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INEBRIETY.

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LONDON: H. K. LEWIS, 136 GOWER STREET, W.C.

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ITS

ETIOLOGY, PATHOLOGY, TREATMENT

AND

JURISPRUDENCE

MEDICAL SOCIETY OF LONDON
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BY

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FELLOW OF THE MEDICAL SOCIETY OF LONDON; PRESIDENT, SOCIETY FOR THE STUDY OF INEBRIETY; CHAIRMAN, BRITISH MEDICAL ASSOCIATION HABITUAL DRUNKARDS LEGISLATIVE COMMITTEE; CONSULTING PHYSICIAN, DALRYMPLE HOME FOR INEBRIATES; CORR. MEM. MEDICO-LEGAL SOCIETY OF NEW YORK; CORR. SEC. AMERICAN ASSOCIATION FOR THE CURE OF INEBRIATES.

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AND IN REMEMBRANCE OF MANY HAPPY HOURS IN AMERICA

AND ENGLAND,

THIS VOLUME IS DEDICATED

BY

THE AUTHOR.

PREFACE.

For some years past innumerable enquiries have been addressed to me by Inebriates, by their friends, and by my medical brethren, as to the best course to be adopted in dealing with the Inebriate. The one common feature of most of these enquiries has been the non-recognition of a disease element in Inebriety, and the acknowledgment of only a moral depravity. The intelligent minority who have exhibited a knowledge of the physical aspect of intemperance have sought advice as to medicinal remedies, the selection of a suitable Home, or some other detail of therapeutic treatment.

With a view to impart useful knowledge on all these and kindred points, the present volume has been written in the hope that it may aid, however feebly, through the medium of the attending practitioner who I trust will be among my readers, in the enlightenment of the patient, his sorely-tried relatives, and the community, in the great truth that Inebriety is a disease, as curable as most other diseases, calling for medical, mental, and moral treatment. I am also not without hope that the work may be found serviceable by my professional colleagues.

42 Grove Road, Regent's Park,
London, N.W.
February, 1888.

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INEBRIETY OR NARCOMANIA.

CHAPTER I.

Inebriety a Disease.

Prevalence of Inebriety—Importance of early recognition—Seldom recognised early enough—Rarely recognised as a disease—Is Inebriety a disease?—Typical cases—Inebriety a true disease—Inebriety in alcohol, opium, chloral, and other narcotics—Pathological appearances—Disease indicated by symptoms—All drunkards not diseased—Inebriety defined—Drunkenness partly physical—Drunkenness has a physical origin in various classes of inebriates—Physical origin in idiots and in those endowed with deficient moral control—Physical origin in recurrent insanity—Physical origin in inebriate criminals—Physical origin in inebriety from alcohol poisoning—Physical origin in subjects of narcotic heredity—Fortunately drunkenness not always a disease.

No disease is more common than Inebriety, and yet none is so seldom recognised.

No disease is more widespread. In the whole circle of even an extensive acquaintance it may happen that no member has been known to have suffered from any of the leading diseases which prevail in our islands, that no one has been laid low by phthisis or by cancer. But there are very few families in the United Kingdom which have not had at least one relative who has been the subject of inebriety.

Prevalence of Inebriety.

In but too many instances this family failing has unhappily not been confined to one member of the domestic circle.

The busy General Practitioner of Medicine, who in the course of his experience as a family medical attendant is called upon to treat a wondrous variety of human ailments, may have had a lengthened professional career without ever having been confronted with a case of hydrophobia or of typhus fever, of cholera or of true diphtheria. But, whatever be the case in such a comparatively sober country as Italy, it cannot be denied that in the United Kingdom, as in many other lands, no medical man, however small his practice, can hope to pursue his professional calling for any long period without being called to most piteous and intractable cases of some form of inebriety.

Importance of early recognition.

How important then that there should be a clear understanding of the real nature of inebriety. Such knowledge is essential to the friends of the diseased one, that they may readily discern the development of the malady in its early and more curable stages. Such knowledge is essential to the physician that he may be in a position to form an enlightened opinion of the case, and thus be prepared to devise a method of treatment calculated to arrest the progress of the disease and to effect the permanent cure of the patient. Otherwise, if the existence of an underlying disease in the intemperate be not recognised and treated at the outset, the inebriate addiction will have time to become confirmed, and morbid degeneration of function and structure have time to be intensified, each additional day's delay adding to the ever present difficulties standing in the way of the reformation of the habit, of the cure of the disease.

Paramount as is the necessity for an early recognition of this disease, it is a saddening fact that in very few cases indeed has its existence been even suspected before it has acquired so great an intensity and chronicity as to have lessened in a marked degree the moral control. Rarely has the truth been realised either by the victim or by his friends till the will-power has been so weakened that the hope of cure has seemed faint and remote. Nay, and this is the most astonishing feature of the prevailing ignorance on the subject, when the malady has become incurable and when the confirmed inebriate after a long and painful illness, more painful even to the spectators than it has been to the sufferer, is lingering in the last agony of death from some fatal form of inebriety, no physically diseased state is seen! The presence only of the immediate morbid affection which is ending the drunkard's "pitiful desperate struggle for life," is, except by the few who grasp the whole truth, the sole physical disorder observed, and the hapless mortal who has put on immortality is mourned by the survivors as one who has fallen a prey to his own vicious propensities, not as one who has been slain by a disease as insidious and as fell as any disease which has ever decimated the ranks of human kind.

Seldom recognised early enough.

By almost universal consent drunkenness has been regarded but as an act of folly, a sin, a vice, or a crime. The finger of scorn has been pointed at the sot as an object of ridicule and contempt. The drunkard has been stigmatised as a good-for-nothing scapegrace who loves excess for its own sake, who lives but to gratify his vitiated tastes, who from his inherent depravity, knowingly and unblushingly prefers vice to virtue, intoxication to sobriety.

Rarely recognised as a disease.

The theologian denounces the intemperate one as willingly guilty of heinous sin. The judge punishes the riotous drunkard as a criminal offender. Whatever his inherited tendencies, whatever his original weakness of will, whatever his inborn deficiency of moral control, whatever his natural susceptibility to the narcotic influence of intoxicating agents, contumely and reproach, pains and penalties have been the only means which has generally been employed in the treatment of the subjects of alcoholic or opiate indulgence.

Has this treatment of the inebriate been judicious? Is he but a fool? Is he but a wanton and wicked sinner? Is he but a headstrong and hardened criminal? Are all his outbreaks of intemperate drinking but the fruit of an evil and perverse disposition?

Emphatically does science answer "NO," and plainly does common sense echo the denial. Men and women of the highest culture, the purest life, the most exalted aims, have become reckless drunkards. The clearest minds, the keenest intellects, the most acute reasoners, have been subdued by alcohol. The warmest hearts, the kindest souls, the most unselfish spirits, have been transformed under the syren influence of "the tricksy spirit," into the coldest, most unkind, and most selfish votaries at the shrine of Bacchus.

Why have these, and a great company of such, fallen so low? Not from a desire to fall, not from wicked and vain imaginings, not from a determination to become drunken, not from any innate love of the inebriating agent, but from a want of power to resist the overwhelming weight of an internal and well nigh irresistible impulse within them, which, awakened to action on the contact of a narcotic with the nervous system, hurls them away in spite of their vain efforts at escape in a whirlwind of excessive indulgence.

Is inebriety a disease? How anyone who has witnessed the career of a confirmed tippler ever doubted this for a moment, is beyond my comprehension. Yet some deny that inebriety is ever a disease, and insist that it is only a "moral vice." Is Inebriety a disease?

Sir Thomas Watson, the Nestor of modern physic, defines disease as "all deviation from the healthy standard." What intelligent and skilled observer of an inebriate life can have any doubt that, tried by this classic test, inebriety is a diseased condition?

Take one case—a clergyman. Learned, studious, self-denying, he is an active and energetic worker in the service of his Master. In the smallest living-rooms of the humblest of his congregation, at the bedside of the sick and the dying, he is as scrupulous and faithful in discharge of the hallowed duties of his sacred office as when in the pulpit with eloquent and persuasive words he promulgates the great doctrine of his Church. This is but a feeble record of his work and worth, the work and worth of an earnest, humble-minded man, ever striving to do his duty and an abstainer to boot. Under the influence of some sudden nervous shock, or, as I have also seen, through exhaustion of brain from excessive toil and worry, his nervous system is shattered, he is completely crushed, and (it may be medically) takes an occasional alcoholic stimulant. He feels refreshed and reinvigorated for the renewed performance of the duties which lie so near his heart. So he more frequently falls back on his deceptive pick-me-up. Insensibly he is drawn closer and closer within the fascinating, narcotising, physical embrace of alcohol. His friends see his imminent peril, but he laughs at their fears and Typical cases.

resents their warnings. Open outbreaks of intoxication follow, with intervals of abstinence; but after each relapse his attempts to continue abstaining become more difficult, till, with all his former noble deeds and present high resolves, his life ends under the dark shade of an alcoholic eclipse of the understanding and the conscience. If ever there were a deviation from health, this has been one, the first deviation having been from bodily health, the moral deviation coming long afterwards.

In females I have repeatedly seen both periodic and confirmed inebriety, ending in death, follow the medicinal use (recommended usually by the mother or by some female friend of the family) of alcohol for the relief of natural pain. The falsehood, deceit and meanness of the habitual female inebriate were moral evils, but the functional disorder was the antecedent physical condition, the discomfort of which was temporarily alleviated by an intoxicating remedy, for the administration of which the sufferer herself may not have been responsible. This dangerous remedy set up, in a system susceptible to its narcotic influence, as truly a diseased condition as is lead poisoning or malarial fever.

Yet one more case. An abstemious and well-living carman, aged 41, is thrown accidentally from his car. He sustains some obscure head injury. Not long thereafter he suddenly lapses into frequent outbreaks of drunkenness. To the medical attendants who have carefully excluded all other contributory factors, it is clear that this is a case of traumatic inebriety, *i.e.*, inebriety from the effects of an injury. In this case, too, neither a vicious disposition, nor a sinful desire, nor a criminal propensity has given rise to the alcoholic indulgence.

In all such cases as those of which the preceding, drawn from my own practice, have been types, there is a departure from health in the form of some obscure condition of the nervous system, which craves for the temporary relief afforded by some stimulant or narcotic.

Inebriety a true disease.

These observations apply with equal force to opium, to ether, to chloral, and allied substances. These three narcotising agents, unhappily for the bodily and mental health of our women, are becoming too rapidly fashionable intoxicants.

Let us try inebriety by a still more particular definition of disease, let us leave out of reckoning the cases in which disordered function without apparent structural degradation is the source of inebriety (though, as we have seen, even this is a departure from health, and therefore constitutes a true disease), and let us define disease more minutely as a condition of body or brain accompanied by alteration of structure. It is impossible to narrow the definition further than this, the accuracy of which all will admit.

When first engaged actively in the temperance propaganda and absorbed by the thought of the nameless miseries of the drunkard's family, the moral riot produced by alcohol in his lying, cunning, and debauchery, by its magnitude overshadowed the effects of alcohol on the material frame. Thus was I so blinded to the truth that I relied on moral and spiritual agencies in attempting the reformation of the drunkard. Repeated relapses and absolute failures in the apparently converted shook my confidence in the efficacy of moral means only. This process of disillusion was quickened by having in the course of professional duty to make frequent post-mortem examinations, when in the case of persons who

have been known to have died inebriates, I almost always found a typical series of pathological appearances, the observation of which gradually opened my eyes to the facts, and dissipated the incredulity with which I had formerly received the statement that inebriety was a disease.

Pathological appearances.

What were those appearances, the testifying to which has in a number of inquiries into the cause of sudden death, led a coroner's jury to return a verdict of "Death by poisoning from alcohol?" *Stomach*—patches of congestion, thickening of walls, extravasation of grumous blood, presence of undigested food. *Liver*—nutmeg, or hobnail. *Kidneys*—fatty, or other degeneration of structure. *Heart*—fatty, flabby, feeble, fatty degeneration of muscular fibre. *Brain*—cerebral congestion (in delirium tremens, intense) or shrinking, alteration of exterior portions of grey matter on microscopic examination, thickening and opacity of membranes, vessels atheromatous and tortuous.

These appearances observed after death, as well as other structural derangements, the existence of which may from functional disorder during life have reasonably been inferred, are undoubtedly marks indicative of changes in vital organs, signs of a diseased condition of body and brain. Thus even if the term "diseased" be restricted to departure from health accompanied by definite pathological changes, inebriety in many cases is a true disease.

Disease indicated by symptoms.

In fairness, however, so severe a test ought not to be applied to inebriety to ensure its classification under the head of "disease." There are many derangements of function, which we have no hesitation in calling "disease," to which as

yet we have detected no corresponding alteration in structure. Disease in the living body is revealed by symptoms. The medical observer reviews the various symptoms in each case, and bases his diagnosis thereon. He collates the symptoms of inebriety in one of its varied forms of acute alcoholism, chronic alcoholism, drink-mania, delirium ebriosum or alcoholic degeneration, and concludes that it is a disease just as he concludes from another group of symptoms that epilepsy or insanity is a disease.

If we try inebriety by Dr. Bristowe's comprehensive and philosophical definition of disease there can be no doubt of the disease element, his definition being "a complex of some deleterious agency acting on the body, and of the phenomena (actual or potential) due to the operation of that agency." In the disease of inebriety there is the deleterious alcohol, opium, chloral, or other narcotic; and there are the phenomena, material, mental, moral, and spiritual, due to the operation of this agency.

The etiology of inebriety in most cases in which the medical history of the inebriate has been traced, is as well marked as is the etiology of the majority of diseases.

In inebriety we often find pathological degeneration of the tissues of individual organs, and in addition general depression or degradation of the whole organism.

All drunkards not diseased.

To avoid misunderstanding, let it be noted that all drunkards are not subjects of disease. There are some who drink from sheer "cussedness," in whom, at the outset of their alcoholic career at all events (though in them the habit may ultimately develope into a disease), the closest scrutiny can detect only moral obliquity. Such are not happy

unless when indulging in forbidden pleasure. They drink, as they gamble, for the gratification of their love of pleasurable excitement. There are others who indulge simply because they yield easily to temptation, or like to be in the fashion of the set in which they move. These too, although they may occasionally be overcome by drink, cannot be called "diseased," at least in the early stages of their drinking. My remarks have reference only to those in whom either the habit of drinking, or some inherited or other cause, has set up the diseased condition we designate inebriety, which may be defined as an overpowering impulse to indulge in intoxication at all risks. I trust no one will imagine for a moment that I desire to weaken the force of clerical rebuke of the vice and sin of intemperance, or to impede in the least the noble work in the rescue of the intemperate by the army of Christian abstainers, of whom I am not ashamed to own myself one.

Inebriety defined.

But alike in the interest of the inebriates and of science, the truth must be respected and the facts acknowledged. Whatever the immorality, the vice, or the sin of drunkenness, in a very large number of instances the drunkard is more to be pitied than blamed as the subject of a disease, it, or a diathesis predisposing to it, having been by heredity or by some other physical cause stamped on his very being. In the weighty words of the excellent and accomplished Archbishop of Armagh, "In certain cases inebriety is a *disease* (the italics are his Grace's), and the victim can no more resist it than a man with ague can resist shivering."

There is a physical element in all drunkenness, inasmuch as without the presence of a material intoxicating agent there can be no intoxication.

Drunkenness partly physical.

Broadly, inebriates may be ranged under five classes.

I. The common sot, who never refuses to drink, drinks any kind of liquor, as much and as often as he has the opportunity. By many this ordinary drunkard is regarded but as a vicious fool. He is not necessarily so, by any means. He, or (alas, too often) she, may be a person of gentle heart and unselfish disposition, who, no matter how frequently he is guilty of excessive indulgence, as frequently repents and loathes the bonds that drag him to his doom. Not unseldom the mental powers are deficient from birth. In very truth, as in popular language, he is a "born idiot." If not afflicted with idiocy, he is still oftener endowed with insufficient control, and thus has little ability to resist the narcotising power of the magic potion. In such cases, and they are numerous, drunkenness has a physical origin.

In idiocy and defective control.

II. Others resort to drink only on the recurrence of an attack of insanity. These are not insane through drink, but become drunken through insanity. When sane they are perfectly sober, when insane they drink to insobriety. In their lucid intervals they are strictly temperate in their habits, and well conducted in their walk and conversation. The drunken outburst is but the mode in which their recurrent madness is manifested. Here, again, drunkenness springs from physical causes.

In recurrent insanity.

III. There is a very considerable number of men and women, familiar to our police court and judicial officials, who are frequently guilty of criminal offences, especially of theft and misappropriation. They consort with low and disreputable loafers, and steal or swindle to gratify their ever intense desire for intoxication. They present the untidiness,

In inebriate criminals.

slovenliness, dirtiness, and blotched appearance of the constant inebriate, but after a short abode in prison with deprivation of alcoholics, their appearance changes for the better. Yet though they become cleanly, smart, and healthy looking, they are sly, deceitful and mendacious, utterly unreliable. Even here we have to do with a physical basis, as these cheat or steal to procure the means of obeying a diseased impulse, which is unquestionably a physical pathological perversion.

In alcohol poisoning.

IV. Others, and this is an extensive class, lapse into inebriety through the effects of actual poisoning of the bodily and mental man by alcohol. Alcohol is an irritant narcotic poison, poisonous alike to the intelligence and to the material frame. Inebriety may result as a *sequela* of alcoholic disease of the brain, or of its membranes, or of some other organ or tissue. It may also be the direct consequence of the disturbing influence of this poisonous agent on the cerebral and nervous centres. In the first case inebriety is the issue of bodily disease, in the second case it is itself a form of disease. In both these groups inebriety has a physical origin.

In narcotic heredity.

V. The operation of no natural law is more patent than is the operation of the law of alcoholic heredity. A drunken mother, a drunken father, a drunken grand-parent, may hand down to their descendants an alcoholic stain which not even a lifetime of entire abstinence from intoxicating drinks can eradicate. I have known men and women, of the highest culture and the most irreproachable morals, of strong will and deep thought, of unaffected piety and exalted aim, who have been compelled by bitter experience to acknowledge to themselves the saddening fact that they could never dare to dally with strong

drink. The continuous and victorious struggle of such heroic souls with their hereditary enemy, an enemy the more powerful because ever leading its treacherous life within their breasts, presents to my mind such a glorious conflict, such an august spectacle, as should evoke the highest efforts of the painter and the sculptor. Before so protracted and so lofty a combat, the immortal group of Laocoon contending with the serpents, grand though that great work of art is, must pale its ineffectual fires.

In this comprehensive group of cases of habitual drunkenness, with an inherited predisposition, inebriety has also a physical beginning.

Fortunately drunkenness not always a disease.

It is fortunate that all persons who indulge to excess in intoxicants are not diseased, and have not a morbid appetite. Were they all subjects of disease, the half million of drunkards, and another half a million of individuals who drink intemperately though not to intoxication, would constitute a worse than leper-stricken community, which would be a standing menace to the nation, necessitate an enormous expenditure to control, and practically defy ameliorative and preventive agencies. Large numbers of topers drink riotously and excessively, but are able to limit or refrain from their potations whenever their drinking curtails their other enjoyments or interferes with their comfort and happiness in any way. They have never come under the power of a morbid insatiable crave or a physical ungovernable drink impulse, they have been borne along by no abnormal heredity, or literally driven to excess by no disordered function of body or of brain. Such have often been reformed by moral and religious operations. Such I have heard declare on the public platform that they had been, as it were by

a miracle, freed in a moment from the demon appetite for strong drink, the truth being that they never had any. Many such I have seen give up drinking at once and remain abstinent for years at a stretch. Some such I have known continue nephalists while they lived. At times these habits in what we may call normal drunkards do in time set up in the long run a condition of actual disease, but of a very large proportion of drunkards at no period of their intermittent drunkenness can they be fairly said to be in ill health or to be the subjects of a diseased crave, appetite, or impulse.

CHAPTER II.

Inebriety a Disease Allied to Insanity.

Insanity and Inebriety, physical diseases, the outcome of natural law—Many cannot drink moderately from physical inability—Causes of Insanity and Inebriety similar—Past history of Insanity and Inebriety alike—Intoxication Insanity in brief—Drunkenness voluntary, sometimes involuntary, madness—Insanity of moderation—Mania of occasional excess—Mania of periodic Inebriety—Alcoholic shooting mania—Mania of constant Inebriety—Insanity of delirium tremens—Alcoholic epileptic mania—Mania a potu—Narcotic persecutions mania—General insanity from narcotics—Alcoholic dementia—Post-alcoholic insanity—Inebriate delusion of sobriety—Analogy in tendency—Case of inebrio-insane suicide—Analogy in heredity—Relation between Insanity and Inebriety—Insanity and Inebriety intercausation—Analogy in treatment—Our duty to the Inebriate and the Insane—Other allied diseases—Definition of Inebriety—Why called Narcomania.

Inebriety being a disease, to what group should we assign it? There can be but one answer: inebriety belongs to the group of "diseases of the nervous system," and its nearest ally is "insanity."

Insanity and Inebriety physical diseases.

The common idea that intemperance is but a vice, a breach of the moral law, and a sin against God, must, however slowly, give way before the enlightenment born of modern scientific enquiry. Moral obliquity and vicious tastes sometimes are the cause of intemperance; but all who have had the opportunity of intelligently watching the rise and progress of inebriety and insanity, are alive to the fact

that the phenomena of both diseases are mainly physical, and are the legitimate outcome of the operation of natural law. Let me not be misunderstood. I am a firm believer in the principles of the Christian faith, and in responsibility to the Judge of all for the proper use of every faculty with which we have been endowed. Therefore I freely concede that there is a moral and religious aspect of intemperance; that if there is drunkenness the disease, there is also drunkenness the vice and the sin.

Many cannot drink moderately from physical inability.

But sorrowful experience has shown me that there are many inebriates who are more sinned against than sinning (as there are many lunatics who have lost their senses through no fault of their own), who are so constituted that to drink in what is called "moderation" is beyond their power. To impute immorality, vice and sin to the inebriate for his physical inability to stop at one glass is as unjust as it would be to impute immorality, vice and sin to the idiot for his idiocy, or to the hereditary epileptic for his epilepsy. There are not a few human beings so saturated with the taint of alcoholic heredity that they could as soon "turn back a flowing river from the sea," and stay the progress of enteric fever in their person after the development of the poisonous typhoid symptoms, as arrest the march of an attack of alcoholism after the uncontrollable excitement consequent on their drinking the smallest portion of an intoxicating draught.

Causes of Insanity and Inebriety similar.

The insane diathesis may be transmitted, so may the inebriate diathesis. Insanity may arise from constitutional causes, from organic disease and from functional disorder. So may inebriety. In most particulars, the exciting as well as

the predisposing causes of mental unsoundness are very much the same as those of narcomania. There is a marked similarity in the origin of many maniacal and intemperate outbreaks. Alcohol is a swift and potent irritant narcotic poison. The majority of those who drink are happily not susceptible to its anæsthetic action; but, in virtue of an unalterable law of nature, there are large numbers whose susceptibility to the narcotic properties of this poison is so delicate that, though they are fully conscious of their weakness and sick unto death of their slavery, once dally with an intoxicant they fall prostrate before its might.

When I see the thoughtless and unconcerned way in which such hereditary alcoholics, like other moderate drinkers, toss off their nip of ardent spirits, or toy with their glass of mellow fermented wine, as I think of the family *anguis in herbâ* (snake in the grass) in all such beverages, however rare and high priced, ever ready to dart its envenomed fangs on the unwary and fold them in a deadly embrace, I involuntarily feel compelled to address them in the words of the Latin poet:—

"Tantane vos generis tenuit fiducia vestri?" *

Why do these fall? Not because they are greater sinners than their fellows, not because they are worse morally, but because they are weaker physically.

Past history of Insanity and Inebriety alike.

Yet insanity was formerly believed to be a spiritual manifestation solely, a demoniac possession, or a curse inflicted by the Almighty on sinful man as a chastisement for sin. No physical disorder was recognised, so incantations to exorcise the evil spirit and prayers to move the sinner to penitence for his supposed transgressions, were the treatment

* Does such confidence become your birth?

dealt to the madman. As a result of this baleful ignorance, many curable cases of insanity have been deprived of most favourable chances of cure. So with inebriety. Both these diseases have had a somewhat similar history in the past.

The relations between inebriety and insanity are so close that in watching the varied phases of the former the expert is constantly reminded of the latter. The closeness of this connection must have been observed by the ancients, for one of the meanings of the Sanskrit verb *mad* was "to get drunk," and the Sanskrit noun *mada* denoted (1) intoxication, (2) insanity.

Intoxication Insanity in brief.

An act of intoxication is usually an epitome of the chronicle of insanity, an inebriate panorama whereon successive phases of mental unsoundness are depicted in an incredibly short time. The drunken paroxysm may be regarded as a series of dissolving views, each representing insane phenomena, following one another in rapid sequence. In the person of the drunken may be witnessed a bird's-eye view of the entire course of gradually developed lunacy.

The exhilaration stage or preliminary effect of alcohol and allied narcotics, is a state of pleasurable elation, of pleasant and grandiose ideas, of mental excitement and rapid ideation, such an exaltation and mental activity as we often witness before a maniacal outbreak or an attack of general paresis. Unusual merriment testifies to the swift flow of happy thought. So perfectly is this phase of insanity simulated by inebriety, that I have seen experts unable to diagnose the actual disease, till the speedy vanishing of the exhilarative symptoms, and the quickly passing succeeding manifestations, revealed the presence of inebriety phenomena only.

To alcoholic exhilaration succeed automatic or semi-

automatic ideation and emotion, with defective motor co-ordination. So is it in insanity. Control over the higher nerve-centres is lost, thus thoughts arise without order or fitness, causing incoherent cerebration and speech. This is the reign of mental confusion, sometimes accompanied by uncontrolled ebullitions of passion, ending in violent acts or outrages of decency. "Mad drunk" is an accurate description of this brief insanity of alcoholisation.

By and bye paralysis of speech and thought creeps gradually on, with fatuous dulness, depression, and prostration, till the coma of drunken unconsciousness supervenes; the drivelling drunkard being kept alive, all else for the time practically dead, by the automatic action of the circulatory and respiratory organs, a veritable thread of life. Here we have the counterpart "writ brief," a correct abstract of the characteristics of well developed general paralysis of the insane.

Only extend these successive stages over a long series of years, as in some forms of chronic alcoholism, and you have a chain of symptoms of mental alienation which are so clearly indicative of unsoundness of mind that they have been grouped together under the denomination of the Chronic Insanity of Alcohol. No one disputes the accuracy of the designation when applied to the more slowly occurring symptoms. The insanity is no less pronounced because the insane phenomena are produced by acute alcohol poisoning, and pass away after a flitting ephemeral existence,

"Swift upon our vision flashing,
Brilliant while they last;
Fast across our eyesight dashing,
In some moments past."

Drunkenness voluntary, sometimes involuntary, madness.

Aristotle said that drunkenness is voluntary madness, and with the qualification (which modern clinical and pathological observation has revealed to us) that the madness is in many cases involuntary, there can be little doubt of the wisdom of the saying. At every stage of habitual, or even occasional, inebriety, symptoms are developed which seem to be more allied to madness produced by a physical cause than to moral obliquity or badness of heart. In all the stages we at times see indications, though often of transient duration, of mental alienation. In delirium tremens, for example, there is an abnormal fear, an insane terror indicative of temporary madness, with hallucinations and delusions.

Insanity of moderation.

Take the stage of what is called "moderate drinking." A regular living clergyman, or lawyer, or merchant, who takes his daily limited allowance of intoxicating drink, and never seems in the slightest degree affected thereby, never exceeds moderation, except (and then so very slightly that no one calls him "drunk") when he dines out. Then the staid, orderly, intellectual man waxes frivolous or disputatious. To put it mildly, he says and probably does many stupid and foolish things. Sometimes on these exceptional occasions he becomes so excited that he can with difficulty be kept quiet till the effect of the unusually large dose of alcohol has passed away. What are these symptoms indicative of but a temporary loss of reason? For the moment the man is beside himself. I have known good men commit crime during this evanescent insanity. There is perhaps no violence, but a confidential confiding of things serious and trivial, to the veriest stranger. This the latter may take advantage of, to the injury of the temporary madman

or to others. For the time being the drinker is as foolish and fatuous as in some phases of chronic insanity. What the Scotch call "greetin' fou" does not for the moment point to a sound mind.

In young ladies of generally abstemious habits who have taken an extra glass of champagne or other wine, we meet with symptoms of acute mania. Sometimes the character of the maniacal attack is erotic, at other times destructive or violent. These symptoms may not last long, but while they continue the patient is simply beside herself and requires to be taken charge of. I have known this also occur in men ordinarily temperate to a degree. For example, one gentleman in a mad fit after dinner one evening, sold all his horses and carriages for a mere song, and would not believe in the reality of the transaction till his signature of the previous night was produced, yet he did not appear to be intoxicated in the ordinary sense of the term.

Mania of occasional excess.

I have a patient, a well-to-do master builder, who when he takes more than two glasses of beer loses all consciousness. After the third glass he knows nothing. Yet he then begins to quarrel and shout, and finds his way home in such a violent mood that he smashes the furniture, hits out right and left at everybody near him, and raises such a commotion as rouses the whole neighbourhood. Next morning he will be as meek as a lamb, but during the alcoholic paroxysm, while he is raging like a lion, he is literally "insane."

Another man, a highly educated gentleman of mature years, perhaps half a dozen times during the twelve months indulges freely. When under the excitement of alcohol, though of a peaceful disposition he exhibits marked pugnacity. He tries to fight "tooth and nail"

with every one near him, and at times may be seen to do battle with a jeering yelling crowd. His looks and his actions are the looks and actions of a madman.

A third, a business man of probity and worth, as soon as he takes an extra glass or two, is truly "off his head." His employés note the symptoms and guard his interests, or he would soon be ruined. In the drinking fit he has committed forgery, or he has given his signature to money promises of great value for no consideration. But these are simply the deeds of one who is insane for the time. When his drinking bout has ended he is as correct in his behaviour as ever, and about his sanity there can be no question.

Mania of periodic Inebriety.

Periodic inebriety affords extraordinary examples of temporary insanity. One man becomes the embodiment of piety, oracularly delivering solemn religious counsel to all with whom he drinks, though in his intervals of abstaining soberness he is an avowed atheist. Another labours under the delusion that he is "the last man," and bids all his fellows an affectionate farewell. A third is literally "mad." He can be controlled only with the utmost difficulty, and by the employment of considerable force. There is no end to the variety of hallucinations and of insane acts committed by periodic inebriates when "mad through drink."

Look at the periodical inebriate. Though almost as clear-headed and as well-disposed as his abstaining brethren in the intervals between the attacks, during each outbreak he is guilty of freaks, and acts of stupidity or violence, which may truly be said to be the acts of a maniac.

A woman was imprisoned two hundred different times for drunkenness and theft. Each time she had

stolen a tub; she was a washerwoman. Was each of these acts of theft not the act of one temporarily insane? Is it not monstrous to punish such a one as a criminal without any hope of reformation, when, if she were treated as a diseased person in an inebriate retreat, there would be a fair opportunity of trying the effect of curative treatment? Under the same category may be placed the case of a woman who was imprisoned nearly one hundred and fifty times for drunkenness, and its constant accompaniment smashing windows. So also may be classed the career of a man who whenever he got drunk stole a Bible, and who was finally transported for this singular theft. Some when intoxicated steal spades, others shoes, others kettles, others horses, and so on.

I have known a man, quiet and inoffensive in his sober moments, so maddened during his periodical drunken outbreaks, that he was always then possessed with an insane desire to set fire to everything. He had to be carefully watched every time he broke out to prevent the development of his cremating madness, which we know as a true madness by its very name, "pyromania."

Alcoholic shooting mania.

An accomplished friend of mine, a highly educated and intelligent gentleman, given at times to indulge in strong drink, whenever he gave way to excess was seized with an overwhelming desire to shoot someone with a favourite revolver, which he always kept ready for action. The only circumstance that prevented his killing anyone was, that he never drank immoderately except in some friend's house where he was to sleep for the night, his friends knowing his eccentricity. On several occasions he slept in the same house with me in the United States, during a few

of my frequent visits to that great and hospitable country. Night after night, for hours together, has he kept me awake, as he stood outside my bed-room door, loaded weapon in hand, shouting every few minutes, "come out, I want to shoot you." Next morning he would be himself again, with no recollection of his nocturnal shooting mania.

Mania of constant Inebriety.

The career of the confirmed inebriate is often studded with states and acts indicative of unsoundness of mind. Who can doubt the insane condition (for the time being at all events) of the man who, like a medical friend of mine, offered to cut off his right hand if his attendant would procure one glass of brandy? Pyromania, kleptomania, and other special forms of mischief attempted under the influence of alcohol, what are these but different forms of acute mania? Definite acts of violence, too, to which certain inebriates are always incited during exacerbation of their inebriety, can only so be classed. This mania is sometimes homicidal, sometimes suicidal. In cases of the former it is with great difficuty that the alcoholo-maniac is restrained from killing someone. In cases of the latter he has to be continuously and carefully watched to prevent him terminating his own existence. The cunning and the deceptiveness of true madness are fully developed here.

Insanity of delirium tremens.

But why need I particularise? The thousand-and-one delusions to which periodical and constant inebriates are subject; the crimes which only the unceasing vigilence of others hinders them from committing; and the crimes which unhappily they succeed in committing; are well known to alienists as "confirmation strong as Holy Writ" of a temporarily insane state.

Look again at delirium tremens. What are the things of hideous birth and fearful shape, the creeping monsters and the horrid shadows, which make the terrified drunkard tremble with abject fear, but the hallucinations and delusions of an insane brain? True it is that when he recovers from his delirium he is of sound though not strong mind, but during the attack no one can deny that he was out of his mind.

Delirium tremens, often preceded or ushered in by insane morbid fears, closely resembles, in many respects, the acute delirium of insanity, though differing somewhat in details, and much more brief in its existence. There is rapid nerve-exhaustion in both forms of delirium, and the remedial treatment must in each be directed towards the procuring of sleep and the supply of nourishment.

Alcoholic epileptic mania I have frequently met with. How often do we find the maniacal outbreak of the epileptic, during which he may be guilty of atrocious crimes, arise from epilepsy induced by alcohol. A son, æt. twenty-two, of an English country gentleman, inherited £400 a year. He fell into bad society, learned to drink, and became a drunkard. Latterly epileptic attacks have set in once a month, in each instance followed by epileptic mania. There was no heredity, and he never had any symptom of epilepsy in childhood or youth.

Alcoholic epileptic mania.

Mania a potu, by its very name this form of inebriety is a mania. Whether lasting for an hour or for days the subject of this wild ungovernable attack is during the paroxysm irresponsible for, and often unconscious of, his actions. All moral control is gone. He is in a state of inebriate automatism. There can be no doubt as to the reality of the insanity in this

Mania a potu.

phase of inebriety, while it lasts. This is literally a transient acute mania.

Narcotic persecutions mania.

Once more, turn to the persecution phenomena of double consciousness from narcotics, which continental observers have done so much to elucidate. An inebriate lady (alcohol inebriety) sixty-four years of age, laboured under the delusion that a rejected suitor of her youth was continually on the look-out for a chance to assault her. She rushed into my house one day in terror, thinking that the unscrupulous Lothario was just behind her. This delusion persisted for years after her reformation. Yet all the time she knew that this was but a delusion. Such persecuting double consciousness has been frequently known to harass the hapless victims till death by suicide has terminated their suffering, long after their abandonment of drinking. What are these phenomena but the phenomena of insanity?

General Insanity from narcotics.

Long continued intemperate drinking or using of any narcotic, a long way short of intoxication, may result in curable or incurable insanity. Such persons may never have been drunk, may never have had an attack of delirium tremens; but by and bye the eccentricities, morbid apprehensions, jealousies and suspicions, suicidal or homicidal tendencies of insanity, gradually set in. When curable the patient may by judicious treatment be restored to soundness of mind, remain sober for a time, then relapse into drinking and round again into insanity. This process of recovery and relapse may be frequently repeated till the alienation become confirmed and incurable. In other instances, there may be no temporary recovery, but chronic mental unsoundness from the first appearance of insane symptoms. In these latter, the drinking or

narcotic habit has generally been of very long-standing. Acts of violence, murder and suicide, have been committed in both the acute and chronic forms, the person who has been punished as a criminal having been quite irresponsible and insane.

Alcoholic dementia is a chronic mental derangement which may also be produced by continued habitual drinking, though the subject may not have been given to intoxication or have suffered from acute alcoholic affection of any kind, mental or physical, delirious or maniacal. The memory usually fails first, then the powers of the mind gradually become weaker, till the patient becomes quite imbecile. This state is not unseldom accompanied by a slowly advancing, either partial or general, paralysis of motion and sensation.

Alcoholic dementia.

Post-alcoholic insanity is the mental unsoundness which sometimes, and quite unexpectedly, manifests itself in inebriates long after they have altogether discontinued the use of intoxicants. In some cases the individuals have been consistent abstainers for years; but the brain instability and weakness induced by the previous alcoholic excess have remained behind, and the application of an exciting cause, such as a sudden bereavement or other form of nerve-shock, has disturbed the mental balance and provoked an attack of insanity. This is the explanation of the apparently unaccountable insane outbreaks of some reformed drunkards, among whom have been enthusiastic temperance workers and popular speakers.

Post-alcoholic Insanity.

It is well known that the insane are apt to believe every other person, except themselves, to be mentally afflicted. So with the drunkard. He thinks that all around him are drunk, while he alone is sober. He cannot even see that it is

Inebriate delusion of sobriety.

himself who is unsteady, and not the pavement. He believes that he beholds the ground rise up before him. What are these but false beliefs of one for the nonce insane?

Analogy in tendency.

There is a great likeness between the lethal tendencies of the insane and the inebriate. Homicide and suicide are too often the eventful complications of both diseases. The following paper written by the deceased was found upon the body of a young man of twenty-four, who had become an inebriate eight months previously, and on whom an inquest was held. Disappointed affection was the exciting cause here.

Case of inebrio-insane suicide.

"Dr. David,

Oh that chursed chursed Drink, what has it done for me Oh my dear fellow If you knew the horrible things I have seen this week and heard you would have pitied me. Men sitting in the Parlour Sitting Room Louisa's Bedroom I could hear talking in most disgusting filthy manner. Our Sam confessing the most things Leechs Black Batts Beetles spiders Frogs or Large ugley Black Things I cannot describe. Oh I could go on naming things that would fill 3 or 4 sheets of paper. I had another delusion I thought I was in some neighbour's house; I could not get out, I every way tried hard, and after pulling and injuring myself I got out. My next was I thought our street was full of very large *Ale Barrels* one above another, that I could not get to my house without climbing over them. I had fearful falls when I heard my children say we will kill the B. Lets fetch out of Bed. What I have gone through this week no one but myself can tell. I beg of you David to advise Louisa not to send me to

prison or to a Lunatick Institution, it will do her no good and ruin me. I have that property to see to. Should I be placed in one or the other I could sign no cheque and property would go to ruin. Do my dear fellow let ask of you as a brother and friend not to send me, do David let me again ask you to advise Louisa I pray myself to her not to send to prison or to any other place. Now my dear fellow I ask the favour to become my Bail I shall ever consider you to have been the best friend I ever had, dont refuse there's a good fellow a wretched wrecked man. Do let me dear Louisa the few months I have to live end these few days not in a prison or a Lunatick Institution do for mercy sake do."

Analogy in heredity.

In relation to heredity, there is a strong resemblance between insanity and inebriety. An inebriate parent may beget an insane child and an insane parent may beget an inebriate child. Again, the offspring of an insane parentage is frequently endowed with various neuroses. One child is an idiot, a second an epileptic, a third becomes insane at puberty, a fourth is an inebriate, a fifth is a neuralgic. Exactly is it so with the families of many inebriates. One member is insane, a second is hysteric, a third is a melancholic, a fourth is an asthmatic, a fifth is an inebriate. The inherited neuropathic predisposition may be transmitted transformed into a variety of neurotic forms, the special form of insanity, inebriety, paralysis, epilepsy, hysteria, spasmodic asthma, hay fever, or allied nerve inheritance being determined by a concurrence of conditions including the individual environment, and stretching back for generations.

[Relations between Insanity and Inebriety.

If we employ a restricted definition of insanity, we find it consists in an exaltation or derangement of the nervous faculties, rendering the insane person unable—in some points, though not necessarily in all—to use his reason, exert his will, and control his actions.

Distinguished alienists adopt a wider description, but I prefer this restricted definition in order to apply as crucial a test as possible to the classifying of inebriety almost alongside of insanity. The wider the definition, of course the more will the justness of my contention be confirmed.

In intoxication there is usually an exaltation, short lived it may be, of the faculties of the mind. To secure this exaltation, which occurs even in cases of pronounced alcoholic melancholia, the inebriate will often lie, cheat, steal, crawl—at any cost, temporal or eternal—and for any agent which will ensure the fleeting gratification. Alcohol is the exaltant generally resorted to in this country, because it is in common use; but indulgence in opium, chloral, ether, or other narcotic agent, is steadily spreading, and by women frequently in addition to or alternating with alcohol. Even when the exaltation is not apparent—and I have seen cases presenting this feature—there is in inebriety derangement of the mental faculties, so that consciousness, perception, reasoning power, and conscience are impaired. The will being paralysed (this is most complete in habitual inebriety), though in an interval of abstinence the periodic inebriate seems to be in the full possession of all his normal powers, how often do we see a renewal of the predisposing cause, or a fresh exciting cause, disclose the eclipse of his reason, the deadening of his conscience and his enfeebled will-power. The etiology of inebriety

and insanity is in many particulars practically identical, and there is a remarkable likeness in the progress of both. Heredity, exhaustion, nervous shock, overwork, and syphilis, play a large part in the causation of both diseases, while a relapse in either case is apt to be induced by similar physical and moral states of depression or disturbance of function.

So much alike are many of the symptoms of insanity and inebriety, and so close is the relationship between those diseases, that every now and again I am consulted in puzzling cases on "the Borderland" which I know to be cases of inebriety, but which I am unable to declare to be of sound mind.

Insanity and Inebriety inter-causation.

Inebriety is a cause of insanity and insanity is a cause of inebriety. More accurately: under inebriate conditions insanity is evolved, under insane conditions inebriety manifests itself. Dr. Edgar Shepherd, of Colney Hatch Asylum, is of opinion that, directly or indirectly, 40 per cent. of British insanity springs from drink; and at the British Medical Association discussion at Cambridge a few years ago, there was a general consensus of opinion that at least 16 per cent. arose directly from this cause.

From its characteristic effect on the brain and nerve-centres, alcohol is not an uncommon cause of dementia, while idiocy from the alcoholic excess of parents has been noted by Dr. Howe, of Massachussets, and by a host of skilled observers.

The whole question of Inebriety and Insanity is an intricate and perplexing problem. If we have studied them without prejudice, the more we see of both, the more do we realize how much we have to learn. The careful study and deep thought with which many are now investigating the subject, with the brilliant work on

neurasthenia and other nervous affections of leading neurologists, will in time collect such a store of knowledge as cannot but lead to a clearer understanding of the phenomena and causation of both insanity and inebriety.

Analogy in treatment.

With all our ignorance we know, however, enough to warrant us in insisting on the treatment of habitual inebriety and insanity as diseased conditions, rather than their punishment as criminal offences. Time was—not so very long ago—when the unhappy ones of unsound mind were treated with studied harshness, when of almost every establishment for lunatics it might have been said, in the words of the grand old Quaker poet of America—

> "The groan of breaking hearts is there,
> The falling lash—the fetter's clank."

But a new era has dawned upon the world. Cruelty has given place to kindness. The wasted and worn incurable, whom no scourge could rouse and no torture awake from

> "A dumb despair, a wandering death,"

is amenable now to humane and skilled medical treatment, which is

> "Like a subtle flame,
> A breath of life electrical,
> Awaking and transforming all,
> Till beats and thrills in every part
> The pulses of a loving heart."

To my professional brethren I would say—Deal with the inebriate as you have so successfully dealt with the maniac. Frown not on him as a hardened criminal. Condemn the sin, while you stretch out a loving hand to the sinner. Remember that he has fallen by the power of a physical agency, which has crushed to earth some

of the noblest and most gifted of our race. Treat him, in short, as a patient, labouring under a baffling and inveterate disease, and, amid many discouragements, such a measure of success will follow your true curative treatment, as will gladden your heart as men, while it will attest your skill as physicians.

Our Duty to the Inebriate and the Insane.

The disease of inebriety resembles in many particulars the disease of insanity, and it is as much the duty of the Christian, the Philanthropist, and the Statesman, to establish homes for the treatment of the inebriate, as they have acknowledged it to be their duty to sustain asylums for the care of the insane.

Other allied diseases.

Inebriety is a functional neurotic disease, and may be considered as one of a group of nervous affections. It is often seen in families in which neuralgia, hysteria, epilepsy, neurasthenia, and other similar ailments appear. Any other neurosis renders the subject of it peculiarly susceptible to the intoxicating action of narcotic agents, but there is also a special inebriate neurosis, with an extreme susceptibility of this nature. The susceptibility to alcoholic narcotisation is, however, much more delicate than to any of its compeers. Even where drunken acts have diminished from the excellent work of abstainers and prohibitionists, the disease inebriety has increased. The extent of this disease cannot be gauged by the amount of drunken manifestations, as the disease is an unhealthy state of the nervous organism, which may or may not be manifested in the phenomena of intoxication. There has been a history of drunkenness all along the ages, but in ancient times there does not seem to have been much of what we now know to be the functional nervine disease—inebriety. This latter has largely been

developed from the increasing nervous exhaustion consequent on the wear and tear, the bustle, pressure, and worry of modern civilised existence, combined with the accumulated heredity (neurotic and narcotic) of our ancestors.

Definition of Inebriety.

The act of drunkenness is no more the disease of inebriety than is a violent deed the disease of insanity. There may be intoxication and there may be murder, without any underlying disease. But no inconsiderable proportion of drunken eccentricities and of criminal assaults are the product of diseased states. As there is a morbid condition designated "insanity," so there is a morbid condition designated "inebriety."

To avoid confusion and prevent misapprehension, let me define inebriety as a constitutional disease of the nervous system, characterised by a very strong morbid impulse to, or crave for, intoxication.

Why called Narcomania.

The morbid impulse and crave of inebriety are not for inebriating agents for their own sake, but for the temporary relief afforded by them. In fact, many inebriates hate the intoxicant which they would sell their soul to procure. Nor is the inebriate indulgence limited to alcohol. This is our narcotic in common use, so most of our inebriates long for and indulge in alcoholic intoxicants. But other narcotics are also sought under the overpowering pressure of the diseased inebriate impulse and crave. As the disease is the same, environment and other conditions determining the particular inebriant, I propose to call this abnormal state, especially in its marked maniacal forms, by the comprehensive name—NARCOMANIA. In other words, a mania for narcotism of every kind, an inexpressibly intense involuntary morbid crave for the temporary anæsthetic relief promised by every form of narcotic.

CHAPTER III.

Forms of Inebriety.

Inebriety assumes various forms—Periodical and Habitual Inebriety—Proportion of periodic inebriates—Female periodical inebriety—The functional the most common—Functional disturbance a prolific cause of female inebriety—Examples—Periodical inebriety in the male sex—Law of nervous periodicity—Periods of recurrence—Regular periodicities—Daily, tertian, quartan, &c.—Irregular periodicity—Examples of chronological inebriate periodicity—Lunar periodicity—Periodicity of occasion—Commercial inebriate periodicity—Climatological inebriate periodicity—Habitual or constant inebriety—Case of a medical man—Case of a literary man—Inebriety social or unsocial—Example of social inebriety—Examples of unsocial inebriety—Neurolytic inebriety—Alcohol and opium forms—Cases of statesman and divine—Neurasthenia the cause of their inebriety.

The disease of inebriety, which I have defined as a disease of the nervous system with a morbid impulse to or crave for intoxication, may assume various forms when fully developed. Even in its latent stage, before the application of an exciting cause has provoked a paroxysm or brought into view an inebriate act, the innate tendency to narcotism appears in varied guise.

Inebriety assumes various forms.

We may class inebriety under two heads, and divide inebriates into two general groups.

Inebriety may be periodical or constant, and inebriates may be periodic or habitual.

Periodical Inebriety.

Of 600 admissions to the Home for Inebriates at Fort Hamilton, New York, 242 were periodic inebriates; and of 103 admissions to the Dalrymple Home for Inebriates at Rickmansworth, there were 45 of this class. There was therefore a larger proportion of constant than of periodic drunkards.

Proportion of periodic to constant Inebriates.

Inebriety of female functional Periodicity.

Among females the commonest form is that of functional periodic inebriety. The great functional disturbance undergone by many women at the approach of each period, especially by individuals of highly nervous temperament, has been a prolific cause of the inebriate tendency. The whole nervous apparatus is in a state of perturbation, and there is often a pathological condition which craves for the calmative influence of some anæsthetic. Alcohol in most cases meets this physical want for the moment, and it is desired mainly because it is the anæsthetic agent which we in Britain affect.

Case, married, with delusions.

R. S., 50, married, refined, intellectual, and domesticated. Heredity neurotic. For twenty years she has been the subject of uncontrollable inebriety for two days during the menstrual period. While in this truly maniacal state she is infuriated against her husband, to whom she is always affectionate and kind except during these paroxysms. He is obliged to shut himself up as a protection against her violence.

While labouring under this transitory and regularly recurring periodical inebriate outbreak, she is quite unmanageable and is lost to all sense of decency. She will rush out of the house into the street sometimes naked, sometimes clothed only in her night-dress, and conduct herself like a mad person. As soon as the

period is over she is again in her right mind, a pattern wife and mother, and remains perfectly sober till the recurrence of the inebriate paroxysm at the approach of the next period.

Case, unmarried and uncomplicated.

L. N., 17, unmarried. Paternal inebriate heredity. A highly educated, accomplished, and amiable young lady. Entirely abstemious except at her regular illness, when she has to be closely watched for four days to prevent her from drinking to excess.

Case, single, of 24 years standing.

Y. A., 43, unmarried. Heredity neurotic. An active Christian worker. Generally takes no intoxicant whatever in the intervals, but about three days prior to a period begins to feel an intense craving for strong drink, which, if she is on a visit to abstaining female friends, she can resist, but if at home without any female friend and left to herself during the day, she seems powerless to prevail against. She began to feel this tendency to intoxication at the age of nineteen.

Case, married, 11 years standing.

S. C., 42, wife of a mechanic. Heredity unknown. Habit of eleven years standing. For about ten days every month, from about four days before the period, she suffers from unconquerable depression, accompanied by a persistent and increasing crave for intoxication. She thoroughly understands the nature of this perversion of function, and attempts to stay the crave by coffee, cocoa, and fruit. For a few times she tried smoking, which gave temporary ease, but the effect soon wore off. She usually resists for about six days, then in a moment, driven to desperation by her suffering, her sense of the wrong doing overpowered by the crave, she drinks up a glass of liquor quickly and spasmodically. The

moment this is swallowed all is over, and she becomes speedily dead drunk. Repeatedly while in this unconscious state she has met with serious, almost fatal, injuries.

Male periodic Inebriety.

Periodic inebriety is not confined to the female sex. Nor is this to be wondered at when we reflect how the law of nervous periodicity affects all human beings. Periods of action and inaction, manifested in the alternation of wakefulness and sleep, are types of the periodical recurrence of various functions and states common to both sexes. The vital temperature, like the temperature of the atmosphere, rises and falls in regularly returning periods. Similar periodicities affect us in a variety of forms. The brain, for example, is liable to excessive discharges of nervous force at regularly recurring times. Accordingly we find periodic inebriety among males as well as females.

Regular periodicities.

The recurrence of the outbreak may be once every day, every second, third, or fourth day, once a week, once a fortnight, once every month or two or every three months. Or the periods of recurrence may be at any time between these times, which I have stated simply because these are the most general which I have seen. Whatever the length of the abstinent periods, the peculiarity of this form of inebriety is that the intervals are usually of about the same length.

Irregular periodicities.

There are also periodicities of inebriety which are chronologically irregular in their appearance. Such periodicities as the atmospheric and terrestrial awake corresponding periods of depression and exaltation in many individuals.

Chronological periodicity.

In some persons labouring under the disease in its periodical form the periodicity is weekly.

R. N., 45, gentleman. Atavic inebriate heredity (male). Regularly every Friday morning the inebriate impulse creeps over him despite his endeavours to keep it back, and with rare exceptions (when he has been with friends who have forcibly kept him from alcohol for twenty-four hours till the impulse has subsided), before the evening he has rushed headlong into excess, the debauch generally lasting for about thirty hours. Weekly periodicity.

The following is a type of fortnightly periodic inebriety. S. D., 29, unmarried. Male of independent means. Inebriate heredity (two uncles). For ten years the drinking bouts have been every fourteen days, extending over fifty hours each. For the first three years there were intermissions of prolonged sobriety, but thenceforward no exception to the fortnightly outbreak has been known. Fortnightly periodicity.

Not a few periodical inebriates have an attack of inebriety once every four weeks. A solicitor, aged 33, married, heredity unknown, of nervo-sanguineous temperament, has for four years past regularly at the expiry of every fourth week been literally hurried, unless when restrained by his wife and other friends for from three to four days, into riotous indulgence in intoxicants. Lunar Inebriate periodicity.

J. N., 46, male, married. Maternal neurotic heredity. Generally very temperate, but about the end of each fourth week he experiences a very strong impulse to intoxication. In certain circumstances he is able to restrain from giving way to the morbid impulse, but this is the exception, and the victory is gained only with difficulty. He succeeds best, when either at home or on a visit he is in intellectual and elevating society, though the impulse is strongly present even then.

When he realises that he cannot succeed in resisting the morbid impulse, he asks his wife to lock him up for forty-eight hours; and, if he have no access to narcotics during that term of voluntary detention, he is past the crisis and is safe for nearly four weeks.

Periodicities of occasion.

There are many whose inebriate periodicities are governed, not by internal impulse but by external opportunity. Such break out into inebriate activity whenever they have a chance. They suffer really from constant inebriety, but can indulge only when they have the wherewithal to purchase liquor, or when the absence of strong restraining circumstances allows them an open field for the gratification of their morbid desires or impulses.

A common periodicity of occasion is seen in the regular Saturday, Sunday, and Monday excess of so many operatives in London and the provinces.

Commercial Inebriate periodicity.

In merchants and clerks I have seen the outbreaks regularly follow the heavy weekly or fortnightly foreign mails; and in other professions and occupations I have noticed the outbreak invariably occur on the occasion of certain specially busy days.

For example:—T. H., aged 39. Heredity unknown, nervo-sanguineous temperament. Clerk in an extensive firm of dry goods merchants. Invariably sober except twice a year when stock is taken. This is a very heavy operation. The worry and exhaustion consequent on longer hours than usual is the occasion of intense neurasthenia, which physical weariness seems to crave most strongly (as clearly as if expressed in an audible voice) for the Lethe of narcotism. He strives against this persistent and growing yearning, but feels unable to hold out, and surrenders at discretion before the

stock-taking is half over. Once or twice he has been closely watched and guarded, through this trying and exhausting commercial process, by a staunch abstaining friend who has wisely administered such non-intoxicating supports as coffee, cocoa, tea, hot milk, hot extract of meat, with nervine tonics combined with diffusible medicinal stimulants. When safely over the five harassing days and 24 hours more, he was free from the morbid desire, once more sound in body, brain and nerve. Another gentleman, aged 44, an auctioneer, heredity inebriate (male) of nervous temperament, is a water-drinker habitually. But when he has two or three continous days of a heavy sale, his whole nervous system is unstrung, he feels wearied worn and woe-begone, his buoyant spirits have fled, he is weak, languid and despairing. Nothing arouses his interest. He gets through his work mechanically, suffering a living martyrdom like the Spartan youth with a fox gnawing at his vitals. Plunged in the depths of gloom and hopelessness, an invisible yet masterful monitor within, more real to him than was the familiar demon to Socrates, urges him on to the intoxicating bowl or the soporific pipe on the plea, the truth of which he cannot deny, that a goodly draught or a generous narcotic dose will afford him instant if temporary relief.

Climatological periodicities.

Atmospheric and telluric periodicities also exert their influence in the genesis of the periodically inebriate impulse and acts. Influence of every kind which has an appreciable effect on the brain and nerve centres is a factor in the causation of periodic inebriety. In some persons the return of summer, in others the recurrence of winter, in some rainy weather, in others again the piercing east wind, operates so as to set up, in constitutions predisposed thereto, periods of inebriety.

Some who lead lives of sobriety in a city, invariably drink to excess at the coast. Others indulge to drunkenness only when in the country.

Habitual or constant Inebriety.

It has been urged that though periodic inebriety is a truly diseased condition, habitual drunkenness is simply a vicious habit. That in some cases the latter is a vice I frankly concede, but in a vast number, I believe I am within the truth in saying the great majority, of cases in which the drinking habit originated in a quest for pleasure and excitement or in compliance with fashion, the habit has at length crystallized into a veritable disease, and has set up a chain of pathological tissue changes which are unmistakeably a diseased condition. At the outset of such purely vicious alcoholic careers the act of drinking or of indulgence in any narcotic may have been quite voluntary, but as the frequency and extent of each drinking act have increased, the boundary line between the physiological and the pathological has insensibly been crossed, the latter having gained ground so surely that disease is the only accurate term which can be applied to the well-nigh irresistible impulsion and its gratification. The constant form is more frequently than the periodic form accompanied by fatty muscular degeneration, and other structural degradations.

Apart from the toxic irritation, inflammation, and degeneration of tissue and organs affected by the poisoning action of the intoxicating agent, the repeated and prolonged paralysis and anæsthesia gradually so dull the nerve and brain functions that the higher faculties are set to sleep, are in fact rendered powerless and inactive. The result is that existence is maintained automatically. There is no clear perception, no lucid reasoning, no guiding directing controlling power. The confirmed

habitual drunkard becomes practically a soulless mass of animal function.

The habitual drunkard is a person of whom neither the brain nor the body is in a healthy state. He is weighted with a disease than which none is more subtle in its working, none more lethal in its influence. How any well-informed observer can doubt for a moment that cases such as the following are labouring under a physical and mental disease, is quite beyond my comprehension.

Typical cases of Habitual Inebriety.

S. L., 36. Medical practitioner. No inebriate or insane heredity known. Nervous temperament. For many years an abstainer. About fifteen years prior to his death be began to drink occasionally and very sparingly on social occasions. Step by step he fell or rather glided into habits of excess, till in about three years he became a habitual inebriate. No riotous outburst, no mad drunken bouts characterised his alcoholic course. The only special incident was an attempt at suicide by poison when drunk and in acute mental distress through brokers being in the house. He drank morning, noon and night, and neglected his patients, raising every farthing he could to spend in drink. All care for his wife and family fled, though he was never actively unkind or uncivil to them. His whole life seemed to become one continuous act of indulgence in intoxicants. The gratification of his ever present craving for alcohol was the sole apparent aim of his wretched existence. Even on his death-bed he lied to me about his drinking, calling for brandy as long as he could utter audible speech. At one time he was a well-educated, clear-headed, judicious medical man, tender and affectionate to his family,

Case of medical man.

attentive and considerate to his patients. He was active, truthful, reliable, and most diligent in the performance of his duties. Gradually he was transformed into a chronic sot, living only to devour ardent spirits, selfish, inconsiderate, regardless of the claims of both patients and family, untruthful, deceitful, cunning, fawning, and shuffling in his walk and conversation. What was this metamorphosis but the work of a fell physical and mental disease?

The progress of the disease was as well-marked in this case, as I have ever seen the progress of chronic forms of diabetes and insanity.

Case of literary man.

Take another case, a university graduate in arts, an excellent scholar, a perfect gentleman, a loving and devoted son, of nervous temperament, with no known inherited taint. He was abstemious to a degree till at the age of twenty-six he met with a disappointment in love which he felt acutely, when he took to drinking. Ere many months had passed he was a habitual drunkard. His character changed for the worse *pari passu* with his drunken habits. In less than twelve months no more apparently hopeless case of inebriety could have been met with. Clothes, jewellery, books, in short everything he could lay his hands upon whether belonging to himself or to others, was pawned for drink. Every influence was brought to bear upon him, but in vain. The only sober intervals were when he thrice was attacked by acute intercurrent illness and was absolutely unable to get out of bed, prostrate and hanging between life and death. Even then, by coaxing and bribery he sometimes succeeded in smuggling in some brandy in spite of the watchfulness of his friends and his physician. He died, one of the myriads who have succumbed to the disease of inebriety, at the early

age of thirty-seven. His entire nature seemed to have radically altered, the once loving and obedient son having repeatedly struck and tried to kill his mother, the once happy and open-hearted *litterateur* having degenerated into a querulous, morose, discontented and self-sufficient drink-seeker. Here the inebriate impulse steadily acquired such strength as to dominate his whole existence. Everything that he once held dear was sacrificed to gratify this morbid impulse, which was truly uncontrollable, persisting till his premature death. He told me again and again that if hell gaped between a glass of spirits and himself he could not possibly help trying to reach the glass. I have seen other cases of habitual inebriety nearly as bad, completely cured, with the happy issue that the old sweetness of disposition, unselfishness of spirit, and devotion to duty were again in a great measure restored, as a result of intelligent and appropriate medical and hygienic treatment. Is not this proof that the patient had been suffering from a well-marked disease? In this case I have related only the mental and moral symptoms, but the progress of the disease was characterised by intercurrent bodily ailments, lung, heart and kidney affections, springing from the alcoholic toxication. The perversion of the mind and of morals were as truly departures from health as were the phthisis, the pericarditis, and the nephritis.

Habitual or constant, as well as periodic inebriety, may manifest itself in various ways corresponding to the idiosyncracy of the individual inebriate. One person it may make taciturn and gloomy, another frank and frisky. We may thus class inebriates, as they are affected by alcohol, under the headings of:—

Inebriety social or unsocial.

A. Social.

B. Unsocial.

The social inebriate drinks openly and without disguise, and rarely except in congenial companionship with other drinkers. In his cups he is fond of "good company," and it is frequently to his fondness for company that he is indebted for his introduction to drinking, if not his initiation into the habit of intoxication.

Example of social Inebriety.

V. O., 28. A gentleman of fortune. Temperament nervo-sanguineous. Heredity: father a free liver but not a drunkard. A refined warm-hearted ingenuous man. Partial to intellectual reading, music and the fine arts. Though partaking socially of wine and malt liquors like his friends and acquaintances, he never was known to exceed for years. But so very gradually as to be almost imperceptible, the drinking habit grew upon him till when he reached the age of twenty-three he was a confirmed drunkard. He never drinks to excess when alone. In fact, he rarely ever tastes an intoxicant unless when one of a circle of boon companions. On these occasions he has generally to be taken home, helplessly drunk, by some of his fellow debauchees.

Examples of solitary Inebriety.

B. R., 32, temperament bilious and sluggish. Maternal inebriate heredity. A solicitor, and a marked contrast to the case of V. O. How he became a drunkard is not known. When seen to drink it was with difficulty that he had been persuaded to do so, and then he invariably drank only a very little, appearing to the spectators to have a distaste for intoxicants. But an accidental over-dose of chloral revealed the fact that for years he had been an habitual inebriate, regularly going to bed drunk at an early hour in the morning after having emptied a bottle and a half of some kind of ardent spirit. He in general affected brandy, but occasionally applied himself to whiskey or gin.

S. J., male, 59, temperament phlegmatic. No inebriate, insane, or neurotic heredity known. A brilliant scholar and an elegant writer, a man of profound learning. A gentle and unselfish spirit, even on his death-bed devising a deed of munificent generosity. Originally a warm friend of temperance, he gradually fell into the habit of secret drinking, and for some ten years, unknown to the world, drank to intoxication every night. Only his servants knew of his failing. I discovered his secret accidentally, on being called to him on one occasion during a sudden and alarming illness with which he was seized late at night.

He drank port and sherry freely, with large quantities of brandy and whiskey. He was abstemious to a degree in society, and always drank alone.

Female case.

It has been my painful duty to attend not a few females who have been solitary and secret inebriates. One lady, aged 50, had been at once a habitual drunkard and a Christian worker for twelve years. There was a history of maternal inebriate heredity. She was of a phlegmatic temperament. After dinner every evening she drank to excess, fermented wine and brandy being the usual beverages. After sleeping the sleep of the drunken she refreshed herself in the morning with a bath, partook of a late breakfast, and sallied out on her round of religious work among the poor. She thus led two separate lives, each occupying about one-half of her existence. During the forenoon and afternoon she was an earnest and indefatigable District Visitor, as considerate and liberal a philanthropist as I have ever known. During the evening and through the night she was a drunkard. What saved her reputation was the fact that she was never out after dinner, but went straight to bed. Had

she ventured into the fresh air and appeared upon the street, her gait would have been still more unsteady, her speech thicker, and her thoughts more confused, though these symptoms were well known to her domestics.

Neurolytic Inebriety.

Nor is this the only case of the kind which has come under my observation. I have known clergymen, literary men, merchants, and others who have, for lengthened periods, after doing a splendid day's work in their respective callings, habitually indulged to excess in intoxicating drink. I have been quite carried away by the eloquence of the statesman whom I had seen helplessly drunk not twelve hours previously. I have been profoundly impressed by the fervor and pathos of a grand discourse from the pulpit from a divine who, when I was called to see him the night before, was as was his wont at that hour of the day literally "dead drunk."

In cases of this double life alcohol is not always the dominator of the one-half. I have known men of high intellectual capacity spend the moiety of their existence under the spell of opium, the other moiety being active and busy. In more than one such case of constant opiomania the narcotic indulgence has been absolutely unknown to the friends, only accident bringing the fact to light.

Neurasthenia the cause of their Inebriety.

Neither a bad heart, nor an evil disposition, nor a love of drink or opium was the cause of these series of startling eccentricities. They were all good men and true, without guile, and, but for the one blot, of blameless life. They had exhausted their nerve force, were the subjects of neurasthenia or exhaustion of the nervous system, their inebriety was neurolytic, and they were simply seeking

relief in the only way by which they felt they could obtain the complete satisfaction of their insatiable physical craving for anæsthesia. They were abject slaves to the narcotic, and nightly, though with loathing, felt compelled to surrender their consciousness to their Master. Fully realising their dreadful slavery, hating the very taste and smell of their betrayer, horror-stricken at their cowardice in submitting to such a yoke, these wretched yet magnificent spirits, in common with many as gifted as themselves, were possessed as it were with a physical demon, were under the malign influence of a material evil spirit, were dominated by a chronic disease which held them tight in its iron grasp. Not that their case is beyond hope. I have seen such a statesman, restored and in his sound mind, become a model of sobriety. I have seen such a divine, freed by appropriate treatment from his dread affliction, live to become a burning and a shining nephalian light.

CHAPTER IV.

Forms of Inebriety *(Continued)*.

Inebriety of Insanity—A true Narcomania—Narcomaniacs often driven against their will and their tastes—They drink because they are insane—Case of a journalist—Inebriety of recurrent insanity—Inebriety of syphilis—The health history of inebriates often reveals inebriate starting points—Inebriety starts sometimes from non-alcoholic disease—Sometimes from injuries—Sometimes from head injuries—Abstainers sometimes become inebriates after head injuries—Inebriety of sunstroke or heat apoplexy—Case—Inebriety of nerve-shock from accident—Case—Inebriety of operations.

Inebriety of Insanity.

In another chapter (Chap. II.) I have treated in detail of the relations of Insanity to Inebriety. In this place I propose merely to briefly describe the principal forms of the Inebriety of the Insane, *i.e.*, of those inebriates who are admittedly insane, apart altogether from the larger question as to whether all persons suffering from the disease of inebriety, latent or developed, can be pronounced wholly sane. No one will deny that drunkenness and free indulgence in intoxicants short of drunkenness not infrequently spring from insanity, the partial or complete intoxication being but a manifestation of mental unsoundness. This class of cases will be recognised by all as legitimately ranked under the cognomen of narcomania.

To such this special term is peculiarly appropriate inasmuch as their mania is not so much for alcohol, or ether, or chloroform, or opium, or any particular narcotic, as for the pleasurable sensation of narcotism. Most inebriates in this country and in Western countries generally prefer alcoholic intoxication simply because they have been accustomed to alcohol, and they have not acquired the same artificial relish for the slightly differing gratification to be derived from other anæsthetics. The sensations, however, are not always pleasurable. Generally speaking, the morning after a debauch is a miserable one. The awaking from drunkenness is usually most wretched. The headache, the heartache, the weariness, and the prostration, combine to form what may truly be called woe unutterable. No one can describe the remorse and the despair, the physical and mental depression, craving for a replenishment of the Circean cup. The earlier stages of intoxication are in general of a completely opposite character. Pleasure dances through the veins, mirth gleams in the eye, gladness fills the heart, joy surges through the brain, the whole being is elated and in an ecstacy of happiness. But there are exceptions to this rule of temporary and festal enchantment. Some of the insane who are the subject of inebriety as a part of their alienation of mind, find no pleasure in the drunken act at any of its stages. However they become drunk or whatever they get drunk upon, they experience no gratification in the act. It is true that they find forgetfulness and are oblivious for a season while they are in a state of unconsciousness when dead drunk, but they hate both drink and drinking with a perfect hatred. They are driven, not led,

A true Narcomania.

Narcomaniacs often driven against their will and their tastes.

coerced, not allured, into the horrible pit of drunkenness. Each of them, as each narcomaniac who has no positive aversion from the narcotic itself, may with truth say in the language of Schiller,*

> "There's a dark spirit walking in our house
> And swiftly will the Destiny close on us.
> It drove me hither from my calm asylum,
> It mocks my soul with charming witchery,
> It lures me forward in a seraph's shape;
> I see it near, I see it nearer floating,
> It draws, it pulls me with a God-like power—
> I have no power within me not to move."

I exclude from present consideration all those who have become insane through the use of narcotics, although this alcoholic and allied insanity begets in its turn the inebriate morbid impulse. The number is larger than is generally supposed, of those in whom intemperance is simply a mode of exhibition of their insane state. Such cannot be said to have become unsound in mind through drink. Yet so little is this understood that, in the recent report of a well-conducted and genuine Home for Inebriates, the fact that 10 per cent. of the inmates had become insane is cited as a proof of the assertion that three-fourths of our lunatics have lost their reason as a direct consequence of intemperance. The cases of which I speak indulge in strong drink or opium because they are insane. They are not mad because they drink. Inebriety is but one form which their insanity may assume. Many of them appear sane on every other thing except drinking. Others again are insane in their every action, their speech, or their eating, as well as in their imbibition.

They drink because they are insane.

* Thekla in *The Piccolomini*, Act II., Scene 7.

Take a typical case, that of a journalist who died in an asylum at the age of 38, where his mother had been twice under restraint for considerable periods for mania. He was of nervo-sanguineous temperament, mercurial, and easily excited. During youth, he was subject to sudden and violent fits of passion when put out by some trivial *contretemps*. These lasted sometimes for fifteen or twenty minutes, leaving him prostrate. Hallucinations and delusions began to occur in his nineteenth year. He soon thereafter exhibited symptoms of aberration, wandering about at night without a definite aim, at times unable to understand what was said to him, at times incoherent in speech, and at times obstinately silent. His friends described him as "queer in the head." At 21 he began to drink. In less than a month he disappeared for four days on "the drink." In a couple of months there was a similar disappearance. Gradually the intervals became shorter, till within a year, these alcoholic absences happened about every three weeks and extended sometimes over a week. This went on for some four years, during which period he had repeatedly been closely watched on account of his "eccentricities."

Case of a journalist.

His insanity having assumed a dangerous form, he was put under restraint for some months. On his discharge his eccentric behaviour and his alcoholic absences were renewed, and he had to be restrained within twelve months. This process was gone over twice afterwards, till his permanent seclusion six years prior to his death while labouring under dementia.

Drinking to excess is a common feature in attacks of recurrent insanity. The recurrences are generally preceded (as earthquakes are by terror in horses or other animals) by a

Inebriety of recurrent Insanity.

longer or shorter interval during which the patient appears out of sorts, irritable, and uneasy. Then there is a sudden and drunken attack. On awaking from this alcoholic debauch the patient looks strange and excited. He rapidly manifests symptoms so violent and insane, sometimes within and sometimes without doors, as to necessitate removal to an asylum. In from a few months to a year his recovery is complete, and a recurrence may not take place for a term of years. I have generally found such subjects of recurrent insanity take to ardent spirits of some kind, though occasionally the drunkenness has been on beer or champagne. In all the cases of alcoholic intemperance intervening in this form of insanity which have been observed by me, there has been an insane heredity. Individuals labouring under this insidious malady may lead the most temperate lives in their lucid intervals, which intervals may extend over years, and then, after having been lost to their relatives and to society, be found in a state of unsound mind in some place where they had hidden themselves to indulge in a drinking bout.

Inebriety of syphilis.

Though formerly of a different opinion, I have been gradually compelled by the convincing evidence of facts to recognise many points of contact of specific disease with inebriety.

In some cases in which the practice of profligacy and excessive drinking were clearly owing to the lack of inhibitory power to resist truly morbid impulses, I have observed that the two impulses were almost if not quite concurrent. In other cases these impulses were alternate.

Again, in all the stages of syphilis, especially in the second and third, as well as to a limited extent in local venereal disease, there has at times been an exhibition

of the narcotic impulse. In most of the cases in which this morbid desire occurred in local inflammatory trouble, or in the first two stages of the constitutional disease, it has appeared to me that the remorse, fear, and mental distress, have so disturbed the nervous equilibrium that perverted cerebration has been the origin of the crave. These forms of the inebriety of specific disease are very amenable to treatment. But in the third stage of syphilis I have not been able to think otherwise than that the syphilitic poison has, by its action on the neuroglian connective brain tissue, the meningeal membranes, or the bone substance, caused such physical agony as has originated an intense morbid longing for intoxication.

Traumatic Inebriety.

So long as inebriety is regarded, not as a disease, but as a vice a sin or a crime, it is surprising to note how little is known about the medical and surgical health of the inebriate. The fact that a man was drunk has often caused his death, because the mere fact of drunkenness has made most of the by-standers blind to everything else. In the same way it has generally been forgotten that the drunkard has a body liable to be attacked by disease and to suffer injury, the horror at his sinful excess rendering the lookers-on oblivious to all beside. But when we enquire into the health history of inebriates we find a variety of accidents, injuries, or ailments, which in a large number of cases have been the occasion of his embarkation on a voyage over the treacherous deep of intemperance.

The health history of Inebriates often reveals Inebriate starting points.

Inebriety starts sometimes from non-alcoholic disease.

I have seen inebriety, periodic and habitual, take its rise from certain pathological states which intervened in the course of acute and chronic non-alcoholic disease. This has been most observable in phthisis and other chest af-

fections, in collapse after severe hæmorrhage, and in anæmia supervening on wasting diseases.

Sometimes from injuries.

But the development of inebriety has not been limited to morbid states. I have repeatedly seen both slight and serious injuries set up periodical or constant inebriety in individuals who had previously been the soberest of the sober. When considering the etiology of our subject we saw that at least 1 in 6 of the 600 cases of inebriety treated at Fort Hamilton had received blows on the head, 41 of these having produced fracture of the skull. Of these cases of head injury nearly two-thirds became habitual, and one-third periodic, inebriates. This is not to be wondered at, as disorder of the cerebro-spinal centres is often caused by injuries to the head. By metastasis, this cerebro-spinal disturbance may be transferred into a paroxysm of inebriety.

From head injuries.

I have had no opportunity of seeing the state of the brain after death in a case of traumatic inebriety arising from an injury to the brain or skull, but it is well known that a great variety of cerebral symptoms have been recorded as following blows on the head, at longer or shorter intervals. An unstable state of the nervous system may be quickly or gradually set up either by the shock, or by molecular changes in the substance of the encephalon, caused, it may be, by the pressure of the fractured bone, or swollen membrane, or effusion strangling brain cells and thus arresting their growth and impairing their nutrition.

Abstainers sometimes become inebriates after head injuries.

Abstainers from intoxicants have become addicted to both periodic and habitual forms of inebriety after blows and other injuries to the head, and in some cases the inebriety has been cured when the injury was one which was capable of repair.

Of the form of inebriety arising from the effects of heat apoplexy, or sunstroke, I have had several cases. B. T., aged, 48, a fine up-standing well-built strong man, of phlegmatic temperament, with an inebriate heredity, had served as a soldier in India for some seven years. There he had sunstroke twice. He was an outdoor porter to a large firm in London. Generally he was a thoroughly sober man, very seldom drinking a glass of even the weakest beer. During winter and spring his sobriety was unbroken, but regularly every summer, a few days after the hot season set in, he drank to excess and became maniacal (acute alcoholic mania). On the expiry of three weeks or thereabout, during which time he had been under restraint and had been kept absolutely from intoxicants, he was quite well again and recommenced his autumn, winter, and spring session of unimpeachable sobriety. After three years recurrence of this solstitial inebriate paroxysm, I persuaded him to adopt certain simple precautions to protect his head from the excessive heat, to take non-stimulating food, and follow a strictly hygienic course of life. He followed this plan and for the four years thereafter, during which he was almost daily under my observation, the inebriety did not recur.

Inebriety of sunstroke.

Heat apoplexy is characterised by hyperpyrexia, which is believed to be the result partly of paralysis of the vaso-motor nerves, and partly of the excessive stimulation and exhaustion of the nervous centres by the heat affecting the body as a whole. There is such a general failure of the vital powers that the nerve centres often sustain structural damage. In this way nervous instability is produced, with a loss of inhibitory power. These degenerations, with an increased sus-

ceptibility to the action of narcotics, which I have frequently observed after an attack of heat apoplexy, fully account for the part sunstroke plays as a factor in the causation of inebriety. While some of my cases were drinkers before they were struck down by heat, owing their *coup de soleil* largely to their habits, others were abstainers.

Inebriety of nerve-shock from disease.

Various injuries, and nerve-shock from railway or other accidents, where there has been no external lesion, I have also seen excite to inebriety in constitutions predisposed to this disease.

S. B., 34, railway porter. Had a very narrow escape from being killed by falling off a platform in front of a passing train. So intense was the shock to the nerves that he was at once, as it were, precipitated into developed inebriety of the periodic form, which was cured by the restoration of his nervous tone.

Inebriety of operations.

Operations, especially for stricture, have also been known to have started persons, predisposed thereto, on an inebriate course. Fortunately patients are generally under control for some little time after an operation has been performed, and careful surgeons are very chary in administering intoxicants in such cases. Inebriate traumatism is an undoubted fact, and the possibility of its latent existence ought never to be lost sight of. Many persons are extremely liable to be seized with a fierce impulse to indulge in narcotism, while the system continues to labour under the effects of severe and sometimes even trifling injuries.

CHAPTER V.

FORMS OF INEBRIETY *(Continued)*.

Forms of inebriety correspondent to inebriating agents—Inebriety may be classified as alcohol, opium, chloral, chloroform, ether, chlorodyne, and other forms of inebriety—Alcoholic Inebriety—First act of the drama of alcoholic intoxication, exhilaration and relaxation with vaso-motor paralysis—Second act, cerebral automatism with incomplete paralysis—Third act, advanced paralysis, unconsciousness, and automatic existence—A drama in three acts of progressive paralysis—Modification of alcoholic action—By idiosyncracy—By inebriating agent—Variety of alcohols—Ethylic and methylic least toxic—Propylic, butylic, and amylic, most toxic—Toxic potency of wine; beetroot, corn, and potato spirit—The most toxic the product of imperfect distillation—Curious outbreak of methylated spirit intoxication—Various liquors—Spirits violent in action—Beer and wine Inebriety—Sequelæ of beer drinking—Embarrassed respiration, functional perversions, hepatic and renal congestions—Stupor tending to paralysis—Psychologically beer a depressant with suicidal tendency—Cider Inebriety—Absinthe Inebriety provokes to epileptic seizures and mania—Depraves the digestion—An unreliable and dangerous medicine—Kava Inebriety—Modification by dilution—All the alcohols poisons—Alcohol the demon of physical degradation—Inebriate lying—Intercurrent alcoholic affections of alcoholic inebriety—Delirium tremens—Symptoms—The delirium of terror—Peculiar hallucinations—Diagnosis—Mania a potu—Acute alcoholic mania—A mania of violence—Case—Another case—Police-court inebriates generally subjects of this alcoholic mania—A delirium of fury—Cases—Attacks dangerous to self and others—Case illustrating unconsciousness—Produced by small doses—Diagnosis from delirium tremens—Alcoholic epileptic mania—Absinthe epilepsy—Other alcoholic epileptic attacks—Explanation—Case—Acute alcohol poison-

ing—Fatal case—Case of recovery—Acute alcoholic paralysis—Symptoms—Diagnosis from general paresis—Diagnosis from lead poisoning—From acute ascending paralysis—Recovery frequent—Alcoholic phthisis, pneumonia, and other diseases—Chronic alcoholism—Transition from acute to chronic alcoholism—Boundary line indistinct—Gradual development of subacute and chronic alcoholism—The chronic more injurious than the acute—Chronic bodily disorder—Symptoms sometimes latent during life—Insomnia and fatal complications—Mental perversion—Delusions of persecution—Dementia—Muscular tremors—Characteristic limb pains—Hemi-anæsthesia—Diagnosis from general paresis—Complexion and speech—The senses—Chronic alcoholic paraplegia—General paralysis from alcohol—Other intercurrent alcohol-born diseases.

Forms of Inebriety correspondent to Inebriating agents.

INEBRIETY may also be classified with reference to the intoxicating agent. We thus have alcohol, opium, chloral, chloroform, ether, chlorodyne, and other forms of the disease.

We have already seen that inebriety may be periodic or habitual, that it may assume a variety of forms varying with the functions the disorder of which has been the exciting cause, the differing circumstances of traumatism or of disease which may have induced the affection, and the forms which the ailment may assume. We have now to consider the inebriate impulse as developed into the inebriate act by the action of different inebriating substances.

There are certain features common to all these last named varieties of inebriety, and there are also certain differing symptoms which are worthy of note.

Alcoholic Inebriety.

Ethylic alcohol, the alcohol of pure fermented wine and genuine unsophisticated thoroughly rectified ardent spirit, has a distinctive action on the human economy. Besides its irritant property it is a potent narcotic and anæsthetic.

The first action of ethylic alcohol is vascular relaxation, commonly called exhilaration or stimulation, when a glow of warmth spreads over the whole system, when the heart beats faster, when "happy thoughts" crowd in upon the brain, when all seems life and light and joy, when everything without and within wears a roseate hue. The person is garrulous, in the highest of spirits, extravagant and lofty in his ideas, reckless and confiding. The pathology of this stage of exhilaration consists in paralysis of the vaso-motor nerves causing a reduction of the nervous control of the blood vessels, whereby these are for the moment rendered equally powerless to resist the undue flow of blood into them, and by adequate contraction to expel the blood from them. The result is dilatation and relaxation of the vessels, as indicated by the flush on the face of the alcoholic diner-out. This dilatation and vascular distention are found to extend to the brain and other vital organs. During this excitant stage of alcoholic action, the resistance to the heart's action being lessened by the reduction of nervous control, that organ beats more rapidly, as does the screw of an ocean steamship when the stern is by the gigantic waves lifted high out of the water.

First act of the drama of alcoholic intoxication.

Exhilaration and relaxation with vaso-motor paralysis.

The second act in the drama of intoxication is characterised by a still further reduction of inhibitory control, an incomplete partial paralysis of the brain and higher nerve centres. The power of inhibition having been decreased, a state of intellectual automatism ensues. The reason, the will, and the conscience are somewhat enfeebled, so that thoughts and words become incoherent, and imagination runs riot. So thoroughly has the mental

Second Act.

Cerebral automatism.

balance been destroyed that the emotional and intellectual faculties are beyond the control of the judgment, and there is disturbance as well as exaggeration. Though it may be true, that in some cases there is simply an exaggeration of the original feelings whereby the modest may become more retiring and the pugnacious more combatant, my reading of the phenomena of drunkenness is that there is often a complete reversal or disorder, the meek becoming assertive, the timid bold, the thoughtful silly, the truculent merciful, the ill-natured amiable, and the polite rude.

This phase of cerebral automatism is apt to be accompanied by a temporary and incomplete spinal paralysis.

With incomplete paralysis.

Through the loss of nervous control over the muscles and a diminution of muscular contractility, the characteristic actions usually performed by the spinal cord automatically, are imperfectly executed, and there is a decided lessening of the co-ordinative muscular power. The upper and lower limbs can no longer act in unison with their fellows, and paralytic thickness of speech is synchronous with the paralytic unsteadiness of gait.

In the third act of this spirituous play, the paralysis is

Third act.

for the moment complete. With stertorous breathing the inebriate lies asleep and comatose. He is now "dead drunk." Nothing recks he of

Advanced paralysis, unconsciousness, and automatic existence.

the world within or the world without. Sensation, perception, volition, emotion, intellect, all are for the time being absent. Through all this living death, in the heart and circulation lingers the only spark of vitality which keeps the drunkard really and just alive till the faculties have emerged from the deep narcotism in which they were plunged.

All these acts or stages are paralytic, so that the action of alcohol on the living body is from first to last, so far as we have had an opportunity of observing it, one of progressive paralysis. The facial flush, the nervous flow of spirits and conversation after a moderate quantity of intoxicating wine, are as truly evidence of a disordered cerebral circulation and of vaso-motor paralysis, as is the insensibility of the deepest intoxication. The difference is in degree, not in kind.

A drama in three acts of progressive paralysis.

This is a brief resumé of the drama of drunkenness in three acts, the comedy of inebriety with the tragic and fatal termination so often witnessed. When a lethal dose has been taken there is usually a preliminary nervous shock, evidenced by shivering, pallor, nausea, and faintness, as well as the finale of death. This preliminary nervous shock is sometimes experienced after doses which are not fatal.

This influence of ethylic, as of other potable alcohols, is somewhat modified by the idiosyncracy of the drinker, by the kind and purity of the liquor, by the quantity and comparative dilution of the poison.

Modification of alcoholic action.

According to the individual temperament and constitution alcohol will, in the earlier stages of its action, madden one, calm another—enliven one, make another sad and despairing. Though the majority of drinkers are, during the two first stages of intoxication, first inspirited and then made boisterous, there are some who throughout are dull, stolid, vacant, and heavy. Again, as has been also demonstrated by an extended and carefully conducted series of experiments on animals, age modifies the effect produced by the poison. The immature and tender, like

Modification by Idiosyncrasy.

the senile and exhausted, are less able to resist the toxic and intoxicating influence than are the mature and vigorous.

By variety of Alcohol.

There is a great variety of alcohols, ranging from the light fluid methylic alcohol (wood spirit, or alcohol distilled from wood) to the heavy solid wax-like cetylic alcohol. The last named has never been dissolved and drunk as an agent of intoxication. Nearly all the others have been employed to produce drunkenness. When vaporised and inhaled the methylic is the least poisonous, but when swallowed as a drink, the ethylic (the alcohol of genuine fermented wine) is less toxic than any of the other potable members of the alcohol family. The characteristic symptoms of these are developed more rapidly and with greater intensity than are the corresponding phenomena following on the ingestion of the ethylic, though the methylic ranks more closely with the ethylic than with the heavier alcohols. The presence of acetone in the methylic accounts for much of its potency. Acetonæmia is probably the cause of death in alcoholic coma in many sudden and obscure fatal cases. The temperature goes down lower, and death comes more quickly, with the heavier alcohols. In non-fatal cases the recovery is most speedy from poisoning by the methylic, coming next in rapidity from poisoning by the ethylic, and being much slower from a poisonous dose of the propylic, butylic, and amylic. With these three substances, more especially the two latter, well-marked muscular tremors are the rule, but with the ethylic and methylic they are the exception. Intense headaches, with other aches and pains, are also more apt to accompany intoxication from the heavier alcohols.

Ethylic and methylic alcohol least toxic.

Propylic, butylic and amylic most toxic.

All the alcohols are poisons. The least poisonous are the alcohols of wine. More poisonous are the alcohols of beetroot. Still more deadly are the alcohols of corn; and the most potent and pestiferous of all are the alcohols from potatoes. Amylic alcohol is nearly four times as poisonous as the ethylic.

Toxic degrees of wine, beetroot, corn, and potato alcohols.

The heavier and more noxious alcoholic beverages are generally the result of the imperfect rectification of beetroot, corn, and potato spirit. In Britain the spirits are purer and more thoroughly distilled, so that the grosser discomforts consequent on incomplete distillation are rare compared with their frequency on the Continent of Europe, where the strong intoxicants are presented in a cruder form. Ardent spirits there, as in America and some other countries, are coarser and much more impure than with us.

Most toxic the product of imperfect distillation.

It is a curious fact that the consumption of methylated spirit has, of late, been considerably developed in Scotland. Large seizures of this liquid, which it is illegal to sell as a beverage, have been made in Glasgow and Edinburgh. Quite a number of inebriates have been getting regularly drunk on this liquor, in its coarse and harsh commercial form of "finish," especially in these two cities.

Curious rise of methylated spirit intoxication.

Brandy, gin, rum and whiskey generally, though not always, incite to more violence than do fermented wines and beers, mainly for the simple reason that the former drinks are spirituously stronger. This is the effect when these drinks are pure and unsophisticated. When adulterated, as, for example, in the now generally extinct "coopers" the former pests of the North Sea fisheries, spirits actually madden their

Various Liquors. Spirits violent in action.

devotees. Diseases of the stomach, from the concentration of the locally irritant property of alcohol, are frequent. So also is degeneration of the structure of the liver, of the kidneys, of the heart, and of the brain.

While the mischievous effects produced by these more alcoholically potent liquors are widely acknowledged, it is comparatively seldom admitted that fermented wine and beer are productive of serious damage to body and mind. Many who denounce ardent spirits as the incarnation of evil, claim for beer the properties of a wholesome and sustaining food. One philanthropist has gone so far as to publicly declare that much of the ill-health of the people is due to their drinking too little beer!

Beer and wine Inebriety.

All this is but a vain and baseless superstition. Of 103 inebriates admitted to the Dalrymple Home two drank wine only, three wine and beer, four nothing but beer; or over nine per cent. of the whole number. Beer-drinkers are specially liable to structural alteration and enlargement of the liver often complicated with dropsy, and to rheumatism, gout, and rheumatic gout. Disordered digestion and sluggish circulation are also frequently present. So far from being an innocent and healthful article of diet, beer stout *et hoc genus omne* are noxious and unwholesome luxuries, with no practical food value, and by their vitiation of the blood a fertile cause of degeneration, disease and death. Among the sequelæ of beer drinking are an impeded and loaded circulation, embarrassed respiration, functional perversions, hepatic and renal congestions, with a stupor tending towards paralysis, and a diminished as well as weighted vitality which invites disease and easily succumbs to its ravages. Many beer inebriates are subjects of this form of inebriety, though they rarely if ever die boisterous in

their cups. They lead what may be called an "intemperate" life, drinkers to excess albeit not what are commonly called "drunkards." They are beer-soakers, human sponges with an enormous capacity for the absorption of malt liquor. Of the cases which have been under my own observation, while one gallon a day has been a moderate allowance, I have known eight gallons consumed in one period of twenty-four hours. The general average per day has been one-half gallon. I have, however, seen intractable disease and premature death result from less than a quarter of this quantity drunk daily over a term of years. Psychologically, the beer habit has in the long run a depressing effect, even when taken in fairly "moderate" quantities. Lager beer, which by many is declared to be a temperate safe and wholesome drink, is by no means so. Its daily imbibition long-continued tends to melancholy, ending occasionally in self-destruction. There is also no small proportion of the cases of the general paralysis of inebriety, arising from beer. Such wines as port and sherry are so fortified that they might fairly be classed as spirits. Gout and dyspepsia are their respective concomitants. Champagnes are most truly painful in the process of "tapering off." I know of no distress and discomfort from any kind of drink at all approaching the miseries of the day after a debauch on champagne.

Indigestion and profound melancholic depression are often experienced in this form of inebriety.

Cider Inebriety.

Cider inebriates are usually more heavy and stupid than alert and offensive.

Absinthe provokes epileptic seizures and mania.

Although almost all intoxicating drinks have a tendency to excite to the epileptic paroxysm in constitutions thereto predisposed, there is one drink (in common use in France, more

particularly in the cities, though I regret to acknowledge that its use is spreading in England), which provokes epileptic convulsions by the specific action of wormwood combined with alcohol on the nervous system.

Absinthe, which has a peculiar harsh bitter fiery taste and is of a pale greenish hue, is often adulterated with a metallic colorant and with other noxious substances; but, even when a pure and unadulterated compound of wormwood with alcohol, it is an intense poison. Formerly an alcoholic infusion of absinthium with other plants was distilled, but now to essence of absinthium and various other herb essences a considerable quantity of alcohol is added. Absinthe is popularly supposed to be a tonic from its exceeding bitterness, and to be an aid to digestion. No greater mistake could well be made. Absinthe vitiates the gastric juice, disorders the digestion, and is a prolific producer of the worst and most trying forms of dyspepsia. Goaded and irritated by the medicated mis-named "tonic bitter," the stomach loses much of its power of digestion, and the palate relishes no food unless the artificial and pernicious appetiser be first taken. Thus the digestion of the absinthist is depraved, the natural appetite for wholesome food is lost, and gastric derangement with hypochondriasis is a common sequel. As a medicinal agent absinthe is virulent, unreliable, treacherous and dangerous. An ordinary innocent vegetable bitter (gentian, calumba, cascarilla, or bark) would contribute more efficient therapeutic virtue, and be a safer remedy. In absinthe there are two different poisons, the alcohol and the wormwood. The former is relaxing, the latter binding or tightening. After the alcoholic excitement the contracting action of the absinthe comes into play. The coldness left by the alcohol is increased by the absinthe.

Symptoms of nervous chill, abnormal coldness, trembling, nausea, and unsteady gait present themselves. The inhibitory power being paralysed by the alcohol, the voluntary muscles, goaded by the absinthe, unchecked and uncontrolled, are precipitated into epileptic convulsions with complete unconsciousness. On the repeated application of the absinthal irritation during the alcoholic relaxation, the unfortunate subject is apt to become a confirmed epileptic. The characteristic phenomena of absinthe-cum-alcohol inebriety are the epileptic explosion, vertigo, and early delirium.

Effects of dilution.

The comparative dilution of the poisonous substance is not without effect. The more concentrated the poison the more pronounced is its local gastric causticity, alcohol being an irritant as well as a narcotic poison. On the other hand, free dilution with water adds to the remaining toxic properties by the more rapid and complete absorption of the poison.

Kava Inebriety.

Intoxication from Kava (root of Piper Methysticum) is characterised by excitement, sexual exaltation predominating. Delusions of obscenity occur.

All alcohols poisons.

Yet all these are comparatively slight modifications of action. The great fact remains that ALL THE ALCOHOLS ARE POISONOUS, are IRRITANT, NARCOTIC, ANÆSTHETIC POISONS.

Let us group the common properties of the potable varieties, and treat this embodiment as a type of the various species.

Alcohol the demon of physical degradation.

Alcohol is the demon of physical degeneration, as it is the Pandora's Box of mental confusion and the evil genius of moral perversion. Besides its paralysing action on the brain and nervous centres, alcohol alters the structure of the vital organs,

permanently damages many of the other tissues, and degrades most of the bodily functions.

Inebriate lying.

One influence it has on the morals, which stands out pre-eminent. One of the most distinctive features of habitual and periodic inebriety is an utter disregard for truth on the part of the inebriate. Females lose the sense of truth even more completely than do males. Seen in the very act of laying down the just emptied glass, lady patients have coolly and solemnly denied to me that they had partaken of the contents. The perception of truth seems to be destroyed by alcoholic indulgence, the consciousness of truth seems utterly lost in the devotee of Bacchus. Even when temporarily sober, the brain may be so dominated by the alcoholic propensity to lying that no reliance can be placed on any statement made by the man or woman whose whole being has, as it were, been steeped in alcohol.

This observation applies to opium, chloral, chloroform, and other inebriants, but aggravated as I have seen the falsehood and cunning engendered of these forms of inebriety, the untruthfulness has never been so marked as under the influence of alcohol.

Inter-current alcoholic affections of alcohol Inebriety.

The career of the alcoholic inebriate may be studded with various diseases begotten of alcohol.

Delirium tremens not caused by abstinence.

Formerly it was believed that the sudden stoppage of drinking was the origin of delirium tremens (trembling delirium). The fact, however, is that this affection is caused by excessive drinking, is when spontaneous really poisoning from the accumulated effects of alcohol on a nervous and irritable temperament,* and it may occur in the pre-

* A view propounded by Dr. A. Peddie.

sence as well as in the absence of strong drink. The appearance of the disease simultaneously with, or soon after, abstention is simply a co-incidence. The onset of the disease is sometimes sudden. At other times there are premonitory symptoms of excitement, depression, loss of appetite and sleep, general malaise and uneasiness, with disordered digestion. Delirium tremens is characterised by terror, tremblings, fearsome hallucinations (false perceptions of the senses), delusions (false beliefs concerning self), incessant restlessness, and what may be called the busy delirium of wakefulness and suspicion. The temperature generally is rather above 100° F. The pulse is weak, compressible and frequent, the tongue white, moist and tremulous, and the skin feels clammy with perspiration. There is usually conjunctival injection with a dilated state of the pupils.

Symptoms.

The hallucinations are peculiar and always inspire terror. Serpents, dragons, toads, mice, and loathsome insects may be among the false perceptions of the senses. One female patient of mine saw lions, from which she shrank back in horror and affright, under the sofa, behind the window curtain, below the bed, outside the door, rushing up the staircase and bounding down the chimney.

Peculiar hallucinations.

There is in many cases one persistent hallucination or delusion. The subsidiary hallucinations and delusions are of a more changeable nature, but they often persist too. The sufferer is in many cases heard giving orders or talking to imaginary persons, about his ordinary occupation. There is a continual chattering, with a confused disturbed state of the brain, but the patient's attention can readily be recalled for a moment, though only to wander off again.

Exaggeration is a feature of delirium tremens. The ordinary tones of the voice sound like the thunder of a giant, the tread of a cat sounds like the tread of an elephant. Acts of violence are rarely committed, never offensively. When assaulting anyone, the alcoholic deliriant believes he is acting in self-defence to escape capture or death. The tendency is not homicidal but suicidal. If the delusions take a gloomy turn his entreaties are piteous and heartrending to hear; and in the intensity of his abject fear, if not closely watched, he may commit suicide.

Two distinct forms of delirium tremens may be readily recognised. Traumatic delirium tremens arises independently of any local lesion, from the constitutional crises incident on some injury or other disease. Idiopathic delirium tremens, independent of an injury or disease, is the direct issue of the surcharging of the system with an irritant narcotic poison circulating in the blood. The latter may be characterised by a state of hyperpyrexia, when the prognosis is grave. Or there may be a comparatively non-febrile condition, the thermometer never rising above 100° F., when the attack is mild and the outlook is full of hope.

The delirium of terror.

Of all the ills to which flesh is heir I know none so painful to witness. It may truly be called the "delirium of terror."

Diagnosis from other diseases.

The alcoholic diagnosis lies between delirium tremens and acute alcoholic mania (mania a potu). Under the latter disease this will be considered. Delirium tremens may be confounded with certain forms of acute non-alcoholic cerebral and meningeal inflammation, and with the muttering delirium of typhus and enteric fever. Any doubt is soon resolved by the progress of the symptoms,

though the presence of alcoholic excess and the history of the seizure generally distinguish the specific character of the ailment.

Mania a potu is another acute disease born of alcohol. It seldom attacks continuous drunkards, and differs from delirium tremens in frequently occurring in a moment without warning of any kind, almost immediately after the quantity of alcohol sufficient to provoke an attack in a predisposed constitution has been taken. There is generally no, or little, muscular tremor. The patient is wild and ungovernable. The pulse is strong, bounding and frequent. Hallucinations are seldom present. The eyes roll and the infuriated alcoholic rages like a madman. The attack is usually brief in duration, but is very violent while it lasts. Sometimes the frenzy continues for days or weeks in very exceptional cases, with intermissions—a succession of storms with intervals of calm between. After the alcoholic whirlwind has passed the patient is usually penitent, ashamed to hear the misdeeds of which he was guilty and of which he was unconscious. I have never found the temperature abnormal five hours after a paroxysm. The alcoholic, exhausted by the violence of his exertions, is like a dismantled ship after a tornado has swept over it, temporarily crippled and unequal to any effort.

Mania a potu.

Acute alcoholic mania.

Symptoms.

A mania of violence.

Mania a potu assumes various forms, of which I append a type or two.

F. M., 54. Ship's carpenter. Heredity neurotic. Generally moderate in drinking, about once in a year on reaching port he would go "on the spree." On returning to the ship at night, when not lodged elsewhere by the police, he would fight

Case.

every one on board. On one occasion I saw him vigorously attack the binnacle under the impression that it was a living opponent, a stalwart "foeman worthy of his steel." By the time he had wrecked this indispensable part of a ship's properties he was as quiet as a lamb.

Another case.

J. T., 49. A large employer of labour. Maternal inebriate heredity. Temperament nervous. A very abstemious man in his lucid intervals, exemplary, quiet, and steady. Within five minutes after drinking a fifth glass of beer (an event which occurred about once in every two months) he invariably and unexpectedly broke out into yells at the very top of his voice, and rushed about threatening in boisterous tones to knock some one down. The victim of his fury generally was his wife, and he would with cries and yells like a Red Indian hurl every article of furniture he could lay his hands on, at her.

During these paroxysms he was quite unmanageable. In forty-five minutes when his fury was spent, he was quiet and docile again, though fretful, irritable, and discontented for twenty-four hours.

Police court Inebriates often subjects of mania a potu.

Many police-court inebriates are the subject of mania a potu. They generally have no craving for drink. They go on well in the intervals of sobriety. But by and bye an insane and irrepressible desire to do something wrong, to "kick over the traces," comes over them. They take to their favourite liquor, and a few glasses suffice to develope an attack of mania a potu.

A delirium of fury.

The leading characteristic of this form of alcohol inebriety is fury, short lived and tremendous. After the storm has subsided the patient generally recovers without bodily complications.

G. D., male, 55. Heredity neurotic. Has been the subject of attacks of mania a potu for fifteen years. Quiet and orderly in the intervals, during the attack he is beyond control and maniacal. In a paroxysm he beats his wife, kicks his children, and throws the furniture out of the window. Three glasses of spirits suffice to induce an outbreak. Cases.

Another man, a shoemaker, aged 58, in the height of his mania seizes all the boots and shoes entrusted to him for repair or manufacture, and hurls them with such force against the ceiling that it rains mortar. In twelve hours thereafter he is calm and penitent.

At times, during this transitory yet terrible mad violence, when the inebriate is quite beside himself, and if not always entirely unconscious generally is so, in all cases being beyond his own control, there is serious disaster to life or limb. The friends knowing the danger usually keep out of the way, yet, with all their care, I have been called to houses where alarming injury has been inflicted during an attack. In some cases animate objects are the favoured recipients of the amazing force displayed even by weaklings. I have seen a room strewed with the wreck of furniture during such an alcoholic tornado of no more than twenty minutes duration. These are cases in which there has been no recurrent insanity, the maniacal fit having been the effect of a certain quantity of the toxic agent, and commonly occurring after the imbibition of this quantity at one sitting. Attacks dangerous to self and others.

N. R., 21, a gentlemen of independent means, and highly educated. Neurotic heredity. Temperament nervo-sanguineous. During the outbreaks, excited by a pint and a half of Case illustrating unconsciousness.

champagne, five glasses of port or sherry, or three glasses of ardent spirits, he becomes quite enraged and pugnacious. "Spoiling for a fight" he attacks every one within his reach. Failing a human victim he diverts his energies on inanimate objects. If in the height of his violence he injure himself, as he has repeatedly done, he suffers no pain. Only when the "mad fit" is over does he fell any discomfort or become conscious of the blood flowing from some lacerated wound. Each attack used to last three hours, but of late six hours has been the average.

Produced by small doses.

It is worthy of note that I have always seen this form of acute alcoholic mania caused by comparatively small quantities of intoxicants. In one case the third glass of beer invariably developed characteristic symptoms of mania a potu.

In a few cases the quantity necessary to the provocation of an acute attack has been taken on one or more succeeding days, when the excitement was renewed. This performance I have seen repeated for days and even weeks (in the latter case sometimes with an occasional day's intermission); but I have never known a renewal of the violence without a repetition of the alcoholic excitant.

Mania a potu may with comparative ease be diagnosed from delirium tremens.

Diagnosis from delirium tremens.

In delirium tremens there is great bodily disturbance as evidenced by tremors, white tongue, sickness, nausea. In mania a potu, in most cases no symptoms of bodily disturbance are exhibited.

Where present, these symptoms are generally very slight. I have never seen tremors, rarely even the slightest symptoms of gastric derangement. In delirium

tremens there is the busy delirium of wakefulness and suspicion, seldom intermitting till after a good sleep. In mania a potu there is excited speech though not so rapid or muttering, loud talking and wild maniacal rage. In delirium tremens the delirious patient is terror-stricken. In mania a potu he fears no one and no thing, but is violent and valiant. In delirium tremens the pulse is weak and tremulous, in mania a potu generally full, strong and firm. In delirium tremens peculiar hallucinations and delusions are the rule, and in mania a potu are the exception. Delirium tremens generally arises from the consumption either of large quantities of drink or of free, though not necessarily drunken, drinking continued over a lengthened period. Mania a potu usually springs from a comparatively small dose. I have never seen a case of mania a potu arise from an injury like traumatic delirium tremens.

Alcoholic epilepsy.

We have already seen, when treating of the differing effects of different alcoholic inebriants, that absinthe, deadliest of all the lethal beverages in which alcohol plays a leading *rôle*, has the peculiar power of exciting epileptiform convulsions. It is unnecessary, therefore, to dwell upon the epilepsy generated of wormwood *cum* alcohol.

Epilepsy of absinthe.

Other alcoholic epileptic attacks.

I have seen acute epileptic attacks, sometimes accompanied, sometimes unaccompanied by mania, directly provoked by indulgence in ardent spirits and in highly fortified wines. In some of these cases there has been an epileptic diathesis; in others no history could be obtained of any special nervous susceptibility. I have no doubt that, though no epileptic manifestations had previously been observed, in such cases there had been a latent epileptic or

neurotic tendency. Yet when the attacks have ceased shortly after the enforcement of a regimen of abstinence, and recommenced shortly after a return to drinking (not always to drunkenness), a process of alternate quietude and disturbance, I have been unable to come to any other conclusion than that those attacks of epilepsy were due to the intoxicant taken.

While experiments on animals have confirmed the belief that absinthe has the power to cause vertigo and epileptic convulsive explosions, they have not yielded a single instance of other alcoholic drinks producing these special symptoms.

Explanation.

In cases where there had been no previous history of the disease, I take it that the epilepsy was simply the form in which the toxic influence of the poison on the nervous system was manifested. Every one has some specially weak point in his nervous organisation, and the poisonous effect of alcohol on the nerve apparatus and brain produces differing symptoms corresponding to the locality of the weak point of the individual drinker.

Case.

L. S., 56, an army pensioner, with no history of epilepsy. Whenever he had been drinking either beer or spirits, or such strong fortified wines as port or sherry, freely for a day or two, a series of epileptic convulsions set in. Within forty-eight hours the fits always ceased and never recurred till he went "on the drink" again. These alcoholic epileptic seizures, after their respective debauches, occurred about three times in a year for some fourteen years, when the patient died from coma induced by alcoholic epilepsy.

Acute alcohol poisoning.

The career of the incipient and of the developed inebriate may be abruptly terminated by acute alcohol poisoning.

I have seen several fatal cases, as well as other cases in which recovery was with difficulty effected from the acute form of toxication by alcohol.

Many fatal cases have been recorded. I add two as corroborative illustrations.

A. V., 47. Skilled mechanic. Was found dead. I made a *post-mortem* examination and found the usual symptoms of acute alcohol poisoning, irritative congestion of interior of stomach, congestion of liver, injection of meninges and congestion of brain substance with serous effusion in ventricles, lower lobes of both lungs engorged, the cavities of right side of heart distended with semi-fluid blood. The gastric mucous membrane was so intensely injected, the angry fiery field being interspersed with a few bleeding points, that I suspected the action of an irritant metallic poison like arsenic. A careful analysis, however, showed that no other poison but alcohol had been taken, and a verdict of death from alcoholic poisoning was recorded. Than the inflamed and angry gastric membrane, I have never seen a more marked and repulsive appearance in irritant poisoning. A similar case of acute alcohol poisoning where a chemical analysis of the tissues was necessary to prove the absence of arsenic, was reported in the newspapers as having occurred in London a few days ago.

Fatal case.

N. R., female, 23, daughter of highly respectable parents. Vomiting, pain, other symptoms and the unmistakable odour of spirits in the matter ejected and in the breath, told their own tale.

Case of recovery.

The temperature fell to 94·2° and the extremities became deathy cold. Collapse followed the agonising pains, and the patient, utterly exhausted by the persis-

tent sickness, became apparently moribund. She rallied, however, and made a good recovery.

In this case, as in several others, the patient was weeks before she thoroughly emerged from the effects of the toxic crisis.

Acute alcoholic paralysis.

Alcohol being pre-eminently a paralyser, its paralytic effect on the organism is inevitable. Accordingly among a nation of drinkers we have never to go far to see unmistakable evidences of this toxic process. Apart altogether from the more protracted forms of paralysis induced by alcoholic intoxicants, of which I propose to treat further on, alcohol, being a most potent paralyser, is the cause of a rapidly produced acute and characteristic paralysis. Fortunately, acute alcoholic paralysis is readily amenable to treatment, recovery being the rule if the alcoholic element has been recognised before chronicity has been established.

Symptoms.

In acute alcoholic paralysis head symptoms are either "conspicuous by their absence," or are so unobtrusive as to occasion no suspicion of impending mischief. Where present, there is occasional headache accompanied by an undefined uneasy feeling. The person is languid, sometimes irritable though generally lethargic, his appetite fails, and he does not rest so well at night. His duties are more of a trouble to him, but he cannot point to any painful spot or tell what is the matter with him. There may be a slight dragging of the toes, occasional numb feelings in the legs and arms, and a momentary sensation of giddiness, with as brief an appearance of staggering. In most cases these symptoms are so slight as to occasion no resort to medical advice. Rapidly, however, these increase in intensity so that the person is unable to pur-

sue his avocation, and is the subject of more violent pains, with cramps in the extremities; and becomes unable to walk or to lift the limbs from paralysis of the extensor muscles, especially of the lower limbs. There may be double foot and wrist drop. There may also be rapid muscular atrophy, most marked in the extensors. These are practically all the symptoms in a considerable number of cases. Indeed, the symptoms are occasionally so much milder that the specific character of the paralysis remains unsuspected. Generally the lower extremities are first affected, but at times paralysis shows itself first in the upper. When the disease is more severe, there are other complications, such as a puffy œdematous condition on the dorsum of the feet and limbs when dropped, from paralysis of the vaso-motor nerves. Severe tearing or stabbing pains in the legs, with numbness and chill, may be experienced. There may also be lancinating pains in the feet, with soreness on pressure. Patellar and other allied reflexes are generally lessened or lost, but there is at times an exaggeration of cutaneous reflexes over the abdominal and other limited regions. Everything is apt to feel cold to the touch. There may be by turns exaltation, melancholia, and confusion of thought, but the mind symptoms are rarely prominent when present. The skin is often smooth, fine and glistening, without any subcutaneous effusion. Some cases have an element of ataxy in the symptoms, while the affection may assume various forms. The most favourable age is between 30 and 45.

This form of paralysis is well discriminated from general paresis by the absence of paralysis of the tongue and lips, as well as of the grandiose delusions of the latter ailment. Females,

Diagnosis from general paresis

so far as my experience goes, are most frequently attacked.

Diagnosis from lead paralysis.

The diagnosis is mainly from lead paralysis. The absence of the blue line on the gums and the alcoholic habit are the chief points of distinction. Sometimes both lead and alcohol are concurrent factors. Many cases of paralysis from alcohol have been mistakenly credited to lead, the power of alcohol to produce this disease having till recently been unrecognised. It is, too, often difficult to obtain a history of the presence of the metallic poison, the truth being elicited only after persistent cross-examination. But this difficulty is infinitely greater as to alcohol. The patients, especially the females, are not only reticent but in the majority of cases do all they can to conceal their spirituous indulgence, while the friends are unwilling to own the frailty of the delinquent. This false delicacy would be obviated were there a general recognition of the diseased condition of the inebriate.

In females the symptoms are somewhat similar, the preference for the sensory and motor disturbances being in the lower extremities. In a female I have never seen more than a hardly perceptible wrist-drop, even where the double foot-drop was pronounced.

Recovery frequent.

In all the cases which I have seen there has been a complete recovery, the symptoms yielding within 20 days of discontinuing the use of alcoholic intoxicants. I have not seen any paralysis caused by other intoxicants.

Diagnosis from acute ascending paralysis.

Many of these alcoholic cases have been diagnosed as the acute ascending paralysis of Landry. In this latter disease the pains are not so severe, nor is the muscular atrophy so marked.

A variety of diseases may show themselves at some period or another of the inebriate's career, such as different liver affections, albuminuria and other disorders of the kidneys, alcoholic pneumonia, alcoholic phthisis, and a host of other ailments the direct product of alcohol indulgence.

Alcoholic phthisis, pneumonia and other diseases.

Acute alcoholic diseases with the exception of paralysis generally run their course within fourteen days, though sometimes they last longer. In the majority of cases the system seems to recover its tone and to be uninjured. Not that this is absolutely true. After even one attack of delirium tremens, for example, a certain amount of physical damage is wrought to the cerebral and nervous tissue, for the effectual reparation of which time is needed. In the most healthy and vigorous the reparative process is gradual. Longer time still is required for the righting of the disturbance of the stability of the nervous energy. In most persons, though no succeeding attack follow, the constitution is not quite itself again for a long period, and if there should be a repetition before tissue reparation has been completed, the foundation of a permanent central nervous instability has been laid. Acute is apt to be consolidated into chronic inebriety, the transition being often so gradual that it is impossible to mark the boundary line.

Chronic alcoholism.

Transition from acute to chronic alcoholism.

Boundary line indistinct.

Apart from this evolution of acute into chronic alcoholicity, steady continued imbibition of intoxicants, in quantities very much short of what are commonly regarded as excessive, frequently sets up a chain of body and brain pathological changes which, while assuming a variety of forms correspondent to the organs and tissues most

Gradual development of sub-acute and chronic alcoholism.

affected, may be grouped under the comprehensive designation of chronic alcoholism.

In this form of alcoholism the toxic symptoms are not so intense as in the acute form, but they last much longer and recovery is more protracted. In the latter variety the severity of the attack passes away and leaves no apparent mischief behind, but in the former there is no disappearance of effect, there being a permanence of the damage which has been inflicted on the body and the brain. From a mental and physical point of view the individual who has an attack of acute alcoholism once a month, and takes no intoxicants in the intervals, damages his constitution less than he who has never had an acute attack, but who drinks freely every day. The constant soaking of the system in alcohol is a more serious affair than even repeated bouts of intoxication succeeded by lengthened periods of sobriety.

Chronic more injurious than acute.

In chronic alcoholism the bodily condition becomes gradually but surely disordered. The motor functions are increasingly disturbed. The liver is enlarged and fatty or contracted and cirrhosed. The structure of the kidneys is deteriorated so that their important office is imperfectly performed. The heart is pierced with fat, weak and flabby, and there are palpitation, shortness of breath, and painful stitches on any unwonted exertion.

Chronic bodily disorder.

The tongue may be parched and coated, the breath foul. There may be acidity, flatulence, waterbrash, nausea, severe gastric pain, and persistent thirst with loss of appetite or loathing of food. The taste is often perverted, in which case the cook is liable to be credited with bad cookery when the fault really lies in the vitiated palate. These and other symptoms of disordered diges-

tion and of disturbance of various living functions may be present in aggravated form, or may be slight. But the nervous and mental symptoms are usually marked. Yet I have known a few splendid constitutions which gave no signs of distress or disease while alive, but which after death revealed chronic alcohol poisoning, disclosed fatty degeneration of the heart, liver, and other vital organs.

Symptoms sometimes latent during life.

Frequently there is sleeplessness, for which the chronic alcoholic seeks a potent spirituous night-cap of hot whiskey, brandy, rum or gin, or it may be strong doses of morphia or chloral. I have seen the deaths of promising lawyers, physicians, and clergymen take place through an overdose of one or other of these sleep-producing agents, taken, not for the purpose of suicide, but to woo the sleep which chronic alcoholism had driven from a delicate and disturbed brain.

Insomnia and fatal complications.

Headache is a frequent symptom, with an almost ever present feeling as if a heavy weight kept pressing on the head. Sometimes there is insomnia or dreamy distured sleep. Hallucinations are not uncommon. Many chronic alcoholics often think they see and hear other persons walking or standing by their side. Sometimes they carry on a long conversation with some imaginary campanion. Delusions, too, are by no means rare, and are not unseldom those of persecution, which takes a variety of forms. Some fancy policemen are after them to apprehend them for the commission of some terrible crime. Others again imagine that they are haunted by private individuals, to avenge some supposed wrong. So intense is the fear of these delusive persecutions that chronic alcoholics have been known to rush

Mental perversion.

Delusions of persecution.

over Europe, cross the Atlantic to America, and travel from city to city all over the world, in the vain hope of escaping from their shadowy pursuer, their "Banquo's Ghost," and ultimately to commit suicide.

Dementia.

In some cases the issue is a state of dementia through physical degeneration of the brain structure, and consequent loss of mental function, the outcome of a long-continued use of alcoholic inebriants by a person with no known alcohol or neurotic heredity. Here we have purely alcoholic dementia, a loss of mind arising solely from the pernicious effects of the narcotic on the brain, which may or may not have been accompanied by permanent tissue changes in the liver and other organs. Sometimes the brain alone seems to suffer, especially in persons leading an active out-door life. In these cases there are no symptoms of bodily disease. There is to be seen only the mental derangement.

Muscular tremors.

Muscular tremor, as well as quivering of the tongue when the organ is protruded, is a very general symptom. By some, lancinating pains are at times experienced in the upper and lower extremities, and there may also be occasional incomplete anæsthesia over limited areas. In the limbs the painful sensations are so characteristic that they may truly be called alcoholic leg and arm pains.

Characteristic limb pains.

Hemi-anæsthesia.

Occasionally hemi-anæsthesia is seen. This usually passes off in a few weeks. The affected side is lower in temperature than the unaffected. All the senses are impaired on the hemi-anæsthetic region.

Cuticular and muscular hyperæsthesia is often present.

The diagnosis between general paresis and chronic alcoholism is very difficult in certain stages of the former. Generally, the derangement of the digestive function, one of the effects of chronic alcohol poisoning, discriminates the disease. Headache is not so often felt in paresis, and anæsthesia is also rarer. The tremors of the upper extremities frequently, especially in the first half of the day, point to the alcohol form. There is very often diarrhœa in alcoholism, and constipation in non-alcoholic general paralysis.

Diagnosis from general paresis.

The complexion may be bloated and puffy or pale and waxy, the gait shuffling, the general expression dull and listless. Aphonia is occasionally persistent in some degree, and the speech is often thick and hesitating. The sense of hearing is apt to be seriously impaired, touch, feeling, and sight to be markedly affected. Alcohol, though not so common as tobacco, amaurosis, is to be met with. The impairment of the various senses usually arises, not so much from the organs of sensation, as from the paralysis of their nerve apparatus.

Complexion and speech.

The senses.

Many forms of motory and sensory paralysis can be produced by the toxic action of alcohol, besides the acute forms of which I have already described a general type.

Chronic alcoholic paraplegia.

Alcoholic paraplegia is one of the most common. Severe lightning pains are the most prominent premonitory symptom. They are felt like electrical shocks, come without warning and pass off as quickly. This form of paralysis when chronic is sometimes accompanied, sometimes not accompanied, by dropped feet. In some cases the paraplegia has been the only prominent lesion for ten years and longer. The majority

of my cases of alcoholic paraplegia have been acute or sub-acute and have done well. Those which were chronic invariably ended in dementia, when not cut off by some intercurrent fatal illness.

General paralysis of alcohol.

General paralysis, while it may arise from causes altogether apart from alcohol, is another sequel of alcoholic indulgence which crops up at intervals. When alcoholic, it usually differs mainly from the non-alcoholic form by being antedated. Alcohol induces general paresis prematurely. In one case, an active intellectual and vigorous male inebriate was at 42 a general paralytic, antedating the disease by probably 30 years.

Other intercurrent alcohol-born diseases.

Then there is a host of alcohol-born diseases which may intervene during a career of chronic alcoholism, and cut off the inebriate. Alcoholic pneumonia and phthisis are two well-marked examples. So is alcoholic erysipelas.

CHAPTER VI.

FORMS OF INEBRIETY *(Continued)*.

Opium Inebriety—A functional disease—Differs from alcohol Inebriety—Opium Inebriety solitary—Alcohol Inebriety social or solitary—Opium soothes, alcohol maddens—Exceptional effect of opium on Malays and others—Animals unaffected by opium, affected by alcohol—Alcohol lowers, opium raises, temperature—Alcoholists more untruthful—Opiumites more continuous in indulgence—Proportion of sex—Functional derangement—Differential pathology—Opium less curable—Burmese susceptibility to opium—Opiate habit more prevalent in America—Modes of use—Initiation of opium addiction—Opium intoxication—Stage of excitement—Stage of satisfaction—Stage of torpor—Effects on vascular system—Opium soothes—Complication of albuminuria—The opium crave—Quantity taken—Increase of opium Inebriety.

Opium Inebriety.

WHAT is commonly called "the opium habit" is a true inebriety, though differing in some particulars from alcoholic Inebriety. It cannot lay claim to so great indebtedness to heredity, or so marked pathological disturbance as an antecedent or co-incident condition; but it is in a vast number of cases an undoubted disease, a functional neurosis, whence arises a physical crave for a renewal of the sensation of intoxication procurable by the consumption of a fresh dose of opium. Unlike in alcoholic inebriety, organic lesions are rare. Even when premature death ends the succession of alternating states of woe and bliss which constitute the opium inebriate's life, func-

A functional disease.

Differs from alcohol Inebriety.

tional derangement, impairment of the nutritive process, nerve exhaustion, general wasting and emaciation, are the prominent links in the lethal chain.

Opium solitary. Alcohol social or solitary.

Alcoholic intemperance may be either social or solitary, indulged in with boon companions or in solitude, the latter being the case with only a minority of alcoholists. Opium taking, on the other hand, is rarely a social act. Though in opium dens the frequenters may smoke in company, this is merely because there they have their only opportunity of indulging, or comfortably indulging, in their favourite dissipation. When the opium inebriate can follow his inclinations the drug is taken in private.

Opium soothes. Alcohol maddens.

Again, alcohol infuriates many of its users. They are maddened, and commit acts of violence. They are excited and make a public exhibition of themselves, staggering on the street and attracting the attention of the passers-by. Opium, on the contrary, while its effects are somewhat varied, rarely hurries its devotees into a thousand extravagancies, eccentricities, and misdeeds. Withal, however, opium in some cases begets most foolish and fatuous acts. On the inhabitants of the Malay peninsula, as on a few other peoples, opium seems to have sometimes an excitable effect. A large dose will affect some Malays so that they will "run a muck," attacking every one in their way.

The opium inebriate does not destroy his furniture, beat his wife, dash his child's head against the wall, or pursue his narcotic career dealing with his hands death and desolation all around. Nor does he, as does the tippler of alcohol, so degenerate his tissues, injure the structure of his vital organs, or originate organic dis-

ease, by the direct poisoning action of the stupefying agent which consigns him to an early grave.

A striking point of difference is that there are few animals which cannot be alcoholised, while opium is innocuous to many. Elephants, horses, dogs, monkeys, and jelly fish have been brought under the influence of alcohol, staggering and tumbling about when intoxicated like drunken men and women.

Animals unaffected by opium, affected by alcohol.

Pigs and other members of the lower animal group have been taught to relish drink, and have literally "drunk themselves to death." In carefully conducted scientific experiments, representatives of the brute creation have been slain prematurely by both acute and chronic alcohol poisoning. On the other hand, pigeons live and thrive on opium.

There is also a difference between alcohol and opium in regard to their influence on vital temperature. This is lowered by alcohol sometimes several degrees, and raised by opium.

Alcohol lowers, opium raises temperature.

Once more, the alcohol inebriate is often notoriously untruthful, the opium inebriate comparatively seldom. The alcoholic, even though you detect her in the act of lowering a glass from her lips, more often than not denies the fact of her delinquency. The opiumite usually pleads guilty if accused of the habit, and readily tells you about it. Like the alcohol slave, the confirmed opium eater or smoker will do anything to secure a renewed supply of the potent pleasure producer; will, if this cannot be procured otherwise, lie, cheat, or steal.

Alcoholists more untruthful.

Another difference lies in the continuity of opium inebriate indulgence compared with the two alcoholic phases of continuity

Opiumites more continuous in indulgence.

and periodicity. There are probably on the whole more periodic than constant drinkers, but those addicted to the opium habit are generally constant in their devotions. There are some exceptions to this rule, but periodicity in opium is mostly involuntary on the part of the indulger. By this I mean that he consumes opium whenever he has the chance, but the opportunity is afforded only periodically, for example, at night when the day's work is over. There is one form of voluntary opiate periodicity which I will refer to subsequently. Excessive opium users must have a daily supply of their narcotic or they break down and cannot work, whereas the periodic alcoholite has his sober intervals, during which he can fulfil his duties with vigour and comfort.

Proportion of sex.

There is some difference, too, in the proportion of the sexes. Female alcoholic inebriates, especially in England, are very common. Female opium inebriates are rare. Many male opium inebriates are impotent, the capacity returning on discontinuance of the habit. To a less extent an allied phenomenon is exhibited in females, failure of conception frequently taking place after the habit has been fairly launched. Amenorrhœa and irregular menstruation are common.

Functional derangement.

Perversion of the affections.

A common feature of all narcotic inebriety is the frequent perversion of the affections. Love is transformed into hate, and the narcomaniac not unseldom loathes the sight of the devoted companion whom, in his pre-narcotic years, he cherished with the tenderest affection.

Differential pathology.

The pathology of opium is very different from the pathology of alcohol. We shall see later on (*Pathology of Alcohol*, Chap. XII.) how

extensive and profound are the pathological alterations of organic structure and connective tissue in confirmed alcoholism. The pathological changes which have been observed in opiism are few and limited. The shrunken and withered appearance of the habitual opium inebriate is a fair representation of his internal physical state. The repeated contraction of the vessels impairs the nutritive process. When the opium habit has become a disease it alters nutrition and perverts vital function, it is a prolific cause of insanity, a fertile breeder of impotence, often producing innutrition and malnutrition, leading by anæmia and marasmus to a fatal issue.

Above all, opium transcends alcohol in the generation of a more irreclaimable and incurable diseased condition. Cured alcohol inebriates are not uncommon. They abound all over Britain and America. Cured opium inebriates are comparatively few in number. It is much more difficult to abandon the opium than the alcohol habit.

Opium less curable.

It is a curious fact that the Burmese appear most incapable of using opium in moderation, while in China the majority are able to limit their consumption and never increase their daily allowance.

Burmese susceptibility to opium.

Opium inebriety is much more common in the United States than in Britain. For one case in England I have known thirty in the United States, and I have had the opportunity of observing in person, the enormous consumption in some of the States of the American Union. In England there are some localities where opium is indulged in to excess, but in the greater part of the United Kingdom this form of inebriety is unknown.

Opium habit more prevalent in America.

Opium smoked is more quickly absorbed than opium eaten, but it is less harmful, as only a comparatively limited quantity can be inhaled at a time. With the latter mode of use there is greater disorder of digestion, and the craving for the blissful (?) effects of the drug is more speedily and permanently established. Opium drank in a liquid form may be classed alongside opium taken as a solid. The speedier absorption of laudanum is more than counterbalanced by the smaller quantity that can be taken on account of the greater bulk. The hypodermic injection of morphia is, however, the most swift and the most potent of all the methods of administration. The effect is almost immediate. The simplicity, ease, and celerity with which the narcotic effect can be secured, have combined to make this subcutaneous process of self-administration peculiarly popular and seductive. The opiomaniac and morphinomaniac are often difficult of detection, if they have a supply of the drug about them. It is astonishing how dexterous with the hypodermic syringe the inebriate becomes. I have seen a body speckled all over, except on the head, face, and neck, with minute dark indurated spots, though usually the thighs are the favourite injecting field. Morphia may be detected in the urine.

Modes of use.

A very short time suffices for the establishment of this form of inebriety. It is not unfrequently, silently, yet surely set up in from four to six weeks. The period of incubation varies in duration with the idiosyncrasy of the subject, and the means at his disposal of procuring supplies of the deceiving drug. The initiation of the practice of opium or morphia taking shows some different starting points than those from which inebriates set out on an alcoholic career.

Initiation of opium addiction.

The most frequent apology with which I have been favoured by opium and morphia inebriates has been, that they first had recourse to the drug to procure sleep. Many persons are terribly afflicted with insomnia, an increasing trouble in these days of mental over-pressure and over-strain. These have chiefly been literary workers and members of the learned professions. A sedative for the relief of pain has been the origin of the habit with nearly as many. In one case, that of a male of 55 years of age, who had morphia injected under the skin some 2000 times, the first injections were for the alleviation of the acute pain caused by a gastric ulcer. Obscure and intense neuralgic pains being generally relieved as by a charm by morphia introduced subcutaneously, this also is a frequent inauguration of the habit. Opium is also taken by some persons of education and refinement to promote increased intellectual activity, brilliancy of thought, imagination, and speech. Though much less in vogue with women than with men, those of the former sex who have been enslaved by it have taken to an opiate narcotic to calm the perturbation of a delicate organisation, or for the relief of natural pain. The enormous amount of opium given to children in the form of soothing syrups has much to answer for in the increase among us of opium indulgence.

Speaking broadly, I have generally found the hypodermic method to have taken its origin from a resort to morphia thus applied to assuage severe local distress; while for the wooing of sleep the solid and sometimes the liquid preparations of opium have been sought. In my experience the smoking of opium has rarely been attributed to any therapeutic necessity, but has almost always taken its birth from the pursuit of pleasure.

Moderate indulgence has been ventured upon, but in many cases the power of the narcotic has insensibly increased until it took possession of the whole man, holding him in an iron grip from which there has seemed little chance of his escape.

Though the effects of the drug may be somewhat modified by the idiosyncrasy of the individual opium *habitué*, there is a certain train of symptoms which usually follows the consumption of a dose sufficient to procure the characteristic action. A few minutes after the dose, with a shorter interval when given hypodermically, the face will be suffused with a blush, with probably a well-defined hectic spot. The eyes will sparkle with unwonted brilliance. The countenance will be ruddy and the expression animated. This is the stage of excitement or exhilaration. The pulse beats faster and muscular activity is increased. In the second stage there is a pleased feeling of satisfaction, partaking of delight and ineffable composure. This is a stage of complete repose. The pulse beats more slowly, the muscles are less active.

Opium intoxication.

Stage of excitement.

Stage of satisfaction.

A vacant look, with an occasional gleam of momentary consciousness, ushers in the third stage. The opiised gradually sinks into a state of torpor, from which he is with difficulty aroused. The only effectual means of arousing him is to administer a fresh dose of the narcotising agent. The face looks pale or dusky, the skin is withered, the pupils are contracted to the size of a pin's head.

Stage of torpor.

The vascular system is relaxed in the first stage, and slightly tightened up in the second, this contraction being intensified in the third. Opium and morphia inebriates are generally very chilly.

Effects on vascular system.

Opium exerts a soothing influence. Under its powerful sway, the cantankerous and quarrelsome are transformed for the moment into the most amiable and peaceful of beings. Rarely does violence proclaim this inebriate's downward march to a premature grave.

Opium soothes.

Evanescent albuminuria at times occurs, during the exhibition of the drug and also after its discontinuance. It is apt to last for a few days at a time and to recur at intervals. Symptoms resembling ague are occasionally seen, in both the presence and absence of the narcotic. There are high temperature, shivering, and the cold and hot stages of intermittent fever. There is also an opiate and morphia trembling delirium, excluding the acute wakeful and trembling delirious state supervening on sudden withdrawal. No one can describe the torture experienced by opium inebriates on the failure of the supply of a fresh dose at the accustomed time. While in this fatuous, listless, irritable condition, the patient will at once become lively, clearheaded, and brilliant, on the exhibition of a sufficient dose. This depraved physical state is a pathological condition, a physical depression which clamours for a renewal of the potion as soon as the pleasurable effects of the preceding dose have disappeared.

Complications.

So intense is the opium crave that a man has been known to mortgage his mother and sell his wife to gratify it. One man sold his wife for £12 and smoked the proceeds. This crave robs a man of his resources, unfits him for work, and hurries him to an untimely end.

The quantity taken is sometimes enormous. In one case of female addiction I have known as much as one pint of laudanum drunk daily,

Quantity taken.

and thirty grains of solid opium swallowed for a dose. In one day twenty grains of morphia have been injected under the skin in divided doses. But the ordinary amount of the narcotic usually taken by opium inebriates is very much less than any of these extraordinarily excessive quantities. In my observation the average daily allowance of laudanum has been rather over one ounce (I have known half-a-pint taken daily by a woman for many years), of opium about thirty grains, and of the hypodermic self-administration of morphia salts about eight grains. These quantities, as well as the more excessive, have sometimes been taken daily for periods of months and years.

Increase of opuim Inebriety.

Though the opium habit does not seem to me to be spreading so rapidly amongst us as is often asserted, the result of my observation is that the practice of opium smoking eating and drinking, and of morphia injection, is undoubtedly on the increase. The number of helpless children who are dosed to death, though not intentionally killed, with opium or other narcotics to keep them quiet, is, especially in certain localities, simply appalling. My experience is, that among adults the increase is chiefly in opium smoking and morphia injection. I have found about one per cent. of alcoholic inebriates take some form of opiate.

CHAPTER VII.

FORMS OF INEBRIETY *(Continued)*.

Chloral Inebriety—Not social—Reduces temperature—Mode of action—Origin of habit—After-effects of chloral intoxication—A functional disease—quantity taken—Common form of the drug freely sold as a syrup—Occupation of chloralists—Chloral generally associated with alcohol Inebriety—Chlorodyne Inebriety—Beginning of habit—Quantity taken—Sex of takers—Symptoms of intoxication—Duration of habit—Chloroform Inebriety—A blessing transformed into a curse—Chloroform intoxication—Phenomena—Temerity of chloroformomaniacs—Quantity taken—A chloroformomaniac's career a protracted misery—Character of sensations—Associated habits—Periodic and habitual—Solitary—A disease of function—Ether Inebriety—Locality of prevalence—Moderate and immoderate ether drinkers—Fatal cases—Comparison with opium and alcohol Inebriety—Cases—Cocaine Inebriety—Initiation of habit—Swiftness and evanescence of effect—Tendency to delirious raving madness—Taken very frequently and hypodermically—Gelseminum Inebriety—Is there a tobacco Inebriety?—Tobacco a cardiac depressant—Acts on animal life like opium—Enormous quantities consumed by some—Excessive use of tobacco injurious to health—The tobacco-crave does not cloud reason and destroy moral sense—Is only a physical desire and not over-powering—No irresistible impulse to tobacco—No indulgence at all risks, as with alcohol and other narcotic anæsthetics—Therefore there is no true tobacco-inebriety or mania.

THE modern hydrate of chloral, not 20 years old, a most valuable medicinal remedy, is rapidly advancing in popular estimation as an inebriating agent. It is affected by both sexes. **Chloral Inebriety.**

Chloral, unlike opium but like alcohol, reduces vital temperature. **Reduces temperature.**

Solitary. This inebriety does not assume a social form, being indulged in privately.

Mode of action. Chloral is decomposed within the blood, giving off the chloroform which induces sleep.

Origin of habit. I have generally found the chloral habit originate in its employment as a means of securing a night's rest to the sleepless. Some few have resorted for the first time to the drug to obtain a short respite from severe pain. Still fewer have been alcoholic inebriates who, to escape the torture of long weary wakeful nights, have had recourse to the soporific services of the seductive potion. Medical prescription has initiated the habit in some cases, and I have been informed by medical men of a fatal habit of chloralism following their therapeutic administration of a moderate narcotic dose.

Intolerance of Alcohol. Alcohol is badly borne by the chloralised. A small quantity of a weak intoxicant has been known to give rise to injection of the vessels of the head and neck with other bodily complications, and cases of chloral intoxication have been rendered fatal by the administration of spirits.

After effects of chloral intoxication. The effects, after the intoxication from this sleep-producer has passed away, are most unpleasant. The digestion is liable to be upset. The capacity to sleep naturally is to a large extent lost. The circulatory fluid is badly nourished and insufficiently aerated. The circulation is oppressed. The heart labours. The secretory and other functions are disturbed. The inhibitory power of the various nerve-centres is lessened. Muscular unsteadiness is the equivalent of nervous instability. In some confirmed cases there is a feeling of general

muscular weakness, cardiac debility and reduced vascular tension, there is some vaso-motor disturbance, witnessed by coldness and blueness of the extremities, the tip of the nose, etc. Often, too, there is a dull listless lack of energy.

Troublesome as are these sensations of disturbance and distress, and alarming as is the condition occasionally induced by chloral indulgence, especially in the aged—a condition characterised by cardiac asthma and a tendency to syncope—I know of no pathological organic degenerations which have been detected. That some deterioration of the structure of the heart at least, in chloral inebriety of long standing, does occur I have no doubt; but our present knowledge has not revealed the existence of such a lesion. Functional disorder and functional distress, with the peril of a fatal over-dose, seem the physical risks which stand in the path of the chloralist.

A functional disease.

A considerable amount of chloral can be borne if the doses have been gradually increased. One patient had been in the habit of taking 300 grains daily, in two doses of 150 grains each. He had begun nineteen months before with 15 grains once a day at bed-time. Chloral is frequently diluted with water, sweetened and drunk as a draught. But it is oftener taken in the form of a syrup. It is deeply to be regretted that some chemists sell freely a palatable syrup of chloral, of dangerous strength and in guise calculated to avert suspicion of risk to life.

Quantity taken.

Common form freely sold as a syrup.

Literary men, barristers, clergymen and medical men, with some highly sensitive and nervous ladies, have been the subject of this form of inebriety. I have known no mechanic who

Occupation of chloralists.

has become addicted to chloral, and only one or two individuals engaged in trade or mercantile pursuits.

In every case but one which I have seen, the chloral habit has been associated with the alcohol habit. That exception was a brilliant young medical practitioner of great promise who took to chloral to procure sleep, the power of which had left him through incessant midnight study.

Chloral generally associated with alcohol Inebriety.

He took a poisonous over-dose evidently by misadventure, there having been no suspicion of suicide. On the other hand, there have been several deaths from over-doses of chloral, of inebriates who indulged in both alcohol and chloral. These persons began their intemperate career on alcohol, and became periodic or constant alcoholists. Their immediately fatal debauch was inaugurated with alcohol. They took chloral to sleep off the effects, and were killed by the combination. Had they not been drunk they would probably not have taken any chloral, and owing to their drunkenness the chloral acted with greater potency. Of the alcoholics who have been under my care, about four per cent. have consumed excessive quantities of chloral. I know a very few abstainers from alcoholic intoxicants who occasionally fall back upon chloral for a night's repose, but none of these can be considered a chloral inebriate, the use as yet being only occasional.

I have known no case in which chlorodyne was the only inebriant used. In two cases the chlorodynomaniacs were abstainers from intoxicating liquors.

Chlorodyne Inebriety.

In both of these cases the habit had been set-agoing by the almost magical relief afforded in diarrhœal attacks of frequent repetition. So prompt and efficacious was the remedy that

Beginning of habit.

the patients never travelled without it, and with it in their possession they never hesitated to go anywhere. The drug seemed to have this morbid symptom well in command. In one case the diarrhœa was phthisical, in another it was nervous. In females the habit has arisen from taking the narcotic to relieve pain, and procure sleep. A married lady, the wife of a professional man, has cost her husband £220 for chlorodyne during the past six years, although she daily drank only one-fourth of the quantity taken by another case in which four ounces were used every day. In another the average daily amount was about five ounces. These quantities were arrived at only by a gradual and steady increase of the dose.

Quantity taken.

I have found chlorodynomania among males, but of late it has appeared more often in the other sex. Several distressing cases have come before the police-courts of London recently, husbands appealing to the magistrate for advice as to how to deal with a wife so afflicted. The female chlorodynomaniac will sell every available article belonging to her husband and pledge what is unsaleable, in her mad crave for intoxication with this too popular and powerful patent preparation. One married woman, aged 30, after pawning her husband's clothes and their bedding, had stolen his master's rug and pawned that too.

Sex.

The narcotic and anæsthetic substances of which chlorodyne is composed, are morphia, indian hemp, and chloroform or ether. These are combined with prussic acid, peppermint, treacle and water in an elegant and not unpleasant mixture. A fabulous amount of this patent medicine is sold without restriction.

Composition.

There is a transitory stage of excitement, but it is

very short. This is succeeded by profound sleep, stupor in fact. The symptoms are somewhat similar to those of intoxication by morphia, this powerful soporific entering largely into the composition of chlorodyne.

Symptoms and effects of intoxication.

The after effects are very much like those following opium dissipation, with a greater degree of thirst and a peculiar hot dry feeling in the pit of the stomach.

The crave can be established in a week. In one case it persisted for three years, when it was destroyed under appropriate treatment. In other cases the crave has died only with the victim.

Duration of habit.

One of the greatest boons of the century has been the introduction of chloroform, ether, and other anæsthetics, whereby untold suffering has been spared to multitudes of our fellow-beings, and the chances of recovery after severe surgical operations have been enormously increased. Yet these charmed agents for the assuaging of pain are not an unmitigated benefit. "No rose is without a thorn," and these blessings have not been without an attendant curse. The ease with which such benumbing substances can be taken, has led many individuals afflicted with an inebriate predisposition to clothe their favourite leanings in this fascinating and delightful class of oblivion-producing poisons. Chloroform, that grand gift of science to man, has been selected as an inebriating agent to a larger extent than is credible by any but physicians who know the facts.

Chloroform Inebriety.

A blessing transformed into a curse.

The sensation is at first slightly unpleasant principally owing to the pungency and odour of the fluid, but after a few doses have been taken

Chloroform intoxication.

this feeling of repugnance, which I have never known to prove a real obstacle to continued indulgence, quite wears off.

Gradually a delicious state of unconsciousness steals over the individual, delightful visions floating through the brain. The votary is beyond the influence of external impressions. There is muscular relaxation. The heart beats more slowly and feebly. The arterial blood becomes dark. The respirations are weak and shallow. Nervous sensibility and muscular movement diminish till the patient is completely under the influence of the anæsthetic. In this completed stage the chloroformed assumes a dangerous and death-like appearance, and the intelligent chloroformist watches the state of the unconscious subject most closely, ever mindful of the paralysed condition, and ready by prompt measures to avert a fatal termination. In spite of the utmost care death sometimes takes place.

Temerity of chloroformomaniacs.

Having regard to the extremely fine partition between life and death in chloroform insensibility, it is surprising that this insensibility should be self-wrought, it is amazing that any one should put himself in so perilous a condition. "Found dead" is not an uncommon event in this form of inebriety.

Quantity taken.

The amount consumed varies with the idiosyncracy o the individual, the inebriate persisting in inhalation till insensibility is reached. In one case eight ounces a day were taken for months together.

Chloroform is speedier in operation than any of the other forms of inebriety except ether. The nervous depression, the sickness, the perverted nutrition, and the continual sense of langour usher in an infirm and de-

moralised condition of body and brain, which makes of the victim a complete wreck. Unless the mania be resisted and the disease cured, the inevitable consummation by death approaches with startling swiftness. Interspersed with most transient visions of delight, the life of the chloroform inebriate is but a protracted misery. The visions in the early stage of the diseased manifestations are most agreeable, but later on they become weird and horrid.

A protracted misery.

A feeling of chilliness is frequently experienced, the suffering being aggravated in cold weather. In the season of frost and snow the temptation to the chloroformomaniac is at its height. Like intoxicating wine, chloroform is a mocker, bewitching its victim with a delusive feeling of warmth when it actually robs the body of vital heat. There is this difference from alcohol in relation to heat. Under alcohol the skin is warmer, though the interior vital heat is less. Chloroform produces coldness of the surface of the body. Alcohol, too, is a nervous vascular relaxant. Chloroform is momentarily a relaxant, and then contracts the capillaries giving rise to pallor, chills and nausea.

Character of sensations.

I have generally found the chloroform habit associated with alcohol. Only in one instance, a medical man, have I seen an abstainer a chloroform *habitué*. He was, I am happy to say, completely cured. In his case the pathological state constituting the disease of inebriety was corrected, with an excellent result.

Associated habits.

Chloroform has this property in common with alcohol. To the slave of both anæsthetic narcotic poisons there is no such thing as moderation. The only alternatives

are abstinence and deeper infatuation. Either the use of the deleterious substance must be discontinued altogether, or the disease will become more confirmed and less curable.

The chloroform habit is both periodical and habitual. In the early stages it is usually the former, in the later stages the latter. In the evolution of periodic into habitual inebriety each renewed dose necessitates a further increase, thus intensifying the crave for a fresh supply. In a minority of cases this form of inebriation is periodic to the end, the indulgences being once a week, twice a week, or once a fortnight. Rarely are the sober intervals longer than fourteen days. Sometimes the periodic outbreaks are irregular.

Periodic and habitual.

The chloroform habit is solitary, not social.

Solitary.

In chloroform inebriety there is no evidence of organic disease. The pathological sequelæ are of the nature of disordered function. Gastric derangement is common. There is no nausea at first. After the habit has been indulged in for a little time and the dose essential to unconsciousness has been insensibly increased, nausea and vomiting, precordial pain, anorexia and flatulence harass the sufferer. There are also deep mental and physical depression, nervous trembling, languor, drowsiness, sluggish circulation, and emaciation, with a cold skin. The countenance is haggard and has a pitiful look of constant weariness and strain. Chloroform first relaxes, afterwards contracts the vessels. There is always danger of syncope and sudden death.

A disease of function.

In a locality in the North of Ireland, ether drinking has prevailed for nearly half a century. The evils which have arisen there from

Ether Inebriety.

this species of inebriety are so serious that the attention of the presbytery of Armagh was recently called to the practice. The good and single-hearted Theobald Matthew administered the teetotal pledge to nearly 6,000,000 Irishmen, but as the influence of his wondrous and saintly labours began to fade, a drink was introduced into the locality in question, for which powers of exhilaration and stimulation were claimed, and of which it was asserted that it was not whisky, could not intoxicate, and was harmless. Ether inebriates are to be seen to-day in this community of ether drinkers. There are individuals who partake of this anæsthetic in limited quantity, as there are multitudes in the rest of the United Kingdom who are "moderate" drinkers of alcohol. A glass of sulphuric ether is drunk as unconcernedly as a glass of Irish whisky in other parts of Ireland, especially if the mouth be rinsed out with cold water first. There are many ether inebriates who drink large amounts of this rapid and volatile inebriant. A few fatal cases have occurred.

Locality of prevalence.

Moderate and immoderate ether drinkers.

Fatal cases.

The intoxication of ether is more rapid than that of alcohol, and even more lively. It is more effervescent and sparkling, and, though unconsciousness may have been reached, it is much more evanescent in its effects. The whole drama of ether exhilaration, drunkenness, and dead drunkenness, with a return to sobriety, is often performed in little more than half the time occupied by a similar alcoholic performance. Etherism is the antipodes of opiumism. The intoxicated by ether are merry, frisky and mercurial. The intoxicated by opium are serene, sedate and lethargic. But, like opium, ether

Comparison with opium and alcohol Inebriety.

does not appear to set up a permanent pathological change of organic or connective tissue. In this respect both these substances differ from alcohol.

I may refer to two cases in England, one a medical man, the other a lady. The former is 46 years of age, of a nervous temperament. No known inebriate heredity. At first he took chloral and opium, then he devoted himself to ether, and has been an etherist for some four years. At first irregularly periodical, he has now become a constant inebriate, will lie, cheat, or steal to procure a fresh supply. Cases.

The other is an elderly lady, who was addicted to chloral for some eight or nine years. She then became alarmed on account of the extreme feeling of cardiac weakness which she experienced, and she resorted to ether. Her approach is heralded by the characteristic odour long before she is seen, and she returns to her intoxicant as soon as the effects of the previous dose have passed away.

Cocaine Inebriety is perhaps the most novel form of inebriety. Several cases of fatal poisoning by this powerful and valuable medicinal drug have been reported, but only a very few cases of cocaine inebriety are as yet known to me. In the most of these, the beginning of the habit dated from the medical prescription of the poison to alleviate severe pain. The pain has recurred after the soothing effect of the stupefier has passed away, and the same handy and charmed remedy has again been had recourse to. Thus the habit has been insensibly acquired, until the victim has at length awoke to the fact that he is bound hard and fast. In each case a supreme effort has been rewarded by deliverance. In one or two cases, cocaine has been resorted to by opiumites in the Cocaine Inebriety. Initiation of habit.

search for an agent to aid in the renunciation of opium. In some cases where the injection into the tissues has been repeated several times daily, a state of temporary insanity has been developed, characterised by attempts at suicide. Cocaine is much more swift and short-lived in its toxic effects than morphia. Its tendency in an excessive dose is to delirium and raving madness. In fatal cases stupor and coma follow. It is more nauseating than morphia, more intense in narcotic action, and the inebriety is even more difficult of cure.

Swiftness and evanescence of effects.

Tendency to delirious raving madness.

Taken very frequently and hypodermically.

Cocaine is usually taken hypodermically, and doses are frequently injected in rapid succession. Generally cocaine has been taken along with or after other narcotics. Cocaine inebriety is oftener seen in the United States than elsewhere. Dr. J. B. Mattison, of Brooklyn, has recorded a number of interesting cases. Taken in time, this form is very curable.

The introduction to the habit has in all the recorded cases been a narcotic dose for the relief of acute pain. So satisfactory was the ease secured by the potion that this was repeated, and the habit was insensibly yet quickly established. Paleness, emaciation, listlessness, and restlessness are common symptoms. Indescribable fears trouble the mind, and hallucinations mock the senses. Vision is disturbed. Mental failure, without apparent organic lesion, gradually takes place; and the patient sinks into a kind of premature senile decay.

Gelseminum Inebriety.

Tobacco through the nervous system contracts the capillaries, causes a pale face and cold body surface, while the heart labours to force on the supply of blood until its own vascular

Is there a tobacco Inebriety?

system goes under the influence of this narcotic. Then the stomach involuntarily contracts, and after a time the voluntary muscles, deprived of blood, are convulsed tremulously or pass into active convulsions, as in tetanus. Alcohol, on the other hand, from its relaxing power over the nervous system, sets free the heart, reduces the muscular power, and counteracts the tobacco.

Tobacco a cardiac depressant.

Though burning tobacco has long been a favourite remedy for the clearing of green-houses from insect life, this substance is like opium in the respect that, with the exception of man, most animals are unaffected by it.

Acts on animal life like opium.

Enormous quantities have been used by seasoned smokers, the pipe or the cigar having never been out of their mouths except when they were eating or drinking, or were asleep.

Enormous quantities consumed by some.

So natural does the tobacco habit seem to become, that the story (or storied fable) is told of a South American planter, who was so inveterate a smoker that his negro valet had orders every morning to light a cigar and place it between his master's teeth while asleep, in order that the devotee of "the divine weed" might awake with the proper taste in his mouth.

Tobacco in excess (the quantity which can be called excess varying with the susceptibility of the user, many being unable to tolerate it in the smallest possible quantities) is a fertile cause of heart troubles, of dyspepsia, debility, loss of vision, and various other serious mischiefs, but it is widely different in action from alcohol and the other intoxicants which have been under consideration. No husbands are charged with killing their wives or assaulting their children through its excessive use, no acts of violence

Excessive use of tobacco injurious to health.

are laid to its charge. Nor does it seem to give rise to mental and moral perversion as does alcohol, and do, though in a less degree, opium and the remaining anæsthetic narcotics. Yet tobacco has a powerful influence on the nervous system, and I have known a case of an abstainer with a male inebriate heredity, who trembled like a man with delirium tremens every morning till he had a pipe to steady him. Even in this case there was no moral or mental aberration. I have not observed, as with drinking, any morbid uncontrollable impulse to nicotian unconsciousness. A crave I have noted, but it is a self-originated crave, the physical effect of the narcotic action of the article on the nervous system. And, though it is often more difficult for a confirmed smoker to give up smoking than to forswear his potations, the crave is but comparatively mild in its character. I have never known it so irresistible as to compel a smoker to pawn his wife's clothes, or so utterly deprive his family of bread as to kill them by starvation, in order to satisfy his longing; or to commit a criminal offence against the person, as we so often witness in alcoholic, opium, and other forms of inebriety.

The tobacco crave does not cloud reason and destroy moral sense.

Is only a physical desire and not overpowering.

No irresistible impulse to tobacco indulgence at all risks as with alcohol and other narcotic anæsthetics.

It is true that an abiding impression may be made by almost any article which can be taken by any channel into the human body; but this is a physical impression with a mental correllation, rarely obscuring the reason, deadening the conscience, or perverting the moral sense. The permanent physical impress has become so confirmed a habit as to prevail against reason, conscience, moral sense, and will, while leaving these faculties compara-

Therefore no true tobacco Inebriety or Mania.

tively intact. Though no defender of tobacco, which it cannot be denied is a mere luxury, injurious to the health of many, even when used in moderation, I am driven to the conclusion that in the philosophical and practical meaning of the term, there is no true tobacco inebriety or mania. There is undoubtedly a tobacco habit, but unless in cases of insanity the general mental and moral powers are not deeply involved.

The evil wrought by tobacco is mainly on the sight, the digestion, and the heart's function, with a malign influence on the procreative power, mischief as alarming as it is widespread.

CHAPTER VIII.

Etiology of Inebriety.

Pathology of Inebriety—Causes predisposing and exciting—Often difficult to discriminate—Predisposing causes—Sex—Age—Religion—Race—Climate—Education—Pecuniary circumstances—Occupation—Marriage relations—Heredity alcoholic—Heredity insane—Temperament—Associated habits—Other diseases—Head and other injuries—Diet—Intoxicating agents—Sex—Female Inebriety more common in England than in America—In the Colonies male Inebriates preponderate—Little female Inebriety in Austria, though much male Inebriety—Age—Proportion of Inebriates treated in American Home at Fort Hamilton—Greatest liability from 30 to 40, then from 40 to 45, then from 25 to 30—Experience at Dalrymple Home for Inebriates, Rickmansworth, England—Period of greatest liability 30 to 40, then 20 to 30, then 40 to 50—Juvenile Inebriety increasing in England—Religion—Considerations to be taken into account in estimating value of religious statistics—Protestants and Roman Catholics—Brahminism—Buddhism—Mohammedanism—Non-alcoholic Inebriety—The Jewish religion—Race—Nativity of American cases—Nativity of English cases—Considerations needed to form accurate estimate—Anglo-Saxon Inebriety—Continental peoples—Inebriety of Denmark, Belgium, Russia, Germany, France, Sweden, Austria, and Switzerland—Temperance of Italy and Spain—Negro races—Indians—Savage susceptibility to narcotism—Remarkable sobriety of the Jews—Comparative racial predisposition—Climate—Atmospheric environment—East wind—Dalrymple Home meteorological observations—Telluric influences—Influence of the seasons—Character of Inebriety affected by atmospheric conditions—American compared with English Inebriety—Hot and Cool climes—Omnibus drivers and air.

Having seen that Inebriety is in many cases a true disease, having assigned it a place among diseases of

the nervous system, and having described the varying forms which it assumes, we are now called upon to consider the etiology of the disease with a view, if possible, to trace the various causes from which the malady has been found to arise.

Pathology of Inebriety.

Under the heading of "the pathology of inebriety" we propose to enquire into what may be considered the immediate and proximate cause of all disease—in other words, the actual pathological changes which in the living body precede an attack.

Etiology of Inebriety.

In the study of the etiology of inebriety we have to elucidate all the factors contributing to the appearance of the ailment in the person of human beings. These contributing factors are called Causes (styled Remote in contra-distinction to the Immediate and Proximate pathological causes).

Causes, predisposing and exciting.

These Remote causes may be divided into Predisposing and Exciting. The former are those which render the body susceptible to the disease; the latter are those which excite an outbreak of the disease in bodies previously predisposed to it.

Often difficult to discriminate.

It is often difficult, if not impossible, to discriminate between the Predisposing and the Exciting causes of Inebriety. The intoxicating agent itself, whether in the form of an inebriating alcoholic beverage, of opium, of chlorodyne, of ether, of chloral, of chloroform, or of cocaine, may be both a Predisposing and an Exciting cause. This may be seen in the case of inebriates with no history of heredity, of injuries, or of nervine defect, in whom the organism has, under the degenerative influence of the poisonous narcotic, undergone an undoubted degradation, involv-

ing a pathological condition which never ceases demanding a renewal of the fleeting gratification of intoxication.

But taking everything into account, perhaps in our present state of knowledge this twofold division of causes will be found the most scientific and the most satisfactory.

Predisposing causes.

Predisposing causes are those conditions which render the individual peculiarly liable to be affected by the disease. These predisposing conditions will be best understood by special consideration of each.

I. Sex.
II. Age.
III. Religion.
IV. Race.
V. Climate.
VI. Education.
VII. Pecuniary Circumstances.
VIII. Occupation.
IX. Marriage Relations.
X. Heredity—Alcoholic.
XI. Heredity—Insane.
XII. Temperament.
XIII. Associated Habits.
XIV. Other Diseases.
XV. Head and other Injuries.
XVI. Diet.
XVII. Intoxicating Agents.

Let us consider the subject under the above divisions seriatim.

Sex.—With regard to which sex is more liable to inebriety, we may form a reasonably accurate judgment. From a Statistical Report of 600 cases of Alcoholic Inebriety treated at the Inebriates' Home, Fort Hamilton, New York, from November 1st, 1879 till Jan. 1st, 1881, we learn that these patients comprised 507 males and 93 females. Sex. America.

In England, the Inspector of Retreats licensed under the Habitual Drunkards Act, 1879, has in his annual reports from 1881 to 1887 recorded the admission of 314 patients. The sexes have not been discriminated, but it is probable that the actual numbers have been about 261 and 53 respectively. It must be borne in mind, however, that up till 1887 there had been a very much smaller provision for females than for males in these retreats, for only 18 females as against 52 males. England.

Of Homes for Inebriates not licensed under the Act there is, on the other hand, a much larger provision for females than for males. With more than ordinary opportunities for knowing the facts, I believe I approximate closely to the truth when I state that there is, of this class of places for the care of inebriates, accommodation for about 240 females and only about 30 males.

In the colonies the proportion of male to female admissions to homes officially recognised as well as to private homes, is probably about five to one. Colonies.

Though there is a large extent of male inebriety in Austria, there are very few female inebriates. Austria.

Age.—Of the 600 cases received at Fort Hamilton the following are the particulars:— Age.

Age on Entrance.	Cases.	Age on Entrance.	Cases.
15 to 20 years	5	45 to 50 years	66
20 to 25 ,,	47	50 to 55 ,,	28
25 to 30 ,,	78	55 to 60 ,,	24
30 to 35 ,,	116	60 to 65 ,,	21
35 to 40 ,,	115	65 to 70 ,,	1
40 to 45 ,,	99		
			600

American experience.

From these figures it appears that the periods of life showing the greatest liability to the disease were from 30 to 40. The period from 40 to 45 comes next, followed by that from 25 to 30. Between 45 and 50 succeeds. Below and above these extremes of age the liability is very much less.

English experience.

Of the 103 cases admitted to the Dalrymple Home for Inebriates at Rickmansworth in Hertfordshire, subjoined are details:—

Age on Entrance.	Cases.
20 to 30 years	27
30 to 40 ,,	46
40 to 50 ,,	22
50 to 60 ,,	8
	103

This British experience corroborates the American, for here again we find the period of greatest liability between 30 and 40 years of age.

Juvenile Inebriety.

Of recent years a more distressing phase of inebriety has been brought to light in the tender years of childhood and youth. Boys of seven years old and upwards have been treated for delirium tremens, and cases of repeated intoxication have

occurred at as early a period of life. Even in much younger children I have seen the disease manifest itself.

A child is given a small dose of an intoxicant, and at once drinks to drunkenness. The excess is, so to speak, spontaneous. The latent tendency to intemperance is there, and the excitation of a sip of an alcoholic inebriant testifies to the disease lurking within. Not a few young people, sometimes of only two years of age, after strong drink has been offered to them and once drank, have cried for their daily allowance of spirits and have died, prematurely wasting away in a year or two, or less. Not long ago, a child of four years of age was run over by a cab. The little one was drunk when the accident occurred, and on awaking to consciousness cried out for gin. In France, the custom of including a supply of wine in the charge for breakfast and dinner has led to not a little inebriety among the young.

Very young children can be seen by the critical eye clearly under the influence of liquor. The wine, added to the water, which children of from three to ten years of age are encouraged to drink at meals, is frequently seen to flush their face, make them demonstratively caressing and finally send them to sleep.

Religion.—Of the 600 treated at Fort Hamilton 369 were Protestant, 228 Roman Catholic and 3 professed no religious faith.

Religion, Fort Hamilton.

Of the 103 inebriates received at the Dalrymple Home 98 were Protestant and 5 Roman Catholic.

Dalrymple Home.

In estimating the value of these statistics, it should be remembered that some inebriates, though they profess to belong to a religious body, do so to the officials at the retreat simply because they are ashamed to

Considerations in estimating value of statistics as to religion.

avow their agnosticism. Inebriates of this belief, or rather no-belief, usually declare they belong to the established church, or most fashionable religious community of the country or part of country in which they reside.

It should also be borne in mind that these tables afford no certain indication of the comparative prevalence of inebriety among Protestants and Roman Catholics, as in the United States and in England, Scotland, and Wales, the former largely outnumber the latter.

Protestants and Roman Catholics.

After, however, every reasonable allowance for these and other sources of error, I have no doubt, from an extended professional experience of inebriate cases, that such cases include a somewhat greater proportion of male Protestants than of male Roman Catholics. So far as females are concerned, the proportion tells a little less strongly in favour of the Roman Church. I blush to confess it, but honesty compels me to concede my belief, that this disproportion extends to countries in which Roman Catholicism is the prevailing form of worship. At the same time, I have observed of recent years an alarming rate of increase of inebriety among Roman Catholics, especially among females, which, if not arrested, wiil ere long secure them an equal if not greater proportion of inebriates with their Protestant brethren. Both in America and England there is a large and constantly increasing intemperance in the lowest orders of Roman Catholics, but this habit is spreading rapidly among the higher and more educated classes, particularly among women.

Taking an all-round view of religious predisposition, with one remarkable exception to be further noticed, neither of the great creeds of modern civilisation can

cast a stone at each other. Religious excitement, and not the particular creed, if that excitement be beyond control, is a marked predisposing cause. Brahminism and Buddhism, perhaps by the subjection of the feelings and passions of the devotees under strict discipline and an austere regimen, exhibit comparatively little liability to inebriety. Mohammedanism, like these two other widespread faiths, no doubt owes the inferior liability of its followers to inebriety, to the intelligent recognition by its founder of the perilous and insidious nature of intoxicating draughts. There is inebriety of the opium, haschish, and other allied forms, in these colossal heathen persuasions, but the extent of such inebriety is dwarfed into insignificance by the side of the terrible character and appalling extent of alcoholic intoxication among modern Christian peoples.

Brahminism. Buddhism.

Mohammedanism.

Non-alcoholic Inebriety.

One fact, with reference to religion, which stands out in bold relief is that the community of the Jews is conspicuous by its absence from this sorrowful exhibition of suffering humanity, and puts to open shame both Protestants and Roman Catholics. It is possible that a very few Jews have been classified under the denomination of Protestant, but I have never known of such an occurrence. The temperance of the Jews is proverbial. Extensive as my professional intercourse has been with them, I have never been consulted for inebriety in the person of a Jew, while my advice has been sought for this complaint by a very large number of Christians.

One lesson let me here in this connection point to as valuable for our guidance, *viz.*, that the Jews undoubtedly owe not a little of their comparative freedom from inebriety (comparative because

The Jewish religion.

it is not absolute) to their scrupulous attention to many healthy and sanitary conditions.

Race.

Race.—The records of Fort Hamilton and Rickmansworth at first blush point to the United States and England as furnishing the bulk of the cases. But it ought not to be lost sight of that these institutions are located in America and Great Britain respectively, so that the greater part of the applications for admission naturally come from residents in the one country or the other.

Nativity of American cases.

The particulars of the nativity of the 600 cases at Fort Hamilton are as follows:—

United States	388
Ireland	129
England	36
Germany	17
Canada	14
Scotland	13
West Indies	2
British Provinces	1
	600

Nativity of English cases.

The particulars of the residence of the 103 cases at the Dalrymple Home are the following:—

England	81
Ireland	7
Scotland	5
France	2
Switzerland	1
Cape Colony	1
Australia	1

New Zealand	1
United States	1
Canada	1
South America	1
India	1
	103

It is only fair to scrutinise these figures with the qualification which I have mentioned, *viz.*, that the retreats are situated in America and England, and that therefore a larger proportion of applications for admission was to be looked for from the Americans and the English. Yet my own observation and all the information at my command lead me to the conclusion that the Anglo-Saxon race are peculiarly susceptible to this disease. As the nervous system and the higher nerve-centres are so pre-eminently involved in inebriety, it may be that the severe intellectual strain with the consequent intense nerve exhaustion, account in considerable part for this Anglo-Saxon inebriate susceptibility. And as the organic nervous system is also deeply involved, especially in periodic inebriety, this susceptibility to narcotics may also be largely owing to the vigour and the sturdiness of Anglo-Saxon physical life. With "go" and staying power this race is confessedly copiously endowed, and this very intensity of organic vitality may incorporate a liability to the disease as well as a delicate susceptibility to the narcotic and anæsthetic action of alcohol and other similar substances. Probably the greater share of this inebriate proclivity and acute neurotic sensibility is the property of the Saxon element in our blood. This race

Considerations needed to form accurate estimate.

Anglo-Saxons.

were mighty in their cups, and history narrates their prowess in drinking. Intoxication was a Saxon accomplishment from the earliest times. It may be that their huge draughts of "the wassail bowl," by the accumulated influence of alcohol on the nerve system from age to age, laid the morbid foundation, transmitted from sire to son, of what may be called either our weakness or our strength, according to our mode of regarding our racial bibulous proclivities.

Continental peoples.

Notwithstanding the alleged superior sobriety of continental peoples there is an enormous amount of inebriety in France, Sweden, Austria and Switzerland; more in Russia and Germany; still more in Denmark and Belgium. Among Italians there is unquestionably less of this trouble than in any other nation on the continent of Europe. Probably the Spaniards come next to the Italians in comparative freedom from intemperance.

Negro races.

The negro race, with their vivacity and enthusiasm, are, from their nervous sensitivity, easily excited. Their drunkenness is more demonstrative than profound, but the anæsthetic influence is less lasting. They may be characterised as more readily intoxicated than the white men of western countries, but less liable to the diseased condition which I have designated narcomania, intoxication-mania, or inebriety.

Indians.

Red Indian tribes exhibit a marked liability. This savage becomes infuriated in the height of a drunken bout, his madness and rage subsiding only with the comatose stage of dead drunkenness. Unlike the negro, the influence of inebriants especially of the alcoholic species is abiding with the wild man of the west. The untutored, aye even the tutored American

Indian, is therefore very apt to fall a prey to inebriety. This is a characteristic of most savages, in different parts of the world. In their case the career of the inebriate is brief. He drinks himself to death swiftly and violently. Whenever he has the chance he drinks enormous quantities of liquor. This savage susceptibility to intoxicants has been but too clearly proven by the terrible mortality among them from the ravages of "fire-water."

Remarkable sobriety of the Jewish race.

Under the last head—religion—I have referred to the remarkable temperance of the Jews. In my opinion their general freedom from inebriety in almost every clime and under almost all conditions (there are a very few exceptions to this rule) is as much due to racial as to hygienic, and more to racial than to religious influences. This extraordinary people has, amid wondrous vicissitudes, preserved a variety of distinctive characteristics, and I cannot help feeling that some inherited racial power of control as well as some inherited racial insusceptibility to narcotism, strengthened and confirmed by the practice of various hygienic habits, has been the main reason for their superior temperance. Even among those Jews in whom there has been an unusual enjoyment of alcohol drinking, when (though they were not "drunk") there has been a slight thickening of the speech, glibness of tongue and unwonted exuberance of spirits, evidencing a certain amount of alcoholic poisoning, I have never detected the existence of the disease, inebriety. Of this strong impulse to alcoholic or other narcotism I have never seen a case among this distinctive people.

Comparative racial predisposition.

As a whole, Anglo-Saxons seem to be more prone to this disease than any other race; but the Russians, the Swedes, the Belgians, the Germans, the Swiss, the French and the Austrians

seem to be steadily coming up to the English and the Americans. It is interesting to note that as Jews carry their sobriety into every country (some parts of Russia excepted), so do the Anglo-Saxons carry their insobriety all over the world. We British are the finest colonists extant, but, to our shame be it recorded, our triumphant march over the habitable globe has been marked by a disgraceful and damning trail of alcoholic drunkenness, destruction, and death. Our demoralisation and decimation of native races by the drinking habits which we have taught them, are a hideous blot on the escutcheon of our fame, a reproach to us as a people, a dishonour to us as a civilised nation.

I have no doubt that when we shall be in possession of fuller information with regard to the ethnographical distribution of inebriety, we shall find that there is much more than is generally supposed in Racial Predisposition.

Climate.

Climate.—A close observation of the behaviour and mental condition of inebriates in varying states of the atmosphere, of the soil, and of the sky, has convinced me that climatological environment exerts an appreciable influence in the genesis and development of inebriety.

Atmospheric environment.

Fog and damp have a depressant effect. Clear bright weather braces up the nervous tone, invigorating the spirits and cheering the hearts of all. Most to be dreaded are those dull sultry days when the air is heavy and charged with electricity. The disturbed electric condition of the atmosphere disturbs and excites the nervous fluid of the body. The feelings are oppressed, the patients are listless, then they are unsettled, and in a state of excitement, unrest and irritability. At this juncture the morbid impulse to in-

toxication is most liable to arise, and the long sleeping crave most apt to be re-awakened. Under these circumstances the responsibility and anxiety of the medical superintendent of a retreat, or the medical adviser of inebriates treated at home, are more than double what they are under ordinary meteorological conditions.

East wind.

The force and direction of the wind exert a decided influence on the inebriety of some. The east wind, the praises of which have been so enthusiastically sung by Charles Kingsley and other hardy poetic spirits, is a bitter foe to many inebriates, inciting a paroxysm with its keen and biting edge. Some of the cured, who in general pursue the healthful and sober tenor of their abstaining way, have a hard fight to refrain from yielding to a strong impulse to excess when the east wind begins to blow.

Dalrymple Home meterological observations.

Daily observations at the meteorological station, under the supervision of the Royal Meteorological Society, in the grounds of the Dalrymple Home, have confirmed my previous deductions that atmospheric and other allied conditions exert a marked influence on the physical, mental, and moral tone of the inebriate. These observations, which were instituted, partly as an aid, by the elevating influence of scientific occupation, in the treatment of the intelligent inebriate, and partly to note the influence of climatic and territorial conditions on inebriety, have extended over twelve months.

Telluric influence.

The conditions engendering malaria are influential in fostering inebriety. The depression consequent on malarial poisoning invites relief from narcotism; but besides this, the malaria generating forces operate to produce inebriety. In suddenness, intensity, and periodicity, there is a close

analogy between malarial fever and inebriate paroxysms, the same causes often originating both diseases.

Influence of the seasons.

The seasons have their influence. Some individuals are more apt to be incited to excessive indulgence in intoxicants in winter, some in summer, some in spring, some in autumn. The periodicity of the seasons, like other periodicities, has its counterpart in the periodicity of some forms of inebriety. A powerful physical influence on the body is exercised by the changes of season. In winter the body loses, in summer gains, in weight.

Reviewing these facts and observations, can we wonder that climate seems to have a potent influence, especially in some localities and with some subjects, in predisposing and exciting to inebriety?

Character of Inebriety affected by atmospheric conditions.

The moist and dense atmosphere of the United Kingdom engenders a solid, heavy-headed, riotous revelry of inebriety, differing somewhat from the light, mercurial, volatile, though often destructive, inebriety begotten of alcohol under the dry, exhilarating, buoyant atmosphere of the greater part of the American Continent. Yet the inebriety of both nations has more points of agreement than of difference. The dissimilarity consists in a few minor modifications of the common narcotic and paralysing actions of alcoholic poison.

American compared with English Inebriety.

The fact that the disease is so prevalent in America and Britain, two countries with greatly differing climatological conditions, is remarkable, and points to some other common cause. Probably the electrical condition of the atmosphere has the greatest influence. We know the high nervous tension of the American people, among whom affections of the nervous system have

attained to a much greater magnitude and intensity than among the English at home, and the drier air of the western continent has probably a good deal to do with American nerve tension. Our denser and damper atmosphere may have considerable influence in shaping the heavy, depressing, sodden, brutal drunkenness of England. I have known crimes of violence to be committed in the United States under the influence of strong drink, but I have never, when there, heard of such brutalities as roasting a wife alive and persistently dashing a child's head against a wall, of which we hear too often in our own country. A potent factor in the causation of American nervous intensity is the astonishing variation of temperature, a difference of as much as 130° having been experienced by myself within a few days.

Hot climates, though they are prolific in breeding the toxic effects of alcohol on vital organs like the liver, do not seem to be quite so favourable as cold climates to the development of what we may call the disease of narcomania or true inebriety. Thus there is a difference between the drinking habits of the colder regions of Russia, Sweden, Germany, Belgium, and the northern portion of France, as compared with the more southerly and warmer regions of Spain, Italy, and Southern France. Southern climates generally do not apparently yield so abundant a crop as northern climates, of either periodic or constant inebriates. In America in the Northern States the alcohol impulse is not so easily resisted as in the Southern States. To some extent, with perhaps the exception of New Orleans and Charleston, it may be said that there is less aggravation of the symptoms of the act of drunkenness in the South. In illustration of

Hot and cold climes.

the influence of climate as a factor in developing inebriety, I may adduce the fact, which I have so often seen exemplified in foreign-born patients, that natives of Italy who had never drunk to anything approaching excess for twenty, thirty, or forty years, in their native land, have rapidly in England fallen into habits of intoxication several times weekly, in addition to inordinate drinking all day long. This applies to both rich and poor.

Omnibus drivers and air.

It is noteworthy that omnibus drivers, cab drivers, and others among us who spend the greater part of their lives in the open air, do not suffer to any great extent from nervous diseases or from true inebriety, though they are marked sufferers from gout, rheumatic gout, dropsy, ulcerated legs, asthma and other affections, from the toxic influence of their considerable potations. The climatological conditions clearly modify the action of the poison on the individual.

CHAPTER IX.

ETIOLOGY OF INEBRIETY. (*Continued*).

Education—American statistics—English statistics—Education and culture no bar to Inebriety—Pecuniary circumstances—Riches and poverty predispose to Inebriety—Occupation—American patients—English patients—Learned professions—Teachers—Speculators and stock-brokers—Liquor traffickers—Condition as to marriage—Statistics—Heredity alcoholic—Heredity insane—Chief inherited cause an inebriate parent—Diseases inherited—Feeble progeny—Alcoholic diseases transmitted—Inebriate idiocy—Parental Inebriety—Transmitted alcohol debility—Transmitted drink impulse—Ancient recognition—Alcoholic inheritance—Crossed heredity—Inherited impulse always exists—Intemperance short of drunkenness—Maternal share of heredity—Pathology of inherited alcoholism—Alcoholic heredity a fixed law—Inebriate intra-uterine death—Inebriate premature child mortality—Defective inhibition transmitted—Unstable brain transmitted—Temperament—Phlegmatic least predisposing—Phlegmatic inebriates not generally riotous—Case of a barrister—Associated habits—Does tobacco predispose to Inebriety?—Sometimes and how—Tobacco using teetotallers—Tobacco does not markedly predispose to inebriety—Opium and chloral—With alcohol, chloral occupies second place—With opium, morphia and chlorodyne, alcohol takes second place—Chloroform, ether, eau-de-cologne inebriates, also alcohol drinkers—Other diseases—American experience—English experience—Alcoholic phthisis—Hernia—Uterine affections—Syphilis—Chest disease—Cerebral disease—Sunstroke predisposition—Epilepsy—Head and other injuries—Diet—Injudicious and unwholesome—Intoxicating agents.

Education.

Of the 600 inebriates at Fort Hamilton only 59 were uneducated, 88 had received a rudimentary education, 341 had been brought up at a common school (*i.e.*, an American common school) and 112 had passed through a college curriculum. Thus,

453, or fully three-fourths, had experienced the benefit of a liberal education, about 1 in 6 having studied at college.

British statistics.

Of the 103 admitted to the Dalrymple Home 2 had received only elementary instruction, 20 were fairly well educated, 55 had the benefit of a good education, and 26 either graduated or were otherwise the recipients of a university training.

From these figures and from extended observation by such accurate and reliable observers as Dr. T. D. Crothers, of Walnut Hill Home, Hartford, Conn., U.S.A., it is manifest that the ranks of inebriety are largely recruited from the educated classes.

Education and culture no bar to Inebriety.

The disease inebriety, apart from ordinary drunkenness, is indebted to the cultured portion of society for a large proportion of its subjects. My own professional testimony on this predisposing cause will be given under the cognate heading of occupation.

Pecuniary circumstances.

The fact that patients under the Habitual Drunkards Act have to pay, or their friends have to pay for them, a charge of from £2 2*s*. to £6 6*s*. per week, the average having been £3 3*s*., is of itself proof that a considerable number of inebriates have been in fairly good pecuniary circumstances. Riches, by the abundant opportunities of indulgence and by their power of purchase, exercise a great predisposing influence. It is true that many applications have been received from destitute inebriates, but in the bulk of these instances the destitution has been the result of the inebriate habit, the means having been squandered on drink. The most of these applicants had become subjects of inebriety when in easy or wealthy circumstances. Inebriety does affect

the poor, and poverty does to some extent predispose to inebriety; but the indigence is generally a consequence, not a cause.

The various occupations of the 507 males under treatment at Fort Hamilton are set forth thus:—

Occupation.	American patients.
Followed trades	208
Merchants or manufacturers	79
Members of learned professions	61
Clerks or Salesmen	111
Engaged in liquor traffic	31
No occupation	17
	507

The 93 female patients were grouped as follows:—

House-keepers and domestics	83
Dressmakers and Seamstresses	10
	93

Subjoined are the particulars of the calling of the 103 patients at the Dalrymple Home:—

	English patients.
Medical practitioners and medical student	9
Barristers and solicitors	5
Clergymen	2
Tutors	2
Librarian	1
Publisher	1
Merchants and manufacturers	10
Retired military officers	3
Civil servants	9
Followed trades, or shopkeepers	4
Accountants	2

Stock-brokers	2
Auctioneer	1
Land agents	2
Underwriter	1
Civil engineers	4
Clerks	15
Commercial travellers	2
Farmers	2
No occupation	25
Marine merchant service	1
	103

Private patients.

Among the cases in which I have been consulted in private practice, there has been a large proportion of members of the learned professions, and at least three-fourths have been highly educated. Fellows of our leading scientific societies, literary men, members of the legislature, and women of refinement and culture, have passed in review before me in such proportion as to demonstrate that the disease is most prevalent in the intelligent and cultured classes of society. In other words, education and refinement predispose to the malady.

Learned professions.

A delicate and sensitive nervous organism is a congenial soil for the development of narcomania.

Teachers. Stock-brokers and speculators.

Teachers and others liable to severe and exhausting brain work, are also very liable to suffer from inebriety. So are stock-brokers and speculators. Any occupation involving worry has considerable inebriate liability attached to it.

Washer-women and laundresses.

There are others whose avocations specially predispose to inebriety. Such are laundresses and washerwoman, who are engaged in trying work and whose opportunities for wholesome

and regular feeding are few. The occupations of hotel and public-house servants, of omnibus drivers and others who are specially exposed to temptation are rather exciting than predisposing causes, and will be considered under the former division.

Of the 507 male inmates at Fort Hamilton 227 were bachelors, 40 widowers, 239 married, and 1 divorced. Of the 93 females 13 were spinsters, 16 widows, 63 married and 1 divorced. Condition as to marriage. Statistics.

Of the 103 gentlemen at the Dalrymple Home 46 were single, 51 married, and 6 widowers.

There was thus no great difference between the number of married and unmarried males; but among the females the proportion of inebriates was much lower among the unmarried, the ratio being about 1 to 6 of the married or widowed.

These are the details of the family history of the 600 cases at the New York establishment:— Heredity—Alcoholic and Insane.

FORT HAMILTON.

HEREDITY.

INEBRIETY.		INSANITY.	
Fathers	168	Fathers	3
Mothers	9	Mothers	3
Fathers and mothers	12	Brothers	6
Fathers and brothers	7	Sisters	7
Fathers and sisters	2	Mother and grandmother	1
Fathers and grandfathers	7	Aunts	4
Fathers and uncles	4	Uncles	6
Brothers	16	Cousins	7
Grandfathers	12	Grandparents	1
Grandparents	2		38
Other relatives	26		
No history of Inebriety	335	No history of Insanity	562
	600		600

The following is all the information procurable as to the family history of the 103 inebriates at the Rickmansworth Home.

DALRYMPLE HOME.

HEREDITY.

INEBRIETY.		INSANITY.
Father or mother . . .	17	In 9 cases.
Grandparents (with uncles or brothers)	6	No history of Insanity or Inebriety obtainable in 59 cases.
Brothers	10	
Uncles	10	

From these and other records it would appear that the chief inherited cause of inebriety is an inebriate parent. Parental insanity is also a predisposing factor. On the other hand, in some cases inebriate parents begat insane as well as inebriate offspring.

It is a suggestive fact that of these 703 cases treated in America and Britain no fewer than 308 had a family history of previous inebriety.

The most saddening, and perhaps the most serious, of the numerous evils inflicted by alcohol on human kind is the hereditary transmission, both of the drink-crave itself, and of the pathological changes caused by indulgence in alcohol.

Diseases inherited.

Physical disease, induced by habitual intemperance, is often transmitted. Alcoholic phthisis, for example, is a disease, the seeds of which are at times sown on the constitution of the unborn babe (fœtus in utero). Some very painful cases of this hereditary infliction have recently come before me. Hereditary alcoholic rheumatism and hereditary alcoholic gout are constantly to be met with. I have had under my care a life teetotaller, who has been repeatedly tormented by acute attacks of gout, though

by his careful diet and mode of life he has disarmed the disease of half its terrors. He owes his besetting ailment to the alcoholic indulgence of his ancestors, and has inherited this legacy with the rest of the family property. In no other disease is the heredity of alcohol more marked. In Britain the proofs are everywhere around us.

Many other diseases produced by alcohol are the subject of transmission. Among the most characteristic are alcoholic cirrhosis and alcoholic contracted kidney. In one painful case of the latter, under my own care, the patient had been a total abstainer for nearly forty years, but he inherited the contracted kidney from an intemperate father.

Feeble progeny.

The blood of the inebriate parent is so vitiated and his energies are so wasted, that, even when there is a sober mother, the innocent progeny are often brought into existence, puny, stunted, and debilitated. Body and brain having been insufficiently nourished, the vital powers of such infants are so defective that, in their earliest years, they are literally mowed down. In the causation of the terrible infantile mortality which is such a disgrace to English civilization, the drinking habits of the parent or parents have the largest share. Even when grown up to manhood, the constitutions of the offspring of intemperate parentage are frequently so enfeebled and impaired, that they succumb to a premature death from their lack of recuperative power after the exhaustion, following some acute illness, which a tolerably vigorous system would have perfectly recovered from.

Alcoholic mental and nervous disease transmitted.

Alcoholic nervous and mental diseases are also handed down. Hereditary alcoholic epilepsy, for example, is by no means

uncommon. Defective nerve power, enfeebled will, and a debilitated *morale* form a favourite legacy from thoughtless inebriates to their helpless issue. The nerves of the narcomaniac are shattered, while the bodily strength is undermined, and thus the family are liable to be mentally afflicted. Some of the circle, generally the daughters, may be nervous and hysterical; others, generally the sons, are apt to be feeble and eccentric, and to fall into insanity when any emergency calls for the display of unusual brain power. In one household, with a drunken father, two girls were hysterical, and the third was imbecile; of the sons, the eldest was an epileptic, the second died suddenly of alcoholic apoplexy, and the third was an idiot. In another family, burdened with the hereditary drink curse, the eldest daughter committed suicide, the second lost her reason and became quite demented, and the youngest was the incarnation of hysteria. The elder son killed himself by poison through drink, and the younger is an apparently confirmed sot.

Inebriate Idiocy.

Absence of intellect from infancy, or idiocy, not unseldom follows of necessity from parental excess in alcohol. Dr. Howe, in his well-known Report on the State of Idiocy in Massachusetts, states that the habits of one or both parents of 300 idiots having been learned, 145 of these children, or nearly one-half, were found to be the progeny of habitual drunkards. Dr. Howe gives the case of one drunkard who was the parent of seven idiots. Dr. A. Mitchell, in his evidence before the Committee of the British House of Commons, said he was quite certain that the children of habitual drunkards were in larger proportion idiotic than other children; a belief shared in by M. Rousel, M. Taquet, Dr. Richard-

son, and a host of competent observers. At the meeting of the British Medical Association at Cambridge, Dr. Fletcher Beach, Medical Superintendent of the Darenth Asylum, reported that an analysis of 430 cases under his own care showed 31·6 per cent. of idiotic children to be the offspring of intemperate parents. In private practice the proofs of the influence of parental alcoholic excess in the generation of amentia are continually confronting me; and among my professional *confréres* there is no difference of opinion on the subject.

Parental Inebriety.

That the impairment of the bodily or mental faculties arises from the intemperance of one or both heads of the family, is demonstrated by the healthfulness and intellectual vigour of children born while the parents were temperate, contrasted with the sickliness and mental feebleness of their brothers and sisters born after the same parent or parents became intemperate. In one case, there were first a son and daughter, both excellent specimens, mentally and physically, of vigorous humanity. After the birth of the daughter the father fell into habits of dissipation, and rapidly became an habitual drunkard. He had four children after his declension to insobriety. Of these one was defective in mind, and the remainder were complete idiots.

Transmitted alcohol debility.

There can be no reasonable doubt, in fine, that not the least painful and unavoidable effects of intemperance in alcohol are the physical and mental debility and disease it entails on posterity. Darwin, in "The Botanic Garden" in 1794, pointed out this fixed and immutable law. Nearly all the diseases springing from indulgence in distilled and fermented liquors are liable to become hereditary, and to descend to at least three or four generations, unless

the hereditary tendency be starved out by uncompromising and persistent abstention from all intoxicating drinks. This is no speculative theory, no visionary hypothesis. It is a well-grounded belief founded on accurate observation—a legitimate conclusion deduced from extended experience, and based on incontrovertible facts.

Transmitted drink crave.

But the most distressing aspect of the heredity of alcohol is that the transmitted narcotic and insatiable craving or impulse for intoxication—the inebriety of the physician—is every day becoming more and more prevalent. Probably this alarming increase of alcoholic heredity in England is owing, in great part, to the unmistakable increase of female intemperance amongst us.

Not long since, I was called to a lady, sixty-three years of age, evidently dying. All that I was happily able to accomplish was, by the aid of powerful medicinal stimuli, to restore her failing consciousness for a few brief moments while her spiritual adviser addressed to her a solemn exhortation. She was an habitual drunkard, getting drunk regularly every night, and when drunk she lost all sense of shame and decorum. She was a victim to the hereditary drink-crave. The only other members of her family, two sisters, were also hereditary inebriates. The one died in an asylum from insanity caused by drinking, and the other is so confirmed a drunkard that she has to be constantly watched.

Ancient recognition.

The hereditary transmission of an innate proneness to excess in alcohol, of a special susceptibility to habitual and abandoned intemperance, has been recognised from the earliest times. Plato referred to the injurious effects of intemperance,

both on the parent and on the child. Plutarch wrote:— "Ebrii gignunt ebrios," and Aristotle taught that "drunken women bring forth children like unto themselves."

The Parliamentary Committee of the British House of Commons, in 1834, in their Report on Intemperance, state that the evils of alcoholism "are cumulative in the amount of injury they inflict, as intemperate parents, according to high medical testimony, give a taint to their offspring before its birth, and the poisonous stream of ardent spirits is conveyed through the milk of the mother to the infant at the breast; so that the fountain of life, through which nature supplies that pure and healthy nutriment of infancy, is poisoned at its very source, and a diseased and vitiated appetite is thus created, which grows with its growth, and strengthens with its increasing weakness and decay."

Alcoholic inheritance.

One more example, which has come under my own professional observation, may be useful. A gentleman of position, sixty-four years of age, is an hereditary drunkard. So violent is he that his wife and family have had to leave him. One of his sisters (unmarried) is an imbecile through drinking. She has frequently tried to commit suicide, when drunk, by hanging, by poison, by jumping from a window, and by drowning. Her insanity has so suicidal a tendency that she cannot be left for a moment alone—all the repeated efforts at self-destruction which I have just enumerated having been attempted while the attention of the attendant was withdrawn from her for a few seconds. She will do anything for drink, will beg, borrow, or steal, pawn everything she can lay her hands on, and even essay robbery with violence in the hope of obtaining money to gratify her morbid craving for

alcohol. Another sister (married) is also an habitual drunkard, who is subject to fits of ungovernable fury when in drink, and being dangerous both to herself and others, is under restraint. Thus, all the family are narcomaniacs. The fatal legacy in this case was from both parents. The father shot himself when labouring under alcoholic mania, and the mother was an inveterate drunkard. The grandfather was also a confirmed inebriate.

Sometimes when the father is addicted to drunkenness the girls are the most liable to be the subjects of hereditary alcoholism, and when the mother is the culprit the sons are specially endowed with the family failing (*hérédité croisée*). That the female parent is the more general transmitter of the hereditary alcoholic taint I have little doubt. In a London prison, recently, female representatives of four different generations of one family were incarcerated, at the same time, for drunkenness or offences connected therewith.

In my own observation, the female members of several families, which suffered under the infliction of drunken mothers, have all, except those individuals who have become rigid teetotalers, lapsed into being hardened drunkards. In one case, the females of two successive generations, and in another case of three successive generations, have all formed an unbroken chain of reckless inebriates, and then all at once their successors in life have exhibited an utter loathing for alcohol in every shape and form. Apart from any outside temperance influences, an instinctive and irrepressible abhorrence is sometimes seen, simultaneously and of its own accord, in the children of the third or fourth generation of families formerly, apparently helplessly and firmly bound by the iron fetters of the heredity of

alcohol. The very extent of the evil seems to have worked out its own cure. The depths of misery and despair into which the relentless tyranny of alcohol has, by inheritance, plunged its victims, seem to have permeated their whole being with hatred of their enslaver, and to have inspired them with the determination to strike a blow for freedom, and, casting off for ever the yoke of the oppressor :—

> To burst the chains which drink for ever flings
> On the entangled soul's aspiring wings.

Inherited crave and impulse always exist.

The inherited drink-crave and drink-impulse where they exist, even when from the absence of temptation or from the strength of resolute will, they have never been made manifest, are always latent, and ever ready to be lit up at the faintest alcoholic provocation. The smallest sip of the weakest form of fermented or distilled liquor has power to set in a blaze the hidden unhallowed fire. Persons ignorant of the inexorable law of heredity in alcohol, indiscriminately rebuke and denounce the vicious drunkard and the diseased inebriate. But to medical experts it is as clear as is their own existence, that there are multitudes of persons, of both sexes and in all positions in life, who, though they may never have yielded to the enticements around them, are yet branded with the red hot iron of alcoholic heredity. There is no nobler sight on earth than the triumph of such weighted ones over their lurking and implacable foe—a foe the more terrible that it lies concealed within their own bosom. The only safety for all such, lies in entire and unconditional abstinence from all alcoholic drinks. Such must shun all the alcohols. Every fermented and distilled liquor is their enemy. Though added horrors, such as delirium

tremens, may be heaped up by a resort to impure spirits and the heavier alcohols, the purest ethylic alcohol, or the weakest and most delicate fermented wine, is strong enough to awake the dormant appetite, and provoke a thirst too often, alas! quenched only in death. Whatever their station or their accomplishments, the subjects of the inherited drink-crave can abstain or can drink to excess, but drink moderately they cannot. If, in a state of consciousness, they taste an alcoholic beverage at all, whether on the plea of sickness at the prescription of a physician, or on the plea of religion at the exhortation of a priest, they are in imminent danger. Their whole system is, as it were, set on fire. Unless happily enabled to master the giant appetite in the very first moments of its re-awakened life, they are truly taken possession of by a physical demon, a demon easily raised, but, once raised, almost beyond the power of even a Hercules to slay.

Intemperance short of drunkenness.

To prevent misapprehension, it is well here to state that all the evil resulting from hereditary alcoholism may be transmitted by parents who have never been noted for their drunkenness. Long-continued habitual excessive indulgence in intoxicating drinks, to an extent far short of pronounced intoxication, is not only sufficient to originate and hand down the morbid tendency, but is much more likely to do so than even oft-repeated drunken outbreaks with intervals of sobriety between.

Maternal share of heredity.

In what consist these influences of the alcoholism of parents upon the constitutions of their children? The mother probably is the more potent factor in the transmission. She exerts an influence, not only with the father in the conception, but, in addition, during the whole period of utero-gesta-

tion, wields a special influence on the unborn child. Exact records are wanting, but I have remarked a preponderance of the maternal influence in the causation of alcoholic heredity in many cases in family practice.

Pathology of inherited alcoholism.

Alcoholism seems to impair the vital properties of the fertilising material, and thus from the very beginning the child of an intemperate father is burdened with an inherited constitutional idiosyncracy. Then the depraved moral sense is transmitted, just as are other heritable mental and moral defects. When the heredity is from the mother, it seems to me that it arises mainly from the defective nutrition of the nervous centres of the cerebral and spinal substance, during the entire uterine career. The continued action of nervine stimulants modifies the nutrition of the nervous system, and it is this acquired perversion of the normal nutrition of the nervous system which is conveyed from parent to child and constitutes heredity in alcohol.

The nerve cells are built up and kept in adequate repair by the nutritive plasma from the blood. This process is essentially a healthy function, the health of the mind as well as of the body depending on the proper nutrition, growth, and repair of the cells. By taking alcohol (whether the less poisonous, as the ethylic, or the more poisonous, as the butylic or amylic) we cause the blood plasma to convey to the cells an irritant narcotic poison instead of a bland nutritious substance, thereby retarding the normal healthful rate of cellular waste and repair, and thus set up a depraved diseased condition. Alcohol disturbs the balance of the mental powers. Its action is to destroy the equilibrium of the organic functions of the mind, and by this interference it brings about undue depression of some of the

functions, and undue exhaltation of others. This abnormal mental unsteadiness produces in the children of such parents a badly balanced and weakly condition of the brain and whole nervous system, as well as of the moral faculties, and thus both the mind and body of the offspring of parents, whose mental and physical being is steeped in alcohol, are predisposed to take a diseased action. A crowd of nervous disorders is the inevitable outcome. The mortality among children so afflicted is enormous, and when they survive the period of childhood, epilepsy, apoplexy, cerebral and meningeal disease, and insanity work sad havoc with the survivors. A considerable proportion of the children of female inebriates succumb to intra-uterine death. Of those who reach the period of birth, a goodly number have been so affected in the womb by the alcoholic cerebral and meningeal congestions, and other pathological states induced by alcohol, that they die from hydrocephalus or convulsions.

Defective inhibition transmitted.

In like manner, parental deficiency of inhibitory or controlling power is transmitted. The progeny are physically undermanned as regards their ability to resist abnormal impulses and even ordinary temptations. They inherit a weakened power of resistance. It is more difficult for them than for their mentally strong compeers, to say "No."

Unstable brain transmitted.

An unstable state of brain is also handed down. The inherited defective mental balance is so real that any sudden and excessive call upon their nervous system is apt to upset their equilibrium, and plunge them into an insane or an inebriate outbreak.

Alcoholic heredity a fixed law.

The heredity of alcohol is now beyond dispute. It is no mere dream of an ab-

stemious enthusiast, but the operation of a natural law; no fanciful creation of a nephalian brain, but an acknowledged fact. Men and women on whom this dread inheritance has been forced without their consent are everywhere around us, bravely struggling to lead a pure and sober life; and would it not be but an act of justice to make every church, every home, and every land, safe for all such afflicted ones by the expulsion of all intoxicating beverages from our sacred services, from our social gatherings, and from within our borders? Equity and fairness demand this at our hands in the interest and the rights of each hereditary legatee of alcohol.

Temperament.

All kinds of temperaments are apt to labour under inebriety in favouring circumstances, except perhaps the phlegmatic, of which I do not remember to have seen more than two cases. In such the disease, when excited into active intemperance, assumes a somewhat different form from that which it takes in the other temperaments. There are topers of this comparatively unimpressionable and unsusceptible nature who coolly and quietly, but with deep satisfaction at every draught, habitually indulge in copious potations. These self-possessed and lethargic wine-bibbers, whether the liquor consumed by them be malt vinous or spirituous, seldom seem to be what in common language is called "one hair the worse," rarely appear in the slightest degree affected in speech or in gait, hardly ever evidence symptoms of disturbance or excitement.

Phlegmatic least predisposing.

Phlegmatic inebriates not riotous.

When such become inebriates they are not often guilty of riotous drunkenness. The more they drink the quieter and more deliberate they become. To all appearance they are

only more unmoved and philosophic in their indifference to everybody and everything around them. One such I knew well. He was a barrister, a born orator, a lucid persuasive speaker, impressing the reason of his hearers by the clearness of his thought, the distinctness of his utterance, and the beauty of his diction. So powerful was his eloquence that I have heard a cultured audience, probably every one of whom was opposed to the views expressed by the lecturer, rise up *en masse* and cheer him to the echo. When actually drunk he seemed to be more sober than when he had not been drinking. In his cups, when so drunk in his legs that he could with difficulty stand upright, his tongue moved more slowly, his speech became more deliberate, his argument more lucid and well weighed. To a stranger he appeared perfectly sober only when he was thoroughly drunk. He was the subject of inherited inebriety on the maternal side, and during his spells of abstinence which extended over a couple of months at a time, he was much more mercurial and intoxicated-like than in the acmé of his inebriate paroxysm.

Case of a barrister.

Tobacco.—Of the 507 males at Fort Hamilton 491 used tobacco, as did 70 of the 93 females. At the Dalrymple Home tobacco was indulged in by 91 of the 103 gentlemen there under treatment. Of the females in the various homes in England only about one per cent. are known to have used this narcotic.

Associated habits.

It has been contended that because the majority of male inebriates have been consumers of the "divine weed," therefore the tobacco habit conduces to inebriety. Though it may have done so in a few instances (I have not known more than three myself), I have little doubt that in general this contention is untenable.

Does tobacco predispose to Inebriety?

Smoking and drinking frequently go together, especially with men, but it is often a mere accident which goes first, the difference in their birth being little greater than between the birth of twins, one of which latter is always born first. The glass at least as often precedes the cigar as the cigar precedes the glass, neither having any appreciable influence in the taking of the other. In the very rare cases which I have had under observation, and in which the tobacco appeared to have really predisposed to the inebriety, Sir Walter Raleigh's favourite solace so depressed the nervous system as to induce a neurasthenic state of temporary or prolonged nervous exhaustion, which craved for a stimulant or for a stimulant narcotic to relieve the indefinable and overpowering depressed sensation. Generally coffee has been resorted to for this emergency, especially by abstaining tobaccoists, and it usually answers admirably. Coffee is the natural ally of tobacco, the supporter and corrective of the depressant narcotic.

Sometimes and how.

But in a very few cases within my ken the depressed smoker has found alcohol relieve his depression, and in these instances the alcohol habit has been gradually built up. The tobacco user, in one case, to moisten his mouth and throat deprived of their natural moisture, had taken an alcoholic refresher. This was repeated until by degrees he acquired a taste for strong drink, inebriety being the sequel.

Tobacco-using teetotallers.

On the other hand, I have had under my care a large number of abstainers who were smokers, snuffers, or chewers. Some of these had used tobacco to great excess, and had been excessive smoke-consumers for long periods of years.

Though I have no doubt whatever that tobacco is a poison, that its use is necessary to no one and perilous to many, that it is the occasion of not a few enfeebled hearts, not a little loss of vision, not a small amount of nervous excitement melancholia and dyspepsia, not a limited number of premature deaths, and though I have as little doubt that every one would be healthier by abstaining from tobacco, with the exception of a few cases developed in the two modes just indicated I have not been able to come to the conclusion that the use of tobacco as a general rule implies much liability to inebriety. At one time, before my opportunities of observing cases of inebriety were so extended, I entertained an opposite opinion, believing that tobacco was one of the chief predisposing causes of the inebriate habit; but loyalty to truth compels me to add that not only have I changed my mind as to this, but I have actually seen a few cases of inebriety in which the sedative influence of tobacco has subdued the craving for the moment, as it sometimes lulls for a time the sensation of hunger, and has thereby prevented an inebriate outbreak.

Tobacco, however, operates as a contributory factor in the development of that neurotic diathesis which in some constitutions sets up the diseased condition of inebriety, either in the offspring or in the succeeding generation.

Of the varied influence of tobacco in the treatment of inebriety I shall speak later on.

Opium and chloral.

Twenty of the 600 cases at Fort Hamilton took opium, one of these also taking chloral.

Of the 103 patients at the Dalrymple Home at Rickmansworth, 3 took chloral, and 5, opium, morphia or chlorodyne.

In most of the chloral cases, the alcohol was the prin-

cipal anæsthetic consumed, the chloral occupying a secondary, though important place. In most of the morphia, opium, and chlorodyne cases one of these narcotic drugs was the principal intoxicant resorted to, but all the habitués were also consumers of alcohol, this latter playing a minor part. I have found this specially in my private cases, though in some of these the alcohol was the first inebriant taken to excess. In less than one per cent. of my cases of alcoholic inebriety was morphia taken by subcutaneous injection.

Chloral occupies second place.

With opium chlorodyne and morphia alcohol takes second place.

I have rarely known the subject of any of these habits in excess to be an abstainer from alcohol. The chloroform, ether, or eau-de-cologne has taken the place of alcohol in the bouts of excess, though the free drinking of alcohol has been continued. Sal volatile I have known to be consumed in large doses, especially by females who also were considerable users of alcoholic intoxicants. I cannot say that I have seen either eau-de-cologne or sal volatile shorten life. Indeed it has been not unseldom a matter of amazement to me how ladies have kept up the excessive use far beyond "three score years and ten." It has been "as good as a play" to see aged though youthfully attired and conducted dames mysteriously disappear for a few minutes twice or thrice at an evening party, each time reappearing as sprightly and as sparkling as the youngest of their sex present, after a dose large enough to incapacitate half a dozen less seasoned tipplers.

Chloroform, ether, eau-de-Cologne and sal volatile, also alcohol, drinkers.

Nearly one-fourth of the patients at Fort Hamilton had suffered from syphilis, or 145 of the 600, while several had been the subject of local

Other diseases.

venereal disorder. 42 had been affected by some form of chest disease, 33 being cases of phthisis. Though some of the latter were afflicted with alcoholic phthisis, the disorder so clearly described by Dr. B. W. Richardson, in the majority the lung trouble was the first in the field. Hernia was present in the person of other patients, also diseases and displacements of the womb. Of the 103 gentlemen treated at the Dalrymple Home, 11 were martyrs to dyspepsia, 6 suffered from some form of chest disease, 7 from rheumatism or gout, 12 from syphilis or some form of venereal disease, 3 from general debility, 2 from amaurosis, 2 from alcoholic paralysis (partial), 1 from stone, and 2 from some species of convulsions.

America.

England.

Though all these are often exciting causes, they are sometimes predisposing causes concurrently or separately.

Predisposing and exciting.

Syphilis and local allied disorders are potent factors, and merit special attention. The physical depravity of the organism effected after a lengthened spell of specific disease, constituting unmistakeable evidence of the ravages of syphilis, coupled with the depressing influence on the nervous system and on the mind, combine to set up an abnormal state of body and brain which craves for immediate relief. This relief is unfortunately often secured for the moment, and for the moment only, by alcoholic intoxicants especially. Such is the birth of inebriety in not a few men and some women.

Syphilis.

The harassing nature of sub-acute and chronic diseases of the chest and of various vital organs, with the weary wearing effect of almost constant suffering, whether the intoxicant be resorted to for temporary relief (in which circumstance

Chest disease.

there is present an exciting cause) or not, tend to induce a perverted state of the whole being, physical and mental, which predisposes to inebriety.

Cerebral disease and head affections also exert a considerable influence in the production of inebriety. I have seen the effects of former sunstroke or heat apoplexy, years after the attack, the intervening period having been one of sobriety, bring about a condition of the system pre-eminently predisposed to be excited to an inebriate paroxysm.

Cerebral disease.

N. R., 54. Discharged from the army on a pension, having been invalided after serving for a series of years in India, where he had a smart attack of heat apoplexy. He occupied for some five or six years a responsible post in London, during the whole of which time his conduct was unimpeachable. As the hottest season drew near in England he became uneasy, restless, irritable, complaining of headache and distress. In a few days he would be drunk, and it was from two to three weeks before he fully resumed his temperance again.

Sunstroke predisposition.

Epilepsy is far from uncommon in inebriety. The epileptic diathesis is apt to undermine and break down the nervous system, rendering this an easy prey to various diseased disturbances predisposing to inebriety.

Epilepsy.

Head and other injuries are generally exciting causes, but frequently they exercise a predisposing influence. While some individuals are almost precipitated, as it were, into inebriety immediately or shortly after some injury to the head, I have seen other cases which have had a long interregnum of sobriety. In all probability this sober habit would have been maintained, had not some exciting

Head and other injuries.

cause, some slight mental shock or worry cropped up. The head, which could stand ordinary troubles, could not bear this extra strain, however slight it may have been, and the result was inebriety.

Diet.

Injudicious and unwholesome diet contributes to predispose the system to inebriety. In certain of our colonies the digestive organs are abused and digestion impaired by the badly cooked salt beef, indigestible bread stuffs, adulterated inferior tea, and other trying comestibles on which large numbers of overwrought individuals comfortlessly exist. So, nearer home, has the modern common feeding of tender children on bread and dripping with tea, not a little to answer for in the genesis of present day British inebriety. The bad colonial "tack" depraves the appetite and creates a constant thirst for intoxicants by its direct perversion of the stomach and palate; but all these improper dietaries wear rapidly out the nerve-force, and thus construct a crave for intoxication.

Bad hygienic conditions.

Ill ventilated and over-crowded dwellings, from the vitiated state of the air within them, occasion a languor and sluggishness which lead to functional derangement, and produce a profound feeling of depression, which, in many cases, predisposes and excites to intemperance in alcohol.

Intoxicating agents.

Intoxicating agents come under the head of predisposing causes, inasmuch as in a large number of cases the disease of inebriety is the indirect remote effect of the ordinary use of these beverages by healthy and vigorous persons. Many constitutions are, by the poisonous action of alcohol on the nerve centres and on various vital organs, so altered, that, from apparently complete control at the beginning of their drinking career, they have

slowly and steadily lost in a great measure that control. The inhibitory power having been weakened, the constitution is predisposed to inebriety by the lessened capacity to resist the narcotic influence of the intoxicating agent. The alcoholic degeneration may be latent, but it is there, and on the application of an exciting cause, a paroxysm of inebriety is evolved.

CHAPTER X.

Etiology of Inebriety *(Continued)*.

Exciting Causes.

Sphere of predisposing and exciting causes—Exciting causes—Nerve shock—Traumatic Inebriety—Other diseases—Head affections—Sex—Pregnancy and maternity—Influence of occupation—Climate—Idleness—Overwork and overstrain—Sociability—Intoxicating agents—Nerve shock—Proportion of cases—Varieties of shock—Domestic trouble—Domestic worry—Male case—Female case—Bereavement—Male example—Female example—Hysteria—Case of religio-temperate Inebriety—Unrequited affection—Unhappy marriage—Unexpected good fortune—Loss of fortune—Business worry—Traumatic Inebriety—Inebriety after head injuries—Case of fractured skull—Meningeal affections after injury—Inebriety of other diseases—Dysmenorrhœal Inebriety—Inebriety of dyspepsia—Inebriety of gout—Inebriety of epilepsy—Inebriety of syphilis—Inebriety of insanity—Head affections.

So much for the predisposing causes, by virtue of which the body becomes favourable soil for the development of the disease should the application of an exciting cause call it into existence. Let us now enquire into these latter, the exciting causes, which on their application are apt to give birth to the disease.

Exciting causes.

These exciting causes may be considered under the following heads:—

I. Nerve shock.
II. Head and other injuries (Traumatic Inebriety).
III. Other diseases.

IV. Head affections.
V. Sex.
VI. Pregnancy and maternity.
VII. Influence of occupation.
VIII. Climate.
IX. Idleness.
X. Overwork and overstrain.
XI. Sociability.
XII. Intoxicating agents.

I. *Nerve shock.*—At Fort Hamilton in 67 of the 600 cases, or over eleven per cent., to some form of nerve shock the inebriate symptoms were attributed. Of the 103 cases at the Dalrymple Home this was the exciting cause assigned in 33, or nearly one-third. Generally there has been an unstable brain. In such cases an unexpected shock disorganises the higher faculties, disturbs the mental equilibrium, and lessens the control over thoughts and actions. A strong brain, though staggered for the moment by the blow, speedily recovers itself and gathers up the reins of government again. But in a weaker brain confused and reeling from the assault, the higher powers are stunned. Unable to rally quickly and labouring under an excessive weight of grief or despair, the stricken seeks relief in the Lethe of intoxication. Such phenomena are ever present before me.

Proportion of cases.

Domestic, business or financial trouble, religious hysteria, disappointed affections, fright, are all among the forms of nervous shock which provoke to acts of inebriation.

Varieties of shock.

Of the intimate relation of domestic trouble to inebriety, the records of the Dalrymple Home and notes of my own private cases, have

Domestic trouble.

been full of proofs. In many ways inebriety is, in congenial soil, originated from this source. Husbands worried by their wives, wives worried by their husbands, fly to drink for comfort and consolation. Or death steps in and ravishes a dear one from the loving embrace of the broken-hearted survivors. The shock is too much for one or more of the domestic circle, and one may become insane, another become an inebriate.

Domestic worry.

There are women who are enough to drive any husband either to drink or to another clime. Vain, selfish, and inconsiderate, their whole pleasure seems to consist in making the lives of all around them miserable, the husband, of course, coming in for the lion's share of the persecution. Such an unfortunate was Major S., a gallant officer who commanded the respect and kindness of every one with whom he came in contact, except the one who ought to have exhibited the most unequivocal marks of both. At 42 he married a lady of some 26 summers, who always looked as if it were the place of the whole world to be continually at her feet, ready to fly and anticipate all her whims. The martyr bore his punishment for some five years in silence, but during the latter half of that time he gradually resorted to the bottle to soothe his suffering. He became a wretched, degraded sot. When the mischief had been wrought, his wife awoke to the error of her ways. She realised the position, induced him to enter a home, where he kept absolutely abstinent for six months. With his recovered sobriety, vigor, and manliness, his wife's former selfish and persecuting inconsiderateness returned, with the to-be-expected sequence of his relapse.

Male case.

There are men who are as irritating and worrying to a wife as the most irrepressible of her sex can be to

a husband. Such a one was a lawyer of good standing and honourable character. He was a thoroughly sober man. His wife, V. T., aged 31, with a neurotic heredity (female) was an amiable and fascinating woman. No helpmeet could have been more loving, more devoted, and more unselfish. But nothing she could do could please him. In everything he seemed to entirely disregard her feelings, exhibiting profound indifference to her devotion, her health, and her happiness. Her life was a long suspense. He never told her beforehand what he wished her to do, or where he wished her to go. He thought nothing of constantly inviting three or four more boon companions to dinner, and telegraphing to her about a couple of hours beforehand to have a *recherché* meal prepared for them. In this as in everything else he evinced an utter lack of regard for the feelings of others, yet he always expected everything to be perfect whenever a new whim instigated some difficult undertaking, without warning or hint. After six years of this wretched slavery to the caprices of a tyrant, she took to fashionable alcoholic intoxicants, which in our day and generation ever hold out to us the alluring wile of a brief oblivion of our miseries Thus was another inebriate made, type alas of a multitude of her sisters.

Female case.

S. V., aged 45. An educated and warm hearted gentleman. Heredity neurotic. Of sober and estimable life. He lost his wife, with whom he had lived very happily for twenty years; became miserable, gloomy, and apathetic, interested in nothing. He took to drinking, and within ten months became a confirmed inebriate.

Bereavement, male example.

N. W., age 57. A refined and accomplished lady. Heredity alcoholic on father's side. She led an ab-

stemious regular and most decorous life up till the date of the sudden death of her husband after thirty-four years of happy married life. Within a month thereafter she had repeatedly given way to drink to drown her intense grief. In three months she was a confirmed inebriate, ready to lie, deceive, cheat, or do anything to gratify her morbid desire for intoxicant forgetfulness.

Female example.

Hysteria, that protean malady, is a frequent exciting as well as predisposing cause. In its religious form it is shorn of none of its inebriety-exciting power. This form is seen at its highest development in the hysterics of religio-temperance.

Hysteria.

Many such cases are known to me, but as several of them have been public characters I dare not narrate the leading features of any of them, as the individuals would be recognised. Suffice it to say of such that there was no hypocrisy in their alternations of apparently wanton drunkenness of a repulsive type, and of Gospel-Temperance fervour. They were, all through, men who were the subjects of an inveterate disease. In their abstaining intermissions, their earnestness, their temperance ardour, and their religious enthusiasm were real and remarkable. In the height of their self-abnegation and their devotion they felt no pain, and realised no physical weakness, rejoicing in their frequent utter exhaustion as an offering to the cause so near their heart. But by and bye excitement had carried them far beyond their strength. The spirit was willing but the flesh was weak. They became quite prostrate. To keep them up as they thought (deceived by the mocker wine against their judgment) they invoked the anæsthetic charm of an alcoholic intoxicant. That moment their fall was certain.

Case of religio-temperate Inebriety.

Through their veins this deceitful narcotic raged like a consuming fire. They were as physically and mentally transformed, as were the victims of the goddess Circe of old, and changed into distorted and uncontrollable narcomaniacs. Once having tasted their implacable foe they were no longer their own masters. As one of them, a more simple hearted and guileless mortal never trod the earth, told me when recovering from such a debauch, "when I had drunk that glass of sherry, not all the devils in hell could have prevented me drinking till I was drunk." Yet this poor weak brother, useful as was his Christian work, both before and after this relapse, after struggling for days against the temptation to drink to relieve his utter weariness, at last was tempted to break his resolution on the Machiavellian plea that a single glass would give him new life for his mission, and that he could easily stop there.

Unrequited affection.

Disappointments of any kind, if taken to heart by the victim, are not infrequently a cause exciting to inebriety. Unrequited affection is not an uncommon cause. The stable brain, especially if fortified by higher influences, rises gradually above the temporary misfortune. The unstable brain is more disturbed and has greater difficulty in emerging unscathed from the severity of the ordeal. Generally alcohol, but sometimes opium or one of the other narcotics, is flown to for the negative pleasure of oblivion. The physical web of the narcotic spider is insensibly yet steadily and by degrees thrown over the unsuspecting fly till it is entangled in the meshes, and a supreme effort is required to achieve freedom, which often indeed cannot be enjoyed without recourse to medical and other aid.

A nobleman with alcoholic heredity, aged 31, who

was very much attached to an estimable young lady of no great fortune though of good family, was over-persuaded by his parents to marry another lady, whom he did not love, of high position. An unhappy marriage was the result. He was an educated man with a scientific bent of mind, she was a votary of fashion, addicted to horse racing and gambling. Ere many years had passed he had become a confirmed inebriate, dying at last from the effects of an accident while he was drunk. During his temperate intervals, which rapidly grew fewer and fewer, he was with congenial friends himself again, delighting in the scientific and philosophical conversation of his pre-inebriate days. Here unhappy marriage relations, imposed on him by unwise parents, were the exciting cause of inebriety.

Unhappy marriage.

Joy as well as sorrow may lead to drinking. Not so often probably, but still this does happen. An ill-balanced mind is apt to be completely thrown off its equilibrium, and inebriate symptoms sometimes manifest themselves without warning. The attack may be short and fierce, or confirmed continuous inebriety may follow.

Unexpected good fortune.

M. S., 47, gardener. Temperament nervo-sanguineous. Heredity unknown. Earns 25*s.* weekly. Steady, sober, industrious, and economical almost to parsimony. Was left a legacy of £500. His actions underwent a radical revolution. He became irregular at his work, extravagant and profuse in his expenditure, would pick up five or six men in the street and treat them to champagne suppers. In a variety of ways this unwonted display of lavishness was shown until the money was exhausted, when he quietly returned to his old regular state of sobriety and industry, a sadder but a wiser man.

J. R., 28. Temperament nervous. Heredity alcoholic (male). An intelligent man of great promise, temperate and well-behaved. At this age he unexpectedly came into possession of £30,000. Within three months he was a constant inebriate, drinking continually to drunkenness, on arousing from which state he recommenced his excessive potations. Within three years he had squandered all his means and was literally destitute.

These two cases of periodic and constant inebriety respectively, are but types of a host of others. In such cases the elation experienced on an unlooked for stroke of good fortune was the exciting cause of the inebriate manifestation. I have had under my care cases in which the exaltation consequent on the achievement, after long years of toil, of literary and other work has been the excitant to alcoholic excess. Such cases are generally very curable.

Loss of fortune.

That pecuniary misfortune is the vestibule to a life of drunkenness is a matter of common observation. How often have we all seen a man lead a laborious and thrifty life and preserve a perfect character for strict sobriety, when some overwhelming financial misfortune has overtaken him, and his sobriety has fled with his fortune. Certain men are only braced up and stiffened by disaster, looking their ruin square in the face and starting afresh, at any age, to do battle with the world anew. Others are overpowered and demoralised. They succumb to the blow, and, ostrich like, bury their head, not in the sand, but in an intoxicant, that they may shut out from sight the horrors of their commercial collapse. Sometimes these so excited to demonstrative inebriety are the subject of inebriate, sometimes of neurotic, inheritance.

S. L., age 55. A man of high commercial position. Temperament bilious. No known heredity. Of great wealth, he lived in excellent style, surrounded by every comfort and luxury which money could procure. His wife and children with himself formed a happy family circle. His temperance was unimpeachable. A sudden reverse of fortune overtook him. His substance was swept away by one unfortunate speculation. He was quite broken down, and within a few weeks was an inveterate inebriate.

Business worry.

Business trouble operates extensively in the genesis of inebriety. The magnitude of the fluctuations of many business concerns proves too heavy a task for many persons. Just able to carry on the regular routine, when a sudden rush comes they are upset, worried, and totally unfit to keep at their post. The narcotic glass is essayed, and satisfying it at first proves. Calmness is restored to the nerves. The calmative potion is applied to more and more frequently. By and bye the man comes to lean upon the "broken reed." He is no longer a man but a slave, a veritable diseased drunkard. This is the history of not a few whom the world, in its ignorance, has envied. Others preserve their sobriety all through the ebbing and flowing of commercial demand, but either from a lack of forethought or from no fault of their own, a crash comes. Financially they are a wreck. Then they seek to drown their grief in the flowing bowl. Their doom is sealed, unless they remedy their physical and mental disorder by method, moderation, and regulation of work.

Traumatic Inebriety.

II. *Traumatic Inebriety.*—Head and other injuries are a powerful source of inebriety, both as predisposing and as exciting causes.

Of the 600 cases at Fort Hamilton head injuries were greatly in excess of other exciting causes. 123, or nearly one-fifth, had received blows on the head. One-third of these 123 head injuries were fractures of the skull, accompanied in four cases by loss of bony substance. Of the 123 who had been hurt on the head, 71 became habitual and 52 periodic inebriates.

Of the 103 admissions to the Dalrymple Home six owed their inebriety to injuries of some kind, three being in the region of the head. In one case the shock resulting from a severe fall from a horse was the exciting cause.

After head injuries.

It is very striking when a sober steady man or woman, immediately after recovery from an injury to the head from violence or accident, suddenly appears frequently intoxicated. This might be a co-incidence in a case or two, but the cases are too many in number to admit of such an hypothesis. The injury may be obscure and slight, yet the intoxication may be deep and inveterate. In some cases there is concussion, or compression, or fracture of the bone ushering in the sudden change of character and behaviour. In one case, that of a lady of neurotic but not narcotic heredity, aged 42, the injury sustained was fracture at the base of the skull from a fall. She was unconscious for seventy-five hours, with blood discharging from ears and mouth, and no one anticipated her recovery. In a fortnight she was convalescent. In another week she was able to be out of doors, and returned drunk. This inebriety has continued ever since, some five years ago.

Case of fractured skull.

Apparently very trivial blows on the head have brought about a similar state of things. I have also

known cases of ill-defined meningeal trouble, after the fall of a stone or other heavy body on the head, the inebriate starting point. Some of these have had a protracted convalescence, distress and dullness of spirits with slowness of thought speech and movement remaining. Some have developed no inebriate symptoms, others have gradually shown a strong inclination to alcoholic excess. It has frequently struck me that these cases afford a clue to many of the manifestations of inebriety following head injuries. Alteration of the nutrition of the brain substance as well as of its membranes may be effected, and the reflex nervous irritation may have been the cause exciting to the inebriety. There are generally headache, confusion of ideas, mental and muscular inertia, depression with a tendency to melancholy and irritability. At times the stage of these premonitory symptoms is brief, at times they are prolonged for weeks before alcohol has been indulged in to excess. In all cases of head injury and head affection, whether the injury or ailment has been caused by drink or not, alcoholic intoxicants are contra-indicated.

Meningeal affections.

III. *Other diseases.*—I have already shown how the continual and wearing strain of long-standing disease of various kinds so exhausts the staying power, so undermines and disorganises the nervous system, that the constitution is predisposed to an attack either of constant or periodic inebriety, as I have again and again seen in phthisis and other diseases in which the strength steadily gives way. Diseases other than inebriety may be the cause excitant of the inebriant impulse.

Inebriety of other diseases.

The brain is liable to be affected by the sympathetic influence of organic and functional disease, sometimes

automatically, almost without the consciousness of the individual. Sometimes he is conscious of the mental perversion, yet has little control over his desires and actions. In other cases, imbibition is strong, and there is little or no difficulty in guiding those desires and actions into a serene atmosphere far above the commotion below. Certain forms of uterine disease are apt in this way to develope a perverted taste for intoxication, or some form of narcotism.

Dysmennorrhœal Inebriety.

Painful menstruation is a familiar example. There are many females who suffer so acutely that the agony is almost unendurable. Indeed I have seen cases in which the patient was completely prostrate for days. There are many degrees of this pain, and it is well known that the popular remedy is hot gin and water or port wine. Here alcohol seems to act as an anæsthetic. Immediate relief is ordinarily obtained, with the too frequent issue of a career of confirmed or periodic inebriety. In this sex my observation is that this is the most general cause exciting to intemperance.

A. R., 18. A highly accomplished and temperate young lady. Temperament bilious. Heredity neurotic. An abstainer habitually. When I was summoned she was intoxicated and quite uncontrollable, continuing so for some hours. She had been suffering from acute and distressing pain during the period, till the dysmennorrhœa became almost unbearable. Her mother administered a couple of glasses of hot port wine negus.

Inebriety of Dyspepsia.

Another influential exciting cause is dyspepsia. The deep despair and unconquerable dread of the hypochondriac dyspeptic are so overwhelming that it is not surprising to see

them, as I have in many cases seen them, drive the unhappy sufferer to seek a temporary repose from these torments in the narcotism of alcohol or opium. This exciting cause is usually operative in middle and advanced life.

Inebriety of gout.

Though there is a general consensus of intelligent medical opinion that alcoholic intoxicants are a leading factor in the production of gout, it does not seem to be recognised that, whether or not of alcoholic origin, the pain and exhaustion of the gouty paroxysm not unseldom excite to an outbreak of alcoholic excess. Yet it is so, even while the martyr to this English morbid privilege knows that to his drinking he has been indebted for his gouty attacks. A similar observation applies to rheumatism.

Inebriety of epilepsy.

Epilepsy excites to inebriety, though it is sometimes an effect, not a cause. In other instances, both the epileptic and the inebriate paroxysms are the outcome of a common neurosis. 44 of the 600 cases at Fort Hamilton were complicated with this epileptic affliction, and one of the 103 at Rickmansworth.

Inebriety of syphilis.

Syphilis, in addition to being a potent predisposing cause, in some cases has been an exciting cause. The victim of this depressing and persistent class of diseases may have endured all the discomforts of his position for years without his sobriety having been shaken. But when the ailment has involved the nervous system, cerebral disturbance and distress have impelled the sufferer into a paroxysm of inebriety. At other times the intense headache, or the nocturnal pains in various regions of the body, have so maddened the patient that he has been excited to alcohol or opium inebriety in sheer desperation.

Unsoundness of mind is an exciting cause, both in constitutions in which it has and in which it has not implanted an inebriate predisposition. Inebriety of Insanity. I have seen a sudden access of mental alienation provoke to pronounced inebriety in persons whose families had no history of previous unsoundness of mind or of inebriety.

The insane impulse, perhaps by some discharge of grey matter, hurries the individual into intoxication, as it may hurry him into any other abnormal act. The morbid impulse impels one man to drink to excess in the same way as it impels another man to commit theft in kleptomania, or murder in homicidal mania. In such circumstances the inebriety is simply a symptom of insanity. He is not mad because he drinks, but he is drunk because he is mad. In his lucid intervals he may be temperate to a degree, or even an abstainer, the insanity manifesting its return by a drinking bout.

IV. *Head affections.*—I have reserved a paragraph for this heading instead of merely grouping it under that of other diseases. Cerebral cellular starvation or disturbance, by disease of the brain or its membranes, is productive of a very much larger proportion of inebriety than all other bodily ailments together. Any brain commotion may excite to inebriety, and this issue follows very much oftener after some head affection than is generally supposed. There are some forms of headache, for example, which are well known for their inebriate excitation. Head affections.

CHAPTER XI.

Etiology of Inebriety *(Continued)*.

Exciting Causes.

Sex—Inebriety of adolescence—Climacteric Inebriety—Inebriety of marital excess—Case in advanced life—Inebriety of pregnancy—Inebriety of parturition—Case—Another case—Sudden shock—Puerperal cases—Inebriety of too rapid child-bearing—Morbid impulse may be resisted—Influence of occupation—Commercial travellers—Auctioneers—Horsekeepers—Daily newspaper work—Printers—Inebriety of liquor traffickers—Climate as an exciting cause—Inebriety of marine climatic conditions—Inebriety of sober Italians from English climate—Inebriety of voluntary idleness—Inebriety of enforced idleness—Overwork and overstrain—Nerve-exhaustion a cause of Inebriety and allied disorders—Overwork and overstrain a common cause of neurasthenia—Youthful overpressure—Premature decay of nerve-strength—Inebriety from sociability—Inebriate excitation by intoxicating agents—Excitation of the abstemious—Excitation by alcohol — Case — Excitation of old crave by alcohol as medicine—Alcohol at communion exciting to Inebriety—Case of Inebriate excitation by a sacramental intoxicant—The intoxicant may be both a predisposing and exciting cause—Excitation by alcohol in juvenile Inebriety—Modification by form of intoxicant—Narcotic substances excite to narcomania—Imitative intoxication.

Inebriety of adolescence.

V. *Sex.*—When we think of the blood being the life of the body, how it is the wondrous canal through which is automatically distributed the nourishing materials to every part of the

frame, and on its other varied offices in the living organism, we cannot but expect that the approach of puberty, the first great revolution of the system, in the female especially, will be heralded and accompanied by nervous disturbances of varying degrees of intensity. So in fact it is. The mental equilibrium is apt to be affected, and a certain irritability of the nerve centres to ensue which manifests itself in perverted appetite and morbid cravings. The eating of slate pencils, chalk, and other injurious substances, without apparent hurt, is but a symptom of the convulsion of nature through which the subject is passing on her way to fair and full blown womanhood. In this transition stage females are especially susceptible to the physical fascination of narcotics. Sometimes the morbid craving is for malt liquors, at other times for port wine or some other more potent intoxicant. Whatever the article craved for, the patient is generally ashamed of her perversion of taste when the period is over. With those who resort to alcoholic and other inebriants, there is a great risk of the initiation of periodic inebriety.

Climacteric Inebriety.

At the change of life in the female there is another mental revolution, in the throes of which the peril of a propensity for narcotism is nearly as great as, in some cases greater than, at the approach of puberty. The unwonted physical commotion leads to mental excitement which, in minds unstable by heredity or some other predisposition, and at times even by its own force, explodes now into insanity, now into inebriety.

Inebriety of marital excess.

A rarely acknowledged but significant cause exciting to inebriety is sexual excess. In several cases I have been consulted, in one case by both husband and wife, with reference to

inebriety developed unexpectedly within a few months after marriage. A careful scrutiny has led to the diagnosis of the morbid antecedent being nervous prostration from excessive intercourse. These cases are very amenable to treatment, and on an observance of the principal prescription—moderation in conjugal rights—recovery has been complete. Cases in advanced life have been under my care. One may be instructive.

M. F., aged 61. A strong healthy Englishman, engaged in business in the City of London. Heredity not known. Temperament nervo-sanguineous. For the past four years his former temperate mode of life has lapsed into irregular periodic inebriety. He did not smoke, was in good general condition, took plenty of outdoor exercise, slept soundly and well. He could not account for having become a drunkard and was most anxious to be cured. He had taken the pledge repeatedly, but at times would feel so exhausted that he must take some champagne, or he felt he would die. I was puzzled, till on further cross-examination I elicited that he exercised his marital rights very frequently. Strict moderation was enjoined. In three months he called on me to say that he was cured at last. He had resolutely carried out the injunction, and had never felt the slightest inclination to drink either champagne or any other intoxicant. I have seen him repeatedly since, and for these six years he has kept firm to his abstinence, having felt no physical yearning for strong waters during all that time.

Most of the cases of this description which I have seen have been of the male sex.

VI. The psychological and physiological excitement of pregnancy helps to swell the vast army of the ine-

briate. At this we cannot be surprised. States of fitful depression and exaltation, of mental perturbation and of functional perversion are often interspersed in apparently eccentric fashion during this protracted and, with many, fateful term of bodily and mental inconstancy and unrest. The nutritive process is often interfered with, the appetite depraved, the will weakened, the reason unsettled, and the judgment obscured.

Inebriety of pregnancy.

The functional disturbances of maternity are also powerful excitants to inebriety. The pain, excitement, exhaustion, and great functional disturbance in parturition, combine to raise a physiological storm which defective or unstable nervous centres explode sometimes in a morbid craving for intoxication. When the mother is quite convalescent this morbid craving often dies out, though there is always the risk of the intoxicating agent creating a new desire or taste for itself.

Inebriety of parturition.

N. V., aged 36. Heredity unknown. Nervous temperament. Immediately after her first child was born, though an abstainer previously, she suddenly insisted on being supplied with stout. Unfortunately this was given to her by the nurse (whom I have frequently known to be the true introducer to drunken habits, for which the medical attendant has been unjustly blamed). Notwithstanding the doctor's orders, fresh supplies of intoxicating liquor continued to be surreptitiously conveyed to the lying-in patient. In the end this Nazarite became a confirmed drunkard.

Case.

In another case, that of a nephalist, aged 25, with an unknown heredity, the medical practitioner in attendance yielded to the mother-in-law's wishes. The result was disastrous, the un-

Another case.

fortunate inebriate dying from alcoholic cirrhosis of the liver, within five years.

Sudden mental shock, such as witnessing a fight or being terrified by the news of fire or of a sudden death, is at times the *raison d'être* of this inebriety of maternity.

Sudden shock.

Too rapid child-bearing, by its exhaustive influence on the constitution without intervals long enough for recovery of strength, wields a decided influence in contributing to the aggregate of female inebriety.

Inebriety of too rapid child-bearing.

Let there be no misunderstanding. I do not mean to suggest that the majority or even a large proportion of women rush into intoxication at these trying periods of their lives. What I do mean to expound is that these are periods of extreme physical and mental perturbation, when many women are peculiarly liable to be the subjects of the insane and the inebriate impulse. It does not of necessity follow that they invariably give way to the impulse. Self-control steps in, and in the majority of cases resists the impulse even when this is strong. Moral and religious influences are of the highest value in strengthening this essential self-control. There are many who pass through these functional crises without experiencing any such morbid impulses.

Morbid impulse may be resisted.

VII. *Influence of occupation.*—There can be no reasonable doubt that the temptations of the drinking customs associated with commerce are an exciting cause. Many sober men, who have never before had any difficulty in preserving a temperate habit of life, have been excited to paroxysms of inebriety by the fact of their having felt constrained to partake freely of an intoxicant when buying or selling goods, or on other occasions when it was customary to

Influence of Occupation.

produce the bottle, as I have myself seen it produced in business houses in the British metropolis.

Of the 600 at Fort Hamilton 164 inmates ascribed their inebriety to the drinking customs of trade or business. 10 of the 103 at the Dalrymple Home were in the same category.

Commercial travellers are specially liable to be confronted by this exciting cause. Though happily now the old custom of each diner at a commercial table in an hotel having to pay his share of the wine, has been considerably broken down, yet this calling is still a serious exciting cause. Recently one commercial traveller in the City of London, in the interests of his firm was compelled to put out of sight, between 10 a.m. and 6 p.m. in one day, six glasses of beer, two of sherry, four of whiskey, four brandies and sodas, and two gin and bitters. Commercial travellers.

Auctioneers have contributed their quota to the ranks of the inebriate, from their special temptations. So have those following other occupations, such as horsekeepers and cabmen. The fine which had to be paid in intoxicating liquor by way of a workman paying his footing on beginning his apprenticeship or entering a new shop, is now largely a thing of the past. This fashion was a frequent excitant to inebriety. Auctioneers. Horse-keepers, &c.

There are callings also which are liable to excite to narcotism not because of any direct temptation, but on account of the nerve exhaustion and prostration they entail. For example, the literary and printing staff of a daily newspaper, a very large portion of whose work is executed at high pressure into the early morning, in an unhealthy atmosphere. Daily newspaper work.

Other occupations exercise this inebriant excitation in virtue of the unhygienic conditions under which the workers carry on their work. Such are printers, who are depressed as well as made thirsty by the dust arising from the types.

Printers.

But those who are engaged in the liquor trade itself are the most exposed. Hence the enormous mortality among publicans and beersellers, as well as the marked increase of fatality among grocers in England since they were legally empowered to sell spirits. At Fort Hamilton 29 of the 600 were employed in the liquor traffic, principally as bar-tenders.

Inebriety of liquor-traffickers.

The Registrar-General in his 45th annual report shows in a table the comparative mortality of different occupations, taking 1000 as the average. The mortality of public house and hotel servants is four times that of clergymen, or some 1200 above the general average.

VIII. *Climate.*—We have seen the operation of climatic conditions in the inception of the inebriate diathesis, but besides its action in predisposing, climate acts on many individuals by exciting, to the act of drunkenness. There are those who, while invariably sober when resident inland, are as invariably drunken when resident at or very near the sea shore. Habitation on the banks of a river does not seem to act in this way, as does a sojourn at the coast. The phenomena of the inebriate paroxysm are analogous to the phenomena of spasmodic asthma, with this marked difference that salt water and sea air appear, as a general rule, to relieve the asthmatic paroxysm, while they generally provoke the inebriate paroxysm.

Climate as an exciting cause.

These marine attacks of inebriety are usually pre-

ceded by a pathological cerebral disturbance, with cephalalgia, uneasiness, dread of impending trouble, and depression. Sometimes various other bodily pains and discomforts accompany the headache. In the cases in my mind's eye these physically disordered sensations have arisen in the absence of intoxicants and temptation to drink, have been independent of drinking, have always occurred within a few hours of arriving at the coast, and have preceded any indulgence. If the patient persisted in remaining by the sea he lapsed into intoxication. If he adopted the only effectual remedy and left the coast the nervous perturbation passed away, and all was well.

Inebriety of marine climatic conditions.

Probably it has been largely owing to the climatological change that strictly temperate Italians, shortly after coming to reside in England have become inebriates. I have seen such even at 20 and 21 years of age, after having been a couple of months here, drink continually and get drunk thrice a week.

Inebriety in sober Italians from climate of England.

IX. *Idleness.*—The German proverb "the devil tempts the idle man, but the idle man tempts the devil," is physically as well as morally true. Idleness is a fertile cause exciting to the inebriate act. Young men brought up to no business, trade, or profession are peculiarly liable to fall into intemperance. If they have no favourite wholesome pursuit, such as study, scientific research, efforts of charity, or other good works, they generally have no object in life but to kill time. This, itself the hardest of all tasks, soon becomes a weariness of the flesh and a source of perpetual ennui. In desperation the idler often takes to drink or to some

Inebriety of voluntary idleness.

other narcotic intoxicant, generally beginning with alcohol though he may end with chloral or opium. His chronic state of boredom is dissipated for a space. A transient gleam of pleasure begotten of alcohol appears and disappears. The process is renewed till sometimes in a few months he is a periodical or constant inebriate.

Inebriety of enforced idleness.

The enforced idleness of persons suddenly thrown out of employment is another exciting cause. The temptation to have the darkness of their outlook lightened and their melancholy enlivened, even for a few moments, is too great to be resisted by many a man seeking for employment through no fault of his own.

X. *Overwork and overstrain.*—Any severe and excessive draining of nerve force initiates a weakened and depraved nerve condition, which is a genial soil for the growth of inebriety. Nervous exhaustion, whatever its occasion, is a pathological degradation from which there is ever ready to spring up a plentiful crop of nerve ailments. The special form which the nervous cataclysm may bring forth is largely determined by environment. In one individual there may be an epileptic explosion, in another an attack of neuralgia, in a third an outbreak of inebriety or insanity.

Nerve-exhaustion a cause of Inebriety and allied disorders.

There are no more potent causes of this inebriety-producing neurasthenia—than overwork and overstrain. Excessive hours of toil overtask body and brain. Natural tiredness wooes the repose of sound sweet sleep, but unnatural extreme exhaustion repels slumber and wastes nerve force. The tremendous high-pressure of present day life involves a continuous discharge of energy, and our

Overwork and overstrain a common cause of neurasthenia.

nervous vigour is prematurely depleted. There is little rest. Haste and worry are the curse of modern progress, beneath the remorseless wheels of which multitudes are crushed to death. The weakest go to the wall. Of these no mean percentage fly to alcohol or some other narcotic for a transitory oblivion of their suffering. Many are goaded into inebriety along this avenue of nerve exhaustion.

Youthful over-pressure.

Education of the young is rapidly becoming more and more pressing in its demands on the immature. The increasing amount of short-sightedness in our day is a true indication of the growing over-pressure of the brain and mind. We are more nervously susceptible than were our ancestors. Our education and mode of life, with the continual unrest excitement and bustle, add to this susceptibility, and our successors will be even more susceptible than we have the misfortune to be. Defective or improper nutrition, deficient air and exercise, increase the impoverishment of the nervous system, cause a greater loss of nerve power, and thus lead to undue morbid exaltation or depression of sensation.

Premature decay of nerve-strength.

The startling increase of diseases of the brain and nervous system is indicative, alike in America and Britain, of a rapidly growing nervous susceptibility. Children and young people are forced and their young life marred in the atrocious process. Young men are "crammed," and are broken down in body and mind by the dangerous operation. Men of riper years are laid aside, and often permanently incapacitated in the vigour of their manhood, in the headlong race for riches, for power, or for fame. The high pressure at which we now live, the excitement, the sensationalism, the turmoil, which envelope us in our

impetuous rush through life, so combine to improvidently exhaust our nervous energy as to set up a bodily and mental irritability and unrest which crave for intervals, however brief, of repose, and thus introduce not a few to a career of inebriety.

XI. *Sociability.*—Of the 103 cases of inebriety at the Dalrymple Home, no fewer than 41 were ascribed to sociability as the exciting cause. By this is meant a strong desire for company. There are many who, whether bearing within them an alcoholic proclivity or entirely free from any narcotic heredity, if they were to restrict themselves to their daily occupations and to their own families, would not become inebriates. But they are fond of society. They cannot bear to be alone. They cannot tell a good story, or sing an attractive song, or enter into a spirited argument, unless they have an appreciative audience or a "foeman worthy of their steel." They are winning in their ways, their conversational powers are excellent. In a word, they are "good company." Their presence is sought after, for they are the life and soul of every gathering at which they are present. Probably they are fond of admiration, and are delighted with the welcome which greets them wherever they go. When they are thus the centre of an admiring and applauding circle, they are elated and enchanted.

Inebriety from sociability.

Or they may be of that unselfish class of mortals whose keenest pleasure lies in giving happiness to others. Anyway, they are in their element when gathered together in good fellowship with kindred spirits. They are abstemious in their ordinary habits, but when out cannot resist the social glass. Their grateful friends are ever anxious to show their appreciation of so unselfish and cheerful comrades. Liquor

is proffered as a mark of hospitality. This may be declined for a time, but by and bye a sip is taken, not to appear odd. The ice is broken. Wine becomes linked with the friendly intercourse, till friendship is steeped in the intoxicating bowl. The habit grows apace, and at length blossoms into fully developed inebriety. Inebriates from sociability are numerous. The love of company is the fashionable avenue to the abject slavery of the intemperate. Our alcoholic social customs are the ruin of many, and an ever prolific exciting cause of the disease of inebriety.

XII. *Intoxicating agents.*—We have, lastly, among the causes exciting to inebriety, to consider a class of material substances which, as we have already seen, act as predisposing to the inebriate diathesis. We have discussed their mode of operation in predisposition, let us now ascertain how they act in excitation.

Inebriate excitation by intoxicating agents.

A person, old or young, unaccustomed to partake of inebriating drinks, is induced to drink say a glass or two of port or sherry. This person, perhaps because ignorant of the nature of such beverages, perhaps because endowed with a delicate susceptibility to their narcotising properties, is somehow or other thrust headlong into an act of drunkenness. It is astonishing how small a dose will sometimes suffice to intoxicate one who has never tasted an intoxicant before. I have again and again been called to abstainers who have been made demonstratively drunk by a couple of glasses of champagne, by a glass and a half of port, or by a single glass of brandy or whiskey.

Excitation of the abstemious.

What is the *rationale* of this outburst of inebriety? Simply that the alcoholic liquid has been the cause exciting to the paroxysm.

The excitation by the alcohol.

I was called to a young lady, aged 17, who was hysterical, excited and violent, exhibiting undoubted symptoms of acute drunkenness. She had up till that day been an abstainer, but at the family Christmas dinner had been persuaded to drink a glass and a half of champagne, neither of her parents nor any of the company having the slightest suspicion that she could thereby show any signs of intoxication. Frequently I have witnessed similar phenomena in older persons of both sexes.

Case.

To reformed drunkards a small quantity of intoxicating liquor as a medicine has been known to re-awake the long dormant crave. It is not long since an inquest was held on a former female drunkard who had been a teetotaller for several years. She was found dead, and it was shown in evidence that she had died from acute alcoholic poisoning, the old overpowering yearning for intoxication having been relighted by brandy administered medicinally. Nor are such occurrences uncommon. I could give a dozen cases which have come under my own professional observation.

Excitation of old crave by alcohol as medicine.

So potent an excitant is an alcoholic inebriant that, even in the solemn service of the sacrament, a mere sip has been known to rouse in all its pristine fury the long slumbering ungovernable craving of a believing drunkard, after years of absolute abstinence. Such relapses of rescued inebriates by the direct physical excitation of their previous poison draught, presented to them in the name of religion by priestly hands which should have dashed the maddening cup from their lips, have been too common in the past. These cases are rarer now, partly because more of this class of regenerated men

Alcohol at communion exciting to Inebriety.

and women, like their illustrious and deeply lamented champion John B. Gough, knowing their danger, either frequently absent themselves from communion, or if present do not taste the contents but content themselves with simply putting the sacramental cup to their lips; partly because in a continually increasing number of churches of all denominations unintoxicating wine* is now used on this sacred occasion.

Case of Inebriate excitation by a sacramental intoxicant.

In a cathedral city the clergyman used unintoxicating wine. At one communion the supply was rather short and the clergyman, thinking that it would not matter, made up the quantity short by an intoxicant. A reformed inebriate, believing that he was communicating in an unintoxicating harmless element, partook as usual. In a moment he was seen to rush out of the church. Some of the congregation acquainted with his history, though they had no suspicion that intoxicating wine had been given to him, saw there was something wrong and followed him. They found him making for the nearest public house in a great state of excitement. Fortunately these were not yet open, so

* The Bishop of Winchester (Harold Browne) and the late Bishop of London (Jackson) both sanctioned the sacramental use of non-intoxicating wine. The Episcopal Synod of the West Indies has pronounced this wine a lawful element. So has the Established Church of Scotland by a decision in the Townmill case. A very large number of non-conformist congregations, including those ministered to by Mr. C. H. Spurgeon, Dr. Joseph Parker, Mr. Newman Hall, and Dr. Raleigh, have adopted the unfermented wine. In America, unfermented wine has been largely substituted for fermented wine, as in the Methodist Episcopal body, with between four and five million adherents and eleven thousand ministers. See "Wines: Scriptural and Ecclesiastical," 2nd edtion, by Dr. Norman Kerr. London, 337 Strand, W. C.,

they succeeded in getting their protégé to one of their houses where they guarded him till the paroxysm subsided, a process which took some hours. Next day he was himself again. In this case alcohol clearly excited to the inebriate paroxysm.

The intoxicating agent may be at once the predisposing and exciting cause. Its long continued use (not necessarily to drunkenness) either by the parent or parents alone, or by the individual, has gradually brought about a predisposition to the addiction. An unusually large dose (in some circumstances a very small dose) acts as an exciting cause, and paroxysmal inebriety is the inevitable result. I have known half a glass of port excite a child of seven years of age to a fierce and nearly uncontrollable inebriate outbreak. There was a history of double alcohol heredity. In another case in the practice of a colleague, a similar attack was seen in a boy of four years old. The increasing amount of juvenile drunkenness is truly alarming. Delirium tremens has recently occurred in boys of tender years, ranging from between seven and eight to ten years of age.

The intoxicant may be both a predisposing and exciting cause.

The character of the attack is somewhat influenced by the kind of intoxicant taken. The uproarious drunkenness born of some forms of ardent spirit is wide as the poles asunder from the stupid sottishness of cyder intoxication. Imperfectly rectified spirits, with their fusel oil and other crudities, add tremors and violent aches to the other poisonous effects of the purer alcohols. Absinthe again has a special tendency to induce the superadded mischief of epileptiform convulsions. The extent to which intoxicants are diluted also tends to vary the effects produced. Concentrated alcoholic beverages,

Modification by form of intoxicant.

such as spirits neat, are more caustic in their action on the mucous membrane of the stomach than when taken in the same quantity largely diluted with water.

There is no need to enlarge on this exciting cause. It is obvious that alcohol, opium, and other narcotics excite to narcotism. Whatever the heredity, narcotic or non-narcotic, without the intervention of the intoxicating agent there will be no intoxication.

Narcotic substances excite to narcomania.

There are, however, occasionally to be met with remarkable cases of imitative intoxication, when all the objective symptoms are present and some of the subjective, where the person appears to be and feels drunk, and yet has not taken, perhaps has never tasted, any kind of intoxicant or narcotic. I was called not long ago to a man aged 60, who was taken home by some friends. They thought he was drunk because he staggered, talked foolishly, and generally behaved like a drunken man. But his temperature was higher than normal and there was no odour of alcohol. After the excitement he slept for eighteen hours, and awoke perfectly well. A strict enquiry revealed the fact that he was a consistent abstainer and that he had not touched drink that day, every minute of his time having been accounted for. Sometimes symptoms of apparent acute drunkenness are to be seen in young people who have never used any species of inebriant.

Imitative intoxication.

CHAPTER XII.

Pathology of Inebriety.

Pathology of Inebriety—A difficult study—An important study—Structural degradation and functional disturbance in Inebriety—Prior morbid condition in Inebriety—Physical antecedent in health normal—Physical antecedent in disease abnormal—Voluntary drinkers from fashion, custom, &c.—Involuntary drinkers from heredity, &c.—Involuntary drinking abnormal with pathological antecedent—Transition from moderation to immoderation a pathological process—Physical antecedent in first stage of Inebriety—Physical antecedent may be depressant—As in drunken re-action—As after hæmorrhage—As in the crises of neurotics—Prior melancholic depression—Prior state of morbid exaltation—Pre-Inebriate exaltation physical—Pathological perversion of sensory-ganglionic functions causing Inebriate crave—Pathological perversion of desire—Pathological unrest—Pathology of the Inebriate impulse—Prior morbid exhaustion—Pre-paroxysmal pathological antecedent.

Having described the etiology of inebriety, under which term we have passed in review its various predisposing and exciting causes, I now come to the pathology of the disease. We are here confronted by a topic of extreme difficulty and importance, the cause which being present the disease is present, which being absent the disease is absent, which being changed the disease changes.

Pathology of Inebriety.

The difficulty lies in the following circumstances. Purely nervous disturbances, altered states of the nervous fluid, and impairment of the nutrition process with changed conditions of the blood, may take place in the living subject without exhibiting any physical degradation of structure visible

A difficult study.

during life. Insanity of an incurable type may be existent beyond dispute, and yet we may be able to detect no organic or other lesion. How often in such cases has the curable stage been passed without an effort at remedial treatment, because the presence of no disease was suspected. Even after death, in many cases of mental unsoundness an examination has revealed no definite discernable lesion.

An important study.

Difficult though the investigation of the pathology of inebriety may be, it is of the highest importance. For lack of accurate knowledge of the morbid conditions which antedate or are contemporaneous with the act of intemperance, many well-meant and honest attempts at its cure have failed, the presence of a diseased state of body and brain has been unrecognised, and the efforts on behalf of temperance put forth by the World the Church and the State have often been unwisely designed and imperfectly executed.

Structural degradation or functional disturbance in Inebriety.

Though there has hitherto been little recognition of the fact, to my mind there is clearly either an alteration of structure or a functional disturbance of some kind, or perhaps in some cases both, antecedent to or co-incident with the desire for and the act of intoxication. That there is a structural degradation in long-standing habitual inebriety admits of no cavil, as we shall see when we proceed to the consideration of *post-mortem* appearances, but whether any tissue changes immediately precede or are synchronous with the narcotic crave and impulse we have as yet no means of knowing.

Prior morbid condition in Inebriety.

There is, however, a pathological state, probably there are various pathological states, on which this desire depends. If this pathological basis of inebriety be removed by appropriate

treatment, the desire ceases. The exact nature of this physical antecedent or co-incident we cannot yet determine, though there is undoubtedly a failing reproduction of that nervous force which is essential to healthy brain life; but of its existence I do not see how there can be any reasonable doubt.

Every sensation has a physical antecedent or accompaniment with which it is in close relationship, the relation being that of proximate cause and effect. The sensations of hunger and thirst are preceded or accompanied by a certain bodily state, the intensity of the appetite for food and drink varying in degree with the actual condition of the body. The desire for food is the expression of a physical need caused by waste demanding repair of tissue. The longing for water is the expression of a physical want caused by loss of fluid calling for fresh supplies. In the one case the lack of substance and in the other case the lack of liquid, sets up a physical state which is the precursor and producer of the sensations of hunger and thirst. These sensations are thus the expression of certain bodily requirements.

Normal physical antecedent in health.

In health both these physical antecedent conditions are normal, but in deviations from health the feeling of hunger may be heightened or lessened, the feeling of thirst may be mitigated or intensified. In acute disease, as in a high state of fever, or in chronic disease as in diabetes, when thirst is excessive, this again is but the expression of altered physical conditions. The bodily states antecedent to the sensations of hunger of thirst and of other natural feelings, are in good health called physiological in bad health pathological conditions.

Abnormal physical antecedent in disease.

Except when intoxicants are drunk for social or

fashionable reasons, why do men and women partake of any intoxicating agent? They do so either to gratify some inward desire for the acceptable though fleeting pleasurable sensation which follows the use of such substances, or they are impelled by some strong impulse from within to indulge in some narcotic (whether they like or dislike it) which will yield relief for the moment. In the former instance the act of drinking is voluntary, in the latter it is involuntary. Involuntary drinkers lead, so to speak, an involuntary life, so far as their inebriety is concerned. In this disease the subject has as little control over the drink-crave or impulse as has a victim of tic douloureux over his spasms of agony.

Voluntary drinkers from fashion, custom, &c.

What are known as "moderate" drinkers belong, at least so long as they practice "moderation," to the voluntary class. With them drinking for a time is largely a matter of habit; but unhappily considerable numbers are possessed of constitutions, which are by some inborn or acquired idiosyncracy so susceptible to the narcotic influence of alcohol or other anæsthetic, that the habit lays the foundation of a diseased condition of body and brain, the victim quietly, unknowingly, yet surely passing from the voluntary to the involuntary class.

Involuntary drinkers from heredity, &c.

A diseased inebriate is largely an automaton. On the application of an exciting cause he is swept away without or against volition. In favourable cases the little will power left is exercised in putting himself under restraint in a Home, or with friends who will prevent him being carried away automatically by a paroxysm of his disease.

Involuntary drinking is characterised by an impulse from within, excited to activity by internal or external

stimuli. This intoxicant drink-impulse has as clearly an antecedent physical condition as has the uninToxicant drink-impulse or the desire to eat. The impulse to eat food and the impulse to drink water are natural. The impulse to drink intoxicants, or to eat or smoke opium, is not natural, and does not exist in a perfectly healthy state. By perfectly healthy I mean a constitution wholly free from abnormal heredities, as well as from any present physical or mental disturbance or departure from sound health. This overpowering narcotic impulse is the result of a disordered state of the nervous centres, a morbid condition of nerve element roused to action either by some organic or other excitation from within, or by some provocative from without. Here is emphatically a pathological antecedent, a prior morbid condition.

Involuntary drinking abnormal with pathological antecedent.

Again, look at the voluntary alcohol drinker gradually merging into involuntary inebriety. For whatever length of time he has been able to "take it (an intoxicant) or want it," the habit has imperceptibly tightened its hold upon him till it is extremely difficult for him to refrain from intemperate indulgence. The narcotic has gradually undermined his power of control while, by its irritant properties, it has injuriously affected the texture and functions of at least some of his vital organs. The consequences are that his "coppers are hot," he suffers from nausea, his tongue is dry and he is rapidly becoming "a thirsty soul," or he frequently after slight extra exertion feels a faintness or sinking. He craves for an intoxicating "pick-me-up," which soothes the craving for a short time, only alas to ensure the speedier return of the unhealthful desire. Here is an unquestion-

Transition from moderation to immoderation a pathological process.

able series of pathological changes giving rise to a frequent unhealthy craving. This craving is as truly an expression of a pathological antecedent as are the hunger and thirst of the healthy the unspoken voice of a normal physiological state. We know the ending of these pathological changes. Who can divine their beginning? If we hark back to the first glass of intoxicating wine or beer which was drunk to please the palate, are we not confronted by a desire however faint, by a crave however slight, for the enjoyment of the effects of a potent physical agent, a desire and a crave differing only in degree from the irresistible crave of the confirmed inebriate? Are we not face to face with a non-natural longing begotten of a certain physical antecedent or co-incident condition of a corporeal man? The wish to taste an intoxicant for the pleasurable sensation the wisher feels it will ensure has as truly its rise in a preceding or accompanying bodily state as has healthy appetite for food and for natural drink.

Physical antecedent in first stage of drinking.

What is this pathological basis, the proximate cause of the crave for intoxication? In some cases this crave is the inarticulate cry of a despondent soul for a temporary solace of its woe. Out of the depths of misery comes the despairing wail of a dejected spirit, ready at any peril to drain the cup of Lethe, in the hope of even a few moments oblivion of its despair. This feeling is one of extreme depression.

Physical antecedent may be depression.

The most familiar example is to be seen in the reaction from an alcoholic or opiate debauch. No pen can describe, no tongue can tell, the wretchedness of the sufferer. Dismayed, appalled, a prey to apprehension, and utterly prostrate,

As in drunken reaction.

the wretched drunkard in the depths of his despair feels that he must indulge again to lift but for a second the terrible load from his being. He is in a state of complete physical depression, dependent on some (even if undefinable) physical state of body, brain, and nervous system.

Profuse loss of blood is followed by a deep faintness. Repeated losses of blood are apt to cause a somewhat continuous though less intense degree of faintness. These are conditions which not unseldom give rise to a crave for narcotisation. Females are specially liable to sink into habitual inebriety, from the temporary alleviation of their post-hæmorrhagic languor and dread by an alcoholic remedy. Though intoxicants are contra-indicated in such cases, faintness being nature's mode of arresting hæmorrhage, it is a common practice to administer alcoholic liquors freely in this disease. The patient revels in the glow of reviving life which has apparently been fanned by the alcoholic spark. The semblance of death vanishes, vitality and vigour seem to return, gloom gives place to mirth, despair is swallowed up in hope, the most inanimate and bloodless sufferer is deluded by the joyful presage of new life; but after a short interval pallor creeps again over the countenance, strength fails, languor recurs, prostration advances, gloom returns, despair deepens, and the woe begone victim succumbs once more to the false wiles of the mocking narcotic enchanter. Here the pathological antecedent of each desire for alcohol is a state of profound physical depression.

As after hæmorrhage.

There are many persons who are possessed of a highly delicate brain and nervous system, with little cerebral inhibitory power against pain, fatigue, or

distress. From this numerous class inebriety has derived no mean proportion of its recruits. To such sensitive and morbidly nervous individuals any extraordinary call on their resisting capacity creates a feeling of actual depression. If they are seized with illness, they are sure that they must die of it. All through the attack they look upon death as imminent, and even when danger is past, it is with the utmost difficulty that the physician can persuade them that they are actually convalescent. Mental or bodily overwork, such a crisis as puberty, pregnancy, or lactation, in such handicapped individualities developes an unutterable sensation of lowness, a nervine collapse, which craves for some immediate if fleeting relief from some intoxicant or narcotic. Here the pathological antecedent is one of indescribable physical depression.

As in the crises of neurotics.

Not a few inebriates are liable to deep and prolonged depression for some time previous to an outbreak. They at first feel out of sorts, anxious, worried, restless. They have lost their elasticity of spirits, are easily disheartened, and a melancholy gloom gradually creeps over them. This cloud may be lifted in a moment, and may or may not re-appear. The melancholic attack may come and go more than once, and leave no inebriate act to mark its way. But, suddenly, in the acme of a gloomy fit, a very strong impulse to get drunk may spring up. This is at times successfully resisted, at other times it carries all before it. This melancholy may last for only a day or two, or may persist for years. Here no one can dispute the existence of an antecedent physical state of abnormal depression.

Prior melancholic depression.

A very strong longing for partial or complete in-

toxication is not invariably preceded or accompanied by physical depression, though I am inclined to believe this is so in the majority of cases. As in insanity the immediate antecedent condition may be one of the opposite character, viz., exaltation. By this I mean morbid exaltation, when the physiological limit of natural exaltation has been passed, and there is exhibited an abnormally exalted state dependent on a disorder of cerebral function or on some unsettlement of the neurine, or more probably on both.

Prior state of morbid exaltation.

In physical depression productive of an inebriate outbreak, there is a nervous insufficiency. We are now met with a superabundance of nerve force. In the evolution of paroxysms of inebriety from a morbidly low physical state, there is an exhaustion of nervous energy. In the evolution of paroxysms of inebriety from a morbidly high physical state, there is an excessive discharge of nervous energy. Under the latter circumstances there is an expulsion or liberation of nerve force, as in epileptic seizures. A man or woman feels buoyed up and unusually elated, more than ordinarily talkative, playful, demonstrative, and excited; in short, displaying symptoms of undue exaltation. If he has been drinking, this unwonted exhilaration would probably be ascribed to alcohol, but in many cases which I have seen, the person had not partaken of an intoxicant for some time. If he drinks in this state of hyper-exaltation, he drinks to excess. He cannot help it. He is carried away body and soul by the neurotic whirlwind which has suddenly and unexpectedly arisen within him. Here the antecedent or concomitant state is one of exaltation, and it is as clearly physical as is the antecedent or

Pre-inebriate exaltation physical.

concomitant state of depression. We may credit the symptoms of elated excitement to dilatation of the arteries as in the first or exhilaration stage of alcoholic intoxication, but this again is possibly due to a pathological perversion of brain life affecting the vaso-motor nerves. In all probability both the cells of the brain and the cerebral function are morbidly affected. In any case this prior state of exaltation is unmistakably physical.

The character and condition of the blood supply markedly and immediately affect sensory-ganglionic function. A rush of blood to the head causes throbbing of the temples, noises in the ears, and other uncomfortable sensations. In like manner a rush of blood to the sensory-ganglionic centres gives rise to hallucinations and delusions, the throbbing of the cranial arteries is exaggerated by the sensory tumult into a feeling of being beaten by a thousand hammers, the noises in the ears are intensified into such sensations as the enraged roaring and threatening of a multitude of devils. Deficient sensory blood supply by starving the central ganglionic cells occasions a different species of abnormal craves and fancies, as in the hysterical devouring of chalk, slate pencils, coals, or earth.

Pathological perversion of sensory-ganglionic function causing Inebriate crave.

A disturbed and vitiated blood supply, such as is induced by alcohol or bhang, developes unwholesome violent and contorted hallucinations and delusions. In short, any unhealthful circulatory departure has a potent effect on the sensory, as well as on the ganglionic and glandular systems. All these depravities and commotions of the sensory apparatus at times give birth, in certain constitutions, to an unhealthy non-natural impulse to, or ungovernable crave for, intoxication.

It is thus manifest that pathological states of depression and exaltation are met with as the proximate cause of outbreaks of inebriety. But these are not the only morbid states ushering in a paroxysm. As the result sometimes of drunken debauch, sometimes of continued drinking far short of drunkenness, the poison sets up a temporary or permanent disordered condition of the gastric and organic nerves by which morbid impressions are transmitted to the higher nerve centres. This morbid impression may not always partake particularly of a depression or exaltation, but may consist in a peculiar undefinable feeling of craving or abnormal desire for intoxication. The patient may feel neither up nor down, and yet there may arise from this digestive disturbance a perverted non-natural longing for alcohol or opium, or rather for the effect of indulging in either to excess.

Pathological perversion of desire.

At other times, nervous disorder may induce an uncontrollable feeling of unrest, the irrepressible uneasiness giving rise to an intense crave for the anæsthesia of alcoholic, or opiate, or other inebriation. These two abnormal states are plainly not healthy, are in fact a state of pathological digestive perversion and a state of pathological unrest.

Pathological unrest.

The subject of the inebriate diathesis may keep steadily on the path of sobriety if no exciting cause interpose. This excitation may be from without, in the shape of nerve shock from sudden reverse of fortune, or bereavement, or some other extraneous excitant. But the provocation may also arise within, altogether independent of the patient's will. The condition of organic function promptly and powerfully affects the higher nerve centres. If the organic function is abnormally in-

Patholgy of the Inebriate impulse.

tensified or interrupted, the perturbation is transmitted to the higher nervous centres. A depravity of organic function often originates an intense and irresistible impulse to intemperance. This morbid impulsion is the direct outcome of the morbid organic disturbance.

Prior morbid exhaustion.

Whether accompanied or not by depression, an exhausted condition of the nerve apparatus not infrequently precedes inebriety in any form. When the nervous system has lost so much of its energy that it is unable to withstand the demands of active existence, it craves for something to lean upon or to support it for the time being, till natural elasticity, suitable nourishment, and other measures have restored the nervous strength. A narcotic or anæsthetic temporarily dulls or even abolishes the indescribably acute feeling of nerve exhaustion, which is an agonising sensation, and thus alcoholics and opiates are called into requisition for the prompt and complete relief which for a very short space indeed they afford. This is an antecedent physical state of nervous enfeeblement, a real pathological condition.

Pre-paroxysmal pathological antecedent.

There may be other functional, and perhaps structural perversions, which are at times the antecedent or coincident. Any morbid alteration of the cerebral substance, any impairment of the nutrition of the brain by abnormal action of any organ or tissue on the circulatory fluid, any disordered function, may be the immediate pathological basis of the attack. This physical antecedent or concurrent may truly be described as a *pre-paroxysmal pathological antecedent.*

CHAPTER XIII.

Pathology of Inebriety *(Continued)*.

Pathology of the inebriate diathesis—Temporarily diseased state in evanescent attacks—Majority of drinkers do not respond to excitation to Inebriety—Drinkers who do respond have the inebriate diathesis—This diathesis a deficient brain and nerve tonicity—Self-control required of the sane—Physical seat of inhibitory power—Inhibition affected by nerve and brain states—Defective inhibition may be inherited—Physical unsoundness transmitted—Special proclivities to Inebriety also transmitted—Susceptibility to narcotics inherited—Alcoholic transmitted susceptibility the most delicate—Inebriate diathesis latent or developed—Defective inhibition may be acquired—Alcohol a potent cause—First stage of alcoholic action reduces control—Alcohol the most effectual weakener of control—Alcohol specially injures the brain—Is therefore injurious to intellect, thought, and moral sense—Alcohol a poison to the nerve centres—How alcohol injures the brain—Derangement of brain substance accompanied by other morbid changes—Pathological depravity of appetite-centre—Alcohol a powerful will paralyser—Abnormal nutrition initiates these pathological changes—By pathological action alcohol begets Inebriety—Pathology of the mania of suspicion—Inebriety from brain and nerve atonicity—Pathology of Inebriety from brain injury—Pathology of inebriate selfishness—*Post-mortem* appearances—Hyperæmic appearances after a fatal paroxysm—Gastric hyperæmia—Meningeal and cerebral hyperæmia—Liver, kidneys, heart—Respiratory organs—Chronic lesions more permanent—Stomach—Brain—Tortuous atheromatous vessels—Neuroglian hypertrophy—Shrinkage of substance—Meninges—Alcoholic paralysis—Alcoholic multiple neuritis—Alcoholic dementia—Alcoholic epilepsy—Little *post-mortem* appearance in some periodic or occasional inebriates—

Many of these appearances effects of alcohol poisoning—Other appearances not necessarily so—Innate inebriate predisposition a dynamical and physical brain disturbance—Present knowledge incomplete—Will be fuller.

Having investigated the pathology of the paroxysm, we have next before us the pathology of the diathesis.

Pathology of the diathesis.

We often see an explosion of inebriety as we often see an epileptic explosion; but in inebriety, as in epileptic mania, there are causes predisposing to an attack, as well as external causes which excite, and an internal proximate pathological cause which inaugurates, the attack.

Unless the encephalon and nervous fluid, by some transmitted or acquired influences are responsive to the exciting cause, the inebriate storm may exhaust itself and leave the patient apparently without having inflicted on him any structural damage, the origin probably of the aphorism "Drunk once a month not so injurious as steady drinking every day." I say "apparently," for it is not absolutely true that no textural injury follows occasional or periodic lunar intoxication. Acts of drunkenness frequently repeated tend to set up a gradual series of pathological changes, which in the long run become crystallised into permanence. There is an analogy in non-alcoholic cerebral or cerebellar affections. One or even an occasional convulsive fit in a child, consequent on reflex irritation from dentition, worms, or gastric derangement, may pass by without ulterior damage, but if the irritation be often renewed, a serious epileptic neurosis may be established.

The most evanescent attacks are those which take their origin from functional derangement. Of course I refer to attacks of inebriety or narcomania, viz.:

a powerful morbid impulse to, or desire for, inebriation.

Temporarily diseased state in evanescent attacks.

As soon as functional order has been restored, the crave for the inebriant ceases. Yet during the brief period of inebriism there has been an altered state of the blood and of the blood-vessels. The whole circulatory system has been riotous and disorderly. The larger vessels have been dilated by paralysis of the vaso-motor nerves, the action of the heart has been tumultuous, the nervous fluid has been thrown into a state of commotion, cerebral action has been vitiated, and the cell-life of the brain has been rudely disturbed. In an otherwise healthy organism the immediate lesions may, by the recuperative vigour of the nutritive and nerve processes, be repaired; but a persistent succession of such temporarily diseased states of body and brain lays the foundation of chronic disorder, of permanent tissue alteration.

Exciting causes, such as sudden joy or sorrow, would be unable to provoke to inebriety in action unless there were something within the organism ready to be acted on, as it were an inflammable entity easily fanned into a flame by a spark from without, or from within. The majority of drinkers are tried by as many vicissitudes, experience as many calamities, suffer as many bereavements, undergo as great hardships, are the subject of as wasting diseases, as are the minority. Yet the former are not goaded or tempted into any kind of intoxication or narcotisation, as are the latter. Why is this? Credit may be attributed to the fortifying influences of religion, of social and other environment, but after ample allowance for the operation of all such influences, there are large numbers of persons who, to the intelligent medical

Majority of drinkers do not respond to excitation to Inebriety.

observer, are indebted for their inability to keep from narcotic indulgence in the hour of their extremity to some inherent physical defect which renders them, on the one hand, prone to surrender to inebriety, and, on the other, powerless or at least weak to resist the onset of this intensely virulent disease.

Drinkers who do respond have the Inebriate diathesis.

In what consists this diathesis, so potent in its operation, so subtle in its working, which has betrayed to their death so great a company of our fellow beings? It consists in a deficient tonicity of the cerebral and central nervous system, with an accompanying defective inhibition.

The diathesis a deficient brain and nerve tonicity.

All men and women are endowed with some amount of self-control. All of us, except such as are of unsound mind, must exercise this power. We are compelled by legal enactment to restrain ourselves from committing theft, destroying the property of another, taking human life, and other illegal acts. The seat of self-control is in the higher nerve centres, and the act of self-control is the exercise of the inhibitory power.

Self-control required of the sane.

The brain and higher nerve centres being the seat of inhibitory control, innutrition and mal-nutrition of cerebral and nerve tissue are apt to lower the tone and impair the efficacy of the inhibitory process. If the brain and nerve cells are healthy, so are their functions. If the brain and nerve substance is improperly or imperfectly nourished, the will-power and the power of control are heavily handicapped.

Physical seat of inhibitory power.

Inhibition affected by nerve and brain states.

This defective inhibitory or controlling power may be (1) inherited, (2) acquired.

(1) *Inherited.*—In a considerable proportion of cases of developed inebriety, the family history shows that the lack of self-control was transmitted. Self-indulgent parents who, though never actually intoxicated, have been in the daily habit of drinking freely, have originated, or it may be intensified, pre-existing inborn constitutional deficient power of inhibition, by begetting progeny all of whom may be more or less wanting in that normal amount of self-control with which fairly sound human beings ought to be endowed. Though alcohol is the commonest cause of this hereditary defect, yet lack of sufficient brain, will, and restraining power may be handed down by parents who have never tasted an alcoholic or other inebriant. This burdensome inheritance may have taken its origin simply in infraction of the ordinary laws of health, the morbid state having been gradually set up by irregular and improper feeding, mental or physical over-work, the neurasthenic sequelæ of various lowering ailments, and a life of pleasure, of mere gratification of every passing whim, void of honest effort to restrain the desires and actions with due regard to the comfort and benefit of other persons. With this defective central inhibitory power is often associated an inherited deficiency of resisting power, whereby the legatees are in great part physically at the mercy of strong morbid impulses springing from functional crises, such as puberty, maternity, visceral derangement, and other disturbed physical states.

Defective inhibition may be inherited.

There are also transmitted perversion of function and altered structure, an unsound condition of brain and nerve cell, a physical and mental idiosyncrasy which in some manner as yet hardly understood renders the possessor

Physical unsoundness transmitted.

peculiarly liable to be excited to concrete inebriety, and peculiarly susceptible to the narcotic influence of alcohol and other intoxicating anæsthetics.

Special proclivities to inebriety also transmitted.

This peculiar susceptibility may extend to opium, ether, chloral, chloroform, *et hoc genus omne;* but it is more delicate in the case of alcohol than in that of any of the others. Alcohol is pre-eminently a degenerative agent, and the degenerative work is seen to be carried farther by it than by any of its congeners.

Susceptibility to all narcotics inherited.

The physical temptation born of alcoholic intoxicants embraces in its range of morbific action the highest mental centres, and seems to physically taint the most delicate intellectual processes, as it dulls the senses and reduces muscular force. The pathological depravity of the cellular brain and nerve tissue, the intellectual vitiation, the feeble *morale*, may lie dormant for a life time unless quickened by the interposition of an internal or external exciting cause. The inebriate diathesis may be either latent or developed. Where it is latent all through a long life, it dwells hidden and unnoticed because no appropriate provocative has intervened to disclose its existence.

Alcoholic transmitted susceptibility the most delicate.

Inebriate diathesis latent or developed.

(2) *Acquired.*—When defective inhibition has been inherited it may be increased by cultivation, but this deficiency of restraining power may be acquired where it has not been transmitted.

Defective inhibition acquired.

The disturbing action of alcohol and other neurotic poisons on the blood, with their narcotic action on the nervous fluid and the material centres of intelligence, is a powerful factor in the causation of that acquired loss of self-control

Alcohol a potent cause.

which offers up so many a comparatively easy prey to inebriety. Apart from any of the commoner and what may be called coarser forms of alcoholic degeneration of tissue, at times *pari passu* with these, alcohol exercises a specific influence on the circulatory and nervous systems, which influence tends to break down inhibitory function.

The first stage of alcoholic action is one of exhilaration. The blood courses more quickly through the blood vessels, the rate of the cerebral circulation is increased, the spirits are more buoyant, a glow of warmth is felt and the face appears flushed. What has taken place pathologically? The alcohol has paralysed the *vaso-motor* nerves, their vigilance is relaxed, their power is for a time reduced. The check on the heart having been lessened that organ beats with marked additional frequency. This stage is one of relaxation. From the loss of power in the cardiac inhibitory centre the heart pursues its mad career, from the diminution of power in the higher inhibitory centres the affected becomes garrulous, confiding, yielding, easily pleased and ready to contribute to the pleasure of others. Each act of inebriety still further relaxes and reduces the inhibitory power. The central and local stock of inhibition, perhaps not over grand to begin with, is by long-continued and persistent withdrawal, through the daily imbibition of alcohol or other intoxicant, gradually decreased to such an extent that little self-control remains, and the shiftless unstable victim is tossed about on the ocean of inebriate excitation like a rudderless ship in a storm.

First stage of alcoholic action reduces control.

Alcohol is a mighty waster of inhibitory force, the most effectual destroyer of the faculty of self-control. Under the action of the alcoholic narcotic poison the

strength of the local inhibitory centres is also weakened, whereby the vigour of various bodily organs is impaired, thus tending to the genesis of morbid functional disturbances as exciting causes, the alcohol all the while reducing the general resisting power. The descent is so easy as to be hardly apparent, but to recover the lost power is a formidable task indeed.

Alcohol the most effectual weakener of control.

Healthy cell life is the measure of a healthy function, function alike of the *mens sana* and the *corpus sanum*. Unhealthy cell life is the measure of these functions disordered and diseased. Alcohol impairs cellular vitality, and thus, by its direct effects on the brain and nerve substance, produces pathological states of cerebral and nervous abnormality. The brain tissue is perhaps the most delicate texture in the human economy, and its functions are the most refined, the most intricate, the most varied, and the most susceptible. Alcohol is a brain poison as subtle as it is powerful. So that from the extreme delicacy of the organ combined with the peculiar subtilty of the narcotic agent, intoxicants are specially noxious to the organ of thought and injurious to the intellectual, volitional, and moral faculties. Alcohol, destructive as it is all over the body, is pre-eminently a poison to the nerve centres. This is probably owing to a peculiar affinity of alcohol to nerve element. Alcoholic inebriety is a central nervous disease, a dominating masterful disorder, alongside the power of which the alcohol-produced organic lesions are dwarfed into insignificance.

Alcohol specially injures the brain.

Is therefore injurious to intellect, thought, and moral sense.

Alcohol a poison to the nerve centres.

Alcohol is carried by the blood to the meningeal membranes, coursing through this vascular reticulated

envelope of the brain. The poison paralysing the vaso-motor nerves and thereby relaxing control over the vessels, these latter dilate and allow more arterial blood to pass to the brain. With this superabundant supply of blood there is great activity of function. This is the stage of exhilaration, excitement, brilliance, sometimes phrenzy and delirium. Owing to the loss of the contractile power of the vessels the increased blood supply cannot be returned by the veins from the brain with sufficient rapidity, and thus there is a block causing impediment of the circulation, which ought to be free and unimpeded to allow of duly aerated fresh arterial supplies. This is the stage of depression and collapse, when the brilliancy dies away, memory fades, speech is thickened, voluntary movement ceases, sensation is dulled, and consciousness fails. When this pathological process has ended the vessels recover their contractility, but for a time there is a depressed feeling of weariness and exhaustion. This process frequently repeated, inclusive of the supply during the temporarily abnormal process of imperfectly aerated blood to the brain substances, sets up permanent tissue changes. The covering envelope is thickened and otherwise so injured that its vascular apparatus cannot convey proper nutriment to the brain, and thus that organ is badly nourished. This physical degradation of cerebral substance sadly impairs the intellectual and moral faculties. The intelligence is dimmed, the senses are blunted, locomotion is interfered with, the disposition is deteriorated, will-power is weakened, and the moral sense dulled. These sad results are the product of morbid changes of brain structure affected by alcohol poisoning.

How alcohol injures the brain.

The pathological effects of alcohol on the brain and

nervous system are productive of accompanying mischief to the mind and to the *morale*. The structural changes, the tissue degenerations, of the human body, produced by alcoholic intoxicating drinks, are all pathological states, the ineradicable foot-prints of a destructive disease-producing poisoning agency.

Degeneration of brain substance accompanied by other morbid changes.

There can now be little doubt that there is a portion of the brain in so intimate communication with the digestive organs, that a cerebral appetite centre may be localised. While the general nervous system is affected by alcohol as in delirium tremens, the nerves of various organs are also liable to come under the influence of this irritant narcotic. This local nervous disturbance is transmitted to the correlative brain centre. In this way the alcohol-irritated gastric nerves convey the disturbance to the cerebral appetite centre. An abnormal state of the nerves of the stomach produces a corresponding abnormal state of the nerve terminus in the encephalon, and thus inebriety is set up in the central nervous system through the reflex action of the alcohol-perverted organic nerve-apparatus. The result is an overpowering crave for fresh supplies of the narcotic anæsthetic. All this contributes a pathological degradation of function affected by alcohol.

Pathological depravity of appetite centre.

Serious as are the injuries inflicted by intoxicants on the intellectual faculties, the loss of inhibitive capacity is a hundredfold more detrimental. To these must be added the progressive paralysis of the will. The damage done to the understanding is great, but infinitely more terrible are the decrease of control and the benumbing of volition. Many inebriates, so long as they retain consciousness,

Alcohol a powerful will-paralyser.

through all their outbreaks know what they are doing, hate with a perfect hatred their drunken excesses, but are as unable to exert their will as is a terror-striken animal helpless under the fascination of the eye of a boa-constrictor. Their moral faculties are even more deadened by the poison, than are their intellectual. Alcohol is a puissant will-paralyser. Such an inebriate is a captive, retaining the possession of his senses though these are somewhat dulled, and the will is powerless to make an effort at deliverance. Again and again does he resolve to drink no more, but his resolution is overborne by the dominating drink-impulse or drink-crave. This volitional disablement, this palsy of the will, is a direct effect of a pathological degradation.

Abnormal nutrition imitates these pathological changes.

By this degenerative process, by a long chain of morbid changes—capillary paralysis, circulatory tumult, vascular atheroma, cellular decay, membranous thickening, cerebral congestion and neuroglian proliferation—alcohol dims the perception, confuses the judgment, paralyses the will, and deadens the conscience. Perverted or imperfect nutrition has been the starting point in this series of pathological degradations.

By pathological action alcohol begets Inebriety.

Nor is this all. By its destructive action on the stomach, the liver, and the kidneys, it sets up a pathological condition of organic structural alteration which impairs those digestive and depurative functions, the due performance of which is so essential to health and comfort. The depravity of the blood, the functional derangements, and the poisoned organism, engender morbid impulses and desires which crave for the delusive consolation of narcotisation.

In certain forms of alcoholic mental alienation, alike

in young and old, delusions of persecution are the most prominent feature. A husband believes his wife is his worst enemy, a wife that her husband is her sworn foe. The food is poisoned and there is a conspiracy against the inebriate's person and property. What is the pathology of this chain of symptoms? There is cardiac failure, there is impeded respiration from fatty degeneration of the liver and other vital organs, with a loss of vascular elasticity and tone. The brain and nerve centres are imperfectly nourished, are in fact starved, with the inevitable issue of cerebral anæmia and nervous irritability. Nerve and brain function is depraved and perverted. Gloom and suspicion are the offspring of these unsatisfied, and therefore discontented mental wants. Deprivation of proper food invariably causes dissatisfaction to body and to brain.

Pathology of the mania of suspicion.

Through general perversion of function, the all pervading influence which it exercises throughout the system, its affinity for water and consequent abstraction of the natural bland fluid nutrition-bearing solvent, its vitiation of the blood as well as its interference with secretion, an alcoholic intoxicant so disturbs and depraves the tissues that the whole frame yearns for a fresh supply as soon as the anæsthesia produced by the last dose has passed away. Every bodily structure is in an agony of physical distress till the "poisoned chalice" is drained by the parched lips. There may be no taste for the narcotic which indeed may be positively abhorrent to the palate, but all the tissues are so morbidly dry or distraught that they undergo indescribable torture, till their immediate and clamant physical want is met by yet another temporary benumbing of their sufferings. Thus doth alcohol often breed inebriety.

Inebriety from brain and nerve atonicity.

Whether inherited or acquired this want of tone in the brain and nerve centres, with its accompanying defective inhibitory power, is usually preceded by a neurasthenic condition or state of nervous exhaustion. This is a well-marked pathological lesion, and can in most cases be recognised by the skilled and intelligent physician. In this inchoate stage of the disease there is a real departure from health, a truly diseased condition of the higher, if not the lower, nerve-centres. Inebriety, once developed, pursues its course influenced by environment, by meteorological and climatic conditions, and by other modifying forces which affect the nervous fluid. It is a disease subject to natural laws, an accurate knowledge of which would render the treatment a comparatively easy task.

Pathology of Inebriety from brain injury.

The pathological brain changes following a severe blow on the head or a fall on the head from a height, when no immediate morbid symptoms have ensued, or a fracture of the skull, are of a somewhat similar character to those which we have seen as the effect of alcohol poisoning. A slight extravasation or exudation from the vessels, caused by mechanical pressure in the traumatic cases and by vascular distension in the alcohol cases, sets up a series of gradual degenerative tissue alterations which may make so insidious a progress as to escape notice, and yet, continuing for a long period, give rise to irritability, gloom, suspicion, mental weakness and loss of reason.

Pathology of Inebriate selfishness.

Mal-nutrition of the brain, with degenerative changes of the tissue of that organ, gradually develop melancholy, irritability, distrust, and suspicion in the inebriate; but there is another phase of the inebriate's disposition which is sadly altered for the worse, viz., his utter selfishness and heartless-

ness. Though his intellectual faculties may be impaired he still knows the wrongfulness of his conduct, yet he heeds not the distress of the wife whom he loved or the agony of the little ones who cannot get bread to eat, because he robs them of food to procure the intoxicant which is his master. The *rationale* of this indifference to the mother, to the children, and to every pure affection and duty, simply is that his sensibilities are benumbed by alcohol, that he is labouring under a more or less complete anæsthesia. In such a state his feelings are blunted, he is in an abnormal state of semi-torpor. His cruel behaviour to those who in his sober intervals are dear as well as near to him, his utter disregard of their sufferings and privations, are in many cases the phenomena of anæsthesia. Repeated anæsthetic acts set up a chronic morbid state of apathy and callousness. In some inebriates subject to an overpowering impulse before an intoxicant has been taken and anæsthesia produced, the sensibilities are intact, but are overwhelmed by the irresistible impulse.

Post-mortem appearances.

I have had frequent opportunities of examining after death the bodies of persons who have died suddenly during, or from the effects of, a paroxysm of inebriety, and of conducting a similar examination of the bodies of well-known inebriates who have met their fate by accident or otherwise, on whom inquests have been held.

Hyperæmic appearances after a fatal paroxysm.

In the former case, that of persons who have been found dead during or immediately after an inebriate outbreak, the appearances have been those of hyperæmia. Injection of the gastric vessels so intense as to cause the gastric mucous membrane when stretched to present the form of a tree with its branches, commonly called *arbor*

vitæ (tree of life), but more appropriately described as *arbor mortis* (tree of death). The injection usually pervades the vessels of the duodenum. In one case the interior aspect of the stomach was so angry and inflamed as at first to give rise to a suspicion of metallic poisoning, and it was only after a chemical analysis of the tissues that this hypothesis was rejected. In all the cases the meninges were congested, and in several there was a general congestion of the brain, as evidenced by the presence of red bleeding points throughout its substance. In a few cases there were extravasations of blood both on the exterior and in the interior of the cerebrum. The capillary vessels were frequently found distended, with engorgement ot the cerebral venous system.

Gastric hyperæmia.

Meningeal and cerebral hyperæmia.

In nearly all the cases there were appearances pathognomonic of lesions of the liver,* the kidneys, or the heart. In the majority of the cases there had been disease of all these organs, showing the regular chain of the effects produced by alcoholic poisoning. This cerebral, meningeal, gastric, and renal hyperæmia was in many cases associated with traces of some morbid affection of either the respiratory, circulatory, or excretory organs. Pleural effusion and the white spot on the heart were indicative of old-standing pleurisy, and of pericarditis, from which the deceased must have suffered. In a few cases there were also certain other abnormal appearances characteristic of inebriety of long-standing, such as proliferation of the neuroglia of the brain.

Liver, kidneys, heart.

Respiratory organs.

* The proportion of cases of both acute and chronic alcoholism in which I have found a hobnail liver has been very small. The usual form has been the nutmeg liver.

In the bodies of inebriates who have been well-known as habitual drunkards for a longer or shorter series of years, I have observed more distinct and permanent changes. In chronic disease with its gradual pathological degeneration, structural alteration is much more clearly defined and manifest than in acute affections. The injection of the digestive apparatus has become confirmed, the internal aspect of the stomach presenting a less brilliant representation of the foliage of a tree.

Chronic lesions more permanent.

Though this is delineated in broader lines the colour is now a dark delicate bluish-red, contrasting with the general blanched appearance of the mucous membrane. Patches of ulceration and erosion of the membrane are sometimes seen with thinning of the muscular coats, so that on the walls of the stomach being stretched, transmitted light discloses a semi-transparent condition. There is often also thickening of the membrane where that is intact. Occasionally the stomach has been dilated, which I have noted specially in persons in whom I have afterwards traced a history of copious beer or porter drinking. In some cases there is cirrhosis of the liver and enlargement of the spleen. In others the nutmeg liver is present. Frequently there is pleuritic effusion and occasionally pneumonia.

Stomach.

In the brain substance there is less hyperæmia than in a death during, or immediately after, the paroxysm. In many autopsies I have seen no trace of general cerebral congestion, though in a very few this condition has been present. In some cases of sudden death in habitual inebriates I have found the fatal issue caused by the rupture of an aneurism of the middle cerebral artery, and in other cases by rupture of a brittle cerebral artery. In one case

Brain.

Broken heart.

there was a rent in the heart. With this I have also seen arterial dilatation, thickening of the coats of the arteries with atheroma, the vessels having at times assumed a twisted form, the smaller vessels being coarse and tough. Changes of shape in the nerve cells have been displayed, while there has been hypertrophy of the connective tissue, or neuroglia, with atrophy of the brain substance. There is shrinkage of the mass, with somewhat flattened convolutions, often associated with serous effusion in the ventricles and the sub-arachnoid space.

Tortuous atheromatous vessels.

Neuroglian hypertrophy.

Shrinkage of substance.

On the surface of the dura mater is sometimes to be seen neo-plasmic cellular exudation supplied with vessels. Whitish patches are the marks of old-standing inflammatory exudation from the distended vessels, blanched like the cardiac white spot of pericarditis by the changes effected since its deposition. The membrane is thickened and often adherent to the bony surface. The pia-mater presents generally an opaque appearance, is thick, coarse, and adherent to the brain surface. The vessels are twisted and with thickened coats, atheromatous and brittle.

Meninges.

Alcoholic paralysis.—The morbid appearances apparent in fatal cases of alcoholic progressive multiple neuritis have shown no lesion of the spinal cord or the nerve roots, but have been limited to a degeneration of the peripheral nerve fibres. Sometimes traces of congestion in the pia-mater have been observed.

Alcoholic multiple neuritis.

While in some forms of alcoholic paralysis the lesions are peripheral, in the dementia of alcohol these are central. The *post-mortem* appearances are usually shrinkage and softening of the

Alcoholic dementia.

brain, shallowing of the furrows between the convolutions, atheroma of the vessels which are tortuous, and bloody serum in the ventricles. There is sometimes some extravasation from the vessels on the brain surface, with injection and extravasation of those of the pia-mater. Cardiac hypertrophy, a compensatory left ventricular hypertrophy consequent on the contractile resistance of the arterioles to the flow of alcoholised blood into the capillaries, is a common feature.

Alcoholic epilepsy.—If death has occurred during an epileptic fit, as in non-alcoholic epilepsy there is cerebral and meningeal congestion, most marked in the medulla oblongata, with vascular dilatation and thickening of the coats of the vessels. When death has taken place from exhaustion during the interval of intermission, the vessels often contain very little blood.

Alcoholic epilepsy.

I ought to add that I have examined the bodies of inebriates who have been known as periodically or only occasionally guilty of a drunken bout, and have found no fatty nor cirrhotic liver, nor any other morbid appearance except congestion of the vessels of the mucous membrane of the stomach, with the meningeal and cerebral lesions more or less marked.

Little post-mortem appearance in some periodic or occasional Inebriates.

It may be contended that many of the *post-mortem* appearances which I have been describing are mainly the pathological effects of a poisonous substance, alcohol; that textural alterations are not the cause but the effect of the drinking of alcoholic intoxicants. This is true in the main, but it does not cover all the *post-mortem* appearances which have been indicated. Some of the signs, such as proliferation of the neuroglia, have been

Many of these appearances effects of alcohol poisoning.

observed after death in the person of opium inebriates as well as in the non-alcoholic insane, and we know that opium is not the poisoner of every organ and tissue that alcohol is. In rare cases, too, these and allied appearances frequently met with in inebriates, are seen in persons of whose sobriety during life there has been no suspicion. From my own researches I have been left no other alternative than that certain brain and nerve morbid appearances are in all probability pathognomonic of constitutions with the alcoholic diathesis, which may exist, though owing to the operation of a variety of influences there has been no act of alcoholic intemperance during life. Even if it were true that all the morbid *post-mortem* appearances were the effect of a material poison, it must be remembered that alcohol has a tendency to create an appetite for itself, and that its perversion of function and degradation of tissue tend to set up a pathological state which seeks for intoxication. In this manner the diseased conditions established by the poison become themselves a cause of the disease inebriety.

Other appearances not necessarily so.

Whether the disease has been caused by the direct or indirect poisonous effects of a material intoxicating narcotic, there must have been a beginning of the drinking habit in such cases.

Why then did such lapse into inebriety while the majority of drinkers halted at moderation? The reply is, because these persons had in many instances an innate or acquired susceptibility to the intoxicating action of the narcotic used. On the other hand, many have from a life of strict sobriety or even abstinence suddenly plunged into excessive indulgence

Innate Inebriate predisposition a dynamical and psychical brain disturbance.

in alcohol or other anæsthetic, on the provocation of some exciting cause. As to these numerous individuals, not a few of whom have been abstainers, who from heredity or other predisposing causes are peculiarly liable to be excited to inebriation, there is an abnormal cerebral condition, a dynamical and psychical disturbance of the brain and nerve function, a true departure from sound health, which is itself a pathological state with, in all probability, its *post-mortem* equivalent in hyperplasma of the neuroglia. At present our knowledge is incomplete. An obscure general abnormal appearance of the brain and membranes has been witnessed, but investigations in the dead house have not been numerous and minute enough to reveal the full extent and character of the structural lesions.

Present knowledge incomplete.

Resolute enquirers, however, are at work, among the most conspicuous of whom are Drs. Joseph Parrish, T. D. Crothers, T. L. Wright, and E. C. Mann, of America, and I look forward to the time when we shall arrive at a definite knowledge of the actual pathological conditions from which the Protean malady—inebriety—takes its origin.

Will be fuller.

CHAPTER XIV.

Treatment of Inebriety.

Inebriety a complex disease, so treatment intricate—Insanity once considered a divine punishment removable only by miracle—Now recognised as a disease calling for remedial treatment—Inebriety generally regarded as a sin curable by moral and religious influences only, or by penal measures—Really a disease amenable to treatment—Evils of Inebriety so great, an antidote has been demanded—For inheritors of inebriate diathesis and other inebriates an antidote sought—The search for a specific still goes on, though unattainable—Alleged antidotes—The Turkish bath—Cocoa—Alcoholic extract of frog—Raw beef—Vegetarianism—The claim of vegetarianism as an antidote to Inebriety unfounded—Western non-flesh drunkenness—Eastern vegetarian drunkenness—Physiological basis of claim unsound—Abstinence from flesh sometimes causes Inebriety—Vegetarianism not an antidote—Fundamental error of the unfounded belief in vegetarianism as an Inebriety-preventive—The bark cure—Its pretensions baseless—A dangerous alcoholic poison—Story of alleged "cures" false—Kola nut—Some of these remedies sometimes useful—All alleged "cures" deficient in nerve restoration and moral renovation—Nostrums not needed—Moral and physical treatment required—Cinchona a useful adjunct—Experiments with cinchona—Acidulated infusions—Acidulated decoctions—Cinchona febrifuge—Powder—Syrup—Another preparation—Quinine—Various attempts at cure—The Yorkshire man's paint cure—The wife's, a striking cure—The barrel cure—License to drinkers—The Liverpool publication cure—The Russian, a sweeping cure—The ducking, a water cure—The liquor cure—Charlemagne's scourging and "kill or cure."

Inebriety is so varied in form, so subtle in operation, so intricate in developmeut, and so complex in causation, that its treatment is no easy task.

There was a time, not so long ago, when insanity, elder sister of inebriety, was not recognised as a physical disease, but was believed to be a divine punishment for sin, a baneful curse imposed by the Deity, and requiring a miracle for its removal. The lunatic was regarded as one possessed of a devil. Therapeutic and medical aid was therefore deemed wholly useless. The only method of treatment employed was "the kill or cure." Persons of unsound mind were exposed to the air, deprived of food, beaten with rods, had cold water thrown over them. These external applications were persisted in for days, when, if the patient survived, he was considered to be cured. The demon was starved and beaten out of him. Modern medical science has swept away for ever this dark and dire superstition, and no well informed person can now be found who doubts the curability of mental unsoundness.

Insanity once considered a divine punishment removable only by miracle.

Now recognised as a disease calling for remedial treatment.

So, till recently, insanity's younger sister—inebriety—has, except by a few enlightened medical and other authorities who even in ancient times saw the truth, been looked upon as a moral perversion, a sinful possession irredeemable unless by the miraculous operation of salvation. Hence inebriety is generally regarded as the legitimate offspring of a depravity of heart unconnected with disturbance of bodily function, and incurable by any method of medical treatment.

Inebriety generally regarded as a sin curable by moral and religious influences only, or by penal measures.

The error concerning insanity was no greater or more fatal, deadly though it was, than this erroneous belief regarding inebriety. As it was found that the former was a disease dependent on ill health of body

and brain, so it has been found that the latter is a disease dependent upon some morbid departure from corporeal and mental health. The happy issue is that, at least in certain forms and stages, both diseases are amenable to treatment. Inebriety or narcomania, if taken in its earlier stages, unless it be the outcome of physical conditions the removal of which is beyond our power, is as curable as any other morbid affection, if we only thoroughly comprehend the character and extent of the pathological changes and the functional disturbances, and secure the co-operation of the patient in the adoption of remedial measures adequate to the restoration of the physical, mental, and moral tone.

Really a disease amenable to remedial treatment.

The irresistible desire for intoxicating drinks and other narcotics to which the unhappy victims of the disease called inebriety are subject, is so imperious, so unquenchable, as to have driven every one interested in the cure of this terrible affliction to constant effort to find an antidote for the removal of this insatiable craving.

Evils of drink so great, an antidote has been demanded.

There has, in these latter days, always been a loud call for an immediate and certain charm for intoxication, a cure which would act as a specific and a prophylactic, which would give the drunkard a distaste for intoxicants, which would save him without any effort of his will, which would exempt the inebriate, struggling for emancipation, from the agony of abandonment of a favourite and long-continued habit. Shocked at the havoc wrought by strong drink, heart-sore at the piteous spectacle presented by the woe-begone sot, his starving children and his broken-hearted wife, what short-sighted and impatient friends of the intemperate have longed for, forgetting that there is no royal road to sobriety,

has been a bolus which, acting like a charm and once swallowed, an automatic loathing for intoxicants would arise which would render continued intoxication impossible.

For inheritors of Inebriate diathesis, and other Inebriates an antidote sought.

It is true that, in most cases, the appetite for alcohol, for opium, for chloral, for chloroform, and similar articles is acquired, and that if no one ever tasted alcoholic liquors there would be comparatively little longing for them, but there are many who, from defective physical mental or moral stamina, or from a transmitted drink-impulse consequent on the intemperance of their progenitors, have an hereditary predisposition to fall an easy prey to the most intractable forms of habitual inebriety.

For all such, a talisman which would cause distaste and abhorrence for intoxicating drinks, would be invaluable, inasmuch as the moment such "weak brethren" partake of an intoxicant, that moment their doom is all but sealed, and they can be saved as it were only by a miracle. To the miserable beings who are in the pitiable position of slaves to the tyrant alcohol, an antidote to the dire drink crave, which as in the punishment of Tantalus, provokes the thirst it can never quench, would be a priceless boon.

The search for a specific still goes on, though unattainable

Need we wonder, then, despite disappointment after disappointment, failure after failure, the search still goes unweariedly on for this "elixir" of temperance, this "philosopher's stone" of absolute safety from intemperance?

In their fervent zeal for the rescue of the inebriate, the relief of the sad sufferings of his victims, and the prevention of drunkenness, medical clerical and lay philanthropists have, without a thorough knowledge of

the disease or in many cases a suspicion of its existence, rushed into the exhibition of remedies which a little reflection would have shown to be unreliable.

Alleged antidotes.

Wonderful discoveries have been recorded. A learned professor of the healing art not long since announced that he could eradicate the craving for alcohol in a week by means of the Turkish bath. Happy thought! The temperance societies would only have to establish Turkish baths all over the country and induce inebriates to bathe in them daily for a week, and the pledge would be a work of supererogation.

The Turkish bath.

Alas! for the inebriate, this is but an Oriental dream, as unsubstantial and illusory as the mirage to a wayfarer on an Eastern desert. No one can be fonder of the Turkish bath than I am, my only regret being that professional duties permit me too seldom to revel in its refreshing and reinvigorating charms; but I rarely ever enjoy the luxury of this bath that I do not meet there *bons vivants*, who resort thereto to whet their appetite for both eating and drinking. Before making a night of it, it is a common practice to take a Turkish bath, which is found to add a keener zest to the animal food and the alcohol of the evening banquet.

Cocoa.

A distinguished member of the British legislature has propounded a simpler, cheaper, and more valuable antidote to the drink crave, in the shape of cocoa. He believes that this most nutritious article of diet has the power of destroying the desire for strong drink, and he therefore looks upon cocoa houses as the truest Rescue Work.

Would that this roseate remedy were reliable! But, unfortunately, it is not. I have known drunkards who were as fond of cocoa as I am myself, and I have seen

customers at our most successful coffee taverns, after plentiful draughts of cocoa, walk straight into an adjoining public-house, and quaff an alcoholic beverage with undiminished gusto.

Alcoholic extract of frog.

Among the extraordinary so-called "cures" for inebriety, perhaps the following bears the palm for originality. The cure is an extract prepared by macerating frogs in alcohol, of which 1½ ounces per diem in three divided doses should be taken for a fortnight.

Raw beef.

Another prophylactic was launched in Germany in the shape of raw uncooked meat. This was based on the theory that cooking removes a great part of the watery constituents of the crude food, and that if only uncooked diet were eaten, there would be less thirst and therefore less longing for a beverage. The proposal is too ridiculous for serious notice, and has proved utterly valueless.

Vegetarianism an alleged antidote and preventive.

Among the loudly praised specifics for the abolition of the drink-impulse and drink-crave, as well as for the cure of inebriety, vegetarianism occupies a prominent place. A vegetarian diet excludes fish, flesh, and fowl. Strongly imbued as I have been for the past quarter of a century with a belief in the simplicity and excellence of non-animal food, in the presentation of which in a practical form to the educated as well as to the operative classes I have been privileged to bear a part, I regret to be compelled to admit, after careful study and close observation, that the practice of vegetarianism has no claim to be considered an antidote to inebriety.

Two facts are alone sufficient to negative this claim. In Scotland and other parts of the United Kingdom the mass of the population have been practical vegetarians.

I can well recollect the time when the bulk of the Scotch people lived almost exclusively on oatmeal porridge, barley bannocks, and milk. Rarely (not because they did not like, but because they could not afford to buy, meat) did they taste flesh or even fish. Yet among these practical vegetarians drunkenness was far from uncommon. Many a Highlandman, many a Lowlander, have I known whose palatal affections were about equally divided between whiskey and porridge. To still further make this point clear, I may add that of recent years flesh-meat has to a considerable degree been introduced into the dietary of the same men in Scotland, and yet the amount of drunkenness has decreased.

The claim unfounded.

Western non-flesh drunkenness.

So much for a cool climate. Turn we to a hot one. In India and other Eastern lands there are whole tribes who, from religious motives, will not touch animal food on any consideration, yet many of these ascetic akreophagists who have never tasted the flesh of slaughtered animals will quickly get as drunk as a London in-door pauper out for a day*, if you only supply them with arrack or some other fiery intoxicant. Many vegetarian Orientals are opium or haschisch inebriates.

Eastern vegetarian drunkenness.

This non-flesh dietary claim to be an antidote to alcohol, has been advanced on three grounds:—1. Because the taste for alcohol is lost, a contention which we have just seen is opposed to facts. 2. Because vegetarians are less thirsty than those who live on a mixed diet. The contrary is the experience of many, I have had patients

* On one occasion not long ago, two-thirds of the inmates of a Metropolitan workhouse, who had leave for the day, returned intoxicated.

whose practice of vegetarianism was inseparable from increased thirst, and others who if they abstained from animal food for periods as long as twelve months suffered during the whole period from intense thirst. In both of these classes of cases a "judicious mixture" of flesh invariably decreased the thirst. Fresh fruit, from its abundant juices, is refreshing and thirst quenching, but is not sufficient with all. On the other hand, there are some who are less thirsty when they forswear for a time "the fleshpots of Egypt." The truth is that, physiologically, "what is one's meat is another's poison" is true of thirst, as it is of other sensations. In some persons a non-flesh diet causes perversion of function, setting up a persistent thirst which not all the fruit-juices in the vegetable kingdom can appease. The cases in which vegetarianism *per se* can avert inebriety are very few and far between. 3. Because sweet substances are incompatible with alcoholism. This hypothesis is baseless, though it is ascribed to Liebig. I recollect several Glasgow magnates who in my young days regularly consumed a dozen tumblers of whiskey toddy every day after dinner. Yet each tumbler contained a plentiful proportion of sugar. I have also seen "seasoned casks" in Canada and elsewhere, when they wished to be able to stand more liquor on an extra occasion, drink their whiskey hot without any sweetening, having learnt by experience that the addition of sugar made them more quickly intoxicated.

Physiological basis of claim unsound.

Indeed, abstinence from animal food sometimes predisposes, sometimes excites, to inebriety. There are persons, of which type I have had the professional care of several, who cannot restrict themselves for any long time to vege-

Abstinence from flesh sometimes causes Inebriety.

tarian diet without alcohol, in consequence of acute precordial pain and distress arising from dyspepsia. Notwithstanding most conscientious and intelligent endeavours to judiciously select a vegetarian dietary suited to their digestive idiosyncrasy, the attempts have been a failure, and the only alternatives left were the return to a mixed diet or a resort to alcohol or some other anæsthetic to lull their sufferings for a time. Dyspepsia, as we have already seen when considering the etiology and pathology of our subject, is apt to create a perverted gastric condition which is not unseldom the introduction to a career of inebriety. The fact is that no hard and fast dietary suits every one. In the majority of cases I have no doubt that a wisely chosen non-flesh regimen is a cure for indigestion, and that the person will thrive at least as well, probably better, thereon than on a mixed diet.

Fundamental error of the unfounded belief in vegetarianism as an Inebriety preventive.

The fundamental error of this unfounded belief in the virtue of a non-flesh diet as a preventive of inebriety, is the false premise that there is "a complete parallel between alcohol and animal food as regards their stimulating narcotic effects on the human body." There is no such parallel. Apart from minor differences, there is a considerable proportion of nourishing constituents in meat, there is practically none in alcohol. Above all, there is the radical distinction that an alcoholic intoxicant is a brain poison, beef is not. No man has ever yet been hailed before a magistrate for violently beating and assaulting his child, or condemned to death for killing his wife, through the excessive eating of fish flesh or fowl; while men and women without number have been executed, or sentenced to severe punishment for capital and other

crimes, committed when their angry passions were inflamed by strong drink.

In no proper sense of the term, then, can vegetarianism be regarded as an antidote to the alcoholic, or any other narcotic appetite. Still it must be conceded that as a general rule, other things being equal, the simpler the diet, the purer the blood, the healthier the frame. While a diet restricted to fruits, roots, and grain, and to such animal products as milk, cheese, and eggs, is no absolute bar to inebriation, such a simple, non-stimulating regimen will (in those constitutions which it suits) conduce to health, longevity, and temperate living.

Vegetarianism not an antidote.

What of the reputed antidote which, a few years ago, was reported in almost every newspaper in the world to be infallible in the cure and prevention of drunkenness. The discoverer (?) announced "I can and do cure any case of drunkenness that comes before me." He also declared that drunkenness was a disease, and that his specific could cure not only the disease but destroy the appetite for alcoholics. The glowing accounts of thousands of extraordinary cures of the worst forms of inebriety in the United States of America appeared at first sight, and appear still to the uninformed, to indicate that in red cinchona bark there was at last presented to our view an effectual spell by which to charm away the unhallowed narcotic appetite. Many good Christian workers still believe in its efficacy. But notwithstanding the *éclat* with which the annunciation of this alleged potent specific was heralded, its pretensions are as baseless, its promises as fallacious as those of any of its predecessors. It is an old remedy and generally proves ineffectual. So far from always destroying the relish for

The bark cure.

Its pretensions baseless.

alcohol, I have known inveterate topers take it daily for weeks together in whiskey, port wine, or some other intoxicating liquor. In a great American city where I was resident twenty years ago, the favourite morning dram, especially of the drunkard, was "Peruvian"—a drink composed of either quinine, or pale or red bark, and whiskey. In nearly all the cases in which I have tried red bark, I have seen it exert no apparent influence on the desire for, and indulgence in, intoxicating liquors.

The preparation in question was a strongly alcoholic potion, as much as 40 per cent. of proof spirit having been found in some samples. Though many physicians in England were deceived by the plausible tale of its efficacy, I was incredulous, partly from my experience of former so-called "cures," partly from my knowledge of the place of its nativity. I examined it and found it a mere quack nostrum, utterly valueless in averting or curing intemperance, and from its alcoholic strength more likely to add to the already too crowded ranks of the inebriate.

A dangerous alcoholic potion.

By an exhaustive enquiry into the after-history of the pretended cures in Chicago, Professor Pliny Earle discovered that, so far from curing drunkards, this vaunted antidote had made many inebriates a great deal worse, and had caused the backsliding of many reformed drunkards by relighting the crave for intoxicants.

Story of "cures" false.

Kola nut.—Of recent years the praises of the Kola nut (Sterculia acuminata) have been persistently chanted. This is a valuable nutrio-stimulant, and as it contains free caffeine in greater proportion than coffee, with theobromine, fatty and starchy constituents, is of some use in nourishing and restoring nervous tone during

convalescence from an inebriate outburst. But notwithstanding the positive assertions to the contrary, I have not found it have any more effect in preventing drunkenness than a dish of warm cocoa or chocolate. The virtues attributed to this article equal those of the amethyst in ancient times. Whoever swallows a copious and steaming draught of powdered Kola nut cannot become intoxicated, drink he ever so much of alcoholic intoxicants!

Some of these remedies sometimes useful.

The truth is, that though all these so-called "certain cures" are utterly unreliable, and of little avail in the destruction of the drink crave, they are, every one of them, valuable adjuncts to the mental, moral, and medical treatment of the inebriate. The Turkish bath tends to soothe the inordinately excited brain and nerve centres, and to induce a sleep more refreshing and infinitely less dangerous than the sleep produced by chloral or opium, while it strengthens the body, calms the perturbation of the mind, and re-awakens the appetite for food. Than cocoa there is nothing better, for those who can digest it, to assuage the alcoholic thirst, and temporarily meet the frequent sinking of the enervated and worn out sot. Kola chocolate, in the form of Kolatina paste, is to some an invigorating restorative tonic beverage. Red, pale and yellow cinchona bark, quinine, and other similar medicinal agents, are of great service in aiding to restore the broken-down tone and power of the shattered mental and physical constitution of the hapless narcomaniac.

But these are not always even of temporary service. Very often every one of them fails in arresting, even for an hour, the uncontrollable abandonment to alcoholic indulgence. Though useful, they are not invari-

ably reliable remedies for even transient improvement. That a sanitary application, however healthful—that an article of diet, however nourishing—and that a drug, however powerful—should fail, in the vast majority of instances, to prove of any avail in the cure of the inebriate, is what every thoughtful and accurate scientific observer would expect. Alcohol is a narcotic as well as an irritant poison. It paralyses the brain, deadens the nervous system, debilitates the will, weakens the moral power, and dims the intellect, while it alters the physical structure of the brain substance. Therefore, even if the Turkish bath, or cocoa, or bark, could be, though they cannot be depended upon to annihilate the craving for alcohol for a time, these most valuable remedies would be practically useless, as a panacea for habitual intemperance, unless they could shake off the paralysis, reanimate the nerve centres, strengthen the will, restore the moral power, dissipate the cloud over the intelligence, and reproduce healthy brain tissue.

All "cures" deficient in nerve restoration and moral renovation.

It has been oracularly declared, with most wearisome reiteration, by the patrons of all such alleged specifics as "the red bark," that there is no hope for the intemperate unless in their nostrum; but this groundless assertion has been happily falsified by the permanent reformation of large numbers. It was publicly said of the most illustrious trophy of the cause of temperance, John B. Gough, that he would inevitably, and continually break down and relapse into intemperance if he did not frequently have resort to a physical antidote; but his graphic description of his terrible struggle is the narration of a battle fought without the aid of any nostrum. By the grace of God, through the exercise of his own moral power, the great

Nostrum not needed.

modern magician of our hearts stood before the world a free man.

Drunkenness is at once a moral and a physical evil. While we must look to the will, however weakened, of the inebriate, for an effectual and a lasting cure, his physical system must be strengthened, his diseased condition of body treated, and his craving for alcohol at least lessened. To aid in the accomplishment of such desirable ends, we can usefully employ various medicinal remedies, various hygienic measures, and various modifications of diet.

Moral and physical treatment required.

No drug in the pharmacopœia is more useful, as an auxiliary to the moral treatment of the drunkard, than cinchona bark. Whether the red bark is preferable to the other varieties (the pale and the yellow) is doubtful. They are all valuable. Their power for good lies in their tonic, nerve-stimulating, and anti-periodic qualities. Red cinchona bark (cinchona succiruba) is a native of Ecuador, and is cultivated in Ceylon, Jamaica, Java, and on a very extended scale in British India. It is hardy, and is easily propagated, so that its growth in India has been marvellous. Seven years ago there were nearly 3,000,000 trees in Sikkim, and the plants were equal to an annual yield of over 180 tons of dry succiruba bark. The red bark occurs in flat pieces and quills, the latter being the richer in alkaloids, and therefore the more potent. As the flat pieces are comparatively poor in the alkaloids, and very rich in the red colouring matter (cinchona red) containing ten per cent., and as they have been found to be much less useful in the treatment of inebriety than the quills, it is clear that the anti-alcoholic virtues are to be attributed to the alkaloids, these forming the active principle.

Cinchona a useful adjunct.

The chief of these alkaloids are quinine, forming more than a third of them, cinchonidine, forming about a fourth, cinchonine and quinidine, and these are all comparatively more abundant in the young than in the old bark.

When prescribed to the drunkard it is exceedingly undesirable to exhibit the red bark in a strongly alcoholic form, and the Chicago prescription is strong in spirit. The active constituents of the bark can be extracted by water, dilute acids, and, to some extent, by glycerine, though the last named extracts only a portion of the alkaloids.

Experiments with cinchona.

My friend Mr. T. A. Clifford and I have conducted a series of experiments, to ascertain whether acidulated water is preferable to ordinary distilled water, for preparing an infusion or decoction of red cinchona bark, and whether an infusion or decoction is the better process. We considered it necessary, not only to find the amount of alkaloids dissolved in the case of both plain and acidulated infusion and decoction, and make a comparison between the two, but also to obtain the amount of alkaloids left in a dried and weighed quantity of the dregs, and from these data draw our conclusions, the one result in each case checking the other.

Acidulated infusions.

Infusions.—We made infusions of red cinchona bark as follows:—One ounce of finely powdered bark macerated in a pint of boiling distilled water for two hours.

No. I. was acidulated with five minims per ounce of dilute hydrochloric acid.

No. II. was made with boiling distilled water only.

Five ounces of No. I., concentrated by evaporation, were precipitated with caustic potash and shaken with

chloroform in successive portions. The chloroform solution, evaporated after separation, yielded one grain of alkaloids. No. II., five ounces by same process yield ·75 of a grain of alkaloids.

The dregs of No. I. were saved, and dried until they ceased to lose weight. Two hundred grains of these, taken and treated in the manner directed for an assay of red cinchona *(British Pharmacopœia)* yielded, on separation and evaporation of the chloroform, 1·5 grain of alkaloids. The dregs of No. II. were treated in the same manner. Two hundred grains of these yielded two grains of alkaloids.

From these data it appears that an acidulated infusion is better than one made with boiling distilled water only.

Decoctions.—Decoctions of red cinchona were made by boiling one ounce of powdered bark with one pint of distilled water. This was strained when cold, and distilled water was poured over the contents of the strainer until the product measured one pint.

No. III. The water was acidulated, prior to making the decoction, with five minims per ounce of dilute hydrochloric acid. Acidulated decoctions.

No. IV. was made with the distilled water only.

Five ounces of No. III., concentrated, and precipitated with caustic potash, shaken with chloroform, and the chloroform solution evaporated, yielded 1·5 grain of alkaloids. Five ounces of No. IV., treated in the same manner, yielded one grain of alkaloids. The dregs of No. III., treated as in the case of the dregs of the infusions, yielded one grain of alkaloids from 200 grains. The dregs of No. IV. yielded 1·5 grain of alkaloids from 200 grains.

Since a larger yield of alkaloids has been obtained

from the acidulated decoctions, and a smaller from the dregs than has been the case with the decoction made with distilled water only, we may conclude that, in the form of acidulated decoction, we have increased power, with less waste, than when water alone is used. And a comparison of the results of the two sets of experiments proves the superiority of the acidulated decoction over the acidulated infusion. The cinchona succirubra with which we worked yielded, by the process of the *British Pharmacopœia*, two per cent. of alkaloids.

The best mode of prescribing red cinchona is in decoction, which can be prepared as follows:—Add one ounce of the powdered bark to one pint of water, acidulated with 100 minims of dilute hydrochloric acid. Boil for ten minutes, and strain when cold. Pour water over the contents of the strainer till the product measures a pint. Of this give two ounces or a wine-glassful, every three hours, gradually diminishing the frequency and quantity of the dose after the first day, till in six or seven days it is reduced to a tea-spoonful three times daily.

Cinchona febrifuge.

The most elegant preparation of the active principles of red cinchona is that which has been found so successful in India against the malarious fever, and is known as "cinchona febrifuge." It is made by exhausting the dry bark with successive portions of dilute hydrochloric acid, and precipitating the resulting liquor with excess of caustic soda. The precipitated alkaloids are collected on filters, washed, dried, and powdered. This product is then dissolved in a quantity of acid sufficient to take up the alkaloids, filtered from some insoluble colouring matter, and the solution again precipitated. After washing, drying and grinding, a fine white powder is obtained. It keeps

well, though it is apt to lose its whiteness, and is readily taken up by lemon juice (Wood, *Yearbook of Pharmacy*, 1878). Taken in lemon juice this is a pleasant drink, and is the most attractive form in which to exhibit the alkaloids of the red bark.

The powdered red bark itself may be prescribed in doses beginning with forty-eight grains, and gradually decreasing. Its taste is best concealed by milk, with which, however, it should not be mixed until immediately before being taken. Powder.

Bark may be given in the form of syrup. Take of any variety of cinchona bark, bruised, 3 oz., of sugar, 1 lb. 4 oz., and of distilled water, 3 pints. Boil for half-an-hour in a covered vessel. Remove from the fire, set aside for a quarter of an hour, and then strain with expression. Filter, as soon as the liquid is quite cold; evaporate the filtered liquid, with a gentle heat, to the consistence of a syrup, and finally strain. Dose to begin with, in treating inebriety, a wine-glassful, *i.e.* 2 oz. (Neligan speaks highly of this preparation). Syrup.

A very satisfactory preparation of the red bark has been made by Mr. Clifford and myself. We heated 4 oz. of the powdered bark over a water bath with 8 oz. of glycerine, for half-an-hour. The following morning we added to this 1 quart of distilled water. The whole was strained, pressed, and filtered, and the filtered liquid allowed to deposit. The marc was boiled with successive portions of distilled water. These were strained, pressed, and filtered, and the filtered liquid allowed to deposit. The clear supernatant fluid from each portion was added together, and treated with a pint of distilled water. This was also allowed to deposit. The clear supernatant fluid from Another preparation.

this was decanted, and added to the previous clear fluid; and the whole liquid evaporated to 8 oz., the original bulk of the glycerine. Acidulated water, instead of ordinary distilled water, gives a still better result. The preparation, on dilution, did not deposit, which is the general drawback to concentrations of cinchona principles. Since the publication of our experiments with red bark the *British Pharmacopœia* has officially sanctioned an acidulated infusion.

Quinine.

Quinine alone, with infusion of orange, is often very useful in allaying the drink-crave. All the benefit derivable from quinine will be obtained from repeated doses of 2 grains.

Various attempts at cure.

The remedial measures which have been tried to cure the drunkard, have been a thousand and one in number. I can stay to notice but a few.

The paint cure.

The most original attempt at a cure was that practised by a Yorkshireman, who, having found the usual method of "punching" unavailing, hit upon the plan of painting his wife black when she was unconscious in one of her drunken attacks. So efficacious was the remedy that she remained sober for the unwonted period of one month.

A striking cure.

Many an unhappy wife driven to desperation by an intemperate partner's maddening cruelty, has resorted to some improvised expedient to secure for him the blessings of involuntary abstinence, as in the case of a poor woman who, after doing all in her power to reform her drunken and violent husband, and failing to obtain his admission into any institution, took up a kitchen poker and broke his jaw in three places, as the only way she could think of to have him placed under medical care in enforced sobriety.

It was at one time the custom in this country to put the head and arms of drunkards through a barrel, and walk such incorrigibles round the principal thoroughfares. The barrel cure.

In one American State it was proposed to license the drinkers at the annual uniform fee of a sovereign, no liquor dealer being allowed to sell to any one without a license, the license being withheld by way of cure. The personal license cure.

In Liverpool the experiment was tried of publishing the names and addresses, in the newspapers, of those convicted of drunkenness. The publication cure.

In Southern Russia, the plan has been followed of setting police-court drunkards to sweep the streets. A sweeping cure.

In some parts of Holland, to this day women convicted of drunkenness are strapped securely in a chair, which is suspended to a pulley and lowered three times into the water. The triple bath, with the jeers and derision of the spectators at the bedraggled and half-drowned appearance of the ducked, is so effectual a deterent that this spectacle is now to be witnessed only at long intervals. The ducking, a water cure.

Among the methods alleged to cure and to prevent inebriety is the "similia similibus curantur" "cure" of cooking every article of the inebriate's diet with a strong dose of ardent spirit, in the hope that this would create a disgust for intoxicant liquor ever after. This too has gone "to the tomb of all the Capulets." In a few cases it may possibly prove such a spirituous surfeit as to beget a temporary aversion from alcohol, though I have never seen it do so; but it is no cure for the disease of inebriety. The liquor cure.

Kill or cure.

It is said that Charlemagne tried to cure the drunkard by scourging for a first offence privately, for a second publicly, and if both these measures failed, put the inebriate to death.

CHAPTER XV.

TREATMENT OF INEBRIETY *(Continued)*.

Sound treatment—Formerly little success, now more success—Fuller and more accurate knowledge the reason of the recent greater success—First indication of sound treatment the withdrawal of the poison—Immediate withdrawal in alcoholic Inebriety—Immediate withdrawal safe—Does not cause delirium tremens—Precautions to avert collapse or delirium if these are feared—Suitable extra food—Medicinal remedies—When sickness present—Tonics contra-indicated at this stage—Indicated after gastric disturbance has abated—Sleeplessness—Avoid narcotics if possible—Feet in hot water—Hot abdominal compress—Constipation—Aperient carminative tonic—Sulphate of magnesia, nitrate of potash, nux-vomica, capsicum—Aloin with belladonna and nux-vomica—Galbanum—Inebriate reaction calls for judicious nutriment—Ether and chloroform Inebriety require similar treatment—Treatment of opium Inebriety—Generally sudden withdrawal of opium dangerous—Occasions distressing and serious symptoms—Gradual diminution better—In rare cases sudden withdrawal safe—Average length of period of dose reduction one month—Treatment to allay nerve irritability—Bromides—Henbane—Cannabis Indica—Effervescing form in severe sickness—Occasionally full dose of opium beneficial—Coca—Blue pill and aperient draught—Lime water, soda water—Ice—Selection of dietary important—Peptonised milk—Beef peptonoids—Staminal food—Valentine's beef juice—Broths—Soups—White fish with lemon—Fresh fruits—Green vegetables—Fowl—Flesh—Turkish bath—Wet pack—Treatment of irritable stage of morphinism—Alcohol contra-indicated in opiism and morphinism—Second indication of treatment—Removal or counteraction of exciting cause—Massage—Systematic feeding—Electricity—Heredity does not necessarily involve disease manifestation—Nor does inebriate inheritance necessarily involve

drunkenness—Measures to counteract irremovable exciting causes—Exciting causes may be removed, and nerve tone with inhibitory power strengthened.

HAVING acquired a knowledge of the morphology, etiology, and pathology of inebriety, besides having seen the impotence of nostrums and of defective treatment, we are in an advantageous position to discern the principles of sound treatment, and the methods of cure best adapted to secure the greatest amount of success.

Sound treatment.

At one time very little success was attained. Up till a few years back, the results were so disappointing as to have given rise to a very general belief that the treatment of inebriates was the most disheartening as well as the most thankless work in which a medical man could engage. All this has changed for the better. Even with female inebriates, whose treatment is very much more difficult than is the treatment of males, there has been a wonderful improvement. For years I could not regard one of my female inebriate patients as having reformed permanently, but during the past twelve years I have been able to reckon a number who can fairly be considered as having been cured, having been restored to health and happiness, to mental and bodily vigour, to the full performance of their family, social, and other duties, and having continued steadfast in the practice of abstinence.

Formerly little success.

Now more success.

One, who has remained strictly abstinent for the whole of that period, was an apparently hopeless case. She was unmarried, aged 40, and had been an habitual inebriate for ten years. She had three relapses before she finally entered on her unbroken term of abstinence, during which time she has enjoyed excellent health and

has been actively engaged in charitable work. During this latter term of more successful treatment, of the whole number of female cases treated by me in private practice without seclusion, fully 10 per cent. have up to this been cured of their alcoholic or other narcotic habit. Among males the proportion has been much higher, a little above 19 per cent. of these cases having been most satisfactory. The duration of the respective periods of their permanent restoration to health and to complete sobriety has ranged from twenty-five years to a few months. The ratio of good results with male inebriates has also increased during the latter half of my professional life. I have been informed by several of my professional brethren who have had much to do with the treatment of inebriety, that they have had a similar experience. We agree in attributing this increase in the proportion of satisfactory results to the fuller and more accurate knowledge which we have gradually acquired of the true nature and causation of the disease. The same testimony has been given to me by intelligent medical advisers of genuine establishments for the reception of inebriates, where, from the absence of alcohol, the treatment is more effectual.

Fuller and more accurate knowledge the reason of the recent greater success.

The first indication in sound treatment is to prevent the inebriate indulgence from going further, by the withdrawal of the inebriating agent. Each article of this kind has a strong toxicity, the toxic effect being reproduced by each successive dose. In addition to the reproduction of the characteristic poisonous influence, the cumulated force of the repeated poisonings culminates in chronic poisoning. Each one of many injurious doses of any narcotic contributes to the

First indication of sound treatment the withdrawal of the poison.

infliction of permanent injury, alteration of structure and perversion of function. The toxic process must be stopped, or the mischief will go on as well as become more intense and confirmed. It is essential therefore that the toxicating process be suspended. This can be accomplished only by the elimination of the material substances which have occasioned the noxious symptoms.

Immediate withdrawal in alcoholic Inebriety.

The mode of withdrawal is a practical matter demanding due deliberation. Undoubtedly, wherever practicable, the withdrawal should be immediate. It is imperative that the abstinence be as prompt as possible. Ample experience has shown that it is safe for the most confirmed alcoholic inebriate to at once and for ever abstain. Year after year, large numbers of criminal and pauper inebriates, on their admission to the prison and the workhouse, have their liquor suddenly cut off without any disastrous result. My own experience has been so clear as to the wisdom of immediate withdrawal in alcoholic inebriety, that I never hesitate to totally and immediately forbid the continuance of the intoxicant.

Immediate withdrawal safe.

It was at one time almost universally, and still it is to some extent, believed that the sudden cessation of the alcoholic narcotic may induce either collapse or an attack of delirium tremens. There need be no fear on either score. The judicious physician will liberally order digestible nourishing food, or, if the stomach can bear it, an additional good square meal of wholesome solids, when cutting off suddenly and entirely any free drinker's regular alcoholic allowance. When the digestion is intact, a mixed diet of fish, meat, vegetables, and fruit, will be readily assimilated. When the digestive powers are disturbed and weakened, nutritive broths and soups with, if acceptable to the

Does not cause delirium tremens.

palate, whole-meal bread, egg and milk, malted farinaceous foods, the excellent and handy "staminal food," with that much abused though useful nutrio-stimulant preparation, extract of meat, which with a biscuit makes a capital extra meal, are all at times very serviceable. Any genuine peptonised article of diet is valuable in such circumstances. Oatmeal porridge and milk (except when oatmeal disagrees with the individual inebriate) is an excellent and digestible morning or evening dish. I have never had occasion to employ nutrient enemata, though this mode of introducing nourishing food into the body may in rare cases be necessary. These precautions are applicable to avert both collapse and delirium tremens, where either is feared. For medicine, such a mixture as this will often aid wisely chosen food in averting unpleasant complications:—

Precautions to avert collapse or delirium if these are feared.

Suitable extra food.

℞ Sp. ammon. aromat., fl. dr. jss.
Tr. cardamom. co., fl. dr. jss.
Aq. destillat. ad fl. oz. vj.
S. A sixth part every three hours.

Medicinal remedies.

When there has been nausea, vomiting, furred tongue, or other symptoms of disordered digestion, soda or lime water and milk, with ice, and a stimulating effervescing mixture, may be employed with advantage. I have found the following simple form of considerable service:—

When sickness present.

℞ Potass. bicarbonat., gr. 120
Sp. ammon. aromat., fl. dr. j.
Tr. cardamom. co., fl. dr. j.
Tr. nucis vomicæ, fl. ♏ vj.
Aq. destillat. ad fl. oz. vj.

S. A sixth part every four hours in effervescence with an acid powder.

Potassium bromide in fifteen to twenty grain doses may be added when necessary. Sometimes I have also given in this mixture hydrocyanic acid in two minim doses.

℞ Acid. citric.
6 powders of 15 grains each.
S. The acid powders.

In this stage tonics should be very sparingly administered.

With many bismuth with opium is most effective, especially in mania a potu and nervous irritability. These may be given in the effervescent mixture, or the opium may be combined with liquor bismuthi et ammoniæ citrat.

After gastric disturbance has abated.

When the sickness has abated, the following nerve and liver tonic has proved useful at my hands :—

℞ Tr. nucis vomicæ, fl. dr. ss.
Acid. nitric. dilut., fl. dr. j.
Liquor taraxaci, fl. dr. vj.
Tr. cardamom. co., fl. dr. j.
Aq. destillat. ad fl. oz. vj.
S. A sixth part three times daily.

In addition to this mixture I frequently have recourse to this alterative :—

℞ Resinæ podophyll., gr. $\frac{1}{12}$
Ex. colocynth. co., gr. $\frac{3}{4}$
Ex. hyoscyami, gr. $\frac{3}{4}$.
12 pills each as above.
S. One pill night and morning.

In many cases it is advantageous to correct the liver by a dose of calomel or other mercurial preparation, followed by an aperient. In other cases an emetic has proved of considerable benefit.

It is often essential to procure sleep and promote nervous quietude. I always try to do without a narcotic. With some patients immersion of the feet in warm water at night succeeds. With others, a good sized towel wrung out of hot water, applied to the epigastrium, and covered over with folds of warm flannel tightly bound with a bandage round the body, answers well. Potassium and sodium bromides are preferable to an opiate. They may advantageously be combined with hen-bane. In many intractable cases, the addition of chloral hydrate renders the remedy more effectual. I have frequently prescribed this preparation :—

Sleeplessness.

Avoid narcotics if possible.

External applications.

Bromides, hyoscyamus, chloral.

℞ Chloral hydrat., gr. 48
Potass. bromid., gr. 60
Sodii bromid., gr. 90
Tr. hyoscyami, fl. dr. j.
Syrup. rhœad., fl. oz. ss.
Aq. destillat. ad fl. oz. vj.

S. A sixth part every hour till sleep. Not more than six doses are to be taken.

Sometimes a moderate dose of tr. opii, or Dover's powder, or opium pill, is sufficient to induce sleep. The reaction after an opiate should always be remembered. In one case I ordered an emetic of pulv. ipecac. and ten grains of pulv. ipecac. co. alternately at bed-time. On the morning after the emetic had been taken, on awaking from a refreshing sleep the patient felt comforted and refreshed. On the morning following the Dover's powder, after a heavy confused sleep the patient awoke with a headache, dry coated tongue, and felt out of sorts.

Tr. opii.

Constipation is a common complication. Whole meal and brown bread, stewed fruit, and oatmeal porridge are very helpful to some. Where the constipation is obdurate I have frequently seen decided benefit accrue from this formula:—

Constipation.

Aperient carminative tonic.

Sulphate of magnesia, nux-vomica, capsicum.

℞ Magnes. sulph., gr. 60
Potass. nitrat., gr. 30
Tr. nucis vomicæ, fl. dr. ss.
Tr. capsici, fl. ♏ vj.
Tr. cardamom. co. fl. dr. j.
Aq. destillat. ad fl. oz. vj.
S. A sixth part twice daily.

At other times some such pill as this was effectual:—

Aloin with belladonna and nux-vomica.

℞ Aloin, gr. j.
Ext. belladon., gr. ½
Ext. nucis vomicæ, gr. ½.
S. One pill at night.

When an antispasmodic is required I have seen decided benefit from this pill:—

Antispasmodic.

Valerianate of zinc, nux-vomica, galbanum.

℞ Zinci valerianat., gr. j.
Ext. nucis vomicæ, gr. ¼
Pil. galbani co., gr. j.
S. One pill night and morning.

Ferrous sulphate in doses of one grain may be added when a ferruginous tonic is indicated.

The reaction from acute forms of the inebriate paroxysm may be characterised by bursts of excitement and violence, but under a judicious course of digestible nourishment the nervous perturbation caused by the intoxicant will subside, as the poison is gradually eliminated and the proper nutrition of nerve element is affected.

Inebriate re-action calls for judicious treatment.

These observations apply in the main to ether, chloral, chloroform, eau-de-Cologne, and sal-volatile inebriety, as well as to alcohol inebriety. In opium and morphia inebriety, in whatever form the narcotic has been taken, the procedure as to the withdrawal of the toxic agent ought to be different. It is just as desirable to withdraw the poison as speedily as may be practicable in opium and morphia, as in alcohol, inebriety. But the difficulty here lies in the practicability. Both plans have been tried in opiate and morphine inebriety. The narcotic has been suddenly withheld, and it has also been gradually tapered off. Levenstein, who advocates the heroic course, has been ably answered by Dr. J. B. Mattison, who adopts the slower, more pleasant, and surer method.

Ether and chloroform require similar treatment.

Treatment of opium Inebriety.

Generally sudden withdrawal of opium dangerous.

Among other distressing symptoms after sudden withdrawal, the following have been observed in an aggravated form:—Rigors, nausea, vomiting, exhaustive diarrhœa, convulsions, delirium, prostration, collapse. Langour and sneezing are minor troubles. The agony is in many cases indescribable, and the symptoms are so alarming, that the full narcotic dose of the drug has had to be given to avert a fatal issue. My sympathies are with the heroic course, but the sufferings undergone, with some risks (such as paralysis) consequent on the peremptory stoppage of supplies, have forced me to the conclusion that gradual diminution of the dose ought to be the rule.

Occasions distressing and serious symptoms.

Gradual diminution better.

There are cases in which immediate cessation of the drug occasions comparatively little distress and is successful, but these have been, so far as I have seen, exceptional. I generally

In rare cases sudden withdrawal safe.

spread the period of gradual diminution of the dose till entire discontinuance of the drug, over four or five weeks. The length of this tapering-off process, however, depends chiefly on the daily amount of opium or morphia used, while taking the idiosyncracy of the narcotee and the effect of the poison on the individual constitution into account. Occasionally three weeks suffice, but the duration sometimes extends over eight weeks.

Average length of period of dose-reduction a month.

Here potassium and sodium bromides are generally indicated in considerable doses to subdue the extreme nervous irritability, with henbane and cannabis indica. The quantities administered must vary with the individuality of the case. Bearing this in mind, the formula appended may be taken as a guide:—

Treatment to allay nerve irritability.

Bromides, henbane and cannabis indica.

℞ Potass. bromid., gr. 20
Sodii bromid., gr. 40
Tr. cannabis indic., fl. ♏ xv.
Tr. hyoscyami, fl. ♏ xx.
Sp. ammon. aromat., fl. ♏ xx.
Tinct. cardamom. co., fl. ♏ xx.
Aq. destillat. ad fl. oz. iij.

S. The draught at bed-time, followed by a copious drink of cold water.

When the patient can bear the immediate or almost immediate withdrawal of the drug, a much smaller dose of this bromo-hyoscyamine mixture, repeated once or twice, will be ample. After a day or two tonic treatment can be begun.

The crave for opium or morphia is dependent on an abnormal physical condition, which it has been claimed that sparteine and nitro-glycerine relieve. I have not seen occasion for the exhibition of the former, and only once or twice for the prescription of the latter, the use

of which involves too serious a risk to justify the administration of it except very rarely and with extreme caution. Professor Benjamin Ball and Dr. Oscar Jennings have made a splendid contribution to the literature of morphinomania, but it has occurred to me that, perhaps the greater need they have met with for the trial of such remedies, may have arisen from sudden withdrawal of the narcotic. Sparteine is administered hypodermically in the form of sulphate in doses of from two to four centigrammes, and nitroglycerine is given in tablets or in a one per cent. alcoholic solution.

In severe vomiting give bromides in effervescing form.

In opium inebriety there is often severe and prolonged sickness, during the earlier stages of treatment especially. When these symptoms are present I find it advantageous to administer the bromides in something like this form, for a few days till the night draught can be retained.

℞ Potass. bicarbonat., gr. 120
Potass. bromid., gr. 60
Sodii bromid., gr. 90
Tinct. cannabis ind., fl. ♏ 30
Sp. ammon. aromat., fl. dr. j.
Tr. cardamom. co., fl. dr. j.
Aq. destillat. ad. fl. oz. vi.

S. A sixth part three times daily in effervescence with an acid powder.

℞ Acid. citric., 6 powders of 15 grains each.
S. The acid powders.

Tinct. nucis vomicæ should often be added to the above mixture, in 3 or 4 minim doses.

Occasionally full dose of opium beneficial.

In some cases an ordinary dose of pil. saponis co. (Sapon. cum opio), not oftener than once in seven days, acts like a charm; but I do not care to resort to this unless in extreme cases.

Another potent remedy is one-sixth of a grain of hyoscyamine administered subcutaneously, but this must be used with great caution.

Coca.

Coca has been much lauded in the treatment of opium inebriety, but I have never seen any need for its use, and so can say nothing in its favour.

Blue pill and aperient draught.

In most cases I begin the treatment with four grains of blue pill, followed by a black draught or seidlitz powder next morning.

Lime water, soda water, ice.

Ice, milk and lime water, or milk and soda water, will aid in counteracting the vomiting.

In all cases great attention should be paid to the diet, which should be nourishing, easy of digestion, and such as will not be rejected by the stomach. Peptonised milk, Carnick's beef peptonoids, staminal food, Valentine's beef juice, broths, soups, and similar preparations are good. As soon as it can be borne, white fish cut up fine with a little of the juice of a lemon, is very grateful. Fresh fruits and green vegetables are refreshing, and can be taken with benefit before and after fowl and flesh can be retained and assimilated. Fatty foods, when these agree, are of great value in the remedying of nerve starvation.

Selection of a dietary important.

In certain cases the Turkish bath aids in procuring sleep as well as in soothing the nervous irritability. At other times these objects will be secured more easily and cheaply, occasionally more effectually, by the wet pack, which, however, must be carefully applied, or it will do more harm than good. Dip a sheet in hot or tepid water, the former being preferable. Wring the wet sheet well, and closely envelope the whole body (except the

Turkish-bath and wet pack.

head and neck) in it. Above this, leaving no part of the damp sheet uncovered, roll a blanket round the body. Then add successive wrappings of a couple or more blankets. The patient will generally be in a profuse perspiration within three quarters of an hour. He should not be allowed to remain in the pack longer than 75 minutes, even when sleep has not been won. The application may in suitable cases be repeated daily, every second or third day, according to circumstances. To avoid any possible risk the pack should be applied not less than two hours, or more than three hours, after food. I have seen an excellent calmative influence exerted on the opiist, by this simple and agreeable procedure. Wherever this pleasant sedative soporific can be employed, in all forms of inebriety I prefer it to the exhibition of large doses of narcotic drugs to secure sleep. That it is a pleasant process I have had many a happy experience, having a vivid recollection of how annoyed I used to be with the bath attendant, when undergoing this treatment during an attack of blood-poisoning, for always rousing me out of a delicious snooze when he came to unwrap me. The well-wrung hot water sheet is an admirable soother of nerve perturbation, and it is impossible for me to speak in too high terms of its efficacy in lessening the extreme restlessness occasioned by the reflex nervous irritation, which, with sleplessness, signalises the first week of the treatment. This remedial measure is also potent to procure sleep, and has not the drawback of disturbing the system, which belongs to chloral and other narcotics.

Treatment of irritable stage of morphinism.

I pursue a somewhat similar course of treatment in morphia injection, the dose being steadily diminished day by day, a weekly full narcotic dose of opium with belladonna, or

chloral with bromides at night, instead of that day's reduced hypodermic dose.

Alcohol contra-indicated in opiism and morphinism.

I never allow opium or morphia inebriates any alcoholic intoxicant. The Eastern proverb, "one death is bad enough, two or three deaths are the very devil," is peculiarly applicable here. There is a danger of alcohol or chloral inebriety being added to the opium habit. The cases of this double and treble narcomania which I have seen have been too sad, nearly all having ended in suicide, for me to run the risk of promoting such a combination and development.

Second indication of treatment.

The second indication of sound treatment is to remove or counteract the exciting cause.

Because an individual has had fastened upon him the legacy of transmitted inebriety or transmitted alcoholism, is no reason why he should inevitably become an inebriate. The tendency is handed down, the predisposition is there, but if the circumstances or conditions which provoke to drunkenness or narcotism are altered, the alcoholic legatee may live a long life unsullied by any act of intemperance. A child is born with an epileptic neurosis, but it does not follow that he will ever have an epileptic fit. By the avoidance of undue excitement, of stimulating food, of food or drink breeding worms, of mental over-strain, and other conditions which are adapted to provoke a paroxysm, he may complete his sojourn on earth without a single epileptic explosion. So with many morbid states which are transmitted. An accurate knowledge of the special forms of disease to which an individual is from descent liable, would enable him to guard against

Removal of exciting cause.

Heredity does not necessarily involve disease manifestation.

the causes favouring the development of the latent physical trouble, and thus powerfully contribute to sound health and prolonged life.

In the same manner it does not of necessity follow that the subject of alcoholic heredity will become an habitual alcohol tippler, or a confirmed opium eater. It is true that the proclivity to inebriety, the disease itself, may be present all through life, but it is quiescent, and, unless roused into activity by some provocative, may never manifest itself. There are multitudes who have been born with a special susceptibility to the narcotic influence of alcohol or other similar substance, and with a strong bias towards intoxication, who have nevertheless lived lives of absolute abstinence from all narcotics. No one, however heavily weighted with the inherited alcoholic diathesis or with defective control, need despair. The fight may be fierce, the struggle may be prolonged, but victory will reward the patient, persistent, honourable, and intelligent combatant.

For this protracted and unremitting warfare it is incumbent that the warriors should be armed with weapons of precision. In the whole anti-inebriate armoury the keenest blade is that which can cut off what are sometimes hydra-headed causes. Fortunately, in a large proportion of cases there are but one or two heads, in which circumstances the decapitation is a simple and efficacious means of cure. In some cases (I have found these very rare) where there has been a profound neurasthenic excitant, massage, systematic feeding, and electricity, have done well.

Exciting causes may be removed, and nerve tone with inhibitory power strengthened.

When the causes exciting to inebriety cannot be removed, measures may be employed to counteract them. For example, if the exciting cause is depression

from exposure to unavoidable cold, the patient can be directed to wear flannel next the skin, to clothe himself so as to secure protection against the inclemency of the weather, to take a cup of cocoa or other suitable cold-resisting food before exposure, to carry with him some meat or ginger biscuits or other handy heat-giving edible, with or without some warming aromatic yet non-intoxicating drink. In addition to these precautions the patient should be advised to render himself as chill-proof as possible by regular cold bathing and other hygienic exercises. Withal, tone can be given to the inhibitory power so that inebriate excitation, which cannot be evaded, may be successfully resisted. Above all, intoxicating drinks of every kind should be avoided, as these, so far from "keeping out the cold," rob the system of vital heat and lessen the cold-resisting power.

Measures to counteract irremovable exciting causes.

CHAPTER XVI.

TREATMENT OF INEBRIETY *(Continued)*.

Third indication of treatment—Reparation of physical damage wrought by Inebriety—Remedying of the pre-Inebriate morbid condition—Strengthening of the inhibitory power—Reparation of damaged tissue—Good sound food—Vegetarian claim as best renovator of tissue and function unfounded—Different diet needed by different individuals—Diet must be judiciously selected—Excess in animal food injurious—Food should be eaten slowly and moderately—Selection of drinks—Intoxicants must be excluded—Water best—Hot, cold, or flavoured—Milk—With lime water, soda water, or Apollinaris water—Iced—Butter-milk—Whey—Separated milk—Tea—Cocoa—Coffee—Unfermented port wine with bark—Aerated drinks—Still lemonade and ginger-beer—Only intoxicants must be absolutely excluded—Abstinence must be unconditional—No exception on religious or medical grounds—Unintoxicating wine should be used at the communion—Frank Wright Mundy and Co.'s unintoxicating wines—Intoxicants should not be prescribed as medicine—Common sense and medical judgment to be exercised in the choice of food—Correction of prior morbid condition—Importance of sound hygienic conditions—Air—Exercise—Cleanliness—Activity—Amusement and recreation—The inhibitory power must be strengthened—By exercise—By moral influences—By reasoning—By sound instruction on alcohol and other narcotics—"No good to fight against my fate"—By religious influences—By rational therapeutics—Common error of supposing no medical treatment without drugs—Sometimes a placebo demanded—Gentle tonic—Ferrous sulphate with galbanum—Gentian and dilute nitro-hydrochloric acid with cardamoms—In such cases every good purpose served by ordering medicine for 10 to 14 days—Mild tonic antispasmodic—Valerian with calumba—Stronger medicines sometimes really needed in full doses—Nux-vomica and belladonna—Syrup of

orange and quinine—Bark with acid—Strychnia—Nux-vomica with dilute phosphoric acid—Cod-liver oil and hypophosphites—Ferrous sulphate with magnesia, sp. myristicæ and aq. menth. pip.—Treatment of complications—Delirium tremens.

Third indication of treatment.

The third indication is to repair the physical damage wrought by Inebriety, to remedy the pre-Inebriate morbid condition, and to strengthen the inhibitory power.

In the essential work of reparation of tissue by the construction of new healthy structure, good sound food suited to the digestive and assimilative capacities of the patient is a leading factor. Healthful nutriment alone will aid in the reproduction of healthy material. By no other process can sound blood, flesh, sinew, bone, and nerve be renovated. And the diet must be such as the stomach and duodenum can thoroughly digest. Unless completely broken up and dissolved so as to be readily absorbed by the lacteals, the best and most judiciously chosen articles of food will be inadequate.

Reparation of damaged tissue and function.

Good sound food.

It has been claimed on behalf of certain restricted dietaries that they afford the fittest pabulum for the renewal of strength. No such claim can justly be conceded. No one limited course of feeding can suit every constitution. It is physiologically true that a rigid dietary cannot be universal. A purely vegetarian diet excluding fish, flesh and fowl suits many very well, provided due care be bestowed on the selection of the different edibles, and on their cooking. It is imperative to exercise this caution as, owing to improperly chosen substances and the defective preparation of wisely chosen vegetarian products, I have seen dyspepsia so

Vegetarian claim as best renovator of tissue and function unfounded.

depressing and prostration so extreme as to have driven the sufferer to the beer, wine, and spirit bottle for relief from his sufferings, with the unfortunate result of fully developed inebriety. The adoption of a vegetarian mode of life involves in these islands often greater care than does the use of a mixed animal and vegetable diet. For example, in Scotland, Ireland, and the North of England most persons can digest and thrive on that excellent national diet of my native land, of which I am not ashamed to own that a day begun without it always seems wanting in something good. I refer to oatmeal porridge. Yet in the Southern portion of England, including the metropolis, I have had under my care many persons young and old who have been quite unable to assimilate it, a perseverance in taking it daily for a week never failing to set up most aggravated and well-nigh unendurable symptoms of indigestion. Again, I have seen a few persons leading sedentary lives, who rushed from animal food at least twice a day to as frequent meals composed mainly of peas, beans, and other legumes. The issue here was indeed disastrous.

Different diet needed by different individuals.

I am therefore especially desirous to warn inebriates who hope to find, as they are sometimes told they will find, in vegetarian diet a cure for their inebriety, of the need for great circumspection in the practice of that system. No one can have any excuse for imputing this warning to any prejudice against vegetarian habits. I have none, being of opinion that we English eat far too much meat, that excessive flesh-eating tends to the production of narcotic intemperance, and that a judicious dietary excluding fish, flesh, and fowl is ample for the physical and mental requirements of the great majority of man-

Diet must be judiciously selected.

kind. Inebriates and embryo-inebriates who are flesh-eaters also stand in need of admonition. Though I have no sympathy with those who teach that the moderate consumption of animal food creates a thirst for alcoholic liquors, no unprejudiced physician with much experience in the treatment of inebriety can have failed to discern the mischievous influence of a gluttonous indulgence in this variety of food. Persons who are the greater part of their time in the open air can assimilate a very much greater quantity of animal food than those who follow a sedentary occupation. Yet it is not uncommon for the latter to be inordinate consumers of strong meat, eating it largely and eating it often. In such cases, though the meat-eater may be thin and pale-faced, a physically gross habit of body is apt to be engendered, the blood is surcharged with effete products, the circulation is impeded, and the infatuated kreophagist, instead of lessening the oppression by eating less of the oppressor, resorts to the British alcoholic panacea for all the ills which flesh is heir to, and ere long may be an inebriate indeed. In these cases the patient is easily tired, has a feeling of general weariness, sometimes gets thinner, and is altogether miserable. The urine has usually a high specific gravity. Alcohol relieves the discomfort for the moment, and inebriety gradually sets in.

Excess in animal food injurious.

As a general rule the subjects of congenital and acquired inebriety will derive most bodily vigour and nervous tone from a plain mixed diet of fish, flesh, and vegetables, with fruits, roots, and grain. Palatable fatty foods should have a prominent place in the dietary. As another general rule, animal food at one daily meal is enough.

Food should be slowly and moderately partaken of.

Above and beyond all else, whatever the food, it should be eaten slowly. The German proverb "food well masticated is half digested," is physiologically true. Deliberate eating would save no inconsiderable number of human beings from falling into inebriate courses. The bottle has a potent ally in the bolting of food. The hasty despatch of a meal leaves masses of food, not properly broken up and dissolved in the mouth, for the stomach to encounter, a task never intended to be thrown on that organ. The result is that digestion is attended with considerable difficulty, followed frequently by flatulence, severe pain, and depression of spirits. This diseased condition craves for relief, and an alcoholic soother is employed, in too many cases the introduction to a course of periodic or constant inebriety.

Selection of drinks.

In the restoration of physical and mental strength, an important question is "What should the inebriate drink." I am aware that a few authorities on inebriety have recommended the moderate use of certain intoxicating beers and wines. To this recommendation I cannot assent, and I feel assured that it is a vital error. It is fatal to multitudes who are beguiled by the treacherous and false alcoholic promiser of strength into limited drinking, drunkenness, and death. It is all a delusion. Neither alcohol, nor chloral, nor chloroform, nor opium, nor any narcotic, is a strength giver. "Wine is a mocker" physically as well as morally. All the alcohol in the world will not contribute a drop of blood, a filament of nerve, a fibrilla of muscle, a spiculum of bone, to the human economy. On the contrary, there is death in the cup, waste of strength, decay of substance, destruction of tissue, degradation of function, material death. In the most unequivocal

Intoxicants must be excluded.

terms I denounce alcoholic and other intoxicants as useless, unsafe, perilous remedies in the treatment of inebriety, bearers to the convalescent from this disease of physical feebleness, mental unstableness, moral perversion, volitional disablement.

Water is best.

There is a host of drinks at once restorative, refreshing, and safe. Of water, the best of all beverages, the veritable "water of life," body-life, brain-life, it is impossible to speak in too high terms. Even in the height of inebriate madness the thirsting dipsomaniac craves for water. None need be afraid of it. If, as is the case with some, it is not acceptable or comforting when drunk cold, it can be taken hot. When desired, it can be flavoured to suit any variety of palate by the addition of some non-intoxicating preparation of lime-juice or other similar fruit syrup. Sweet milk stands next, at once nourishing and thirst-quenching to most. There are some with whom it does not agree taken cold and neat, but the addition of lime or soda or Apollinaris water will probably render it grateful. Sometimes it suits better iced, sometimes when swallowed hot. There, are, however, a few individuals who cannot assimilate milk in any form. Buttermilk is a delicious and reviving drink when the ordinary sweet milk does not agree. Whey is useful to some. Separated milk is often retained and assimilated when the heavier sweet milk would give rise to troublesome digestive disturbance. Tea should be partaken of weak, rapidly infused, and in moderate quantity. Cocoa and chocolate are delightful forms of combined food and drink. Coffee, genuine coffee properly prepared, is the most stimulating and enlivening of all artificial potables, with an aroma and a charm of its own.

Hot, cold, or flavoured.

Milk.

Tea, cocoa and coffee.

Port (unfermented and unintoxicating*) with bark, is an elegant and valuable aid to nerve and muscle rehabilament. Port with bark.

Zoedone and other aerated non-intoxicating drinks are sometimes of service, but special caution must be exercised to use these with moderation, as many of them contain iron, and their gaseous form is apt to cause cardiac distension. Oxygenated water, charged with oxygen from the atmosphere by Brin's process, made pleasant to the taste by lemon or other flavouring, is a new and palatable non-intoxicant. I have found no drink more useful than two very common and venerable favourites, viz.:—For a still drink, home made lemonade or lemon water; for an effervescent, ginger beer. Aerated drinks. Still lemonade and ginger beer.

To sum up, no hard and fast line of feeding or drinking can be laid down for every inebriate. The peculiarities of each case must be taken into account, as what would suit one admirably would be most unsuitable for another. Only one article should be absolutely excluded. That article is intoxicating liquor of every kind and strength. The abstinence should be unconditional, with no exception in favour of birthday or other celebrations. Such exceptions have been the ruin of not a few, as has also the exception for religious purposes at the Communion. Every intelligent and honest physician when asked, as I have frequently been, if it is safe for the reformed inebriate to partake of intoxicating liquor in such circumstances, should at once reply, "No, it is not safe." A high Only intoxicants to be absolutely excluded. Abstinence must be unconditional.

* Prepared by Frank Wright, Mundy and Co., Wine Importers, Merton Road, Kensington, London, W.

medical authority once publicly asserted that there was no probable danger, and that if there were there would be greater risk in calling the special attention of the reformed inebriate to his weakness by any provision to meet it. Such an opinion could only have been delivered in utter ignorance of what inebriety really is. This is a physical disease, a paroxysm of which is provoked by the application of an exciting cause. Alcohol is such an excitant, probably the most potent of all, and the purely physical effect of the sip of a sacramental intoxicant is sufficicnt in many cases to arouse to activity the latent disease. Most reformed inebriates know this and avoid the risk. The great temperance orator, John B. Gough, during his reformation period of some forty years of abstinence, never would run this risk. Cases of excitation to paroxysmal drunkenness on this solemn occasion, after long terms of absolute sobriety, have not been unknown.

No exception on religious or medical grounds.

There need be no difficulty on the part of the clergy. In the Roman Catholic community the cup is withheld from the laity. For the Protestants a variety of genuine unintoxicating wines* (much more entitled to be considered pure and fit for sacred purposes than the most of the fortified commercial so-called "pure sacramental wines" in general use at present), are now available.

Unintoxicating wine should be used at the communion.

Nor should there be an exception in medicinal treatment. Other stimulant remedies can be applied, and if alcohol be in a rare case deemed necessary it can be given in accurate doses, a precision impossible when intoxicating drinks are prescribed. It can be ordered either in the

Intoxicants should not be prescribed as medicine.

* The sacramental unintoxicating wines of Frank Wright, Mundy, and Co., Kensington, may be thoroughly relied on. They are truly "the fruit of the vine."

form of proof spirit, or, as I prefer, in the form of Tr. cardamomi co., spirit. ammoniæ aromat., or spirit. chloroformi.

In opium, morphia, chloral, and other forms of inebriety this condition of abstention from alcoholic intoxicants should be insisted on. The danger in alcoholic inebriety is greater than in any of the other kinds, because the inherited tendency is more intense with alcohol, and this narcotic sets up organic and structural pathological lesions which are rarely, if ever, met with in opiism, morphinomania, chloralism, or any non-alcoholic narcomania. The physician should be wary in ordering alcoholic intoxicants even as therapeutic remedies, for in the subjects of inherited alcoholism (or rather tendency to alcoholism) medical prescription has been known to re-awaken the old irresistible crave or impulse. He should also administer opium, chloral, and narcotics generally with never failing caution. In no case, with an inebriate diathesis, should he continue the use of opium or any sedative without a break. Especially should the self-administration of morphia hypodermically be prohibited. The absolute discontinuance of all narcotics is of the highest importance, and the medical practitioner should never resort to them if any other remedy will answer the purpose. When required, these potent and dangerous drugs should be given in accurately defined doses for the occasion only.

For the remaining articles of food and drink, common sense and medical skill must be brought to bear upon the diet problem. The peculiarities, the likes and dislikes, the tastes and distastes, of each inebriate should be carefully considered, while due weight should be given to considerations as to the idiosyncracies of

digestion, and to the nutritious and other properties of the various articles of diet. Eating and drinking should be a pleasure, not a task—a welcome interlude, not a serious and forbidding duty.

Correction of prior morbid condition.

The correction of the pre-inebriate morbid condition is most essential. In many cases, if the pathological physical antecedent can be transformed into a physiological physical antecedent, a cure will be affected. If the unhealthy state of organ or of function, which has originated the inebriate impulse or crave, can be converted into organic and functional good health, the work is accomplished. The attention of the physician therefore ought to be chiefly directed, for the removal of internal exciting causes as well as for the correction of the diseased antecedent cause of the drink impulse or crave, to the bodily and mental soundness of the patient, to the rectification of abnormal departures from health. If, for example, an inebriate female dates her initiation into inebriety to, or is suffering from, some ovarian or uterine affection, that trouble must be at once attacked.

Importance of sound hygienic conditions.

The convalescent from inebriety, who so urgently needs restoration of the healthy nutrition of the brain, should live as far as is practicable under sound hygienic conditions. Fresh air and exercise are almost as important as diet. Personal cleanliness is of the highest value. No one can over-estimate the influence of a life of vigour and activity, physical and intellectual exertion being withal kept within due bounds, in preserving and elevating the healthy tone of the human constitution. After a few weeks of abstention from inebriants, there is an extraordinary access of bodily strength and nerve force. This new and superabundant supply of vigour must

find an outlet, and the great point is to have a healthy outlet in energetic work of some kind. A word of caution as to moderation will not be amiss. If the amount of exercise be immoderate, a feeling of cardiac exhaustion and general weariness may be induced, which may re-awake the crave for a neurotic but temporary dissipator of lassitude. If the brain work be excessive a pathological state of neurasthenia (or nerve exhaustion) may ensue, which may prove but the prelude to a fresh inebriate paroxysm. I have witnessed this in several painful cases of relapse. Recreation and wholesome amusement are powerful allies. "All work and no play makes Jack a dull boy" is as true of the inebriate as of the teetotaller. The lack of diversion has driven many a sober man to drink, has brought on a melancholia which has transformed an abstainer into a sot. Music and the fine arts have saved many a young man and woman from becoming confirmed inebriates.

Air, exercise, cleanliness, activity.

Amusement and recreation.

Not less essential is the strengthening of the inhibitory power. No matter how strong and active a man may be, if he have the strength of a Samson or the agility of a harlequin, no matter what his intellectual prowess, if he have the intellect of a Newton or the logic of a Locke, if the faculty of inhibition be not cultivated, he may lapse into as abject servitude to inebriety as the most clownish and unlettered rustic. Education is no safeguard against drunkenness. The most learned man whom I ever knew was a habitual inebriate for years before he died. He was drunk regularly every evening, and I have known him occasionally attend meetings of important bodies, of which he was a member, in a state

The inhibitory power must be strengthened.

of intoxication during the earlier part of the day. His learning was profound and his memory phenomenal. Simple in his tastes, unostentatious in his mode of life, and so warm-hearted withal, that no more touching and generous bequests were ever made by man. The ranks of opium, chloral, chloroform, and chlorodyne inebriates, have been conspicuous by the presence of men and women of towering intellect, close reasoning, brilliant genius, perfect culture, and manifold accomplishments. All else that man can desire on earth may be his, all else that woman can wish for may be hers, but if moral control be allowed to lie fallow, none more likely to become a victim to inebriety, if temptation or any other exciting cause present itself.

By exercise.

Exercise is as essential to the health of each organ as it is to the general health. If a fractured arm is kept in splints too long, the muscles are atrophied and weakened, and are unable to fulfil their office till exercise has restored their pristine vigour. If the brain be not kept at work, the power of thought is lessened. In the same way, if the moral control is not actively employed, it, too, will sustain loss. Each time mere impulse is obeyed without an effort at restraint, the moral government loses strength. Therefore it is that resistance to the beginning of evil is so plainly enforced in the Scriptures, "My son, if sinners entice thee, consent thou not." The moral governance can be strong only when its efficiency is preserved by use. Its idleness is its death. On the other hand, each occasion on which control is wisely enforced it is invigorated and strengthened. Each renewed judicious effort contributes to its stability and its mastery.

It is of the highest importance, therefore, that firmness and perseverance in the paths of rectitude be sedulously

cultivated. Every influence tending to aid in this consummation is as a remedial agent urgently called for. The psychical tone is affected by pathological states of bodily organs, and also by the slightest physical disturbance of the nervous organisation. That is to say, the integrity of the higher nerve centres to a great extent depends on the normal state of nerve tissue and nerve function. Every derangement of the human economy wields a certain influence on mental tonicity. Therefore it is that the remedying of all morbid exciting causes is so vital a necessity in the cure of inebriety. By this rational and strictly scientific procedure the controlling power is protected from a very common source of weakness.

By moral influences.

Something more is indispensable. Besides the enfeebling of inhibition by neglect of its exercise, alcohol and other narcotics exert a directly debilitating and enervating influence on the inhibitory power. For these last reasons it is imperative to call in every auxiliary to the bracing up of the control. This immediate and serious enervation by the anæsthetic paralysing action of the narcotic, over and above the psychical disturbance by the functional commotion aroused by the poison, renders narcomania a more difficult disease to cope with than mischiefs free from a material narcotising factor. Herein, too, is a radical distinction between intoxication and other evils, such as lying or swearing, which are non-material actions. The operation of a destructive and deceptive chemical agent is peculiar to acts of inebriety, no one becoming inebriated without either drinking, smoking, inhaling, or having introduced into the body in some manner, the inebriating substance.

Difference between narcomania and merely moral evils.

By reasoning and sound instruction on alcohol and other narcotics.

To aid in the buttressing of the central inhibitory power many allies can be summoned. The reason ought to be appealed to by sound instruction on the nature and effects of narcotics and anæsthetics, by an exposition of the uselessness of these substances in a state of health, of the delusiveness of the plea that they are food for either body or brain, and of the hidden perils, all the more dangerous because they are concealed under the disguise of healthfulness, from which their use is never wholly free. The mind shculd be further enlightened as to the physical effects of the physical poison on body and brain, on organ and function, and as to the physical aspect of the narcotic bondage in which the inebriate is held fast. Inebriates should be shown that they labour under a physical disease which is generally curable in its early stages, when exciting causes can be ascertained and removed, before the volition has been seriously weakened and moral control seriously diminished. It should emphatically be made clear to them, when cured, that their brain and nervous system will still remain peculiarly susceptible to the anæsthetic and paralysing influence of narcotics, and that, to their dying day, their only safe course is to be abstainers in all circumstances from all such drinks and drugs.

"No good to fight against my fate."

It has been objected that to tell inebriates that they are diseased is to dishearten them, and to set a seal on their fate. They will say, "What is the good of my fighting against my inclination to drink, I can never be cured." Or "I have an inherited drinking tendency. What is the use of my struggling to keep sober?" The contrary ought to be the effect on the inebriate. If told judiciously, he

will understand that to find a cure for any disease, it is important first to recognise the disease, and then to comprehend its immediate and remote causes. With this knowledge, a hope of cure is as good as in rheumatism or neuralgia, or almost any other disease. The fact of having any special heredity is no reason why we should necessarily yield to it. We all have heredity of some kind. If we know its form we can avoid the causes and occasions of it—we can strengthen our body and invigorate our brain—we can add to our inhibitory power. By these means we can, if we have an inebriate diathesis, hand down to our children a weaker inebriate inheritance, with a greatly increased power of resistance and moral control.

Conscience should be approached by the inculcation of the duties owed by the inebriate to his family and to the community, and the value of the hallowed and strength-giving power of true religion should be plainly laid down. "Not by might nor by power, but by my spirit, saith the Lord." I have seen many a wasted waif, many a despairing drunkard, many a forlorn inebriate, who had failed again and again when trusting in his own strength to resist the impulse to excess, succeed at last when invoking help from on High. Not spiritual hysteria, not theological dogma, but true and unsullied religion, is a grand support to the feeble, fitful, and unstable will of the diseased inebriate. It is a strengthener of the volition as well as a purifier of the affections, a mental tonic as well as a moral alterative. In opium inebriety religion has wrought marvels. Men will submit to being locked up in uncomfortable quarters for a month to rehabilitate the system that they may be able to do with a small allowance of the drug, they having applied for restraint because they needed a

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quantity greater than they could afford to procure. Their hearts have been touched when the brain was freed from the opium and its effects, and they have continued steadfast after their discharge. On the other hand, many who have left determining to abstain, have broken down after a longer or shorter interval. With opium users religion has been the faithful and helpful ally of medicine in strengthening resolution and supporting firmness.

By rational therapeutics.

In the invigoration of the control the resources of pharmacy play a secondary part. It is a common belief that there can be no medical treatment without the profuse prescription of pharmaceutical preparations, that the advice of the physician is valueless unless he orders drugs with a lavish hand. For this reason, unfortunately the inebriate and his friends usually regard the consulting of a medical man as altogether useless. There can be no more grievous and mischievous error. Medicines are but one stone in the Æsculapian sling, one resource of the art of healing. The intelligent medical practitioner knows that physic is a good stick but a bad crutch. He uses it but does not lean on it. He employs drugs as one means of combating ill-health, but these are not the only weapons with which he essays to slay disease. Scientific medical treatment includes attention to hygiene, to diet, to the body, brain, mind, and *morale*. Everything which can contribute to the improvement of the soul and the spirit, as well as to the reparation of tissue, has its place in the medical *armamentarium*.

Common error of supposing no medical treatment without drugs.

Yet there are many who do not believe that they are properly cared for unless they are directed to swallow or otherwise apply unmistakable medicaments. This

is a natural feeling. When laid aside by illness we can with difficulty realise that we are making progress, unless we are using special means to assist us on our way. The act of swallowing, especially if the medicine have a taste of physic, is palpable to our senses, and each time we take a dose we feel that we are doing our part to promote recovery. I have myself experienced this feeling and have never failed to feel benefited by the medicine ordered by a professional colleague, even when I knew that rest and fair play to the *Vis medicatrix naturæ* were the only real needs. The mere fact of taking a medicine which has been prescribed, is of itself a remedy not to be slighted. For such, even if no medicine is indicated, it is useful to prescribe some course of gentle physic, or at least some *placebo*. In such cases a daily pill of half a grain each of ferrous sulphate and pil. galbani. co., will generally be found of advantage. Or this might be tried :—

Sometimes a placebo demanded.

℞ Tr. gentian. co., fl. dr. ss.
Acid. nitro-muriatic. dilut., fl. dr. ss.
Tr. cardamom. co., fl. dr. j.
Aq. destillat. ad fl. oz. vj.
S. A sixth part twice daily.

Gentle Tonic.

In nearly all cases of this kind, any other simple and harmless, though slightly alterative and tonic prescription, will answer. I have generally found that if the medicine be ordered to be taken for from ten to fourteen days, every useful purpose will be served.

In a few cases I have found that nothing but something like this nauseous compound seemed to make the patient realise that he was actually taking the medicine he felt he wanted :—

Mild tonic antispasmodic.

℞ Tr. valerian. co., fl. dr. ss.
Tr. calumbæ, fl. dr. ss.
Aq. destillat. ad fl. oz. vj.
S. A sixth part twice daily.

Medicines sometimes needed in larger doses.

There are, however, no inconsiderable numbers of convalescent inebriates, whose general tone and whose recovery of moral control, are decidedly aided by medicinal remedies. I have often seen the following pill prove of use:—

Nux vomica and belladonna.

℞ Ext. nucis vomicæ, gr. ¼
Ext. belladonnæ, gr. ⅛.
S. One pill to be taken twice daily.

Syrup of orange and quinine.

For alcoholic and other narcomaniacs, Beckett's syrup of orange and quinine diluted with water, which forms an elegant and palatable substitute for the bitter beer of the drinker, has answered well, as has also at times the following:—

Bark with acid.

℞ Tr. cinchon. co., fl. dr. j.
Acid. nitro-muriatic. dilut., fl. dr. ss.
Aq. destillat ad fl. oz. vj.
S. A sixth part twice daily.

Strychnia.

Strychnia is in some cases useful. It may be given in the form of pill:—

℞ Pil. strychniæ, gr. $\frac{1}{30}$.
One pill daily.

Or perhaps better,

℞ Pil. strychniæ, gr. $\frac{1}{50}$.
One pill twice daily.

This remedy may also be administered in liquid form:—

℞ Liquor. strychniæ, fl. ♏ xii.
Aq. chloroformi, fl. oz. j.
Aq. destillat. ad fl. oz. vj.
S. A sixth part twice daily.

Nux vomica with phosphoric acid is of unmistakable service with many in the restoration of healthy tissue and tone, as thus:—

Nux vomica with phosphoric acid.

℞ Tr. nucis vomicæ, fl. dr. ss.
Acid. phosphoric. dilut., fl. dr. j.
Aq. chloroformi, fl. oz. j.
Aq. destillat. ad fl. oz. vj.

S. A sixth part three times daily.

Cod-liver oil and hypophosphites. Malt with phosphates.

In some cases cod-liver oil with hypophosphites is a genuine heightener of nerve tone. Maltine or other non-intoxicating malted preparation with phosphates, is also good.

A well-known reformed drunkard, Mr. John Vine Hall, found the following, which he took regularly for seven months, a valuable remedy:—

Ferrous sulphate with magnesia nutmeg and peppermint.

℞ Ferri sulphat., gr. v.
Magnesiæ, gr. iv.
Sp. myristicæ, fl. dr. j.
Aq. menth. pip. ad fl. oz. iss.

S. The draught to be taken twice daily.

Treatment of complications.

Various alcoholic disorders which may affect the inebriate call for special treatment. Such a complication is delirium tremens. This is most successfully combatted by the careful sustenance of the strength by frequent supplies of light nutriment readily assimilated, by a brisk hepatic purge, and the administration of the bromides with chloral and henbane. Wherever I have been able to apply a hot wet pack, I have found this remedy do excellent service, diminishing the need for the prescription of strong medicinal doses to secure sleep. The delirious patient must be closely and unceasingly watched.

CHAPTER XVII.

Treatment of Inebriety *(Continued)*.

Early symptoms of Inebriety before any act of drunkenness—Nervous irritability—Frequent headache on moderate brain-work—Impetuosity—Excessive timidity, boldness, obstinacy, or exaltation—Acute sensitivity—Or depression, gloom, suspicion, morbid fears—Treatment at home in early stage—Inebriates generally have medical advice only after everything else has been tried and has failed—Inebriety should be treated at an early stage—Inebriety generally too confirmed for treatment at home—Change of country—Need for caution—Voyage in a teetotal ship—Abstaining companion—Residence with a family—Residence in a retreat for Inebriates—Any objections to such a Home outweighed by the advantages—Benefit of discipline in a genuine Home—Benefits of intellectual and general intercourse—Esprit-de-corps—Benefit of removing patient's thoughts from himself—Length of residence in a Home—Treatment should not be interfered with by friends—Bad effects of interference—Reasonable visiting allowed—Mischief wrought by unwise friends—Bad results of upbraiding and reproach—Friends should not place intoxicants before Inebriates—Choice of a Home—The Dalrymple Home at Rickmansworth—Method of treatment—Dr. Parrish's testimony—Opportunities for exercise—Results of treatment—Fort Hamilton Home in the United States of America—Results of treatment—Other Homes—Great caution needed in recommending any particular Home—Consider idiosyncracies of case—Shall the inebriate enter a Home under the Habitual Drunkards Act, or privately?—Under the Act the better course.

Earliest symptoms of Inebriety.

Inebriety may be diagnosed long before any act of drunkenness has taken place. Shiftiness, untruthfulness, excitability, unrest, ill-grounded suspicions, exalted ideas, are all symptoms to

be met with in the latent stage of the disease, before the patient has drunk a glass of intoxicating liquor.

If the inebriate and his friends realised, at an early stage of the disease, his diseased state, it may be laid down as a general rule that the treatment of inebriety would be best conducted with the patient pursuing his usual avocation. To have the mind engaged in the performance of regular duties, to be so busy at one's daily work as to leave no time for thoughts of indulgence, is no mean aid to the therapeutic care of this disease. The more leisure the inebriate has, the longer time at his disposal to dwell on his miserable slavery, the greater the danger of frequent repetition of the inebriate act. Mental occupation and bodily exercise are alike invaluable.

Treatment at home in early stages.

Unfortunately, however, it is seldom that either inebriates or their friends grasp the situation till the habit has become confirmed, till the disease has become chronic. They rarely ask medical advice till every other means has been tried to remedy what they regard as a vicious indulgence, a moral declension. Prayers, pledges, ribbons, excited gatherings, the offices of Christian friends, the clergyman and even the lawyer are usually all exhausted before recourse is had to the physician. Valuable time has thus been lost, and the Æsculapian adviser is at a tremendous disadvantage in the selection of what counsel to give.

Inebriates generally have medical advice only after everything else has been tried and has failed.

Inebriety should be treated at an early stage when, like other diseases, it is most curable. Treatment could in that case be ordered while the patient would be in favourable circumstances as regards occupation, and could continue to

Inebriety should be treated at an early stage.

be under the eye of the medical man. In such a case the medical attendant's first duty is to impress the physical aspect of the case on the inebriate and his family, to explain that he is the subject of a disease, to enforce unconditional abstinence on him, and to urge on the friends the immense help which would be rendered to the patient and to the physician if all intoxicants were at once banished from the household, and if they all set him (the only safe practice for him) the example of abstinence. It is not fair to the inebriate to environ him with an atmosphere of alcohol, and the duty of his family is plain. Under such favourable conditions, with intelligent and judicious medical treatment the highest attainable amount of success would be assured. Even in the earliest stage of the disease, there are some inebriates who, from the intensity of their inebriate diathesis or their inherited or acquired defective inhibition, are unable to resist the ever-present temptations to partake of inebriants, so long as they are subjected to their inebriate associations of friendship or of business. These in general do well if removed to new surroundings and resident for a considerable period amid new environment, free from any alcoholic opiate or other narcotic taint.

In the great majority of cases, however, the affection has become too chronic, the alcoholic addiction has been too prolonged, to admit of a reasonable hope of cure while the patient remains at home. Even in the early stage, unless intoxicants be rigidly excluded from the social board and the home, a favourable issue can rarely be looked for.

What then remains? I know of but five alternatives. 1. A change of country. 2. A voyage in a teetotal ship. 3. An abstaining companion, at home or travel-

ling. 4. Residence with a medical man, or with a family. 5. Residence in a Home or Retreat for inebriates.

1. *Change of country.* This has been a favourite device. Thousands of drunken sons have been sent abroad by their parents in the hope of a reformation. This has answered well in one or two cases with which I am acquainted. The prodigal, thrown on his own resources in a country where he must work or starve, has had his innate sense of independence aroused, and has been effectually cured. But this is a risky procedure. By far the greater part of those thus expatriated have been but the more confirmed in their inebriety, and have dragged out in a colonial or foreign clime a lingering or useless life, finally falling victims to the disease for the cure of which they were sent forth from their native hearth. If such a course be adopted, care should be taken to send the inebriate to a locality where temptation to drink is not. Nearly thirty years ago, my advice to send a youthful inebriate of several years standing to the State of Maine was followed by an excellent result. My reason for this advice was that I knew from personal observation that in five-sixths of the Pine Tree State no liquor was to be bought. In some of the larger cities the Maine law is evaded as all other laws both in America and England are, but even there intoxicants can be procured only illegally by the initiated. The Eastern States of America, of which Maine is one, are not the most suitable places for emigration, but there are now large tracts in America and Canada, and other States, where prohibition reigns, and where public temptations to drunkenness are few and far between. In our colonies, alike in the extreme cold of a Canadian

Change of country.

Need for caution.

winter and in the sweltering heat of an Australian summer, strong drink is even more deadly and swift in action than in Great Britain; and to send an inebriate abroad to a non-prohibitory region is in general only to intensify his disease and to hasten his death. In Europe, the two soberest nations are Italy and Spain. Care must also be exercised in considering the suitability of any intended climate, where rheumatic phthisical or other inter-current maladies are present.

2. *Voyage in a teetotal ship.*—Sea-air and sea-sickness do not suit all inebriates, but to those who feel at home on the mighty deep, a long voyage in a temperance ship is of priceless value. In the United States of America such vessels are more common than with us. Here they are very uncommon. Though I have had occasion to advise this course in several cases, in only one ship sailing from the shores of England could the indispensable condition of no liquor be secured. This was attained by a ship owner who owned a number of vessels. There was a teetotal captain who managed to keep his ship on that occasion entirely free from intoxicants. There are one or two lines of steamers sailing on voyages of considerable length, the owners of which do not sell liquor to the passengers. But his fellow-passengers unhappily are but too apt to supply their *compagnon-de-voyage* with his bane. Even if a strictly teetotal ship be found, close supervision must be kept over the inebriate while he is on shore at the various ports at which the vessel calls.

Voyage in teetotal ship.

3. *Abstaining companion.*—There are some inebriates who seem to be able to keep from narcotics if only they have fit associations. Their disposition is very flexible. They readily adapt themselves

Abstaining companion.

to the company in which they may happen to be. They are very much what those around make them. They are literary men, scientific observers, or artists, or if wealthy have some praiseworthy hobby which they can follow out at home. In some cases of this kind, an agreeable and reliable companion who has influence over them and will use that influence aright, is a desideratum. There are others who are fond of travel, as their health and happiness depend on change of scene and enlivenment. If long in one place they mope and pine and fly to narcotics to enjoy a temporary respite from their *ennui*. For both these inebriate types a trial might be made of a companion of the same sex, who should, if possible, be an educated accomplished and skilful medical practitioner likely to have a restraining and elevating influence on his patient. Personal abstinence must be a *sine qua non*. No one but a staunch abstainer can exert the influence needed. A qualified practitioner is most desirable, but infinitely better a suitable abstaining layman than a moderate drinking, however highly accomplished and skilful, physician. There is this advantage in the companion being medical, that the patient can be constantly under skilled supervision and treatment.

4. *Residence with a family.*—Given an abstaining family circle of irreproachable character, with a hearty welcome of the guest as a member of the household, especially if the head of the house be a medical man, this with many inebriates is an advisable step to recommend. There should be no influence in favour of alcohol or any other inebriant narcotic. There need be little or no reference to the cause of the guest's residence except privately between doctor and patient when this is necessary, but the house ought

Residence with a family.

to be quite free from alcohol and its congeners. I have also seen a prolonged term of residence with a non-medical family of decided value, especially for ladies; but on no consideration could I advise an inebriate to seek admission to any household where strong drink in every form was not excluded.

6. *Residence in a Home or Retreat.*—For the majority of cases, especially at the later stages of their inebriate career when they are usually brought to the physician for professional advice, there is nothing equal to a lengthened abode in a genuine and well-conducted Home or Retreat for inebriates. In confirmed cases some firmness is needed, with strict discipline and strong restriction, especially as to going outside the prohibitory territory of all reliable Homes and Retreats. This can be secured much more effectually in an Institution than in a private family. At most stages of the disease of inebriety, my experience compels the conclusion that inebriates (with a few exceptions already pointed out) have a considerably better hope of cure in such an establishment than either in an abstaining family or with an abstaining companion. It is impossible to enforce rules as easily and well in private circumstances as in a fit and thoroughly equipped Home.

Residence in a Retreat.

There are some objections to the congregation of inebriates for treatment, but these are trivial in comparison with the benefits. It has, for instance, been urged that the moral tone is lower among a number of individual inebriates living together than where there is only one. Whatever weight can be attached to this objection is far more than counterbalanced by the emulation where there are different individuals, besides

Any objection to a Home far outweighed by the advantages.

a sharpening of wit and a stimulation of thought, which are often of undoubted service in cultivating the intellect and elevating the tastes of the inmates.

In a reliable Home or Retreat there are regulations which must be observed in the interest of all, and the enforcement of these is backed by the power of the proprietary, which especially in an institution not for personal pecuniary profit (like the Dalrymple Home at Rickmansworth) is a moral power of no mean weight.

Benefit of discipline in a genuine Home.

All the patients are assembled together professedly with one intent. They are the subjects of a common disease, in perhaps a variety of phases. Their common object is to be cured of this disease. The very fact that they have voluntarily entered a Home is a proof that they are desirous of cure. There is this benefit in such a life under one roof, viz:—The fact that inebriety is a physical disease is, by the presence of other patients on the same quest, impressed upon the minds of all. In well-managed Homes there are discussions which stimulate thought, social gatherings which promote good fellowship, musical evenings productive of real pleasure, sacred concerts and services which purify the heart and strengthen the moral control. Most of the patients feel constrained by the general tone of the community (I speak now of the Dalrymple Home) to occupy themselves in some favourite study or taste, and the mere fact of being one of a body of guests has a tendency to infuse into all a determination to perform the duties which every member of a well-ordered family circle always owes to every other member of it. In a good Home of this kind there are grounds where the patients will have ample space whereby they may not be under the necessity of going

Esprit de corps.

outside for air and exercise. This is a most important provision, for thanks to our unrighteous legislation everywhere around us in the United Kingdom there are planted licensed temptations to drinking. There will be innocent amusement and healthful recreation in abundance, with facilities for scientific study, for the exercise of handicraft, and for artistic work. There will also be adequate medical supervision, with the opportunity of watching the disease in its manifold forms, so that each case may be treated individually with that skill which experience and observation alone can afford. The patient will be under moral as well as hygienic and medical treatment. Valuable as is the assistance from certain therapeutic agents in the arresting of the disease, in the removal of the cause exciting to the inebriate paroxysm, in the reparation of structure, in the heightening of the moral tone and the strengthening of the control, of the aid from the *Materia Medica* moral treatment is the complement. The latter is as essential as the former. The concentration of the patient's thoughts upon himself, his obliquity to truth (an obliquity at once physical and moral) are most effectually rectified by the guidance of a directing mind, by the unconscious force of a masterful friend. Personal contact with the medical guide and controlling spirit, as well as with his fellow patients, will do more to draw the narcomaniac out of his morbid egotism than a hundred lectures, or a thousand sermons.

Benefit of removing patient's thoughts from himself.

The length of time for which a patient should surrender his liberty, is a serious consideration. Not cognisant of the physical damage wrought by alcohol, nor understanding the slowness of the process of tissue regeneration, the

Length of residence in Home.

patient and his friends usually imagine that two or three months will suffice for a cure. I have even met with those who confidently and complacently talked of a month's residence curing an inebriate of twenty years' standing. If there is anything clear in medicine, it is that this is a fallacy. The wish is father to the thought. Belief in a speedy cure is unconsciously fostered by the difficulties in the way of heads of families absenting themselves from their homes, from their business or other callings, for a protracted period. But nature cannot be cheated, and it is the duty of the medical adviser to put the case plainly before the patient and his friends. In very few cases should a shorter term than twelve months be recommended. In many cases a term of eighteen months to two years is indicated. The length of the habit of inebriation must be carefully taken into account in coming to a decision as to the term of internment. Inebriety of only six months' standing does not present the extent, intensity, and permanence of tissue-change which results from inebriety of ten, fifteen, or twenty years' standing. Dr. B. W. Richardson holds that it takes from one to three years for the cardiac circulation to recover its normal tone.

On the other hand, the circumstances of the patient and family must be taken into account. It will be found that in a few cases a period of nine months or even of six months, may freely be suggested. In no case have I ever seen my way to recommend a shorter term than six months. If the circumstances do not warrant more than three months, this term can be sanctioned, as a matter of necessity, not of choice.

One caution ought to be strongly given, to leave the patient alone for some time after admission, and there after not to visit him too often. The inebriate wel

known the weakness of its dearest friends, and
often prone to insinuate complaints agai
Treatment should not be interfered with by friends. the feeding, management, company, a
everything connected with the establishme
in the hope of giving consent to his libe
tion. He also is frequently not bashful in asking
money or stamps (though the supply is against
law of the land as it is against the regulations of
retreat approved by the Government inspector), w
which he may try to procure by bribery of servants
by escape, a fruit store oliquor. After a time
reason, freed from the narcotising effects of the d
becomes clear; his judgment more impartial, and
safe, he alike useful to him, may him a visit. It is
to be guided in this matter by intelligent me
counsel. The judicious superintendent of a true h
will never prohibit the visits of friends unless these
likely to be detrimental to the patient and to inte
with his cure.

I have seen piteous cases of escape, relapse, and
Bad effects of interference. more irremediable expulsion from the
disastrous effect of the patients produce
appalling visits. J. C., aged 40, w
recovered fourteen days. He was greatly improved
was convalescent from uncomplicated mania. His
appeared and demanded to see him. The m
director endeavoured to dissuade her from this, pr
ing to let her see him in a few days more, or s
if this should appear safe. She would not list
reason and insisted on being introduced to her hus
The director, after the usual as to her behavio
the patient, arranged an immediate interview.
morning the poor fellow awoke and was brought
recognised, and it transpired that the wife, thou

had promised to gie heed to the doctor's monitions, had actually, in defnce of the rules which both she and her husband ha in writing agreed to observe, and of the law, given hir money. The truth is that as soon as the patient recoers from the immediate effects of drink, his appetite rvives, he feels strong and vigorous, and thinks he is all rght now and quite fit to go anywhere in the midst of temtation. Of course he is not. This is a most perilous eriod, this period of reaction from inebriate depressio He feels physically better than he has felt for a long tne, but is not yet in a state of mind practically sober enough to realise his actual condition. Later on, when th reaction is over and his reason is cool and clear, he ees the need for a lengthened term of residence where o temptation is presented, but now he is in an undulyelated excited and disturbed state. This interregnum f restlessness is the very time when he should be seen oly by cool-headed experienced and judicious experts, oby disinterested intelligent persons who understand th nature of the crisis through which he is passing. Theexcitement of visits from home is in most cases prejudial to him till after the reactionary stage has been pased.

Another difficult often arises from the thoughtlessness of friends. After he patient has been an inmate for a couple of months r so, sometimes sooner, he is apt to fancy himself quit cured, strong enough in resolution to marh boldly and unscathed through the world f temptation without. He works upon the felings of those near and dear to him. Sometimes withou going to see him they believe all he says, though whe they took him to the home they strongly enjoined he superintendent not to believe a word the narcomaiac said. They jump to the conclu-

Reasonable visiting allowed.

sion that a miracle has been wrought, they are persuaded that he is clothed with sobriety and in his right mind, that he is perfectly whole and need remain no longer under restraint. If he is a private patient they take him away. If he is a patient under the Habitual Drunkards Act, they worry the doctor for the miraculously cured inebriate's immediate discharge. If the doctor do not hasten to comply with their wishes, they write to the government inspector and to the Home Secretary, and threaten to write to *The Times* to expose the nefarious detention of the cured in twenty days after ten years abandoned and apparently hopeless drunkenness. They persist in this process of what one might justly call "non-alcoholic inebriety" till they either worry the superintendent to a premature discharge of the detenu by a justice's order, or till the impatient patient incontinently escapes. Incredible though it seem, I have actually known female relations subject themselves to a liability to imprisonment by aiding personally in the flight of an interned narcomaniac.

Let me give a case illustrative of the mischief done to patients by the unwise intervention of friends. W. S., aged 36, had been an habitual drunkard for eleven years. He had been nine weeks in a Home, when he tired of the place, said he was all right and could go safely back to the enjoyment of his estate. No fear of him getting drunk again. He tries the director. Not meeting with a favourable response he employs all his cunning (cunning is a quality conspicuously developed in many forms of inebriety) to interest his friends in a determined effort to secure his speedy discharge. They all combine to worry the licensee of the Retreat, who, however, is anxious that his patient should not leave till

Mischief wrought by unwise friends.

the cure is more established. The patient escapes. Being under the Act, he is brought back after having had to appear before a justice. The friends abuse the licensee for allowing the patient to escape, though they have themselves contributed to the departure by strategem against the licensee's express instructions. The same process is renewed. The patient is again convalescent, and again foolhardy and confident. The friends are hoodwinked once more. There is a second escape with the former issue. A third time the drama of departure is rehearsed, when the worried and distracted licensee, fearing the evil influence of these repeated infractions of discipline on the cure of the other patients, procures a legal discharge. Thus, thanks to the cruel and short-sighted kindness of the friends, no benefit except during the time spent in the institution, was derived in this case.

Friends should on no account worry the inebriate patient, either by letter or in person, with upbraiding and abuse. I have seen deep depression dominate an inebriate after reading a querulous epistle from his wife, abounding in reproaches and complaints. In many cases the effect would be to almost drive the patient to drinking. Protection against himself in such perilous circumstances is a leading benefit to be derived from residence in a good Home. When a man has surrendered his freedom, or shown his desire to be cured, by entering a Home for Inebriates, or by placing himself anywhere under restrictions, this ought to be looked upon as an earnest of his wish for cure, of his determination to reform. He needs encouragement, and ought to be spared expostulation. I shall never forget one case of the relapse of an educated man, who was excited to an out-

Bad results of upbraiding and reproach.

break by the mingled shame and distress occasioned by a wife bitterly rebuking him and upbraiding him with contributing nothing to her support, when he was ill, under medical treatment, and unable to earn a shilling. He had been a strict abstainer for eight months amid great temptations.

Friends should not interfere with the treatment or set temptation before the patient if he visit them. Again and again have I seen most disastrous results, both in America and in this country, from this unwise practice. To tempt a patient, who has of his own accord separated himself from his family and his business and has surrendered his liberty for a term of sojourn in a Retreat in the hope of deliverance from his besetting habit, of the cure of a dire disease, is a cruel and cowardly act. Yet this is often done by heedless friends, who by this very deed prove themselves his worst foes.

Friends should not place intoxicants before Inebriates.

L. V., 46. In residence three months. A bad case of confirmed inebriety, of some twelve years duration, but doing splendidly, and has given no trouble or occasioned any anxiety. An intimate female relative insists upon his dining with them a few miles off. The director demurs, pointing out the dangers by the way, but never dreaming of the possibility of any temptation to drinking at that relative's house. This relation, her husband, and the patient plead very hard and as he is a voluntary patient the director reluctantly consents, saying:—"Well, have your way, but you must guard him to and from your house. Remember, you are responsible for him." The patient departs with his friends and returns early next morning—drunk. It turned out that there was intoxicating drink on the dinner table, and that his hosts, without any evil design, from pure want of thought compassed his fall.

The choice of a Home for an inebriate is the most difficult task of all. Among the nearly one hundred on both sides of the Atlantic some at best are mere boarding-houses with no attempt at cure. Others acknowledge only a moral depravity in their inmates. Others recognise in inebriety a physical disease which they treat on sound scientific principles, moral and religious influences having their due place in the treatment.

Choice of a Home.

Some of these last named Homes are licensed under the Habitual Drunkards Act, some are not.

The published records of cases with the result of treatment tell a hopeful tale. During the $3\frac{1}{2}$ years which have expired since the opening of the Dalrymple Home there have been 85 patients discharged. Of these 1 has become insane, 3 have died, and 16 have not been heard from. There remain 65 whose after history is known. Of these 36 are doing well, 2 are improved, and 27 are not improved. (For complete record see Appendix).

Results of treatment.

Of 500 discharged from Fort Hamilton between 1st November, 1879, and 1st January, 1881, 283 were heard from. Of these 148 were doing well, 10 had improved, and 86 were unimproved, 29 had died, 8 had been transferred to lunatic asylums, hospitals, or almshouses, and 2 were idiotic.

There are other Homes in Canada, in Australia, and on the Continent of Europe, as well as in the United Kingdom, from which a tale of nearly as good results comes.

Before advising application for admission to any Home for inebriates, great care should be taken by the physician to acquaint himself with the character of the Home, and the

Great caution needed in recommending any particular Home.

strictness or laxity of its discipline. Better for an inebriate not to enter such an establishment than to take up his abode in one where intoxicants are not excluded, where rules are not enforced, and where patients are allowed to go out almost at their own pleasure.

It is a common belief among the relations of a drunkard that a Retreat is a place from which no inmate can escape, and that once he is received therein there is no possibility of his obtaining any intoxicating liquor in any circumstances. Indeed, if from the best conducted Home an inebriate elude the vigilance of the licensee and succeed in effecting an escape, the relations or solicitor are almost sure to wax wrath, and indignantly "demand to know what sort of a Home this is from which you have allowed this man to get out." Such persons forget that a Home for inebriates is not a prison, though indeed from the most effectually guarded prisons the imprisoned, at the peril of their life, having run the risk of being shot by sentries, do somehow occasionally accomplish their flight. All that the law of the United Kingdom does is to aid in re-capturing a fugitive inebriate on a justice's warrant in the event of an escape, provided the patient has entered under the Habitual Drunkards Act. There are some inebriates who are incurable, and others who will not for any length of time continue to observe the regulations which on admission they legally bound themselves to obey. Both of these classes are exceptional, fortunately. For the former there is no provision in this country, and residence in a Home is as useless as it is undesirable. There is but one way of dealing with them and with the insubordinate if they are in residence, viz., by expulsion. The licensee need have no difficulty. If after having been forgiven twice or thrice a patient persist in in-

fraction of discipline, or in repeated escape and indulgence in intoxicants, if a voluntary patient he can be summarily expelled. If under the Act he can be discharged from its jurisdiction under Section XII., and be converted into a private patient. He can then be given one last chance of conforming to the rules which both scheduled and private patients contract to comply with. Though it is a painful task to insist on the departure of any patient, this course is absolutely essential in refractory cases, as the presence of even one such patient seriously interferes with the effective treatment of the others. Since the Dalrymple Home has been open three persons have been compulsorily discharged by this process as not amenable to treatment.

Homes where intoxicants are used, to be avoided.

I desire above all to urge the necessity for the absence of intoxicating drink. A satisfactory Home for the treatment of inebriates ought to be a domain from which all intoxicating liquors are excluded. Other things being equal, it is very desirable that the superintendent or licensee should be an abstainer. The inebriates need to live in an atmosphere untainted by intoxicants, and if the director drinks, however little, the weight of the ruling influence is in favour of alcohol. If the non-abstaining authority never say a word in praise or defence of his personal habits, these somehow become known. The perverted moral sense of the inebriate eagerly seizes on every excuse in support of its perversion, the diseased and depraved appetite gathers fresh strength on finding an ally in the person or in the practice of the commander of what ought to be an absolutely abstaining garrison.

The personal abstinence of the staff is a tower of

strength. Alcoholic indulgence, however limited and occasional, on the part of any member of it, much more of its head, is an undeniable weakness. The whole traditions and influences of a true Home for Inebriates ought to be against all tampering with strong drink.

In advising on the selection of a Retreat the idiosyncrasies of the patient should be borne in mind, his physical ailments and susceptibility to other forms of disease, and the suitability of certain localities and climates.

Consider idiosyncrasies of case.

In choosing a Home, it must be ascertained whether the inebriate is willing to put himself under the provisions of the Habitual Drunkards Act. If he is willing, the only Home in which he can be received is one licensed under the Act. By entering under the Act, the patient, if he escape, can be retaken on a warrant and remitted by a justice to the Retreat whence he had fled. This is a safeguard, and if the patient be really anxious to be protected against himself it is, therefore, an advantage to apply for admission under the Act. I usually recommend this course. In an unlicensed Home there is no power to retake, persuasion is alone lawful, the only penalty at command is expulsion. When a patient knows that if he succeed in escaping the licensee is bound at once to apply for a warrant to recapture him, he will be more cautious in endeavouring to get away stealthily, than when no legal proceedings can be taken against him.

Shall an inebriate enter under the Act, or privately?

Under the Act, the better course.

CHAPTER XVIII.

TREATMENT OF INEBRIETY *(Continued)*.

Procedure to obtain admission to a licensed Retreat—Request for reception—Applicant's signature to be attested by two justices—Form—Statutory declaration by two persons that applicant is an habitual drunkard—Form—Charges at a Home—Entrance fee—Rates for payment for board, residence, and treatment—Ineligible cases—Other conditions—Undertaking for payment—Form—Regulations and orders of the Dalrymple Home—No money to be retained by patients—No intoxicating drinks to be introduced on the premises—No drugs except ordered by medical superintendent—Regulations against profanity, etc.—All patients to aid in the general work of cure, comfort, and happiness—Infraction of discipline entails, in private patient, expulsion, and in patient under the Act a summons before a justice—Home Secretary's additional rules provide that no patient can enter a place licensed to sell intoxicants, or can take any intoxicant, without special written authority of medical attendant—Refractory patient can be discharged—Procedure in private cases—Request for admission—Form—Undertaking for payment—Form—No provision under the Act for the poor—Philanthropic unlicensed female Homes—No provision for poor male inebriates—America provides for all classes—So do some of our Colonies—A national reproach—Many inebriates ask for protection against themselves—Some inebriates are unwilling to enter a Home—What shall we do with them?—Compulsory committal to a Home desirable—Even many bad cases of Inebriety are curable—Objection of infringement of liberty of the subject—Answer—Provision should be made at the public expense for the poor, who are willing to surrender their liberty in hope of cure—Compulsion needed for the inebriate unwilling to enter of his own accord.

Procedure to obtain admission to licensed Retreat.

To secure admission into a licensed Home the first step is to arrange with the licensee to receive the patient for a definite term. The applicant must sign a Request for Admission for any

period not exceeding twelve months, and the signature must be attested by two justices of the county in which the request is signed, or by one metropolitan police magistrate, who must be satisfied that the applicant is an habitual drunkard within the meaning of the Act, and that the applicant understands what is involved in his application for admission. The Request for Admission is in the following form:—

Request for reception.

[42 & 43 Vict. Ch. 19.]

Habitual Drunkards Act, 1879.

Request for Reception into Retreat.

To

The Home.

I, the undersigned, hereby request you to receive me as a patient in your Retreat at in accordance with the above-mentioned Act, and I undertake to remain therein for at least, unless sooner duly discharged, and to conform to the regulations for the time being in force in the Retreat.

Applicant's Signature
Dated this day of

The above-named signed this application in our presence, and at the time of his so doing we satisfied ourselves that he was an habitual drunkard within the meaning of the *Habitual Drunkards Act*, 1879, and stated to him the effect of this application, and of his reception into the Retreat, and he appeared perfectly to understand the same.

Dated this day of

Justices of the Peace for county [*or borough*] of

Applicant's Name in full
Address
Description
Witness's Name in full
Address
Description

It is also necessary to produce to the attesting justices, a Statutory Declaration signed by two persons before a Magistrate or a Commissioner, to the effect that the applicant is an habitual drunkard within the meaning of the Act. The Declaration must be in this form :— Statutory declaration.

STATUTORY DECLARATION.

The Habitual Drunkards Act, 1879.

We

severally, solemnly, and sincerely declare that
who is an applicant for the admission
into the Home for Inebriates, at
is an Habitual Drunkard within the meaning of the Habitual Drunkards Act, 1879, and is by reason of Habitual Intemperate drinking of intoxicating liquors incapable of managing himself and his affairs, and we severally make this solemn declaration, conscientiously believing the same to be true, and by virtue of an Act made and passed in the fifth and sixth years of the Reign of his late Majesty King William the Fourth, intituled "An Act to repeal an Act of the present Session of Parliament intituled, 'An Act for the more effectual abolition of Oaths and Affirmations taken and made in various departments of the State, and to substitute declarations in lieu thereof, and for the more entire suppression of voluntary and extra-judicial Oaths and Affidavits, and to make other provisions for the abolition of unnecessary Oaths.'"

Taken and declared severally
at in the
County of
this day of
188
Before me

TO BE SIGNED BY TWO FRIENDS OF THE PATIENT BEFORE A MAGISTRATE OR A COMMISSIONER.

It is a general rule for Retreats to charge an entrance fee, and to insist on all payments being made in advance. The procedure with regard to charges at the Dalrymple Home may serve as a guide to those of other Homes, though there may be some slight difference in detail. The entrance fee is £1 1*s*., and the rates range from £2 2*s*. to £5 5*s*. per week. The charge for three months' board and residence must always be paid in advance, that being the shortest term for which any one is received.

Charges—Entrance fee and rates.

Inebriates who are insane, or who are suffering from any diseased symptoms which are calculated to interfere with the comfort or cure of the other patients, are not eligible for admission. If on arrival the applicant is found to be ineligible, the payment in advance is refunded. To prevent disappointment in this way, a medical certificate is required to be forwarded with or before the advance cheque. For laundry and other personal expenses a small sum must be lodged in advance with the superintendent. It is necessary to give four weeks notice of removal before the end of each term of three months. If a patient leaves the Home from any cause at any period during the quarter, the payment in advance for the remainder of that quarter is forfeited. An important stipulation is that any orders to tradesmen for extras which may be desired for the patients, are to be given by the superintendent, and the bills for such extras are to be presented monthly. In addition to this, an undertaking for payment of board and treatment, to which a sixpenny stamp must be affixed, must be signed by the person responsible for the payments.

Ineligible cases.

Other conditions.

Undertaking for payment.

To obviate any difficulty on a plea of non-service, this

Undertaking with a copy of the conditions and regulations is printed on the same sheet as the prospectus, and a reference to them is embodied in the Undertaking which is in these terms:—

UNDERTAKING FOR PAYMENT FOR BOARD AND TREATMENT OF INMATE UNDER THE ACT.

Dalrymple Home for Inebriates, The Cedars, Rickmansworth, Herts.

To the Medical Superintendent,

I,

of

hereby agree to pay all your charges, IN ADVANCE, for

of

(who has, under the provisions of the Habitual Drunkards Act, 1879, requested to be admitted to the Dalrymple Home), in accordance with the prospectus as set forth on page 1, and the Terms agreed upon, £ : : per Quarter of 13 weeks.

SIXPENNY

Name

STAMP.

Address

Date

TO BE SIGNED BY PERSON RESPONSIBLE FOR PAYMENTS.

The following are the Regulations and orders of the Dalrymple Home, approved by the Government Inspector, a breach of which involves, on the part of a patient under the Act, a summons before a justice for an offence against the Act, and renders a private patient liable to expulsion:— Regulations and orders.

Regulations and orders approved by the Government Inspector for the Domestic Arrangements and the Management and Treatment of the Inmates of the DALRYMPLE HOME, *"The Cedars," Rickmansworth, Licensed under the Habitual Drunkards Act,* 1879.

No money to be retained by Patients.

No intoxicating drink to be introduced on the premises under any circumstances, unless specially ordered by the Medical Superintendent as a medicinal remedy.

No drug of any kind to be taken by Patients, except with the consent of the Medical Superintendent.

Unless excused by the Medical Superintendent, for sickness or other sufficient cause, all are to be present at daily prayers and the regular Sunday and other religious Services.

Hour for retiring 10 p.m. All lights extinguished at 10.30.

Patients not to go beyond the Home grounds, except with the consent of the Medical Superintendent; not to injure walls or fences, drive in nails, or otherwise deface any part of the premises, and not to interfere with the servants and employés or give them gratuities or fees.

Punctuality at meals strictly enjoined.

Breakfast 8.30 a.m.
Dinner 2 p.m.
Tea 6 p.m.

Light Supper of Bread and Cheese, if required, at 8 p.m.

Religious Services on Sundays at 10.30 a.m. and 7 p.m.

Prayers daily at 8.15 a.m. and 9.30 p.m.

Smoking strictly prohibited, except in the Smoking Room. Patients allowed to smoke at the discretion of the Medical Superintendent.

No profane, vulgar, unbecoming or contentious language allowed.

Every Inmate to take a bath, at least once a week, unless excused by the Medical Superintendent.

While spying and petty complaints are deprecated, the knowledge of any infraction of the rules, especially as to bringing intoxicating liquors on the premises or indulging in them, renders a Patient a party to the offence, unless promptly reported to the Medical Superintendent.

Each Patient to aid in the cure of himself and his fellow Patients, and by cleanly habits and courteous demeanour to do all he can to make this a cheerful and happy Home.

As this Home is only for those who have an earnest desire to be cured, infraction of discipline will render a private Patient liable to expulsion, and a Patient under the Act for an offence against the Act to a summons before the Justices.

Patients not to enter their bedrooms between 9 and 11 a.m.

In addition to the foregoing Regulations and orders, Model Rules ordered by the Home Secretary provide that no patient, without written permission from the licensee, shall enter any public house or other house where intoxicating liquors are sold; nor shall, without special written authority from the Medical attendant of a Retreat, take any intoxicating liquor, or sedative narcotic, or stimulant drug or preparation.

Refractory patient can be discharged.

It may be remembered that if a patient under the Act prove refractory or surreptitiously obtain intoxicants, and the licensee deem it wise in the interests of discipline and of the other patients, he may procure the discharge of any such patient on application to a justice, no matter how long or how short a portion of the whole period of detention be left.

The patient's friends should note that any person inducing or knowingly assisting an habitual drunkard to escape from a Retreat, or without the authority of the licensee or medical officer bringing into a retreat, or without the authority of the medical officer (except in urgent necessity) giving or supplying to a patient under the Act any intoxicating liquor, or sedative narcotic, or stimulant drug or preparation, is guilty of an offence against the Act. This involves liability to a penalty not exceeding £20, or at discretion of the Court imprison-

ment for any term not exceeding three months with or without hard labour.

Procedure in private cases.

The procedure in the case of private patients, who decline to go in under the Act, is practically the same, with the exception that there is no attestation by justices or production of a Statutory declaration. The private patient signs the following request for admission, affixing a sixpenny stamp:—

REQUEST FOR ADMISSION OF PRIVATE PATIENT.

To the Medical Superintendent of the
Dalrymple Home for Inebriates, Rickmansworth.

Date

I desire to enter the "Dalrymple Home for Inebriates" as a Private Patient, and I hereby undertake to comply with your Regulations as set forth on page 2, during the term of my residence in the Home.

I further acknowledge and agree that should I wilfully commit a breach of such Regulations or any of them, you shall be at liberty to expel me, without notice, from the Home.

SIXPENNY STAMP.

Patient's Name

Address

There must also be a medical certificate as to the health of the patient, to ensure that no one is admitted to the Home who is labouring under any symptoms which might affect the treatment of the other patients, this being an institution for the treatment of inebriety alone.

The friend responsible for the payments signs the

following undertaking, to which a sixpenny stamp is also to be attached:—

UNDERTAKING FOR PAYMENTS FOR PRIVATE PATIENT.

I
of hereby agree to pay all your charges in advance for the above named in accordance with the Prospectus as set forth on page 1, and the terms agreed upon, viz., £ : : per Quarter of 13 weeks.

SIXPENNY STAMP.

Name

Address

Date

TO BE SIGNED BY PERSON RESPONSIBLE FOR PAYMENTS.

The above accommodation is for those patients who are able to pay, or whose friends are able and willing to pay for them. There is no provision in English Homes for Inebriates under the Act, for the destitute or for drunkards of very limited means. £2 2*s*. per week is the lowest charge at any licensed Retreat.

No Provision under the Act for the poor.

But there are some philanthropic unlicensed Homes for females where they are resident as private patients, contributing their services to the institution in the shape of work of some kind. The average charge for this class is 21*s*. per week, though at a few Homes they are taken at varying rates and even at times free. There is thus a much more plentiful provision for female than for male inebriates of limited resources.

Philanthropic unlicensed female Homes.

No provision for poor male inebriates.

For the impecunious male inebriate, with the exception of one recent experiment on a small scale, there is but one refuge, the workhouse, a recommendation which it has been my painful duty to give to some clerical and other educated narcomaniacs.

America provides for all classes.

It is far otherwise in the United States of America. There all classes of inebriates are in some States cared for. Those who can pay a little, those who can pay nothing, are cared for as well as those who can pay high rates. Magistrates too have the power to send inebriates to a Retreat instead of to prison, when charged for drunkenness and offences connected therewith. In the latter case the cost of maintenance is borne by the rates. In like manner, in some of our Colonies, provision is made for the payment of charges of maintenance at the public cost.

So do some of our colonies.

A national reproach.

Does not the narration of these facts call a blush of shame on the cheek of every reader of this book? Is not our neglect to provide medical care and treatment for the poorest victims of the disease of inebriety a disgrace to our humanity and a NATIONAL REPROACH?

Many inebriates ask for protection against themselves.

Many of the victims themselves see the need for restraint and urgently ask for it, as often does a well-off cab proprietor in London, who, when he awakes to find himself drunk, insists on a cab being called and at once giving himself up at the nearest police station as being drunk and incapable; and as lately did a young woman, after thirty previous apprehensions for drunkenness, who when charged before a Metropolitan police magistrate for attempting to commit suicide by hanging, exclaimed,

"I can't keep away from the drink, I have such a dreadful craving for it. I would like your worship to make me find sureties, which I cannot find, so that I may be kept in prison away from drink."

Some inebriates are unwilling to enter a Home.

In addition to the large number of diseased and impecunious inebriates who are most desirous to have the opportunity of surrendering their liberty for a time for curative purposes, there is a considerable residue of confirmed drunkards whose moral sense has been so perverted and whose will-power has been so undermined that they will not of their own accord move hand or foot to strike a blow for freedom, or listen to the advice that they should apply for admission into a non-alcoholic Home. Many of these are not amenable to treatment, are in fact incurable.

What shall we do with them?

Such are our diseased habitual drunkards. What are we to do with them? Some reply, "drunkenness is a vice. Let them kill themselves; why should they not? and the sooner the better." How such an answer could be given, how such a line of conduct could be defended in this nineteenth century of the Christian era, is utterly beyond my comprehension. Let the beginning of the hapless victim's intemperance have been in thoughtless abandonment to a dangerous pastime, in selfish indulgence in a vicious habit, or in criminal dalliance with an unlawful pleasure, as he crouches at my feet, and with palpitating heart and quivering tongue implores me to save him from himself, if I could turn coldly away and bid him go die and make a speedy ending on't, I could but look upon myself as—

> "A stony adversary, an inhuman wretch,
> Uncapable of pity, void and empty
> From any dram of mercy."

It may be in strict accordance with the stern decrees of justice, though I doubt it, to leave the unhappy victim to his fate and raise not a hand to stay the arm upraised to bear the poisoned chalice to the mouth—It may be just, though I more than doubt it, for those who, with a healthy brain and strong will, aided by intellectual, moral, religious, and social restraints, have been preserved from falling under the sway of that devouring appetite to which a diseased brain, a feeble will, or a hereditary predisposition through the poisoned body and brain of one or both parents, has rendered others an easy prey, to pass by on the other side and leave the drunken slave, with no hope but the grave, to his chains, his wretchedness and his despair. But is it right? Let us treat the despairing captives of alcohol as we ourselves have been treated—let us deal with them as we have been dealt by—let us temper our justice with that compassion to which we owe so much—let us be just, but let us, too, be merciful.

> "Why, all the souls that were, were forfeit once;
> And He that might the vantage best have took
> Found out the remedy. How would you be
> If He, which is the top of judgment, should
> But judge you as you are? Oh, think on that,
> And mercy then will breathe within your lips,
> Like man new made."

But it has been urged that the cure of the habitual drunkard is hopeless. Were it so, the enterprise is yet lofty, the undertaking noble. Could we do no more than snatch the victim for a time from his persecutor and restore him to tolerable health and strength, to such health and strength that if he only keeps the enemy at bay by totally abstaining he will be permanently cured, we should achieve something well worth trying for.

The difficulty of an undertaking is no reason why we should not attempt its accomplishment, and, hard though the task may be, we have much to encourage us. The possibility of the permanent reformation and cure of habitual drunkenness has now been placed beyond dispute by a great company and cloud of witnesses.

Even bad cases of Inebriety are curable.

A few years ago a magistrate's clerk in the metropolis is reported to have declared, in the course of a trial involving the character for temperance of one of the witnesses, "everybody knows that teetotallers are nearly all reformed drunkards." Were this true it would indeed be a magnificent result, as it is generally conceded that there are more than 4,000,000 of water-drinkers in the realm; but, though I fear we cannot claim anything like so great a triumph, I have no hesitation in saying that I am within the mark when I aver that a quarter of a million of human souls have in this country alone been raised from drunken death to abstaining life.

I have myself known of the cure of what seemed to be absolutely and hopelessly incurable cases, and my own efforts in the cause of abstaining temperance have taught me that no case is utterly hopeless and wholly beyond remedy, so that I will never despair of the rescue of anyone, no matter how shattered his nerves or how weak his resolves, or though he be

> "A creature unprepared, unmeet for death."

In the long roll of temperance worthies will be found the names of many a brand plucked from the burning, and no conqueror of ancient or modern times can boast of so numerous and glorious an array of hard-won trophies as can the great total abstinence movement,

wherever with true Christian fervour it has raised its triumphant banner aloft,

> "Pointing the spirit in its dark dismay,
> To that pure hope which fadeth not away,"

The other day a woman of only 35 years of age was found intoxicated and in peril of her life on the top of a ladder 60 feet high. She had previously been convicted 120 times of drunkenness.

Another most distressing case presents itself to my memory. An amiable and accomplished lady, aged twenty-six, the wife of a devoted and excellent husband, has taken to drinking during the last few years. She is one of the victims to that most demoralising of all legislative measures—The Grocer's Licensing Act. It was long ere she sank so low as to enter a public house, and was wont to purchase her weapons of suicide at the grocer's, and the railway refreshment bars. Everything that can be done has been done to save this poor unhappy worshipper of Bacchus, but in defiance of all she is daily drinking herself to her grave. Nothing more can be attempted for her under the present laws; but had we a Compulsory Seclusion Bill she might be separated from her destroyer for a season, with some glimmer of hope that one day she might regain character and self-respect. But this would be an interference with the liberty of the subject! Liberty for the subject to do what? To commit suicide, not so speedily, but as surely as by potion, steel, or cord; to harass, humiliate, and disgrace home, family, and husband. This is not liberty, but license; license as hideous as liberty is beautiful. "O Liberty, Liberty, what crimes have been committed in thy name!" but never has thy lofty banner

Objection of infringement of "liberty of the subject."

been subjected to so gross an insult as is offered in this miserable objection! Such a plea is a profanation of the hallowed birthright purchased for us by the blood and lives of our forefathers, and true freedom revolts at the degradation and the shame. However the habit of drinking may have originated, it has now, in such cases as the last which I have narrated, become a veritable disease demanding the iron hand of restraint and the most tender yet firm medical care. There is no slavery so abject as the slavery to strong drink, no tyranny so terrible as the absolute possession by alcohol or opium of the body and the soul of the crushed inebriate. Enforced seclusion from temptation is his best hope of emancipation from his degraded serfdom; compulsory residence and treatment in a genuine Home for Inebriates is, to such, the Magna Charta of restoration of real and unfettered liberty.

Compulsion needed for the inebriate unwilling to enter of his own accord.

For the poor and the destitute inebriate who is willing to intern himself in a genuine Home for the treatment of inebriety, provision should be made at the public expense. For rich or poor who, though committing suicide by strong drink, ruining and loading with suffering shame and reproach their sorely tried families, and incompetent to manage their own affairs, are too broken down by inebriate indulgence to assent to seclusion, the law ought to provide for compulsory committal to such a Home for care, control and treatment.

of parliament that the efficient and complete provisions of the late Dr. Donald Dalrymple's measure for the reception of voluntary applicants for admission to a Home and the compulsory committal thereto of confirmed drunkards unwilling to surrender their liberty, were prevented from passing through the British House of Commons. It was from their opposition that only a limited term of ten years was allowed to the comparatively feeble and incomplete Habitual Drunkards Act of 1879. I do not state this by way of reproach, for the motive which I believe prompted this somewhat sorry legislative treatment of what was practically a medical proposal, was a praiseworthy regard for the preservation of the sacred right of the liberty of the subject. The legal objection to Habitual Drunkard Legislation has been based on the fear that persons might be deprived of their liberty for a year, under cover of these special legislative provisions, by being made drunk and and while drunk being persuaded into signing away their freedom for a time. That this fear is groundless an inspection of licensed Homes would demonstrate, there being no force used, no secrecy, and every facility for visitation, besides government inspection, with the right of appeal for enquiry and discharge to several independent authorities by the patient or his friends. I am persuaded that if the legislative members of the learned profession of law could only have seen the absolute possession of the inebriate by his besetting disease and the abject bondage of his wife and children to one who was the slave of slaves and had already yielded up his freedom, our legal members would have been the loudest in demanding the fullest and most thorough

Opposition to habitual drunkard legislation mainly legal.

Based on presumed danger to liberty of the subject.

This fear unfounded.

going legislation for the compulsory care and control of the habitual drunkard, for the protection of his friends and the community from his recklessness and violence.

Law and medicine should combine to devise proper legislation.

As inebriety is a mental and physical disease requiring medical treatment, involving serious consequences to the person and property of others as well as to the commonwealth and to the government, the physician and the lawyer should meet on equal terms and combine to secure the fittest legislation for the interests concerned.*

United States advocacy of legislation.

To the United States of America we are indebted for the earliest modern attempt to point out the diseased state of the inebriate, and the need for his scientific treatment. It is a century since the illustrious Dr. Benjamin Rush taught the doctrine, and inaugurated this crusade which has already achieved splendid results on the American continent. The American Association for the Cure of Inebriates, since its foundation by Dr. Parrish, in 1877, has laboured hard to elucidate and expound the truth, its *Quarterly Journal of Inebriety* under the Editorship of Dr. T. D. Crothers, being a mine of wealth to those who desire to arrive at a sound basis of legislation.

The United Kingdom.

The movement on behalf of legislation for habitual drunkards appears to have been first proposed in this country in 1839, in his popular prize essay "Bacchus," by the late Dr. R. B. Grindrod. This clear-headed and far-seeing pioneer of temperance then recognised what some fashionable

* It is only right that I should here acknowledge the valuable and unceasing services of several members of the legal profession, who are in thorough agreement with my exposition of the disease aspect of inebriety.

temperance reformers now-a-days seem to be in total ignorance of—the physical aspect of intemperance, and the diseased condition of the confirmed inebriate.

Favoured by an approving reference in the Report of the Scottish Lunacy Commissioner in 1857, important papers by Sir Robert Christison and Drs. Peddie and Bodington in 1858, and by other influential testimonies, the necessity for legislation for such diseased inebriates gradually became apparent to intelligent medical men and social reformers, till Dr. Dalrymple, M.P., brought his first Bill before the House of Commons in 1870, and, following on valuable evidence before a Select Committee, in 1872, his second Bill. After his deeply lamented death the work was carried on by a joint Committee of the Social Science and British Medical Associations, thereafter merged into a Special Association for the Promotion of Legislation for the Control and Cure of Habitual Drunkards, and notably by the late devoted Stephen Alford. The latter Association drafted a Bill which was taken charge of by Dr. Cameron, M.P., and Earl Shaftesbury, in the Houses of Commons and Lords respectively. During the past three years the need for better legislation and the formation of a sound public opinion have been energetically enforced by the Society for the Study of Inebriety, under whose auspices the first International Congress ever held to consider the diseased state of the inebriate and legislation to promote his cure, has recently been assembled in London. The attendance at the Congress was influential and representative, comprising delegates from England, Scotland, Ireland, Wales, Canada, Australia, New Zealand, the United States of America, France, Germany, Russia, Austria,

British Medical Association.

Society for Study of Inebriety.

Sweden, Norway, Italy, Belgium, and other countries. The publication of the papers in The "Proceedings" of the Society, has awakened widespread and deep interest.

The Dalrymple Home was established in 1883 by a philanthropic incorporated society, "The Homes for Inebriates Association," for the purpose of ensuring a disinterested and thorough trial of the experiment of scientific care and treatment of the inebriate, under the provisions of the Habitual Drunkards Act, and under conditions believed to be most favourable to cure. During the three and a half years since the opening of this Home, there have been 103 admissions, of which 35 were for the term of twelve months.

The Dalrymple Home.

Dr. Dalrymple's original Bill provided for the admission into retreats of habitual drunkards—

Dr. Dalrymple's Bill.

1. *Voluntary.*—Simply on their own written request that they were such, and that they desired to be admitted.

2. *Compulsory.*—On the request of a near relation, friend, or guardian, or on the certificate of two duly qualified medical practitioners, and the affidavit or declaration of some credible witness. The Bill also provided for the establishment of inebriate reformatories, or sanctuaries, or refuges, and for the maintenance of habitual drunkards therein, to be charged on the rates; for the appropriation by boards of guardians of a special place for habitual drunkards, for the committal of a pauper habitual drunkard to a retreat, on the production of two medical certificates, for a limited period, and for the committal, without certificate, of any person convicted of drunkenness three times within six months.

Dr. Cameron's Bill.

The Bill introduced by Dr. Cameron in 1877, was much on the same lines, but leaving it to a jury instead of a magistrate to decide whether any person, for whose compulsory committal to a retreat application was made, was an habitual drunkard; and with the additional proviso that any one without lawful authority taking into a retreat, or giving to any person detained therein, any intoxicating liquor, or sedative or stimulant drug, should be deemed guilty of an offence against the Act.

Habitual Drunkards Act, 1879.

The opposition to most of these proposals was so resolute that the sponsors of the Bill, in order to secure its passage, were compelled to withdraw the more thorough-going provisions. The final issue, for which great praise for their tact and perseverance is due to Lord Shaftesbury and Dr. Cameron, was the enactment of the Habitual Drunkards Act, 1879, a measure far short of what the friends of habitual drunkard legislation asked for, but still of the highest importance as the affirmation of a principle.

Definition of habitual drunkard.

The Act defines a "habitual drunkard" as "a person who, not being amenable to any jurisdiction in lunacy, is notwithstanding, by reason of habitual intemperate drinking of intoxicating liquor, at times dangerous to himself or herself or to others, or is incapable of managing himself or herself, and his or her affairs."

Voluntary admission.

By the provisions of the Act, a habitual drunkard may be admitted into a retreat licensed by the local authority, to which retreat is attached a qualified medical practitioner, on the production of a statutory declaration by two persons that the applicant is a habitual drunkard, and on his

own application for admission for any period not exceeding twelve months, which application must be attested by two justices who shall have satisfied themselves that he is a habitual drunkard, and has understood the effect of his application for admission and reception. The applicant, once so admitted, unless discharged or legally authorised by license, is not at liberty to leave the retreat until the expiry of the term for which he has signed away his liberty. If he escape, a warrant may be issued for his recapture. The introduction into a retreat, and the supplying to any inmate detained therein, of any kind of intoxicating liquor, or sedative narcotic, or stimulant drug or preparation, without the authority of the licensee or medical officer, is prohibited.

Re-capture on escape.

Intoxicants prohibited.

The laudable jealousy for the preservation of individual liberty which has so retarded the progress of habitual drunkard legislation in Britain, as compared with our Colonies and with the United States, has raised in the minds of some a prejudice against Homes for Inebriates, from the belief that they are places where persons may be deprived or cheated out of their liberty, and detained against their will illegally and improperly.

Prejudice against licensed Retreats.

This is a complete misapprehension, and there is no foundation for it. A statement of the steps that must be taken in applying for a license to keep a Retreat, of the regulations to be complied with by the licensee, and of the provision for the inspection of the institution and the discharge of patients, will probably do more than anything else to dispel such suspicions.

No ground for it.

Anyone seeking a license to keep a Retreat under

the Habitual Drunkards Act must apply in a prescribed form* to the local authority through their clerk. This local authority in England is, in a borough or city corporate having a separate court or quarter sessions, the justices of the peace for the borough or city in special sessions assembled, and in a county district the justices of the peace for the county or place in general quarter sessions assembled. In Scotland, in a county, the county justices of the peace in general or quarter or special sessions, and in a burgh, the provost and magistrates. In Ireland, in a borough the recorder, and in a county district the justices of the peace for the county. The applicant must declare how many patients he applies for, and must undertake to reside in the house and give his personal attention to the management, care, and treatment of the patients. The house must be described, and a plan submitted on a scale of not less than one-eighth of an inch to a foot, showing the dimensions of each room, the arrangements for separation of sexes (if both sexes are applied for) the quantity of land available for exercise and recreation, and the extent of applicant's interest in the house. The application must be made not less than ten days before the meeting of the local authority, and must be advertised by the clerk in a local newspaper at least six days prior to the meeting. A license may be granted to two or more persons conjointly, provided one of these resides in the retreat and is responsible for its management. Each retreat must have a duly qualified medical attendant, if the licensee is not one. As the license does not extend beyond thirteen months, yearly appli-

Steps to be taken in applying for license to keep a Retreat.

Publication of application.

* See Appendix.

cation for a renewal is necessary. No person who receives lunatics can obtain a license for a retreat for inebriates. If the license be granted or renewed it bears a stamp duty of £5, in addition to 10*s*. for every patient above the number of ten. All the clerks' expenses connected with the granting or renewal must also be paid by the applicant. The local authority can transfer a license in the event of death, incapacity, bankruptcy, or disablement. If a retreat becomes unfit or unsuitable for residence, the local authority or inspector can discharge the inmates. In such event the licensee must communicate with one of the signers of the preliminary guarantee or statutory declaration. No habitual drunkard can be admitted to a retreat under the Habitual Drunkards Act before he has applied in writing to the licensee in a prescribed form, stating the time during which he will remain in the retreat (which may not exceed twelve months).

No person keeping lunatics can have a license.

Stamp duty.

Transferance of license.

Closure of unfit Retreat.

Applicant for admission must apply in writing, attested by two justices.

The signature to the application, which must be accompanied by a statutory declaration by two persons that applicant is a habitual drunkard, must be attested by two justices of the peace (it has recently been laid down by the Home Office that these must be of the county where the attestation is made) who must not attest till they have satisfied themselves that the applicant is a habitual drunkard, and thoroughly understands the effect of his application for admission and reception into a retreat. The patient must then of his own accord enter the retreat, and

Statutory declaration by two persons.

Notice of admission to be sent to local authority and Home Secretary.

within two days thereafter the licensee must send a copy of the application to the clerk of the local authority and the Secretary of State. Any patient under the Act may at any time be discharged by a justice, on a written request from the licensee. A judge of the High Court of Justice or a local county court judge may at any time appoint any one to visit and examine a patient in a retreat, and on the receipt of the visitor's report, order the patient's discharge. The Secretary of State may also at any time order the discharge of a patient. A justice may, at the request of the licensee, grant leave of absence to a patient for not longer than two months, and renew this leave until the expiry of the whole period of detention. There is a government inspector of retreats who is bound to visit them not less than twice in every year, and to afford every patient under the Act an opportunity of lodging complaints or requests. He is also bound to report yearly to government the names of the licensees, the number of patients admitted and discharged, with observations on the state of the retreats and the patients. This report becomes a parliamentary paper.

Discharge at request of licensee.

Judge can order visitation and discharge.

Leave of absence.

Government inspection.

The authorised plan must be hung up in the building, distinguishing the apartments at the disposal of the patients. The licensee must keep a register of admissions and of discharges and deaths, and he or the medical attendant must keep a case-book with the particulars of each case and the treatment. The licensee must keep a visitors book, in which is bound a copy of the Habitual Drunkards Act, for the insertion of remarks by the inspector, which remarks must be forwarded within

Exhibition of plans.

Books to be kept.

thirty-six hours to the Secretary of State. The licensee must also keep a list of all patients present or absent, with the payments made for each.

Report by licensee to inspector, local authority, and Home Secretary.

Within two days after death or discharge of a patient the licensee must inform the clerk to the local authority and the Secretary of State of the event, and also notify the inspector by registered letter of every license for absence or leave, with the name and address of the host of a patient absent on leave. Every escape and return of patient must also be made known by registered letter to the inspector within the same period.

Inspection at any time.

All parts of the retreat must always be open to the inspector, and every patient under the Act must be shown to him at his visits. The licensee and the medical attendant must give every information asked for by the inspector conformable to the law, regarding books and patients, furnish copies of entries, and when requested by the inspector furnish him with a special report on the mental and bodily condition of any patient on the register of the retreat.

Procedure if insanity occur.

If a patient become insane the licensee must at once notify by registered letter to the inspector, the guarantor and one of the Statutory Declarators, and the local Relieving Officer, that the insane patient may be placed under proper care and control as a lunatic.

Separation of sexes

In any retreat where patients of both sexes are received, satisfactory arrangements must be made for their separation at night, and at all but defined hours during the day.

Visits by friends.

No reasonable visits from friends are refused by intelligent superintendents. If the licensee prohibit the visit of a friend of a patient,

notice with the reasons must be at once given in writing to the visitor, entered in the case-book, and a copy of the entry forwarded to the inspector within twenty-four hours. The inspector can give an order to a friend or medical practitioner to visit any patient either for admission once, or for a limited number of times, or generally at all reasonable times. The licensee may at his discretion insist on the presence of an official at interviews between patients and visitors of opposite sexes.

Letters from patients.

The licensee must forward any suppressed outgoing letters, suppressed because having been suspected of having been written to obtain intoxicating liquor or other prohibited articles such as money, to the inspector within forty-eight hours. All letters addressed to the Secretary of State, to a judge, to the local authority or clerk, or to the inspector, must be forwarded unopened without delay.

Penalties for offences by official staff.

Every attendant and servant must be informed of the offences specified in the Act and of the penalties attached thereto, and must be furnished with a copy of all orders and regulations. Any officer, servant, or employé wilfully neglecting a patient under the Act, or assisting him or her to escape, or without the authority of the licensee bringing into the retreat or supplying to any patient any intoxicating liquor, or sedative narcotic, or stimulant drug or preparation, is guilty of an offence against the Act. The penalties for offences against the Act for officers, servants, employés, or others who are not patients, on summary conviction shall not exceed £20 or three months imprisonment with or without hard labour.

If the licensee knowingly and wilfully fails to comply with the provisions of the Act, or neglects or permits to

be neglected any inmate under the Act, he is guilty of an offence against the Act.

The inspector is the prosecutor for all offences against the Act or authorised rules, except in the case of attendants who are prosecuted by the licensee and dismissed if convicted. Prosecutions.

The regulations and orders for the management of each retreat, which must within one month from the granting of the license be submitted by the licensee to the inspector, must be approved by the inspector. Regulations.

It will be evident from the enumeration of all these precautions that a licensed retreat for inebriates is not a prison, and that the liberty of the subject is so safeguarded that there can be no fear of any wrongful detention or seclusion. Liberty of the subject perfectly safeguarded.

CHAPTER XX.

Inebriety in its Medico-Legal Aspects *(Continued)*.

American and Colonial Legislation for the Cure of Habitual Drunkards.

Desirable to review legislative provision elsewhere—Legislation in the United States of America—First Act in 1854—Act of 1857, for medical treatment—Reception of voluntary and involuntary patients—Act for King's County Home, 1867—Transference to Home of persons imprisoned for drunkenness—Present modes of admission in the State of New York—Committal of habitual drunkard to Home—Estate chargeable with cost of board—By Act in 1875, the Home receives 12 per cent. of the license fees for Brooklyn—Act of Illinois, 1867—Inmates required to work—Home to receive 10 per cent. of drink license fees—Act of Pennsylvania, 1867—Committal of inebriate to Sanitarium on certificate of two physicians duly attested—Texas—Connecticut, 1874—Power of Committal to Home by Court of Probate—Period from four months to three years—Patients can be allowed out on probation—A Supreme Court Judge can order discharge—New Jersey—Voluntary admission either before a justice or without attestation—Judge may commit to a Home—County or city to pay charge for destitute inebriates committed to a Home—Colonial legislation for habitual drunkards—Canada—Ontario—admission on simple application by inebriate and signing of an agreement—Involuntary patients—Expulsion if not amenable to treatment—Expulsion for breach of discipline—Committal by Provincial Secretary after enquiry by a judge—The escaped can be retaken by any authorised person—Inebriate's property liable for charges of board—Provision for poor—Definition of drunkard—Quebec—Interdiction of inebriate by judge after report by family council—Loss of civil rights by the interdicted—Sale or gift of liquor to the interdicted prohibited—Curator can place

the interdicted in licensed Home for Inebriates—Nova Scotia—Interdiction and power to intern similar to Quebec—New Brunswick—Committee of inebriate appointed by judge—Power over estate—Manitoba—Interdiction and committal by judge—Civil incapacity of the interdicted—Prince Edward Island—South Australia—Grant by government—Committal for drunkenness three times within six months—Voluntary admissions—Committal by a judge or two justices on certificate by two doctors—Regulations—Victoria—Voluntary admissions—Committal by judge for twelve months on statutory declaration by two medical men—Any authorised person can retake—Medical superintendent empowered to appoint substitute—New South Wales—New Zealand—Committal by judge on evidence of two doctors—Penalty for refusing to work—Free patients—Her Colonies set England a good example.

To enable us to form a deliberate and judicious opinion of the amendments needed to make our English legislation more effective, it may be well to examine into that of other countries and of our own possessions beyond the confines of the United Kingdom.

Legislation in the United States.

First Act in 1854.

Act of 1857 for medical treatment.

The first American Act with reference to an asylum for inebriates, of which I can find any record, was passed in the State of New York in April, 1854. In 1857, in the charter of the State Inebriate Asylum, incorporated 27th March, the object was stated to be "the medical treatment and control of the inebriate." The institution was empowered to receive and retain all inebriates entering either voluntarily or by order of the committee of the habitual drunkard. All poor and destitute inebriates admitted were to be employed in useful occupation. All monies accruing from their labour, after deducting the expenses of their board in the asylum were to be sent to their families monthly. If no family, the overplus was to be paid to the patient on

Reception of voluntary and involuntary patients.

his discharge. The committee of the habitual drunkard, duly appointed, might commit him or her to the custody of the trustees or other officers of the asylum, there to remain till discharged by the committee.

Act of King's County Home, 1867.

The Inebriates Home for King's County, New York, incorporated May 9th, 1867, has power to receive inebriates either voluntarily applying or by order of the trustees, for a period not exceeding six months. The trustees can visit the county jail and choose of the imprisoned for intoxication or habitual drunkenness such as they think fit subjects for the Inebriates' Home. On the certificate of the President of the Home the jailer hands over the prisoner to the authorities of the Home.

Transference to Home of persons imprisoned for drunkenness.

Committal to Home of habitual drunkard.

Upon being satisfied by return of a commission that any person is a habitual drunkard and incapable, in consequence thereof, of conducting his or her affairs, a justice can commit the habitual drunkard to the Home for any period not exceeding one year.

Estate chargeable with cost of board.

The estate of anyone committed to the Home is liable for charges for his support therein, and his committee must pay out of his estate the charges fixed by the justice.

Home receives annual share of license fees.

By the Acts of various years this Home received a considerable contribution from the fees paid for liquor licenses in Brooklyn. By the Act of 1875, this annual revenue was fixed as at 12 per cent. of the license monies.

Act of Illinois, 1867.

The officers of the Washingtonian Home of Chicago, incorporated February 16th, 1867, can receive and detain till the expiry of the original term of sentence, any person sentenced by the authorities

of the City of Chicago for intemperance, drunkenness, or any misdemeanour caused thereby. The officers can require inmates to work. Ten per cent. of all monies received for spirit, wine, or fermented liquor licenses to be paid by the City and County Treasurers to the authorities of the Home.

Inmates required to work.

Home to receive 10 per cent. of drink license fees.

If there is no committee of a habitual drunkard, the proper officer of the Pennsylvania Sanitarium, incorporated 1867, can receive and detain the drunkard upon presentation by his guardian, or next friend, of a certificate by two physicians attested by a judicial officer having authority to administer oaths. The certificate must set forth that the physicians have examined the alleged drunkard, that they are satisfied he is addicted to the intemperate use of alcohol or other inebriant, and that they are of opinion he is a fit subject for treatment. The judicial commissioner must attest that the physicians are practitioners in good repute and that their signatures are genuine.

Act Pennsylvania, 1867.

In Texas an appropriation of one hundred thousand dollars was made by the legislature for construction and equipment of an Institution for the Cure of Inebriates.

Texas.

By an Act of the State of Connecticut, approved 25th July, 1874, the Court of Probate for the district, on application of a majority of the select men of the town where he resides, can issue an enquiry into the allegation that any one is a habitual drunkard or dipsomaniac, or so far addicted to intemperate use of stimulants or narcotics as to have lost the power of self-control. If the first or last allegation is proved the individual can be commited to an inebriate

Connecticut Act, 1874.

Power of committal by Court of Probate.

Period from 4 months to 3 years.

asylum in the State, for from four to twelve months, but if a dipsomaniac for three years. A certificate by two physicians and duly attested must be produced before the order of Commitment is granted. Any person so detained can be allowed out on probation at the discretion of the management of the the Home. Voluntary patients can be detained for any period between four and twelve months. On information of unjust detention any Supreme or Superior Court judge can issue commission of enquiry and discharge the patient. The managers of the Home can discharge patients pursuant to their rules and regulations.

Patients can be allowed out on probation.

A Supreme Court judge can order discharges.

In New Jersey (Assembly No. 311) the signature of an applicant for admission to a Home or Hospital for Inebriates may be attested by one justice of the peace of the county where the applicant resides; or the applicant can present himself voluntarily at the Home and the filling up of a similar form is as binding as when attested by a justice, or a person in a state of intoxication can be received, who, on becoming sober can sign a valid and binding application.

New Jersey.

Voluntary admission either before a justice or without attestation.

Any judge can, on the sworn certificate of two physicians in good standing, commit an inebriate to such Home or Hospital there to remain till in the discretion of the officers he is discharged. The cost of maintenance, in destitute cases, is charged on the county or city from which the inebriate was received, the corporation being authorised to defray these costs from the poor-tax, or from a portion of the monies collected for licenses to sell intoxicating liquors.

Judge may commit to a Home.

County or city to pay charge for destitute Inebriates.

Colonial Legislation for Habitual Drunkards.

The example set us by many of our Colonies in legislation for the habitual drunkard is so remarkable as to need no apology for a *précis* of it.

In the Dominion of Canada, nearly all the legislatures of the various Provinces have enacted effective measures for the care and treatment of habitual inebriates. Canada.

In Ontario an Act to establish a hospital for inebriates (36 Vic., cap. 33) was assented to in March, 1873. The admission of voluntary patients and the committal of inebriates who decline to apply for admission of their own accord, are provided for. Application for admission may be made in writing by *bona fide* residents in the Province, provided it is certified to the satisfaction of the superintendent of the licensed Retreat that applicant is an inebriate, and is a reasonably hopeful subject for treatment. Before admission, applicant must sign an agreement pledging himself to faithfully conform to the rules of the retreat. The period of residence for which voluntary application can be made must not exceed twelve months. Before the expiry of this term, the superintendent has the power, with the authority of the inspector, to discharge a patient at any time, on either of the following grounds:—1. As having being cured. 2. As incapable of being benefited by the discipline and treatment. 3. As, having the means, having neglected to pay for his maintenance in the Retreat. 4. As having being guilty of conduct inimical to good order.

Ontario.

Admission on application by Inebriate.

Expulsion as not amenable to treatment, for neglect to pay, for breach of discipline.

In the case of involuntary patients, a petition under

oath must be presented to a judge of the county in which the inebriate resides, by blood or affinity relations, or, in default of relatives, by any friend, that habitual drunkard is a resident, is so given over to drunkenness as to be unable to control himself and incapable of managing his affairs, or by drunkenness either squanders or mismanages his property, or places his family in danger or distress, or transacts business prejudicially to interests of family or creditors, or uses intoxicating liquor to such extent as to render him dangerous to himself or others, or incurs the danger of ruining his health and shortening his life thereby. The judge grants a hearing and directs copy of petition to be served on alleged habitual drunkard, at least eight days before the appointment. The judge summons witnesses, refusal to be served or to appear involving liability to imprisonment for contempt, not exceeding fourteen days. He may, if he chooses, examine the drunkard, who can produce and examine witnesses. The judge forwards his decision, with a copy of the evidence, to the Provincial Secretary, who, if the judge has found the petition proved, may direct inebriate's removal to the Hospital for any period not exceeding twelve months. The rules as to discharge are similar to those applicable to voluntary patients.

Committal by Provincial Secretary after enquiry by a judge.

If any patient admitted or committed escape, he can be retaken, and re-conveyed to the Hospital, by any officer or servant, or by any person, at the request of, and on a warrant from, the superintendent.

The escaped can be retaken by any authorised person.

The inspector, who is appointed by the Lieutenant Governor, has the power to sell, subject to review by County Court judge, the property of the inebriate to secure payment of charge for maintenance, even though this may not

Inebriate's property liable for charges of board.

be overdue. Poverty is no bar to committal, but those who are able or whose family is able to pay for maintenance in the hospital, are compelled to do so.

Provision for poor.

The Lieutenant-Governor has power to purchase, equip, and maintain, a Hospital for Inebriates, and the Inspector of Prisons and Asylums has the same power over this Retreat as over asylums for the insane.

Power to equip and maintain asylums.

By an Act (46 Vic., cap. 28) passed in 1883; (1) the provisions of the previous Act of 1873 are made applicable to private asylums established under the Act of 1873, and transformed into hospitals for inebriates; (2) the Act of 1873 restricted to males, is extended to admit females; (3) the provisions of the Act of 1873 are extended to any person, male or female, who is a habitual consumer of stimulating or narcotic drugs to such excess as to cause mental or physical derangement or disease.

Definition of drunkard.

Quebec.—On a similar petition, by an Act to provide for the interdiction and cure of Habitual Drunkards, assented to 1st February, 1870, (33 Vic., cap. 26), any judge of the Superior Court of Lower Canada may pronounce interdiction of a habitual drunkard, and appoint a curator to manage his affairs and control his person, as in interdiction for insanity. A family council is called by the judge to investigate the truth of the allegations. The facts need not be in writing, nor the person interdicted examined. Petition must be served on alleged habitual drunkard when he is sober, or, if he is not sober, on a reasonable person of his family, at least eight days before the hearing. The judge's decision is final. If the petition be refused, it

Quebec.

Interdiction by judge after report of family council.

cannot be renewed before the expiry of three calendar months. Any interdicted habitual drunkard may be relieved of his interdiction, after one year's sobriety. He cannot regain civil rights, till a judge removes his interdiction. Wilful sale or gift of intoxicating liquor to an interdicted person involves liability to a fine for each offence, of 40 dollars, recoverable by curator for the benefit of the family of the interdicted by summary procedure before a justice of the peace in the district, and to three months imprisonment in default of payment.

Loss of civil rights.

Sale or gift of liquor to the interdicted prohibited.

Any person who, according to common report of the neighbourhood, has the reputation of being a drunkard, shall be deemed to be a habitual drunkard. All proceedings are summary and are not attackable for error in form or for any irregularity, before any court. The names of the interdicted are inscribed on the general roll of the interdicted.

Curator can place the interdicted in licensed home for Inebriates.

The Lieutenant-Governor may grant a license to any person, or persons, or association of persons, to keep an asylum for drunkards, these licensed institutions being subject to regulations issued by the Lieutenant-Governor in Council. The curator may place his interdicted in any licensed home for the cure of drunkards, and may remove him at any time.

Asylums for drunkenness,

The interdicted can be placed in an asylum for Inebriates.

Nova Scotia.—The procedure is on the same lines as in Quebec, as stated in an Act to provide for the Guardianship and Cure of Drunkards, (N. S. Statutes, 38 Vic., cap. 24), passed 6th May, 1875.

Nova Scotia.

Interdiction is defined as the declaring of a person

incapable, by reason of habitual drunkenness, of the management of his or her business affairs, as of the insane. The petition must be served on the petitioned against, when sober, at least fourteen days prior to appearance before the judge. The judge's decision is final, and the curator is termed "guardian."

The provisions as to the evidence, renewal of petition, removal of interdiction, penalties for supplying liquor to the interdicted, common report classing a person as a habitual drunkard, license to keep an asylum for inebriates, etc., are almost identical with Quebec legislation. The guardian may place his interdicted in any duly licensed institution for the cure of drunkards, upon such terms as may be agreed on between guardian and directors, and may remove him at any time after receiving a certificate from the medical officer or manager that habitual drunkard has been cured, or is not likely to derive further benefit.

Interdiction and power to intern similar to Quebec.

By an Act passed 4th April, 1876, (N. S. Statutes, 39 Vic., cap. 85), power was given to incorporate a Home for Inebriates, to hold 50,000 dollars of real estate, and to receive also voluntary patients, who must observe the same rules and regulations as the inmates sent in by their guardians.

Home for Inebriates.

New Brunswick.—The legislation is of the same character as in the Provinces of Ontario, Quebec, and Nova Scotia, with a few points of difference in details (N. B. Consolidated Statutes: Habitual Drunkards. Passed 13th April, 1876, cap. 49 § 170 to § 198). Petition may be presented to any superior court judge. Fourteen days service must be made on alleged drunkard. The examination before the judge is *vivâ voce*, both petitioner and petitioned

New Brunswick.

against having power to examine by counsel. If the petition is rejected and has been presented by a friend without the consent of a member of the family over 14, if such be in the Province, the judge may dismiss it as vexatious. The judge appoints a committee, consisting of one or more persons, if he makes a declaratory order, who shall give securities, approved by judge or by barrister appointed by judge.

Committee appointed by judge.

All the right, title, and interest of the subject of the declaratory order rests in the committee. The judge may adopt the alternative courses to appointing a hearing by himself, of (1) making an order on the Registrar of Deeds for any County, and preventing action with regard to any property by alleged habitual drunkard, before the appointment of the Committee; or (2) may appoint a county court judge to hear the petition and transmit the evidence with his opinion, the decision to rest with the supreme court judge. Any one may inspect the registrar's endorsement of date of service, on payment of a fee of 20 cents. The committee is empowered to deal with the estate of the inebriate as if he were an insane person, and a judge may authorise the committee to dispose of the habitual drunkard's property to maintain his family. Suits against habitual drunkards are to go on, but the committee is not personally liable. Property held by the habitual drunkard, as trustee, is exempt from the Act. The committee has power to enter actions. After the expiry of six months, the habitual drunkard, on thirty days notice to the committee, may apply to a judge to annul and supersede the declaratory order.

Power over Estate.

Manitoba.—There are provisions for the control of

inebriates in an Act respecting lunatics, persons *non compos mentis*, and drunkards (Man. Consolidated Statutes, cap. 43, § 19 to § 29). The method pursued is on the same lines as in the Provinces already referred to. The petition can be presented, either in or out of term, to a judge of the Court of Queen's Bench, by any public officer, as well as by a blood or marriage relation. The nearest friends, relatives, and neighbours of the alleged drunkard are to be summoned, and their evidence taken in writing under oath. The petition must set forth facts, and be confirmed by two credible attestations. The interdicted may be confined in any place the judge may think proper, and must be visited once a month by the county sheriff, or by any clergyman appointed by the court. At any time, any duly licensed medical man may, on petition, cause patient to be examined by any judge of the Court of Queen's Bench, and if found sane, to be discharged and restored to civil rights. All bargains, sales, and contracts, by the interdicted during his interdiction, are null and void. Patient may also be discharged and revested on proof of twelve months freedom from drunkenness.

Manitoba.

Interdiction and committal by judge.

Civil incapacity of the interdicted.

Prince Edward Island.—The only legislation which I can find on habitual drunkenness is to the following effect:—(P. E. I., 34 Vic., cap. 10, § 9). If a husband, wife, parent, child, brother, or sister, master or guardian of any person addicted to the intemperate use of intoxicating drinks, or any justice of the peace, or any minister of the gospel residing within the county where the inebriate resides, shall give notice in writing to any dealer in intoxicating drinks that such person is addicted to

Prince Edward Island.

intemperance, on no account whatever shall it be lawful for the dealer receiving the notice, by himself, servants, or agents, directly or indirectly, to sell or give any intoxicating liquor to such intemperate person, to be used on the premises, or in any quantity less than five gallons at one time. The penalties for breaches of the law are:—For first offence, a fine of not less than £5; for second or subsequent offence, a fine of between £5 and £10, and imprisonment for a period not exceeding 30 days.

South Australia.—In Australia there is excellent legislation. In striking contrast to the non-support of the British Legislature, the government of South Australia gave £3000 towards the Asylum for Inebriates at Adelaide. An Inebriates' Act was passed in 1874, followed by an Amendment Act in 1878. The present provisions are embodied in an Act for the protection, treatment, and cure of inebriates, passed in November, 1881 (S. A. consolidated Acts, No. 238). Intoxicating liquor is defined as wine, beer, and all liquors containing alcohol; an incorrigible drunkard as any person who has been convicted of drunkenness three times within a period of six months; and a dealer in liquor as a brewer, licensed victualler, winemaker, or the holder of a wine or beer license. Governor may grant license for a Retreat, the committee managing which being authorised to draw up rules, subject to the Governor's approval, for the conduct of the establishment, including specially regulations for payment for board, for providing employment for inmates, the value of their work going towards the cost of their maintenance, for moral instruction, and for order and discipline. The rules

South Australia.

Intoxicating liquor defined.

Incorrigible drunkard one convicted for drunkenness 3 times within 6 months.

have to be laid before Parliament within fourteen days if sitting, if not, within fourteen days after resumption. In the meantime certain regulation scheduled with this Act are to apply. Any justice of the peace, or anyone authorised by a justice of the peace, may visit the Retreat, examine and record the condition of the inmates. *Voluntary admissions.*—Anyone desirous of admission may apply to any justice, who may, if he be satisfied that the applicant is a habitual drunkard, make an order authorising the apprehension and conveyance of the applicant to a Retreat, his delivery to the superintendent or manager, and his detention and curative treatment therein for any period not exceeding twelve months. *Involuntary admissions.*—Upon the application of any relation or friend, any person addicted to the habitual use in excess of intoxicating liquor, may be summoned by any judge, special magistrate, or two justices of the peace, to show cause why he or she should not be committed to a Retreat. If, either in the presence or absence of the person summoned, it appear that by reason of his abuse of intoxicating drink he is unable to control himself, or is not supporting his family, or is incapable of managing his affairs, or is dangerous to himself or others, or is suffering or recovering from delirium tremens, or chronic alcoholism, or is in imminent danger of death from the continuous use of intoxicating drink, and if two medical practitioners certify in writing that he requires curative treatment in a Retreat, the judge, special magistrate, or two justices of the peace, may make an order authorising the apprehension of the inebriate, his conveyance to a Retreat,

Voluntary admissions.

Involuntary admissions.

Committal by a judge or two justices on certificate by two doctors.

Inebriate convicted 3 times within 6 months can be committed.

delivery to the responsible officer, and detention therein for any period not exceeding twelve months. Petition may be dismissed with costs. Any person charged with being an incorrigible drunkard, before a special magistrate or two justices of the peace, is liable to be committed to a Retreat, and kept therein for a similar term. An escaped patient may, in virtue of the order for detention, be retaken at any time by any officer or servant belonging to the Retreat, or by any constable, or by any person authorised in writing by the superintendent or other manager of the Retreat, and reconveyed to the Retreat. The judge may direct payment by inebriate of cost of maintenance and board, etc., including charge for conveyance to Retreat, as a judgment debt. After six months residence the committee of management may discharge any patient with the approval of the medical officer. Any relative, or any police-officer by direction of a justice of the peace, can obtain a justice's summons calling upon an alleged drunkard why a certificate should not be issued that he is addicted to the excessive use of intoxicating liquors, so as to be injurious to himself or to his family, This certificate, if issued, shall be in force for twelve months. Dealers supplying a person when drunk, or when a certificate of addiction has been given against him, after having been served with a copy of the certificate, are liable, for the first offence, to a penalty of £5, for the second or subsequent offences £10. On a third conviction, there shall be a deprivation of the license, and the licensee shall not at any time thereafter be allowed to hold a license. Inmates absconding or destroying property, or guilty of insubordination or wilful disobe-

Recapture by any authorised person.

Certificate of addiction prohibits sale or supply.

Regulations, discipline.

dience to rules, may be brought before two justices of the peace, and are liable to imprisonment, with or without hard labour, for three months, and to be returned to the Retreat after the term of their imprisonment has expired. Aiding in the escape of a patient, or harbouring him, involves liability to a penalty not exceeding £20, or imprisonment, with or without hard labour, for three months. Inmates unable to pay for their board and maintenance are to be employed at a fair rate of wages, the value of their labour going towards the payment. There is an appeal from any order of justices of the peace to the Local Court. Included in the scheduled rules for the conduct of a Retreat are provisions for the submission of all parcels for inmates to the superintendent, for an inventory of all effects and money to be taken on admission, these to be returned to patient on his discharge, and fixing the rate of payment at not less than £1, or more than £4 per week.

Provision for poor.

Examination of parcels.

Victoria.—In Victoria the provision made for the care and cure of confirmed inebriates is almost identical with that in South Australia. The Act was passed on December 17th, 1872 (No. 449, Vic. 36). The Governor in Council may grant a license to one person, or to two or more persons jointly, to keep a Retreat for inebriates. Any habitual drunkard may apply to any justice, who can issue an order for his apprehension and conveyance to a Retreat, and detention for not longer than twelve months. On the application of any relative or friend, the inebriate may be summoned before a county court judge, and may be committed, on statutory declaration by two medical men, to a Retreat by the judge

Victoria.

Voluntary admission through one justice.

Committal by judge for 12 months on statutory declaration by two medical men.

for not more than twelve months. The order can be rescinded by a Supreme Court judge. An escaped patient can be taken by any officer of the Retreat, by any constable, or by anyone authorised in writing by the superintendent or manager, and reconveyed to the Retreat. Inebriates are to pay expenses of cure, on a judgment debt by a justice or judge. The superintendent or other officer has power to discharge a patient at any time. The regulations for conduct of the Retreat are to be issued by the Governor in Council. Retreats to be always open to inspection by visitors appointed by Governor in Council. The medical superintendent has power to appoint a substitute in absence.

Any authorised person can retake.

Medical superintendent empowered to appoint substitute.

New South Wales.—The Report of the Intoxicating Drink Inquiry Commission presented to the Legislative Assembly, a few months ago, strongly denounces the punishment of drunkards and their incarceration with thieves and other criminals, and the utter uselessness of short terms of imprisonment. The Commission declare that they cannot express too strongly their opinion that goal treatment is quite powerless, either as a remedy or a deterrent; and go on to urge the establishment of two kinds of asylums for the inebriate. One kind to be a Home for the treatment of inebriates who can afford to pay the whole, or a fair proportion, of the cost of their board, residence and medical care, for the admission of patients either of their own accord, or at the desire of their immediate relatives, upon sufficient medical certificates. The other kind of Home to be a mixed penitentiary and inebriate asylum for the quasi-criminal class. To this latter there should, add the Commission, be the power of committal

New South Wales.

for eighteen months on a certain number of convictions for drunkenness within a year. In both classes of asylums the treatment to be curative.

The Commission appear to have been thoroughly alive to the great expense involved in the equipment and management of these institutions; but justly hold that such an expenditure would be true economy. The Commission further recognise the need for the legislature to be to a large extent responsible for the maintenance of the families of those whom it may be necessary to confine for long periods.

New Zealand.—In New Zealand, legislation for habitual inebriates is embodied in the Lunatics Act, 1882 (No. 34, Part II., Habitual Drunkards, § 42 to 48, Vic. 46. The first Act was passed in 1868). Application may be made to a judge of the Supreme Court for an order for detention. New Zealand.

1. By the habitual drunkard himself declaring that he is willing to submit to curative treatment in a retreat. Voluntary.

2. By the parent, husband, wife, child, or friend in cases where (*a*) the person, through habitual drunkenness, has recently been wasting his means and neglecting his business, or insufficiently providing for his family, or a wife been wasting the means of her husband, (*b*) the person has recently, under the influence of drink, used or threatened violence towards himself or any member of his family. On application in writing, a judge, after twenty-fours from the service of the notice when the habitual drunkard is not the applicant, on hearing the evidence of not less than two medical practitioners, may make an order in writing for the detention of the inebriate in any asylum or place authorised under the Act for lunatics, but in a ward Involuntary.

or division where lunatics are not detained, or in any place specially appointed by the Colonial Secretary for curative treatment, for a term not exceeding twelve months. The judge may direct payment by the inebriate, or security for payments. Inspector to make regulations, with approval of Colonial Secretary, for superintendent to set patients to work, recording labour in a book. The superintendent may use such force as may be required to prevent the escape of a patient. A patient refusing to work renders himself liable to a penalty not exceeding £50, to be recovered summarily. The Medical Officer may grant leave of absence in writing, and if the patient fail to return, he may be brought back by order of a Resident Magistrate. The Inspector reported that there were twelve under treatment in 1880, under the twenty-first section of the old Act, and that there had been three of each sex in the Wellington Asylum at the beginning of 1879. During 1880, four females had been discharged as cured. In every case but one, the judge's order was for twelve months, though only one remained for this entire term. One was in residence two months, three under four months, two under six months, and one under seven months. The orders for payment were at the varying rates of 20*s*, 25*s*, and 30*s*, per week. In many cases there were no funds available, and in four no payment was made. In 1883 there had been eight under treatment, and in 1884 there were five admissions.

Committal by judge on evidence of two doctors.

Escape can be prevented by force.

Penalty for refusing to work.

Free Patients.

Great difficulty has been experienced in complying with the statutory requirement that habitual inebriates should not be placed in any building where lunatics are

resident, and special accommodation is declared urgent by Dr. Grabham in his last report.

Such is our Colonial legislation on this most important question—the cure of the inebriate, with the protection of the friends and of the community from injuries inflicted by the inebriate. While in Britain our Act is temporary, in our Colonies it is permanent. While our legislation, trumpery and temporary as it is, is available only for the rich or the well to do, our Colonial brethren, all honour to them, have not forgotten their obligations to the impoverished, or the destitute. The little we have so stintingly done has been only for those victims of alcohol who are anxious to give up their freedom for a time; our kin across the seas have legislated much more effectively, for the unwilling as well as for the willing. Let us hope that the parent will learn from the children, and that the mother may be taught by her dutiful daughters how to repair the long and sad neglect of her duty to not a few diseased, suffering, and sorrowful, if erring, members of her wondrously abundant flock.

Her Colonies set England a good example.

CHAPTER XXI.

Inebriety in its Medico-Legal Aspects *(Continued)*. Amended Legislation Required in the United Kingdom.

Amended legislation needed—Defects of Habitual Drunkards Act, 1879—Defects as regards the licensee—Act expires too soon—Permanent legislation desirable—Defects as regards the patients—Hindrances to voluntary admission—Operate to deter patient—Admission on simple request—Or attestation by one justice—By statutory declaration before a Commissioner—Recent interpretation of Home office puts more difficulties in way of inebriate's admission—Recapture of escaped patient—Correspondence containing money enclosures to patients—Appointment of substitute for medical superintendent—New title—Inebriate can now kill himself and ruin his family with impunity—Punishment no remedy—Cumulative sentences would be an improvement—Inebriates subjects of a disease—The community ought to be protected—Lay hold of the Inebriate—Pauper habitual drunkards—There should be provision for the poor—Amendments required.

Having ascertained the legislative provision for the habitual drunkard in other nations and in our own colonies, we are in a favourable position to consider how our present legislation can be improved to the greatest advantage.

Amended legislation needed.

The defects in the Habitual Drunkards Act may be considered under three heads:—(1) As regards the licensee; (2) as regards the patients; (3) as regards the friends of the habitual drunkard, and the community.

Defects of Habitual Drunkards Act.

I. As Regards the Licensee.

The brief term during which the present Act was to be in operation (it will expire in 1890) has proved a barrier to the investment of capital on any large scale as a business enterprise. It could not be expected that many would sink an amount of money adequate to securing extensive grounds in addition to a large house, as, in the event of the lapsing of the Act two years hence, the outlaid capital might be lost.

Act expires too soon.

What a contrast to the state of matters in America, where, owing to the permanence of the law, capital has been confidently invested in Homes for Inebriates, some of which can receive hundreds of cases in a year, with such an influence on public opinion from the unmistakable benefit from treatment in the best conducted of these establishments, that they hold a high place in popular estimation. In fact, persons in all conditions of life, doctors, lawyers, clergymen, editors, and others, who are the subjects of an inherited or acquired predisposition to alcoholic excess, at once seek the shelter, protection, and care of such an institution when they feel the premonitory symptoms which bitter experience has taught them indicate an approaching paroxysm. To meet this serious defect in the Act, its short-lived existence, the only effectual remedy would be the enactment of a permanent instead of a temporary measure.

Permanent legislation desirable.

II. As Regards the Patients.

Hindrances to voluntary admission.—The voluntary admission of a habitual drunkard into a retreat is, under

the present system, made very difficult and irksome. Confirmed inebriates, from the diseased condition of the brain and nervous centres, to say nothing of the frequent collapse of their purely bodily energy, are very often so utterly broken down in *morale*, and so shorn of will-power, that they are insensible as a rule to appeals to their manhood and self-respect. They seem in general dead to all the nobler impulses of humankind. In this demoralised and apparently hopeless prostration of brain, mind, and morals, it is an arduous task to get them to realise their diseased state, and their utter inability to tamper with intoxicating liquor in any form and under any circumstances. You succeed, however, in a happy moment. The victim sees his condition clearly, with the urgent call for treatment in a retreat and seclusion for a time, and he consents to go under the Act and surrender his liberty. He cannot do so till, on the production of the statutory declaration of two persons that he is a habitual drunkard, two justices have been found in whose presence, he has to declare himself a habitual drunkard. You might with some little trouble find one justice, but to find two is not unseldom by no means easy of accomplishment. Appointment after appointment may be made, aye, has been made, till after repeated disappointments the flickering effort of the shifty narcomaniac has become fainter and fainter till it has died away altogether, and an excellent opportunity for a trial of the Act and of firm curative treatment has been lost. This has occurred with males. How much more powerfully will the having to undergo a similar ordeal operate to deter females from applying to be placed under the compulsory detention provisions of the Act!

Operate to deter patient.

This grave obstacle to the voluntary admission of the

habitual drunkard into a retreat must be removed, or at all events diminished, if any considerable number of inebriates are to have a fair opportunity of placing themselves in a retreat in circumstances favourable to a cure. Why should not the confirmed inebriate be admitted, (as in the United States of America and Canada) with or without a medical or other certificate, on his own written confession that he is a habitual drunkard and on his own written request that he be taken care of and treated? Efficient inspection with power of appeal and frequent official visitation would be a bar to improper detention.

Admission on simple written request.

If this be deemed too easy an entrance into an inebriate home (though I fail to see how voluntary admission can be too simple and easy, as every inducement ought to be held out to the habitual drunkard to give himself up to protective and curative influences), the presence of two justices ought to be dispensed with, and a declaration before one justice be sufficient (as in South Australia, Victoria and New Zealand). Though appearance before even one justice is formidable enough to repel most female inebriates, this would not deter so many applicants as appearance before two justices does at present. To this proposal I do not see how there can be any reasonable objection, as it is in the power of one magistrate now to commit a person of unsound mind to a lunatic asylum, a much more delicate and responsible office than simply attesting the desire of an inebriate to voluntarily surrender his liberty for a time, in the hope of temporary or permanent benefit. This substitution of attestation by one justice in place of two justices has been strongly urged by the British Medical Association and the Society for the Study of Inebriety, and has been

Or attestation by one justice.

recommended by the Government Inspector of Retreats, Dr. Hoffman, in his seventh annual report to the Home Secretary.

Statutory declaration before a Commissioner.

A still less formidable process would be the attestation by a Commissioner to administer oaths in the Supreme Court of Judicature in England, a procedure on oath yet greatly less forbidding and less public than an appearance before a justice.

Recent order of Home office adds new difficulties.

By a recent interpretation on the part of the Home Office, the two justices must be "in the Commission of Peace for the county in which the attestation is made." This renders the securing of the necessary two justices more difficult than before, as it frequently happened that a justice from an adjoining county was on a visit to the justice to whom the habitual drunkard applied in the first instance. In retreats on the borders of more than one county, it has been found very difficult to obtain the presence of two justices without taking the applicant a considerable distance away, thus practically rendering patients unable to avail themselves of the provisions of the Act. If the attestation by two justices be still enforced, any two justices, as the Act of 1879 directs, ought to be allowed to attest.

Recapture of escaped patient.

The escaped patient, instead of, as at present, after recapture on a warrant, having to appear before a magistrate, ought to be sent back to the retreat from which he has escaped, direct; immediate notice being given to the Secretary of State of his return to the retreat. The present procedure has sometimes involved a night in a police cell by patients of position and refinement, before the police could bring the retaken fugitive before the justice.

It would be an immense advantage to allow the medical superintendent, or any one duly authorised by him, to retake and reconvey to the retreat without necessarily calling in the aid of the police (as in the United States, Canada, South Australia, and Victoria). Any penal ordeal operates against the cure of the inebriate as a rule, and it is most desirable not to call in the aid of the police if this can at all be avoided.

There should be greater power over correspondence. The wives and other friends of patients, as well as discharged patients, are apt to enclose stamps or money in some form to patients in residence, which is a very great temptation to the latter to escape and procure drink. At present a letter from an inmate can be suppressed if the licensee suspect this contains an illegal request for a remittance, the intercepted letter being forwarded to the inspector within two days. But there is no power over incoming letters, so that even if a licensee is morally certain that a letter addressed to an inmate contains a remittance, the suspected letter must be delivered to the patient. There ought therefore to be power to open incoming letters if there is reasonable ground for suspicion, or at least to insist on the patient opening the letter in the presence of the licensee or any duly authorised person. By the latter plan, no one else would see the patient's letter, but the licensee would see if there was any money enclosure. If there should be, the patient ought to be bound to hand it over to the licensee in safe keeping. In South Australia and Victoria, letters and parcels to residents have to be enclosed under cover to the superintendent or submitted to him.

Correspondence containing money enclosures to patients.

Under the existing law there is no formal provision

for the appointment of a substitute, by the superintendent or licensee. The result is that in his absence recalcitrant patients are not slow to endeavour to take advantage of this apparent absence of authority with full control. This could easily be remedied by power being given to the licensee to appoint a deputy in his temporary absence. In Victoria this has been thought of and provided for. Another evil arising from inability to depute power to act, recently came before me. The licensee was on the Continent, taking a well-earned and much needed holiday. A patient escaped, and the unfortunate official had to be telegraphed for as no one else at the institution could apply for a warrant for recapture, and this duty is imperative by the Act.

Substitute for medical superintendent.

As many object to confess themselves habitual drunkards, a better title would be "Inebriates Act."

New title.

III. As regards the Habitual Drunkard's Friends and the Community.

At present the habitual drunkard, in the impossible endeavour to satisfy his irrepressible craving for strong drink, may drag his wife and family to beggary, and may wring their hearts with a sorrow, the depth of which will for ever remain untold, and if only he takes care to be guilty of no overt criminal act, he is allowed to scatter hunger and desolation at his pleasure. Ruined, disgraced, and dishonoured by a father's habitual drunkenness, the weary wife and tortured children have no redress. Ought this to be? There can be but one reply. "It ought not."

Inebriate may now kill himself and ruin his family with impunity.

How is the mischief to be remedied? By penal enactments? Assuredly not. It would be an improve-

ment in penal procedure if sentences were made cumulative. These short periods do not afford time to clear the system from the poison and the physical effects of the previous poisoning by alcohol, nor to repair the destroyed and degenerated tissue, nor to restore the bodily mental and moral tone. Short terms of imprisonment only suffice to allow the inebriate prisoner to rally from the immediate effects of his potations, and to be more fitted than on committal to indulge in strong waters. Under this penal *régime* the gaol is practically but a hospital, where the debauchee is relieved from the aches and pains and miseries of his drunkenness, whence he emerges invigorated and strengthened, ready and able to resume his drunken courses. The prison is, in short, the drunkard's club.

Cumulative sentences would increasingly lengthen the period of detention of inebriate "repeaters," and thus the more confirmed they became the longer would they be kept away from alcohol. The protection of their friends and of the community would be also more effectual.

Cumulative sentences.

The treatment of drunkenness as a crime is a complete blunder. So far from curing the incarcerated inebriate or deterring him from repeating the offence on his discharge, the penal procedure of the past has been an utter failure. Of those who have been imprisoned (for some complicatory crime) for a term long enough to free their constitutions from the physical damage inflicted by their narcotic indulgence, only a very small proportion have emerged unscathed from the terrible contamination of prison life. Contact with thieves, forgers, and persons confined for offences against morality, can tend only to degrade and demoralise the already too enfeebled, by an alcoholic or other anæsthetic, in brain and will-power.

Punishment no remedy.

Apart from these considerations, the associations and conditions of involuntary residence in a prison are not favourable to the useful employment of curative means for the scientific treatment of such a disease as inebriety. The very sense of undergoing punishment operates against therapeutical success. There is, besides, no opportunity of properly applying the needful medical, hygienic, mental and moral remedies.

Inebriates subjects of a disease.

The punishment of habitual drunkenness by the law, and its denunciation as but a vice and a sin from the pulpit, are alike futile. Habitual drunkenness in many cases is a true disease, a madness for strong drink, a veritable narcomania. In not a few cases the inebriate is more sinned against than sinning. He may have an inherited alcoholic taint, an irresistible impulsion to excessive indulgence in intoxicating liquor, once the blood has felt the warm provocative glow of the irritant narcotic intoxicant. Theorists, whose vision is limited to their own circle, whose belief is based on preconceived notions without reference to facts, whose intellect is given up to tradition, and whose judgment is surrendered to others, may deny the existence of alcoholic heredity; but to the skilled medical eye there it stands as clearly displayed as is the hereditary taint of gout, of scrofula, or of insanity. On the whole system of the subject of this inviolable natural law are stamped a susceptibility to the narcotic influence of alcohol, and a proclivity to its intemperate use, which last through life itself, and which may truly be said to combine, in the words of the poet, to form—

> "A wreathéd serpent, who does ever seek
> Upon his enemy's heart a mortal wound to wreak."

From physical causes other than heredity, habitual drunkenness may fasten on a human being with its—

"Strong and cold and iron grip."

Defective nerve-power, nervous shock, excessive study, neurasthenia (exhaustion of the nerves) from any cause, and many other physical conditions, may set up such a morbid state of brain and nervous centres, and such a derangement of the intellectual and moral powers, as may induce periodic or habitual drunkenness in the previously regular and moderate drinker.

The gist of the whole matter is that alcohol is an irritating narcotic poison and that intoxicating drinks have an irritant narcotic poisoning property. The majority of persons are not specially susceptible to this poison, but can go on creditably through life, steady, careful, limited drinkers, just as multitudes can live in insanitary conditions without ever appearing the worse for such dangerous surroundings. But there are those who are peculiarly susceptible to alcohol, as there are those who are peculiarly susceptible to sewage poison. Such can be total abstainers from intoxicants, or can drink to intoxication, but drinking in "moderation" is an impossibility to them. Of such material are habitual drunkards made. Apart altogether from moral and religious considerations they are afflicted with a physical disease, which must be met by physical remedies, the chief of which is unconditional total abstinence from all intoxicants in all circumstances. Even when life itself appears involved, the risk inseparable from the smallest sip of an intoxicating liquor is so great, that the experienced and judicious physician would administer to such an one an intoxicating remedy only with fear and trembling.

Besides the terrible injury he inflicts on his household, the habitual drunkard works much mischief to the community in which he lives. He is not a friend, but a foe to the public good. He is a disturber of the peace, a promoter of riot, and the occasion of a large proportion of the criminal and reformatory expenditure of the country. He is also a standing menace to the security of life. Take one instance of the wrong he does to the community. In some extensive workhouses there are paupers who have been regular attendants for years. They go into "the house" penniless and broken down from a debauch, and as soon as they have recovered from the effects of their excess, and have been set on their feet again, they take their discharge and recommence their career of drink and unthrift. This process of wreck and repair is repeated several times in the twelve months. What an enormous expense is thus thrown by even one such habitual offender on the rates in the course of a few years!

Community ought to be protected.

Is it just that this course of outrage and wrong on the family and on the community should go on unchecked? Common sense replies, "No it is not just." How can it be stopped? This could be done by the removal, on the part of the State, of all temptations to drinking—in other words, by the total prohibition of the liquor traffic. Such a measure thoroughly enforced would be an effectual preventive of the vagaries and misdeeds of the narcomaniac. I have seen its efficient operation in the State of Maine, and right thankful would I be to see it enacted and enforced in the United Kingdom. But that desirable consummation is not yet, nor is it even, notwithstanding the jubilation of the most enthusiastic of abstainers, within measurable distance.

Such being the fact, the only course left is to lay hold on the drunkard. He is a public nuisance and a private curse. Lock him up, seclude him from drink, place him under wise curative and hygienic influences, and he may yet become an orderly, sober, and useful citizen. It ought to be in the power of the injured relatives, or of anyone interested in the welfare of the habitual drunkard, to apply to a magistrate to commit such a person, who by reason of his habitually intemperate habits is unfit to manage his own affairs, or is dangerous to himself or others, to an inebriate home, where he may have a chance of being cured. No real objection to this power can be based on "the liberty of the subject." The class of persons I am now referring to are the most abject on earth, bound by the iron chains of habit, and grovelling at the feet of their implacable narcotising tyrant.

Lay hold of the Inebriate.

Not the most wretched victims of the despotism of Eastern antiquity—

> "In their helpless misery blind,
> A deeper prison and heavier chains did find,
> And stronger tyrants."

The only liberty they enjoy is liberty to destroy themselves and to annoy others. The true liberty of the subject can easily be safeguarded; and efficient inspection would effectually prevent any abuse of the powers of compulsory committal and detention.

With reference to pauper habitual drunkards, the British Medical Association issued two circulars to Boards of Guardians, asking their opinion as to whether guardians should be entrusted with the power (if they chose to exercise it) of paying for the detention and cure of habitual drunkards

Pauper habitual drunkards.

who might be paupers, on similar conditions to lunatics and those having special diseases, viz., of detaining such habitual inebriates either in the workhouse, or in some special establishment. There were replies in the affirmative from forty-one Boards, and in the negative from ten.

The power to detain habitual inebriate paupers for a definite period would be of inestimable value in giving them the chance of reformation and cure, a chance that they would probably have in no other way, and their cure would be a great saving to the rates. The inebriate "ins and outs" are to workhouses an unspeakable nuisance, and to the ratepayers an enormous expense.

There should be free provision for the poor.

As the industrial classes cannot be expected to pay for their food and treatment, the establishment of industrial inebriate Homes, where the labour might be in part remunerative, is much to be desired. At present, however, the British public are not convinced of the value of inebriate homes, and it seems hopeless meanwhile to ask for any increased charge on the rates for an experimental undertaking. It is to be hoped that the cure of a number of typical cases at the Dalrymple Home has shown the value of appropriate treatment so clearly that there may, ere long, be provision made for these two classes of inebriates.

Amendments required.

On the whole, the conclusion to which we seem to be driven is that the Habitual Drunkards Act ought to be made permanent and ought to be amended; and that the amendment ought to be in the direction (1) of removing the present hindrances to voluntary admission into a Retreat; (2) of diminishing the surrounding temptations to drinking; (3) of confer-

ring on magistrates the power to commit habitual drunkards to Retreats; (4) of empowering guardians to to detain pauper habitual inebriates for ameliorative treatment; (5) of providing at the public charge for inebriates who cannot pay, or who can pay very little, for their board and treatment. By some such amendments, the Act, permanently prolonged, might be made an efficient and useful measure, as valuable to the friends and to the community at large as to the unfortunate victims whom the Act was designed to aid in their restoration to health of body, to strength of mind, to their families, to a life of activity and usefulness, to their fellows, and to the common weal.

It would also be very desirable to so amend the Act as to include the inebriety of morphia and other narcotics, as well as alcohol.

CHAPTER XXII.

Inebriety in its Medico-Legal Aspects *(Continued)*.

Medical Jurisprudence of Inebriety.

How criminal law may be affected—Disease aspect considered in American legal practice—Inebriates classed with idiots and lunatics as regards property—German, Austrian, and Swiss law—France—Sweden—Present English law based on responsibility for induced insanity—Stephen on involuntary absence of control — Contradictory rulings — General ruling sometimes operates unfairly—Difficulties of plea for mitigation of punishment—A medico-legal commission of enquiry desirable—Many inebriates have little or no control—Neurotic diathesis—Reasons for reconsideration of certain cases—Can the inebriate always be capable of a criminal intent—Exemption from responsibility—In Inebriety of insanity—The presence of drink symptoms often diverts attention from the presence of other diseases—Insanity of Inebriety—Delirium tremens—Mania-a-potu—Very like epileptic mania—Traumatic Inebriety—Inebriate trance—Any responsibility in such cases should be for tasting at all—Mitigation of punishment might be conceded, but is not curative—The only useful course committal to a Retreat for inebriates—Incapacity to perform civil acts—Incompetence of an intoxicated witness—Evidential incompetence of inebriates—Testamentary disposition—Married when intoxicated—Marriage of the inebriate—Expert medical evidence essential to justice—These considerations not put forth dogmatically—Present jurisprudence prior to recent more accurate knowledge of inebriety.

How criminal law may be affected.

The general recognition of the physical aspect of inebriety, of the diseased condition of many habitual drunkards, of the insane character of many acts committed in a fit of maniacal drunken-

ness or narco-anæsthetic automatism, would probably lead to some modification of criminal law. Roman law made allowance for intoxication, but Grecian law did not. In Pittacus there was a double punishment for crime committed in a state of drunkenness.

In the United States of America, certain phases or stages of inebriety are now acknowledged as states of disease requiring medical care and kindly restraint, warranting neither fine nor imprisonment in a police cell or a jail. Throughout that great country legal practice has caused a confirmed drunkard to be regarded, by judge and by counsel, as a diseased drunkard. I do not say that United States law recognises inebriety as exempting from responsibility, but in some way or other it is generally contrived to evade the highest penalty of the law. The charge of murder of different degrees affords one mode of escape. Half a century ago, New York State law classed a confirmed drunkard with idiots, lunatics, and persons of unsound mind, and directed a similar procedure with reference to the property and estate of each of these groups (Revised Statutes, Title 2, Cap. v. of Part ii., in relation to the Custody and Dispositions of the Estates of Idiots, Lunatics, Persons of Unsound Mind, and Drunkards, § 1. "The Supreme Court shall have the care and custody of all idiots, lunatics, persons of unsound mind, and persons who shall be incapable of conducting their own affairs in consequence of habitual drunkenness, and of their real and personal estates, so that the same shall not be wasted or destroyed," etc.

Disease aspect considered in American legal practice.

Inebriates classed with idiots and lunatics as regards property.

In Manitoba, Canada, habitual drunkards are classed with lunatics in "An Act respecting lunatics, persons *non compos mentis* and drunkards" (Consolid. Statutes).

German, Austrian and Swiss law.

In German, Italian and Swiss law there is a difference in the punishment of crimes committed in inculpable and culpable intoxication. In Austria the accused of a crime committed in intoxication is punished for the intoxication only, porvided he has not become intoxicated in order to commit the offence.

France.

On the continent generally some such distinction is acted upon. French law which does not appear to allow of this plea of mitigation of penalty, has, however, deprived the indicted inebriate of civil rights.

Sweden.

So in Sweden with regard to criminal responsibility, though divorce can be granted against a husband on the ground that he is an inebriate.

Basis of present English law on responsibility for induced insanity.

Our English law seems to aim at punishing drunkenness through its results, and to be based on the exaction of complete responsibility for offences committed in a state of mental unsoundness, provided the insanity has been induced by the personal habits of the accused.

Sir James Stephen on involuntary absence of control.

Sir James Stephen in his new criminal code lays down that it ought to be the law of England that no act is a crime if the person who does it is, at the time when it is done, prevented either by defective mental power or by any disease affecting his mind, from controlling his own conduct, unless the absence of the power of control has been produced by his own default.

It has been held by our judges, again and again, that drunkenness is no excuse for crime, and that a criminal act committed during a drunken fit is as justly punishable as a criminal act committed when the doer is quite sober. It has even been decided by some judges that

drunkenness is an aggravation of the criminal offence, as was the law of ancient Sparta. Some judges have admitted a plea in defence when the crime has been committed during frenzy arising from habitual intemperance. On the other hand a man *while drunk* killed his friend who was also drunk, fancying that the latter was some one else about to attack him. He was found guilty of manslaughter on the ground that he had voluntarily brought himself into a state of intoxicated frenzy, (Reg. *v.* Patterson, Norfolk Lent Ass., 1840). Reviewing the apparent contradictory rulings of different judgments it appears, notwithstanding the *voluntarius dæmon* dictum of Coke and what has been by many styled* "artificially contracted madness by drunkenness," that on the whole, the state of English law as at present generally interpreted is that anyone accused of a deed of violence will fare neither better nor worse whether the deed was done by a sober or by a drunken man in a state of sobriety or insobriety. One exception to this ruling, which I do not understand to have been generally accepted, is that of Mr. Justice Day "that whatever the cause of the unconsciousness, a person not knowing the nature and quality of his acts, is irresponsible for them" (Reg. *v.* Baines, Lancaster Assizes, January, 1886).

Contradictory rulings.

That the general legal ruling is unfair and unjust in many cases, few who are acquainted with the physical aspect of inebriety and subtilty of the natural law of inebriate heredity will deny.

General ruling sometimes operates unfairly.

I frankly admit that it would be dangerous to allow a valid plea of excuse or mitigation in every case of

* Stephen's *New Commentaries on the Laws of England*, 10th edit., London, 1886.

drunkenness, for there are many persons who drink to such excess as to be temporarily insane and for the time being are beyond the knowledge of right and wrong, who indulge in drinking simply for purposes of pleasure, in whom the alcoholic intemperance is but a vicious habit.

Difficulties of plea for mitigation of punishment.

Still it seems to me most desirable, in the interests of justice, that the learned members of the profession of law should unite with the medical profession in a close scrutiny of the predisposing and exciting causes of inebriety, of the inebriate phenomena, and of the pathological state of many habitual and periodical inebriates. If such a mixed scientific commission, in a judicial frame of mind, solely animated by the desire of truth-seeking, were to carefully study the physical, as well as the mental aspect of inebriety, I am convinced that the members of such a Commission would with one accord discriminate certain forms of the disease as coming purely under the category of disease, of a disease closely allied and often interwoven with insanity, of a real madness for intoxication or narcotism, a true narcomania.

A medico-legal commission of enquiry desirable.

If we accept Sir James Stephen's deliverance, we know that there are many inebriates the absence of whose power of control has not been produced by their own default. There are individuals born into the world permeated with an inborn inherited predisposition to drunkenness or narcotism. As soon as these subjects of alcoholic or other narcotic heredity taste any intoxicating or narcotising agent such as alcohol, opium, chloral, ether or chloroform, their organisation is as it were set on fire, a physical conflagration has been lit

Many Inebriates have little or no control.

up, without their consent, which is quenched only by an act of intoxication. They had no control over their innate natal proclivity. I refer now to their first tasting of an intoxicant, for if they once know the serious results involved in their taking a single glass of liquor and a second time voluntarily indulge, they have done something which many of them might possibly have refrained from.

Others who have been endowed from birth (in fact before birth) with this constitutional susceptibility to intoxicants, have been handicapped in their mother's womb by a neurotic diathesis, a defective nervous and mental organism, or a deficiency of inhibitory power, which makes it extremely difficult to resist the anæsthetic influence of a narcotic anæsthetic, and renders them an easy prey to alcohol, opium, chloral, and other inebriety. Yet these had no control over the too scanty stock of mental force with which they were from the first supplied.

Neurotic diathesis.

Is it reasonable, is it rational, is it right that these heavily weighted ones should be tried by the same standard as their more favoured compeers? The first class, though they may never once have been guilty of drunkenness, are nevertheless afflicted with the disease of inebriety, viz., a constitutional tendency to intoxication or narcotism. They may have led a life of absolute abstinence from intoxicants of all kinds, they may have been nephalists of the purest water, but glorious though their success in obtaining the victory, their's has been a tremendous struggle all through life, and to the day of their death there remained implanted within them the inebriate diathesis. They were the subjects of ine-

Reasons for re-consideration of certain cases.

briety, though they never committed an inebriate act. At any time in

> "Their fierce, relentless, bitter life
> Their warfare long and stern,"

some departure from health, some pathological state of depression or exaltation dependent on disturbance of function may throw their nervous system into confusion, may for a space cause reason to totter on her throne, and inhibition being relaxed, the constitutional tendency may break out into open riot. Here the indwelling proclivity and the temporary disenthronement of the will are equally beyond the control of the individual. Crime may be committed during the drunken paroxysm. Is the doer wholly responsible for the deed?

In these two forms of inebriety—the disease itself inherited and inebriety of the neurotic diathesis—a mere sip of an intoxicant may suffice to put the taster quite beyond his own control.

Can the Inebriate always be capable of criminal intent?

To constitute a crime there must be an illegal intention. Chargeable murder involves a felonious intent. Criminal violence presupposes a wrongful motive. How, in justice and fairness, can an intoxicated person, or an inebriate in the unconsciousness of many a paroxysm of inebriety, be guilty of unlawful design, when he is unable either to remember or reason, or even may be utterly unconscious alike of his acts, their nature and their consequences?

Exemption from responsibility.

There are two forms of inebriety which ought undoubtedly to exempt from criminal responsibility. The one is the inebriety of insanity, the other the insanity of inebriety.

Take the inebriety of insanity. When the act of drunkenness is the clear outcome of insanity, if a crime be committed in this drunken state the criminal act is the act of an insane person. As we have already seen, drunkenness in this case is simply one of the phases of recurrent insanity. If the subject of recurrent insanity in a paroxysm of madness unattended with the drinking of intoxicants be guilty of a violent deed, he is not punished for his violence but treated as one insane. Why should the same person be punished as a criminal for a like offence in a maniacal outbreak, merely because he has been drinking? If he is treated as a criminal and not as a person of unsound mind, he is actually punished, not for his violence but for his drinking. Such cases are of not infrequent occurrence, and the present practice leads to disastrous results. The insane drunkard is imprisoned. After his short term of imprisonment expires he is liberated. He has a lucid interval. Bye and bye a recurrence of his insanity declares itself. He gets drunk and commits another assault. Once more he is incarcerated as a felon. In time he is discharged from jail. He is all right for a while. Ere very long his insanity recurs. He flies to drink. He injures, perhaps kills, some-one. He may be again imprisoned or hung. In either case, his last state as regards both insanity and inebriety is worse than his first. On the other hand, if his offences, however serious, against the law had been committed while he was not under the influence of strong drink, he would never have been punished as a criminal, but he would have been put under restraint, and improved in health both of mind and body if improvement were possible. In any case, his seclusion would have prevented him from injuring others.

In Inebriety of Insanity.

Under our present system of jurisprudence I am not without hope that insane inebriates can be treated as insane persons in our criminal courts, but the practice is not followed of taking pains to discriminate between sanity and insanity in such cases. If the man or woman has been seen drunk that is enough. Whether he or she is sane or insane is practically regarded as a matter of no moment. The mistake is natural and is daily made in illness. A man has the reputation of a drunkard. He is heard groaning and talking strangely. His wife supposes it is the old old story of "drunk again," and lets him, as she has been accustomed to do, "sleep it off." Early in the morning he is found dead, and a *post-mortem* examination shows that he has died from rupture of a blood-vessel on the brain, or from some other fatal disease. Or a man is discovered lying on the street and breathing heavily, or perhaps staggering about from side to side. He smells of drink, and the conclusion is at once arrived at that he is only drunk. He dies within a few hours, and an autopsy proves that he died from apoplexy. In these cases the drinking symptoms were prominent and diverted attention from the presence of serious disease. So in legal medicine. The accused has exhibited symptoms of drunkenness, so he is adjudged, and punished as a drunkard, while an intelligent medical examination would have demonstrated that he was of unsound mind. There would be an enormous gain to the administration of justice as well as incalculable benefit to many ill-used lunatics, if the bench and the bar would co-operate with the professors of the healing art in the exclusion of all cases of inebriety of the insane from those penalties of the

The presence of drink-symptoms often diverts attention from the presence of other diseases.

law which should be reserved for the sound of mind.

Similarly, the insanity of inebriety ought to exempt from criminal responsibility. By this I mean alcoholic insanity, that state of permanent or apparently permanent mental alienation which has been produced by long-continued alcoholic indulgence. There are other forms of the insanity of inebriety, but I prefer to consider this one of chronic alcohol insanity separately, as I do not see how there can be any more difference of opinion on this class of insane cases than on the class which we have just been considering, comprising manifestations of the inebriety of insanity.

Insanity of Inebriety.

When one has become permanently deranged, deranged with the apparent prospect of a lengthened continuation of the morbid mental condition, he can be, in equity if not in law, only regarded as insane. Whatever he was originally, he is now unable to judge between right and wrong, he probably has insane delusions, he is unable to reason, he is quite beyond his own control or the moral control of others, he has the habit and repute of unsound mind in the opinion of everyone who has much knowledge of him. No matter what the cause of his present state he is now acknowledged to be mentally unsound.

The remote cause of his lunacy may have been altogether unconnected with his habits as to strong drink and other narcotics. If so, if his present lapse from mental soundness has been non-alcoholic and non-narcotic, no judge would think of, in any circumstances, punishing him as a criminal for any offence against society or person. Why then should there be an exception if the alcohol or opium or other allied habit has contributed to the insanity? No matter how mad he is,

how eccentric in his conduct, how insane in his acts, if he has been known to drink "not wisely but too well," he is as a matter of course set down not as an irresponsible lunatic but as a responsible inebriate. Here, again, I do not think that judge-made law is so much to blame as is the practice at the courts. If care were taken to examine into the presumed insanity, and not to be contented merely with the recognition of the drinking habit, I feel assured that our enlightened impartial and painstaking interpreters of the law and dispensers of justice would acknowledge in their judicial ruling the valid plea of insane irresponsibility, where insanity could be shown to have existed for some little time, even through the insanity had an alcoholic origin.

There are other phases of the insanity of inebriety about which at present there are conflicting views.

There is *delirium tremens*, in the course of which crime is sometimes committed. During the attack, which may have been preceded by groundless morbid fears such as are often met with in the insane, the subject of this delirium is generally suffering from a true temporary insanity. Hallucinations, with frequently delusions, are present in profusion. The patient is in constant fear. He trembles. He is often unconscious of the existence of real objects around him. Even when recalled to consciousness of external objects he in a moment relapses into his muttering and busy delirium. The judgment is clouded. The sense of distinction between right and wrong has disappeared. He has lost all control as well as power of perception. It is true that in favourable cases he is sane in less than a week, but while the delirium rages, however short the period may be, he is literally of unsound mind. In this temporarily insane state, when he is not himself, when

Delirium tremens.

he does not know what he is doing, when he is unable to reason or to discern the character of an action, he may commit many illegal acts. Is he responsible for what he does in this state of mental aberration, when he is unable to understand what he is about? If in the delirium of enteric fever, eagerly watching for the chance, he sees the opportunity when his nurse's back is turned toward him for a few seconds, and kills himself or any one else, what judicial authority would hold him guilty of criminal suicide or murder? Why then should he be held responsible for deeds done during the delirium of alcohol?

There appears to me only one possible plea, that if he had never drunk he would not have been afflicted with delirium tremens. This is not absolutely true, as I have seen what could not from the symptoms be distinguised from delirium tremens occur in the person of individuals who were teetotallers, as the result of accident or disease. I have also seen what may be called imitative delirium tremens, delirium tremens without any apparent physical cause, alcoholic or non-alcoholic, where all the symptoms were wonderfully and accurately simulated. But granting that it were absolutely true, the fact remains that he may be a very moderate drinker compared to others, that his neighbour may be able to drink twenty times as much as he can without exhibiting any of the delirious symptoms. The subject of the delirium is peculiarly susceptible to the narcotic influence of alcoholic poison. That is not his fault. His inherited susceptibility to alcohol and the narcotic group is utterly beyond his control. Is he then to be punished for tasting intoxicating liquor at all? I cannot see the justice of such a proposition, but if it is indeed just and strict justice be meted out, a like penalty should be

imposed on every one who drinks. Further, if it be a crime to drink with the knowledge that drunkenness will be the issue, as the individual from his idiosyncrasy cannot drink in moderation, should it not also be a crime for any one with say a rheumatic diathesis to expose himself deliberately to meteorological conditions likely to induce an attack, or for a gouty subject to indulge in a glass of port?

It may be urged that if he has had one attack of delirium tremens, he ought to be punished if he ever has a second, and must undergo the highest penalty of the law if he be guilty of a capital crime during this second or succeeding attack. Just so, but the very fact of having had one attack renders him less able to abstain and more liable to a second attack. It would be a great advance if a first seizure were to exempt him from criminal responsibility, but it would be a still greater advance if the insane state of the subject of delirium tremens during the height of the disease were also fully recognised. The fear of punishment is no deterrent to a man acutely insane, so that no protection is afforded to the community by penal procedure in these circumstances. Punishment, too, instead of reforming the diseased individual, only makes him worse. The wisest plan would be to treat him as the subject of a physical disease and intern him where he could harm no one, and at the same time be under such care and control as would give him the best chance of recovering full mental health.

In some cases, as in Reg. *v.* Burns, (Liv. Sum. Ass. 1865), the accused of murder has been acquitted, on the ground of substantial mental impairment during an attack of delirium tremens.

Mania-a-potu, an acute form of alcoholic mania, is

another phase of the inebriety of insanity, about the legal relations of which there are opposing dicta. In this form of alcohol poisoning the individual is literally mad. During the paroxysm he is quite beyond his own control. In delirium tremens the patient is comparatively quiet, though incoherent and restless, and sometimes with difficulty restrained. But the difficulty is an hundred-fold greater in mania-a-potu. Here there is actual violence, an aggravated maniacal fit, during which I have seen it take four stalwart men to keep a patient from injuring others. Soon after the paroxysm is over the patient is of sound mind and fairly accountable for his actions, but during the fit it is not the fact that he knows what he is doing or that he is able to control himself.

Mania-a-potu.

The most similar form of non-alcoholic insanity is the epileptic. When mischief is done during a paroxysm of epileptic mania, if this fact is clearly established, the person who has committed the offence is not, and justly so, held responsible. In alcoholic epileptic mania the same course would be followed. Yet alcohol has been the *fons et origo mali* here, as in mania-a-potu. By a parity of reasoning the subject of mania-a-potu should be held legally free from criminal consequences.

Very like epileptic mania.

There ought to be no uncertainty about traumatic inebriety. Damage to life and property is sometimes inflicted by persons who at the time are out of their mind through drink or opium, and who owe their intemperance to head and other injuries. In these cases surely there can be no doubt. They are insane when intoxicated, and their intoxication is the result of physical damage to the brain, or of some physical shock to the brain and higher nerve centres.

Traumatic Inebriety.

Inebriate trance.

There is another phase of inebriety which seems to me to call for legal recognition, a suspension of memory with semi-conscious automatism, to which attention has been called by Dr. T. D. Crothers. This may come on without warning or observation during a period of inebriety, and is often unrecognisable, unless something occur to draw attention to the trance or somnambulistic state of the inebriate. In some cases the inebriant sleep-walker has gone mechanically and automatically about his business or other avocation for days, without a clear perception of his acts. When he awakes from this cerebral trance state he has no recollection of anything he did while in it. Crime has been committed by inebriates labouring under this partially suspended consciousness. This condition of inebriate automatic trance demands serious consideration.

Any responsibility should be for tasting an intoxicant at all.

Whatever blame be deemed needful to be laid on inebriates, whatever responsibility be demanded from them for offences committed during an outbreak, must in justice be referable only to a period preceding the outbreak. You cannot quarrel with anyone for shivering if he has a fit of ague, or for coughing if he has a severe cold. These consequences of exposure are beyond his control. But you can justly reproach him for, except at the call of duty, sleeping in an ague locality or exposing himself to the unnecessary risk of contracting a cold. In the same manner, you cannot fairly blame many a man for getting drunk if he once drinks, this being the fact with many subjects of the inherited inebriate diathesis. Any blame must have reference to his taking drink at all. In such a case, as soon as he drinks at all, he is beyond his own control; and he must be held responsible only for having tasted his resistless tyrant, which once swal-

lowed turns upon him and rends him in spite of his frantic attempts to escape.

If it should, after mature consideration, be thought inexpedient to exempt inebriates from full responsibility for offences committed while temporarily insane, a middle course between this and the existing insistance on full responsibility might be followed. There might be admitted a plea for reduction of punishment on the ground of mental disease, and a jury might be empowered to recommend to mercy when they were satisfied of the validity of the evidence of such an extenuating circumstance. This, however, would simply be a mitigation of penalty, and would be of no avail in the cure and reformation of the sentenced criminal. Where satisfactory proof of any such mental disorder (even if self-induced) could be advanced, the most effective and judicious course would be to commit the insane offender to a Home where he could remain under conditions favourable to cure, under the supervision of the authorities.

Mitigation of punishment might be conceded but is not curative.

The only useful course committal to a retreat for Inebriates.

If there is reasonable ground for the contention that inebriety in some of its phases is a valid plea for exemption from responsibility for criminal acts, a justifiable inference is that this disease may operate in vitiating civil acts.

Incapacity to perform civil acts.

The present rule of law is that a witness in a state of intoxication is incompetent to give evidence.

Incompetence of an intoxicated witness.

Though he may not be drunk at the time when he is in the witness-box, there are many inebriates who have no clear perception of truth, whose memory and judgment are affected, and whose evidence is utterly unreliable. Acting under my advice

Evidential incompetence of Inebriate.

litigants and their legal advisers have refrained from calling such inebriates as witnesses and have thus prevented a farce, which would have been a painful experience to the witness and his friends, as well as wholly useless to the parties concerned and to the interests of justice.

It is rightly laid down that less mental capacity suffices to make an impregnable will than is requisite for the discrimination of the wrongfulness of a criminal action. This might be said of civil acts, such as the conducting of a business and the contraction of the marriage relation. In Quebec and New Brunswick the inebriate while under interdiction loses his civil rights. In England, the Court of Chancery, if an enquiry in lunacy has established that any one has been unable to manage his affairs through confirmed intoxication, may take the person and property into its custody.

Testamentary disposition.

As regards the devising of an estate, one circumstance of importance is likely to be occasionally met with. Many married inebriates who have been induced to enter a Home under the provisions of the Habitual Drunkards Act, for say the full legal term of twelve months, after they have been a month or so in residence feel so well that they believe they are cured. They are not cured, inebriates being often presumptuous and unduly self-confident as well as mendacious. However, satisfied that a cure has been effected, they apply to be discharged. The medical staff know better, and the patient has to complete his full term. The disappointed inebriate, fretful and impatient, cherishes a grudge against whoever persuaded him to apply for admission. Perhaps it was his wife, who in the interests of her husband and her familly made serious sacrifices in order to secure for him the benef

of a long period of residence. The rancour of the inebriate is directed against the wife, and if he execute a testamentary disposition while in this frame of mind he may exclude her, as far as he can, from any beneficial interest therein. Ought this unnatural and unthankful injustice to stand? I trow not. The devisor is diseased in mind, and no will with such a provision made in such a frame of mind ought to be inviolable. The law of the State of New York and of other legislatures deprives the habitual drunkard of the management of his property, a righteous measure which has secured the rights and saved the means of subsistence of wives and children, who, but for this wise legislation, would have been deprived of their resources and perhaps thrown on the public charge for maintenance and support.

Contracts executed during intoxication void.

As I read it, English Law does not hold to be valid a contract binding himself or others, executed by any one when wholly deprived of reason while intoxicated. The intoxication and the total deprivation of reason must be thoroughly proved, and may have been voluntary or at the instigation of the other contracting party.

Married when intoxicated.

In our existing law, it has been ruled, that if either party to a marriage has been so far under the influence of liquor as to have been unable to understand the nature and consequences of the act of marriage, proof of this would render the contract invalid. I presume that consummation is understood not to have been effected when this plea has been successfully urged.

Marriage of the Inebriate.

Marital engagement is a serious step in many cases of confirmed inebriety. The medical adviser, as well as the legal adviser, ought ever to remember that the law of alcoholic heredity renders propable the procreation of offspring tainted

with inherited alcoholism and with a defective neurotic temperament, both of which endowments tend to the rearing of children with a strong proclivity to inebriety. Hence we ought to be deliberate in our counsel. It is the more necessary to be clear and firm in our advice, as self-sacrificing devoted women not infrequently marry inebriates to reform them, a step which I have seen disastrous alike to mother and to children.

Reviewing the whole matter, it seems to me sound doctrine that if a man has no control over his actions, he ought not to be punished for not exercising what he does not possess. The cause of the absence of control is another matter which may or may not involve penal turpitude. The main point is—was the man sane or insane at the time when the offence was perpetrated?

Expert's evidence essential to justice.

As a measure of precaution and to assist in elucidating the actual condition of the accused, in all cases of alleged criminal acts committed in a drunken fit or by a person known to be a confirmed inebriate, the evidence of a medical expert ought to be taken.

Considerations not put forth dogmatically.

This conclusion and the views which I have enunciated on criminal responsibility in various phases of inebriety with insanity, are not put forth on dogmatic opinions. Frankly recognising the candour, the good faith, and the strong desire that justice should be done, displayed by the judges and by the leading members of the legal profession, I venture to submit these views, with the considerations advanced in their support, to an impartial and thoughtful examination in the hope that they may be of some service to the general community as well as to many individuals arraigned before our judicial tribunals.

Our present jurisprudence, so far as it relates to

inebriates, was framed at a time when the physical aspect of inebriety and the diseased condition of a large proportion of inebriates were not even suspected, except by a very few far-seeing philosophic medical observers. In those days, pains, penalties, rebuke and contempt were hurled at drunkards of all degrees and varieties indiscriminately. They were regarded but as vicious and depraved sinners. Now we know better. Kindness, persuasion, and help, are the weapons which we employ to day in our more judicious warfare with the drunken habit. Medical science has revealed to us the existence of a class of inebriates who are the subjects of disease, as clearly defined as are neuralgia and nervous debility. Let legal luminaries thoroughly understand that in many instances inebriety has a pathological origin, takes its rise from a departure from bodily and mental health, from a morbid state of some parts of the brain or its membranes, whereby the function of that organ is perverted, or from other unhealthful conditions, and that this inebriate tendency is often implanted as a transmitted property in the body and brain during intra-uterine life. Let it also be distinctly understood, at the same time, that there are many drunkards who are not the subjects of a morbid affection, whom no one would desire to excuse on the ground either of insanity or disease.

Present jurisprudence prior to recent accurate knowledge of Inebriety.

While I suggest a mixed commission of legal and medical experts to enquire into the modification of inebriate criminal responsibility indicated by modern science, it should be remembered that, when giving evidence in a criminal trial, the medical witness has to testify only to the pathological, psychical, healthy or diseased condition of the accused. The application of the evidence is for the judge and the jury.

Province of medical evidence.

CHAPTER XXIII.

INEBRIETY IN ITS MEDICO-LEGAL ASPECTS *(Continued)*.

Procedure with inebriates found guilty of criminal offences—Voluntary Inebriates—Involuntary Inebriates—Wise legislation should deal effectively with Inebriates—Mortality of Inebriety—The Inebriate's chance of life—Mortality of liquor traffickers—Mortality of inebriety, author's estimate—Deaths registered no indication of actual deaths from Inebriety—Improved system of registration—Basis of Dr. Kerr's estimate of Inebriety mortality of 40,000 annually—Dr. Wakley's testimony—Verdicts by coroner's juries—Dr. Edwin Lankester's opinion—Dr. Hardwicke's—Check estimates—United Kingdom and Temperance Provident Assurance Company returns—Comparison between Rechabites and Odd-fellows—Harveian Society enquiry—Author's estimate of indirect Inebriate mortality—Disease from Inebriety—Expenditure on inebriants—Great national loss—Economy to treat inebriates as diseased—Saving to the nation from the Dalrymple Home—Lunatic asylum undesirable—Special Homes for Inebriates best—Medical treatment and care—Requirements of special Homes—Period of treatment one to three years—Leave on probation—Power to compel work to be done by patients—Provision for the indigent—Classification of patients—Special provision for incurable inebriates—Inebriates should not be associated with the insane—Medico-legal relations of Inebriety to life-assurance—Should uncured Inebriates marry?

WHATEVER the verdict on these suggestions for a reconstruction of law and practice with reference to the irresponsibility for certain acts performed in a state of inebriety, there remains for solution a yet more immediate and practical question, what shall be done with the large number of alleged criminals who have been guilty of offences against the law while under the influence of

Procedure with Inebriates found guilty of criminal offences.

drink or other narcotic? There can be no doubt that there will also be a considerable proportion of cases in which the sanity or insanity of the accused will be very difficult to determine. If found to be insane, what shall be done with many of the individuals whom it would be very doubtful wisdom to consign to association with ordinary lunatics?

To arrive at a prudent procedure it is essential that we comprehend the causes of the inebriety, that we attain to a knowledge of the physical and mental conditions on which the act of intoxication and the intoxication-impulse often depend. These I have endeavoured to set forth in the chapters on etiology and pathology.

Voluntary Inebriates.

I except from this group the mere voluntary toper who drinks to drunkenness solely for the sensual enjoyment of the act, and from no morbid tendency to narcotism, from no strong overpowering impulse from within, though these repeated indulgences may in course of time set up an unhealthy state which will constitute a true disease. Vicious gratification oft renewed may insensibly be transformed into chronic physical and mental disorder.

Involuntary Inebriates.

As I have shown, there are inebriates not a few who are subject at either certain or uncertain periods to an imperious inclination or internal force which they cannot annihilate, even if, by physical restraint or by an effort of strong will, they succeed in letting it expend its force without giving way to it by plunging into intoxication. A patient of mine, a merchant, aged 45, of nervo-sanguineous temperament, with a neurotic though not inebriate heredity, usually a steady circumspect and useful man, has this impulse come upon him regularly every two months. He has at times suc-

cumbed to its terrible intensity, but of late years has been able to withstand it and let it pass harmlessly by. Though for some five years he has tasted no intoxicating drink and used no narcotic or anæsthetic, the periodicity still recurs in much of its well-nigh overwhelming fierceness. And this, notwithstanding every possible regulation of bodily and mental health by the strict observance of the laws of health and the sacred influence of earnest religious principles.

There are others who are assailed by this almost masterful impulsion from various physical causes and disturbances of function, just as some are afflicted with recurrent mania.

These abnormal states, as well as many others conducing to inebriate or narcotic excesses, are strongly marked and heightened by heredity, a natural law which no moral influences can alter.

This being so, it is the province of wise legislation to provide the most effectual means in its power to care for the harassed subjects of this disease, whether they have or have not done anything to bring them within the grasp of criminal law, so that the brain may be looked to, physical and mental health secured, and the power of self-control made as strong and vigorous as may be. By so doing, advantages of untold magnitude will be gained by the State.

Wise legislation should deal effectively with Inebriates.

The loss of life through inebriety is a fearful tale of wretchedness and sorrow, as it is of material wealth.

The conclusions of the late Mr. Neison, the eminent actuary, are very striking. He found that while ten temperate persons from 15 to 20 years of age die, eighteen inebriates of same age die. Between 21 and 30 years (inclusive) 51 of the intem-

Mortality of Inebriety.

perate die for every 10 of the temperate. Between 31 and 40, about 40 die. In the first group the fatality is raised 80 per cent, in the second over 500 per cent. and in the third 400 per cent. Mr. Neison calculated the chances of life as follows:—a temperate adult's chance of life is at 20 over 44 years, an intemperate's 15½ years; at 30 a temperate's 36½, an inebriate's 13½ years; at 40 a temperate's 28·8 years, and an intemperate's 11½.

Inebriates chance of life.

It may be interesting here to note the Registrar-General's statement in his forty-fifth annual report, as to the death-rate of traffickers in strong drink, which he calls an appalling mortality. With the annual average mortality of all males as 1000; ministers of all denominations show a comparative death-rate of 556, farmers and graziers 631, agricultural labourers 701, males in selected healthy districts 804, carpenters and joiners 820, coal miners 891, masons and bricklayers 969, plumbers, painters and glaziers 1202, brewers 1361, innkeepers, publicans and beer-dealers, 1521, public-house and hotel servants 2205.

Mortality of liquor. traffickers.

It has been my painful duty to compute the mortality from inebriety within our borders, and the estimate which after careful enquiry I was enabled to lay before several scientific and learned societies was pronounced "moderate" and "within the truth," and has never been seriously disputed. There is first the number of deaths occurring annually in the United Kingdom from personal alcoholic inebriety, which I reckon at 40,000.

Mortality of Inebriety, author's estimate.

It is true that only between 1400 and 1500 deaths have been certified as arising from alcohol in one year. But it is well known that the figures of the registration re-

turns are no criterion of the actual number of deaths from alcoholic excess. As the present system of death certification renders it easy for the friends and others to ascertain the causes of death returned by the attending and certifying practitioner, we are not in the habit of enumerating alcoholism as a cause. Were we to do so, many a heart-broken and mourning widow and child would be shocked and tortured beyond expression on learning a fact, the existence of which had in many instances never been suspected. No good purpose would be served by such an exposure, a new pang would be added to the pain of the survivors, a deeper sorrow would be laid on "the heart bowed down with grief and care." Nor are we expected to record on the certificate all the causes contributing to a fatal issue. A person dies of pneumonia. We are not called upon to state the origin of this affection, to specify whether it arose from exposure to cold or from saturation by alcohol. We have simply to say what the disease is which has caused death. It is to be hoped that ere long the certification of all cases of death will be treated as confidential documents and utilised in the interests of public health alone. Then, and not till then, will medical men feel at liberty to give alcoholic and other intoxicants the credit due to these lethal agents in the production of the tremendous crop of premature and preventable mortality which year by year is gathered in.

Deaths registered no indication of actual deaths from Inebriety.

Improved system of registration needed.

I arrived at my estimate of 40,000 by taking the proportion of alcoholic deaths to all the deaths certified by me in the course of one year, and applying that proportion, with certain necessary corrections, to the total number of practitioners throughout the kingdom. This cal-

Basis of Dr. Kerr's estimate of Inebriate mortality of 40,000 annually.

culation I checked in a variety of ways. First, by taking the average of seventeen years' practice, comprising 278 fatal cases. Next, by the summary of the causes of 232 deaths in the practice of twelve medical men, some located in cities and some in the country. Next, by taking out from the general mortality returns a certain proportion for alcoholic deaths in hospitals, workhouses, from violence and accident arising through drink, and for the alcoholic mortality among publicans, beersellers, and licensed grocers.

Dr. Wakley's testimony.

Dr. Wakley, M.P., late editor of the *Lancet* and Coroner for Middlesex, afforded ample corroboration of the moderation of my figures. Of 1,500 inquests held by him yearly, he attributed at least 900 to hard drinking, and he believed that from 10,000 to 15,000 persons died annually from drink in the metropolis, on whom no inquest was held. Taking London as one-tenth of the population of the United Kingdom, this would give 100,000 deaths from alcoholic indulgence over the country. It is often impossible to elicit a verdict of alcohol-poisoning or alcohol-acceleration of death, even when the evidence is strong. As the jury have often been neighbours of the diseased, they are naturally unwilling to return a verdict reflecting on his character.

Verdicts by coroner's juries.

Yet, owing to the gradual enlightenment of the public mind, juries are steadily becoming more alive to the truth and less reluctant to refer to alcohol. Even when both coroner and jury are ready to acknowledge the facts as to the habits of the deceased, it is difficult to elicit the whole truth from the witnesses. I have seen inquests at which the medical testimony showed the presence of alcohol-poisoning, when the friends declared that their dead relative was a perfectly sober individual,

but after the proceedings were closed admitted that he "took far too much."

Dr. Edwin Lankester, F.R.S., Coroner for Middlesex, was of opinion that one-tenth of our entire mortality was the direct result of poisoning by alcohol; and his successor, Dr. Hardwicke, pronounced my estimate of the direct and indirect mortality from alcohol to be "far within the truth." Dr. Noble, of Manchester, believes that one-third of our disease is due to intemperance, and Dr. B. W. Richardson, that one-third of the vitality of the nation might be saved but for strong drink.

Dr. Hardwicke.

The death-rate in the general section of the United Kingdom Temperance and General Provident Assurance Company, from which drunkards are excluded, having on an average of a long series of years been fully seventeen per cent. higher than in the abstaining section, this ratio, applied to the whole number of deaths in the kingdom, would indicate an annual death-roll of over 117,000.* A comparison between the returns for eight

Check estimates.

United Kingdom Assurance Co.

* *United Kingdom Temperance and General Provident Assurance Company. Record of deaths for* 21 *years*, 1866-86.

General Section.		Temperance Section.	
Expectation.	Actual Deaths.	Expectation.	Actual Deaths.
5784	5621	3655	2279

Sceptre Life Association. Record of deaths for 10 *years*, 1877-86.

General Section.		Temperance Section.	
Expectation.	Actual Deaths.	Expectation.	Actual Deaths.
685	608	300	134

Whittington Life Assurance Company.

The bonus in the Temperance Section has ranged, in different periods of three years, from fourteen to twenty-five per cent. higher than in the General Section.

years of the Rechabites and Oddfellows in the Bradford district, show a proportionate average of one in 44 among the latter, and 141 among the former.* Dr. Thomas Morton's reckoning, based on an analysis of returns from some twenty medical colleagues, was equivalent to 50,000 annual alcoholic deaths. The Harveian Society, a body of London medical men, collated the statistics collected by members practising in the metropolis, these gentlemen having responded to a confidential report of the actual causes of death in 10,000 cases, of which between seven and eight thousand were in the course of private practice. The report was presented to the society in November 1882. This may be considered a very fair representation of the mortality of London, of which it would constitute one-fourth. A reasonable deduction from this report is that fourteen per cent. of all the adults dying in London have injured their health directly or indirectly by alcoholic inebriety. This is equal to a mortality of almost 39,000 in England and Wales, or some 52,000 in the United Kingdom.

Comparison between Rechabites and Oddfellows.

Harveian Society enquiry.

This is the estimate of the yearly number of premature deaths among the personally intemperate. There is, secondly, the roll of those who have died prematurely from accident, violence, starvation, or disease arising indirectly from the alcoholic excess of persons other than the

Author's estimate of indirect Inebriate mortality.

* An actuarial report on the sickness and death among the members of the London Grand Division of the Order of Sons of Temperance, shows the following comparative ratio in 11,016 years of life. Sons of Temperance 7·48 weeks; Manchester Unity Rural Towns and City Districts, 1866-70, 26·20 weeks; M. U. Rural Districts, 1866-70, 24·68 weeks; Foresters, 1871-5, 27·66 weeks.

slain. This I could not estimate as much less than double the former number. When we consider that each working member of the community has a money value, it will at once be apparent what an enormous pecuniary loss accrues to the country every year from the lethal ravages of this deadly disease.

Disease from Inebriety.

For every death there are probably fifty cases of illness. But if we compute the proportion as only ten persons laid aside by illness accompanied by incapacity for work to one dying, the abstraction of human working power by inebriety is indeed appalling. One large employer of labour with whom I am acquainted informs me that his firm loses nearly £30,000 a year through the inebriate absence of their workmen practically two days per week.

Expenditure on Inebriants.

In 1886 the alcoholic expenditure for the United Kingdom amounted to almost £123,000,000. When it is remembered that this alcoholic disbursement is unnecessary, and that, even if any legitimate need for alcohol exists, one-tenth of this amount would be ample, we see how our resources are wasted and how the demand for our production is restricted. The miserable outcome of this shameful extravagance is a plentiful crop of crime, poverty, lunacy, suffering, disease and death.

Great national loss.

In a word, the national loss of health, wealth, and life, through inebriety, is a waste which is wanton, an expenditure which is profligate.

How much cheaper it would be, instead of this reckless extravagance, including as it does a large sum for the punishment of inebriety as a crime,* if in addition

* It is computed that the average cost to the community of many cases of individuals imprisoned repeatedly for drunkenness and its complications, is about £1000 each.

to suppressing the common sale of intoxicants and narcotics, our rulers would adopt measures adequate to the care and cure of the inebriate! Even though drastic legislation for the prohibition of the liquor, opium, and allied traffic be not meanwhile enacted, ample provision for the control and treatment of the habitual drunkard, a practical effort in which every citizen could unite, would be a true economy.

Economy to treat Inebriates as diseased.

The Dalrymple Home has been open for three and a half years. Thirty-six patients who have been discharged after a longer or shorter term of residence are doing well. We may compute their annual monetary value to the State at the very low average of £1000, among them being landed proprietors, merchants, medical men, manufacturers, lawyers, and civil engineers. At this exceedingly under-estimated computation £36,000 a year is now being saved by the nation, which but for the result of the treatment at this Home would probably have been nearly all lost. In addition to this, there would have been the expense incurred to the community through breaches of the law by some of these persons when under the influence of drink.

Saving to the nation from the Dalrymple Home.

What plan should be devised? It would be a mistake to consign confirmed inebriates to a lunatic asylum, even if the law pronounced them insane. The society of epileptic maniacs and other persons of unsound mind is not calculated to improve the alcoholist or the opiist, the chloralist or the chlorodynist, but rather the reverse. The association is perilous both for the mad and the drunken. This is recognised in the Habitual Drunkards Act, under the provisions of which a license to keep a retreat for

Lunatic asylum undesirable.

inebriates is granted to no one who has the care of lunatics. What then remains? As inebriety is not, except in a limited number of cases, an insanity, but a disease of the nervous system allied to insanity, the most judicious plan is to send the inebriate to an institution for the specific purpose of treating this disease, that is, the disease of inebriety, whatever the particular inebriant used.

Special Homes for Inebriates best.

In this establishment there should be strict supervision and watchful medical care. The predisposing and exciting causes of the ailment and the idiosyncrasies of each case should be diligently enquired into, and the treatment appropriate to the individual thoughtfully directed and considerately carried out. There should be an airy, cheerful, commodious building erected on a healthy soil and scrupulously kept in a high state of sanitary perfection. There should be ample grounds for exercise, so that the patients may have no reasonable excuse for frequent absence in search of healthful exertion. Attention should be paid to amusement, recreation, and occupation suited to the varied character and tastes of the inmates, while intellectual moral and religious influences should be sedulously cultivated.

Medical treatment and care.

Requirements of special Homes.

Whether the inebriate is regarded as sane or insane, whether he has or has not been accused of a criminal offence, he is a nuisance to his friends and to the community. He needs protection against himself, while his family and the general body need to be protected from him. The disease is generally so confirmed that the shortest period in which decided improvement likely to last any time can usually be hoped for, is a year, though a less term may suffice in a small proportion of

cases. Two years are required for many, and there are very large numbers who should be committed for terms of three, four and five years, or even till medical experts are of opinion that the disease is cured. As in the case of lunatics discharged from an asylum on probation, inebriates about whose cure there is doubt might be similarly dealt with. The licensee ought to be invested with power to retake patients who have illegally escaped. Another essential is power to compel the patient to work. Idleness is most detrimental, and an indisposition to exercise is nearly as characteristic of many cases as is lying. As perhaps a majority of inebriates have expended their own resources and the resources of their relatives, there ought to be provision by the State for the treatment of indigent inebriates who are unable to contribute towards their maintenance and treatment. A portion of the proceeds of their labour might fairly be apportioned in part payment of the charge to which the tax-payers are put. There could be an arrangement also for those who are in a position to defray a part or the whole of the bare cost of their board and treatment. Those who can afford, or whose friends can afford, to pay for more select care should be catered for either in authorised private venture Homes under Government Inspection, or in institutions carried on by a corporation not for profit. The latter disinterested corporate undertakings might be in part aided by the public funds, and thus be able to receive patients of various classes comprising those who could pay well, those who could pay a moderate rate, and those who could pay nothing. The patients at these last men-

Period of treatment 1 to 3 years.

Leave on probation.

Power to compel work to be done by patients.

Provision for the indigent.

tioned Homes would necessarily be arranged into different floors or wings of a main building, or into separate buildings, the accommodation varying with the pecuniary payment. In this case it would be necessary to have separate tables and other provision for each class.

Classification.

For inebriates who have shown that they are not amenable to treatment, who are in fact practically incurable, it is important that different provision be made. Though, in spite of the unfavourable prognosis, a few even of these "incurables" may ultimately be at least improved if not cured, it is imperative that they be restrained in their own interest, in consideration for their families and for the defence of the community against probable violence and other serious offences. Such inebriates cannot safely be treated with those of whose cure there is great hope, without sadly and mischievously interfering with the successful treatment of the latter.

Special provision for incurable Inebriates.

In no circumstances should the inebriate be associated with the insane. The House of Lords, at the suggestion of the Archbishop of York, did splendid work when they inserted a clause in the Habitual Drunkards Act of 1879, preventing the granting of a license to keep a Retreat for inebriates to anyone having the care of lunatics. The commingling is bad for both classes of patients. It is injurious to the inebriate, inasmuch as when he has recovered from his outbreak he is of sound mind, all his faculties being clear and collected. This is the most critical stage in the cure of inebriety, for though he requires to be under control and medical care for months or years, he feels well and strong, has a wondrous appetite, and is (though he is mistaken in this

Inebriates should not be associated with the insane.

belief) confident that he is completely cured, able to go out into the world and resist every temptation to drink. During this convalescent stage, the vigorous intellectual convalescent is irritated disturbed and depressed by associating with the mentally unsound. The communion is prejudicial to the insane, for the annoyed discontented and now sane inebriate vents his spite on the officials, whose duty it is to detain him for so long a period, by goading his lunatic fellow-patients to insubordination, or at the best delights in varying the monotony of his detention by diverting himself at the expense of his less intelligent and sound-minded companions in enforced residence. At other times, the depressing influence of the insane associations is apt to engender melancholia and other forms of mental alienation.

Medico-legal relations of life insurance to Inebriety.

Many legal suits have been raised against life assurance companies by the executors or heirs of persons who have been suspected of drinking to excess. Payment of the policy on such lives has been resisted on the plea that the deceased insurer had hastened his death by his drinking habits, and had concealed these, when effecting the policy. The issue of such suits has been variable, as it is very difficult in many cases to produce testimony adequate to an elucidation of the truth. In some cases the friends were able to prove that the deceased had never been believed by any of them to have been intoxicated. I fear that the result of all such trials must be very uncertain. Many circumstances arise to complicate the pleadings. For example, the insurer may truthfully declare, on applying for a policy of insurance on his life, that his habits are strictly sober. But he may have been the subject of an alcoholic or

neurotic heredity, and his life may truly have been shortened by inebriate indulgence induced by the application of an exciting cause to the inebriate diathesis, long after the date of his declaration of temperance.

Should uncured Inebriates marry?

As there is nothing more certain than that the children, or some of the children of a periodic or continuous inebriate, will either have a tendency to intoxication, a deficient inhibitory power, or some neurosis involving considerable liability to habits of inebriation, the question arises:—Have confirmed inebriates any right to procreate offspring weighted with so perilous an heredity? To this delicate question I would suggest a practical reply, viz., that no uncured inebriate should have children. For such an one to bring helpless innocents into the world with the prospect of a life-long struggle for sobriety, seems to me a wrong at once to the progeny and to the community. The just and wise practice of no perpetration of the inebriate diathesis, might be fairly relaxed when the inebriate has given reasonable evidence of cure. There ought to be as solemn a sense of responsibility in begetting a child of a drunken as of an insane parent. In one German locality, Waldeck, a decree has been issued that no license to marry will hereafter be granted to any individual who is addicted to drunkenness; or, having been so, he must exhibit full proofs that he is no longer a slave thereto. It has also been directed that in every report made by the ecclesiastical, municipal, and police authorities upon petitions for license to marry, the report shall distinctly state whether either of the parties desirous to marry is intemperate or temperate.

APPENDIX

I.

Summary of the One Hundred and Three Cases admitted since the opening of the DALRYMPLE HOME, *Rickmansworth, Hertfordshire, England,* R. W. BRANTHWAITE, L.R.C.P., *Med. Superintendent.*

NUMBER OF PATIENTS:—	
Under the Act	48
Private	55
	103
PERIOD FOR WHICH PATIENTS HAVE ENTERED:—	
Under the Act—	
18 entered for 12 months	18
1 " " 9 "	1
12 " " 6 "	12
17 " " 3 "	17
	48
As Private Patients—	
Entered for 12 months	17
" " 9 "	3
" " 6 "	13
" " 4 "	4
" " 3 "	18
	55
	103
AGE:—	
Between 20 and 30 years	27
" 30 " 40 "	46
" 40 " 50 "	22
" 50 " 60 "	8
	103
Average age of all Patients, 35.	
PREVIOUS RESIDENCE OF PATIENTS:—	
England—	
London	38
Provincial	43
Scotland	5
Ireland	7
France	2
Switzerland	1
Cape Colony	1
Australia	1
New Zealand	1
United States	1
Canada	1
South America	1
India	1
	103

RELIGION:—	
Protestant	98
Roman Catholic	5
	103
EDUCATION:—	
College	26
Good	55
Fairly Good	20
Elementary	2
	103
MARRIAGE:—	
Married	51
Single	46
Widowed	6
	103
OCCUPATION:—	
Retired Military Officers	3
Medical Practitioners	8
Student of Medicine	1
Barristers-at-law	2
Solicitors	3
Tutors	2
Civil Servants	9
Clerks in Holy Orders	2
Publisher	1
Marine Merchant Service	1
Accountants	2
Auctioneer	1
Stock-brokers	2
Librarian	1
Clerks	15
Land Agents	2
Underwriter	1
Engineers	4
Cotton Manufacturers	2
Builder	1
Shop-fitter	1
Drapers	2
Merchants	8
Farmers	2
Commercial Travellers	2
Gentlemen of no occupation	25
	103

FAMILY HISTORY:—

Insanity	in	9 cases
Inebriety:—		
Father or Mother	„	17 „
Grand-parents (with Uncles or Brothers)	„	6 „
Brothers	„	10 „
Uncles	„	10 „
No history of insanity or inebriety obtainable	„	59 „

ASSOCIATE HABITS:—

Tobacco	91
Chloral and Tobacco	3
Morphia	2
Opium or Chlorodyne and Tobacco	3
No other apparent habits	4
	103

DRINKING HABIT:—

Regular	58
Periodical	45
	103

FREQUENCY OF PERIODS:—

Every week	5
„ 2 weeks	2
„ 3 „	4
„ 4 „	4
„ 6 „	5
„ 2 months	7
„ 3 „	8
Very irregular	10

Average of time addicted in all cases 8½ years.

DELIRIUM TREMENS:—

Patients who have had one attack	16
Patients who have had two attacks	5
Patients who have had three attacks	3
Patient who has had five attacks	1

ORDINARY HABITS:—

Described as Social	95
„ Solitary	8
	103

KIND OF LIQUOR USED:—

All Spirits	19
Whisky	30
Brandy	8
Gin	5
Wine	2
Wine and Beer	3
Beer	4
Beer and Spirits	24
Various	8
	103

PREVIOUS RESIDENCE IN OTHER RETREATS OR UNDER PRIVATE CARE:—

Once	19	patients
Twice	2	„
Insane Asylum	1	„

EXCITING CAUSE:—

Sociability	41
Some description of nerve-shock from domestic, financial, or business trouble	33
Want of employment	9
Influence of occupation	10
Following injury	6
Not assigned	4
	103

COMPLICATING DISEASES:—

Phthisis	3
Pulmonary Congestion	1
Asthma	2
Chronic Rheumatism	3
Gout	4
Syphilis	9
Urethral Stricture	3
Dyspepsia	11
General Debility	3
Amaurosis	2
Partial Paralysis (Alcoholic)	2
Phosphatic Calculi	1
Alcoholic Convulsions	2

SUMMARY OF THE DISCHARGES.

DISCHARGED:—

Efflux of time	75
Illness	4
Unsuitable for treatment	6
	85

TERM OF RESIDENCE:—

12 months and longer	20
9 „ „	2
8 „ „	5
6 „ „	18
5 „ „	3
4 „ „	3
3 „ „	30
2 „ „	1
1½ „ „	1
1 „ „	2
	85

Average length of period under treatment of all patients discharged, about 6½ months.

AFTER HISTORY:—

Doing well	36
Improved	2
Not improved	27
Insane	1
Dead	3
Not heard from	16
	85

READMITTED 7

II.

[42 & 43 Vict.] *Habitual Drunkards Act*, 1879. [Ch. 19.]

THE SECOND SCHEDULE.

Form No. 1.

Application for License of Retreat.

The Habitual Drunkards Act, 1879.

To the justices of the peace for the county [*or* borough] of [ ] [*or as the case may be*].

I, the undersigned, hereby apply for a license for the house described below, as a retreat for the reception of male [*or* female, *or* male and female] persons being habitual drunkards within the meaning of the above-mentioned Act, to be detained and treated as patients therein.

And I, the undersigned, undertake to reside in the house and give my personal attention to the management, care, and treatment of the patients.

Witness	(Signed)
Name	*Name*
Address	*Address*
Description	*Description*

[*House to be described with the following (among other) particulars; and a plan on a scale of not less than one eighth*

of an inch to a foot to accompany the description and be referred to therein :—

a. Dimensions of every room.

b. Arrangements for separation of sexes.

c. Quantity of land available for exercise and recreation of patients.

d. Extent of applicant's interest in the house].

Rules.

1. An application may include two or more houses belonging to the same person or persons, provided no one of the houses is separated from another or others of them otherwise than by land in the same occupation and by a road, or in either of those modes.

2. The application is to be made not less than ten days before the sessions or meeting at which it is to be considered.

3. The clerk of the local authority is to give notice of the application having been made, by advertisement published in a newspaper circulating in the district of the local authority six days at least before the same sessions or meeting.

III.

FORM No. II.

LICENSE.

The Habitual Drunkards Act, 1879.

County, [*or* borough] of { This is to certify that in pursuance of the above-mentioned Act the justices of the peace acting in and for the county [*or* borough] of [*or as the case may be*], in general or quarter (or special) sessions assembled, upon the application of *A.B.*, a copy of which application is endorsed on this license, have licensed and do hereby license the said *A.B.*, to use the house described in that application for the reception of persons being habitual drunkards, as follows: namely, male [*or* female, *or* male and female] patients for calendar months from this date.

Dated this day of 18

(Signed)

Clerk of the Local Authority.

RULES.

1. A fee of ten shillings is to be paid for the license.

2. The clerk of the local authority, within ten days after a license has been granted, is to give notice of the granting thereof by advertisement published in a newspaper circulating in the district of the local authority, and is to send a copy of the license to the Secretary of State.

The following is the form of Case-book which I have found most u
patients and also for patients under the Habitual Drunkards
books, one set for those persons treated privately, and the oth

Name.	Date of Admission or first seen.	Age.	Sex	Nativity and previous residence.	Temperament.	Religion.	Occupation.	Education.	Marriage.		Family History.			Constant or Periodic Inebriety.		Duration of Habit	
									Single, Married or Widowed.	Married—with or apart from family.	Friends insane.	Friends intemperate.	General Health Heredity.		Frequency of Periods.	Periodic.	Moderate Use.
																	Years

recording the main features of each case. It can be used for private ere both classes of patients are received, there should be a double set of nts under the Act.

Indulgence, Social or Solitary.	Ever been in insane or inebriate asylum.	Ever had delirium tremens or alcoholic mania? How often?	Associated Habit. Tobacco, Opium, Chloral, etc.	Exciting Cause.	Complicatory Disease or Injury.	General Health.							Date of discharge or when last seen.	Condition at last report.	Treatment.	Remarks.
						Pulse.	Heart.	Respiration.	Appetite.	Sleep.	Nervous System.	Other functions.				

Register of Admissions.

The following are the forms of Registers ordered to be kept for patients under the Habitual Drunkards Act.

Date of last previous admission (if any).	No. in Order of Admission.	Date of Admission.	Christian and Surname at length.	Sex.		Age.	Condition as to Marriage.			Condition of Life.	Previous Place of Abode.	Date of Application and of Justices Attestation.	Condition of Health.	Date of Discharge or Death.	Discharged.	How discharged.	Died.	Observations.
				M.	F.		Married.	Single.	Widowed.									

Register of Discharges and Deaths.

Date of Discharge or Death.	Date of last Admission.	No. in Register of Admission.	Christian and Surname at Length.	Discharged. Sex. M.	Discharged. Sex. F.	How discharged.	Died. Sex. M.	Died. Sex. F.	Age at Death.	Assigned cause of Death.	Observations.

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