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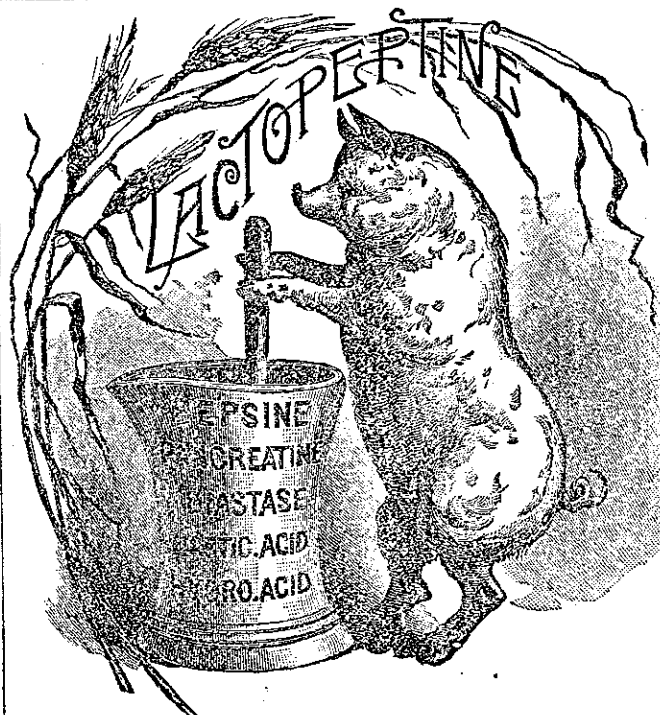
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INEBRIATE CRIMINAL RESPONSIBILITY.*

BY NORMAN KERR, M.D., F.L.S.

President Society for the Study of Inebriety; Chairman British Medical Association Inebriates' Legislation Committee; Consulting Physician, Dalrymple Home.

The importance of the difficult and delicate subject of the criminal responsibility of inebriates has been considerably enhanced of recent years. The public conscience has been shocked by the severe punishment which has been inflicted on persons for offenses committed without any criminal intention, of which offenses the doer had no remembrance when he awoke from his drunken paroxysm, and of the commission of which he was in some instances quite unconscious, in other instances impelled by a dominating narcomaniacal impulse against which nothing short of physical restraint could have prevailed.

I am happy to be in a position to state that my previous lecture here on this subject last year† has been favor-

* A lecture delivered in the rooms of the Medical Society of London, 12th March, 1889.

† Since embodied in "Inebriety: Its Etiology, Pathology, Treatment, and Jurisprudence."

confessedly there is often a temporary loss of reason and consciousness, is not invariably avoidable.

There are individuals who are borne involuntarily on a whirlwind of intoxication, just as at times other persons are swept off their equilibrium by a maniacal access. In the latter case, as in epileptic mania, if it can be established that the seizure is unavoidable, and the consequent actions uncontrollable, complete responsibility is not exacted. In some criminal cases, complicated with drinking, the intemperate outburst during which the crime has been committed has simply been as utterly beyond the control of the person as an epileptic maniacal attack. The drunkenness has simply been a symptom of mental unsoundness. In these cases there should be no room for difference of opinion.

In other cases, though there has been no insane diathesis or previous insane or inebriate paroxysm, there has been a temporarily disordered nervous and mental condition which has produced a temporarily uncontrollable impulse or crave for narcotic indulgence. These morbid phenomena may be the issue of a variety of unavoidable predisposing or exciting causes. For example, there is nerve exhaustion and brain disturbance produced in some persons by excessive and continuous watching of a very exacting invalid. A longer or shorter period of constant nursing without sleep may so affect the cerebro-spinal centers that the nurse may, for the time, be hurled into a drunken fit on the mere sipping of an intoxicant, of which, under ordinary healthful conditions, she could partake in limited quantities.

In the disease of narcomania (a mania for any kind of narcotism), inherited, as in narcomania of the neurotic diathesis, there is apt to be a like risk of extreme susceptibility to the narcotic action of alcohol and other anæsthetic intoxicants. Is it equitable that no allowance should be made for crime committed under such circumstances?

But over and above this inability to partake of an alcoholic or other intoxicant in limited quantity, if the smallest sip has been tasted, there remains a still more important

phenomenon. There are many persons who, from various causes, operating physically and sometimes even in spite of efforts at resistance, are impelled by an inward irresistible impulse to rush headlong into a drunken bout. In this transient stage of inebriate exasperation violence may be attempted. All admit that while drunk and beside themselves these accused are unconscious of evil intention for the simple reason that consciousness is for the moment practically obliterated. If such affected persons can be locked up apart from intoxicants for a given number of hours or days they are safe for a spell; but unless restrained by superior force they cannot resist the drink-impulse. Is it just that such involuntary criminals should be punished as are voluntary evil-doers?

Yet, again: To constitute many crimes there must be an illegal intention. How can this be present when a man or woman is so drunk as to be incapacitated to reason or to remember, or even to be conscious of what he or she does? In a recent case, where there was a sentence of twenty years imprisonment, equivalent in the circumstances to imprisonment for life, two men had been drinking together for hours at various bars. While at dinner in the evening, and still intoxicated, one of the drunkards shot the other. Though the judge, in his summing up, could assign no motive for the deed, the survivor of this fatal alcoholic duet was found guilty and sentenced to this heavy punishment.

Murder is sometimes done by persons who are laboring under some delusion or hallucination begotten of the narcotic brain-poisoning under which they are laboring. In one case an educated man was hung for a deliberately executed murder. Though the fact was not brought out at the trial, this victim of the law had been suffering from delusions similar to those which I have seen other persons laboring under while under the influence of chloral. But in these latter instances the patients were prevented from doing any violence by the watchful care of friends. In this class of cases human beings may suffer the highest penalty of the law for capital

offenses of which they had no personal knowledge at the time, and of which they had no remembrance on emerging from the narcotic influence.

Reviewing these and many other considerations based on physical departures from health which operate to impair, and for the moment destroy the moral control, and which (temporarily, it may be) so dull the consciousness that the doer of a violent deed may be either unaware of the act itself, or, if he is aware of it, his reason may be so confused that he is unable to understand the consequences or the nature of the act. Or, again, if conscious and able to understand the character and effects of the act, his will will be so paralyzed as to be powerless to resist the morbid impulse. Passing all this under review it is most gratifying to scientific students of medical jurisprudence to find a gradually increasing disposition in judge and jury to allow scientific discoveries to influence their judgments. Mr. Justice Day, for example, recently ruled that "whatever the cause of the unconsciousness, a person not knowing the nature and quality of his acts, is irresponsible for them." (*Reg. v. Barnes*, Lancaster Assizes, January, 1886.) If this ruling were acquiesced in by other judges, and if juries acted on this ruling, then a considerable proportion of cases in which criminal offenses have been committed while the doer was in a state of drunken unconsciousness and was therefore innocent of a criminal design, or of any actual present knowledge of the deed, would at once be removed from the category in which they have hitherto been almost always placed, that of complete responsibility involving full penalties, and treated as irresponsible. Indeed, the general following of such an enlightened ruling would amount to a revolution in our present criminal procedure.

As remarkable a judicial deliverance was that of Chief Baron Tolles (*Reg. v. M. R. Galway*, Summer Assizes, 1887). The defendant, a female nurse, was accused of killing a male patient who was under her care for typhus fever. The evidence showed that for over seven days she had nursed the

invalid day and night, that one night half a glass of whisky was given to her, and the bottle with five glasses remaining in it was left on the kitchen dresser. The dying man was in charge of his mother and the nurse during the night, when all else in the house had retired to rest. The mother, who was quite worn out, slept in another room, and was awoke early in the morning by the nurse screaming. She found her son's dead body on the kitchen floor, surrounded by fire. The nurse was screaming and dancing about, with a brush in one hand and a pair of tongs in the other. The nurse was very excited and appeared either mad or drunk. From other witnesses it was elicited that the nurse cried out, "she'd soon have the devil burnt and M. D. back again." The judge charged that drunkenness being a voluntary act, the law held persons responsible for acts done in a state voluntarily produced, though they did not know the nature and quality of their acts. But that, if a person, from any cause, say long watching, want of sleep, or deprivation of blood, was reduced to such a condition that a smaller quantity of stimulant would make him drunk than would produce such a state if he were in health, then neither law nor common sense would hold him responsible for his acts, inasmuch as they were not voluntary but *produced by disease*. It appeared from the evidence that the nurse was under the delusion that her patient had been turned into a devil, that the proper course was to burn the devil and thus bring back the patient. Was that delusion the result of drunkenness or of disease of the mind? The jury found the prisoner guilty of manslaughter, but insane at the time of committing it, and she was ordered to be confined in a lunatic asylum during the Lord Lieutenant's pleasure. [For a report of this case I am indebted to Professor Kinkead.]

Here again is a decision affecting a wide circle of criminal accusations. In former times the accused has suffered severe penalties in such cases, but Baron Tolles' recognition of a diseased condition and of, so to speak, an accidental involun-

tary intoxication as entitling to criminal irresponsibility is a remarkable event in our criminal annals.

Let me just call your attention to one more evidence of the growing influence of the discoveries of modern pathological scientific research on the judicial mind. This case is an excellent illustration of the extraordinary advance in medical jurisprudence, recognizing as it does the influence of *heredity* in modifying criminal responsibility. (Reg. v. Mountain, Leeds Assizes, 1888.)

An unmarried man aged thirty-four was charged with killing his mother with prolonged violence, in the presence of a terror-stricken servant whom he had locked up in the room with them all night. About five years previously the prisoner had an attack of delirium tremens, and for a year past had been subject to excited fits and delusional fears as to his life having been threatened. He persisted in declaring that the victim was not his mother; one medical witness testified that the accused was laboring under a seizure of delirium tremens when the murder was done. Another testified that he believed the form of the prisoner's illness was mania-a-potu. Evidence was adduced in proof of an insane heredity. Baron Tollock, in his charge, said that though no man could be excused on the mere plea that he had reduced himself to a want of reason by drinking, there were other circumstances in the present case. One was that through hereditary influence the accused's infirmity and mental deterioration possibly did largely account for the violent act. Another circumstance was whether, apart from drinking, the man was the subject of delusional insanity. The judge most judiciously answered the objection that if the prisoner had been an abstainer from alcoholic drink he would not have been guilty of killing his mother; that, as a certain amount of alcohol with his predisposition made him a murderer, the accused should not have taken the little drop that upset his reason. Baron Tollock replied that the last man to know his own weakness is he who has a weak mind, that such an one cannot argue as doctors can argue for him,

but believes that as regards strength of mind he is on a par with all around him. The learned judge charged that if at the time when the murder was committed (though the accused had been a drunkard and had suffered from delirium tremens) he had drunk only such a quantity of intoxicant liquor as an ordinary man could take without upsetting his reason, and that the insane predisposition was the main factor although the drinking of a small quantity of alcohol was a contributory cause, the plea of irresponsibility on the ground of insanity was good. Happily the jury returned a verdict of acquittal in accordance with the judge's charge.

To these encouraging deliverances ought to be added others of an earlier date, though those were referable to a special alcoholic disease as freeing from responsibility. Though in some cases a plea based on delirium tremens has not been allowed, in other cases, such as the following, this plea has been pronounced valid. In *Reg. v. Burns* (Liverpool Summer Assizes, 1865), the accused had killed his wife, and immediately thereafter appeared to be quite calm, coolly stating that he knew what he had done, and giving as his reason for the deed that she was in league with men concealed in the walls. The jury acquitted the prisoner on the ground laid down by Baron Bramwell that, though the accused might have known that the act was killing and was wrong, he was laboring under a delusion which led him to suppose that the delusion, if true, would have justified the action.

Another person was acquitted of feloniously wounding two individuals, on the plea that he was under the impression, from delirium tremens, that his house was being broken into. (*Reg. v. Chaplin*, Warwick Assizes, Nov. 1878.)

At the Liverpool Assizes, May, 1888, the jury found a verdict of "not guilty" in the case of a lady of independent fortune, on the ground that she had recently suffered from delirium tremens, had not quite recovered therefrom, and was incapable of knowing what she was doing. The alleged offence was theft of a purse, a knife, a diamond ring, and three shillings in cash.

Turn we now to our police-courts. Our present practice of dealing with drunkards there is as mischievous as it is unjust. I am informed by Dr. J. Francis Sutherland, that in my native city, Glasgow, there are some 10,000 annual commitments of intemperate women for drunkenness and offences connected therewith, for an average period of seven days. On an average each female is imprisoned three times in a year. Some forty per cent. of these prisoners have had from eleven to 800 previous convictions. What does this really mean? Simply that, so far from curing or reforming, these short sentences actually only suffice to allow the incarcerated to recover from the effects of a "drinking bout," and send them forth once more with renewed vigor to resume their drunken excesses. Our police-court procedure in such cases is a mere mockery of justice, a huge system for the governmental training of inebriates. All this is most unfair. When a fine is exacted the real sufferers are the children of the prisoner, who often deny themselves necessary food to gather together the amount of their parent's fine. When there is a term of imprisonment, the family are again the punished, for their means of subsistence is taken from them by the internment of the bread-winner. The latter is practically not punished, prison being but a "club" where he is provided with wholesome food, free apartments, and healthful discipline, to say nothing of gratuitous medical attendance.

Looking at our existing general criminal treatment of inebriety, there can be little doubt that it is altogether an error, and founded on a wrong conception of what drunkenness usually is. Science is day by day showing more clearly that intemperance is generally the effect of disease, the inevitable outcrop of an unhealthy condition of body or brain or of both. To exact full criminal accountability from a culprit whose temporary unconsciousness and lack of control have been in the main due to certain physical perversions, temporarily or permanently affecting his reason, is as prejudicial to the individual as it is costly and demoralizing to the community, is as futile as it is unrighteous. The legislature,

by licensing the common sale of intoxicating drinks, tempts to their destruction human beings too scantily endowed with resisting power to withstand such tremendous temptations, and having trained them in inebriety, exacts from them full responsibility for all criminal acts thus committed and developed under the *ægis* of the law. Is this intelligent, honorable, or fair? I trow not; and I look forward with confidence, a confidence heightened by a recollection of the remarkable tributes of the judicial bench to science to which I have just referred, to the not far distant future when every diseased inebriate accused of a criminal offence shall receive that fair consideration at the hands of our legal tribunals, which a righteous administration of justice owes to even the east deserving and the meanest panel at the bar.

CHLORAL OR ALCOHOL.

A man was found dead in a cab at Manchester, England. He had entered the cab partially intoxicated, in company with a man who soon after got out and ordered the driver to go to a certain hotel. The intoxicated man was found dead and robbed. The supposition was that death came from chloral, and a crime was committed. The medical evidence showed cirrhosis of the liver, and chloral in the stomach. The questions on the trial were the rapidity of the action of chloral, and whether an alcoholic is more susceptible to the action of chloral; also, when intoxicated, if chloral is not more fatal and rapid in its action. It seemed possible that the man was given large doses of chloral after partial intoxication, either just before or after entering the cab, and died from it within half an hour.

In the inebriate, the impressions from the senses are most deceptive. They are never correct, and always biased and misinterpretations of actual conditions. While drinking, the senses are always filled with illusions and delusions that cannot be trusted alone.

THE NATURE AND CONSEQUENCES OF
INEBRIETY.

BY T. L. WRIGHT, M. D., BELLEFONTAINE, OHIO.

The universal extent of alcoholic impressions.—The effects of alcohol upon the human constitution are so various and complicated that a satisfactory analysis of them is of the utmost difficulty. Each one of the component parts of body, mind, and sensibility are profoundly affected in its essential qualities, and seriously modified in the application of its powers by the alcoholic influence.

Alcoholic influence is always muscular paralysis. The muscular structure is partially paralyzed, its natural efficiency being abated and weakened by the alcoholic impression. The muscles are not simply benumbed and enfeebled in movement, but they are hindered in divers and unequal degrees. There is not merely a lessening of muscular force, but there is also an inequality in muscular effort. The final result is not only deficiency of power in the muscular unit, but also distortion and absence of harmony in its actions.

Paralysis extends to the reasoning powers. There are corresponding disqualifications in the instruments of the intellectual movements. While they are enfeebled they are also unequally affected in their individual capacities, and thus their harmony of action is destroyed. Sound rationality is an impossibility under these disabilities.

The moral capacities are also paralyzed. In the physical basis of the moral and emotional activities a like unfitness prevails. Alcohol, while it weakens the moral sense, also deranges and disorganizes the nervous forces through which it is manifested.

There is confusion of capacity in the essential conditions of living in the elements of interior life. Moreover, this com-

bined debility and distortion is not confined to the relations of the human being with the external world. The movements, thoughts, and emotions arising from within — as from memory, association, and suggestion — aroused by the functional and vital processes, are likewise hampered. They are disturbed in unanimity of action and purpose.

Confusion comes on in the elements of exterior life. Again, the external life of the drunken man and the internal life of the same man are out of natural unison with each other; complicating his existence strangely, and placing him and his conduct beyond the pale of rational comprehension.

Confusion follows in the mutual dependence of body, mind, and morals. Finally, when a man is drunk, there is confusion in the relations which the component portions of the human being — the body, the mind, the sensibilities — should bear towards each other. There is too much independent and irrelevant behavior amongst them; and the resultant individual is a changeable and unreliable character, amenable neither to physiological laws nor rational influences.

There are two types of drunkenness — the acute, or occasional. Acute or occasional drunkenness when fully developed may be divided into three stages — the initial, which is very often a pleasing mania; the actually disabled, wherein body, mind, and morals, singly and severally, are unsteady and wavering — bereft of solid and trustworthy foundations. This is the stage which marks most distinctly the disabilities and weaknesses of the nervous system, and the absence of harmonious inter-action in the several component parts of the human character. The third stage of occasional drunkenness is that of helpless imbecility and stupor, merging into complete unconsciousness.

The first stage, as a general rule, subject to exceptions, is peculiarly agreeable. With soft and seductive allurements, it invites to alcoholic indulgence. In this stage, eloquence and poetry are supposed to spring spontaneously into being, clothed in the imagery of an imagination exalted and

glorified. Many sentiments of great apparent beauty, many seemingly fine turns of thought and striking expressions which pass for something of almost supernal quality, have had their first expression in the pleasing mania of initial intoxication. A careful analysis, however, will disclose the fact that the mental productions of drunkenness are always failures. Its expressions are rodomontade, stilted exaggerations, echoing emptiness, "Sounding brass and tinkling cymbals." It is true that fine ideas and grand sentiments have really come from drunken lips; but they are the offspring of imaginations naturally acute. They were formulated anterior to the inebriation, and it may be, were corrected after it was over.

The "weird" thoughts and expressions sometimes associated with certain stages of drunkenness are simply the expression of the incongruous arrangement of similars and opposites in mental configurations. Frequently they come from inconsistencies in the relationships of mental pictures imperfectly seen; or of nascent ideas incomplete, without definite form. The drunken mind is full of half-thoughts, half truths. Every suggestion to the mind in drunken mania is like turning a kaleidoscope—the resulting figures and arrangements seem beautiful and regular, but attention will reveal the fact that they are wholly made up of shining fragments of worthless material.

The second stage of the recent "drunk" represents the incapacities and inequalities of the nervous forces, which have been noted. It is pre-eminently the stage of partial paralysis.

The third stage, wherein sense and motion are practically suspended, needs no present comment.

Spasmodic or impulsive drunkenness.—The second type of drunkenness is that which is intermittent and impulsive; and it differs materially in several particulars from the common or occasional indulgence in alcoholic drinks. In the latter, there is sometimes no especial motive actuating the drinker. He probably is rather indifferent in the beginning

as to whether he partakes or not, and all times for indulgence are the same to him. In the former, however, there is a specific motive in taking alcoholic liquors. His object-point is intoxication, and that right away. He drinks the strongest liquor attainable, and in large quantities. All times for drinking are not alike; the desire for intoxication comes upon him at stated intervals only, but with exceeding power, while at other times his feelings are apparently at rest with regard to the desire for alcoholic drinks.

In the impulsive inebriates, the agreeable mania of incipient drunkenness is present; but the drinking extends over a considerable time—from three or four days to a week—sometimes longer. After the initial mania has passed away, which it will do usually with the first day, there is a change in the mental and moral disposition, arising from an accumulating load of new and unexpected poisons in the blood. Chief among these are carbonic acid and urea, each greatly disturbing the brain, and indeed the entire body. As drinking goes on, there is increase in these poisonous elements, while the universal distress is greatly intensified. This unhappy state works a corresponding change in the disposition of the drinker. The first pleasurable feelings are wholly gone. Irritability of nerve and a vicious temper grow in strength and violence as time passes on, until at last an unreasoning and desperate frenzy rules the mind and conduct. Deeds of violence and even horror are now liable to be inaugurated. With howls and hisses and furious imprecations in his insensate ravings, the drunkard may murder wife and children, and then perchance turn his reddened hands upon himself. Should this stage pass off without some serious outburst, there is reason for thankfulness. But it is not even then improbable that in the horrors of his slow recovery, the wretched man may quietly and silently commit suicide.

Between the pleasing feelings of his early inebriation and the agonized frenzy of his later potations, the spasmodic inebriate may have several periods of stupor and insensibility.

bility; but his general condition is the staggering uncertainty and bewilderment of partial but unequal paralysis, extending throughout his entire nervous system.

There are two events now taking place that, being wholly within the organism of the drunkard, are not perceptible to ordinary observation; but which, later on, impress very important characteristics upon the inebriate constitution. Injury to the heart is one of them. Hard drinking overworks the heart. It not only increases the frequency of the pulsations of that organ, but it precipitates the blood upon it in such volumes that it is strained and stretched in its chambers. The final tendency is towards a thinning and weakening of the walls of the heart, as well as a derangement in the integrity of its valves. A diminution of the nervous force is the other event alluded to as progressing within the system when drinking is prolonged. Persistent drinking sustains a continuous paralysis. The nervous powers, already benumbed, become permanently weakened and dull. It is a physiological law, that when any portion of the human body is withdrawn for a considerable time from activity, its natural capacity is lessened. Indeed, if the non-use is complete and persistent, the organ in abeyance is frequently reduced in size, or, as it is called, atrophied.

There are, in the neighborhood of this writing, many small lakes well stocked with excellent fish. One of these, an eighth of a mile across, was covered over with a thick turf, bearing grass and weeds. In constructing a railroad, this turf was broken through, revealing water, in some places many feet deep and beautifully clear. Eyeless fishes, or fishes with rudimentary eyes, abound in this lake, demonstrating not only the absolute destruction that may overtake the power of an organ when it is not used, but showing also the atrophy or actual disappearance of the organ itself. These fishes present other features of physical degeneration, as though processes of retrograde metamorphosis were becoming constitutional, and of course were appearing in descent. Thus a new and peculiar physical conformation is

established under the fixed coöperation of a number of unusual influences upon the vital forces.

This illustration imparts another very important lesson, namely: physical disability becomes hereditary, they descend from ancestry to posterity. Observation teaches no lesson more clearly, unmistakably, and universally, than the absolute certainty of heredity. Nothing escapes it—neither the slightest physical formation or movement, nor the faintest hint of a mental or moral impulse. Race propagation is simply the handing down of the salient features of one generation to succeeding ones. There is no necessary progression, deterioration, or change. But heredity, in its highest sense, is particularly concerned and exact in transmitting an immense number of personal characteristics derived from the innumerable associations, good, bad, and indifferent, that have been connected with individual existence.

The main features of humanity are one and unvarying; but the acquired "peculiarities" of families, and especially of individuals, are the reflections of the possibilities of human life. They measure the capabilities and the defects of man's nature, as they are susceptible of development by personal contact with the ever-changing situations, and the endless accidents of time. To the descent by heredity of the acquired characteristics of individuals in varying forms, and by unnumbered vicarious substitutions, we owe the strength as well as the weakness of the race. The potentialities of humanity, exhibited in the beauty of one, the eloquence of another, the artistic genius of another, the fortitude and patriotism and unselfishness of others, illustrate and also demonstrate the existence in the human race of qualities far greater and more glorious than the highest achievements of minds merely symmetrical can possibly evince. These potentialities are the outcome of personal traits formulated in individuals by contact with the experiences of life, and transmitted in endless variety of combination and form by the power of heredity.

Habitual drunkenness.—This form of inebriety has cer-

tain characteristics peculiar to itself. The growing injury to the heart is likely to attract attention, and become troublesome, and it is very apt to call out much complaint, and cause no small uneasiness of mind. Alcohol, taken in the first place without, perhaps, any very driving motive, or, it may be, to gratify a morbid desire for intoxication, is now consumed quite frequently as a medicine. The incentives to alcoholic indulgence are changed and modified in accordance with the change of circumstances. The delightful feeling of early intoxication — the initial mania — is no longer the chief inducement in drinking liquors. The weakened heart, the strained and lax arteries, and the engorged and lifeless veins, induce a feeling of universal wretchedness and discomfort. The drunkard himself is not aware of the actual state of the facts; but he knows by experience that alcohol, through its exciting qualities when newly taken, relieves the sad and gloomy impressions that weigh upon him. Alcohol braces the heart, and for a short time arouses the languid circulation from its torpor. The inebriate, therefore, comes to look upon it as a necessity, not only to afford present help, but even to save life. But every cup taken by the habitual drunkard augments the evil, debilitating the heart still more, and lays deeper than before the foundations for future danger and future excess.

The process of dulling the nervous centers by alcoholic paralysis, begun in the early stage of drinking, goes steadily on in the habitual drunkard. By slow gradations, the muscular movements are conducted with increasing difficulty as they are gradually withdrawn from the instant and natural control of the will.

The reasoning faculties become restricted, obtuse, and slow; and the judgment is apt to require frequent revision. Important facts escape the attention altogether, and agreements and differences are not clearly observed.

The mingled weakness and perversion of common sensation under the paralysis of alcohol make muscular movements uncertain and fumbling. Injury to the sense of feeling in

drunkenness (as also in cold) always interferes with the fitness, as well as the readiness, of muscular activity. When the fingers are benumbed accuracy of movement by them is impossible. A musician sensibly under the control of alcohol cannot perform acceptably either to himself or others upon a musical instrument. He will probably make the effort with the utmost confidence, but his disgust and disappointment will be great as he discovers that he is physically incapable of succeeding.

The disabilities of common sensation present insurmountable obstacles to the acquisition of reliable information. In state of general numbness, the senses cannot receive clear impressions. For this reason the relative perceptions in the mind are misty, shadowy, undefined; or, it may be, they are grotesque — mere caricatures — like the reflection of a face in a mirror with an uneven surface. Knowledge partaking of such features is of course indefinite and untrustworthy. Yet this is the character of the facts submitted for the consideration of the reasoning faculties in a person who is drunk.

The moral sentiments, by reason of the partial paralysis of certain nerve centers, are not acutely felt, nor in fact fully developed. As habitual drinking continues they cease to supervise motive and conduct with a healthy vigilance, and they sink down impaired in alertness and vitality. The truth appears to be that the moral sentiments sit lightly upon human nature. The slightest uncongenial breath tends to taint them, or, it may be, it destroys them altogether. "Barbarous instincts in man are preserved with remarkable persistence by the laws of heredity," says Mr. Austin Abbott. Dr. Spitzka says, "the barbarous element is present in greater or less degree in every one of us." When the delicate and refined characteristics of sensibility and emotion are brushed away, as they readily may be by the rude violence of habitual drunkenness, the barbarous element in the animal nature at once appears in all its aggressiveness.

But there is another mischievous process going on in the

habitual drunkard, one which is now seen for the first time, for it is not observed either in the occasional or the spasmodic inebriate. Habitual drinking, even in small quantities, favors the unnatural growth or increase of a particular structure that enters largely into the human body, known as the fibrous tissue. This substance may be described as sustaining a relationship to the body at large very similar to that occupied by the *canvas* of a lady's sampler to the figures worked upon it. The fibers or "threads" of this substance sometimes become considerably enlarged under the prolonged influence of alcohol. Consequent upon the increase of this fibrous material in different localities, various diseases and inconveniences are brought into existence. The habitual drunkard begins to have liver complaint, kidney trouble, swimming in the head, as well as other ailments, superadded to his heart disease, and his infirmities of sensation, and of mind and morals.

The fibrous tissue being alone concerned in this morbid growth, the remaining constituents of the organism cannot maintain their proper relative proportions. When, therefore, one of the component parts of bodily organs becomes greatly overgrown, derangements in the symmetry of the organs affected necessarily occur. Troubles arise incident to the unnatural form, size, weight, and texture of the parts implicated. It is impossible that such serious physical changes in important and vital organs should take place without imposing great disabilities upon the freedom and perfection of their actions. Thus the power of alcohol over the human constitution fills the system with strange, dangerous, and intractable diseases, both structural and functional.

The chronic inebriate.—After many years of steady drinking, the injuries and disqualifications, begun perhaps in the occasional drinker, growing and increasing in the habitual drunkard, become established and immovable in the chronic inebriate. Common sensation is permanently lessened and dulled. Things in the hands are held insecurely; they are apt to be fumbled. Bodily movements are uncertain, unsteady, rolling. Reason and judgment are impaired, un-

finished, unsatisfactory. Conclusions are adopted from insufficient data. Things out of the common routine of life, so far from giving pleasure and alertness to mind, arouse irritability and worry of temper. Independent thought is often impossible; but when possible it is difficult and of inferior quality. The living active moral sense has disappeared. The chronic inebriate is unreliable in every way, and he has little scruple about lying and deceit. There may be, it is true, a knowledge of the moral nature derived from habit and example. Indeed, the emotions and sensibilities may become the topics of elegant platitudes and beautiful descriptions. Lord Byron could heartily curse his mother and every one else who did not fit his morbid and selfish standard; and at the same time discourse beautifully upon the fine sentiments and feelings of the heart. The personal sympathy of the chronic inebriate is dead, inanimate, while with ideal sympathy he is all aglow, all life. He will treat his own family with neglect, but will weep at the woes of strangers, with whom he has little or no business.

Heart disease is common, and is usually fully established in the chronic inebriate. Diseases of the stomach, the liver, the kidneys, and the brain, are liable to prevail. Not infrequently, the damage to the fibrous structure within the muscles interferes with the free movements of the body. Motion is stiff, rigid, constrained, and of diminished sweep. This motor incapacity is often attributed to rheumatism.

In the chronic inebriate there occurs, sometimes, a change in the condition of portions of the fibrous substance, that is not noticed in either of the progressive stages of drunkenness. This consists in a process of *shrinkage*, confined to those parts of the fibrous structure that have been overgrown and thickened. The shrinkage is very considerable, and so violent as sensibly to affect the size, shape, and density of the parts involved.

The chronic inebriate is an epitome, an abstract of the great book of drunkenness. He contains within himself all the evidences of the evil nature, as well as the tremendous power of strong drink.

THE LEGAL RESPONSIBILITY OF INEBRIATES.*

BY JOSEPH PARRISH, M.D., BURLINGTON, N. J.

What is it? is the question of the hour. To find the answer, let it first be determined what or who are inebriates. That there are thousands of persons who consume intoxicants habitually and constantly, who are never visibly intoxicated, is a very obvious truth. It is nevertheless true, that there are many who, by nature and constitutional bias, are inebriates, who have never taken an inebriating draught, but who, knowing themselves, and their morbid tendency, avoid the danger of excess by absolute and perpetual abstinence.

Not a few such persons may be found among intelligent and careful people, with whom each day is a day of conflict — of conflict with themselves and their environment. They are a multitude of heroes, whose battles with self will never be known, and the record of whose conquests will never be made. Such cases have their analogues in various forms of morbid inheritance, only two of which need now be mentioned, insanity and pulmonary consumption.

The natural history of insanity and inebriety is so similar that it is sometimes difficult to draw the line of separation. Indeed, they are so near to each other as to admit in some cases of an equal place in nosology, as, for example, in the use of the terms "insane drunkenness" and "drunken insanity," both representing kindred pathological conditions. The relationship is so patent even to the unprofessional observer, that I need dwell no longer on this point than to allude to a striking inconsistency in the law, as viewed from a medical standpoint. If I understand its meaning, the law discriminates between common drunkenness and dipsomania, but fails to recognize the likeness between dipsomania and insanity, or in other words, it does not see a similarity

* Read before the Medical Jurisprudence Society of Philadelphia.

between insanity from drink and insanity from other causes, though the manifestations may be similar. It assumes that the dipsomaniac is a voluntary *demon* or drunkard, and if he will, he may avoid the paroxysms that characterize the disease.

Science, however, declares a dipsomaniac, or an inebriate in the medical sense, to be what he is, from an impaired or defective will, that is unable to resist the "nerve storm" which assails him at intervals, that he cannot always anticipate, as is the case in hysteria, epilepsy, etc. In consequence of this error, the law provides in the same statute for habitual drunkenness and insanity, making a criminal act committed by an insane person so far different in its results from the same act committed by an inebriate, as to warrant the commitment of the former to an asylum, while the penalty inflicted upon the latter may be imprisonment for life in a penitentiary, or it may be hanging by the neck till he is dead.

The analogy presented by pulmonary consumption may not, in the view of some, be so decided, and hence I invite attention to the early symptomatology and hereditary signs of the two disorders. Thousands are being born with a decided and well marked consumptive diathesis, but who, knowing themselves and their family history, adapt themselves to such hygienic and climatic methods of living as tend to counteract the progress of the disease, and thus avoid its fatal ravages. Such persons, however, are consumptives by natural descent, who would go steadily on to a consumptive's lingering death, but for the knowledge of their tendency to it, and their ability to avail themselves of means to resist its approaches. While it is interesting to observe these analogues, and while the very fact of likeness serves as confirmatory evidence of disease, there is ample testimony from distinguished sources to fix the fact of disease independent of any likeness to other morbid conditions. Dr. Quain, editor of the recent "Dictionary of Medicine," defines

disease to be "any deviation from the standard of health, in any of the functions or component materials of the body."

Dr. Norman Kerr, a distinguished medical practitioner of London, an expert and author on inebriety and on medico-legal topics, says, in his recent work on inebriety, "In drunkenness of all degrees, and every variety, the Church sees only *sin*; the world, only *vice*; the State, only *crime*. On the other hand, whatever else any intelligent medical practitioner beholds in such cases, he generally discovers a condition of disease." In our own country, the current medical opinion favors the same view, and I am convinced that it is gaining a firmer hold on the public mind in all departments of our social and civil life. It remains for the legal and the judicial sentiment of the land so to classify alcoholic intoxication as to remove it from the domain of morals, not even regarding it as a species of moral mania, but to accord to it its legitimate place as a physical disease.

For our present purpose, at least, it is assumed that we are agreed as to the abstract question of disease as applied to inebriety, but it becomes us to extend our inquiries a little further, that we may ascertain to what class of disorders it belongs. By common consent it is assigned to the realm of neurotic disorders. It affects most immediately and seriously the nervous system. Here, again, we may pause a moment to notice a fact concerning the complicated nervous system, which I think is not fully appreciated outside the medical profession. I refer to the sympathetic system of nerves as distinct, and largely independent of the motor system. In order to apprehend the ravages of alcohol upon the sensitive nature of man, it is essential that we understand the functions of the vital, as distinct from the mechanical or automatic forces and movements of the body. I take it to be an admitted principle of law that to constitute a criminal act, the will must consent to the performance of the act, and in the study in which we are now engaged it is highly important that we discriminate as I have suggested; that we appreciate the difference between the nervous system, which

has to do with vital forces and functions, and the other nervous system, which does not control or influence vital forces or functions.

The inhibitory, restraining power resides in the series of nerves which is specifically assailed by alcohol, when taken into the body, and this is the prime fact in the whole matter of responsibility, to which the law of the land does not seem to attach importance. I read in my Blackstone that "all the several pleas and excuses which protect the committer of a forbidden act from the punishment which is otherwise annexed thereto may be reduced to this single consideration — the want or defect of will. Indeed, to make a complete crime cognizable by human law, there must be both a will and an act." In the time when this wholesome doctrine was proclaimed, the dogma of disease as applied to inebriety was not considered. Intoxication was taken to be a voluntary act, and hence it was said of an inebriate that "what hurt or ill soever he doeth, his drunkenness doth aggravate it."

This doctrine may be to-day orthodox in law, but in medicine it is not, and herein lies the difference between law and medicine. Occasions or opportunities like the present are meant to reconcile the two professions to the acceptance of this wiser doctrine and a more humane practice.

But the question arises here, and is submitted from the legal side, If inebriety is not to be punished, how will society be protected from the assaults of the drunkard? Judge Noah Davis says: "No disease excuses any man for the commission of crime. A man in the last stages of consumption is to be hanged for a murder as surely as though he was in perfect health, and no disease by reason of its own existence can, under any circumstances, excuse any man for the commission of crime. Hence, to establish that it is a disease is only to put it on the exact footing on which all other diseases stand in respect of violation of law and their punishment."* If, then, insanity being considered a disease,

* Remarks in closing the discussion of this subject before the New York Medico-Legal Society in December, 1888.

and inebriety be taken by law to be also a disease as well defined and understood, we should gain all that we ask for. Then I should hail this utterance from such a distinguished source as the keynote of a new doctrine, which should be taken up by the courts of law and sounded with accumulating force and rhythm till the jurisprudence of the whole range of disease and crime in their joint relation shall be infused by its healthy tone.

While it proposes that society shall be protected from the voluntary and deliberate criminal by punishment, be it hanging or what else, it will protect society from the involuntary and unconscious criminal by isolation in a hospital or asylum provided by the State for its unfortunate citizens who have come into this world with an organization that is out of harmony with the ethical and civil relations which the law sanctions and provides for. When the philosophy of law and the science of medicine shall join hands together to create a jurisprudence founded on such a basis, it will be a step toward a state of society that is much to be desired, and will be doing more in the direction of relief from the blight of intoxication than can, in the very nature of things, be done by the methods so ineffectually put forth at this time.

There is, however, one very important point in this discussion which must not be overlooked. It is the pathological difference between common drunkenness and the disease of inebriety. The late distinguished British alienist, Dr. Forbes Winslow, testified before the House of Commons committee that "there is a normal drunkenness and an abnormal drunkenness." By this is meant that there is an occasional or accidental intoxication in a person who is not an habitual drinker, that is not to be counted as a disease, but that there is a state of intoxication which is the result either of a long-continued habit of indulgence by which the tissues have become diseased; and an alcoholic diathesis thus formed, or a state of intoxication which is the result of an inherited tendency to which the victim yields, till self-control is lost, and he becomes an abandoned slave to debauchery.

When alcohol enters into the human body in excess, its affinity for nerve structure is manifest in its grasp upon the inhibitory forces as among its very early influences. The will is the citadel of the soul, by which life and conduct are guarded and guided, but when it is seized and made captive, to obey only the behests of this destructive force, the victim is lost to himself, and acknowledges that he is enslaved. The relation of the human will to the nervous system is sadly misjudged. The wonderful network of nerves known as the sympathetic system acts independently of the will. It presides over vital functions. It has to do with the forces of life with which the will has nothing to do. The heart beats, the stomach digests, all the vital organs fulfill their respective offices without any reference to the will. It works while we sleep, and the vital functions are performed in our unconscious rest. By its side the will is powerless. If it presides over appetite, its behests are absolute. The inebriate, with inherited or acquired passion for stimulants, or for their hypnotic effect, cannot control his longing when it asserts itself. The hungry man who is starving for bread cannot, at his will, bid his hunger depart. The true inebriate, when his restless nerves and sinking spirits and burning desire demand repose and satisfaction, must obey the call. He obeys though his will, his conscience, his judgment, his past experiences, his moral sense, all join in earnest protest.

Is it depravity of his nature or infirmity of his will? A wide distinction exists between depravity and pravity of will.

Depravity signifies a state of natural debasement, without any cause. The idea of a cause is precluded. It is natural.

Pravity signifies a departure from a right purpose, for which a cause is implied which is generally subjective. Indeed, an impaired, feeble will is frequently the first symptom of an approaching debauch.

In concluding this paper, I offer the views it inculcates in the form of the following

SUMMARY.

1. Alcoholic inebriety is a disease which chiefly affects the nervous system, and may be transmitted from one generation to another, or it may be created by long-continued indulgence, and render its victims as much slaves to its power as if inherited.

2. In either case the symptoms are the same, and the person is debauched at intervals of varying duration, being controlled by an impulse which is beyond the reach of human will.

3. When committing a criminal act, it is usually done in a state of unconsciousness and irresponsibility.

4. If convicted of crime, he should be isolated from the community in a hospital or asylum provided by the State.

5. The dangerous element of the disease is in the fact that when alcohol enters into the human body in excess, it assails the inhibitory power, controls the will, and enslaves its victim beyond his power of choice.

Dr. Black urges that when a person has reached a stage of abnormality that he cannot do without alcohol it is better to have him substitute morphine. The reasons for this change which he presents are first, economy; second, less annoyance to his family and neighborhood; third, less liability of transmitting the neurosis or tendency to this disorder; fourth, a great sanitary saving to the State, in diminished crime and social disturbance; fifth, greater longevity and more happy, peaceful death. Thirty years ago Dr. McWilliams of Edinburgh, urged in a long, pamphlet, that all inebriates should be hung as soon as the chronic state of their malady could be established. The reasons for this view were the same as Dr. Black's: economy, saving to the State, society, and the families of victims and the prevention of heredity. A physician urging such views must regard his reputation as a professional man of little moment, and practically been asleep or oblivious to the progress of science in these later days.

ALCOHOLIC TRANCE IN CRIMINAL CASES.*

BY T. D. CROTHERS, M.D., HARTFORD, CONN.

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The frequent statement of prisoners in court that they did not remember anything about the crime they are accused of, appears from scientific study to be a psychological fact. How far this is true in all cases has not been determined, but there can be no question that crime is often committed without a conscious knowledge or memory of the act at the time.

It is well known to students of mental science, that in certain unknown brain states memory is palsied, and fails to note the events of life and surroundings. Like the somnambulist, the person may seem to realize his surroundings and be conscious of his acts, and later be unable to recall anything which has happened. These blanks of memory occur in many disordered states of the brain and body, but are usually of such short duration as not to attract attention. Sometimes events that occur in this state may be recalled afterwards, but usually they are total blanks. The most marked blanks of memory have been noted in cases of epilepsy and inebriety. When they occur in the latter they are called *Alcoholic Trances*, and are always associated with excessive use of spirits. Such cases are noted in persons who use spirits continuously, and who go about acting and talking sanely although giving some evidence of brain failure, yet seem to realize their condition and surroundings. Some time after, they wake up and deny all recollection of acts or events for a certain period in the past. This period to them begins at a certain point and ends hours or days after, the interval of which is a total blank, like that of un-

*Read before the International Congress of Medico-Legal Science, held in New York city, June 4, 5, and 6, 1889.

conscious sleep. Memory and certain brain functions are suspended at this time, while the other brain activities go on as usual.

In all probability the continued paralysis from alcohol not only lowers the nutrition and functional activities of the brain, but produces a local palsy, followed by a temporary failure of consciousness and memory, which after a time passes away.

When a criminal claims to have had no memory or recollection of the crime for which he is accused, if his statement is true, one of two conditions is probably present, either epilepsy or alcoholism. Such a trance state might exist and the person be free from epilepsy and alcoholism, but from our present knowledge of this condition it would be difficult to determine this fact. If epilepsy can be traced in the history of the case, the trance state has a pathological basis for its presence. If the prisoner is an inebriate, the same favoring conditions are present. If the prisoner has been insane, and suffered from sun or heat stroke, and the use of spirits are the symptoms of brain degeneration, the trance state may occur any time.

The fact of the actual existence of the trance state is a matter for study, to be determined from a history of the person and his conduct; a grouping of evidence that the person can not simulate or falsify; evidence that turns not on any one fact, but on an assemblage of facts that point to the same conclusion.

The following cases are given to illustrate some of these facts, which support the assertion of no memory of the act by the prisoner in court:

The first case is that of A, who was repeatedly arrested for horse stealing, and always claimed to be unconscious of the act. This defense was regarded with ridicule by the court and jury, and more severe sentences were imposed, until, finally, he died in prison. The evidence offered in different trials in defense was, that his father was weak-minded and died of consumption, and his mother was insane for many years, and died in an asylum. His early life was one

of hardship, irregular living, and no training. At sixteen he entered the army, and suffered from exposure, disease, and sunstroke, and began to drink spirits to excess at this time. At twenty he was employed as a hack driver, and ten years later became owner of a livery stable. He drank to excess at intervals, yet during this time attended to business, acting sanely, and apparently conscious of all his acts, but often complained he could not recollect what he had done while drinking. When about thirty-four years of age he would, while drinking, drive strange horses to his stable, and claim that he had bought them. The next day he had no recollection of these events, and made efforts to find the owners of these horses and return them. It appeared that while under the influence of spirits the sight of a good horse hitched up by the roadside alone, created an intense desire to possess and drive it. If driving his own horse, he would stop and place it in a stable, then go and take the new horse, and after a short drive put it up in his own stable, then go and get his own horse. The next day all this would be a blank, which he could never recall. On several occasions he displayed reasoning cunning, in not taking a horse when the owners or drivers were in sight. This desire to possess the horse seemed under control, but when no one was in sight all caution left him, and he displayed great boldness in driving about in the most public way. If the owner should appear and demand his property he would give it up in a confused, abstract way. No scolding or severe language made any impression on him. Often if the horse seemed weary he would place it in the nearest stable, with strict orders to give it special care. On one occasion he joined in a search of a stolen horse, and found it in stable where he had placed it many days before. Of this he had no recollection. In another instance he sold a horse which he had taken, but did not take any money, making a condition that the buyer should return the horse if he did not like it. His horse stealing was all of this general character. No motive was apparent, or effort at concealment, and on

recovering from his alcoholic excess, he made every effort to restore the property, expressing great regrets, and paying freely for all losses. The facts of these events fully sustained his assertion of unconsciousness, yet his apparent sanity was made the standard of his mental condition. The facts of his heredity, drinking, crime, and conduct, all sustained his assertion of unconsciousness of these events. This was an alcoholic trance state, with kleptomaniac impulses.

The next case, that of B., was executed for the murder of his wife. He asserted positively that he had no memory or consciousness of the act, or any event before or after. The evidence indicated that he was an inebriate of ten years duration, dating from a sunstroke. He drank periodically, for a week or ten days at a time, and during this period was intensely excitable and active. He seemed always sane and conscious of his acts and surroundings, although intensely suspicious, exacting, and very irritable to all his associates. When sober he was kind, generous, and confiding, and never angry or irritable. He denied all memory of his acts during this period. While his temper, emotions, and conduct were greatly changed during this time, his intellect seemed more acute and sensitive to all his acts and surroundings. His business was conducted with usual skill, but he seemed unable to carry out any oral promises, claiming he could not recollect them. His business associates always put all bargains and agreements in writing when he was drinking, for the reason he denied them when sober. But when not drinking his word and promise was always literally carried out. He broke up the furniture of his parlor when in this state, and injured a trusted friend, and in many ways showed violence from no cause or reason, and afterwards claimed no memory of it. After these attacks were over, he expressed great alarm and sought in every way to repair the injury. Finally he struck his wife with a chair and killed her, and awoke the next day in jail, and manifested the most profound sorrow. While he disclaimed all knowledge of the

crime, he was anxious to die and welcomed his execution. This case was a periodical inebriate with maniacal and homicidal tendencies. His changed conduct, and unreasoning, motiveless acts, pointed to a condition of trance. His assertion of no memory was sustained by his conduct after, and efforts to find out what he had done and repair the injury.

The third case, that of C., was a man of wealth and character who forged a large note, drew the money and went to a distant city on a visit. He was tried and sentenced to state prison. The defense was no memory or consciousness of the act by reason of excessive use of alcohol. This was treated with ridicule. Although he had drunk to excess at the time of and before the crime, he seemed rational and acted in no way as if he did not understand what he was doing. Both his parents were neurotics, and he began to drink in early life, and for years was a moderate drinker. He was a successful manufacturer, and only drank to excess at times for the past five years. He complained of no memory during these drink paroxysms, and questioned business transactions and bargains he made at this time. On one occasion he went to New York and made foolish purchases which he could not recall. On several occasions he discharged valuable workmen, and when he became sober took them back, unable to account for such acts. These and other very strange acts continued to increase with every drink excess. At such times he was reticent and seemed to be sensible and conscious, and did these strange acts in a sudden, impulsive way. The forged note was offered boldly, and no effort was made to conceal his presence or destination. When arrested he was alarmed and could not believe that he had done so foolish an act. This was a clear case of alcoholic trance, in which all the facts sustained his assertion of no conscious memory of the crime. In these three cases the correctness of the prisoner's assertions of no memory was verified by all the facts and circumstances of the crime. The mere statement of a person accused of crime, that he had no memory of the act, should lead to a careful examina-

tion and be only accepted as a fact when it is supported by other evidence.

The following case illustrates the difficulty of supporting a prisoner's statement of no memory when it is used for purposes of deception :

Case E. An inebriate killed a man in a fight, and was sentenced to prison for life. He claimed no memory or recollection of the act. I found that when drinking he seemed conscious of all his surroundings, and was always anxious to conceal his real condition, and if anything had happened while in this state he was very active to repair and hush it up. He was at times quite delirious when under the influence of spirits, but would stop at once if any one came along that he respected. He would, after acting wildly, seem to grow sober at once, and do everything to restore the disorder he had created. The crime was an accident, and at once he attempted concealment, ran away, changed his clothing, and tried to disguise his identity; when arrested, claimed no memory or consciousness of the act. This claim was clearly not true, and contradicted by the facts.

In a recent case F. shot his partner in business while both were intoxicated, and displayed great cunning to conceal the crime and person; then, after elaborate preparations, went away. He made the same claim of defense, which was unsupported by any other evidence or facts in his previous life. He was executed. Of course it is possible for the trance state to come on suddenly, and crime be committed at this time; still, so far, all the cases studied show that this condition existed before, and was the product of a growth beginning in brief blanks of a few moments and extending to hours and days duration. Unless the facts indicated the trance state before the crime was committed, it would be difficult to establish this condition for the first time, followed and associated with the crime.

I think in most of these cases, where this defense is set up, there will be found certain groups of cases that have common physical conditions of degeneration. These groups

of cases I have divided from a clinical standpoint, the value of which will be more as an outline for future studies.

Probably the largest number of criminal inebriates who claim loss of memory as a defense for their acts are the alcoholic demented. This class are the chronic inebriates of long duration; persons who have naturally physical and mental defects, and who have used spirits to excess for years. This, with bad training in early life, bad surroundings, and bad nutrition, have made them of necessity unsound, and liable to have many and complex brain defects. Such persons are always more or less without consciousness or realization of their acts. They act automatically only, governed by the lowest and most transient impulses. Crimes of all kinds are generally accidents growing out of the surroundings, without premeditation or plan. They are incapable of sane reasoning or appreciation of the results of their conduct. The crime is unreasoning, and general indifference marks all their acts afterwards. The crime is always along lines of previous conduct, and never strange or unusual. The claim of no memory in such cases has always a reasonable basis of truth in the physical conditions of the person. Mania is very rarely present, but delusions and morbid impulses of a melancholic type always exist. The mind, like the body, is exhausted, depressed, and acts along lines of least resistance.

The second group of criminals who claim no memory are those where the crime is unusual, extraordinary, and unforeseen. Persons who are inebriates suddenly commit murder, steal, or do some criminal act that is foreign to all previous conduct. In such cases the trance condition may have been present for some time before and escaped any special notice, except the mere statement of the person that he could not recollect his acts. The unusual nature of the crime, committed by persons who never before by act or thought gave any indication of it, is always a factor sustaining the claim of no memory. The explosive, unreasoning character of crime always points to mental unsoundness and incapacity of control.

A third group of criminals urge this statement of no memory, who, unlike the first group, are not imbeciles, generally. They are positive inebriates, drinking to excess, but not to stupor, who suddenly commit crime with the most idiotic coolness and indifference, never manifesting the slightest appreciation of the act as wrong, or likely to be followed by punishment. Crime committed by this class is never concealed, and the criminal's after conduct and appearance gives no intimation that he is aware of what he has done. These cases have been termed moral paralytics, and the claim of the trance state may be very likely true.

A fourth group of cases where memory is claimed to be absent occurs in dipsomaniacs and periodical inebriates, who have distinct free intervals of sobriety. This class begin to drink to great excess at once, then drink less for a day or more, and begin as violently as ever again. In this short interval of moderate drinking some crime is committed which they claim not to have any recollection.

Other cases have been noted where a condition of mental irritation or depression preceded the drink explosion, and the crime was committed during this premonitory period and before they drank to excess. The strong probability of trance at this period is sustained by the epileptic character of such conduct afterwards. The trance state may be justly termed a species of *aura*, or brain paralysis, which precedes the explosion.

In some instances, before the drink storm comes on, the person's mind would be filled with the most intense suspicions, fears, delusions, and exhibit a degree of irritation and perturbation unusual and unaccountable. Intense excitement for depression, from no apparent cause, prevails, and during this period some crime may be committed; then comes the drink paroxysm, and later all the past is a blank. Trance is very likely to be present at this time.

In these groups the crime is generally automatic, or committed in a manner different from other similar crimes. Some governing center has suspended, and all sorts of

impulses may merge into acts any moment. The consciousness of acts and their consequences are broken up. The strong probability is that these trance blanks begin in short periods of unconsciousness, which lengthen with the degeneration and mental feebleness of the person. The obscurity of these conditions, and the incapacity of the victims to realize their import, also the absence of any special study, greatly increases the difficulty. It will be evident from inquiry that trance states among inebriates are common, but seldom attract attention, unless they come into legal notice. The practical question to be determined in a given case in court is the actual mental condition of the prisoner, who claims to have no recollection of the crime. This is a class of evidence that must be determined by circumstantial and collateral facts, which require scientific expertness to gather and group. The court can decide from the general facts of the crime and the prisoner whether his claim of no memory may possibly be true, and order an expert examination to ascertain the facts. This should be done in all cases where the prisoner is without means, in the same way that a lunacy commission is appointed to decide upon the insanity. The result of this expert study may show a large preponderance of evidence sustaining the claim of no memory, or the opposite. If the former, the measure of the responsibility must be modified, and the degree of punishment changed. While such cases are practically insane at the time, and incapable of realizing or controlling their acts, they should be kept under legal and medical surveillance for a lifetime, if necessary. Such men are dangerous, and should be carefully watched and deprived of their liberty for a length of time depending on recovery and capacity to act rationally and normally. They are dangerous diseased men, and, like victims of contagious disease, must be housed and treated.

The future of such cases depends on the removal of the causes which made them what they are. The possibility of permanent restoration is very promising in most cases. How far alcoholic trance exists in criminal cases is unknown, but

the time has come when such a claim by criminals cannot be ignored, and must be the subject of serious inquiry. Such a claim cannot be treated as a mere subterfuge to avoid punishment, but should receive the same attention that a claim of insanity or self-defense would. This is only an outline view of a very wide and most practical field of medico-legal research, largely unknown, which can be seen in every court room of the land. These cases appeal to us for help and recognition, and the highest dictates of humanity and justice demand of us an accurate study and comprehension of their nature and character.

The following summary of the leading facts in this trance condition will be a standpoint for other and more minute investigations :

1st. The trance state in inebriety is a distinct brain condition, that exists beyond all question or doubt.

2d. This brain state is one in which all memory and consciousness of acts or words are suspended, the person going about automatically, giving little or no evidence of his real condition.

3d. The higher brain centers controlling consciousness are suspended, as in the somnambulistic or hypnotic state. The duration of this state may be from a few moments to several days, and the person at this time may appear conscious and act naturally, and along the line of his ordinary life.

4. During this trance period crime against person or property may be committed without any motive or apparent plan, usually unforeseen and unexpected. When accurately studied such a crime will lack in the details and methods of execution, and also show want of consciousness of the nature and results of such acts.

5th. When this condition passes away the acts and conduct of the person show that he did not remember what he had done before. Hence his denial of all recollection of past events, and his changed manner confirm or deny his statements.

6th. When such cases come under judicial inquiry the statement of the prisoner requires a scientific study before it can be accepted as a probable fact. It cannot be simulated, but is susceptible of proof beyond the comprehension of the prisoner.

7th. In such a state crime and criminal impulses are the result of unknown and unforeseen influences, and the person in this condition is dangerous and an irresponsible madman.

8th. This condition should be fully recognized by court and jury, and the measure of responsibility and punishment suited to each case. They should not be punished as criminals, nor should they be liberated as sane men. They should be housed and confined in hospitals.

Dr. Mann says merely keeping a patient away from liquor is the smallest and most unimportant part of the treatment. The whole system, which is shattered and broken down, must be invigorated and restored to its normal standard, and the brain and nervous system brought up to the highest resisting point before the lost will-power is restored and the irresistible craving for alcohol cured. There is no disease of the nervous system more grave and more worthy of the most careful study and attention. It is a true periodic insanity, and only the most careful treatment, continued for months, can cure it. The treatment must be careful, methodical, and intelligent, the physician recognizing the fact that he is dealing with a real disease which primarily produces congestion from want of vaso motor control, loss of muscular control, perversions of judgment and will-power, and absolute prostration of nerve-power, while, secondarily, it causes hypertrophy of the heart, structural diseases of the stomach, brain, liver, and kidneys, alcoholic dyspepsia, alcoholic phthisis, and a multitude of nervous lesions which may end in alcoholic dementia, in which personal identity and responsibility are lost, and whose earliest symptoms are loss of memory, failure of speech, and manifestations of moral obliquity, and finally delirium tremens, mania-a-potu, and perhaps chronic insanity.

RESUME OF TWENTY-SEVEN YEARS EXPERIENCE IN THE TREATMENT OF INEBRIETY.*

BY MRS. L'OSTE.

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Our esteemed President has encouraged me to risk writing a short paper on my experience of the treatment of inebriates, to be laid before this Society. I feel I owe its members many apologies for troubling them with a woman's views and opinions, and my only excuse for doing so is, that I have been engaged in the study and cure of inebriety for more than twenty-six years, that my endeavors to help my fellow creatures have often been crowned with success, and that I love and am proud of my work.

The early part of my experience was in a home for ladies and gentlemen, which belonged to my parents, who were assisted by a resident medical man, my husband, and myself. We received sixteen patients, all of whom were sufferers from some form of inebriety, or nervous disease of the brain. The staff seems large in proportion to the number of patients, but all our energies were needed to cope successfully with the diseases, though some years ago I became convinced of the fact that our labor and anxiety would have been greatly lessened, and the percentage of cures considerably raised, had our home been for ladies or gentlemen separately. We also then employed the ruinous system of gradually stopping the supply of stimulants, believing that by so doing we were lessening the chance of delirium tremens setting in, and modifying the suffering caused to the patient by sudden total abstinence, whereas we were simply prolonging the pain, fostering the craving for

* Read at meeting of Society for the Study of Inebriety, April 2, 1889.

alcohol, and lengthening the time required to thoroughly purify the system from all traces of it, as I have long since proved unmistakably by the more satisfactory results obtained by discontinuing all stimulants immediately.

The former practice reminds me of an American I know of, evidently not gifted with his countrymen's proverbial acuteness, who, when drowning his superfluous kittens, used always to take them out of the water to breathe at intervals, under the impression, I suppose, that each fresh immersion rendered the process of dying more comfortable!

In 1881 (owing to the death of my relatives) I closed my house, and after taking some little time for rest, went as lady superintendent to one of the licensed homes for ladies, under the "Inebriates," or, as it was then called, the "Habitual Drunkards Act." During my short stay there I convinced myself that, although these institutions may be productive of good among the lower classes, their result on an average among gentlewomen is unsatisfactory. The very fact of the mixture of classes, though there unavoidable, entailing constant enforced associations with those of lower mental and moral standard, as well as the publicity of the establishment, tends to pull down their self-respect, the building up of which is one of our greatest difficulties, while it is decidedly the first step towards permanent recovery.

I am entirely of opinion that inebriety is a disease, often hereditary, the germs of which may sometimes be noticed even in children, frequently shown by their inordinate thirst, and their craving for hot condiments with their food, and highly spiced dishes. I have seen this in several instances in the children of ladies under my care. One little girl of ten I discovered to be in the habit of taking pepper out of the castors and eating it by the spoonful. This tendency, all who have studied the question must know, is a constant trait in the adult inebriate.

When the disease was not inherited, I have found that the majority of cases were caused by the nervous debility resulting from obstetrical disorders. Lately, several cases

have been brought to my notice, which have been brought about through the use of a French drug, called Eau des Carmes de Melisse. It is often resorted to by girls and women as a pick-me-up, who would not take spirits. The analysis of this drug showed that it was pure spirits of wine flavored. Every one must see the frightful danger of being able to obtain such things at a general shop.

While under the influence of the disease, the sufferers are not responsible for their actions, their whole natures and characters undergo a complete metamorphosis, the most high principled and scrupulously truthful will stoop to such depth of deceit and degradation, as at other times they would shudder to think of. The craving for stimulants becomes so intense that they are incapable of resisting it when at liberty, and at this stage will hesitate at nothing, even sometimes risking their lives to obtain stimulants. The consequence of the continued indulgence in alcohol or drugs is the gradual weakening of nerve power, both mental and physical, until at last the poison takes full effect and brings about in some cases partial, and in others total paralysis, besides many other grave diseases, such as diabetes, weakened heart, congested liver, etc.

In order to secure success, homes should be such, not only in name, but in reality; we ought to gain the love and confidence of those under our care, and try to teach them to look upon us as genuine friends and helpers, and our homes as havens of rest and comfort in their affliction. In the treatment of patients we must bear in mind the following: a special study of each individual case is necessary; the origin of the disease should, if possible, be traced; each case should be treated on its own merits; and sufficient time should be allowed to elapse to restore in some measure the shattered nervous system, before trying to convince the patients that *much* depends on themselves as to the ultimate success of their sojourn in the home. Rest, with healthy recreation for mind and body, must be provided, a liberal diet (at first, not allowing any length of time to elapse with-

out giving strong home-made beef-tea, chicken-broth, milk, or oysters). The refinements of home life should be retained, and discussion between the inmates on the subject of inebriety absolutely forbidden, as it tends to foster the disease. The next step is to try to convince the patients that they are suffering from what is perfectly curable if they give themselves up to our guidance, and co-operate with us.

I have often found that women who felt themselves hopelessly degraded, the moment they were told that they were suffering from a disease, plucked up their courage, and, with renewed self-respect, resolved to face all the necessary disconcerts with hope and cheerfulness.

Once they are fully persuaded that *total* abstinence is a necessity for them, the victory is, in a great measure, won, but the chief difficulty is to divest them of the idea that after a short period of teetotalism they will have sufficient self-control and power to be able to be moderate drinkers. I may add that I have never known a single case where an inebriate could take any stimulant whatever without an eventual collapse. The relations between the proprietors and inmates of homes should be such that the latter would not hesitate to return of their own free will in the event of a relapse, as in such cases, with few exceptions, my own patients have done. As a rule I believe the number received in one house should not exceed five or six, as it is impossible to give individual attention to more.

There seems to be a general opinion among temperance workers and proprietors of homes that a country home is to be preferred to one near a large town. My own experience has convinced me that on the whole this is a mistake where ladies are concerned. My first homes were in the country, and I had every means at my disposal as regards horses, carriages, etc., and facilities for many lovely excursions; but I find that the average *lady* inebriate requires more mental stimulus than can be afforded by the simple enjoyment of nature to prevent her from brooding, and this is easily provided if you have convenient access to good concerts, etc.,

and are not consequently obliged to confine your patients to such mental amusements as are to be obtained in the limited society of a country neighborhood. You must not expect your patients to be able at first to make an effort, and a large city affords innumerable easy amusements for ladies.

Those who undertake this difficult but intensely interesting work should devote their *whole* time and energies to it, throwing themselves unselfishly and heartily into the cure, welfare, pleasures, and hobbies of the patients.

With regard to the length of time required for a complete cure it may be said to vary between six months and two years according to—

1. The age, temperament, and physical health of the patients.
2. Whether the disease is hereditary.
3. The number of years during which the attacks of inebriety have continued.
4. The nature and amount of the stimulants taken.

It is rarely, however, that six months proves effectual. I am constantly being urged to receive patients for three months, but I always refuse to do so, as it is an utter fallacy to suppose that any lasting good can be done in that time.

Numbers of cases have been brought under my notice where attempts at cure have been made either by having nurses in the ladies' own houses or as traveling companions, or else by placing the invalids in the house of some clergyman or doctor, who knows little, if anything, of the work, and is not himself a teetotaler. Invariably these cases have turned out failures, as either by stratagem, bribes, or working on the sympathies of friends, the ladies have succeeded in obtaining the stimulants or drugs for which they crave.

Many people advocate the use of morphia (or other narcotics or sedatives) in cases where stimulants are suddenly stopped. My experience proves conclusively to my mind, that, as a rule, when the effect of the drug has passed, the weakness, often engendered, renders the craving for stimu-

lants greater. A sojourn in a genuine institution for the cure of the disease where there is no possibility of either of these being obtained, is, in my opinion, the only chance of permanent cure.

There is no doubt that great strides have of late years been made in the study of inebriety, taken from every point of view, but much still remains to be done. Notably, there is *great* need of free homes under government for the indigent, who are now treated as criminals.

With regard to the upper classes, I feel certain that the percentage of cures will be largely increased when people can be found who, having a knowledge of and love for their work, will start homes for a limited number, setting aside all thought of making them a financial success, and when all those who are interested in the cure of an inebriate will grasp the fact that the *first* remedy tried should be a sojourn in a genuine home, instead of using homes as a *last* resource, as is at present the custom.

I have found the percentage of cures to be about thirty per cent. These were not, however, as is so often the case, mere temporary cures, but the patients were to my knowledge absolute teetotalers for years, and many of them are still known by me to be so. Others have of course been lost sight of as years went by; but I have every reason to hope that, after keeping well so long, they have not relapsed.

When our patients return to their own homes, our work, far from being ended, is in some measure increased, as it is essential to keep up a constant correspondence and intercourse (if possible) with them. Most of my old patients come and spend a few days or weeks with me from time to time.

It has often been asserted that women are much more difficult to cure than men; indeed, I have heard a clever medical man say that it was impossible to ever permanently cure a woman. My experience with both sexes tends to prove that the average of cures is about equal; women are physically weaker, and require more strengthening and individual

care than men, but they are certainly more easily managed in homes, as more suitable employments and interests can be found for them, and once having taken the decisive step of leaving their own homes, they are more readily persuaded to stay a sufficiently long period to gain strength for the future. I should like to add here, that I disapprove of the husbands and children being kept entirely away from the wives and mothers; after a certain interval I encourage visits occasionally, provided the relations have been proved trustworthy.

Drunkenness is a disease even when we call it a moral weakness and vice. It so disorders the brain that human beings in its power are no longer open to the ordinary motives which affect the will and the conscience. The sincerest desire and effort to avoid and conquer the temptation to drink, is in many cases as vain as by a moral effort to prevent the return of an ague fit. Whole families are, by constitutional inheritance, liable to its tyranny; and some individuals are as much and as innocently its victims as though they fell by the cholera or the plague. Now this frightful disease is at least as hopeful as insanity if taken in time. A certain per cent. are cured who go to asylums to recover from insanity. A larger per cent. could be permanently restored of inebriates, if sent early to appropriate hospitals. How few under this dominion of morbid impulse know how to treat themselves, or even suppose they are sick men? they are as much under a delusion as their friends, when they think it is purely a moral disorder, wholly within the control of the will. We need asylums for the profound study of inebriety; many triumphs of medicine came from hospital practice, and psychological advances are made from the study of the insane in asylums. A thorough, large, practical investigation, scientifically exact, can only come from the study of the inebriate in the hospital for inebriates.

DR. H. W. BELLOWS.

DIPSOMANIA IN WOMEN.

BY DR. E. DECAISNE, OF PARIS, FRANCE.

It is not uncommon to see dipsomania confounded with drunkenness, alcoholism, and other nervous troubles which turn out to be the consequence of this. Drunkenness is the habit of addicting oneself to drink, without surrendering his continuous free will. Dipsomania, on the other hand, is a pathological state which almost abolishes moral liberty, and in which the victim is controlled by an irresistible impulse to use intoxicants to excess. Tralet calls drunkards, persons who intoxicate themselves on every occasion. Dipsomaniacs, those who only drink when the fit takes them. Esquirol calls the dipsomaniacs, monomaniacs for drink. The alienists of to-day accept this definition and place them in the same class as certain partial lunatics, the principal symptoms of which are violent distinctive impulses, which impel the victim to murder, to arson, or suicide. Lunatics of this character in the free interval show no disturbances of the intellectual faculties. It is evident, therefore, that this insane impulse followed by sanity must greatly embarrass medico-legal authorities, because it is difficult to determine the time and degree of moral responsibility which they incur.

The dipsomaniac has regular periodical returns of the drink paroxysm, sometimes with great exactness as to time and duration, after which the victim will cease to drink, and be perfectly sober under any conditions of surroundings. They live regular lives, show a disgust for spirits until the return of the fit, which interval may be weeks or many months of time. Lasseque has observed these fits of drink paroxysms to be preceded by digestive and neurotic disturbances. Sometimes loss of appetite, insomnia, headache, neurias, exaltations, and depressions of spirits, are common; other cases the paroxysm comes on without premonitory symptoms, and explodes like an epileptic paroxysm. These

symptoms vary with the person, and in some cases are noted by great intellectual disturbances, in others only slight changes of mind. Some dipsomaniacs have symptoms of alcoholism before the fits; that is, they drink continuously, regularly for a long time, then they become insane in their impulses to intoxicate themselves.

Dipsomania is said to be rare among the poor, and fully three-fourths come from the higher circles of society. Among the causes may be mentioned incipient insanity, general paralysis, morbid emotion from moral or other causes, loss of fortune, domestic trouble, incontinence, and heredity. Esquirol observes that some peculiar state of the stomach, causing a profound depression, is often the exciting cause, and provokes the desire for drink. The brain is overwhelmed with morbid impulses for relief, and incapable of thinking or acting upon any other motive. He drinks for relief from this agonized pressure, and feels better, then drinks more until fully intoxicated.

In certain times of life women find themselves in physical and moral conditions, which seem to demand relief from morbid impulses and depressions; hence, dipsomania may be more prevalent in this class than among men. Dipsomania appears often at puberty and at the time of menstrual troubles, or at the menopause, or at the approach of old age at the decline of life.

In the course of my investigations into alcoholism for the past twenty-five years, I have met and studied over fifty-four cases of dipsomania in women. Of this number seven were between the ages of seven and fourteen years of age. In each case the drink paroxysm began following menstrual irregularity. Eight cases were from twenty-three to thirty-two years of age, and had become so from conditions of pregnancy. Twenty-four were from forty-five to fifty-four years of age, and began to drink at the menopause. One case, aged twenty-seven, began to drink following mental trouble. Fourteen, aged from forty-eight to sixty-five, dated their fits to domestic trouble. In ten cases out of fifty-four heredity was the cause. All but three of this number used

spirituous liquors during the fits. Forty-one had been perfectly sober up to the paroxysms of drink, never using spirits until the dipsomania came on.

In twelve cases the fit returned four or five times a year, lasting from five to ten days at a time. In eighteen cases, one fit a year of eight to ten days' duration took place. In ten cases, an interval of two years followed between the fits, which latter were five or six days duration. In six cases, the fits occurred every third or fourth menstrual period, lasting two days. In eight cases, where the fits were two or three a year, symptoms of acute alcoholism seemed to precede the dipsomania. Thirty-nine of these women belonged to the upper classes of society, and fifteen to the working classes.

The following four cases are given as types of this disease in women.

Case I. B., forty-three years old, a woman of good constitution, who has been regular since fifteen years of age. She was married at twenty and has two children. At the time of the first menses, which began with some stomach trouble, she developed a strong taste for alcoholic drinks, particularly sherry brandy, of which she would drink many glasses in twenty-four hours. This desire died away in ten days, and she showed great sorrow at her perversity and inordinate desire for drink. Yet notwithstanding the remonstrance of parents and the surveillance of attendants, she would procure spirits and drink with intense satisfaction. In the free interval from one epoch to another, she drank nothing but water, and tried hard to fortify her mind against future relapses. At the end of the eighth epoch she broke off this habit entirely, and from sixteen to forty-three years she never tasted spirits, and had profound distaste for wine.

At forty-three years of age she experienced the usual troubles which indicated the cessation of the menstrual function. Suddenly she turned to strong drinks for relief, using five or six glasses of brandy and coffee at every meal. At bed-time she used large quantities of green chartreuse. She could give no reason for this except that it made her feel

better. She drank with every opportunity and every kind of drink which contained spirits. Her temper changed and she acted very strangely. After a period of one month of this dipsomaniac craze she recovered and gave up all use of spirits and began to live temperately, drinking water again. She expressed great contrition for her conduct, and resumed her former duties as if nothing had happened. Three months later she complained of cramps of the stomach and nausea. Her breath became foetid, she vomited in the morning, and had two uterine hemorrhages, a few days apart. Exema appeared on her face and legs. A physician was called, and later a cough appeared, then diarrhoea and trembling of the hands, and finally hallucinations. I was called in, and she confessed that she had returned to her old trouble and was drinking spirits in secret. In her family life she drank nothing but water, but secretly she drank absinthe, brandy, green chartreuse, and any other drink she could get. She was placed on strong tonics, and sent to the country and all spirits withdrawn. She made a rapid recovery, and fourteen years after was a strong, vigorous woman, not having used spirits in any form during this time.

Case II. M. V., age forty-one, was a robust farmer woman, with florid face, who was always regular, in good health, and perfectly sober. In 1870 she was greatly shocked at the death of her son, who was a soldier. From this time she became somber and taciturn, suffered from indigestion and frequent vomitings. The muscles of the face and legs twitched and jerked from the slightest excitement, and were very painful. Hallucinations came on, in which she saw flames and objects that were about to devour her. Many times she declared herself contemplating suicide. Her husband and family, also the doctor, attributed all this to grief and nervous shock from the loss of her son. A few months after it was discovered that she was taking in secret large quantities of green chartreuse and other strong liquors. When accused of this she said in excuse that rum was stronger than she. When placed under the care of a physician she seemed to exhibit great skill and cunning to pro-

cure spirits. Finally she recovered, went to Paris, and seemed fully restored to health. A year later, hallucinations, vomiting, and trembling came on. Her character changed to one of former sadness and moroseness. She had evidently relapsed, and later her mind gave way, and she was sent to an insane asylum. Two years residence here resulted in her full recovery. She finally died of cancer a year after.

In this case the overmastering impulse and cunning to procure drink was very strange.

Case III. Miss C. was of lymphatic temperament, and bore marks of scrofula. Her catamenia did not appear until she was sixteen years of age. At this time her disposition changed, she became sad and irritable, having to go off by herself and weep. The digestion was deranged, she was tormented by stomach troubles, and was restless in sleep and had frequent nightmares. Her hands and legs twitched. She was found to be drinking spirits in secret, which the servant bought her. It was found that she had been using spirits for over six months, and her attack was dipsomania. These attacks, which had been more severe at each epoch, ceased altogether. Two years later they returned at the menstrual epoch and continued four or five days, then a free interval followed, until the next epoch, during which she hated spirits. Finally the interval grew longer; she would pass one or two epochs without being attacked. Then six months elapsed before they came on again, and after two years they stopped altogether. She married, and is now, after an interval of twelve years, temperate and healthy.

Case IV. Miss B., student, age fifteen years at the time of her first catamenia, suffered from digestive troubles, and used many and varied remedies with no effect. Her health declined and it gave her serious disquietude, so she left the school and went to the country. A year later her health was greatly improved, and she seemed well and vigorous. Then her epochs returned with greater severity, and with it came her digestive troubles. Her sleep was broken and her mind showed great changes. It was then ascertained that she was using spirits to great excess, taking brandy at all

times and places, and in the most secretive manner. She suffered from dizziness, and was in a state of extreme irritation all the time. This attack lasted a few weeks, and under exact medical care she recovered. Seven years later she relapsed again, finally became restored, and ten years after was well and hearty.

In this case the attacks came on from causes not clear, but always at the close of the menstrual epoch. She showed a most insane cunning to procure spirits, and also great changes of character, then recovered and resumed her former quiet ways and sane conduct.

These cases are types of all the others, who have only varied from them in degree and some minor details. Some of the conclusions which I have drawn from a study of these fifty-four cases of dipsomania are the following: thirty-one of this number had their first attack at the beginning of the menstrual epoch. In three cases the attack of dipsomania came on at pregnancy, which disappeared on delivery. In five cases the attack lasted only during the first months of pregnancy, and died away as the pregnancy advanced. Domestic sorrow and trouble brought on the dipsomania in four cases. In one case some mental trouble developed the dipsomania. Heredity was prominent in ten cases, and in all these cases there was no period of moderate drinking, but a clear history of sobriety and freedom from drink up to the outbreak of the dipsomania.

The spirit drunk was about the same in all cases, except in three cases where balm water was used. The duration of the attack varied widely, but in most cases was of short duration. In eight cases two and three attacks a year came on; in one the attack lasted over three months. After the attack came on all the usual phenomena of acute alcoholism presented themselves. Our studies show that dipsomania in women is the same as in men. It is no doubt more frequent among women of the better classes, and dependent on the circumstances and incidents of their living. Isolation from home and exact medical care and treatment is the only thing which can be done.

Abstracts and Reviews.

CASES OF FEBRILE DELIRIUM TREMENS; BY
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NEY HOSPITAL, INSTRUCTOR IN THE BOSTON POLYCLINIC.

The existence of certain specially dangerous and hyperacute forms of delirium tremens has been known and recognized by many writers since the days of Magnus Huss, but the first distinct description of this class of cases in which an attempt at their differentiation from the ordinary type was made, seems to have been that of Delasiauve, of his so-called superacute form in 1852. In his cases, however, the distinctive symptom of fever was absent, and it was left for Magnan, in 1873 and 1874, to describe as a distinct variety, his cases of febrile delirium tremens.

Although the cases which I am about to report do not agree in all respects with those related by him, I have ventured to make use of the title of febrile delirium tremens for them also. One of the predominant symptoms, perhaps we may even say their most striking characteristic, was the presence of fever, and in many points they closely resemble the cases of Magnan. Moreover, there can be little doubt that the different varieties of delirium tremens shade imperceptibly into each other and that they are all acute manifestations of chronic alcoholism modified in their symptoms by the constitution of the patient, his condition at the time, the existing complications and various other attending circumstances.

The presence, however, of so important a symptom as fever, affords, in our opinion, a sufficient ground for placing those cases in which it exists to any marked degree, in a separate category from the ordinary simple afebrile cases. Hence, after as thorough an examination as possible of the luminous literature of delirium tremens, we have found no

carefully reported cases of this character, since those of Magnan, we feel justified in bringing these to the notice of the Society, more especially as we believe that there are certain considerations connected with them of considerable importance both to the specialist and perhaps even more to the general practitioner.

A full description of the case is given, the following of which is a summary :

In this case we have a man of thirty-two, with a distinct predisposition to mental disease, and addicted for a considerable period to the excessive use of alcohol. Having continued the abuse of the stimulant after, at least, two attacks of delirium tremens, he finally, four weeks before entering the hospital, and probably much earlier, is perceived to act in a strange manner, to have temporary lapses of memory, and hallucinations of sight and hearing. On entrance, he is found to be much in the condition of a patient recovering from a severe attack of delirium tremens—weak, with decided tremor of face and hands, and mentally affected, unable to realize his surroundings. Very shortly, *fever* was detected, and, instead of improving, he grew rapidly worse. The general weakness increased, and was accompanied by very marked and constant subsultus tendinum, and by continual plucking at the bed-clothes. The tongue was cracked, dry, and parched, and the general condition suggested that of typhoid fever. Mentally, he likewise became worse, having constant, rapidly changing hallucinations, many of them terrifying and horrible, but many also, and the proportion of these increased as the disease progressed, of a not unpleasant character. He constantly imagined that he saw friends and acquaintances, who spoke and chatted with him. He talked aloud much of the time, often starting up suddenly and answering some subjective question. This condition of things continued for a month, being varied by periods of semi-coma, when he could with difficulty be roused to answer questions. The fever ceased at one time, to recur later. At the end of a month his strength had improved, and there

were no acute symptoms remaining. From this time his mental condition improved until he left the hospital, only to grow worse afterwards, and to necessitate a still longer treatment before final recovery.

In this case, there is little doubt that there existed in the beginning that condition of chronic alcoholic poisoning so carefully described by Lentz, under the title of chronic hallucinatory alcoholism. This, possibly due to the withdrawal of stimulants, passed soon into an acute febrile condition, recurrent, and lasting about a month, to be followed in its turn by the ordinary hallucinatory alcoholic insanity.

The second case was that of a liquor-dealer, thirty-two years of age, a native and resident of Boston.

One of the patient's uncles was insane for a time, and at the Worcester Asylum for six months. No record of any other mental or nervous affection in the family obtained.

Patient had been healthy, except as follows: He has been a constant drinker for two or three years, and at times has drunk very heavily. Last autumn, he had several epileptic fits, and he has fallen down stairs several times. Two weeks before entrance, he stopped the use of alcohol entirely for five days, but then resumed. He was at this time placed under the care of a physician, as he had begun to have hallucinations of sight, and was rapidly growing worse. Finally, being inclined to be violent, he was brought to the hospital.

This case was similar to the others.

In both the preceding cases we have to deal with patients in whom, we may presume, a certain tendency to mental disease exists. One had already himself been in an asylum; the other had had a near relative in one. In both, the existing affection was undoubtedly induced by addiction to the excessive use of alcohol. The more prominent and noteworthy symptoms in these cases may be resumed as follows:

(1) The duration of the disease, followed in both cases by recovery, in connection with (2) the peculiar temperature, rising at times to 102° or more; (3) the great weakness of

the patient, especially in the earlier stages; (4) the typhoidal appearance; (5) the constant subsultus tendinum, and the plucking at the bed-clothes; and (6), which is less uncommon, the long duration of the peculiar form of delirium, which in the beginning, precisely resembled that of delirium tremens, but continued for weeks, with a gradual change to less terrifying hallucinations.

I will not enter here into the question of the differentiation of these cases from typhoid fever and other diseases, but will merely say that in the cases related there did not exist any of the more diagnostic symptoms generally seen in typhoid fever, except the general typhoid-like condition of the patient, and that in both cases the course of the temperature was unlike that usual in typhoid.

The medico-legal importance of such cases as these seems to me considerable. The question to decide is whether the patients were actually insane, and likely to remain so for a considerable period of time or whether the condition was a more or less temporary one, and the patient had a fair chance of recovery. In the first case, the actual question to be decided was whether the patient should at once be committed to an asylum, or whether it were advisable to wait; in the second, whether the patient was likely to remain in his actual condition so long that it was right and advisable that his property should be put in trust. In both cases the decision was in the negative, and rightly so.

I cannot help feeling, for these reasons, that it is very important that this class of cases should be early recognized, not only by specialists, many of whom have, undoubtedly, opportunities for observing them more or less often, but also by the general practitioner, into whose hands they, in the beginning, almost always fall. All the cases of this character that I have seen, or have been able to find accounts of up to the present time, have either been fatal within a few days, or have ended in recovery. At any rate, if death does not occur within ten days, the prognosis is more favorable than one would be led to suppose by simple consideration of the duration and character of the symptoms.

In regard to the pathology of these cases, although data sufficient to justify a decided opinion are wanting, certain facts bearing on this subject may be mentioned. Without entering into detail in regard to the pathological changes of the nervous centers, and their envelopes in alcoholism, we may refer to a few general results. Fournier states that autopsies after *acute alcoholism* in man show most commonly the following lesions: "cerebral congestion, more or less intense; meninges injected, veins and vessels of the pia mater gorged with blood, cerebral substance dotted with points, roughened (*sablé*), and, on section, permitting the escape of fine drops of blood; sometimes, also effusion of serum into the meninges."

In chronic alcoholism we find two classes of lesions in these organs: the one, which may fairly be classed as acute, though the result of chronic changes, comprising, for example, hemorrhages, and perhaps some effusions; the other class, the subacute and chronic. Audhoui, writing in 1868, says: "There is no need, I think, of insisting on the form that the nutritive trouble affects in the nervous centers, thickening of the meninges, the production of false membranes on the cranial dura mater, adherence of the pia mater to the cerebral cortex, hypergenesis of the neuroglia, fatty degeneration of the nerve-cells, of the capillaries, etc.; all this is perfectly well-known."

In regard to the superacute form of delirium tremens we may mention two varieties, the "*forme suraigue*" of Delasiauve, and the delirium tremens fébrile of Magnan.

Delasiauve's form is described by Lentz as follows:

"The *forme suraigue* of Delasiauve is remarkable particularly for its violence, its agitation, the intensity of the delirium and the gravity of the general condition. The nervous activity is prodigious: the patient has neither respite nor repose, no part of his body is free from movement; his face bloated, red, even violet, is contorted through the quivering of the muscles; his eyes roll in their orbits; his skin is hot and burning, is moist with a profuse and sticky sweat, which

sometimes emits an alcoholic odor. The tongue may preserve its natural moistness; more often it is dry along the edges, and its surface as well as the edges are covered with fuliginous crusts. Usually the thirst is excessive, unquenchable; the respiration more or less labored; the alteration of the features indicates a profound prostration. As to the pulse, sometimes rapid and feeble, at other times it contrasts by its almost normal rhythm with the other symptoms. The mind is assailed by hallucinations whose rapid succession causes an incessant change. The words crowd each other so in the patient's mouth, that several demand utterance simultaneously and escape with difficulty in jerky, interrupted, often unintelligible sentences. In constant agitation (jactitation), the head and hands are moved abruptly in all directions whence the imaginary impressions seem to arise."

Magnan's form differs but little. Its principal distinctive feature is the rise of temperature which is apt to run high and reach 40° C. (104° F.), or even 42° C. (107.6° F.). This lasts without remission for two or three days or perhaps longer, and if not followed, as is usual, by a fatal result, gradually descends to the normal limit. This form also is marked by the constant presence of muscular movements, subsultus tendinum, jerkings and contractions of the muscles all over the body, and by the extreme muscular weakness which eventually results from this incessant activity. Lentz considers that the only symptom by which this form can be differentiated from that of Delasiauve is the possibility of prolonged remissions in which the consciousness may for a time become quite clear.

The presence of a high and continued fever during an attack of delirium tremens, is always a symptom of most serious import. It denotes either the presence of some severe and dangerous complication, as pneumonia or meningitis, or it implies, as is thought to be the case at times, by certain authorities, an affection of the cerebral heat-centers, and thereby a wide-spread and dangerous condition of the cerebrum. In ordinary cases of delirium tremens, there is no rise of temperature whatsoever.

Näcke says: "In a series of examinations of a small number of cases (eleven), a slight feverishness could be determined in one-third of them. The maximum was 38.8° C., 101° F. Any temperature above this pointed to some internal inflammation, more especially pneumonia. In our cases a slight fever appeared in the evening only, as a slight rise of the physiological evening exacerbation of the temperature, never in the prodromal stage, commonly only on the first, rarely on the second day of the true delirium. Pulse and respiration were commonly only slightly increased in rate."

The cause of the fever in febrile delirium tremens is still doubtful. Magnan gives the results of five autopsies in which little definite was found beyond the injection and œdema of the cerebral meninges and a similar condition of the meninges of the spinal cord with injection of the gray substance of the latter. He himself, says that besides the hyperæmia, which sometimes ends in hemorrhage and thus attests the very violent irritation of the nervous centers, we scarcely find at the autopsy anything except the more or less advanced alterations of chronic alcoholism.

That delirium tremens may be complicated by meningitis, is, of course, well-known, and many instances have been published, of which, however, I will only refer to the cases of Bonnemaïson.

Whether such complication exists in any special case, can, of course, only be decided after a careful consideration of all the symptoms.

Whether in the febrile cases ending in recovery, the fever is due to complications meningitic or otherwise, or whether it is simply due to the violence of the cerebral irritation and the affection of the cerebral heat-centers has not yet been proved. The evidence in favor of the latter condition is up to the present time wholly negative. Considering the existence of heat-centers, as shown by Dr. Ott and others, proved, since no other cause of the high temperature is apparent, and since cerebral irritation evidently exists, it is assumed that the fever is due to the irritation of these centers. It must

be remembered, however, that this is only a theory with some plausibility in its favor.

Näcke is in favor of this view. As in Magnan's cases the temperature cannot be simply dependent on increased muscular action "since now at the autopsy of such patients, beyond the more or less marked hyperæmia of the central nervous apparatus, and the changes produced in the system by chronic alcoholism, nothing was found which could explain the violent fever, we must in these cases regard the fever as directly dependent on the action of the lately introduced masses of alcohol upon the heat regulators."

We, however, do not believe that this question can yet be decided without further evidence.

Boston Medical and Surgical Journal

THIRTY-FIRST ANNUAL REPORT OF THE
WASHINGTONIAN HOME, Boston, Mass. 1889.

This well-known institution reports having admitted four hundred and forty-seven persons during the year, seventy-six of which had delirium tremens. This was a large increase over last year. We give the following quotations from the report of Dr. Day, who is one of the most distinguished workers in this field now living :

"There is one common phase of inebriety which I have but alluded to in a former treatise, in contradistinction from excessive drinking or drunkenness itself, and that is the form commonly known among medical writers as dipsomania.

"In the acute form, the person formerly temperate and sober, suddenly commences to drink to excess, and soon becomes careless and indifferent to all claims of business or family, and seems as if determined to drink himself to death as soon as possible.

"The periodic form, with which we have the most to do, is mostly connected with some hereditary taint of insanity, intemperance, or injury to the head. An instability of char-

acter, and indications of peculiar nervous irritability, may generally be recognized as having preceded the distinct development of the craving for intoxicants. It is also usual to find such persons as are predisposed to the disorder abnormally sensitive to the influence of stimulants. In every case, very small quantities of alcohol will produce appreciable intoxication. The duration of the periods of craving is variable; but most commonly they last one or two weeks.

"The remissions continue for periods varying from two to twelve months. During the period of craving the whole moral being is enthralled by the morbid desire; and regard for truth, decency, or duty, is generally altogether lost. Moderate indulgence in a stimulant may bring on the morbid craving, but the desire is most generally developed without any such introduction.

"I usually recognize the indications of a coming attack by a restlessness and depression which precedes any such indulgence. Nothing but positive confinement, with the strongest bolts and bars, will prevent such persons from plunging into the most degrading drunkenness. They will sell their clothes and wander about naked, or obtain some ragged outfit to slightly cover their nakedness. I have known them to steal and sell their wives' and children's clothing to procure poison to keep up their debauch. They will commit murder, if by so doing they can obtain money; and no doubt this crime is often committed for this purpose alone.

"Pawn-shops are usually an appendage to the rum-shop. They are ready at all times to take little children's clothing from a drunken father, in order for him to get a few more drinks.

"During the intervals of these attacks, the patient seems, except when the brain has been weakened by frequent attacks, to recover completely; and he generally displays great confidence in his ability to resist the tendency in future. He often becomes religious, or succeeds in making

others think he is. He will sometimes constitute himself a temperance lecturer, and by his repeated tales of his previous degradation will gain much sympathy from the public. Repeated attacks always produce a permanent degradation, both intellectual and moral; and if the patient live long enough, he lapses into a state of dementia. It sometimes happens that some disease of the brain, of which the dipsomania had been symptomatic, manifests itself in paralytic convulsive symptoms; and the appearance of such phenomena is often accompanied by a modification of the craving. I have known cases of this nature. They would stop drinking, and claim for themselves much praise and virtue, when in fact the brain had been *burned out* of its best qualities, together with the insane desire and passion for drunkenness.

“The superintendents of insane asylums are not in sympathy with the law that compels them to admit dipsomaniacs, and most of them are discharged before favorable results are obtained. They are not considered insane, but very wicked and sinful men and women, which is generally not true. They affirm that the insane asylum is not for drunkards, and it is true that it is not. To commit such men as criminals, with convicted criminals, is a disgrace to the age in which we live. It is a relic of ages whose acts, in respect to dealing with the unfortunate, are fast passing away.

“It was found some time ago that to whip the devil out of some poor lunatic was only to whip several more devils into him. It was found that the whipping-posts and the stocks, the prison, and the hangman's threat, did not cure the dipsomaniac, but sank him still lower in his degradation. It is said that Charlemagne tried to cure the drunkard by scourging for the first offense privately, for the second publicly, and if both these measures failed, put the inebriate to death. The last act alone resulted in cure.

“Time and space will not permit me to enter into the treatment of inebriety to any considerable length. This disease is so varied in form, so subtle in operation, so intri-

cate in development, and so complex in causation, that to describe its treatment is no easy task. We have but little opportunity to treat the dipsomaniac type here. From seventy-five to a hundred cases of delirium tremens have been treated here each year for the past thirty-one years. They come, are cared for and treated. They go, always with the promise never to drink again. Some are able to keep their promises, and some are not. All are honest in their promise, but weak in mental energy, and fail. It is for this class we plead. But the cases I now mention are not dipsomaniacs, for such seldom have delirium tremens."

SOME STATISTICS OF CASES IN THE DALRYMPLE HOME.

Of the one hundred and fifty-two patients who have been under treatment, forty-six remained one year, seven remained nine months, three eight months, and forty-six months, and the remainder were under treatment from three to six months.* Nearly one-half were between the ages of thirty and forty, thirty-seven between twenty and thirty, and eight between fifty and sixty. Over one hundred were well educated, fourteen were medical men, six were lawyers, and four were clergymen. In the family history, twelve had insane parentage, and sixty-one had inebriate ancestors. Chloral, opium, chlorodyne, and morphine were associated with many cases. The inebriety was continuous in ninety-two cases, and periodical in sixty cases. The exciting causes were nerve shock, thirty-three; special influence of occupation, seventeen cases; overwork and ill health, seventeen cases; accident, seven cases. The after history of these cases are flattering. Seventy-six cases remained well from one to four years after. Six were greatly improved, and nine were discharged as incurables.

These facts show that Dalrymple Home is doing good

*The average length of treatment was seven months.

scientific work, and laying the foundations of a really great institution in the future.

ALCOHOL INSIDE OUT. FROM THE BOTTOM PRINCIPLES. FACTS FOR THE MILLIONS. By ELISHA CHENERY, M.D., member of American Medical Association, etc., etc., Records, McMillan & Co., Philadelphia, Pa., 1889.

This work, written by an able physician and medical teacher of Boston, Mass., has every indication of a very short life. It carries a heavy hereditary load of opinions and theories, good, bad, and indifferent, and assumes these are "bottom principles and facts for the millions." Such a precocity in this hard world means early death. The opinions of Martin Luther, Lord Chesterfield, Buffalo Bill, and General Butler are new to the literature of this subject. The attempt to give a positive answer to the questions—of alcohol, what and whence it is, and its way through the system, by theories and opinions, is also new in the range of science. The last half of this work, in which alcohol as a food, a medicine, and poison is presented, is far more satisfactory to the reader, but even here the positiveness of the conclusions are suspicious. The assumption that a consensus of opinions of physicians represent the bottom facts concerning alcohol is not correct. Such views only show the direction of current thought, and may indicate some general facts, which more accurate study must support or deny. Alcohol and its action on the organism is unknown only in the most general way. The recent discussion by the London Pathological Society brought out this fact. Every exact scientific study in this field reveals far more of the unknown than the known. While this work may have some value as a popular grouping of current opinions, still its usefulness is impaired by the assumption that this subject is understood, and that bottom facts and principles are settled. The reader will be more pleased with the author's views and statements than his quo-

tations, and had he confined himself to a clear personal discussion of the subject, a better work would have been presented. The work is well printed, and will, no doubt, have a large circulation among ultra-temperance people.

PSYCHOLOGY AS A NATURAL SCIENCE
APPLIED TO THE SOLUTION OF OCCULT
PSYCHIC PHENOMENA. BY C. G. RAUE, M.D.,
Philadelphia: Porter & Coates. Price \$3.50.

In this book of nearly five hundred and fifty pages, Dr. Raue has elaborated the little work which he published in 1847, with the object of popularizing the views of Dr. Beneke, the latter a great German investigator, has endeavored to found the science of mind upon a knowledge of the organ of mind. Dr. Raue, in this work, brings out clearly the *new psychology*, in which the occult psychic phenomena are studied in a scientific spirit. In the division of the work, the first part treats of the intellectual sphere of the mind. The second part goes over the region between desire and will, called conation. The third part considers the emotional sphere, the fourth physiological psychology, the fifth discusses some complementary inquiries, while the sixth endeavors to apply the principles brought out in the preceding parts to the explanation of occult phenomena. The problems of mind-reading, thought-transference, hypnotism, hallucinations, spiritualistic displays, are treated in a rational, scientific way, very pleasing to the reader. The author has a very happy way of describing these abstruse subjects, and making his conclusions appear clear and satisfactory. This is one of the most charming works that has been written in the realm of psychology, and while the reader may not be convinced by all the conclusions of the author, he will be both pleased and instructed, and find this work a valuable acquisition to his library. The publisher has brought out a fine volume of large type, with much typographical taste.

THE APPLIED ANATOMY OF THE NERVOUS SYSTEM. A STUDY OF THE NERVOUS SYSTEM FROM A STANDPOINT OF ITS GENERAL INTEREST AND PRACTICAL UTILITY IN DIAGNOSIS, ETC., ETC. BY AMBROSE L. RANNEY, A.M., M.D., Prof. Anatomy and Physiology of the Nervous System in the N. Y. Post Graduate School and Hospital, etc., etc. Second edition. New York City: D. Appleton & Co., Publishers, 1888.

Gray's anatomy is one of those indispensable works which every physician must have. This book bears the same relation, and is equally essential to every student of the nervous system. This is a special work for the student of neurological anatomy and physiology, and also an excellent grouping of the views of the leading minds, and the main facts important in the diagnosis of nervous affections. The great value of this work consists, not only in the clear anatomical descriptions and illustrations of the brain and nervous system, but an outline view of the physiology and pathology, and points of diagnosis essential for the recognition of brain and nerve disease. To both the specialist and student this work has a practical value that is indispensable, and we most heartily commend it. This book, like Gray's anatomy, is the fundamental work for the study of all neuroses, and without it our knowledge must be very imperfect. This is the great text-book that every physician should possess. The type and illustrations are very clear and pleasing, and the book is issued in the publishers' usual good taste.

THE INSANE OF FOREIGN COUNTRIES. BY WM. P. LETCHWORTH, president of New York State Board of Charities. New York, G. P. Putnam Sons, publishers, 1889.

This volume of 363 pages gives in a clear, concise style the results of the writer's studies and observations of all the leading insane asylums of Europe. The laws and practices

in the treatment of chronic insane are described clearly, and opinions of leading asylum authorities are given on disputed questions. The Gheel system is described at some length, and the illustrations of some of the English asylums are particularly good. The description of the asylum at *Prestwich Cheadle* and *Morningside* are excellent, and give the reader who has not seen these places a new view of the great advances in the treatment of the insane. This work has a great value to officers of asylums, and is really a contribution to this whole subject that will interest every reader. Physicians who would know what is being done in Europe for the insane will find this work invaluable, and the author deserves great praise for a very clear, practical work. The work is typographically a most attractive volume.

ENGLISH, PAST AND PRESENT. BY ARCHBISHOP
TRENCH. THE HUMBOLDT PUBLISHING COMPANY, 24
East 4th St., New York City.

This is a series of lectures on the origin and growth of the English language, delivered before the fellows of Oxford College, England. The treatment of the subject is thoroughly scientific, and the style is clear and very attractive. It is issued in a pamphlet form at 30 cents, and will well repay careful reading.

The *Thirteenth Annual Report of the St. James Home for Female Inebriates*, near London, England, shows a large increase, both in patients and income, over the year past. Seventy-nine cases have been received during the year, and four hundred and sixty-four applications for admission have been received during the same time, the receiving board determining the fitness of cases for treatment. This seems to be a church home where the inmates are given some work, and are built up by rest, hygienic care, and medicines.

CONSCIENTIOUSNESS, OR PERSONAL INTEGRITY IN EVERY-DAY LIFE. BY H. S. DRATON, M.D. Fowler, Wells & Co., Publishers.

This little work is replete with suggestions of the most practical character. A very abstruse subject is treated in a popular way, and the reader regrets that the author has not elaborated the topics discussed. The only fault is its brevity. A fine field is open for further study in this direction.

The *Homeletic Review* is a theological journal whose tone and generous spirit is charming for scientific readers.

The *Phrenological Journal* presents a steady growth outwards and upwards, and is one of the strong journals of to-day.

The *Scientific American* contained the best account of the terrible flood, with maps and pictures of the country, that has been published.

The *Wide Awake*, by D. Lothrop & Co., of Boston, is one of the very few magazines whose contents can be read by both old and young, with increasing interest.

The *Popular Science Monthly* cannot be over-praised. Its practical value to every scientific man and reader grows yearly; the late numbers contain papers of the greatest interest.

Warner's Therapeutic Reference Book is a very handy little work for the office table. It contains a great number of facts that are often called in question in the consulting office. Send for a copy to Wm. R. Warner of Philadelphia, Pa.

Good Health of Battle Creek, edited by Dr. Kellogg, is one of the most attractive health journals published in this country. The subject-matter and its treatment, and the general artistic beauty and taste of the pages, are models in literature. Send fifteen cents for a sample copy.

Editorial.

DELUSIONS OF DRINKING.

Among chronic inebriates the delusion of drinking is very common, and largely unknown except by those who are engaged in the treatment of such cases. The intoxicated man is always possessed with the idea that others are more so in the same state. The chronic inebriate, when sober, is always finding evidence of secret drinking in others. When confined to an inebriate hospital this delusion becomes a faith that he can get spirits any time, and that his associates all have spirits in their rooms and are drinking secretly every day. In some cases he has the delusion that he has drunk every day, or been offered spirits. Why he refused is not clear, and why he was not detected is also strange. In every asylum for inebriates or the insane, in prison or jail, wherever these cases are confined, the same delusion is found. They assert most emphatically they could have and did get spirits at all times and in all places. When this statement is disputed, they assert others had spirits to their own personal knowledge. These delusions are urged so earnestly and with so much plausibility that the public have come to believe that the managers of inebriate asylums are stupid or culpable, and that such asylums are mere pretences. So eminent a man as Dr. Bucknill of England, wrote of his visit at Binghamton, that he was offered his choice of spirits by a patient who said he with others had all the spirits in secret they wished. This statement was accepted as a fact by the doctor, when in reality not one of these patients had been away from the building for weeks, and not one of them had means to procure spirits, or could drink a single glass without showing it or attracting attention. The assertions of discharged inebriates that they had all the spirits they

wished in the institutions is contradicted by the fact that a single glass of spirits is always followed by a paroxysm of drinking.

While the chronic inebriate is always untruthful and intriguing to procure spirits and deceive others, he cannot drink any spirits, even in great moderation, without showing it. He may show great cunning to get spirits, but the moment he takes any all caution and prudence to conceal it disappear, and his conduct and acts cannot be mistaken. These delusions assume many curious phases. Thus a patient will interpret the sounds in the next room to be that of drinking spirits, and will feel sure that he was awakened and offered spirits which he refused in the night. The next morning the inmates of such rooms will give to his clouded senses unmistakable evidence of a drinking bout the night before. He will affirm most positively that he detected the odor of spirits in others and believe that he has been given spirits to make him quiet. He will see evidence that some person who has more liberty than himself is drinking all the time in secret, and after some strange statement to this effect will believe the statement to be an actual occurrence. When the drink paroxysm comes on and the patient cannot get spirits, then he will assert most positively that he can get all he wants, and that others are intoxicated constantly, and he drinks every day. These statements are most unfortunately accepted as facts, while in reality if they were true every hospital for inebriates would have to be abandoned at once. These peculiar delusions have never been studied or understood except by practical asylum managers. As an obstacle in the growth of a healthy public sentiment they are often very serious, giving rise to false impression and conceptions of the means of cure. Like the delusions of persecution among the insane, these delusions of free whisky at all times and places ought not to be accepted with any credence, except from a careful inquiry and examination of all the facts and circumstances of the case.

EAU DE COLOGNE DRINKING.

The use of cologne as a substitute for spirits is very common among inebriates; generally when no other form of spirits can be procured. Recently attention has been turned to the rapidly increased consumption of cologne, both in large cities of Europe and this country, and the conclusion reached by several authorities is that cologne is becoming a drink in many circles in preference to other forms of spirits. To many persons this odoriferous compound is very attractive, and especially when the cologne is made with methylated its spirit strength is equal and exceeds many of the stronger alcoholic drinks in market.

The factories for its manufacture in Cologne use the following general recipe: Twelve drops of the essential oils neroli, citron, bergamot, orange, and rosemary; one drachm of malabar cardamoms to one gallon of rectified spirits. In this country cheap wood spirits are used, which gives greater alcohol strength at half the expense.

In England many women and men in the better walks of life begin by taking a few drops of this perfume on sugar in the morning for some debility. This increases until they come to depend upon it the same as any other spirit compound. It can always be purchased with ease and without exciting suspicion, and can be used with great secrecy. American cologne is most often made from wood spirits, and is a very fiery, nauseous mixture which cannot be taken in water, but used on loaf sugar or lozenges is endurable. In one instance a wine glass of cologne was taken three or four times a day for a long time; the patient finally died from delirium tremens. It appears that the effects of this drink vary but little from ordinary strong spirits, except, perhaps, there may be more profound nutrient disturbances, insomnia, and tendency to delirium. If the cologne is made from wood spirits, the brain and nerve degeneration is both intense and profound, and delirium is very sure to follow.

It has been asserted that melancholia and insomnia in a

case suspected of using spirits in secret is an indication of the use of cologne. Usually the cologne drinker will have a strong odor of this perfume about his body and breath which cannot be mistaken. Such cases usually use this perfume externally in excess to divert suspicion from its internal use. Undoubtedly there are, in this country, an increasing number of cases where cologne is used secretly and exclusively. These cases, no doubt, become morphia, chloral, and cocaine inebriates after a time, and in some instances from a physician's prescription which contains these drugs, that are often fascinating substitutes. The alcohol and opium inebriates turn readily to cologne, and use it freely and with great satisfaction. The American inebriate, if a man, is not likely to use this perfume very long as a drink, but if a woman, it may be taken for years in secret. Obscure and complex nervous disorders in a woman that uses cologne externally should always suggest the possibility of its internal use. Inebriates who use it externally and recover rapidly, or make sudden changes of habits and living, may be suspected of substituting it for other spirits. Cologne, both German and American brands, contains a large and variable per cent. of alcohol, and are always dangerous for use among neurotics, even externally. Its internal use is very likely to follow if the person has a great liking for this perfume. In hospitals for the treatment of alcohol and opium cases cologne is found to be as dangerous as alcohol and is not allowed. In private practice among neurotics the possibility of this danger should always be considered. It is asserted that the sale of cologne has increased enormously in certain sections of this country. Statistics on this point would be very interesting. We trust the coming census will throw some light on this, and the extent of the use of bitters in this country.

In the April meeting of the Society for the Study of Inebriety the president, Dr. Kerr, gave an excellent address on "Does Inebriety Conduce to Longevity?" which we print in this issue.

A STEP BACKWARD.

The State of Minnesota organized and built an inebriate asylum ten years ago, then became frightened, fearing they would not have inmates to fill it, and changed it to an insane asylum. A law was passed confining inebriates to insane asylums, and now one of the released inebriate patients makes the following vigorous protest against this association :

"Of the treatment of inebriates in these insane asylums enough cannot be said in condemnation. If the object of the law is to punish men for drinking whisky then the object is fully accomplished, for the human mind cannot conceive of any greater punishment than the inebriates undergo at these insane asylums. Brought to the asylum with nerves unstrung, and with stomach out of order, they are treated the same as the insane. There is no separate hall for inebriates, and no separate dining-room. They are compelled to associate and sit at the table with crazy murderers, raving madmen, howling lunatics, and laughing simpletons. They are forced to witness scenes so revolting and disgusting, so cruel and inhuman, that in order to retain reason they ought to have nerves of steel ; but the inebriate's nerves are in a frightful condition, and he is just in this worse than Milton's hell to strengthen his nervous system and to recuperate on poor food and very little exercise. This department of the institution ought to be called the *insane factory*, for the inebriate who graduates from there in possession of his reason need not fear that he can be driven insane. He has passed through the crucial test."

Undoubtedly this is true in some degree in all insane asylums where the inebriates are confined with the insane. Whether the asylums in this State are better or worse than elsewhere is not determined. But it is clear that the State legislature are at least half a century behind in their conception of inebriety. A law was passed by this legislature lately making inebriety a crime, the first section of which reads as follows :

"Whoever voluntarily becomes intoxicated by the excessive drinking of intoxicating liquors shall be deemed guilty of the crime of drunkenness, and upon the conviction thereof shall be punished as follows: For the first offense it provides a fine of not less than \$10 nor more than \$30, or by imprisonment for not less than ten nor more than forty days. For the second offense, by imprisonment for not less than thirty nor more than sixty days, or by a fine of not less than \$20 nor more than \$50. For the third or all subsequent offenses, by imprisonment for not less than sixty days nor more than ninety days."

The *Northwestern Lancet*, one of the ablest Western medical journals, published at St. Paul, makes the following comment on this act:

"A great deal will depend upon how the word 'voluntarily' is construed by the police court justices. If the judge have sufficient knowledge of the subject to be aware that the victims of the disease, inebriety, do not become intoxicated voluntarily, and imprisons only those who get drunk for the pleasure of the thing, the measure will deserve commendation. But if, as is almost certain to happen, the victims of disease are to be punished for what they cannot help, the passage of this bill is a most decided step backward in the path of human progress, and those who voted for the bill may be assured that future generations will think their legislation as lacking in enlightenment as the laws which made witchcraft punishable by death."

This State is very unfortunate in its management of asylums, and singularly unfortunate in the mediæval conceptions of its legislatures. Individual opinions are of little moment, but laws on the statute books are a permanent record of the ignorance or intelligence of the citizens of the State. Minnesota must, from necessity, re-organize and open up asylums for inebriates, and repeal this law in the near future. The growing intelligence of its citizens will soon check this backward movement.

INTERNATIONAL CONGRESS AT PARIS,
FRANCE.

Under the patronage of the Trade, Industry, and Colony Office of France, and by decision of his excellency M. Tirard, the French premier, a scientific congress for the study of questions concerning alcoholism will, under the presidency of M. Léon Say, the economist and state minister, be held at 84 Grenelle Street, Paris, on the 29th, 30th, and 31st July proximo, beginning, on each day, at 8 o'clock A. M. Membership is secured by sending to the congress' assistant secretary-general, Dr. Audigé, No. 26 Avenue Bosquet, Paris, a subscription of five francs. Preliminary statements, indicating the present conditions of the problems to be solved, will be sent from Paris to every registered member of congress; these statements, from the pens of M. Yvernes, M. Albert Dujardins, Dr. Motet, Professor Duverger, Court of Appeal Councillor Gonse, and Director Bardy, being the subject-matter of the debates. Any person intending to take oral or written parts in the proceedings are to give previous notice of such an intention to the assistant secretary-general, above named.

The official questions to be dealt with are :

I. (a) To compare the statistics of the drink-houses of some one country (England, France, or any other), with the respective statistics of the same houses of other civilized nations. (b) To show the connection existing between the constant increase of criminality and lunacy with the increase of the consumption of alcoholic beverages, and to show this connection statistically. (c) What results have been produced by the two licensing systems now practised in the world, namely, the system of liberty granted under minor restrictive conditions to the drink retail houses, and the system of the preliminary authorization *sine qua non*.

II. (a) To study the medico-legal considerations bearing crimes and delictuous offenses perpetrated under the stimulating influence of alcoholism (drunkenness and its dis-

eases). (b) To study the legal instruments best fitted to prevent crimes having alcoholism for their cause, such as murders, suicides, malicious injuries by fire, etc.

III. (a) Are temperance "sideboards" and canteens to be set up in the neighborhood of workshops, timber-yards, wood-yards, dock-yards, and other such places employing a large number of hands? And to show how the same are to be erected and managed. (b) What are the best means to quickly and correctly detect the adulterations of alcoholic drinks?

DOES PUNISHMENT EVER DETER INEBRIATES FROM DRINK OR CRIME?

The theoretical superstition that more severe punishment of inebriates will deter them from drink and crime has revived again in many sections.

A little practical investigation will show that every inebriate has a delusion that he is not a literal drunkard, but is an exception to others, and he can always stop at will when he chooses. He never realizes that any application of the law to more severe punishment will have any reference to him. He never believes that he will drink to excess or violate any law — he is not foolish enough for that. He always deludes himself with the idea that there is no disease in his case, and all his use of spirits is the result of accidents which he could at all times control. Hence all example and fear of the law are powerless. As a lawmaker and judge of other inebriates he is unjustly severe, but in his own case he is always an exception, and will never come under the general rule. Confinement or even capital punishment of inebriates has never a personal application or is an example in the minds of inebriates who do not suffer. Inebriates who are sent to jail regularly every year for intoxication always delude themselves that it is unjust and the result of accident or personal revenge, and not of violated law.

The inebriate who is punished for crime always consoles

himself with the faith that he is a victim of plots and conditions that should have been otherwise.

All appreciation of themselves when intoxicated is confused and cloudy, and hence he never can realize that he will do as others have done in this condition. The theory of deterring these men by increased punishment has no support practically or scientifically. No single incident has been produced to show that such an effect ever follows the practical working of any law which assumes the inebriate has the power to stop drinking, and can be forced to exercise it by intimidation and fear.

GOVERNMENT MAKING INEBRIATES.

Nothing is more positive and startling than the fact that the legal treatment of inebriety by short sentences is doing more to fix and intensify inebriety, making the victim more incurable than all the saloons combined. In this way the government, by law, is literally making inebriates and pauperizing them and their families with a certainty that cannot be mistaken. Dr. Sutherland of Glasgow, Scotland, has lately published some statistics which show how terrible and certain this process of making inebriates is in that city. Ten thousand commitments of women to jail in that city in one year for drunkenness represented on an average three commitments for every person, and an average length of time to each of seven days. Over forty per cent. of all the persons committed have been sentenced before from eleven to eight hundred times. The first sentence of the victim increases his physical degeneration and pauperizes his mind, by placing him in degenerative surroundings and destroying the mental element of faith and hope to recover, so essential in all cases. He is discharged in the worst possible state to abstain, and is unable to think or act clearly, and his relapse is a certainty. Every sentence still further makes it a physical impossibility to live a healthy life, and the process of degeneration is progressive and positive. The error of sup-

posing that fear and punishment will give these cases a power to remain sober and control themselves is fatal to all rational treatment and the cases themselves. Europe as well as this country, by this terrible blunder, is making inebriates and pauperism, and building a class of incurables by the efforts to check them.

A correspondent calls our attention to the report of Dr. Graham, the physician to the Franklin Home, in which he says "no sickness of a dangerous character occurred during the year, and only a very few trifling ailments were noticed; so I am happy to report that the superintendent, the cook, and the nurse, had more to do with the care of the cases committed to this place than the physician. On the next page is a charge of \$210 for medicines for the year, and this was forty per cent. below the actual charge, making \$294 for medicines. As this institution denies that inebriety is a disease, but claims it is a pure habit, this bill for medicines needs some explanation to the average reader.

The papers of Drs. *Kerr* and *Wright*, which were read at the International Congress of Medical Jurisprudence at New York City, on inebriety and its medico-legal relation, attracted much attention and were highly complimented.

The *Medico-Legal Journal* for June has some excellent papers of unusual medical interest. An excellent picture of Dr. Hughes, the distinguished editor of the *Alienist* and *Neurologist* appears in this number. Hon. Clark Bell, the editor, is the great pioneer in medico-legal science in this country, and this journal may be truly said to lead all the other journals of the world in this field.

The Medical Editors' excursion and banquet at the Newport meeting was a most pleasing event. To Dr. Wile and the staff of the *New England Monthly* the warmest thanks and credit are due.

Clinical Notes and Comments.

DOES INEBRIETY CONDUCE TO LONGEVITY?

BY NORMAN KERR, M.D., F.L.S.

Presidential Address.

From different parts of the United Kingdom and from many countries I have been inundated by pressing requests to "expose the falsity" of such startling statements as the following, copied from one of many similar cards which in various languages are reported to me to have attained an enormous circulation at the hands of persons interested in the manufacture and sale of intoxicating drinks:—"Teetotalism Dangerous to Life. The following table, taken from the Committee of the British Medical Association, in connection with their investigation on Disease and Alcohol, appears to place the advocates of the pump in an unenviable position.

AVERAGE AGE AT DEATH.

	YEARS.	DAYS.
A. Total Abstainers,	51	80
B. Decidedly Intemperate,	52	14
C. Free Drinkers,	57	216
D. Careless Drinkers,	59	246
E. Habitually Temperate,	62	50

From this it will be gathered that even the habitual drunkard has the advantage of the Blue Ribbonist by one year, and the temperate beats him by more than a decade."

The excellent people who have written to me have nearly all declared their disbelief either that such an inquiry ever

took place, or that such figures were ever issued by any scientific body of medical men; and with one accord they bewail the publication as a "terrible blow to temperance."

My good friends have been as mistakenly incredulous as they have been needlessly afraid. A moment's reflection ought to teach that no returns showing a greater average premature mortality among abstainers than among drunkards under ordinary and equal conditions, can possibly be accurate. Common sense, with very little knowledge and experience, should suffice to prove that there is a vital flaw somewhere in any anti-abstinence application of these eccentric statistics. The misstatement (if designed) is too gross to be explained away; the blunder (if unintentional) is too palpable to avoid detection.

It is quite true that such figures were set forth, but it is NOT TRUE:—(1) That they warrant any deduction in favor of the superior longevity of excessive or limited drinkers. (2) That the British Medical Association, or any of its committees or officers, gave utterance to such an absurd and unfounded conclusion.

These are the facts. In the course of inquiry into "the connection of disease with the habit of intemperance," an appeal was made by the Collective Investigation Committee to the 13,000 members of the British Medical Association to fill up returns showing (among other particulars) the age and cause of death of male patients who had died over the age of 25 years, from the counterfoils of each practitioner's death certificate book for the preceding three years. The report was presented by Dr. Isambard Owen at the annual meeting of the Association in Dublin, in 1887, and was published in the *British Medical Journal* June 23, 1888.

Dr. Owen, who collated the returns, has again and again publicly repeated the disclaimer embodied in the report of the Investigating Committee, viz.:—"We have not in these returns the means of coming to any conclusion as to the relative duration of life of total abstainers and habitually temperate drinkers of alcoholic liquors."

The committee in their report state, *inter alia*, that on the whole they may not unfairly claim to have placed upon a basis of fact this conclusion, viz. :— "That habitual indulgence in alcoholic liquors beyond the most moderate amounts has a distinct tendency to shorten life, the average shortening being roughly proportional to the degree of indulgence."

It is therefore manifest that a wrong use has been made of the figures given in the committee's report ; that there is no warrant for the printed statement that "the habitual drunkard has the advantage of the Blue Ribbonist by one year, and the Temperate beats him by more than a decade ;" and that this statement is directly opposed to the terms of the British Medical Association report.

Notwithstanding the explicit language of the report, and authoritative contradictions by the *British Medical Journal*, by other leading medical papers, by Dr. Owen and by other persons with a knowledge of the facts, the misapplication of the figures and the misrepresentation of the committee's report are persistently being promulgated far and wide. It may therefore be useful to enter a little into details.

This investigation, however serviceable as a guide to future inquiries, was too defective to warrant any dogmatic general conclusions.

One of the chief defects of this report arises from the limited number of medical men who have reported, and the small total of deaths returned. Returns were received from only 178 members (two of whom practice in the Colonies, two in Ireland, and five in Scotland), and the whole number of deaths recorded was but 4234. These data are much too restricted (being only about one per cent.) to afford a sufficient basis for founding any reliable generalization as to the effects of temperance or intemperance on the total of male deaths of more than 25 years of age, that took place in the kingdom during the three years over which the returns extended.

A still more serious defect is the loose method employed in the collection of the returns, which were simply drawn

from the death-certificate counterfoils of the three preceding years. The memory of a busy medical practitioner is too over-burdened to admit of reliance being placed upon recollection of particulars of cases even a few months back. This defect, in my opinion, alone suffices to vitiate the report as a whole. Probably not half a dozen of the reporters had their attention, during the period of observation, directed to the relation of a temperate or intemperate habit of life to the causes of death. I have no doubt that the reporters have all done their best to give as accurate returns as possible; but from my own experience of a previous attempt to secure a similar return on a much smaller scale—for a preceding period of twelve months—I feel confident that the only judicious plan would be to ask reports of deaths for a future period, extending say from January 1, 1890, over one, two, or three years. The practitioner could then fill in the particulars (to which his attention would be specially called), of each death, while his remembrance of the circumstances would be fresh and trustworthy.

A third important defect is that of classification of drinkers into (1) the habitually temperate, (2) careless drinkers, (3) free drinkers. The habitually temperate are defined as drinking small amounts, only with meals, and rarely taking spirits except as a medicine. The latter part of this definition did not apply to whisky-drinking countries, so that the Scottish and Irish figures are on a different footing from those of England. The careless drinkers were described as neither "intemperate" nor "free," yet as not confining themselves within a rigid rule, not objecting to spirits occasionally as a beverage, at times drinking between meals, or even getting drunk occasionally, but not making either practice a habit, and, on the average, not materially exceeding the so-called "physiological quantity" of one and a half ounces of pure alcohol daily. The free drinkers were stated to be men who drink a fair amount, or take their wine freely, habitually exceeding the physiological quantity to a material extent, yet who could not be called drunkards or be consid-

ered as having forfeited a reputation for sobriety. The decidedly intemperate were called "drinking men," "hard drinkers," and "drunkards." This distribution will, by those who have devoted close attention to inebriety, be recognized as most indefinite so far as the habitually temperate, careless, and free drinkers are concerned. There is a large proportion of drinkers who are abstemious to a degree in company, but who indulge to excess in secret, their habit of secret and solitary intoxication, or of less pronounced drinking, never being discovered except by accident.

All these and other qualifications must be borne in mind when considering the lessons to be learned from this inquiry in which, it will be remembered, were included only males dying above 25. Only 2.8 per cent. were abstainers, about 42 per cent. were habitually moderate, 25 per cent. were careless, and 30 per cent. were more or less distinctly intemperate. If this state of matters be true, it is very serious that less than one half of our drinkers should be "habitually moderate." Greater longevity of the temperate versus the intemperate. The average age at death was, of abstainers 51.22 years, of the habitually temperate 62.13 years, of careless drinkers 59.67 years, of free drinkers 57.59 years, and of the decidedly intemperate 52.03 years. This shows a difference of ten years in favor of the habitually temperate as compared with the decidedly intemperate.

The most remarkable feature of the table is the apparently shorter duration of life among the abstainers as compared with drinkers of all degrees. The length of life of the nephelists was about 11 years less than the average of the habitually temperate, eight years less than the average of the careless drinkers, about six years less than the average of the free drinkers, and about three-quarters of a year less than the average of the decidedly intemperate.

The explanation of this apparent greater shortness of life among the teetotalers is very simple. The general habit of drinking has come down from remote antiquity, while the abstinence movement is but some 50 years or so old. The great

majority of our converts to teetotalism have been young persons, so that the average age of living abstainers must for some time to come be much less than the average age of drinkers of all degrees. Such is the simple explanation of this latest "Mare's nest of Bacchus."

This explanation is corroborated by two other tables constructed by Dr. Owen and his committee. When deaths under 30 years of age were excluded, the average age of the abstainers was about four years more than that of the decidedly intemperate. When all deaths under 40 years were excluded, the average age of the teetotaler was one year greater than that of the free drinkers, and more than 5 years greater than that of the intemperate.

A conclusive proof of the superior longevity of abstainers over drinkers who are not drunkards, is afforded by the returns of the United Kingdom Temperance and General Provident Institution. The statistics are spread over 22 years, and embrace only the lives of abstainers and moderate drinkers, drunkards being excluded.

	TEMPERANCE SECTION.		GENERAL SECTION.	
	Expected Deaths.	Actual Deaths.	Expected Deaths.	Actual Deaths.
1866-70 (5 years), . . .	549	411	1008	944
1871-75, " . . .	723	511	1268	1330
1876-80, " . . .	933	651	1485	1480
1881-85, " . . .	1179	835	1670	1530
1886-87 (2 years), . . .	553	390	713	700
22 years, . . .	3937	2798	6144	5984

These figures show only 71 per cent. mortality of the expectancy, a saving of 29 lives in every 100 among the abstainers, while among the non-abstainers there was a mortality of 98 per cent., or a saving of but two lives in every 100.

These tables, supported by similar returns from other insurance offices,* afford the best proof at present attainable of the comparative duration of life among abstainers and non-abstainers. Therefore, by the most practical and crucial test that can be applied, abstinence is demonstrated to be favorable to long life.

Dr. Owen and the Investigation Committee have done their best with the imperfect material placed at their disposal. Their labors merited far different treatment from the gross misrepresentation to which their returns and their report have been subjected. Taking the report as it stands, the following (among other statements) are plainly set forth in it:—That the returns reported on afford no means of coming to any conclusion as to the relative duration of life of abstainers and habitually temperate drinkers. That habitual indulgence in alcoholic liquors beyond the most moderate amounts has a distinct tendency to shorten life, the average shortening being roughly proportional to the degree of indulgence. That in the production of cirrhosis and gout, alcoholic excess plays the very marked part which it has long been recognized as doing. That total abstinence and habitual temperance augment considerably the chance of death from old age or natural decay. So does true science even witness to the superior healthfulness of abstinence. The more the effects of alcoholic intoxicants are inquired into, the stronger confirmation there will be of the truth of the foundation principle of the great temperance and prohibition movements, that intoxicating narcotics are dangerous articles, noxious to health and life, in all quantities which are followed by any appreciable effect.

*The Sceptre Life Association records 1884-8, gave a mortality as regards the number of expected deaths of 79 per cent. in the General Section, and of 56 per cent. in the Temperance Section. In the Whittington Life Assurance Company, since 1884 the death-rate in the Ordinary Section was 16.35 per 1000 per annum, and in the Temperance Section only about one-half or 8.74 per 1000.

ON THE PERMANENT CURE OF THE INEBRIATE.

BY EDWARD C. MANN, M.D. (F.S.S., LOND.).

Superintendent Sunnyside Private Hospital for Inebriates, Morphine Habit, etc.

Every progressive physician to-day recognizes inebriety, the great diagnostic mark of which is the irresistible craving for alcoholic drink, either periodically or daily, as a physical disease.

It does not seem to be generally known and believed that appropriate treatment, for a proper length of time, will renew the former health of the patient, and send him out into world again, cured, just as surely as we send out a patient restored to his previous health, who has suffered from any other serious disease. From an experience of eleven years in conducting a hospital for these cases, we can say that a year of treatment will restore seventy per cent. of cases of inebriety in both men and women to complete and lasting health, with the moral and physical control restored, and the craving for drink cured. By the time most cases are willing to go under treatment their place in business and society is lost, and if not permanently cured, they cannot regain their society or business status. We can point to many men and women occupying places of honor and trust, and high position in society, who have never shown the slightest symptoms of relapse since leaving us.

Seventy per cent. of cure is a very large percentage to claim, and we only claim this for cases that remain one year under treatment, and our record and the subsequent history of patients bear us out in our claim. There are a great many inebriates who think they can be entirely cured in three months time, and who will not remain longer under treatment. Of this a large class—we do not think more than thirty-five per cent.—are permanently restored to health. Of those who remain under treatment six months, we estimate

forty-five per cent. of permanent cures, while in those who take our advice and enter for the term of one year, in the great majority of cases, the return to health is complete and lasting. Treatment does not consist alone in restraining patients from the occasion of temptation. Such remedial restraint is, of course, necessary, but the therapeutics of this disease are the most important part of the treatment. To cure an inebriate, we must primarily have complete control of his habits and surroundings, and this can only be attainable when the patient is under hospital restraint for a sufficient length of time. Inebriety is the result of voluntary drinking in most cases, and there is some self-control in the early stages, but if persisted in from year to year, tissue changes are established and the inebriate is no longer able to exercise self-control, but must reside in a hospital designed for his needs until forced abstinence and medical treatment effect a cure.

When in the hospital he or she is surrounded with books, music, and amusements which are designed to arouse the moral nature, while the medicinal means includes everything necessary to procure sleep, eliminate the poison from the system, remove the morbid effects of it upon the functions of the human body, and finally restore the lost will-power of the inebriate and cure his alcoholic appetite. It is the most finely organized nervous systems which most readily become affected by this disease. Hence it is that our patients come from the higher and not the lower ranks of society. We could mention names which rank high in the professions, in literature, in art, and in the drama, who have gone back permanently restored, to adorn their various spheres of life. Very many of them could trace their acquiring the disease of inebriety to daily indulgence in alcohol, to ward off fatigue, when instead of alcohol they needed rest and change, which they would not or could not take. Right here we would record our skepticism as to moderation being true temperance for Americans, who reside on the Atlantic coast, especially if they are brain-workers. Moderation is almost an

impossibility, owing to the highly organized, sensitive nervous system of the modern American and his climatic environment. Add to this the fact that in many the disease is inherited and exists as an alcoholic diathesis which may spring into activity or remain latent and die out according as we are moderate drinkers or abstainers.

With a very great many brilliant men and women—brilliant because of a neuropathic diathesis they inherit—the habit of daily wine drinking lapses into the disease of inebriety with frightful rapidity. We disclaim entirely the position of either moralist or reformer. We speak advisedly as a physician, and from experience. France is a nation of wine drinkers, and there are hundreds of thousands of moderate drinkers. Let us look at the last report from there. I find it in my New York daily paper, *Alcoholism in France*, Paris, June 24, '87. "The senate to-day discussed the report of the committee on consumption of spirits. M. Claude said that the committee *had come to the conclusion that the drinking of spirits in France had reached such a height as to be a SOCIAL DANGER.*" M. Rouvier approved the committee's report.

TREATMENT.

In the treatment of inebriates we need special surroundings and conveniences, for the purpose of removing the alcoholism, to isolate the patient from all excitement, and give opportunity for complete rest of the nervous system, removing all care and responsibility from the patient's mind, except that of recovering his lost health and cooperating with the physician in bringing about this result, and finally for the purpose of consulting the habits and surroundings of the patient. Such restorative treatment of the inebriate is worthy of the highest consideration.

Plenty of out-door exercise, amusements, and a building up of the moral and physical forces, are a necessity in treatment. Electricity, cod liver oil, iron, arsenic, strychnia, plenty of malt and hypophosphites, zinc, valerian, digitalis, etc., etc., are all used *pro re nata*, to restore a normal condi-

tion of the centric nervous system, and remove the morbid craving for alcoholic stimulants. I do not know of any disease of any gravity, that promises better results from medical treatment than the disease of inebriety, which in all its manifestations is a disease of the centric nervous system, and which is as curable as any other nervous disorder.—*New England Medical Monthly.*

LEGAL VIEW OF INEBRIETY.

The late Chancellor Walworth wrote thirty years ago to Dr. Turner, the founder of Binghamton Asylum, as follows:

“As the courts for centuries have ruled, the drunkard has been held responsible for criminal acts and civil contracts; but of later years the courts have ruled that contracts made when one of the contracting parties is under the influence of strong drink, are null and void, and the testimony of a man in a state of inebriation is no longer received by the courts.”

“It is my humble opinion, if you found the Inebriate Asylum, you will establish the fact that inebriety is a constitutional and hereditary disease, out of which grows a form of insanity more dangerous than that of the class which is now confined in our insane asylums. You will be able to sweep away the legal fallacy of holding one human being responsible for murder committed under the influence of a brain diseased by alcohol, and at the same time not permitting another laboring under the same disease to testify in the witness-box, nor to be held responsible for contracts made under the same diseased conditions.”

“When this work is accomplished mankind will acknowledge that as a better form of government which medically treats and controls this irresponsible class of men in hospitals before they murder their innocent victims, than that which continues the old policy of holding them responsible for the crimes which they commit. Does the ruling of the

court which executes upon the gallows the irresponsible drunkard for the murder he commits, bring to life his murdered victim? Is society made better, or individuals purer, by having two murders committed in the place of one? No man taking his wine, or drinking his whisky, ever expects to become a drunkard; this alcoholic delusion follows the drinker from the first glass he sips to the last which terminates his life. The lawyer who defends the inebriate for the murder of his child, the prosecuting attorney who convicts him, the jurors who pronounce him guilty,—one and all,—on the very day of his conviction, drink their wine, and take their brandy with no warning voice to judge, bar, or jury, that they are doing that which the poor drunkard has done to make him a murderer. Thus the end of justice, which seeks a victim as a warning voice to the evil doer, is defeated,—the trial becomes a farce,—and the execution a legal murder. By restraining the inebriate in asylums for medical treatment when his physical condition makes him no longer safe to go at large, is liberty the loser, society the sufferer, or is the individual oppressed? Surely not; there is no more wrong committed upon personal liberty than in placing the homicidal and suicidal cases of insanity in insane asylums, or small-pox patients in pest-houses." The most enlightened and humane government is the one that will prevent crime rather than punish it. Such a government will protect its feeblest and weakest citizens, and give control and shelter to its dangerous and irresponsible classes.

The Newport meeting of the *American Medical Association* was of unusual interest by the reading and discussion of the following papers: "Legal Aspects of Inebriety," by Dr. Wright of Bellefontaine, Ohio; "Inebriate Criminals," by Dr. Crothers of Hartford, Conn.; "Social Aspects of Alcoholism," by Dr. Spitska of New York City; "Opium Addiction," by Dr. Watson of Matteawan, N. Y.

INEBRIETY AMONG THE HIGHER AND EDUCATED CLASSES.

Dr. James Stewart, superintendent of an asylum for inebriates near Clifton, England, recently read an excellent paper before the English Society for the Study of Inebriety, on the above topic. The following is the summary of his conclusions:

1. Drunkenness and inebriety ought not to be confounded.
2. Inebriety is a lesion of the brain which has gone so far as to affect the will-power.
3. Successful treatment based on this pathological dictum must include the absolute cessation of alcoholic drinking.
4. There is no danger in the sudden and complete withdrawal of alcohol if the case — no matter how severe — be in the hands of a skillful physician able to personally direct the hourly treatment from the first.
5. The physician undertaking the charge of such cases ought to be a total abstainer as well as every one living under his roof, so that the moral treatment by example may supplement the therapeutic remedies.
6. Permanent recovery need not be hoped for unless both lines of treatment be pursued, systematically, during an uninterrupted period of twelve months in a "Home" from which every beverage containing the smallest quantity of alcohol is absolutely excluded. The first four months barely suffice for the getting rid of the stomach and other troubles which are the result of the alcoholic poison; at the end of the second period of four months the patient begins to feel less the want of alcohol; by the end of the third period he has begun perhaps to understand that life may be enjoyed, and vigorous health secured without stimulants.
7. So-called "cures" effected by bark, strychnine, iron, and other drugs have not proved permanent.
8. The permanence of a cure depends greatly on the

after-treatment pursued subsequently to the patient leaving the "Home." The family of the inebriate, or the household of which he or she is to form a part, ought all to become total abstainers, no alcohol being allowed under any circumstances into the house except as a drug prescribed by a medical man and dispensed in a medicine bottle.

SPIRITS IN FRANCE.

The following extract from a report on alcohol in France, by the United States consul-general at Paris, is of interest:

The quantity of spirits distilled from wine—long the only distillation consumed in France—has diminished from 18,148,000 gallons in 1871 to 515,000 gallons in 1886. Alcohol is now distilled in ever-increasing quantities from treacle, beet-root juice, grape skins, and miscellaneous farinaceous substances, especially maize and potatoes. Between 1840 and 1850 the average annual production of spirits from treacle was about 1,057,000 gallons; it now reaches 18,492,000 gallons, or nearly two-fifths of the total production. The production from beet-root between 1840 and 1850 was about 13,000 gallons a year; it now reaches 13,000,000 gallons, but is decreasing slightly, being replaced by distillation from grain. Prior to 1876 there was very little of this last, and the quantity was stationary; in that year the quantity produced was 2,298,000 gallons; in 1884 it amounted to 12,812,000, and in 1885 to 14,899,000 gallons. The distillation from potatoes has never been of importance in France. In 1876, of every 100 gallons of spirits manufactured, about thirty were distilled from wines, thirty-eight from treacle, twelve from beet-root, and five from farinaceous substances; in 1886, of every 100 gallons of spirits manufactured, not quite one gallon was produced from wine, twenty-four from treacle, thirty-five from beet-root, and about forty from farinaceous substances, especially maize; so that, in fact, for all practical purposes alcoholic spirits made from the grape do not exist in France. Side by side with decrease of wine pro-

duction is an increase of that of the spirits. In 1875, 2,214 million gallons of wine and forty-eight million gallons of spirits were produced in France. In 1886 the wine had gone down to less than a third, 663 million gallons, and the spirits had increased to fifty-four million gallons. At the same time, imports of alcohol from Germany have increased from about a million gallons in 1872 to six millions in 1886. German alcohol of bad quality is to a very great extent mixed with Spanish wines entering France, paying only wine duty. It is afterwards extracted and sold at a lower price.

PHTHISIS AND THE USE OF ALCOHOL.

The question whether the use of alcohol has a tendency to prevent the development of phthisis is still a mooted one. The older writers, such as Mangus, Huss, Johnson, and Leudet, thought that it not only did prevent tuberculosis, but even assisted in arresting the progress of the disease, when present. Later observers have taken a somewhat different view. Recently Dr. Allison, in an article in the *Archives Générales de Médecine*, September, 1888, presents the results of his studies of this question among persons living in rural districts, where the history of each case could be followed up for a long time, and in great detail. Among fifty-eight cases of phthisis thus examined he found eighteen, or about one-third, who had been for years excessive indulgers in alcohol. Thirteen of these possessed no hereditary taint whatever, nor were any evidences of contagion discovered. They had all given signs of alcoholism before the phthisis developed. They drank from one to three litres of beer or wine a day, or from one to three litres of brandy a week.

Dr. Allison thinks that the alcohol, in being eliminated by the lungs, causes a congestion and irritation of the bronchial membranes, thus affording a good nidus for the development of the bacillus tuberculosis. He further shows by other statistics that alcoholic cirrhosis of the liver is a comparatively rare disease in the country, even among hard

drinkers. This observation will not be disputed. Neither need there be any doubt that the prolonged excessive use of alcohol, by lowering vitality, may induce phthisis. The important question, after all, is whether the moderate use of alcohol favors tuberculosis, or the contrary. We believe it will generally be admitted that, on the whole, such use of alcohol is beneficial to persons having the disease. That its moderate use among persons of a phthisical tendency is beneficial or prophylactic is another question, which can hardly be as yet answered. Probably the influence of race, climate, and individual predisposition must here be taken into account.—*New York Medical Record.*

RESPONSIBILITY OF INEBRIETY.

A confirmed dipsomaniac is as often as not a source of danger to others, as well as to himself. The thin partition which divides the lunatic whose custody is provided for by the law, from the dangerous dipsomaniac who is permitted to go free, is, it must be admitted, founded merely upon a basis of sentiment. A dipsomaniac cannot be held to be responsible for his actions—morally speaking. But the burden of his care and control is laid by the State upon his friends, and the latter having no power to exercise any legal restraint, are compelled to accede to the wishes, and tolerate the effects of the actions of an individual who is practically insane. Certain safeguards should be introduced, and the law should be strengthened to the extent of compulsorily placing dipsomaniacs under restraint. Under these circumstances it might confidently be expected that crime in many forms which can be directly attributed to the neglected supervision of drunkards would undergo a marked diminution. In the present day the confirmed drunkard is permitted by the State to do as he pleases without restraint, and when in his drunken mania he commits a crime—say a murder—it holds him responsible for the act. Reflective persons, we

can imagine, might well be disposed to ask whether this condition of things did not closely resemble this fatuous position of the proverbial individual who closed the stable door after the horse had been stolen. — *Medical Press*.

Dr. Ormstead, Superintendent of the *Connecticut Hospital for Insane*, makes the following reference to inebriates under treatment in that institution :

"Table XI shows that in addition to cases of undeniable insauity, there have been admitted to the hospital during the last two years 25 inebriates and 4 sane persons. The word inebriety appears to be undergoing such an extension of its original meaning as to be applied not only to a morbid condition of which the habit of alcoholic intemperance is the essential element, but also to cases in which other drugs are habitually used to excess. Under it, therefore, are grouped in the table, along with cases of the alcoholic habit, such few specimens of the opium and of the cocaine habit as have been brought to the hospital. All three habits are, indeed, sometimes combined in the same individual, causing functional disturbances, which (except for the convenient name inebriety) some linguist might be tempted to label dipsomorphinococainomania. Granting that there is a disease inebriety, entitled to an independent place in the category of diseases, it would seem to be something quite distinct from insanity; and physicians connected with institutions for the insane, whether regarding these habits as diseases or vices, have repeatedly expressed the opinion that the confinement of inebriates among the insane is unfortunate for both. The inebriates, as soon as they rally from the toxic effects of the drug which enslaves them, and seriously reflect upon their situation, begin to chafe under the restrictions which govern the insane, protest against association with lunatics whom they perhaps view with supercilious pity, are not usually disposed to engage in any useful occupation, and are often prone to plot mischief. They are rarely

willing to be deprived of their liberty long enough to insure a cure of their habit, being over-confident of their ability to keep good resolutions. But so long as they do stay in the hospital they fill space which the insane need.

The following petition of the *Woman's Christian Temperance Union* has been sent to physicians of this country very generally: "Believing that the use of alcoholics in medicine leads many into drunkenness, we appeal to you to consider this petition in behalf of tempted humanity.

Of late years so many distinguished physicians have testified, from investigation and practice, that alcoholics are not essential to success in medicine, that we venture to ask the weight of your influence by signature to the following statement of opinion:

1. That alcohol is a poison.
2. That alcohol is not in any proper sense a food and should be eliminated from our list of dietetics.
3. That alcohol in any form interferes with the true digestive process.

(1.) It produces a morbid alcoholic condition of the blood corpuscles which prevents their full absorption of oxygen, checks the rapidity of the blood aeration, and results in an insufficient oxygenated blood supply.

(2.) The *direct* action of alcoholized blood is upon the nerve centers and their fibers, causing diminution of their activities or paralysis, and some degree of indigestion.

4. That the popular idea that alcohol is a waste arrester and a food economizer is false. It does retard metamorphosis of tissue, and so promotes disease, causing pre-eminently paralysis, fatty degeneration, and scirrhuses.

5. That the nerve centers have a certain chemical affinity for alcohol, facilitating its accumulation in these centers, and producing there marked degenerative processes.

6. That the force-generating theory of alcohol is false. That it has been so proven by the tests of athletes, by trav-

elers, as Livingstone, Bruce, Waterton, Smollet, and by soldiers in the long, exhausting marches in India and America.

7. That alcohol is equally injurious in the extremes of heat and cold, as through its deoxygenation of the blood it reduces the animal temperature and depresses the vital forces.

8. That the direct relation of alcohol to insanity is now well established through insane asylum statistics.

9. That the deterioration produced by alcohol in the nerve centers has a peculiar tendency to hereditary transmission, causing in the descendants insanity, idiocy, nervous diseases, weakness of will, instability of mind, and depraved appetites.

ENCOURAGING SCIENCE.

The Vermont Microscopical Association has just announced that a prize of \$250, given by the Wells & Richardson Co., the well-known chemists, will be paid to the first discoverer of a new disease germ. The wonderful discovery by Prof. Koch of the cholera germ, as the cause of cholera, stimulated great research throughout the world, and it is believed this liberal prize, offered by a house of such standing, will greatly assist in the detection of micro-organisms that are the direct cause of disease and death. All who are interested in the subject and the conditions of this prize, should write to C. Smith Boynton, M.D., Secretary of the Association, Burlington, Vt.

We wish to assure John Doe, Richard Roe, and other gentlemen, that THE JOURNAL OF INEBRIETY has no space and no time to consider the fallacy of the disease theory of inebriety and the excellence of prohibition, and the power of the pledge and prayer to cure the inebriate. Art is long and time is far too brief to enter upon any controversy over per-

sonal opinions, although coming from very good men. Like Gadgrind we want facts, supported by reasonable evidence, then we can accept the conclusions, good only for to-day, but subject to constant correction and change with every day's march of scientific truth.

Dr. Morris of Dunfermline, Scotland, recently read a paper on "The Medico-Legal Aspects of Delirium Tremens." He declared such persons to be insane, and required positive restraint in special establishments where they could be retained long enough to be cured. In the discussion which followed, unsanitary condition of houses was affirmed to be the most frequent cause of inebriety. It was finally agreed to memorialize parliament to enact a law, giving full power to put habitual drunkards in asylums and hospitals, and treat them as diseased.

The hospital treatment of inebriates has scarcely begun, and yet a prominent physician in Boston writes that everywhere medical treatment has proved a failure. That no one is ever cured and no one is ever diseased. This man, like "Rip Van Winkle," has been asleep. The world of progressive thought has gone on, and he has evidently lost sight of the march and current of evolution.

The inebriate who boasts that he could always get spirits in the asylum where he was treated, in most cases simply tells what he wished to do but failed. The men who procure spirits clandestinely never refer to it after, and those who fail to get it boast loud and long of what they never did.

The State of Missouri has recently enacted a law making it a punishable offense to have a bowling-alley, billiard or pool tables, cards, dice, or boxing gloves, or to have musical instruments or musical entertainments, in any place where spirits are sold. This is a most practical law, but ought to

go farther, and forbid all use of chairs, tables, and dining-rooms, in such places, and make the saloon like any other store, with no place for loungers. Such a measure would be a real temperance advance of the greatest importance.

TO MEDICAL MICROSCOPISTS.

In behalf of "the American Association for the Study and Cure of Inebriety," the sum of one hundred dollars is offered by Dr. L. D. Mason, vice-president of the society, for the best original essay on "The Pathological Lesions of Chronic Alcoholism Capable of Microscopic Demonstration."

The essay is to be accompanied by carefully prepared microscopic slides, which are to demonstrate clearly and satisfactorily the pathological conditions which the essay considers. Conclusions resulting from experiments on animals will be admissible. Accurate drawings or micro-photographs of the slides are desired. The essay, microscopic slides, drawings, or micro-photographs, are to be marked with a private motto or legend, and sent to the chairman of the committee on or before October 1, 1890. The object of the essay will be to demonstrate: *First*, Are there pathological lesions due to chronic alcoholism? *Secondly*, Are these lesions peculiar or not to chronic alcoholism? The microscopic specimens should be accompanied by an authentic alcoholic history, and other complications, as syphilis, should be excluded. The successful author will be promptly notified of his success, and asked to read and demonstrate his essay personally or by proxy, at a regular or special meeting of the "Medical Microscopical Society," of Brooklyn. The essay will then be published in the ensuing number of THE JOURNAL OF INEBRIETY (T. D. Crothers, Hartford, Conn.), as the prize essay, and then returned to the author for further publication or such use as he may desire. The following gentlemen have consented to act as a committee:

Chairman — W. H. BATES, M.D., F.R.M.S., London, Eng.,
(President Medical Microscopical Society, Brooklyn.)

175 Remsen Street, Brooklyn, N. Y.

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Dr. Ira Russell is the founder and superintendent of the Home, and letters of inquiry can be addressed to him, or to Dr. F. W. Russell, the assistant superintendent. For information we are permitted to refer to the following gentlemen:

- | | |
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| C. F. Folsom, M. D., Prof. Mental Disease,
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| Rev. G. J. Magill, D. D., Newport, R. I. | W. W. Godding, Superintendent National In-
sane Asylum, Washington, D. C. |
| Wm. A. Hammond, M. D., 43 West 54th St.,
New York. | Clark Bell, Esq., editor of the Medico-Legal
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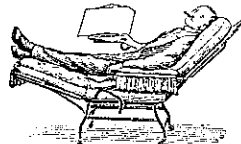
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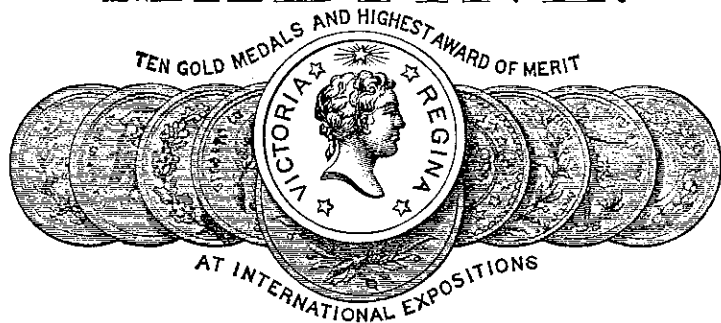
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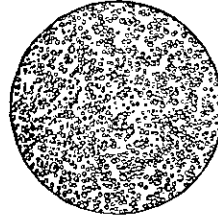
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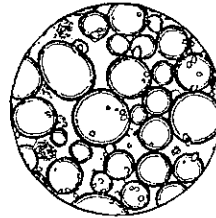


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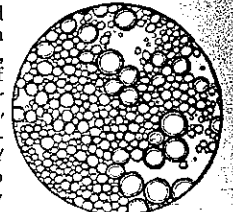


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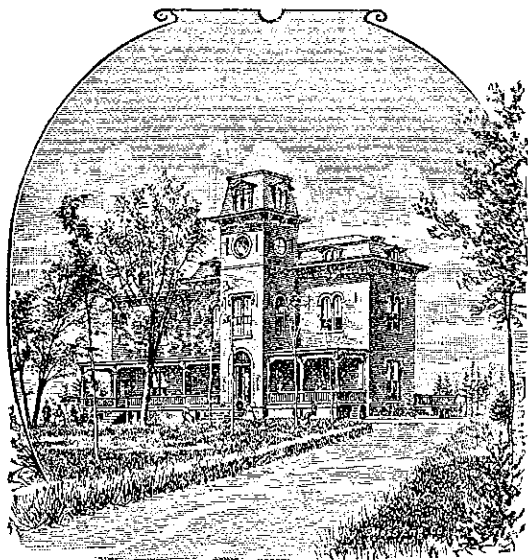
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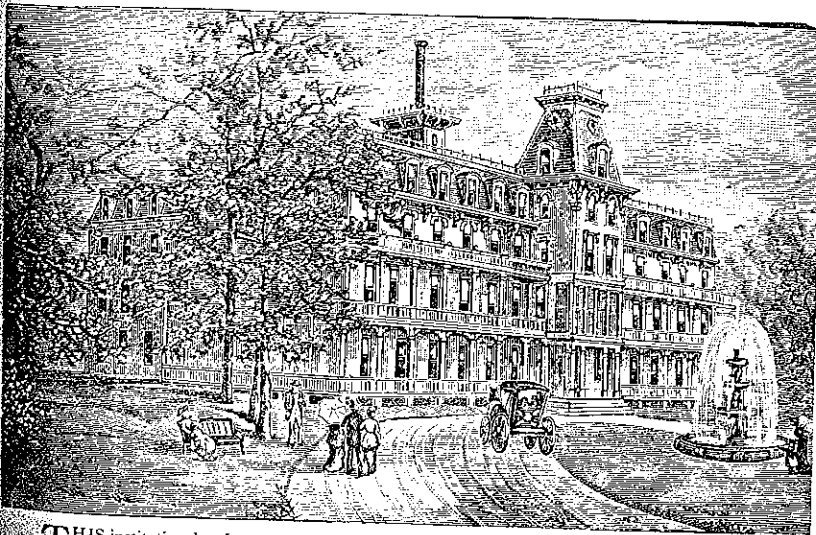
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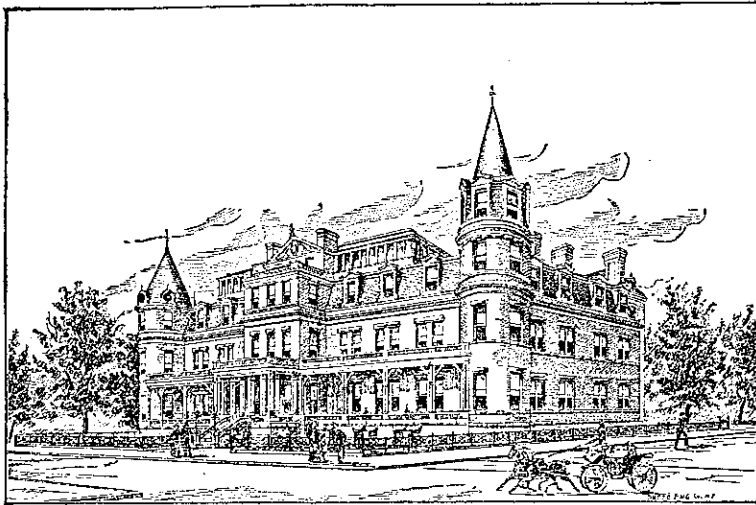
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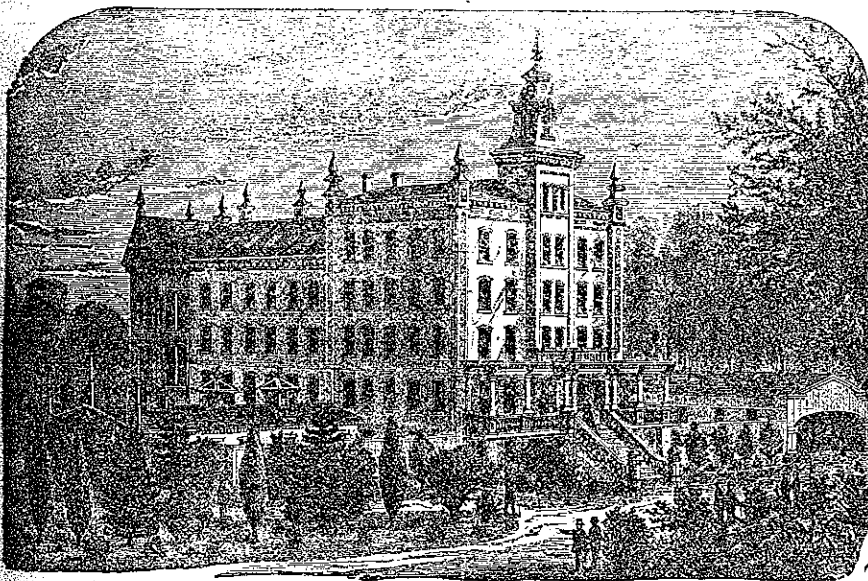
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