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DURATION, MORTALITY, AND PROGNOSIS OF INEBRIETY.*

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Inebriety, as a cerebro-psychal disorder, beginning obscurely, followed by complex perversions and degenerations, has a distinct duration, mortality, and prognosis, which can be understood proportionately to the accuracy with which the history of each case is studied.

Unlike other disorders, it follows an uncertain, variable course, sometimes appearing suddenly, with a rapid, fatal issue, or coming on slowly, with long, uncertain pauses; apparently dying away, then beginning again with greater complications.

Generally its origin and growth extend over years, and then unexpectedly it bursts into great activity, beyond self-

* Read before the American Association for the Cure of Inebriates, at their annual meeting, Philadelphia, Sept. 26, 1876.

control, and is recognized as inebriety. Dating from this time, the average expectancy of life is affirmed to be ten years.

Many reasons confirm the assertion that inebriety is of less duration than formerly.

Inherited degenerations and organic complications are more frequent; bad living, extremes of life, etc., lower vitality, lessen the resisting power of nature, and predispose more positively to a fatal termination.

The severe mental strain incident to our peculiar civilization, with its struggle for wealth and power, precipitates this affection and lessens its duration.

Inebriety of to-day is associated with a class of physical and organic symptoms unknown to older observers, and the lesions following are manifest in neurosal disorders profound and wide-reaching.

In two classes of inebriates the expectancy of life is short: the morbidly sensitive and the stolidly indifferent.

The former have a very acute nervous system, and a consciousness of their condition that borders on extravagant hope or crushing despair. The latter have weak conceptions of their disorder, and seem to be governed by passion and instinct: with a nervous system responding feebly to the changes of reason or sentiment. Here inebriety goes on without mental obstacle.

In the former, enthusiastic efforts are made for relief, which, if unsuccessful, react into the deepest despair. The latter make little effort themselves, and are governed by the lowest currents of action.

The *mortality* of *inebriety* has been estimated at from ninety-six to ninety-eight per cent., or less than four per cent. of recoveries.

Under the treatment in asylums, the lowest estimate has

been placed at thirty-three per cent., and from that up to sixty-two per cent.

This excessive mortality is due to profound degenerations, which follow from the ingestion of alcohol, and the peculiar conditions of low vitality, impaired and perverted cell action, commonly preceding this disorder.

The inebriate is literally in a toxic condition, in which all the organs are both unduly depressed and exalted, or in a state of suspended activity bordering on paralysis.

The mortality of the inebriate is further increased by the favoring conditions which bring on inflammatory affections, of which pneumonia, pleurisy, gastritis, cirrhosis, diseases of the kidneys, etc., are the most common.

Injuries in inebriates that are severe have generally a fatal termination. The degenerations present seem to intensify the lesion and its effect, and diminish the resisting power of nature to its minimum.

The perversions and changes developed in the organism from inebriety, demand a repetition for relief from the present, and, unlike all other eliminative efforts of nature to restoration, this demand and its gratification is a continuation of this disorder.

In certain countries and races, this mortality is greater, depending on conditions of climate and the resisting power of the body or its susceptibility to the influence of alcohol.

The mortality of inebriates is either direct or indirect or both combined. In the former, delirium tremens, convulsions, cerebretis, and gastritis, are most common; in the latter, affections of the respiratory and circulatory system and nearly all the disorders of nutrition.

Inebriety preceding or following diseases of inflammatory or organic nature, rapidly increases in mortality.

It is affirmed that over twenty per cent. of the mortality

from all causes, can be traced to inebriety, either directly or indirectly.

The fatality of inebriety is increasing and its complications are more profound and general.

In the *prognosis*, a careful study of the history and surroundings of each case will always give more or less positive indications of its fatality or future recovery.

A general grouping of the more prominent facts, upon which the prognosis depends, confirms this statement.

Inebriety, with *favorable* prognosis, will have its origin in dietetic causes; irregularities in living and surroundings; of less than ten years duration; beginning after twenty-five and before fifty; in those who have regular business or occupation; who have average will-power and education; who have home and family connections; who are constant and steady drinkers; who begin with strong stimulants and have no premonitory stage of beer, cider, etc.; who seldom smoke or chew tobacco; who are free from general excesses in living or labor; who have no marked nerve or cerebral complications; who do not inherit any predisposition to inebriety or insanity, in any of its varied forms; who have not suffered severely from mental or physical labor, heat, cold, or excitements of business; who have not taken opium, chloral, or other stimulants or narcotics, except medicinally.

Who are free from rheumatism, tuberculosis, and syphilis.

Who have not suffered from shock, concussion of the brain, or spinal cord.

Who never had delirium tremens, alcoholism, or epilepsy, etc., etc.

Such are some of the general hints of a favorable prognosis.

Inebriety may be said to have an unfavorable prognosis:

When it originates in injury to the brain, as the sequel of wasting diseases, or comes on suddenly without any apparent cause.

When it appears in good surroundings, and in those who live regular lives.

When it is over ten years in duration.

When it begins before twenty-five, or after fifty.

In those who have no regular business or occupation.

In those who possess eccentric or untrained will-power, and but limited education.

Who have no homes or family connections.

Who are paroxysmal drinkers.

Who have had initiatory periods of beer, cider, and soda-drinking, and who seldom begin at once to use strong stimulants.

Who smoke and drink excessively.

Who have nervous and cerebral disorders, and who inherit a predisposition to inebriety or insanity, in any of their varied forms.

Who have suffered severely from the extremes of mental or physical labor, heat or cold, and the excitements of business.

Who have taken opium, chloral, or any form of narcotics or stimulants, other than medicinally.

Who have had rheumatism, syphilis, or tuberculosis, before, or coincident with, the beginning of inebriety.

Who have suffered from nervous shocks, convulsions, concussion of the brain, or spinal cord, anterior to the beginning of inebriety.

Who have had delirium tremens, alcoholic convulsions, or epilepsy, etc., etc.

These constitute some of the landmarks which appear

more or less prominent in every case, and indicate the great diversity of causes and conditions governing the prognosis.

This grouping of prognostic signs also indicates an obscure but continuous progression from stage to stage, under the control of laws both physiological and pathological.

Many of these factors have an intimate influence over each case, although often united with others, making their study difficult.

We shall consider some of the most prominent, in detail.

Two inherited conditions of degeneracy pre-dispose to inebriety:

One of direct cerebral lesion, manifest in insanity, or any of its varied forms, weakened mental conditions bordering on idiocy, mental eccentricities, and tendencies to pauperism, etc:

The other inheriting a tendency to particular organic or functional diseases, as in phthisis, rheumatism, neuralgia, scrofula, dyspepsia, etc. Degeneration that may react into mental disorders—of which inebriety is a common and often well-marked sequence.

In the former occur varied conditions of mental and nervous debility.

The mind, under the control of the emotions, dashes from one extreme to the other—now melancholy, now enthusiastic, or filled with hysterical conceptions of on-coming disease; strangely credulous, or rashly skeptical, either exhibiting morbid sensitiveness or reckless indifference about themselves; erratic, eccentric, and insanely passionate; sometimes idiotic, or nearly so, with attacks of chorea, epilepsy, paralysis, hyperæmia of the brain, with loss of consciousness and transient dementia.

Inebriety appearing with any of these forms of degeneration, is a common sequence, or symptom, and may be transient

or permanent, dying away only to appear with greater or less intensity, at regular times and intervals.

The future of such cases is always unfavorable, and subject to great uncertainties.

In the second form of inherited degenerations, inebriety seems to be more of an accidental development, arising from some peculiar favoring causes or organic changes, affecting the nutritive functions.

General organic degenerations that are transmitted to the next generation, appearing in mental or nervous disorders, frequently react into inebriety under favorable circumstances. Many of these factors may be recognized and guarded against.

It is affirmed that inebriety is inherited, as a rule, direct from moderate drinkers, and those who are not called inebriates, and that inebriates and chronic drunkards transmit pauperism, idiocy, or lesser forms of eccentricity or insanity. Also, when children of moderate drinkers are inebriates, it is good evidence of profound degeneration, with bad prognosis. But when inebriety follows in the latter class, it is allied to other disorders, affecting both body and mind, often developing other diseases with fatal termination.

Habits of living have a powerful influence over the duration and curability of inebriety. A careful study of these habits will indicate many of the conditions for recovery.

In general terms, all habits that break up regularity of living, lessen the vigor of organic function, and when preceding inebriety, make the prognosis doubtful—such as taking food at all times, night and day, in irregular quantities, or exclusive diet of this or that, with mixed compounds of fluids, of varying proportions, etc.; changeable habits of sleeping; sitting up through the night and sleeping during the day, having no regular hours of rest; working fitfully night and day, first at one thing, and then another, etc. Or when inebriety

follows, great fastidiousness in dress, or neglect of personal appearance, with little control of the passions and emotions, accompanied by excesses, etc. These are all hints of a degenerative tendency, pre-disposing to inebriety or some of its allied forms.

When all these habits or excesses come on after inebriety has appeared, in a case previously free from them, the prognosis is comparatively good, other things being equal. Inebriates who retain regular habits of living, with methods of control over the body and its functions, to a certain degree, will generally recover under treatment.

When inebriety breaks up healthy restraint, and becomes like the opening of a flood-gate to the passions and emotions of the body, the hope of cure is uncertain.

Habits that influence the nutritive functions direct, breaking up or preventing them, reacting in inebriety, are generally favorable for recovery.

When such habits are of long duration, and develop paroxysmal inebriety, it is less so.

Early habits give direction and tone to the body through life. When irregular and impulsive, conditions of debility follow that develop inebriety with great certainty.

Sexual excesses preceding inebriety, and beginning at puberty, naturally react into this disease, but developing *after* is more promising.

Inebriety appearing in persons without *occupations* seems to be an outlet, through which all the latent energies of the body and mind become intensified into activity.

If occupation is made a part of the treatment, these energies are equalized and the prospects are more favorable, but when inebriety breaks up all pleasure in or desire for activity, the case is uncertain.

Inebriety following the extremes of physical and mental

labor, where the energies are weakened or broken down, ends in recovery often, with the restoration of the body.

When inebriety stimulates an excess of either mental or physical labor, as for instance, the lawyer who spoke for twenty-four hours under the influence of liquor, or the mechanic who performed great feats of labor while drinking; the reaction following is often severe and protracted, and final restoration uncertain. Here a condition of paralysis or anæsthesia exists, in which all sense of fatigue or exertion is gone.

Certain kinds of labor seem to predispose to inebriety. Those who use their brains to excess, and those who only exercise the physical system. Here constant perversions of appetites and desires arising from disordered functional energy, are present, and recovery only follows when such cases are of short duration.

Exercise in advance of development, where natural growth is arrested, is frequently followed by perverted cell action, and when inebriety occurs in such cases, its future is very grave.

Occupation which brings daily contact with drinking, seems to leave a peculiarly unhealthy resisting power, and when inebriety follows, it is uncertain. Here the power of imitation appears incorporating itself into the normal activities of the body, often developing inebriety with as much certainty as if from physical lesion.

Where occupation broadens and enlarges the mind, inebriety is antagonized, but labor that dwarfs and concentrates mental energies on insignificant objects, lowers the vitality and limits the powers of restoration.

Other things being equal, inebriety in a salesman who spends fourteen hours behind the counter is less favorable

than in the commercial traveler who goes from place to place selling at wholesale.

Occupation of a general character, calling into activity both mental and physical powers, preceding inebriety, makes the latter favorable, but previous employment that has limited the faculties and their normal workings, make it uncertain.

Some kinds of employment, such as brokerage, speculating, railroading, etc., etc., seem to intensify and fix the exciting causes of inebriety.

Other occupations retard or diminish these causes and encourage conditions of restoring health.

When inebriety comes from occupation associated with continuous excitement, active treatment in Asylums gives the only promise of help.

AGE *seems* to be influential in the progress of inebriety.

When it begins before the habits are formed, and continues after middle life, recovery is doubtful.

When appearing after middle life, and in old age, it is an expression of debility, more uncertain, although it may give place to other lesions and disappear.

Cases are noted where it has existed in a mild form till late in life, then burst into great activity, associated with either great anxiety, or strange indifference to recover.

Cases coming on at puberty, or soon after, usually decline with the sexual passions and have favorable prospects.

When beginning about twenty, and continuing after forty, the degenerations are fixed and the cure is doubtful.

Beginning after twenty-five, it is likely to decline before forty, expending itself like the bursting of pent-up energies, and unless associated with organic disease, the prognosis may be said to be favorable.

From about thirty-five to fifty, is a period in which per-

verted appetites exhaust themselves, or deflect to other forms of disease.

In middle life, the will and organic functions are at their height, and when aroused are most active in resisting disease and combating diseased tendencies.

In early life, the will and physical stamina are less strong and subject to changes.

Inebriety at this time generally consists of more or less perversions of functional activity, but in old age, it is a phase of degeneration.

Favoring conditions may develop inebriety or a predisposition to it, more rapidly in early life. When later, the resisting powers of nature would be a barrier.

There are certain periods of life (not well defined), in which the tendency to recover is greater: periods in which the organic activity favors and assists restoration.

In inebriety this seems to be between thirty and fifty, and experience indicates, that all things being equal, this is the most favorable time for recovery.

The MENTAL and PHYSICAL STAMINA are important factors in the prognosis.

All diseases are largely influenced by the character and force of both mental and physical action, the predominance of either, controlling the organism and the quality of resistance they possess inherently.

A strong will-power entering into all currents of life, with mastery over the passions and emotions, brings conditions favorable to recovery.

Such a power antagonizes disease, and diseased conditions, although often dormant, but when aroused exhibits marvelous influences over the organism.

When the passions and emotions predominate, and the will is weak, this power of resistance is uncertain. The presence

or absence of this force, in inebriety, give many indications of its duration and intensity.

Other things being equal, the more intellectual and cultured, the better the prognosis from the presence of this factor.

A strong mentally endowed person may be an inebriate, but unless chronic, of long duration, and intensity, the presence of this factor is a hopeful indication.

When this *will-power* is *lost* and the patient debilitated, the case is generally hopeless.

A strong physically developed man, with untrained mind, lacks this force, in part, and usually is subject to every wave of passion and disordered emotion.

He may possess physical endurance, that predisposes to recovery, but the changeable will, with a constant tendency to falter, makes the case more or less doubtful.

If a weak brain-power in a good physical system can be aroused and sustained, the prognosis is better than in a case when strong mental force is associated with a weak physical. In the former, we may expect powerful assistance from the physical, but in the latter the physical only feebly supports the mental.

Inebriety, with average physical stamina and will-power, is generally of good prognosis. Highly-developed mental capacity, with strong emotions, unless balanced by good physical powers, frequently develop inebriety from peculiar susceptibility to the surroundings.

An element of *faith* and *hope* entering into the current of every-day life is a powerful factor, determining the prognosis.

It seems to give elasticity to the mental and physical forces, causing them to rebound from the present and take on conditions favorable to recovery.

The absence of this element is marked by misanthropic ideals, lack of confidence, disposition to doubt, and consequent physical depression, unfavorable to the return of health.

In general terms, these elements of *faith* and *hope* are a promise of recovery, and their absence an omen of failure.

In the treatment, when this force can be aroused and sustained, the prospects are good; but the failure to do this, or the absence of this element, continuous and persistent, is significant of degenerations merging into hopeless conditions.

A mental condition that responds rapidly to the surroundings, alternately stimulated or depressed, has (other things being equal) a favorable prognosis under treatment at asylums.

Pride is also a dominant factor, and when broken down increases the hopelessness of the case, and often furnishes indications of the future that are very suggestive

Climate, conditions of life, and *surroundings* are important agents in the prognosis.

Positive changes in temperature produce corresponding changes in the organs, and their functional activities, that are unfavorable.

Sudden changes pervert and break up normal action in the effort of nature to adjust herself to these varying conditions. Where the changes of climate are violent and prolonged from one extreme to the other, morbid functional and mental activities, strongly predisposing to degenerations, follow.

Inebriety, in extremes of either *affluence* or *poverty*, is usually accompanied by unfavorable conditions.

In *affluence*, it is associated with degenerations from con-

tinuous excess in food, with repletion and perversions, and frequently want of proper exercise of both mind and body.

Here diseased tendencies are encouraged and intensified, and the power of recovery lessened.

In *poverty*, inebriety is continuous with irregularities of hunger and satiety, bad quality and conditions of food, and consequent disordered nutrient wants and desires.

Inebriety in both of these cases is complex and uncertain.

When it appears among those who have the comforts of home and society, that are pure and elevating, and continues persistently, the prognosis is uncertain; but it may be transient and more hopeful in opposite conditions.

Bad sanitary or mental surroundings are active causes: depressing and lowering vitality, encouraging various diseases, of which inebriety is most frequent, accompanied with favorable prospects.

Complications with *cerebral* or *organic lesions* follow inebriety as a result of the action of alcohol on the tissues, in combination with the defective cerebral or organic action which precedes it.

When these lesions are prominent, as in the case of concussions of the brain or spinal cord, particularly following railroad injuries, where the shock is sudden, with intense reaction, or from sunstroke, or inflammation of the tissues, from injuries or disorders arising from hemorrhages, etc., the hope of recovery is uncertain.

Cerebral defects, with history of syphilis, noted by persistent hallucinations, illusions, and delusions, are also grave. When paralysis, with hyperæsthesia or anæsthesia, either follows or precedes inebriety, with complications of organic diseases, the case is doubtful.

When disorders of the stomach, such as dyspepsia, gas-

tritis, or hemorrhages, precede inebriety, the prognosis is grave, but when these lesions follow, the case is more hopeful.

Inebriety, coming on before or after cerebritis, meningitis, hyperæmia, or insanity, indicates profound disorder.

When rheumatism, functional disorders of the heart, chronic or acute affections of the liver, follow inebriety, the prognosis is more hopeful than when these affections precede and become active after inebriety begins.

Bright's disease of the kidneys, tubercular deposits, pneumonia or pleurisy, cirrhosis, etc., appearing either before or after inebriety begins, lessens the hope of restoration.

Inebriety, preceded or followed by rapid degenerations, marked conditions of anæmia or hyperæmia, skin diseases, cerebral exhaustion or depression, with changeable mental and physical activity, loss of memory, etc., is of uncertain prognosis.

When these degenerations come on slowly, or are marked by long pauses in their progress, the expectancy of recovery in asylums is good.

When inebriety immediately follows diseases of the mind or body, it is usually a continuation of the disorder.

Inherited tendencies and predisposition to other diseases always intensify and increase this disorder.

Some diseases following inebriety have a strong tendency to perpetuate this lesion, others to break it up, or supplant it with other affections.

A study of these complications will throw much light on the future of each case.

Here, as elsewhere, this phase of inebriety widens into one of the greatest practical importance, and we catch views of its possibilities, awaiting further study, that are bewildering to our present ignorance.

The following summary condenses many of the facts mentioned:

1st. The duration of inebriety is governed by many complex causes and conditions, which seem to be growing more intense and fatal.

2d. The mortality of inebriety, either directly or indirectly, equals that of the most fatal diseases, but under proper treatment in asylums, the recoveries may exceed that of any other cerebral or nervous disorder.

3d. Every case presents general and particular indications, from which we may predicate its future recovery or fatality with comparative certainty.

4th. A careful study of these indications points out the conditions of body and mind that intensify or antagonize the development and progress of this disease; and also the circumstances and surroundings influencing it.

5th. Every case has a natural progress from stage to stage, governed by causes that are distinct or obscure, simple or complex, which may be recognized and understood.

6th. A further study of this subject will enable us to discriminate between hopeless and favorable cases, and adopt such means as are best suited to its successful treatment.

THE RELATION AND HEREDITARY TENDENCY BETWEEN INEBRIETY AND EPILEPSY.*

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Very little attention has as yet been devoted to the relation and hereditary tendency existing between Inebriety and Epilepsy, although a very close relation undoubtedly exists between them. Careful examination reveals a large number of persons affected with epilepsy whose parents or ancestors have been addicted to intemperance. There is a very close analogy existing between the paroxysms of a dipsomaniac, where there is often a prodromic stage of nervous disturbance which may incapacitate the patient for mental labor, and the convulsions of an epileptic, whose paroxysms of intense nervous excitement are generally preceded by the "aura epileptica;" the difference being, that in the former case the paroxysm lasts for weeks, perhaps, while in the case of the epileptic it lasts but a few moments. As we often see the two diseases existing in the same person, it becomes impossible not to infer a similarity of origin. We have in both instances accumulated and pent-up nervous force or irritation, which finally expends itself, in the one case, in the unrestrained indulgence—in the irresistible impulse—to indulge in alcoholic stimulants, and in the other, in the convulsive movements of epilepsy. There would seem, beyond all doubt, to be a corre-

* Read before the American Association for the Cure of Inebriates, at their annual meeting, Philadelphia, Sept. 26, 1876.

lation of force which results in the mutual convertibility of these two diseases. It is not an unusual case to find in the various members of different generations of the same family, different phases of the neuroses, such as insanity, epilepsy, phthisis, chorea, or inebriety, showing beyond all doubt, correlation of morbific force in hereditary diseases. I believe most firmly that the morbid condition of nerve element, or morbific force induced by inebriety, is indelibly impressed upon, or is transmitted to, the ovum at the time of conception, and that this morbific force lies dormant in the system until developed by an adequate exciting cause, and that the hereditary neurosis thus often skips a generation, leaving no appreciable manifestation of its existence in the intermediate generation. When this morbific force *does* manifest itself, next to the transmission of the pre-disposition to inebriety, comes, unquestionably, epilepsy. From my experience, the children or grandchildren, while infants, are generally affected with convulsions, which may prove fatal, but more often tend to assume an epileptiform type as the child advances in years. I have repeatedly noticed in patients who did not have complete epileptic seizures, *epileptic vertigo*, which passed off almost instantly, but which for the time evidently abolished consciousness, partially, if not entirely. The brain of such children is often morbidly active, and too high pressure in education, or an unnatural forcing process during the formative period of childhood, often results, especially in girls, during the period of constitutional evolution—a time at which the organism is under physiological conditions that pre-dispose to pathological states—in disturbances, primarily, of the organs of respiration, circulation, and digestion ; and, secondarily, in the production of hysteria and epilepsy, by overstimulating a brain already morbidly active and pre-disposed to disease upon the application of even comparatively trifling exciting causes.

Again, consanguineous marriages may be the connecting link between inebriety and epilepsy. I have known cases in which the intermarriage of blood relations, where there was inebriety that had lain dormant for one or two generations, has resulted in the old hereditary neurosis reappearing in the form of epilepsy in the offspring. It is a curious fact, also, that the sons born as the result of union of cousins in marriage, appear to have a strong tendency towards inebriety. The only explanation which I can offer of such cases is, that it is probably the development of the latent morbific force residing in the constition of the parents, who have a common ancestor, which has been lying dormant for one or two generations, and which is developed in the offspring as the result of the consanguineous marriage. I think that such latent morbific force and hereditary disease is far more common than we generally suppose, and that in many cases both insanity and inebriety are only the expression of latent disease, elicited by external, accidental causes, rather than as the result of moral or physical causes, to which they are attributed both by the laity and by the profession, the epileptic convulsions occurring as the result of inebriety, depend mainly, I think, upon a two-fold cause, which operates in the production of a morbid irritability of the medulla oblongata. Whether this be a transitory or a constant state, I think is an open question. I am inclined to think that it is a *constant* state, which may, however, for the production of the epileptic paroxysm, require the additional stimulus of transitory cerebral irritation to be transmitted to the medulla oblongata, and perhaps the sympathetic. The two-fold cause which has appeared to me to operate in the production of what I take leave to term *alcoholic epilepsy*, consists, first, in the hyperæmia of the brain, which causes symptoms of irritation, due to increased excitability of the nerve filaments and ganglion cells of the brain, which, by

transmitting to the medulla oblongata a morbid irritability, results in epileptiform convulsions ; second, a state of cerebral anæmia, which also induces a morbid irritability of the medulla by causing arterial anæmia.

Finally, I believe, that as a result of inebriety, we may have epileptic convulsions occurring, merely from the state of nervous irritation produced in the medulla and at the base of the brain, which excites the motor nerves, from the poisonous and improper character of the blood plasma, produced by the presence in it of alcohol. This is probably often the case, without either very marked anæmia or hyperæmia of the brain. This appears reasonable when we reflect upon the fact that the amount of blood going to the brain constitutes about one-fifth of the whole bulk of the blood. Consequently any poisonous or injurious change in the condition of the usual supply of blood must be very apparent in the Encephalic condition, and produces cerebral irritation incompatible with the performance of healthy function. There is in epilepsy, and more especially in epileptic insanity, a period which sometimes precedes, and sometimes follows the epileptic paroxysm, in which often occurs an abrupt and complete change in the moral nature, so that we often witness the change from a sober, honest, and industrious, to a dissipated, negligent, and lazy man. These attacks often occur periodically in the course of epilepsy, associated with more or less maniacal excitement. During these periods of moral alienation there has often occurred in patients under my charge, an irresistible desire to indulge in alcoholic stimulants to excess, so that for the time, the patient, if not restrained, would pursue a course of inebriety, his reason seeming powerless to control the temporary dipsomania. There is still another class of cases in which the moral insanity takes the place of the epileptic paroxysm, and these cases are also very prone,

according to my experience, to be addicted to inebriety if the opportunity of gratifying their morbid impulse occurs. In my observations, and in my study of insanity, I am continually called upon to witness its connection with disease, and more particularly with the hereditary diseases, and I have come to believe as I have endeavored to show, that inebriety and epilepsy are mutually convertible diseases. They both depend upon the morbific force, before alluded to, which may remain latent in the nervous system for a long time between the intervals of its manifestation, and although there is a certain dissimilarity of the symptoms between the two diseases, it does not at all follow that they are owing to different causes. The fact of the hereditary disease appearing in different forms in members of the same family and passing from one form to another, leads us to positively infer a correlation of morbific force which leads to this mutual convertibility, which includes not only inebriety and epilepsy, but also, I think, phthisis, skin disease, insanity, scrofula, and perhaps, rheumatism, and gout. In my Asylum practice, I have had ample proof of this, in the existence of the different phases of hereditary disease, and their alternations, both in the same individual and in various members of different generations of the same family. With regard to the treatment of hereditary disease, which I do not propose to take up in this paper, the chief indications point to hygiene and to wise marriages. As we have seen that the symptoms of constitutional disease are manifested soon after birth in convulsions, or some affection of the nervous system, we must turn our attention to the nourishment and education of the child, and endeavor to exclude everything prejudicial to its future mental and bodily health. By such attention to hygienic rules are we, as physicians, to endeavor to secure an exemption in the rising generation from these hereditary dis-

eases so far as we may, and it is certainly our duty to aim at the eradication of hereditary disease, which, if it is ever accomplished in the future, as we hope it may be, will complete the round of the possibilities of preventive medicine.

Epilepsy occurring in offspring, as the result of inebriety in the progenitors, is complicated with defects or disorders of the mind in various ways, and the manifestations may, with propriety, I think, be classified as follows: 1st. Epileptic Idiots, whose intellectual faculties have never been developed. 2d. Epileptics who are imbecile or demented. 3d. Epileptic maniacs, who, without obvious disorder of the mind, when epileptic fits are coming on, are irritable, morose, malicious, and dangerous, and sometimes commit fearful crimes. In some instances the mental disorder takes the form of a paroxysm of acute mania coming on suddenly.

4th. Epileptics whose intellects are not impaired.

Pathology. The pathology of the production of epilepsy in the offspring of intemperate parents is very obscure. The condition of the mother during gestation, if abnormal as in inebriety, cannot fail to interfere with the proper nutrition of the cerebral tissue of the fœtus, and it is in this way, I think, that during embryo life, the brain of the infant often undergoes pathological changes, which induce both deficient moral power and epilepsy. It is certain that any pathological state which destroys the equilibrium of the functions of the organs of the mind, producing depression of some functions and excitement of others, cannot fail to produce in the children of such parents, an ill-balanced and defective state of the nervous system, disposed to take on diseased action. It is probable that there exists in such children, a state of the cerebral vessels which interferes with the uniform and healthy interchange of nutritive plasma passing from the vessels to the brain-cells, and of the fluid-cell contents in a state of de-

generative metamorphosis, passing from the cells to the vessels. This state of the cerebral capillaries induces a morbid activity of the cerebral cells, which is in all probability the determining cause of the epileptiform convulsions from which such children suffer. That the functional disturbance resulting in epileptiform convulsions in such children may be due to diverse causes, that is, to anæmia as well as hyperæmia, I have proved to be a fact, as I have found, in two or three instances, the brain and membranes completely bloodless, in children who died in hospital in the midst of convulsions, although I think that the general rule in such cases is more often to find an excessive quantity of blood present.

After numerous dissections of the brains of epileptics both in cases resulting from intemperance, and in cases occurring under ordinary conditions, Foville and Andral agree in their testimony that there is no special lesion attending this malady. Andral insists upon the necessity of distinguishing between those cases in which death occurs in the interval, and those in which the patient dies in a fit, as in the latter class of cases there will be congestion of the cerebral vessels, which is the *effect* and not the *cause* of the fit as some might suppose. I have found that the cases coming under my charge, in which inebriety in the ancestors could be clearly traced as a predisposing cause, that very few, if any of the patients, had been healthy persons previous to the occasion of the disease. That in a great many instances, especially in women, hysteria and other nervous affections had existed previously, and that functional derangements of the nervous system had been of frequent occurrence since infancy. The pathological appearances which have been found by Schroeder Van der Kolk in the medulla oblongata, would seem to show that epileptic convulsions depend generally, upon an increased affiux of blood to the medulla oblongata ; although, as I have

previously stated, it is a fact which has been proved by the experiments of Küssmaul and Tenner, in cutting off the arterial blood from the brain, that arterial anæmia is also a cause of epilepsy. Schroeder Van der Kolk found that in the medulla, there generally existed a dilatation of the arterioles and capillary vessels, with thickening of their coats. In the cases where arterial anæmia of the medulla is the cause of the epileptic convulsion, it is probably the effect—when it occurs in the inebriate—which the alcohol exerts in producing a transitory spasm of the muscular fibers of the arteries with consequent arterial anæmia.

Prognosis. In epilepsy occurring in the inebriate himself, as the result of the morbid irritability produced in the central nervous system by his excessive drunkenness, we may reasonably expect an ultimate cure, if there is no structural change in the brain which has resulted from the course of inebriety. I have had three such cases of recovery of epileptic patients, in the cases under my charge, during the past year. On the other hand, when the disease occurs in the offspring of intemperate ancestors, as the result of the hereditary tendency, it depends more certainly upon structural disease of the brain, and, as a general rule, I have found that the more frequent the recurrence of the epileptic convulsions, in such patients, and the deeper the impression which they leave behind them, the less hope is there of ultimate recovery.

42 East 12th Street, New York.

Extracts from Foreign Correspondents.

OPIUM REFUGE IN CHINA.

REV. M. H. HOUSTON.

"The hospital (for treatment of opium smokers), was first opened in the city of Ningpo, at what date precisely I am not able to state. It was several years, however, before I went to China,—1868. An English gentleman who had been engaged in the opium trade, and who afterwards suffered remorse of conscience for the injury he had done the Chinese by engaging in this traffic, set apart a considerable sum of money for the establishment of a hospital for the cure of opium smokers. The use of this money was committed to the "Church Mission" of England, and it was in connection with this mission that the "Opium Refuge," as it was called, was first opened in Ningpo. Its success in that city was I believe but small, and partly owing to discouragements, and partly for the want of a suitable physician to conduct it, the work of the refuge had been suspended, at the time I reached China. In January, 1872, however, Dr. Jas. Galt, a Scotch physician, was sent out by the Church Mission to take charge of the "Opium Refuge."

"On his arrival in China, the hospital was transferred from Ningpo to Hangchow, the city in which I then resided. This city is the capital of Chekiang Province, and has a population of about 700,000. Here the "Opium Refuge" was again opened, and Dr. Galt, while he treated patients of all

classes, who came to his dispensary, gave attention specially to opium smokers, who alone were admitted as inmates to the hospital. The capacity of the hospital was for about thirty patients. Persons wishing to be admitted, made their applications on or before the beginning of the Chinese month. The applications were generally as many as could be granted. Sometimes the number of applicants exceeded the capacity of the hospital, and some would have to be refused. The opium smoker, on entering the hospital, paid a fee of two dollars, which was about the cost of his board during his stay in the refuge. The payment of this sum was also an earnest of good faith on the part of the applicant. Each patient was required, besides this, to produce a responsible friend, who went security for the good behavior of the patient while he remained in the hospital. All the patients for one month were admitted on the same day, and they continued in the hospital three weeks. In this way twelve batches of patients were turned out each year, and the physician in charge had one week in each month for the thorough cleansing of the hospital, and for attention to other matters.

"As to the medical treatment of the patients, Dr. Galt informed me, that the treatment was directed simply to relieving the malaise and depression caused by the discontinuance of opium; and he said that at the end of three weeks, the patients could dispense entirely with opium, without suffering physical inconvenience.

"Nothing was done to change the taste of opium into disgust; and of course the permanent cure of the patient, after leaving the hospital, depended entirely on his own strength of will, I need scarcely say, that here it was that the discouragements in this benevolent work appeared.

"The temptations to a Chinaman, to return to his opium,

are constant. Friends solicit him, and the fumes from the opium dens are wafted into the street through which he must pass. It is only the man of more than ordinary will, or the man sustained by the grace of Christ, that remains steadfast to the end. I have known myself, some melancholy instances of relapse. In one case a man came to the Church Mission, attended by his mother. He was known to the Rev. G. E. Moule, a member of that mission. The man stated to Mr. M. that opium had brought him so low, he was already in hell; and he begged Mr. M. to assist him in his efforts to reform. At the instance of his mother, a wooden cage was constructed, and placed on Mr. Moule's premises. This cage the man entered voluntarily, and was locked in, and the key of the cage was entrusted to Mr. M. In this way he was kept for several weeks from opium, his health improved, he gained flesh, and he came out apparently a new man. His reformation lasted some time. He seemed to be steady, and he even applied for admission to the church. In the end, though, he returned to opium, and the last state of that man, I suppose, was worse than the first. There can be, I apprehend, but little hope in China for any opium smoker except he be led to a Rock higher than he; and in the Opium Refuge at Hangchow, prayers are daily held with the patients, and instruction is given them concerning the power and grace of Him who is able to deliver those who are tempted.

"There is one fact that has been developed by this benevolent enterprise in Hangchow, that must at first seem to us strange. Some of the patients enter the refuge without any desire of giving up opium. Their motive is this; they have gone so far, that a large quantity of opium is required to satisfy the cravings of their system—larger than they can at all afford to buy. By submitting to the course of treatment

in the hospital, they retrace their steps, and the effect is simply to get back to a point where a moderate quantity of the drug will produce the desired effect. In a word, they only wish to get up the hill, that they may have the pleasure of sliding down again. Even in his dissipations the Chinaman shows that prudent calculation which is a characteristic of his race." * * *

INEBRIETY IN ENGLAND.

Dr. Carsten Holthouse, the superintendent of an asylum for inebriates in London, read a very excellent paper before the British Medical Association in their August meeting this year, on the cure of inebriates. The following is a summary of his conclusions:

"Women, if once they can be induced to enter an inebriate asylum, are far more tractable, amenable to treatment, and curable, than men. There is not always a necessary relation between the duration of the habit and the time required to cure it. In one case a drunkard of many months' standing was cured in a few months, while in another, a much longer time failed to cure a drunkard of twelve months' duration. * * * In all cases, removal of the patient from his surroundings, and usual haunts and temptations, are essential. He requires to have a fresh start in life, and be subjected to influences antagonistic to those he has been accustomed to, with time for reflection on the past and future. * * * Properly conducted, inebriate asylums offer the best chance for the reclamation of the drunkard, and these places must be made attractive, or they will not be patronized. Whether drunkenness be regarded as a disease, or only a vicious habit, it is so wide-spread and ruinous, not only to the drunkard himself and family, as to call loudly for legislative interferance." C.

AUSTRALIA INEBRIATE ASYLUM.

The last annual report of the *Melbourne Retreat* for the cure of inebriates, in Australia, under the care of Dr. McCarthy, contains the following extracts:—"I have been astonished at the rapidity of the recovery of patients in this Retreat. Persons that had not for weeks taken a morsel of food that they did not vomit, are not a week here before they can take three full meals a day. As far as recovery is concerned the results are extremely satisfactory, but recovery, though important, is not the principal object of the Retreat. Cure is the main object. For cure, two things are absolutely necessary, namely, restoration to health, and a desire to be cured of the drink-craving. The greatest difficulty lies in trying to convince people that restoration to perfect health does not imply cure of the drink-craving."

Tablets containing the following are hung up in all the wards: "Essentials for Cure.—To sincerely desire it. To avoid stimulants, opium, and tobacco. To avoid visits, correspondence, and idleness. Manual employment, baths, and laxatives. To avoid company of discontented patients. Strict observance of the regulations."

Dr. McCarthy also reports: "The government of South Australia has given £3,000, and the public more than that amount, to establish an Inebriate Asylum at Adelaide. I have no fear for *this* Retreat. It is yet on too small a scale, but it is a novelty here, and when it becomes better known, the people will insist on its extension. It is a matter of time. I am feeling satisfied with the result of treatment among my patients, male and female, and of more hope now of the case of females than I had at first. A movement has been made in New Zealand, and in Tasmania, also, the question is being agitated."

Abstracts and Reviews.

On Concussion of the Spine, Nervous Shock, and other obscure Injuries of the Nervous System, in their Clinical and Medico-Legal Aspects. JOHN ERIC ERICHSEN. New York: Wm. Wood & Co.

We call the attention to this work, although it has been before the profession for some time, as explaining many of the obscure cases of inebriety which date from injury, or concussion. It comprises fourteen lectures, made up of reports of cases and comments, that are exceedingly suggestive and valuable.

The clinical aspects of injuries of the spine, especially its higher forms, where the symptoms are overlooked until grave stages follow, are discussed in a very clear and satisfactory way.

Both in this country and in Europe, the class of injuries which come from railway concussions, seem to be more severe because of their peculiar character, consisting of a rapid vibration, thrill, or jar, which is transmitted through all the body.

Of the circumstances of these injuries, he says: "Those who are asleep at the time of the accident, very commonly escape concussion of the nervous system." Those suffer most seriously from concussion of the nervous system who sit with their backs turned towards the end of the train which is struck. "Although there is often a long interval between the time of the occurrence of the accident and the supervention of the more distressing symptoms, and the conviction of

the serious nature of the injury that has been sustained, it will be found on close inquiry, that there never has been an interval, however short, of complete restoration to health. There have been remissions, but no complete and perfect intermission in the symptoms." "In spinal concussion there is, as a rule, a fall of temperature. In laceration or crush of the spinal cord, consequent on fracture of the vertebræ, there is often a rise." C.

Cyclopedia of the Practice of Medicine. By ZIEMSSEN. New York: William Wood & Co., 1877.

This is a library of itself, and has already won a place among the most valuable and practical treatises ever published in this country.

All the volumes published, so far, are clear and exhaustive, and give the reader an admirable series which cover the entire subject, particularly the latest pathological studies. The type is large and clear, and the volumes are very attractive in size and divisions of subjects, with an excellently arranged index, and a copious bibliography prefixed to each article.

To the hard working practitioner this work is invaluable, as furnishing an almost perfect compend, always at his command, with sources of information that will be sought after by both students and practitioners for years to come.

No specialist who would have the means to verify any disputed point, should be without this work.

We heartily commend this work as a great standard which should be in the library of every physician, and take equal rank with Appleton's Cyclopedia in general literature.

C.

Coughs, Consumption, and Diet, in Disease. By HORACE DOBELL, M. D., F. R. M. C. S., and Consulting Physician to the Royal Hospital for Diseases of the Chest. London and Philadelphia: D. G. Brinton, 1877.

This is an excellent hand-book for the busy physician, and will amply repay a close study. The style is clear and terse, and the subjects discussed are those frequently met with, and often obscure to the hurried physician. Altogether this book is eminently practical, and should be in the library of every physician.

Inebriety and its Cure. A paper read before the Suffolk District Medical Society. By DR. ALBERT DAY, Superintendent of Washingtonian Home. Boston, Mass.: 1877.

Is a pleasantly written *résumé* of the entire subject.

We are pleased to note the interest manifested by the profession of Boston in the Washingtonian Home.

SOCIETY FOR PROMOTING LEGISLATION FOR THE CONTROL AND CURE OF HABITUAL DRUNKARDS.

The society organized in London for promoting legislation for the control and cure of habitual drunkards, has for its president the Earl of Shaftesbury, and among the vice-presidents, ten bishops, three members of Parliament, and the eminent Dr. Thomas Watson, and many others. On the executive committee, and among those to whom the society refer, are: Dr. B. N. Richardson, Sir James Paget, Alexander Peddie, Edinburgh, C. B. Radcliff, Prof. Stokes, Dublin, Cardinal Manning, and many others, including the most

eminent medical, scientific, and literary men of the country. The object of this society is to follow up and co-operate in the following resolution and petition, which was unanimously resolved by the British Medical Association, representing nearly seven thousand of the medical profession in the United Kingdom:

"That excessive intemperance is in many cases a symptom of a special form of insanity, which requires special treatment, with a view, first, to the recovery of those affected; and, second, to the protection and advantage of them and society. That in the present state of the law, such treatment is not attainable, and that it is desirable that legal provision should be made to render it attainable."

As a result of this expression of opinion, the British Medical Association have, in co-operation with the Social Science Association, prepared and adopted the following petition for presentation to Parliament:

"Unto the Honourable the Commons of Great Britain and Ireland, in Parliament assembled, the humble petition of the undersigned:

"That habitual drunkenness prevails extensively among both sexes, and all classes of society; is one of the most fruitful sources of domestic misery, of disease, pauperism, and crime; and calls loudly for the adoption of some remedial measures.

"That the right of the State to deprive of their liberty, and even to subject to fine and imprisonment, not only the 'drunk and disorderly,' but the 'drunk and incapable,' has been long recognised by law, and is continually exercised throughout the realm; while more recently the Licensing Act, 1872, gives power to the police to take proceedings

against persons found drunk, although neither incapable or disorderly.

"That the merely penal treatment of drunkenness by committal to prison for short periods, far from influencing for the better the habitual drunkard, is shown by the evidence taken before the Select Committee of the House of Commons, 1872, to be "worse than useless;" confirms him in his evil ways, by utterly destroying his self-respect, and rendering him reckless of consequences; and thus runs counter to the whole tendency of recent legislation, which aims at the reformation as well as the correction of the offender.

"That your petitioners fail to perceive any valid reason why this right of State interference with his personal liberty, so long recognised and so constantly put in force, should not be exercised for the reformation of the habitual drunkard.

"That strong testimony was given in 1872, before the Select Committee of the House of Commons, that the treatment of habitual drunkenness in reformatory institutions has been followed both in this country and in the United States of America, by the recovery of a large percentage of those subjected to it.

"That the power of compulsory committal and detention for a term not exceeding a year, as recommended by the Select Committee of 1872, was, by the evidence taken before the committee, shown to be in operation in various parts of the United States of America, and to be unattended by any evil consequences, the silent influence of the law inducing many voluntarily to submit themselves to the salutary discipline of the reformatory institutions for the time required to effect a cure.

"May it, therefore, please your Honourable House to take this important subject into your careful consideration, and to

pass into law a measure for the control and cure of habitual drunkards."

This society are collecting subscriptions and publishing tracts for broadcast distribution, two of which are before us—one "*On Drink Craving*," the other "*On the Necessity for Legislation for the Control and Cure of Drunkards.*" By the Secretary, Dr. S. S. Alford.

The eminent characters of the promoters of this society indicate it to be one of the most prominent movements ever made for this class.

THE ONLY CURE FOR INEBRIATES.

DR. EVERTS, in his "Incidents of Civilization," mentions the following as the remedy for inebriety:

"Declare the inebriate of unsound mind, and subject to constraint by law. Make public provision for his custody and cure, benevolent, and not penal. Make it self-sustaining by the introduction of varied and profitable industries. Give each patient credit for all earnings over pro rata cost of maintenance.

"Supply all deficiencies by a tariff on the sale of intoxicants. Pay all surplus earnings credited to individuals, to their families, if needy, during custody of the patient, or to such individuals on discharge. Make all discharges conditional, and return to custody and labor certain to follow every relapse into the unsound state. Increase the term of custody with each return of patient, making it never less than a fixed period of probation.

"Such institutions, adopted and put in operation by all of the states, would mitigate the evil rapidly, and gradually reduce the sum total of intoxication and the number of its

victims to its lowest term, and stay, as far as practicable, the tide of evils flowing from organic deterioration, perpetuated by descent."

PROOF OF THE CURABILITY OF INEBRIATES.

"That inebriety can be, and is often, permanently cured," is clearly proven by the fact that inebriate convicts who are confined for a term of years seldom drink again on regaining their liberty.

This fact has been noted in several large English prisons and in this country, showing that through long abstinence and regular living this disorder dies out.

From address before the Connecticut State Legislature, by Dr. T. D. Crothers.

Editorial.

RESOLUTIONS CONCERNING INEBRIATES,

By the Association of Medical Superintendents of American Institutions for the Insane.

Extracted from Proceedings of the Annual Meeting, held at Auburn, New York, May 18, 1875.

Resolved, That in the opinion of the Association of Medical Superintendents of American Institutions for the Insane, it is the duty of each of the United States, and of each of the Provinces of the Dominion, to establish and maintain a State or public institution for the custody and treatment of inebriates, on substantially the same footing in respect to organization and support, as that upon which the generality of State and Provincial institutions for the insane are organized, and supported.

Resolved, That as, in the opinion of this Association, any system of management of institutions for inebriates, under which the duration of the residence of their inmates, and the character of the treatment to which they are subjected, is voluntary on their part, must in most cases prove entirely futile, if not worse than useless. There should be in every State and Province such positive constitutional provisions and statutory enactments, as will in every case of presumed inebriety secure a careful inquisition into the question of drunkenness and fitness for the restraint and treatment of an institution for inebriates, and such a manner and length of restraint as will render total abstinence from alcoholic or other hurtful stimulants, during such treatment, absolutely certain, and present the best prospects of cure or reform, of which each case is susceptible.

Resolved, Further, that the treatment in institutions for the insane, of dipsomaniacs or persons whose only obvious mental disorder is the excessive use of alcoholic or other stimulants, and the immediate effects of such excess, is exceedingly prejudicial to the welfare of those inmates for whose benefit such institutions are established and maintained, and should be discontinued just as soon as other separate provision can be made for the inebriates.

These resolutions were introduced by Dr. Nichols, of Washington, D. C., and the discussion of them was participated in by several distinguished members of the Association. From the full report of it, which is before us, it must have been a peculiarly satisfactory debate to the gentlemen who engaged in it, inasmuch as they completely ignored all evidence on the subject of inebriate asylums as it appears in the annual reports of such institutions, and indulged themselves in the assertion of their own self-conceived platitudes, without even the show of authoritative facts and figures which were within their reach, in the "Proceedings of the American Association for the Cure of Inebriates," that have been published annually for six consecutive years, and gratuitously distributed among them.

They did not offer, in a single instance, the report of either of the institutions for inebriates, to demonstrate what is being done by such institutions, but assumed to declare that they were a failure, and that it was therefore proper that the above resolutions should emanate from themselves as a sort of first fruit of their long and weary dealing with a subject about which they seem to have been greatly troubled.

Had these gentlemen risen to the dignity of the subject in hand, and had they dealt with it in conformity with the instincts and genius of the great profession of which they are members, they would have acknowledged the reports of their peers, as having, at least an *existence*, and would have attempted to prove from facts, and their own observation, that the inebriate specialists were in error. But they have failed to meet the question, and contented themselves with their own averment that inebriate asylums are a failure, in the face of abundant facts to the contrary, which have been acknowledged by most careful and thorough observers and thinkers, both in this country and Great Britain.

As the representative from England, Dr. Bucknill, offers his advice on the subject, assuming, with the others, that inebriate asylums are not a success, coming fresh as he does from the metropolis, where the subject had been carefully investigated by a committee of his own Parliament, who had reported favorably to the establishment of such asylums in England, because they were a success elsewhere. Dr. Bucknill asks for facts of his associates, and says he "should feel very grateful" if any members of the Association can inform him "what is being done at Binghamton, and what has been done at Media, and why Media was abolished." No gentleman of the Association having responded to this enquiry, we may take the liberty of answering as follows:

1. "What is being done at Binghamton?" The simple and brief answer to this question, is just this: The asylum at Binghamton is discharging a larger percentage of inebriates cured, than any asylum for the insane is discharging, of its cured inmates, on the Continent of America. And had Dr. Bucknill extended his enquiry to cover all other asylums and homes for inebriates, the same reply might be given.

2. "What has been done at Media, and why was Media abolished?" The answer is as follows: The Sanitarium at Media did not claim so large a proportion of cured cases of inebriety as some other institutions, but its percentage was large enough to challenge a show of equal results, by any existing hospital or asylum, or retreat for the insane. Why was it abolished?

Among the gentlemen who surrounded Dr. Bucknill while he was making these enquiries, were several from the State of Pennsylvania, either of whom could have informed him, that the Legislature of that State was annually pressed for large appropriations of money either for the maintenance or construction of asylums for the insane, or both, and that

legislators were acceding to the claim of necessity for these outlays, as being sufficient to meet the demands, at least for the present, of both insane and inebriate patients. The Sanitarium at Media, being sustained for a number of years, by private contributions, with the expectation that the State would ultimately foster it, and finding the State excusing itself from year to year, solely on the ground of the extraordinary appeals in behalf of the insane, and of the influence of superintendents of insane asylums, to procure what they asked for, it was determined to close the Sanitarium until the reaction should come, when both legislators and people will discover the necessity for separate protection and cure for the inebriate. But the Sanitarium is not, to use the language of Dr. Bucknill, "abolished." Its Board of Directors still has an existence, having determined, at the meeting when it decided to close the institution, not to disband, but to await the progress of events. So much for Dr. Bucknill's enquiry.

But a word about the resolutions. They are expressive of what seems to us to be the truth: namely, it is the duty of Government to provide institutions "for the custody and treatment of inebriates," where abstinence shall be required and restraint imposed when necessary, and that the treatment of inebriates in institutions for the insane is "exceedingly prejudicial to the welfare" of their proper inmates, "and should be discontinued just as soon as other separate provision can be made for the inebriates."

This last resolution contains the text of the spirit of the discussion we have had under review. A confession is made that these gentlemen have been doing a wrong to their insane patients by the admission of inebriates into their asylums, and yet the inference is that they have been compelled to do so, because the *poor inebriate* has had no place of resort.

Let us enquire. At the present time there is one, and

until recently there have been two, well organized and disciplined institutions for inebriates, within an hour's ride of the Pennsylvania Hospital for Insane at Philadelphia. Why, then, the necessity for an inebriates' ward at the latter institution? Perhaps it may be as Dr. Dalrymple testified before the House of Commons Committee, "that a considerable revenue is derived from this class of patients, who are nearly all of the affluent class." Why is it that inebriates are admitted to Bloomingdale and other insane establishments in New York, while there are two large and well conducted inebriate asylums in the State, with full power to detain and restrain when needful? We must seek the reply in Dr. Dalrymple's testimony. The same enquiry could be pressed, and perhaps the same answer given, in connection with most of the asylums for the insane in this country.

We commend to the gentlemen composing the Association, whose action we are considering, the importance of informing themselves on the subject of inebriety, and of asylums for its treatment. The literature of the subject seems to have been entirely overlooked by them, and we feel confident that had they taken the pains to study the statistics of inebriate asylums, they could not have gone to their Auburn meeting and so totally, and yet so calmly contradicted all that the literature of inebriety verifies.

We are content, however, to leave their proceedings in this regard, to the discernment and judgment of a sane and sober public sentiment, and close this brief review with the hope that Dr. Bucknill, of London, will not, on his next visit to America, pass by the institutions, and the men whom he came professedly to enquire of concerning this subject; and then on his return a second time to his own land, he will bear with him facts and experiences that will be quite different from what he has so recently obtained at second hand.

Clinical Notes and Comments.

Under this head will be gathered clinical histories, and notes of cases, illustrating the various phases of inebriety and opium intoxication.

ANALYSIS OF ONE HUNDRED CASES OF INEBRIETY, RECEIVED AT THE NEW YORK STATE INEBRIATE ASYLUM, BINGHAMTON, N. Y.—Continued from the December Number.

Sixty-four of these patients presented numerous indications of an inherited neurosal diathesis, of which the following symptoms were prominent, either alone or combined:

Fair complexion, and naturally spare bodies, light hair, with flashing, unsteady eyes, changeable countenance, restless animation, often impulsive and jerking in their manners; seldom calm and deliberate. Living particularly in the present, and keenly sensitive to all changes of circumstances and surroundings; easily agitated, with intense functional activity, and so sensitive as to show signs of mental disorder, when excited. Their views of life were often unreal, visionary and changeable; they were usually extremists, in both physical and mental activity, and when exhausted, were prostrate for a long time. Often they exhibited boundless self-esteem, with capricious appetites and tastes, or credulity and lack of fixed purpose, that was childlike.

In nearly every case, neuralgia and melancholia were prominent; dyspepsia and functional disorders of the heart were also common. Many of these cases exhibited diminished vital energy, bad nutrition, weakness and perversions,

with special developments of both mental and physical capacity, the body being out of proportion, with a constant tendency to exhaust itself; inebriety seemed to be the reaction following naturally from the physical and emotional activity.

Of the condition of these cases when admitted, seventy-nine were more or less intoxicated, six had delirium tremens, and eight epileptic convulsions from alcoholism. Ten were unconscious of the place and surroundings when they came, and thirteen were forced here against their will, the others coming with full consent.

A study of the effects of alcohol in the different stages of inebriety bring out many curious facts.

In the first stage, that of excitement, thirty-one cases gave a history of delirium of motion, and agitation, a constant desire to go from place to place, to work and be actively engaged. Twenty-six cases were stupid and inactive, indifferent to every duty that involved action, either physical or mental.

In twenty-seven cases this first stage of drinking lasted from two days to three weeks. In nineteen cases it merged into the second stage in a few hours. Of the mental symptoms displayed, fifty-eight gave a history of great sociability, and taste for the fine arts, and ten were very combative in the first stages. Thirty-nine were filled with delusions generally of power and grandeur, and six entertained fears about their health, and made extraordinary exertions to build it up. In thirty-two cases the organs of generation were stimulated to great activity, and in nineteen cases this function was partially paralyzed.

In the second stage of inebriety, that of stupor, sixty-nine cases gave a history of partial paralysis of the motor system; reason and consciousness, although cloudy, was

yet retained. Muscular co-ordination gone, ability to realize the situation fully, but powerless to control the body. In nineteen cases this condition was almost reversed, thorough unconsciousness existed, and the motory functions, and co-ordination, were only slightly disturbed. Four of these cases would go about transacting business, entirely oblivious to all surroundings. In one case the patient was alarmed at finding various sums of money on his person when he recovered consciousness after a drinking bout. For a long time he could not discover where it came from, until it was ascertained that after drinking so much liquor, he cunningly secreted a large basket of toys and trinkets from his store, and sold them in the country, returning at night, so that his presence was not missed.

Inebriety inherited direct from parents was traced in twenty-one cases. In eleven of these the father drank alone, in six instances the mother drank, and in four cases both parents drank.

In thirty-three cases inebriety was traced to ancestors more remote, as grandfather, grandmother, &c., &c., the collateral branches exhibiting both inebriety and insanity. In some instances a whole generation had been passed over, and the disorders of the grand-parents appeared again.

In twenty cases various neurosal disorders had been prominent in the family and its branches, of which neuralgia, chorea, hysteria, eccentricity, mania, epilepsy, and inebriety, were most common.

In some cases, a wonderful periodicity in the outbreak of these disorders was manifested.

For instance, in one family, for two generations, inebriety appeared in seven out of twelve members, after they had passed forty, and ended fatally within ten years. In another, hysteria, chorea, epilepsy, and mania, with drunkenness, came

on soon after puberty, and seemed to deflect to other disorders, or exhaust itself before middle life. This occurred in eight out of fourteen, extending over two generations. In another instance, the descendants of three generations, and many of the collateral branches, developed inebriety, mental eccentricities, with other disorders bordering on mania, at about thirty-five years of age. In some cases this lasted only a few years, in others a life time.

In many of these cases, mental peculiarities, with eccentric habits of work and living, were inherited, which seemed to predispose to inebriety.

A weak will-power, coupled with a sensitive nervous system, seems to be inherited in most cases of inebriety.

Among the exciting causes noted, dyspepsia, with irregularities of living, including want of work and proper rest, were noted in thirty-one cases. From injury to the brain, or nervous system, as in concussion or blow, on the field of battle, or at a railway collision, or proximity to electrical currents, six cases were well marked.

Eight cases evidently originated as the sequel of menigitis, typhoid fever, and hemmorrhages both gastric, intestinal, and pulmonary. Ten cases were attributed to prescriptions of liquor given by physicians, but in most of these cases there was a diathesis favorable for such a condition, inherited or acquired.

Loss of property, death of relatives, disappointment in business and love, or ambition, seemed to be the exciting cause in eleven cases; but a farther acquaintance with each case, indicated a strong emotional and impulsive mind, predisposed to the extremes of hope or despair.

The history of ten cases, was that of indiscriminate indulgence in foods and condiments from infancy, and consequent

depraved vitiated tastes, with inebriety following as a natural consequence.

Inebriety was clearly traceable in four cases to shock from first sexual intercourse, and in three instances there was evidently some connection as an exciting cause, with intermittent fever.

Bad sanitary surroundings acting on a nervous diathesis, and syphilis, exposure to cold, changes of climate, exciting work, &c., were noted in the remaining cases.

In a more detailed study of the history and causes, two forms of inebriety appear to be prominent.

One arising from general causes, similar to those producing insanity and other neuroses, of which inebriety is but an accidental phase, or development.

The other form is inherited direct, or follows invariably, as the result of particular conditions and circumstances.

In the prognosis, sixty per cent. were physically much debilitated, and the rest and quietness of an asylum were particularly needed.

Twenty per cent. were mentally feeble from the immediate effects of alcohol, and continuous excitement. In an asylum restoration follows in nearly every case. Eighty per cent. will go away restored, fifteen per cent. will relapse the the first year, and ten the next, and after that five per cent. for two or more years, then it will grow smaller. C.

THE RELATION OF MELANCHOLIA TO INEBRIETY.—Distinct periods of depression are very commonly associated with inebriety. Often these conditions are so intense and prominent, as to exert a very marked influence over the case. Sometimes it precedes inebriety as an exciting cause, as seen in the following case:

H——, a lawyer, age 41. Mother nervous and neuralgic for years. Father died of rheumatism. Has been an active, temperate man. Married, of high social position, wealthy, and his relations amicable; no history of any mental disorders in himself or family. In 1866 he worked unusually hard for several months, taxing his mental powers incessantly; completing his labors, he went to the sea shore for rest.

Here, without cause, he became depressed, which increased to the deepest melancholia, and as he described it, "he was pressed by a dark cloud on all sides." This lasted several days, then passed away in the night, as suddenly as it came.

An interim of two months passed, during which he complained of neuralgic pains, which he believed to be rheumatic, supposing it to be inherited from his father; then his melancholia returned, and lasted a week. He sought the advice of eminent physicians, and was under treatment for two years, with but little benefit. His mind remained clear and free from delusions, except fear of insanity, and the attacks recurred three or four times every year.

In 1869, while suffering from a severe attack, an impulse to drink liquor came on with such force that he rushed to a saloon and drank several glasses of brandy, and after sleeping a few hours, awoke free from this feeling. Months later this desire to drink appeared with the return of the melancholia, and the latter disappeared after drinking as before.

From this time he drank on the approach of every period of depression, or melancholia, with the same result; the desire for liquor taking the place of these attacks. Two years later he was a confirmed inebriate, and went to an asylum for relief. He remained six months, and was a year later in good health, although not able to bear much mental fatigue.

In this case, the melancholia originated in some cerebral

disorder and became the exciting cause of inebriety, or merged into it, and will probably break out again.

This extreme case typifies all the lesser forms of psychical depression, which precedes inebriety, often unnoticed and obscure.

Melancholia in various forms and grades always follows inebriety after a certain stage, as illustrated in the following case:

B——, a farmer, 38 years of age. A vigorous, temperate man, born of healthy parents. After an attack of typhoid fever began to drink liquor moderately, and three years later was a periodical inebriate. These attacks of drinking are followed by great depression. All interest in himself or friends are lost, and he wanders round aimlessly, sometimes filled with delusions about his health, or alarm at the prospect of death. The cravings for liquor and its gratification only deepens this gloom, which is relieved by complete intoxication. This condition seems to follow every period of drinking, until nature has exhausted herself, then sobriety follows.

Many of these conditions are associated with diseases of the liver and heart, and melancholia seems to be both the sequel and exciting cause. Dyspepsia and hypochondria, when followed by inebriety, are attended with melancholia that is very positive and intense.

Often melancholia is continuous with conditions of hypheraesthesia and neuralgia, and other perversions.

Frequently these periods of depression following inebriety take on forms of great muscular activity, in which the patient is agitated, walks continuously, and is unable to be quiet. Or this condition is reversed, perfect quiet is sought for, and great impatience is manifested at any noise or agitation.

Melancholia attended with strange gustatory sensations, not a craving for liquor, but an almost insatiate appetite, or total loss of desire for food or drink, is very common.

These and many other forms of psychical depression, called melancholia, are so intimately connected with inebriety, both before and after this disorder begins, as to require separate study before we can understand the therapeutical indications.

Melancholia is usually an early symptom of mental disease, the direct cause of which is sometimes anæmia of the brain. When coming on with inebriety, or before it, many of the phenomena distinguishing it in all cases are present. Inebriety may be a phase of melancholia diverging to health, or concentrating into other forms more fatal; or melancholia may be a hint of the first stages of grave mental disorders.

Melancholia has been called psychical neuralgia, beginning in the sensory centers of the cortical substance of the brain, analogous to neuralgias in the sensitive sphere of the cerebro-spinal axis. C.

TREATMENT OF OPIAMANIA AND MORPHIAMANIA.—Two distinct methods of treatment are prominent in the management of this affection.

The first reduces the quantity of opium taken from day to day, until the patient is completely weaned from the drug; the other plan is to take the opium away at once, abruptly ending the disorder.

It is a curious fact that the abuse of opium and morphine produces the same phenomena as that for which it is indicated as a remedy.

The principal symptoms of which are hyperæsthesia, neuralgia, sleeplessness, anxiety, depression, and irritability.

When opium is withdrawn, either suddenly or gradually, these symptoms are intensified, particularly those affecting the cerebro-spinal and vaso-motor system.

Dr. Levinstein, of Berlin, read a paper on this subject, which is printed in the London *Medical Record*, containing the following very clear statement of the first method of treatment:

In the treatment of this affection, the sudden withdrawal of morphia is preferable to its gradual diminution. The organism bears rough and energetic interference better than that which acts slowly, as we see in surgical and obstetric operations. The successful treatment of morphia and opium-cravers is impossible, unless they are treated as prisoners. While the morphia is withdrawn they must be isolated, and be constantly watched by educated persons, inaccessible to all attempts at corruption. Such persons are found with difficulty; for some secretly bring morphia to patients for sake of reward, and others cannot resist the pathetic entreaties and severe sufferings of the patient. * * *

Windows and doors must be closed against all communication with the outer world. The patient's clothes, the sofas, the cupboards in his room, must be repeatedly examined; for it is characteristic of every morphia-craver, who comes voluntarily or involuntarily into an institution to be cured, that he secretes morphia or opium about his person.

The physician must not rely on any promises, or the most solemn assurances, or on any word of honor the patient may give. Opiamania and morphiamania, like other disorders, sets aside the character of the individual; the most educated, the most intelligent and judicious, eschew no means, no trick, to deceive the physician, and secure this drug. * * *

If the physician be energetic, observe his patients constantly, and have control over the watchers, and these be honest, the most difficult part of the treatment is over in eight days. After the morphia has been withdrawn twelve hours, collapse usually sets in; the patient should therefore keep his bed, and for the first eight days be not deprived of the use of stimulating wines, in some cases alcoholic liquors are necessary in large doses. If the collapse should be severe, and life be endangered, subcutaneous injections of liquor, ammonia, anisatus, or even of morphia may be necessary. During the first forty-eight hours after the withdrawal of morphia, if the patient do not groan and lament, if he be able to eat during the first days, and if his countenance be animated, he has, in spite of denial, secretly used this drug.

The narrowness of vision, and absence of diarrhœa, will soon confirm this impression.

Great distress, restlessness, and despair, affect the patient during the first three or four days.

Attempts at suicide at this time are common, and must be watched and provided against.

Prolonged baths are a valuable remedy for the neuralgia appearing at this time. Diarrhœa should be treated with care only when it becomes exhausting. Vomiting, which may appear in the early stages, will yield to no remedies, and requires perfect rest of the organ, by nourishing the patient through the rectum. Alcohol, if taken with the opium, should be continued during the treatment, until the patient can take regular nourishment. After the third week these severe symptoms end, and from that time general hygienic treatment, with mental occupation, good food, and fresh air, soon raise the depressed powers, and health returns.

By the other method—the gradual diminution of the quantity taken—there will be at first an increase of the reflex

irritability, and general feeling of languor and discomfort. Later, neuralgia and convulsive movements of the body, with temporary nausea and vomiting, also hyperæsthesia, or anæsthesia, intense and aggravated, with insomnia, diarrhœa, mental despair, extreme irritability, and other symptoms of variable character. All of which will alternate at irregular times, with intervals of relief, and freedom from all distress. The patient will be buoyed up with hope of speedy recovery, and in a few hours writhing under agonizing torments, tempted to commit suicide, or anything for relief. A single dose will end these sufferings, and a renewal of hope and courage follows. This is repeated for three or four weeks, the agony and distress from want of this drug growing less, and the periods of relief becoming longer, until recovery. In the first method all the distress is concentrated within a few days; in the latter it is extended over a few weeks, with intervals of relief. A clinical comparison of the two methods, in the treatment of several cases of similar character, would be of great interest to the profession. C.

Inebriate Tramps in New York State.—In 1875, there were sixty-one thousand two hundred and eighty-eight dollars expended for relief of tramps by the superintendents of poor in thirty-five counties, not including the large cities of New York and Brooklyn. Estimating for the remaining counties of the state in the same ratio, we have the enormous sum of nearly two hundred thousand dollars expended annually, to support this class. This does not include the private charities, which may be estimated at a quarter more, making over two hundred and fifty thousand dollars given away to tramps.

The large majority of these men are intemperate, uneducated, and go steadily down from bad to worse.

Nothing can be more appalling than this vast army of moving drunkards, drifting from place to place, a perpetual burden and tax on society, scattering vice and crime everywhere.

The state should organize work-houses, and make this class self-supporting. Through this means many a poor chronic inebriate might be restored to society and usefulness. Asylums could be built at less expense than supporting them in the present way, and as a matter of economy the state would be a large gainer every year. The almshouses are found to be breeding-places, where paupers and drunkards are raised up yearly to infest the land.

Confine them in large, judiciously managed work-houses or asylums, where labor is a part of the treatment, and we shall check the stream of desolation and ruin which flows through every town and city. Begin with the inebriate; isolate and quarantine him, make him self-supporting, diminish his power of spreading this disorder and bringing ruin on others as a result of his wretchedness, and the wealth of the state is largely increased—the happiness of its citizens enhanced.

This entire question of dealing with pauperism and chronic inebriety is clearly foreshadowed in the excellent report by Dr. Wilbur, on hospitals for sick and insane in Great Britain, published in the ninth annual report of public charities of New York state. He shows that labor is being introduced into all the charities of Great Britain with profit to both the institution and patient.

If this can be done with all the cumbrous machinery of the old charities abroad, what may we not do here, where we have the facilities for change, and rapid adaptability to circumstances?

C.

Among our Exchanges.

The generous welcome given to the QUARTERLY by medical journals and the profession generally, are cheering indications of a wide-spread and increasing interest in this subject.

Among the many and very excellent exchanges received, we may note the *Medical and Surgical Reporter*, of Philadelphia, the *New York Medical Record*, the *American Journal of Insanity*, the *Cincinnati Lancet and Observer*, and others. The *Watchword*, *Herald of Health*, and *Temperance Union*, are representative papers of their class, which with others have been received and noted.

We append for the reader a few of the pleasant compliments extended to the QUARTERLY by our valuable exchanges:

"We have received the first number, and like its appearance and contents. We wish it success equal to the importance of the subject."—*Canada Journal of Medical Science.*

"This is the first number of a Journal intended to cultivate an entirely new field. It is well arranged, and will doubtless interest a large number of persons, both professional and secular."—*The American Medical Bi-Weekly.*

"The Journal presents a very creditable appearance, the paper is good, the type clear, and the general make-up pleasing."—*Ohio Medical Recorder.*

"The December number contains some excellent papers. * * * If this enterprise is well sustained, it will fill an important journalistic want."—*Virginia Medical Monthly.*

"The American Journal of Inebriety, a neat Quarterly, devoted to the elucidation of the medical side of the temperance question. In another place we give some space to an abstract of a most valuable paper by Dr. Beard."—*St. Louis Clinical Record.*

Among the very complimentary notices from both secular and religious press, we append the following from the *Christian Intelligencer*, of New York:

"This Journal gives promise of most valuable service to the systematic and scientific attempts to reach a cure of inebriety. The terrible and vast injuries wrought by intoxication should gather philanthropists to the support of this periodical. The leading article is the Anniversary Address, by T. L. Mason, M. D., President, the Dean of the Faculty of the Long Island College Hospital, &c. The address consists mainly of a clear, succinct, historic sketch of the rise and present status of the asylums devoted to the cure and treatment of inebriates, and will be valuable for a future reference. Other valuable articles of much interest make up the Journal. * * * * The Journal is printed on firm paper."

Notes, etc.

Inquiry by the State Board of Charity among the county poor-houses, not including the various city almshouses, indicated six hundred and fifteen children, nearly all under ten years of age. The parentage of these children shows a large preponderance of intemperate fathers, three hundred and twenty-nine, over half of the whole number. Of the mothers, only one hundred and fifteen were intemperate, over one-fifth. Of the condition of the parents, four hundred and forty-one mothers were paupers, and one hundred and five fathers were also paupers.

These figures show that inebriate fathers and pauper mothers are filling up the ranks of pauper children everywhere. Also, that inebriety and pauperism are intimately associated. C.

Mortalities of Liquor Dealers.—Dr. Richardson affirms that innkeepers, publicans, and barkeepers have in London a higher death-rate than any class except hackney-coachmen. In England the mortality from all causes is 2.012 per cent., but in publicans and dealers in liquors, it is 3.466 per cent. This is very startling evidence of the fatal effects of intoxicating liquors on the dealers.

It is affirmed that the third generation of inebriates seldom reach manhood, but die out and become extinct, or if

they live to manhood, it is as idiots and paupers of the lowest grades.

THE TEMPERATURE OF THE BODY in inebriates, according to Dr. Reineke, of Hamburgh, who made careful observations on eighteen cases, is greatly reduced, when the external conditions favor the withdrawal of the bodily heat.

It is affirmed that alcohol produces a dilatation of the peripheral vessels, whereby more blood enters the skin and contributes to raise the temperature. If the body be well clothed and protected from external influences likely to abstract heat, the reduction of its warmth is inconsiderable; but if exposed to cold, and placed under circumstances favorable to the abstraction of heat, there is a rapid loss of warmth from the blood circulating in the skin. Dr. Reineke gives a case of alcoholic coma, where the temperature was 75°, and gradually returned to 84°. This is the lowest recorded instance in which the patient survived.

DR. HUBBARD states that during several winters in the Red river country, where the thermometer went down to fifteen and twenty below zero, and even lower, men under the influence of liquor were the first to suffer from frost bite. He considers that alcohol in the system increases the power of radiating heat, and that drinking men should increase their clothing correspondingly to the amount of liquor used.

OCCUPATION.—One of the great moral remedies for inebriety is occupation. Next to restraint in proper asylums, occupation is the chief agent in restoring healthy brain power. Employment suited to every individual, out from the noise and

bustle of populous towns, where good air, light, and quietness bring change and diversion.

Of the various forms of labor, agricultural and horticultural work are the most admirable, because of its variety and absorbing interest. Mechanical work of the lighter kind has many attractions, also artistic labor, such as painting, drawing, and decorating, or anything that will result in tangible form or shape.

Inebriates, as a class, after they are thoroughly free from the immediate effects of liquor, and recover their strength, are anxious to do something; amusements and diversions usually found in asylums are not attractive, something positive and real is wanted as employment for both mind and body.

Such occupation must be semi-voluntary, to suit the changing fancies of a disordered will power, which is wanting in concentration and steadiness of purpose. Gradually the patient will make it compulsive in his own case, and derive pleasure in his power of continuity.

Opium Eating in China. The British vice-consul at Kinkiang, China, in a report to his government, gives some facts under his own observation, which indicate that opium may be taken without detriment to health. The instances are of junk-sailors who worked very hard, eating largely, and using opium with a conserve of sugar, besides smoking it at night. They were very robust, and indicated great steadiness of nerve, and had taken opium for years, their labor being very severe, and no indications of weakness or debility were present.

CONDITIONS OF INTOXICATION AND DRUNKENNESS, that resemble each other closely, are caused by alcohol, opium, belladonna. datura stramonium, ether, chloroform, turpentine, naphtha, benzine, or carbolic acid, chloral, &c. In a case of doubt and obscurity, differential diagnosis only will determine the cause.

Cases are on record of alcohol being given to conceal a poison, and the victim be supposed to die from alcoholism. A careful comparison of the history and circumstantial evidence, will generally bring out this fact.

INVOLUNTARY REMINISCENCE of inebriates under the influence of alcohol, is a very curious mental phenomena, which is also observed occasionally following the toxic dose of opium, chloroform, and hashish. The patient in this condition frequently recalls events and circumstances long ago forgotten, and in some instances mentions events with great minuteness, which could not be remembered when free from the effects of the drug. Dr. Austie remarks, "these phenomena can only be accounted for on the supposition that impressions have been received, passively, by the brain; impressions which have been temporarily effaced by others due to the ordinary course of life and conversation, but which are revived as soon as the poisonous influence has destroyed the power of the brain to minister to the usual modes of thought."

A lawyer who had many years been a chronic drunkard, and had sunk to the lowest grades of pauperism, was brought on the stage to act a certain part for which his habits gave him a peculiar fitness; when, to the surprise of all, he burst out into a speech of great erudition and eloquence, full of classical allusion and polished rhetoric. It appeared that

this was a college oration which he had delivered thirty years before.

STIMULANTS USED BY THE RACE.—It is estimated that coffee, both beans and leaves, are drank by sixty millions of the human family.

Tea of all kinds is used by five hundred millions, and opium by four hundred millions; alcohol, in its various forms, by five hundred millions of the human race. Tobacco is probably used by seven or eight hundred millions.

These startling facts indicate a large proportion of the race using some substances that are either stimulants or narcotics.

The work of the physiologist, in the future, will be to determine the true place in nature of these substances, and indicate where their use ends, and abuse begins.

VALUE OF LIFE.—The value of man. Dr. Farr made calculations of the value of man, as a producer from infancy up, that are both curious and interesting.

Basing it upon the agricultural classes of Norfolk, he estimated that an infant at birth was worth twelve dollars and a half, in its prospective labor. Five years later his value as a productive agent was one hundred and thirty dollars, and five years later it has more than doubled. At the age of twenty-five he has attained the maximum value, six hundred and fifteen dollars a year. At fifty it is reduced down to three hundred and forty-five dollars, and so on down to seventy, where the value is only two dollars and a half a year. Should he live to eighty his value is one hundred and two dollars less than nothing.

OUR MISSION.

BY REV. J. WILLETT, SUPERINTENDENT OF "THE INEBRIATE'S HOME," FORT HAMILTON, L. I., N. Y.

The founders of Inebriate Institutions verily have a mission. In these days of unrestrained indulgence in alcoholic and narcotic poisons, when tens of thousands of our fellow-countrymen are annually consigned to the dishonored graves of drunkards and opium eaters, it concerns humanity to consider what can be done to save those men and women from death. Some say prohibit the accursed traffic, and we respond with a loud amen.

Until that glorious consummation shall come, and come it will, we would have every authorization to sell rum or opium to read thus:

> "Licensed where peace and plenty dwell,
> To spread disease and want and woe;
> Licensed to make this world a hell,
> And fit men for a hell below."

If we cannot stay the onward progress of the liquor traffic at once and for evermore, we can have compassion on its miserable victims who lie prostrate at our feet, smitten down by the rum fiend with epilepsy here, convulsions there, delirium tremens yonder, and lunacy and idiocy in the near distance.

Fathers, mothers, brothers, sisters, husbands, wives, imploringly beseech us on every hand to "*haste to the rescue,*" and to save their loved ones from destruction. If all the letters we are daily receiving were only bound together in one large volume, that volume would form such a book of lamentations as has never yet met the human eye. No such mass of burning words, penned by bleeding hearts, has ever

been compiled into a single book. The most extravagant romances ever compiled by the writers of fiction, when compared with the genuine appeals for aid which we receive, are tame and commonplace.

Give us the means and we can save those men and women from death; we can dry those tears and heal those broken hearts; restore those severed family ties; and bring back joy and gladness into those houses of mourning.

We are not pursuing a phantom, for we have already demonstrated that inebriety is curable, just as other diseases are curable by medical skill; and we also know that our Redeemer can save to the uttermost all who come unto God by Him.

Ours is no visionary mission. Ours is no ideal work. We are no fanatics, but we are earnest men, performing laborious but intelligent work, and our labors are crowned with large success. Our living witnesses abound on every hand, and their numbers are continually increasing.

Such is our mission, and our motto is, "God and duty." We say to all good and earnest men and women, "*Come over and help us.*"—"HASTE TO THE RESCUE."

DR. RICHARDSON has pointed out a curious fact of the *changing seasons having a potent physical influence over the body*. In a careful examination of four thousand persons, it was found in the winter months that the body wastes; the loss and weight varying in an increasing ratio, and during the summer the body gains; the gain varying in an increasing ratio; and that these changes from gain to loss, and from loss to gain are abrupt. The first beginning in September, and the second commencing in April.

ADVANTAGES OF THE STOCK PLAN

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THE TRAVELERS organized its Life Department in 1866, on a purely Stock basis, and the result has been highly satisfactory to the Company and to the Insured. Its Capital Stock of $600,000 is pledged as security for the payment of its policies, and in addition the same legal reserve is made from premiums as is required of Mutual Companies. No dividend can be made to stockholders, except from net profits remaining *after* this full security is provided for policy-holders. It has $156 of Assets to every $100 of liabilities, and the Surplus has steadily increased year by year.

THE TRAVELERS has written over 26,000 Life Policies, and paid $1,000,000 in claims, besides $2,560,000 for losses in the Accident Department. This Company writes all desirable forms of Life and Endowment Policies, and as regards the present and future security of the contract, writes as safe a Life Policy as any in the world. All complication, mystery, and ambiguity are avoided. No false expectations of extra profit are raised, to be disappointed. There being no overcharge of premium to start with, there is no return of part of it in the future under the misleading name of a "dividend." There are no notes to be deducted when the policy becomes a claim. THE TRAVELERS sells *Cash Insurance*, at a low cash rate, and does not invite the insured to speculate in his insurance as an investment. The business of THE TRAVELERS is conducted upon the strictest business principles. It is managed by the men who started it, and its management is noted for prudence, economy, and liberality. Full information concerning its methods and resources is promptly given by the officers and agents, upon application in person or by letter.

JAS. G. BATTERSON, Pres't. RODNEY DENNIS, Sec'y.

NEW YORK STATE

INEBRIATE ASYLUM,

Binghamton, Broome County, N. Y.

This Asylum is admirably situated, overlooking a fine section of country, and is complete in all the appointments of a first class home, with ample means to meet the wants of every case. It is located three miles from the city, and removed from all temptation. Its management is the same as all other State charities, under the control of a Board of Managers appointed by the Governor. The law provides for the maintenance of indigent inebriates, similar to that of the insane, and whenever a vacancy occurs, patients from other States may be admitted.

The experience of this Asylum, for the past nine years, indicates an increasing usefulness and necessity for such institutions, and the original intention of making this an Asylum Hospital, where this disorder may be thoroughly understood and treated on broad scientific principles is nearer realized than ever before. All rules are strictly enforced, and no patient permitted to go beyond the Asylum grounds without permission from the Superintendent, or in the care of an attendant. The discipline maintained in the Institution makes it very difficult for the inmates to obtain in any form alcoholic stimulants.

THE CHARGES FOR BOARD

Will be less to residents of the State, and will include medical care, washing, lights, fuel, etc., with ordinary attention. The exigencies of each particular case will be acted upon, as it may present itself, to those of moderate and limited means as well as the rich.

Special Terms will be made to Non-residents of the State.

All inquiries and applications for admission should be addressed to the Superintendent.

D. G. DODGE, M. D.,
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Binghamton, Broome Co., N. Y.

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New York, N. Y.,
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Albany, N. Y.,
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WOVEN WIRE MATTRESS CO.,
HARTFORD, CONN.

Attention is called to the following Testimonials:

FROM THE REPORT OF THE EXECUTIVE COMMITTEE OF THE HARTFORD HOSPITAL, April 10th, 1871.

The hospital is now supplied with the Woven Wire Mattress, with iron frame. There are many reasons why the wire mattress is peculiarly adapted to hospitals. This mattress with iron frame costs less than a good hair mattress. They require no covering but blankets to protect the patient from the wire. They are elastic and yield to the form of the body like a water bed. Every patient can have a perfectly clean bed when admitted.

They are free from vermin of every kind. They are durable, and never settle nor sag. The wire mattress has been in use for a long time in the hospital with perfect satisfaction, and aid much in the recovery of the patients by the cleanliness and comfort which they contribute to their occupants.

FROM THE REPORT OF THE EXECUTIVE COMMITTEE OF THE HARTFORD HOSPITAL, April 12th, 1875.

The Woven Wire Mattress has been in use in the hospital during the last five years. They have exceeded our highest expectations. In order to have the full benefit, in a sanitary point of view, they must not be used with a mattress of any kind. They make a perfect bed in a hospital by placing two double blankets over the wire In this manner over one hundred are in constant use with perfect ease and satisfaction to its occupant. By so doing, every patient on entering the wards is placed on a clean bed.

INSTITUTION FOR THE RELIEF OF THE RUPTURED AND CRIPPLED, NEW YORK, Jan. 8, 1870.

I consider the WOVEN WIRE MATTRESS one of the most invaluable inventions of the day, as it contributes so largely to the relief and comfort of the sick. The wire fabric, of which it is formed, yields uniformly to the body, obviating undue pressure on the prominent parts of the emaciated patient. Two thicknesses of a comfortable are a sufficient protection to the patient from the wire fabric, and is all that is required for warmth in a temperature of sixty degrees. This light covering is readily removed and washed in extraordinary cases, and the facility afforded for changing the bedding obviates the necessity for disinfectants. This information may be used by the Company, wherever it will tend to the comfort of the sick, at home or in the hospital or for family use, as I consider the MATTRESS not only a comfortable bed, but a means of maintaining good health.

DR. JAMES KNIGHT,
Physician and Surgeon to the Institution.

CONNECTICUT INDUSTRIAL SCHOOL FOR GIRLS, MIDDLETOWN, CT., Feb. 24, 1876.

WOVEN WIRE MATTRESS CO.,

Gentlemen: We last year furnished Eighty (80) rooms with the Mattresses of the Woven Wire Mattress Co., of Hartford, Ct., and find them in every way satisfactory and pleasing.

We expect to provide the same for our new "Allyn Home" when completed.

MARY E. ROCKWELL, *Ass't Sup't.*

BUTLER HOSPITAL, PROVIDENCE, R. I., Feb. 25, 1876.

WOVEN WIRE MATTRESS CO., HARTFORD, CONN.,

Gents: We already have a supply of the Woven Wire Mattresses, some of which having been in use for six years at least. In comfort, convenience, and durability, they far exceed my expectations, and I consider them unequalled by any other device for the purpose.

Yours very truly,

JOHN W. SAWYER, M. D.

INSANE ASYLUM OF NORTH CAROLINA, RALEIGH, N. C., March 27, 1876.

WOVEN WIRE MATTRESS CO.,

Gentlemen: The use of the bedstead recently received from the Woven Wire Mattress Co., convinces me of their superiority over any iron bedstead with which I am acquainted for hospital use.

Yours truly, EUGENE GRISSON, Sup't.

OFFICE OF THE SOUTH CAROLINA LUNATIC ASYLUM, J. F. ENSOR, M. D., *Sup't.* COLUMBIA, S. C., 7th April, 1876.

THE WOVEN WIRE MATTRESS CO., HARTFORD, CONN.,

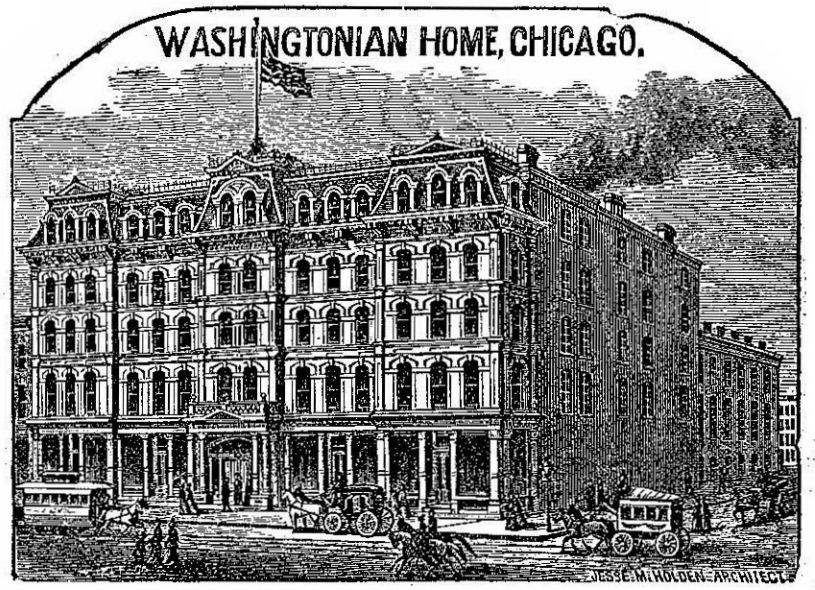
Gentlemen: Your iron bedstead for hospital use, with Woven Wire Mattresses, have now been in use in this institution for several months. From our experience with them I do not hesitate to say that for neatness, durability, and comfort, they are superior to any bedstead ever before presented to the public, for use in Hotels, Hospitals, and all other public institutions.

Yours respectfully,

J. F. ENSOR, M. D., *Sup't.*

WASHINGTONIAN HOME

OF CHICAGO.



AN ASYLUM FOR THE REFORMATION OF INEBRIATES,

(ESTABLISHED IN 1863.)

566, 568, 570, and 572 West Madison St. (Opp. Union Park),

CHICAGO, ILLINOIS.

The new building erected in 1875 has a frontage of 106 feet, with a rear or chapel building 45x70. The main building above the stores contains the Superintendent's apartments, office, parlors, dispensary, reading room and library, service room, gymnasium, printing office, 66 sleeping rooms, 45 being double, bath rooms, etc. The rear building contains the dining room, kitchen, laundry, a chapel seating 500, hospital, convalescent room, padded room, amusement room, etc., affording accommodations for over 100 inmates, and being in all respects as pleasant as any institution or asylum in the country.

The Institution is under the immediate oversight and control of the Executive Committee appointed by a Board of thirty Directors. The Superintendent and Matron reside in the Home and give their entire attention to the care and interests of the inmates, aided by the daily visits of the Attending Physician.

A monthly paper of eight pages is published by the Home about the middle of each month, devoted to the interest of the Institution and temperance generally. All communications and subscriptions for the paper should be addressed to THE WASHINGTONIAN, 566 West Madison street, Chicago, Ill.

Applications for admission, either personally or by letter, or any further information in regard to the Institution, should be made directly to the Superintendent of Washingtonian Home, 566, 568, 570, 572, West Madison street, Chicago, Ill.

N. S. DAVIS, M. D., President. H. C. MOREY, Secretary.
D. WILKINS, Superintendent. CHAS. W. EARLE, Physician.

WASHINGTONIAN HOME,

No. 41 Waltham Street,

BOSTON, MASS

This Institution is the first of its kind ever formed for the treatment and cure of Intemperance, and was instituted in 1857, and incorporated in 1859.

Up to January, 1876,

NEARLY 6,000 PATIENTS HAVE BEEN TREATED,

And while many have been entirely and permanently reformed, all have been more or less benefited and improved.

The elegant and commodious building recently erected at

No. 41 Waltham Street,

A few steps from Washington Street, embraces every modern improvement and will pleasantly accommodate from forty to fifty patients.

Any man who honestly desires to reform his intemperate habits will find at this establishment every aid and accessory that science, sympathy, and long experience can possibly bring to his relief; and while under treatment, which is simple and pleasant, will at the same time be surrounded with all the comforts of home, and strengthened by congenial associations and agreeable entertainment.

The charges for board, etc., will be moderate—not to exceed the price paid for similar accommodations in any private family. For further particulars, reports, circulars, methods of treatment, etc., address or apply to

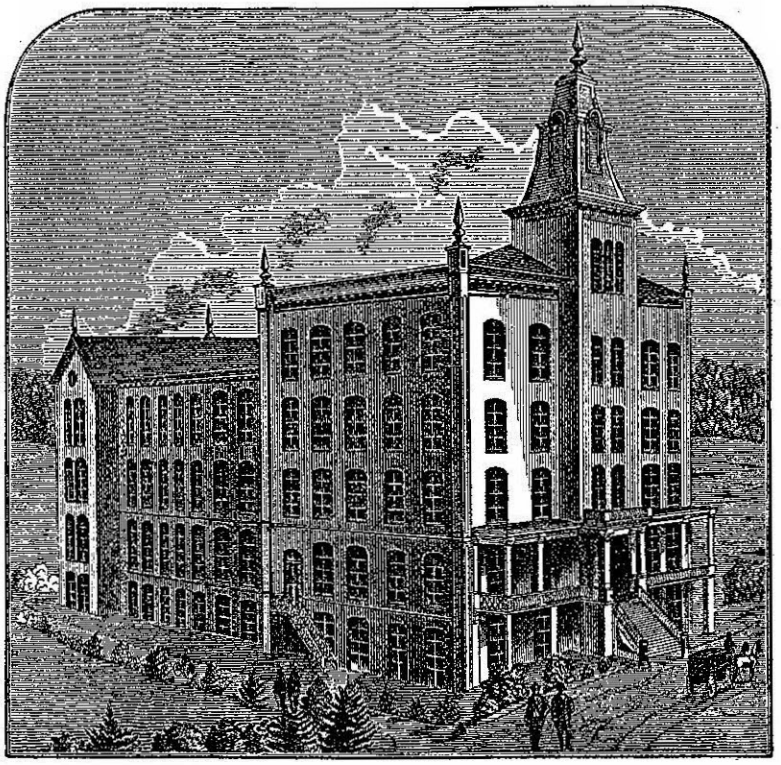
ALBERT DAY, M. D.,
SUPERINTENDENT AND PHYSICIAN.

P. S.—Public Temperance Meetings—always entertaining and instructive, inmates and graduates being usually the speakers—are held in the Chapel of the Home every Tuesday evening at 7.30 o'clock, and Sunday at 6 o'clock, P. M.

THE INEBRIATES' HOME,

Fort Hamilton, L. I., N. Y.

INCORPORATED 1866.



OFFICERS.

HON. JAMES S. T. STRANAHAN, PRESIDENT.
GEORGE G. HERMAN, ESQ., VICE-PRESIDENT.
THOMAS T. BUCKLEY, ESQ., TREASURER.
REV. J. WILLETT, SECRETARY AND SUPERINTENDENT.
THEODORE L. MASON, M. D., CONSULTING PHYSICIAN.
LEWIS D. MASON, M. D., ATTENDING PHYSICIAN.

THE INEBRIATES' HOME,

FORT HAMILTON, L. I., N. Y.,

Is the best constructed and the best furnished Institution for the care and treatment of Inebriates in existence.

The Buildings,

which are new, were erected for and are well adapted to the special purpose of the Home. They are situated on one of the most attractive points on the Bay of New York. They stand on a high bluff within one thousand feet of the Narrows, and the park grounds are extensive.

The Management

is systematic, thorough, and adequate. There has been no change of Superintendent or in the staff of medical or other active officers since the inauguration of the Home.

The Classification

is more perfect, and the beneficial results are fully equal to those of any other kindred institution.

Boarder Patients

are classified according to accommodations required, and the charges are proportionately adjusted. Their department is divided up into several floors, each containing such accommodations as the patients or their friends are willing to pay for. There are separate dining-rooms, lodging-rooms and parlors, billiard and bath rooms. There is also a lecture-room for religious services, readings, concerts, &c. Several daily journals and periodicals are regularly taken, a library is in process of accumulation, and all the appointments for the exercise and the amusement of patients, and which contribute greatly to their cure, are provided.

Female Patients.

For the treatment of the better class of FEMALE PATIENTS an entire floor is set apart, handsomely furnished, having separate approaches, effectually isolating the sexes, and under the charge of the Matron and Assistant Matron, together with a staff of efficient female nurses.

Remarkable Immunity from Death.

The total death-rate of all the patients who have entered the Home since the opening, upwards of nine years ago, has been one-half per cent., or one death for every two hundred patients, and the average time of residence in the institution has been upwards of six months. The total deaths of legitimate cases for treatment in the Home has been only one-eighth per cent., or one case in eight hundred, during the same period. The average annual death-rate in our large cities ranges from two to three per cent. of the population.

Patients are received either on their voluntary application, or by due process of law. The charter confers power to retain all patients entering the Home.

For mode and terms of admission, apply to Rev. J. WILLETT, the Superintendent, at the Institution, Fort Hamilton (L. I.), N. Y.