before I made his acquaintance, using it at first sparingly for its stimulant effect to enable him to do his work. He was in weak health, and had some of the preliminary symptoms of phthisis, being thin, and run down nervously. He says that it did not, like opium, excite brilliant fancies or produce a conscious excitement. He at first gained in flesh under its use, and did his work well; but he had rapidly to increase the dose to get the same effects. Beginning with half a grain, he soon had to take more and more at each hypodermic injection, till in six months he was using forty-five grains at least a day, and probably much more. From what I could make out, he often took injections of ten grains at a time. Rapid mental and moral deterioration followed after three months' abuse of the drug to this extent. He got dirty in his personal habits, eccentric, neglectful of duty, prevaricating when excuses for his conduct had to be made, and very sleepless, often sitting up all night. The next stage in his downward course was that of actual insanity, whose symptoms were hal-

[1] *Anæsthetics*, by George Foy, p. 83.

lucinations of vision and loss of memory. He imagined that people talked about him in the streets, and accused him of crimes. He was impulsive, and could scarcely restrain himself from assaulting his imaginary tormentors, with whom he remonstrated on the street. His memory was at times greatly impaired. He had no power to do any work; he did strange, motiveless acts. Throughout all this there was a half-consciousness that his brain was acting morbidly, and that his false beliefs might be delusions.

When I saw him first he was considerably excited; his memory was fairly good; he was quite coherent; and spoke of his "delusions" freely, as only half believed in. He was pale, his skin muddy, his pupils widely dilated, his nutrition and muscularity fair. He was utterly dirty and untidy—how all the manias take the outward polish off a gentleman! His pulse was good and regular, and was for a time 98. His trunk and limbs were scarred with the hypodermic needle. I gave him within the first forty-eight hours of treatment two hypodermic injections of cocaine of 1 grain each, and then stopped it entirely, giving him liquid food, wine, and plenty of strong tea and coffee, which he found a sort of substitute for the cocaine. He was most miserable, and begged for the drug for about a week, but in that time he had got over the effects of stopping its use. He was then sleeping well, eating well, and walking out in the open air a great deal. He became cheerful, and seemed to acquiesce in the necessary restrictions on his liberty implied in the treatment. But it is certain that he could no more of his own accord have carried out that treatment than he could have gone to the moon. Mentally he showed to a large extent the dipsomaniac's condition. He was plausible, full of promises, cocksure of not again taking to the drug, and suave towards those who had the control of him to a suspicious degree. But the strength of his resolution and the intensity of his craving were soon tested by his taking secretly to his old habit on the first opportunity he had. Every kind of excuse and evasion was practised. He showed that his moral control was utterly weakened, though his physical health was excellent, and he gained two stones in weight in a month. It was quite clear that to give any such case a proper chance of cure the law should allow him to be detained under supervision and enforced abstinence from the drug for a year after every symptom of intellectual disturbance had passed away. To gauge the strength of the craving and the power of the control is simply impossible. One can only apply a rough, common sense rule in regard to the time the highest brain functions are likely to take to recover their normal working, and then the only real test has to come, viz., the actual enjoyment of full liberty of action as an ordinary member of society.

The next case in all its essential features was like the last, but longer and more aggravated.

P. R., also a young professional man, cheerful, fairly indus-

trious, and steady. Heredity towards paralysis and phthisis on mother's side. Three and a half years before I saw him he had begun to take morphia hypodermically for the relief of pain, and continued this more or less, not apparently continuously, till two years ago, when he began to use cocaine to cure the morphinomania which he felt was mastering him. The cure soon was worse than the disease, for he continued the use of cocaine regularly. The result of each dose was at first exhilaration, followed by depression, which for its remedy needed another dose. The morphia habit had caused moral deterioration, but the cocaine habit accentuated this tenfold. Want of system, actual disorder, irregular habits generally, want of attention to ordinary family and social duties, and untruthful excuses, all followed each other rapidly within three months of beginning the cocaine habit. At the end of that time his mental disintegration proceeded deeper, and delusions of suspicion developed themselves, accompanied by hallucinations of sight and hearing. He lost the sense of time, and had not the rudiments of punctuality, even as to important matters. His weakened volition especially showed itself in procrastination, and his weakened control in extreme irritability. His next delusion was clearly suggested by the paræsthesia caused by the drug. He imagined he had a skin disease. He affirmed he felt sensations in the skin that could only be caused by living germs. He used medical means to cure the imaginary skin trouble. He often mixed the cocaine with morphia, and has lately taken 90 grains of cocaine and 20 grains of morphia each day, so far as can be ascertained. His irritability, his utter disregard of family duties, his untruthfulness, his sacrifice of everything and anything to get cocaine, his passing as an ill-used man when efforts had been made to restrain him, had gone the length of insanity. His utter want of system is best illustrated by the fact, that for two years before I saw him he had never sat down to a regular meal.

When I first saw him he was anæmic, weak, and covered with sores from the use of the needle. He had at last been driven, more apparently by coming to the end of his money to buy more cocaine, to place himself under care. Mentally and morally he was broken down, retaining enough of obstinacy, unreason, and discontent to be a most troubl ome and disagreeable patient. I gave him a few small hypodermic injections of cocaine for the first forty-eight hours, and then gave a little morphia, some sulphonal, bromide of ammonium, brandy, tea, and coffee. He complained of all sorts of pains, evidently to get morphia or cocaine. He was restless, fretful, irritable, and during the night almost maniacal. He was, as he said, "in hell" during the night. He improved much in a fortnight, and then a change of residence was tried, still under control, and he got over all the symptoms of his disease in a few months. The last accounts I had of him are good.

Looking at cocainism generally, and comparing the effects of

cocaine on the higher functions of the brain with those of alcohol, opium, and chloral, one sees that they are more distinctly in the direction of intellectual perversion, of technical insanity in fact while they last, but that they are less enduringly hurtful and sooner recovered from than any of the other three drugs, except, perhaps, chloral. Hallucinations of sight and hearing, paræsthesia, especially of the skin, and insane suspicions, are constant accompaniments of cocainism. The moral disintegration of a man seems to be the same in all those diseases; but the present intensity of the craving for cocaine is perhaps greater than for any other narcotic or stimulant whatsoever.

There are cases now on record where the drug, from being used in the most legitimate way as an external application to subdue the pains caused by skin eruptions and sores, has set up a craving for its continuous use and for its effects on the higher brain functions quite apart from the analgesic effect for which it was employed.

The chief facts about cocaine in relation to cocainism may be thus summarized:—

1. It is the acutest and the most absolute destroyer of inhibition and of the moral sense generally that we yet know.
2. The morbid craving is very intense and control is absent.
3. The dose requires to be increased faster than that of any such drug to get the same effect.
4. The delirium and hallucinations of all the senses of single doses become chronic in cocainism.
5. Its immediate effects are more transient than any other such drug, but this does not apply to the craving set up.
6. The treatment of cocainism consists in outside control of the patient, in stopping the drug at once, in careful watching—I should not trust a patient under treatment as regards suicide for the first week—nursing, the use of every sort of food that will keep up the strength, and of the bromide of ammonium, brandy or wine, tea and coffee, and possibly a hypnotic, like paraldehyde or sulphonal, for two or three nights at least.
7. A patient suffering from cocainism can usually be certified as insane so far as the presence of delusions are concerned, but he gets over these so soon, and yet is so far from the real cure, that certification and sending to an asylum is not a satisfactory process altogether. We need cocainism included in any special legislation for dipsomania.

(To be continued.)

II.—CASES OF OVARIOTOMY.

By Skene Keith, M.B., F.R.C.S. Ed.

On 18th February 1889 I performed ovariotomy on a case which presented several features of interest.

The lady was 48 years of age, and, although she had been ailing

for some six or eight months, had not really become ill until the month of December of the previous year. She was living in the country at that time, and was treated by various drugs for sickness and vomiting, due, it was supposed, to derangement of the liver. As there was not any improvement, she went home to Newcastle, and consulted Dr Wilson of Gateshead on the 8th February. A tumour, rising from the pelvis and reaching half-way up to the umbilicus, was at once discovered, and arrangements were being made for sending the lady to town, when, on the 13th of the month, she was seized with a sudden attack of vomiting, followed by most alarming collapse. On examination, it was found that the outline of the tumour could not be defined, showing that there had been a rupture at some point. Next day a considerable quantity of free fluid was discovered in the abdomen. It increased rapidly; and as the strength, never good, was fast going away, Dr Gibb was asked to see the patient, to consult as to the advisability or otherwise of the move to London. On account of the great feebleness, it was thought that the best chance of recovery was to be obtained by having the operation performed without running the risk of a long railway journey. Dr Wilson therefore telegraphed on Saturday evening, asking either my father or myself to come to operate as soon as possible. Dr Keith had left three days before to see a patient in Mexico, so I went north on Sunday night, and saw the patient with Dr Wilson and Dr Gibb early on Monday morning.

The state of affairs was as follows:—The patient looked ill, and the pulse was small and feeble. The abdomen was considerably distended, and was dull on percussion, except on the right side. On making pressure and percussing deeply, no clear note was elicited, and movement of the patient did not make any change. The tumour could be felt from the vagina only, as its upper limit in the abdomen was masked by the ascitic fluid.

Dr Gibb was unable to be present at the operation, but brought Dr Campbell for the ether. Dr Wilson kindly assisted. On opening the abdomen, about eighteen pints of ordinary straw-coloured ascitic fluid came away, practically the whole of this having been thrown out within a week. The ascending colon was adherent to the tumour, and the clear note in the right side, even when the patient lay on that side, was thus explained. The tumour itself was very friable, and had to be almost entirely enucleated out of the broad ligament. Bleeding was very free, and was difficult to arrest on account of the softness of the tissues. The operation was consequently a very long one, lasting one hour and ten minutes. A drainage-tube was left in, and the patient was put back to bed looking wonderfully well. For ten days the lady was very ill, and gave Dr Wilson a great deal of anxiety; and the convalescence was prolonged by two attacks of bronchitis.

The rapid accumulation of the ascitic fluid and the fixing of the

Part First.

ORIGINAL COMMUNICATIONS.

I. — DISEASED CRAVINGS AND PARALYSED CONTROL: DIPSOMANIA; MORPHINOMANIA; CHLORALISM; COCAINISM.

By T. S. Clouston, M.D., F.R.C.P.E., Physician-Superintendent, Royal Edinburgh Asylum for the Insane; Lecturer on Mental Diseases, Edinburgh University.

(*Concluded from page* 809.)

A physician in practice meets with many cases in which there are neither cravings for drink, for morphia, for chloral, nor for cocaine, but yet where morbid and hurtful cravings exist the same as those in their essential nature, but with different objects. Accompanying such cravings, and evidently the results of the same morbid brain condition, we find the paralysed inhibition that existed in the "diseases" I have shortly described in the former articles. As I endeavoured to point out in the first of these articles, we must not look on any of these "manias" as a distinct disease by itself, but rather as an accidental variety of the same great class of *Inhibitory Neuroses*. Whether a patient is a dipsomaniac or a morphinomaniac may be the mere accident of whether he had been exposed to the temptation to drink in youth, or had had morphia administered to him for sleeplessness or pain. I am quite sure I have seen very many patients who would have become either dipsomaniacs or morphinomaniacs, and I have seen many who at different times of their career had been both, or were subject to a vague but overmastering morbid craving which either drink or morphia satisfied, and they took the one that was handy at the time. We saw that the chloralist L. M. (p. 805) took to whisky for a short time before his final breakdown, and that the cocainist P. R. (p. 808) took morphia as well as cocaine. Nothing, in fact, is more common than for mixed cravings to exist, and few patients labouring under any of these "manias" will not, when the supply of their special drug is cut off, take to any of the others they can get at the time. All who have had to do with dipsomaniacs know that—failing whisky—chloroform, ether, turpentine, or anything else of that nature, is eagerly sought for and taken. I have heard of two cases where a paraldehyde craving was established, in spite of its bad taste and odour, as the result of its being given for insomnia; and I have now a lady patient who, when run

down in nerve has on various occasions had cravings for wine, whisky, eau de Cologne, bromide of potassium, and chloral, all of which she has taken to excess, and now is developing a craving for the sulphonal which I give her in 10-grain doses for insomnia.

We must look beyond the intoxicants to the brain that craves intoxication. There are many other things that men crave besides the intoxicants mentioned, and they often crave them morbidly and lose their power of inhibition over their desires. The fiercest conscious craving of higher animal life, after that for food—and not always after that—is the sexual nisus in the male. This often enough becomes morbid in strength, and passes from under control, while it also becomes in some cases perverted in its object and transformed in innumerable morbid ways. It would take a treatise to elucidate even a tithe of what we at present know of morbid reproductive craving and loss of sexual control. Apart from technical insanity, the physiological psychologist who tackles this unsavoury but most interesting subject has a great work before him. To say that the normal reproductive craving has created a vast amount of a great literature and poetry; that it has founded sects, religious and irreligious; that it has been the occasion of fierce wars, and that it well-nigh dominates humanity in its early ages, is simply to state facts. No wonder that this craving becomes diseased in unstable subjects. No wonder it is mixed up in the dipsomania of adolescence with the drink craving, whose early bouts are often indulged in the brothel. Little wonder that it seeks objects and outlets quite apart from its legitimate object of reproducing the species. The gratification of this craving afforded by the promiscuous sexual intercourse of prostitution has had many defenders or apologists, chief of whom of recent years is Mr Lecky, in a well-known passage of great eloquence and power. If we regard prostitution, not from the social point of view, but from that of inhibition and craving, I think we cannot but conclude that its effects are evil. It tempts where no temptation is needed; it excites cravings where they are strong enough already; it diminishes control where control is hard enough to practise. That surely breaks a law of Nature which gratifies a physiological craving apart from the natural object of it. That which entirely parts sexual enjoyment and the reproduction of the species cannot surely be defended on physiological principles. It is certain that the cases of complete loss of control over sexual desire, which are common enough, are frequently rendered uncontrollable through the brothel; though they occur, too, through evil heredity, through want of normal outlets for the social instincts, and through evil habits other than sexual. Many of them also show loss of control over the drink craving. There is no physician in city practice but knows dozens of them.

Masturbation is an evil practice, the craving for which becomes often enough uncontrollable. Its degraded subjects say they cannot

resist it, that it paralyses their volition, dominates their imagination, and often becomes a sort of automatic habit, performed only half-consciously. It is almost always set up in or before adolescence, and I have times without number heard strong men of mature age, whose self-control was in no other respect impaired, deplore their weakness of will in giving way to this habit. It unquestionably has the frequent effect of lessening or almost abolishing the gratification from sexual intercourse and diminishing the desire for it. In the early stages of many forms of insanity it is common enough for the married of both sexes to gratify the sexual nisus by masturbation instead of intercourse. It affects, too, injuriously the whole of the social instincts, diminishes their pleasures, and sometimes perverts their objects. The following case is a very typical one, showing how volition is paralysed by indulgence in this vice :—

A. B. C., æt. 20, of a nervous disposition, small in size, and of the nervous diathesis ; began to masturbate five years ago, but did his professional work, and passed his examination. He went to live in lodgings alone. He now thinks that if he had gone to board in a cheerful family he might have been enabled to lead a more natural life. As it was, he began all right, but found that continuous study muddled his brain, made him feel silly and low-spirited, and seemed to paralyse his volition and sense of duty, and he took to masturbation badly when in that exhausted condition, sometimes without even having any very strong craving. If he went out in that state, and met a bad companion, he would go and get drunk and go with prostitutes, sometimes even without any sort of strong craving for drink or women. When his brain got exhausted in its energy from any cause, his sexual desire or that for drink overcame him, he having then no will of his own to resist either a desire from within or a temptation from without. When he went home for his holidays he only practised masturbation twice in four months, and he otherwise lived a moral and natural life. He is now all the time depressed, unsocial, irresolute, and quite unfit for intellectual work. His pulse is weak, his extremities cold, his pupils dilated ; he is thin, and his muscles flabby ; he looks wanting in energy. I recommended his leaving town at once and going to the country and living a farmer's life for a year, eating unstimulating diet, working, walking, fishing, shooting, riding, and cultivating earnestly control in all forms and the sense of duty, always making a programme for his day's work and amusement, and carrying it out resolutely. He had tried local treatment, bougie passing, etc., for the masturbation, with no avail whatever.

To treat of the loss of control and diseased sexual cravings, met with sometimes in cases who have taken to the crimes of sodomy, intercourse with children, and bestiality, is almost impossible even in a medical journal, that may come into the hands of lay readers. This is quite certain, that such perversions of the sexual nisus exceed even masturbation in the utter wreck of control and in the

brutal cravings they set up. There are well-authenticated cases on record, and I myself have met with several, in which there seemed to be a congenital perversion of the sexual desire and a congenital non-development of control over such perverted cravings, so that from the earliest sexual age, in one man, boys excited the sexual appetite instead of girls, and in another, young immature girls did so, while women of full maturity were positively repulsive, and her presence could scarcely be even tolerated when he was alone with his young and beautiful wife after marriage. Such unnatural perversions and cravings are always accompanied by loss of normal inhibition over them.

The last kind of craving which is essentially connected with the reproductive function is that where the sexual nisus is transformed entirely, and becomes a homicidal or a suicidal uncontrollable impulse. I think few can doubt that the murders of "Jack the Ripper" in Whitechapel last year came under that category; and yet it seems almost a contradiction in terms to speak of that monster and a morbid lack of control, for if cunning, scheming, and extraordinary wisdom in the selection of the time and place for his crimes implied control, as it did of one kind, then he had it far above ordinary humanity. Still he had evidently a morbid craving which he certainly did not control, and which all analogous cases would seem to prove was a perversion of the sexual instinct.

I once had a patient under my care who before he became actually insane, and afterwards as one of the phases of his insanity, exhibited many curious symptoms illustrative of paralysed control and diseased craving. When doing his ordinary work previous to his first attack, he was often conscious of a sudden loss of control over his actions, so that he did not know what he might do next or might not do. If he then saw glass he was tempted to smash it; if he saw a person whom he was not fond of he could not feel in the least sure he might not assault him; if he saw anything he liked he could scarcely resist appropriating or buying it. He bought at various times full Highland dress, jewelry, clothes, and trunks, which he did not want and never used; at the same time he had the feeling that he could not then do many ordinary acts which his duty called on him to do. He used to shut himself in his room when he felt these "moods" on him, locking the door, and often trembling with fear and actually weeping lest he should do any act that would be ridiculous or criminal, and bring on him public disgrace. After this state developed into insanity, one phase of his malady was to stand stock still for hours, never speaking; after this had passed off he would tell me that no power within or without him could at these times have stirred up his volition, and that he could have seen his dearest friend killed without having the power to move a muscle or speak a word to save him. Then the cravings and morbid impulses would get the upper hand, and he would drink to excess, or assault those near him,

or break things, or do indecent or improper sexual acts without the smallest power of controlling his conduct. The case illustrates the clinical fact that insane inaction is commonly very near insane impulse, the one being the complement of the other.

The following case was one which illustrated the gradual loss of control in several directions without intellectual impairment; this loss of control being an aggravation of the patient's natural temperament, till the point was reached at which his conduct indicated disease, and medical means had to be taken for the patient's good and recovery:—T. U. V. had been a quick boy, and a very bright, witty, social, and vivacious youth. There seemed to be no mental disease in the family, but some eccentricity; and drunkenness had prevailed in the grandparents' generation. All the family were extraordinarily thin; they had no reserve capital in the shape of fat, even when well. He too had always been thin. His two marked peculiarities from boyhood had been sleeplessness and a disinclination to face difficulties, to do disagreeable things, or to carry out things contrary to his inclination. He was, in fact, morbidly "self-indulgent." He was perfectly correct in his life, both as regards masturbation and sexual intercourse,—in fact, he seems to have had less than the normal sexual nisus for his age. He was æsthetic, fond of literature and poetry, and quick at business. About 20 he began to smoke, and soon smoked to excess. By-and-by after some years he would also drink too much at times, taking beer chiefly. He drank in an odd way; he seemed to have not so much a craving for it in excess as a want of power to stop when he began to drink in company. He would go on drinking in a sort of automatic way, and the same was the case with smoking to a certain extent. His habits began to be eccentric, especially in the matter of getting up in the morning. He would not go to business for days. Duty seemed gradually to lose its power to influence him, sometimes he would lie in bed till the afternoon for days at a time. When drinking, his appetite would evidently disappear, and he would take almost no food for days. He knew quite well he needed it; and if any one applied pressure on him to eat he would do so freely. There happened to be no one with influence over him to get him to live in a physiological way, so he was allowed "to slide" into the most irregular mode of living. For two years he smoked 300 cigarettes a week and four ounces of tobacco besides. He seems to have almost ceased to sleep. He has lately only gone to business in spurts, when he would do a lot of work, and do it very well; he would lie in bed till towards evening, then go out to some place of amusement for a time, and have a good deal of beer, and return home very late and read novels, and wander about his room all night. He got gradually thinner; he had tobacco amaurosis, his tongue got foul, and his circulation very feeble indeed. His volitional power was more and more impaired, so that he became almost an automaton, doing what he craved at the moment,

going and doing what he had begun by a sort of passive habit, resisting nothing, originating nothing. Needed at business every day, he would not turn up at all, or only very late, or occasionally. If he ever did get up in the morning, it was commonly on a holiday when no business was doing, and then he professed himself ready to begin work; all this time he admitted the absurdity of his conduct, sometimes deplored it, but seemed quite unable to mend it so long as he was his own master. At last things got so bad that there was a real danger of his dying from exhaustion. Once he took no food for three days, just because he felt no appetite. Some one who had influence with him told him to begin eating, and he would scarcely stop. Once he stopped tobacco and drink for three weeks because his doctor vigorously persuaded him to doing so. He at last so strongly recognised the fact of his own volition being paralysed, that he put himself under the rule of his doctor. Massage with suitable diet was recommended for six weeks to put on flesh; then that he was to go and stay with a medical man whose duty was to take the control of his life, restore normal habits, and cultivate his power of control. All this was done with his intellectual assent, but passively so far as his will was concerned. He would certainly have died of the consequences of his paralysed volition and morbid cravings if let alone.

In the stage of brain disturbance preliminary to actual insanity, it is most common for patients to be conscious of a diminishing power of control. They have desires to scream, to run, to talk loud, to laugh, to swear, to be unreasonable, to annoy others, to thwart, to strike, or to pinch, which they either cannot control or have the utmost difficulty in checking. I had a lady patient once who used to pinch her husband and children black and blue when in this stage. Some patients who never had any sort of desire for drink will take it to excess in this condition. I have a lady patient suffering from a variety of melancholia in which her reasoning power is all but unimpaired, but who has the most terrible craving to destroy her life, so that she begs her hands may be tied, and often gets her fellow-patients to tie her wrists together with a tape or a handkerchief. I had another very interesting case of a lady whose psychological history was shortly the following:—She was a handsome, gay girl, whose mental constitution was such that she always was fanciful, and had a difficulty in distinguishing the subjective from the objective. She was, in fact, a physiological liar. She married young, and had to change her whole mode of life, and breathe a different mental and moral atmosphere. She had children fast. In two years she had become a confirmed dipsomaniac, not as, I believe, a vicious drunkard at all, but she laboured under a true disease—a paralysed control with a very active craving. She took the drink to strengthen her control and her resolution, and to enable her to do her duty. The usual moral twist showed itself, cunning and deception being freely practised.

How can a lady moving in good society tell the truth if she drinks? Her maternal instincts were also lessened. After some years the drink craving ceased, but she then showed marked intellectual insanity. She had delusions of many kinds, and her conduct became markedly peculiar. I have myself little doubt that while in the dipsomaniacal stage of her brain disease there would have been discovered some intellectual damage as well as the inhibitory and the affective symptoms, if her state had been closely analysed. But in the stage that followed the dipsomania, the intellectual power was clearly perverted, and she had hallucinations of sight and hearing of a peculiar kind, while her affective faculties were impaired in a marked degree. The sequence of symptoms from first to last was, to my mind, an example of a natural evolution of disease in a certain quality of brain, the weakest point of which from the first was its inhibitory power. The stages were the following:—The first childhood, with uncontrolled and very strong imaginative faculties, so that the real and the imagined were not clearly distinguished. The second girlhood, during which gaieties of all sorts were the whole aim and object of life, the moral or controlling faculties not being then developed or properly evolved at the time they should have been. The third, that of early married life, during which, for outward appearance' sake and against the grain, duty was taken to, not because the sense of it was felt. There was control then exercised, but its sources were not deep or secure. It needed some outside crutch. The fourth stage was that of dipsomania, when an alcoholic stimulant was taken to and relied on to resist nerve weariness, and to give strength for the unequal fight she was fighting. The processes of gestation and parturition would accentuate the exhaustion, and by their reflex effect on an unstable brain help to diminish its inhibitory power. The fifth stage was that of intellectual disturbance, consisting of a belief that she was "acted on," and made to do things by others against her will, and a tendency to mistake her thoughts for words spoken by others. The fact is she had then no "will" left, and no power of distinguishing the subjective from the objective. The most interesting part of the fifth stage is that it was accompanied by a loss of any craving for alcoholic stimulant. Her teaching, her upbringing, her recollection of the drinking part of her life, all united in bringing the evil of her conduct before her, and these accusing thoughts and feelings appeared to her as accusations by voices heard from without. The whole case is one full of instruction to the medico-psychologist. It shows for one thing very clearly, that morals must have a brain basis, just as technical sanity must have. It also shows the thin border line between paralysed control and intellectual delusions in certain qualities of brain. I think it will be generally conceded that an intense realistic imagination is apt in many cases to be conjoined with small power of control. Perhaps this is apt to be the weak point

in the artistic temperament in all its varieties. The law of compensation comes in here as everywhere. If a man has one good quality strongly, he is, I fear, apt also to have some weak points to make up for it.

There are some cases where the loss of control is in one direction only, while it exists in a high degree in all others. The typical dipsomaniac is commonly a "poor creature" all along the line. But it is certain that an irresistible craving to gamble, for instance, may exist in great natures, and may coincide with remarkable intellectual qualities, with the highest sense of honour, and with unusual power of control in all other respects. The stories of so many of the great statesmen of last century illustrating this cannot all be unfounded. The craving to gamble to excess seems to be one to which all races, from the highest to the lowest, are subject; and all men, from the philosopher down to the imbecile. In a way it is a nobler vice than any of the cravings we have been considering. It is more intellectual and less animal than any of these. Many persons are so constituted in brain that they must have some "excitement" in some shape or other. In fact, all sound and normal brains crave stimulants to some extent. It is a law of their existence. The question is always—What is the proper physiological and healthy stimulus to be employed to rouse the normal excitement? Is it to be social intercourse? or happy family life? or some reasonable amount of gaiety not too often repeated? or political activity? or rousing religious services? The excitement and stimulus of being in love must come at some period and in some form to all healthily constituted youths and maidens. It is perfectly possible, in the case of persons whose inhibition is weak, for any one of these harmless and physiological stimuli to become a strong craving and to run to excess, so that control becomes difficult. It is very common in the early stages of simple mania, which is usually characterized by a partially paralysed control, for patients to show this by doing perfectly legitimate and simple social acts to excess. I knew one gentleman who, when about to take such an attack of mania, always showed it by calling on all his friends at unconventional times, and never knowing when to leave. His desire for the stimulus of social intercourse was simply not controlled at the time by the conventional rules of his class, which at other times had been powerful enough to influence him. In this stage of mania patients cease to be able to control their own power of attention too.

Paralysed control often takes the form of morbid indecision. In the early stage of melancholia, before depressed emotion comes on, patients constantly complain of this together with a loss of control over their fears. They cannot come to a conclusion quickly, and especially they cannot act on it; and they find themselves conjuring up consequences and risks, that d ring normal periods of their lives they would never have thought of. This is, to a slight extent,

normal after the climacteric in both sexes, and in some persons it is then very marked indeed. To-day in visiting my patients I came upon a lady who had been very energetic mentally, and whose occupation had been a branch of art. She had passed through the more active stage of an attack of melancholia, and was coherent in speech, and almost reasonable in conduct. She was sitting at a table with a pen in her hand, and ink, and a blank sheet of paper before her. The attendant said, "Miss —— has wanted writing materials every day for a week, and when she gets them she won't write a word, but sits for an hour as you see her." I said, "Why don't you write your letter, Miss ——." I don't know how to begin, doctor." I told her how to begin. "But I don't know which of my friends to write to." I sat down and tried my best to induce her to write the word "Edinburgh" at the top of the page: neither I nor Dr Robertson could get her to do so. She said, "No, I can't possibly do it." Then I said, "Now, make an outline of my face,"—a sort of thing she had been fond of and clever at. She said, "I can't do it with a pen." I gave her a pencil. She succeeded, after an evident exercise of all her available power of control, in making only two lines, and could do no more. This was an example of a completely paralysed control over actions of the simplest kind, which in health would have been done at any time almost automatically, without the least effort. She seemed to have no diseased cravings of any kind. I think few of us but have felt when ill or tired, in a minor degree, such lack of power to originate action—at all events sufficiently to enable us to understand and sympathize with Miss ——'s condition. The man who "can't make up his mind" on simple matters is to that extent lacking in the power of control.

The following case is one that illustrates well the paralysis of control over muscular action, that uncontrolled action not being purposive, not being accompanied by any desire to commit suicide or to injure others. P. Q. R., æt. 53, unmarried, a hard working, intelligent, and very self-controlled woman, began to be restless and unsettled about two years ago, this being accompanied by some amount of depression, but no overmastering mental distress. After a change to the country she seemed to recover, but the morbid condition came back when she resumed her duties. Without warning she one day attempted suicide, and by her own wish was thereafter sent to the Asylum. On admission she was calm and reasonable, but somewhat depressed, very sleepless and very dyspeptic. She was thin and generally run down. The most striking peculiarity in her case is this, that during the day she feels restless, and has the inclination to move her limbs about, but is able to control this to a large extent, and to work, and walk, and take her meals with others; but when she goes to bed, and especially when she awakes after her first sleep, she at once begins to throw her limbs about in all sorts of purposeless ways, rolling about, grimacing

and exercising every muscle, as the attendant says, "like an eel in hot water." She does not scream, or cry, or speak, but when spoken to she can cease to move, and talks quite sensibly, saying she "cannot help it," that she has an irresistible inclination so to move her limbs, and that doing so is in some way a relief to her. Those movements will go on for hours during the night, and are followed by no conscious sense of muscular fatigue. It is a "muscular hyperkinesia," apparently an excitation of the cortical motor centres unconnected with ideation or feeling, occurring at night just as a febrile delirium occurs at night, or as a senile restlessness with excitement occurs at night. Motor depressants like hyoscine diminish the movements after each dose, but she is none the better afterwards.

The inhibitory function gets weaker at night in all directions. Man, in fact, at night becomes more automatic, more emotional, and very much less volitional than during the day. Courage fails at night, while gross, unreasoning superstitions then rise up to the consciousness of "strong minded" men. The moral sense is always at a lower ebb at night than during the day. Groundless fears come up before the mental vision then; while it has, of course, always been the season for ghosts and apparitions. The subjective then tends to become the objective. Remorse then stalks scourge in hand—

> "Art thou not, fatal vision, sensible
> To feeling as to sight? Or art thou but
> A dagger of the mind: a false creation
> Proceeding from the heat-oppressed brain?"

It was at night that Macbeth was thus befooled by his brain—

> "Mine eyes are made the fools o' th' other senses."

Fear then overcame him—

> "How is't with me when every noise appals me?"

It was when night was "almost at odds with morning" that the banquet scene took place, when Macbeth's courage and his sanity temporarily fled, and he had hallucinations of hearing and sight—

> "Thou canst not say I did it; never shake
> Thy gory locks at me."

And this in a man who, during the day, could not be "taint with fear." The real never moved him—

> "Fear not, Macbeth; no man that's born of woman
> Shall e'er have power on thee."
> "The mind I sway by; and the heart I bear
> Shall never sagg with doubt nor shake with fear."
> "I will not be afraid of death and bane;
> Till Birnam forest come to Dunsinane."

The psychology of the night has yet to be written in a scientific sense; but there are plenty of materials for it in the dramatists, the

poets, and the greater writers of fiction, as well as in the medical books. Most men, alone, in the middle of a wood in a dark night, seem to go back suddenly and quite unaccountably to a less evolved stage of humanity than that to which they have attained during the day. They are conscious of coming, to some extent, under the dominion of the fears of children and the superstitions of savages. The plain teachings of reason, with the utmost efforts of volition to back them up, cannot fully dissipate such feelings. Control is exercised by a much greater conscious effort than during the day. We have constant experience as physicians of the disturbing effect of the night in disease on most of the higher brain functions, especially the inhibitory power. The patient suffering from mania is always most restless at night; the patient suffering from continued fever then only becomes delirious. It is then that the child with a febrile catarrh becomes delirious. It is then that the neurotic child takes his "night-terrors" without fever at all. The case of senile mania that is only confused and restless during the day loses control entirely at night, and then becomes perfectly unmanageable. Our profession pays dearly for this psychological peculiarity of humanity. I am only surprised that some of the sufferers have not drawn more attention to it, and given us more careful psychological analyses of it. Has not every country doctor had to turn out of bed and drive many weary miles, many a stormy night, not because his patient was worse then than he had been on the previous day, but because he and his friends had begun to suffer from that nocturnal loss of inhibition, that nightly diminution of control which are so closely allied psychologically to the paralyses of control in dipsomania and morphinomania?

We may conclude, therefore,—

1. That many morbid and hurtful uncontrollable cravings exist apart from those for drink, morphia, chloral, or cocaine.

2. That there is a distinct class of "Inhibitory Neuroses" that may be accompanied by little intellectual or emotional disturbance. The objects of the morbid cravings are often accidental.

3. Some of the most morbid cravings and examples of loss of control are found connected with the reproductive function, in regard to which, too, perversions of object are also very apt to accompany such morbid cravings.

4. For the existence of many cases of such reproductive loss of control prostitution is probably responsible, and the unnatural habit of masturbation for many more.

5. The reproductive instinct is in some cases morbidly transformed into uncontrollable impulses towards suicide and homicide.

6. Cravings to break and destroy, accompanied by little intellectual disturbance, that cannot be controlled, are often met with.

7. The state of morbid inaction is often closely allied to morbid impulse, one sometimes taking the place of the other.

8. There are cases where there is a morbid loss of control over

general conduct in ordinary matters, and cravings to do quite harmless acts.

9. There is a morbid condition of brain automatism, apart from hypnotism, in which there is little or no power of inhibition, but at the same time no active cravings, the conduct being regulated by the will of others, or by chance suggestion from without or within.

10. Loss of control often precedes for some time the other mental symptoms of an attack of active insanity.

11. Inhibition may be lost in one direction only, while in most others it may be very strong, gambling being often an example of this.

12. All brains must have some "excitement" to keep them healthy, the important question being how to select the kind of excitement that will not lead to morbid craving, and that can be easily controlled.

13. Morbid indecision may be an example of paralysed control.

14. We may have morbid and uncontrollable muscular action, not purposive, and not attended by ideation or emotion at all.

15. It is a fact in man's medical psychology, that control is almost always lessened at night or in the darkness as compared with the day, the night being the time for morbid indecision, fears, superstitions, and a tendency to mistake the subjective for the objective, his higher powers then undergoing a process of partial "dissolution,"—man, in fact, is a less evolved being as regards his inhibition at night than during the day, and his brain is then more liable to disturbances of its controlling functions in disease.

II.—THE PRESENT EPIDEMIC OF SO-CALLED INFLUENZA.

By David J. Brakenridge, M.D., F.R.C.P.E., Physician to the Edinburgh Royal Infirmary, etc.

(*Read before the Medico-Chirurgical Society of Edinburgh at the Discussion on Influenza, March 5th*, 1890.)

Mr President and Gentlemen,—It has been felt that it would be well not to allow the present epidemic of so-called influenza to pass over without some attempt—not merely to produce one or two papers on the subject, but, as far as possible, to gather up the experience of the profession in Edinburgh regarding it, and to arrive at some definite conclusions as to the clinical features, etiology, pathology, and treatment of the disease.

The following remarks are unfortunately not, as I had hoped they would be when I promised to read this paper, based upon carefully taken records of cases observed in the Royal Infirmary; for it is a remarkable fact that, during the whole progress of the epidemic, not one single typical case of the prevailing disease has been admitted into my wards. Certain severe cases of lung disease there certainly have been, which may have originally developed