

ENTERED AS SECOND-CLASS MAIL MATTER IN THE HARTFORD POST-OFFICE.

# THE QUARTERLY JOURNAL

OF

# INEBRIETY.

PUBLISHED UNDER THE AUSPICES OF THE AMERICAN ASSOCIATION FOR THE STUDY AND CURE OF INEBRIATES.

T. D. CROTHERS, M.D., Editor,  
Hartford, Conn.

\$2.00 Per Year.

Vol. XIV.

OCTOBER, 1892.

No. 4.

HARTFORD, CONN.:  
THE CASE, LOCKWOOD & BRAINARD CO.,  
PRINTERS.

EUROPEAN AGENCY:  
BAILLIERE, TINDALL & COX,  
20 KING WILLIAM STREET, ON THE STRAND, LONDON, W. C.

# TABLE OF CONTENTS.

OCTOBER, 1892.

|   |     |
|---|-----|
| INEBRIETY IN ITS SEVERAL ASPECTS. DR. T. L. WRIGHT.....                   | 125 |
| DISCUSSION ON THE RESTORATIVE HOMES BILL, Concluded.....                  | 309 |
| SECOND ANNUAL MEETING OF THE AMERICAN MEDICAL TEMPERANCE ASSOCIATION..... | 310 |
| SECRET SPECIFICS FOR INEBRIETY. DR. NORMAN KERR.....                      | 322 |
| TREATMENT OF DELIRIUM TREMENS. DR. NORMAN KERR.....                       | 327 |
| ABSTRACTS AND REVIEWS:  |     |
| ALCOHOL IN SURGERY.....   |     |
| HEREDITARY MORPHINISM.....  |     |
| THE ALCOHOL STUDY IN CENTRAL EUROPE.....                                  |     |
| OUR COLONIAL DRINKS AND DRINKERS.....                                     |     |
| WORK AND REST.....  |     |
| HOW COCAINE PRODUCES DEATH.....   |     |
| THE OPIUM HABIT IN INDIA.....   |     |
| ALCOHOL.....  |     |
| SOME FACTS ABOUT OPIUM INEBRIETY.....                                     |     |
| EDITORIAL:  |     |
| INEBRIETY AND DELUSIONAL PARANOIA.....                                    |     |
| RETRO-ANTEROGRADE AMNESIA IN INEBRIETY.....                               |     |
| THE OLD CRITICISM.....  |     |
| LIABILITY OF PAUPER INEBRIATES FOR CARE, ETC.....                         |     |
| THE QUESTION OF RESPONSIBILITY IN MORPHINISM.....                         |     |
| CLINICAL NOTES AND COMMENTS.  |     |

## OXFORD RETREAT.

A PRIVATE INSTITUTION FOR THE

Treatment of Insanity, Nervous Disorders, Inebriety, and Opium Habit.

**F**ACILITIES and Advantages are Unsurpassed for the proper care and treatment of all forms of the above-named disorders. Attention is given to the proper classification of patients. Average, one attendant to every four patients. Careful supervision at all hours. Ever-ready convenience and accommodations that may be desired. Retired and homelike. Site elevated, beautiful, and salubrious. Thirty-nine miles from Cincinnati, eighty-four miles from Indianapolis. Eight trains daily. TERMS MODERATE.  
For References, Terms, Etc., Address G. F. COOK, M.D., Super.  
Oxford, Butler Co., Ohio.

## KENSETT ON THE SOUND.

AN ESTABLISHMENT FOR THE

Private Care and Treatment

of persons suffering from Mild Forms of Insanity, Nervous Diseases, and those Addicted to the use of Stimulants and Narcotics. Medical and personal attention, careful and constant. Greatest consistent freedom. Accommodations ample. Grounds shaded and secluded. Surroundings very healthful and attractive. Facilities for driving, bowling, bathing, fishing, and boating.

Address,

EDWIN EVERETT SMITH, Formerly Med. Dir. State Asy. Middletown, Ct.  
P. O. SOUTH WILTON, CONN.

## A CURE FOR INEBRIETY.

EFFERVESCING

# BROMO (W. R. Warner & Co.) POTASH.

R. Caffein, 1 grain; Brom., 20 grains  
in each teaspoonful.

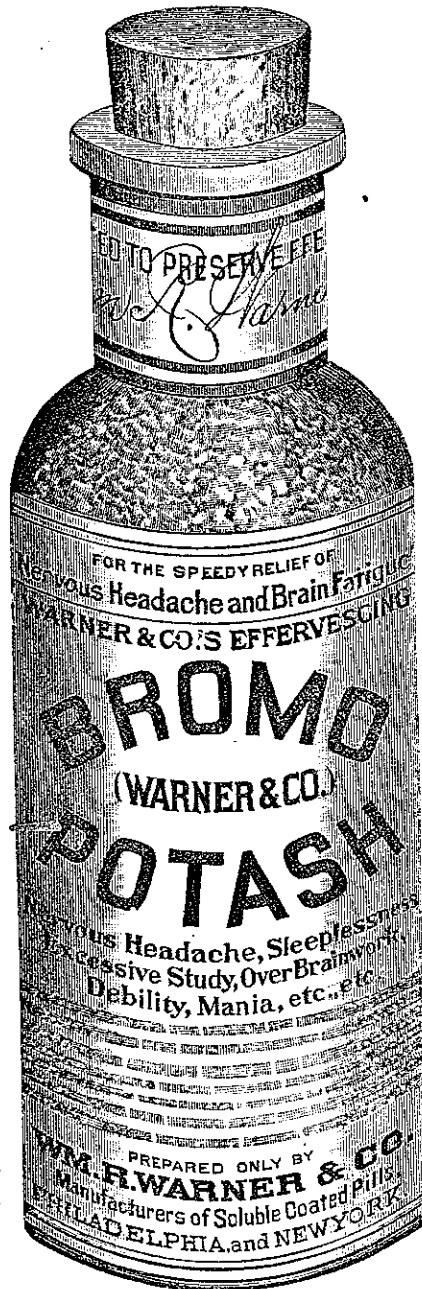
USEFUL IN

Nervous Headache, Sleeplessness,  
Excessive Study, Migraine,  
Nervous Debility, Mania,  
and as a remedy in Sea  
Sickness and Epilepsy.

DOSE.

A heaping teaspoonful in half  
a glass of water, to be repeated  
once after an interval of thirty  
minutes if necessary.

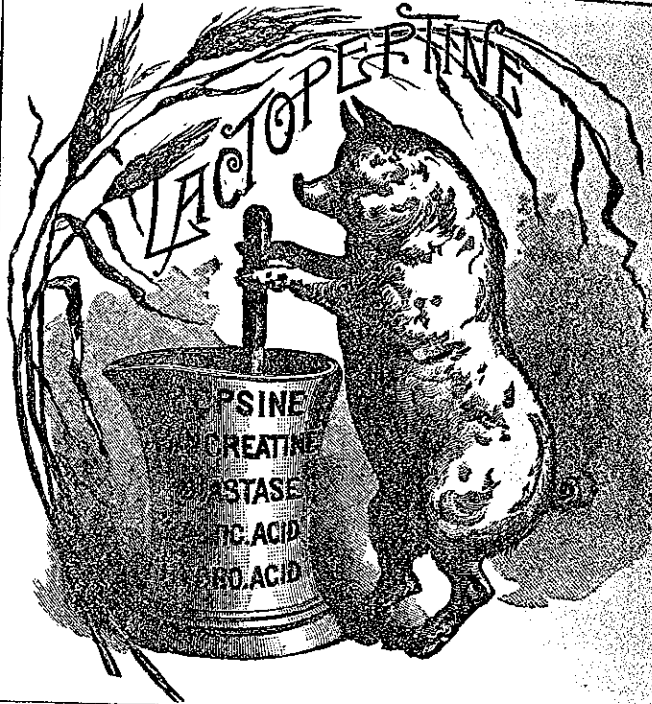
It is claimed by prominent  
specialists in nervous diseases,  
that the Bromide Sodium is  
more acceptable to the stomach  
than the Bromide Potassium.  
An almost certain relief is ob-  
tained by the administration of  
this Effervescing Salt. It is  
used with advantage in indig-  
estion, the Depression follow-  
ing alcoholic and other  
excesses, as well as Nervous  
Headaches. It affords speedy  
relief in Mental and Physical  
Exhaustion.



PREPARATIONS SUPPLIED BY ALL LEADING DRUGGISTS.

**LACTOPEPTINE** is a skillfully prepared combination of Meat-converting, Fat-converting and Starch-converting Materials, acidified with the small proportion of Acids always present in the healthy stomach. It is a most valuable digesting agent, and **SUPERIOR TO PEPSIN ALONE.**—Prof. ATTFIELD, Ph. D., F.R.S., &c., Prof. of Practical Chemistry to Pharmaceutical Society of Great Britain.

The most eminent and successful Practitioners consider LACTOPEPTINE the Standard remedy in the treatment



of all these elements, in order to obtain the most perfect results.

## LACTOPEPTINE.

The most important Remedial Agent ever presented to the Profession for  
 DYSPEPSIA, VOMITING IN PREGNANCY,  
 CHOLERA INFANTUM,  
 CONSTIPATION, and all diseases arising from imperfect nutrition.

### LACTOPEPTINE IN CHOLERA INFANTUM.

We desire to direct special attention to the great value of LACTOPEPTINE in Cholera Infantum, and other intestinal troubles incident to the heated term.

Send address for our Medical Almanac, containing valuable information.

**THE NEW YORK PHARMACAL ASSOCIATION,**  
 P. O. Box 1574. NEW YORK.

THE  
QUARTERLY JOURNAL OF INEBRIETY.

Subscription, \$2.00 per year.

Vol. XIV.

OCTOBER, 1892.

No. 4.

This Journal will not be responsible for the opinions of contributors, unless indorsed by the Association.

INEBRIETY IN ITS SEVERAL ASPECTS.

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

In speaking of certain forms in which inebriety often appears, I will discuss in this place some characteristics of  
DIPSOMANIA — OR DRINK MADNESS.

"The alcoholic excitement with which an attack of dipsomania terminates when it is repeated with sufficient frequency to cause toxic symptoms, due to the cumulative action of alcohol, this excitement, I say, should not be confounded with dipsomania itself, as it is a complication only, not a symptom of it. Trélat lays great stress upon the distinction between these two conditions. Drunkards are a class of people, he says, who become intoxicated whenever the opportunity offers. Dipsomaniacs are patients who do so whenever their attack comes on."\* As suggesting the idea of insanity in relation to dipsomania, these utterances are probably too sweeping. The disease, dipsomania, like others, exists in various degrees of completeness, the great

\* Clinical lectures on Dipsomania, by M. Le Dr. M. V. Magnan — tr. by Stedman.

majority of dipsomaniacs being in several ways more or less amenable to intellectual or moral authority. But there is a large number of complete and typical cases of dipsomania which come under the *dicta* quoted above, and being typical, they are proper cases for investigation with respect to the essential nature and tendencies of dipsomania in its condition of perfect and completed development. To such cases of dipsomania I will direct attention; for, to rightly comprehend things *partial*, either as to scientific principle or material form, it is necessary to be first acquainted with some of the laws and qualities of the ideal, the absolute. With this salvo, I will proceed to discuss briefly the essential principles of that form of inebriety known as dipsomania.

But I will say first, that it needed not the declarations of Magnan and Trélat to suggest the close relationship of dipsomania with true insanity. Long ago the association was declared and described, and the difficulties respecting the question of responsibility, as to the lighter forms of dipsomania compared with its more serious aspects, remain unsolved and unchanged.

The nature of dipsomania as an insane neurosis is recognized by alienists in general. "The same form [of insane demonstration] may frequently be seen in successive generations as suicidal mania and *hereditary drunkenness*," says Blandford. Testimony to the same effect is given by Tuke, Winslow, Wynter, Maudsley, and many others. "Not one of the transmitted wrongs," says Dr. B. W. Richardson, "is more certainly passed on to those yet unborn, than the wrongs which are inflicted by alcohol."

Dipsomania is a disease of the mind, showing intermittent periods of latency and activity — the patient, as a rule, resuming, in the intervals of his attacks, his normal sobriety, regretting his excesses, and filled with good resolutions and excellent intentions. During the reign of the dipsomaniacal access, however, the insane desire is to achieve intoxication. Nothing can overcome or dissuade. "Theft, prostitution even, will not stand in the way of one in the insane pursuit

of drink. It is in cases such as this that the father takes the last piece of property to the dramshop, or else it is the mother who, forgetful of her honor, throws aside all shame and makes a harlot of herself for a few glasses of brandy."

It is customary to impute guilt to any one who voluntarily gives the rein to his passions and appetites, knowing the recompense to be the loss of honor and the neglect of duty. But in the case of the dipsomaniac, it may be presumed, that as long as the disease is in the ascendant, the moral sensibilities are obscured or dormant; and in that condition the proclivity for drink will be unchecked, either by the operations of reason or by scruples of conscience. If dipsomania is true insanity, it must as such be expected to display insane motives. These of course interfere in a very radical manner with rational volition. In truth, they usurp the throne and functions of reason. The thorough dipsomaniac does not "voluntarily" give way to the gratification of his passions and appetites. He is overtaken with a morbid impulse of such intensity and force, that it is impossible to array against it the subdued mental capacities that characterize the predominancy of the insane state. Dipsomania must be viewed as a constitutional malady. It may be hereditary or it may be acquired. The latter contingency is an exhibition of the influence of physical injuries, or of chronic diseases when reflected upon the brain. Dipsomania is, therefore, a disease very difficult to cure; yet it is amenable to the biological evolutions of the living body; and it may, not infrequently, become totally eliminated from the constitution, and the patient spontaneously recovers.

While the greater number of men possess an even and controllable sensibility of nerve adapted to the conditions of a uniform and subordinate life, there are many who are ruled by a nervous system so morbidly acute and irritable, that they are ever upon the rack of uncertainty and discontent. Whoever is affected with an unusual quickness of nervous perception is very apt to be in trouble. The reason is, that the cause of the discomfort is not from without. It cannot

be recognized and guarded against. It comes from within. Nervous persons are always imagining slights and indignities. The man of morbid sensitiveness lives in the midst of woes that have no actual existence, and he wearies himself with perpetual preparations for averting calamities that never can take place. As one phantom of evil comes up and passes by, another is looming into view and distressing the imagination.

The length of the intervals between the attacks of dipsomania vary in different persons, and even in the same person. It may be a few days, or weeks, or even months. The tendency is, however, for the attacks to come on more and more frequently. The disease feeds upon itself; and as drinking weakens and distresses the nervous system, the call for alcohol becomes more urgent and with less intervals of time between them.

The dipsomaniacal onset is not without premonitory symptoms. The patient becomes melancholy, depressed, silent, isolated. Uneasiness and fretfulness appear. "He has no friends," and he sinks deeper and deeper into despondency. His appetite fails, while morbid sensations oppress and disturb the physical organism—the whole being finally merged and swallowed up in an insatiable craving for alcoholic drinks. Sometimes by chance, and again, perhaps, with a purpose, the alcoholic cup finds its way to the lips of the man of unstable and quivering nerve. Instantly the galling invitations of the system are allayed. Forebodings cease to disquiet, and a delightful feeling of repose and self-reliance tranquilizes the body and comforts the mind. Pleasing thoughts, grand ideas, glowing fancies, fantastic imaginings, witty, absurd, grotesque, brilliant, pass through the mind in endless profusion. It is not strange, when alcohol produces such effects as these upon a mind naturally given to trouble and unrest, that a resort should be had to its alluring though deceptive influences. The motives of the spasmodic drinker in taking alcohol are never the subjects of calm deliberation, and of choice wholly free. The violence



of dipsomania no doubt varies in degree at different times and in different individuals, and it may not always be insuperable, yet it is never easily overcome, never readily submissive to the guidance of the judgment. But the impulse of dipsomania for drink is stronger in some cases than in others, and it may be inferred that a point of insanity may easily be reached where the maniacal desire for intoxication is beyond rational control.

There is this peculiarity about the drinking of the impulsive inebriate — that his potations are only limited by the bounds of physical endurance. It is not so much an appetite for alcohol as it is an indication of a great and consuming nerve distress importunate for relief.

The dipsomaniac is infatuated with the agreeable experiences of recent intoxication, and in his wild efforts to obtain the full fruition of the alcoholic influence, he becomes speedily and profoundly inebriated. He drinks himself into insensibility before he is aware, only to awaken and again drink himself into insensibility; and this proceeding he repeats for days together, and until the utter disorganization of the powers of his stomach compels him to desist. It is needless to say that both the immediate and remote effects of alcohol fail not to declare themselves in the dipsomaniac with peculiar distinctness. We have the alcoholic poison joined with other poisons — urea and carbonic acid. And we have, too, in due course of time, the deleterious influences of alcohol upon a system blasted and degenerated, with nerves, and glands, and brain structurally ruined and useless, in every truly physiological sense.

It has been said that the impulse to drink is more violent in some persons than in others. The strength of the impulse may be measured by the facts in hand, but particularly by the history of the patient; as, for instance, whether ancestors were truly insane. This will also give a notion of the *resisting capacity*, a very important matter in the inquiry. The longer and fiercer the drinking habit, the more difficult will it be to control the morbid propensity. For a prolonged

suppression of function will render that function slow and dull, even after the cause of its latency has been removed. An *habitual paralysis* of the whole nervous system will eventuate in dullness and incompetency in all the faculties of manhood, physical, mental, moral. And this may occur independently of complications and degenerations.

On the other hand, physical defects beget imperfection of function. In the infinite variety of human constitutions, there must appear many instances where individuals are born with powers much below the average. Congenital imperfection may show itself in physical malformations, and also in undesirable moral or mental susceptibilities. It is, perhaps, needless to repeat that serious imperfections of structure are necessarily attended with disordered function. This rule is applicable to the finer and sensitive structures of the nerve centers, equally with the deficiencies of the grosser bodily organs.

The dipsomaniac may be, not unlikely, a man of genius. There may be in him special developments compensating special deficiencies. There is always in nature, strenuous effort toward preserving, in a manner direct or indirect, the equilibrium of her forces. The main features of humanity are the same, they are unvarying. But the acquired *peculiarities* of families, and especially of individuals, are the reflections of the *possibilities* of human life. They measure the reserved defects and capabilities of man's nature as they are susceptible of development by personal contact with the ever-changing situations, and the endless accidents of time. The potentialities of humanity exhibited in the beauty of one, the eloquence of another, the artistic genius of a third, the fortitude, patience, and unselfishness of others, illustrate and also demonstrate the existence in the human race of qualities far greater and more glorious than the highest achievements of minds merely symmetrical can possibly evince.

Race propagation is simply the handing down the salient features of one generation to another. There is no necessary progression, deterioration, or change. But heredity in its finer sense is particularly regardful and precise in trans-

mitting family and personal traits derived from the innumerable habits, associations, injuries, diseases, and adventures, good, bad, and indifferent, which have been connected with vivid and prolonged individual experiences.

When the dipsomaniacal diathesis is not of extreme force, there is no doubt that by a special effort of the will, the patient may be enabled to abstain from alcoholic drinks. Unfortunately an idea prevails to some extent, that a light indulgence in alcohol will fulfill the demands of the milder forms of dipsomania, that, in fact, the crave for alcohol is in accordance with the demands of nature; and hence, that a moderate indulgence in spirits is useful to the organism. But it is known that alcohol will surely benumb the sensibilities, and paralyze all the functions of mind and body. The first drink will, therefore, cast a haze of obscurity over the moral and intellectual field of vision. The effect is, that the mind of the dipsomaniac, wavering in its determination as to drink, becomes blunted in its powers of discrimination. Its qualms and irresolution disappear. After the drink is taken, all scruples vanish. The mind is not the same. Hence the saying: "*Qui, ebrium ludificat, lædit absentem.*" "He who jests upon the man that is drunk, injures the absent."\* The spell of dipsomaniacal intoxication proceeds without limit and without mental or moral protest. It would seem, therefore, that in dipsomania, when it is of moderate intensity, the patient may abstain altogether from alcoholic beverages, but he cannot partially abstain, he cannot drink in moderation. There is for such persons no middle ground, no compromise; the outcome is victory complete, resplendent, or it is total defeat.

There may sometimes be, nevertheless, a certain intensity in dipsomania which places that disease in a position of supremacy over all. In such cases the rule is different, for in them drunkenness ceases to be the result of premeditation and choice. It is simply an incident in a chain of causes, originating in hopeless and invincible disease, for the existence of which the inebriate is in no wise responsible.

\* Addison — Spectator, No. 569.  
VOL. XIV.—47

DISCUSSION ON THE RESTORATIVE HOMES  
BILL IN THE MEDICO-CHIRURGICAL SO-  
CIETY OF EDINBURGH.

---

[*Concluded.*]

Dr. Clouston said he would confine his remarks to the general question. In any action they might take they would be wise in the first place to limit such action to that form of drunkenness which they could scientifically reckon to be disease. He thought the more quietly and the more gently they insinuated the thin edge of the wedge in this matter through the House of Commons, the better. In the long run they would reap the greater benefit. He scarcely believed that the definition which had been given in the bill was a right definition of even diseased drunkenness. He would say it would be wiser to accept a general term, such as habitual drunkard.

It would be a simple matter to answer, "How was drunkenness related to disease?" but more difficult to reply to the question, "How could they make it out to be a disease?" He thought the very latest investigations into the functions of the brain proved the relation, and the latest facts in regard to the disorder of the higher brain functions all tended toward the idea that the practice of alcoholic drinking in certain cases is a disease.

In the first place it was strictly analogous to other insanities. They had no difficulty when a man was intellectually so far different from his fellows that he believed things that no other man believed, in saying that that man was diseased. If he entertained delusions of suspicions in regard to actual matters, believed matters of fact to be not fact, they had no difficulty in saying that that man labored under a disease. That man might be in his affections and in his will in a wonderfully sound condition, and even in his conduct he might not be far wrong, still they called it disease. And in the

same way, if a man changed in his affective nature, or if a mother totally changed her affections, they had no difficulty in saying that it was disease.

If a man changed in regard to his still higher functions of inhibition or volition they had no difficulty in saying that he was an insane man. When a man was so diseased in his impulses or in his will or inhibition that he had irresistible impulses towards suicide, no medical man hesitated to say that such a man was diseased.

If a man in certain other circumstances had changed in his higher inhibition, say, when he has an irresistible craving for alcohol or morphia or cocaine or chloral, why should that man be regarded as not insane?

Why should such a man — especially if corroborated by other circumstances — *e. g.*, if you find him belonging to an insane family — if you find a man taking this craving at certain times, and being under its influence at certain times and free from it at other times — not be regarded as diseased?

From the time he had the craving he exhibited one of the symptoms of the higher brain diseases in the shape of sleeplessness. He thought the more they knew of the brain the more certainly they were led to the disease theory on purely scientific grounds.

It would be said by some that the disease was brought on by the patient's conduct. This was unquestionably true; but he asked the members of the society, as medical men, if it was not the case that a great many diseases are not brought about by evil conduct, and which the sufferers could have helped if they had liked?

Did they hesitate in classing epilepsy as a disease because the man originally indulged in such conduct as brought on this complaint?

Dipsomania might be regarded as disease, even though the man himself had caused it. He took it that they should legislate on the assumption that they had a disease to do with. It might or it might not be the case that disease was present in any given drunkard.

In regard to the causes of dipsomania, they knew that many cases resulted from the action of causes that caused ordinary nervous diseases, from blows on the head, from loss of blood in many cases, from exciting labor, from living under bad hygienic conditions. All these were causes of ordinary disease. Hereditary drunkenness was closely allied to nervous disease. It was mixed up in many ways with real insanity. They ought to legislate for such people. Dr. Batty Tuke had said that ordinary public asylums were the proper places for them. He regretted that in this he differed from him. It had been his experience (and he was surprised it had not been Dr. Tuke's) that persons laboring under this disease did not do to mix with ordinary insane people comfortably and for the good of both; and there was another reason which had been alluded to, that they could not detain them long enough to do any real good. In the case of ordinary mania, they could only detain him just sufficiently long to see that his convalescence was secured. They could not detain such a case a year or two after the symptoms had disappeared. This was a test by which the dipsomaniac was to be distinguished in regard to his treatment, and this was one reason in addition to that mentioned by Dr. Yellowlees, why they should not be sent to the public asylums. So strongly did he feel on this point that he never took in a dipsomaniac into the asylum if he could help it. He refused all such cases because he knew he could not do the man the good that was necessary, and therefore, he thought there was no good in taking him into the institution. He thought it was now time something should be done in this matter. It had been long evident to all the profession that something ought to be done. In regard to the question of cure, he did not think they were in a position to express dogmatic opinions. They had never had the opportunity of putting a man under the proper conditions. He thought they must face, not only the case of the confirmed drunkard, but they must ask for power to take charge of the drunkard in the early stage of his disease, and at that stage place him

under proper treatment, a more difficult matter from the legal point of view.

If this bill had been only to affect the confirmed case, he would have taken little interest in it. Such confirmed cases were nuisances to society and their friends. Perhaps they did not deserve a great deal of money spent on them. But what of the relatives of dipsomaniacs and society generally? Had they no claims? Surely they had. Should a woman, because she had had the misfortune to marry a dipsomaniac, neither have the power to try and cure him, nor to leave him? Many of the medical profession believed that the disease could be cured in the earlier stages. Was there any other disease whose proper treatment was put off until it was confirmed? There were, no doubt, many objections to be faced, such as that of the liberty of the subject. He thought, however, they were entering on a time when the liberty of the subject would be less thought of than it had been in past times, because there was no real risk to it now. That was a lesson they were learning from the American Legislature. They took care that the liberty of the subject did not interfere with the working of the body politic. In this country they would come to that. If the dipsomaniac interfered with society, he and his liberty would have to go to the wall.

In regard to whether they could distinguish between vice and disease, he was quite ready to admit that it was an exceedingly difficult distinction in many individual cases. They must also face the difficulty mentioned by Dr. Littlejohn—What was to become of the poor diseased drunkard? The only way he could think of at the present time was to call on the public to subscribe money to provide these homes for the poor. The rich could help themselves. They could provide homes for themselves. He did not see why, as the legislature taxed us for reformatories, they should not give the diseased drunkard, in the early stage of his career, a chance. Of course, they did not like to be taxed any more; but the inmates of the homes could help by working for their livelihood, and in that matter of work he most strongly

and earnestly confirmed what Dr. Littlejohn had said: They would never cure a drunkard unless they provided him with employment and he wished to be cured himself. He thought the best suggestion he could give at present was, that they should try and get the drunkard, at the early stage, away to some Highland home, where he could get some real hard work to do, and where he would live in a high moral atmosphere. He said the atmosphere in which a dipsomaniac lived was most important, and for this reason these restorative homes should not be too large, they should not put too many of these people together, for they corrupted each other. They must restrict the size of them to do good. To put anything like 200 together would be outrageous. They would have to restrict them so that the domestic character would have to be preserved, and the feeling of control and direction on the part of the head would have to be preserved in regard to each individual. He had only now to make two suggestions in conclusion: First, that this society petition generally in favor of new legislation for the habitual drunkard. He had one more suggestion to add, to which he attached the greatest importance, viz.: that a clause should be added to the bill making provision for the compulsory detention of diseased drunkards in ordinary houses with suitable guardians, in suitable parts of the country, under proper guarantees and under proper inspection. When they sent these diseased drunkards away to ordinary homes, they should be under proper superintendence, and the guardians should have a certain authority over the patients. There might be a difficulty in getting proper homes built. There was no difficulty in getting a Highland farmer or clergyman for £50 or £100 a year to look after a man.

Dr. Connell said he had come simply to give his experience. He had been medical officer for twelve years to one of these restorative homes, viz.: the Brownsland Home; during that time he had managed to form some opinions and collect some facts. He had heard some remarks and opinions which were wide of the mark. He thought it right to



give them a few grains of fact. In the first place, he might mention that the home he spoke of was not for the upper class. He had a copy of the rules and the last report in his hand, and the first sentence was, that this institution is intended for women who have fallen, etc. The expense of staying there was not large. They paid only 8s. per week. He did not say that paid the expenses. The difference was contributed by a number of philanthropic ladies and gentlemen in Edinburgh and elsewhere. 122 people had been treated in the home within the last twelve years. They had resided in the home for various periods. Some had resided a short period, and others a much longer—from two months to three and a half years. They had a lady still who has been there three and a half years, and who was most anxious to continue at the home because she did not wish to go back to the temptation. Of these 122, 44 were reported as having done well. Some had broken down; one had been very hopeful. One of the women treated was the wife of a Liverpool captain, and she resided for fifteen months in the home. She had then gone back to her husband, and had been a good wife for the last five years. These were facts which spoke for themselves. He thought there had been a great deal too much pessimistic criticism, especially that indulged in by Dr. Tuke. Some one had remarked that Dr. Tuke's objection to the bill seemed to be, that they could not get everything by it, but still surely they would get something. He thought it warrantable to go in for such a proposal as was made in the bill. He thought it right to say, concerning the cases in the home he referred to, that they had never had one single case of acute illness, and some of the women had been exceedingly bad drinkers. They had spent the exceedingly cold winter of 1879-80, in which year the temperature at Peebles was on two occasions 14° below zero; and the years 1881-82-83 were exceedingly cold, and for eighteen weeks that year they never saw mother earth, and yet they lived without stimulants. He had only refused one case. She came to the home in the winter, and he could

not take the responsibility of treating her through a cold winter without some stimulant; and as the committee did not allow that, she was sent home. He had never heard anything further of her since. In the home they had women varying from nineteen to sixty-nine years of age, and they were chiefly of the poorer classes. One woman was the widow of a doctor in the Indian army. One was the sister of a doctor who supported her; and with the exception of one or two others, they were the wives of working-men. It was not, he thought, the case, that they would have difficulties in legislating for the poorer classes. All the matron and the master of the home felt they required, was the right to keep these people there. The house where they were kept was as private as possible. It was  $3\frac{1}{2}$  miles from a railway station, 7 miles from a town, and lay between two valleys, and high hills on all sides; the road leading to it had a long slope, so that no one could escape without having two or three pairs of eyes fixed on them, and thus being detected. There had been escapes. Two or three women had escaped, but only to wander for a while on the hills and return to the home.

A single case of suicide had occurred, which he did not attribute to the want of drink. She had shown signs of it before. It was a case which would not have been received if it had been known. One of the conditions was, that mental alienation should not have been shown. It was a fact that these people in the home had done well without alcohol. It was not the case that they would contract disease. Of course, if there were cases where alcohol was necessary, there would be no difficulty as to arranging. He had one thing to say about habitual drunkards, and he would say it in plain English. It was, that when a man or a woman reduced him or herself to the level of a beast, then he or she deserved to get the treatment of a beast. Though he said this in such rough, harsh language, he did not mean to be unkind. None of them would be unkind to their beasts. He meant that when these people did as he had said, they should be reduced for a time below the level of manhood.

That was a proposition which none of them would refuse. There was another proposition which he could not help formulating. It was, that it was not only lengthened residence in these homes that would do good. He would have been surprised if Dr. Littlejohn had known of any cases of cure. A psychological reason for a year being the minimum length of time, was, that in the diseased condition of some of these people, the coming through a certain number of months would act as a support, and if they have kept it through the various seasons, they then propose they might venture back into the temptation. That was only his own opinion. Another thing he desired: he was a pessimist in the matter of curing the patient by merely length of time. How many even after this period should be trusted again to give entire satisfaction? These institutions must be conducted, as this home was, upon Christian principles. He thought Dr. Littlejohn's proposal as to work being compulsory was a good one. The only thing that would raise them was to instill into them Christian principles by a sound moral training, and even then he would say that the church could never quite trust them again to themselves. They would require to be kept out of temptation. They required to put a fear and dread of it into them, such as they would have at poison. He thought doctors could do a deal to effect a cure. They should never carelessly prescribe stimulants to anyone. He knew the case of a young man. He had kept away from it for eight months, and then he took the advice of a doctor. The doctor prescribed stimulants, and he has lost hope of him since then. The only hope he had was, if the people kept rid of it entirely. He looked forward to the passing of such a bill as this, and hoped it would pass. It would do an immense amount of good. He had a firm conviction that if they were to keep them in these homes, they must make them work, and another thing was, that you must not make the homes too large. Theirs was not too large. It had eleven rooms, and there were twelve women there at a time. They did needlework and all kinds of sewing, and garden

work when possible ; and during those twelve years he had been connected with the home, he could look back on all the people who had been in the home, and say there was scarcely one that had not been improved by their stay there.

Dr. Strachan said they were all agreed as to the great necessity of doing something in the case of habitual drunkards. They were the pests of society, and should be shut up. He thought legislation would be well applied if they could carry out the suggestion of Dr. Littlejohn. He was doubtful as to the cure which could be got by such lengthened incarcerations. After any one had been in these restorative homes and gone out, it was absolutely necessary that they, for the rest of their lives, should be total abstainers. They could not venture at any future time to taste of alcoholic drink. That was his experience. He had known men for years total abstainers, and who began to feel themselves strong, and returned to the temptations and began to take a little, and as sure as they did so they fell back to their old ways. He considered that this principle of total abstinence could be put in practice without that long incarceration. He was not a teetotaler himself, and he did not advocate teetotalism for every person ; but he certainly did advocate it for habitual drunkards. It was their only safety and cure. He thought some good might be done by their going into this incarceration at the earlier stages.

He would mention a lady patient of his who was as bad as most cases. One fact he would mention : The water-closet in the house had got stopped up. They could not understand the reason, and sent for the plumbers to examine it, and it was found stopped full of eau de Cologne bottles, the contents of which she had been drinking. He thought she must be considered to have been a pretty bad case. The lady consulted him, and he put it before her that her only chance of getting over it was total abstinence, and he strongly advised her to become a teetotaler. She took his advice, and has kept to it for over twelve years.

He would press strongly upon all medical men that that

was a very important matter. These people required to be protected from their friends. It was through the inducements of society to take a little for their stomach's sake that brought back the craving again. He would strongly urge upon medical men to get their patients to become total abstainers, and to take an active part in the movement. He thought that could be done quite as well without legislative incarceration. There were a proportion of people who were liable to this disease, and the ordinary customs of society led them into it. It was not the lighter drinks which produced the disease and did the harm. It was the strong drinks, such as whisky and brandy and gin. These were the drinks which produced the craving. They excited the nervous system for a time, with consequent reaction, for which the people craved relief.

He would look upon it not as an indulgence, but as a craving for relief from a great suffering. He would suggest whether it would not be possible for this Society to try and get these strong drinks classed as poison and sold like laudanum. If laudanum were sold as the strong drinks were, they should then have the opium habit as productive of evil as the alcoholic habit was now. If they were to restrict the sale he believed they should do away with this disease of habitual drinking.

That was the direction in which he should like to see legislation taken, and he was glad of the opportunity which had been afforded him to put this before the Society. It appeared to him that the advocates of abstinence went too far. Comparatively little opposition would be had to this restricted legislation in the matter of drinking.

Dr. Andrew Smart said he would only add a few words in explanation of his experience of the treatment of alcoholic cases as carried on in the ward under his charge in the Royal Infirmary. During the three years he had been in charge of Ward VI—a ward for the reception of acute and chronic nervous diseases—there had been 1,770 cases under treatment, 1,262 of these being alcoholic. That gives an average

of 420 cases of that description admitted to, and in some way disposed of, every year. Of the 1,262 alcoholic cases referred to, it was found necessary to send 115 to asylums for the insane, 63 of these being males and 52 females. That shows an average of about 40 persons annually certified as insane and passed on from Ward VI to asylums, the cause of the insanity in nearly all these cases being admittedly due to the drinking habit. Looking closer at these figures he found that in his experience of each of these 115 cases he had not been able to procure certification in lunacy by the medical men sent to the ward for that purpose until the patients had reached that stage of the disease in which the pathological conditions referred to by Dr. Clouston were unmistakable.

Medical men, looking to the present state of the law and having a reasonable regard to their own safety and protection, declined to certify insanity at an earlier stage in the absence of these pronounced conditions. It is painfully interesting to notice that the average age of those 115 drinkers sent to asylums is under 37 years, and the time taken to acquire the necessary pathological qualifications for being certified as fit for the madhouse varied between ten and fifteen years, this difference no doubt depending upon the constitutional susceptibility in each individual to the toxic action of alcohol in bringing about the necessary degree of brain destruction. No doubt the kind and amount of drink also bore some relation to the period of morbid development. It will be apparent from these considerations that before the habitual drunkard can be finally disposed of by transference to an asylum, a period of ten to fifteen years active drinking will have to be undergone in order to bring the drinker within the scope of the law as it now stands.

It is during this protracted period of inveterate drinking, when nothing by means of restraint can be done, that the domestic and social inconvenience and mischief are most oppressively felt. It may assist one to more adequately realize the magnitude and urgency of the matter under con-

sideration to know that in so limited an area as Ward VI there are annually under treatment considerably over 400 of the class of patients described, a number equal to two-thirds of all the patients in the Royal Infirmary on any given day of the year, and that nearly one in every ten of these will be sent to asylums as incurably insane. These facts will doubtless impress you, as they have me, with the need which exists of obtaining legal control over these infatuated persons at a much earlier period to be of any real service to them or to others interested in them. The insane qualification arrives too late. It is enormously destructive and fatal. It will doubtless also be evident that any shred of legislation intended for the benefit of a section of the community will be inadequate to meet the necessities of the situation. To do that any suitable measures, in order to meet with public approval, ought to possess the recommendation of being adapted to meet the case of any individual in the community who may stand in need of the benefit of its application. In order to obtain the required legislation our present notions as to the freedom of the subject may have to undergo some modification.

Professor Simpson submitted to the meeting the following resolution:

That the Society memorialize the Secretary of State for Scotland and the Lord Advocate, praying the Government to initiate legislation for Scotland, in the ensuing session of Parliament, on the lines indicated in Mr. Charles Morton's Draft Restorative Homes Bill, or in other ways that may seem to them in their wisdom to be more desirable, to provide compulsory powers of control and detention of habitual drunkards in properly regulated houses.

---

THE consumption of beer in Germany has increased 17 per cent. from 1886 to 1892, while the population has increased only 4 per cent.

THE SECOND ANNUAL MEETING OF THE  
AMERICAN MEDICAL TEMPERANCE ASSO-  
CIATION.

---

This meeting was held in the Hall of the Young Men's Christian Association at Detroit, June 9, 1892. Dr. N. S. Davis of Chicago, Ill., the president, called the meeting to order, and delivered the following address:

ANNUAL ADDRESS BEFORE THE AMERICAN MEDICAL TEMPERANCE ASSOCIATION ON THE OBJECTS OF THE ASSOCIATION AND THE CHEMICAL ACTION OF ALCOHOL, ETC. BY N. S. DAVIS, M.D., LL.D., OF CHICAGO.

---

We are assembled to note the first anniversary of this Association, which was organized in Washington, D. C., May, 1891. The objects had in view by those who participated in its organization as declared on that occasion were, "to advance the practice of Total Abstinence in and through the medical profession, and to promote investigation as to the action of alcohol in health and disease; and to form a bond of union among medical abstainers all over our country." That those three objects are of sufficient importance to challenge the attention of every well-informed and unbiased member of the profession, must be admitted by all. Especially is this true, if we consider the fact that more than \$800,000,000 are annually paid for alcoholic drinks, fermented and distilled, by the people of this country; over \$700,000,000 by the people of Great Britain; and nearly in the same ratio by all the nations occupying the Continent of Europe; and all this without returning so much as a single cent to the consumers who pay the money, or a pound of bread for their families. If we also consider the fact that all our highest judicial authorities and social economists attribute much



more than half of all the pauperism and crime, in the same countries, to the use of those drinks, while the highest authorities in our own profession freely admit that a large percentage of the sickness and mortality is traceable to the same source, we will be compelled to admit that there is no other topic more imperiously demanding the candid, persistent and thorough investigation by every practitioner of the healing art, than that which relates to the real influence of alcohol directly upon the living human system and indirectly upon the collateral interests of the race.

To make such investigation accurately and reliable, the investigator must himself be free from the deceptive and perverting influence of the alcohol upon his own brain and blood. In the language of our Code of Ethics: "It is incumbent upon the faculty to be temperate in all things, for the practice of physic requires the unremitting exercise of a clear and vigorous understanding; and in emergencies, for which no professional man should be unprepared, a steady hand, an acute eye, and an unclouded head may be essential to the well-being, and even life of a fellow creature." Hence, our by-laws require the practice of total abstinence from alcoholic drinks by the members of this Association, although they place no restrictions upon the conscientious use of alcohol in the treatment of disease. To determine more accurately the origin, nature, physiological effects, and therapeutic uses of alcohol, and to diffuse a knowledge of the same, both in and out of the profession, is the paramount object of our organization. As an association we have nothing to do with the political parties and questions of the day, whether of prohibition, high license, low license, protection, free trade, or reciprocity. Our work is one of strict scientific inquiry and investigation. Professor Schmoller, the economist of Germany, says: "Among our working people the conditions of domestic life, of education, of prosperity, of progress, or of degradation, are all dependent on the proportion of income which flows down the father's throat. The whole condition of our lower and middle classes, one may

even without exaggeration say the future of the nation, depends on this question." As the same may be said with equal truth concerning our own people, it certainly becomes us, as the professional guardians of the public health, to ascertain more certainly the nature and effects of those drinks that "flow down the father's throat," and which carry with them the income, on which depends the domestic happiness, the education, the prosperity and much of the health of the whole community. It is hardly necessary to say that the one essential ingredient in all the "drinks" here spoken of, whether fermented or distilled, is alcohol. It is not found as a proximate element in living organized bodies, either vegetable or animal, but is exclusively the product of bacteriological action on glucose or saccharine matter, constituting the process known as vinous fermentation. In other words, the alcohol is an effete toxic product resulting from the action of the micro-organism known as the *torula cerevisiæ*, of Turpin, on sugar or glucose, and is composed of  $C_2H_6O$ . It is therefore chemically a pure carbo-hydrate, and early in the progress of analytic and organic chemistry, it was unfortunately classed by Baron Liebig with those carbo-hydrates resulting from vegetable growth or nutrition, starch, sugar, gum and cellulose, as supporters of combustion or respiratory food when taken into the human system. Such classification was not founded on the results of any scientific investigations showing that the actual effects of alcohol, starch, sugar, etc., when taken into the living system, were similar, but solely on the fact that they were all composed of the same ultimate elements, carbon, hydrogen, and oxygen, in such proportion as to admit of further oxidation outside of the living body.

And as such oxidation or combustion was accompanied by the evolution of heat, it was assumed, without experiment or proof, that all these carbo-hydrates were oxidated in the living system, and were active supporters of respiration and animal heat, while the various organized animal tissues were developed and nourished from the nitrogenous proximate

elements of food. The simplicity of such a classification of foods and animal tissues, aided by the high authority of Liebig, caused it to be universally accepted and thoroughly incorporated into both medical and general literature, where, in the public mind at least, it still remains; and is a fair illustration of the danger or fallacy of assuming that similarity of chemical composition is proof of similarity of action when taken either as drink, food, or medicine.

From a somewhat extended investigation of the subject, I think it may be stated as a general law, that all the orders of animal life are dependent for their development, growth, and nutrition, upon materials resulting from either vegetable or animal growth. Certainly, none of the higher orders of animal life assimilate and appropriate for the growth or repair of their structures and the support of their physiological processes inorganic materials not previously combined under the formative or vitalizing influence of vegetable or animal life. It may be further stated as an equally general law, that the products of retrograde metabolism or tissue metamorphosis as presented in the excretions and eliminations from living bodies, both vegetable and animal, are not only not capable of being used as food, but are either inert or positively toxic if retained or reintroduced into the living body. Hence we have a clear and most important distinction between such carbo-hydrates as starch, sugar, gum, cellulose and dextrin, resulting from vegetable and animal nutrition, and the alcohols, which result solely from retrograde metamorphosis or bacteriological excretion, usually termed fermentation. And instead of acting alike as respiratory or indirect food, as has been claimed so long, all the strictly scientific investigations of the last half century have proved their action upon the structures and functions of the living body to be as diverse as their origin. Thus the carbo-hydrates of the first class named, starch, sugar, gum, etc., when taken into the healthy stomach, readily undergo such digestive and assimilative, or molecular changes that their identity is not recognizable in either the blood or tissues of

the healthy animal, and the products derived from them produce no unnatural excitement or disturbance in any of the functions and processes of the living body. Though taken in proper quantities daily from year to year, they create no craving or morbid appetite for more; and when the quantity taken at one time is excessive, such excess is rejected with the ordinary faecal matter of the intestines.

But the alcohols constituting the second class undergo no such digestive or assimilative changes in the stomach or digestive apparatus. If the ordinary ethylic alcohol is taken into the living stomach undiluted and absolutely pure, it acts directly upon the tissues with which it comes in contact as a destructively corrosive poison, and speedily destroys the life of both vegetables and animals when brought in contact with them. When largely diluted with water, as it is in the various fermented and distilled liquors, and taken into the stomach, it is rapidly imbibed; without change, and carried directly into the blood, and with it, into every tissue and organ of the body, as has been demonstrated by the application of reliable tests many hundred times. More or less of it also soon reappears in the excretory secretions and eliminations of the lungs, skin, and kidneys, like other foreign or non-assimilable materials. While retained in the blood and in contact with the tissues, the alcohol modifies in a marked degree the sensibility of the nervous structures, and also the molecular or metabolic changes concerned in nutrition, disintegration, and sensation. If taken daily for a considerable length of time, it invariably creates a morbid appetite or craving for steadily increasing quantities, and sooner or later establishes degenerative changes in nearly all the organized structures of the body. It is obvious, therefore, that there is actually no similarity or analogy, either histological or physiological, between the carbo-hydrates of vegetable and animal growth and those derived from bacteriological or putrefactive fermentation. And the time has fully come when the purely theoretical, and most mischievous error of grouping them together as respiratory and force-generating food should

be corrected in all our literature and eradicated from the public mind. Half or three quarters of a century since, when alcohol was placed at the head of the list of respiratory foods by the chemico-physiologists of that day, it was claimed that when taken into the living body it readily combined with oxygen, and was resolved into carbon-dioxide and water, with the evolution of heat; and hence it came into almost universal use as a supposed stimulant and promoter of animal heat. Step by step, however, investigations, carefully devised and faithfully executed, have not only demonstrated this supposition to be erroneous, but they have equally demonstrated the real action of alcohol in the living human system to be that of an active anæsthetic, directly diminishing cerebral and nerve sensibility and muscular action; a retarder of the internal respiration, by which oxygen is carried from the pulmonary to the systemic capillaries; and a sedative or retarder of the molecular or metabolic changes in the tissues and secreting structures of the body. These several propositions have been so fully sustained by the direct experimental investigations of Prout, Böcker, myself, Richardson, Anstie, Hammond, Harley, Sidney Ringer, Martin, H. C. Wood, Lauder Brunton, Dubois, Reichert, and many others, that it would be superfluous to quote them in detail. There are, however, still many, both in and out of the profession, who claim that the alcohol is an anæsthetic only when given in large doses; while if given in smaller doses and repeated at suitable intervals, they claim it acts as a stimulant and tonic, especially on the cardiac nerves. The incorrectness of this claim is completely demonstrated by the investigations of Drs. Ringer and Sainsbury, Professors Martin and H. C. Wood.

The experiments of Sidney Ringer and Harrington Sainsbury were instituted for the purpose of determining the relative strength of different alcohols as indicated by their influence on the action of the heart of the frog. In closing their report on the subject they say: "By their direct action on the cardiac tissues these drugs (alcohols)

are clearly *paralyzant*, and that this appears to be the case from the outset, no stage of increased force of contraction preceding."

The experiments of Professor Martin, of Johns Hopkins University, were performed on the dog, and he states the results obtained as follows: "Blood containing  $\frac{1}{2}$  per cent. by volume of absolute alcohol has no immediate action on the isolated heart. Blood containing  $\frac{1}{4}$  per cent. by volume, that is,  $2\frac{1}{2}$  parts per 1,000 of absolute alcohol, almost invariably remarkably diminishes, within a minute, the work done by the heart; blood containing  $\frac{1}{2}$  per cent. always diminishes it, and may even bring the amount pumped out by the left ventricle to so small a quantity that it is not sufficient to supply the coronary arteries."

Professor H. C. Wood, of the University of Pennsylvania, also executed his experiments on the dog, and in his address to the International Medical Congress at Berlin, 1890, states his results as follows: "An 80 per cent. fluid (alcohol) was used, diluted with water. The amount injected into the jugular vein varied in the different experiments from 5 to 20 cubic centimetres, and in no case have I been able to detect any increase in the size of the pulse, or in the arterial pressure, produced by alcohol, when the heart was failing during advanced chloroform anaesthesia. On the other hand, on several occasions the larger amounts of alcohol apparently greatly increased the rapidity of the fall of the arterial pressure, and aided materially in extinguishing the pulse rate." That alcohol exerted, not only a general anaesthetic effect upon the nervous system, but also a special or direct paralyzing influence on the cardiac and vaso-motor nerves, strictly parallel with that produced by chloroform and ether, was clearly shown by R. Dubois in 1883. And the editor of the department of experimental therapeutics in the fifth volume of the Annual of Universal Medical Sciences, 1892, in referring to the review of the work done by nearly all those who have engaged in experimental investigations regarding the effects of alcohol on the living system by E. MacDowell

Cosgrove, truly says: "Contrary to what has been and is supposed, it is found from all these researches, that small doses of alcohol, from the first, produce a narcotic rather than a stimulating effect." And he adds that all the observers except one had "also found that alcohol in small doses diminished the amount of carbon-dioxide exhaled." It is thus shown, by the direct experimental researches of the most eminent men in different countries, aided by all the instruments of precision invented in this period of active scientific progress, that alcohol in the living system actually diminishes the sensibility and action of nerve structures in direct proportion to the quantity used. An ordinary regard for scientific accuracy, therefore, demands that it should be classed as an anæsthetic or narcotic, and in no sense as a stimulant or tonic. In studying further the mode by which alcohol produces its effects while in the living human system, it is necessary to appreciate the full import of the following propositions:

1. All nerve sensibility and force, and all natural molecular or metabolic changes, nutritive, secretory, and disintegrating, taking place in the living tissues, are absolutely dependent on the presence and movement of blood containing its natural proportion of oxygen.
2. The oxygen needed in the blood is received from the pulmonary air cells by the hemoglobin and serum of the blood, and in them conveyed to the systemic capillaries, where it comes in contact with, and exerts its influence on, every cell and structure of the body.
3. Alcohol at ordinary temperatures of the air, or even of that of the living human body, manifests but a very feeble affinity for oxygen, but does manifest a very strong affinity for water, albumen, and hemoglobin, acting upon them readily at all ordinary temperatures.

If, therefore, alcohol, sufficiently diluted to permit its circulation in the blood, should be introduced, either by the stomach or any other method, instead of uniting with the oxygen, it presents its superior affinity for the hemoglobin and

serum albumin, and thereby directly interferes with their reception of more oxygen from the pulmonary air cells. It is thus that the presence of the alcohol hinders the hemaglobin from being converted into oxy-hemaglobin in the pulmonary capillaries, and in the same ratio diminishes the amount of oxygen conveyed to the systemic capillaries; and in the same ratio, also, the nerve sensibility and metabolic changes diminish. This affords a full explanation of the facts now admitted by all who have carefully studied the subject, namely, that the presence of the alcohol retards both nutritive and disintegrative changes, diminishes excretory products and temperature, and lessens nerve sensibility and force.

An explanation of these admitted facts has been hitherto, and still is, sought for on the supposition that the alcohol simply unites with oxygen of the blood and thereby prevents or diminishes the action of the latter on the tissue elements of the body, and yet generates heat and some kind of force. The fatal defect in this old combustion or oxidation theory is, that no investigator has been able to find the legitimate products of such oxidation. So far as is known the oxidation of alcohol resolves it into either aldehyde, carbon-dioxide and water, or acetic acid, and evolution of heat. Consequently, if alcohol underwent oxidation in the system some increase of one or all of these products should have been uniformly found, either in the blood, the exhaled air, or in the other excretions. But instead, the most accurate and numerous investigations show less carbon-dioxide in the exhaled air, less temperature of the body, and neither acetic acid nor aldehyde in the blood.

And yet the puzzled investigators turn and say that, inasmuch as the alcohol disappears in the system and cannot be all regained from the secretions and eliminations in a limited time, it *must* have been oxidized and converted into some kind of force. But what force? Certainly not nerve force, mental force, muscular force, heat force, or metabolic force; for all of these are directly diminished by its presence. The only force found operative in the case, is the superior affinity of the alcohol for the hemaglobin, albumin, and water of the



blood ; and its toxic power to so modify their molecular condition and properties as to diminish their efficiency in receiving and conveying the oxygen from the pulmonary to the systemic capillaries, and thereby impairing all the vital processes in which the presence of oxygen is required.

This view also affords a rational explanation of the numerous pathological changes everywhere recognized as resulting from the habitual use of alcoholic drinks, even in the most moderate quantities. These changes were well exposed in the celebrated discussion on chronic alcoholism by the Pathological Society of London, only two years since, and are easily found on the pages of our medical literature.

It enables us also to see clearly the philosophy or *rationale* of those illusions and delusions that have been imposed upon the human mind by the use of alcohol in both health and disease through all the generations of the past. Thus a moderate dose in health by its anæsthetic effect on the nerve cells of the brain lessens the individual's consciousness of cold or heat, of weariness or despondency or weakness, and he is deluded with the idea that it had warmed and cheered and strengthened him, when it had done neither ; but instead, had simply diminished the acuteness of his own perceptions while the evils continued in full force. So in the progress of disease, its use generally has the same anæsthetic effect, causing the patient to complain less, rest more, and often say he feels better, but it neither removes the exciting cause, nor corrects the morbid processes constituting the disease, nor increases the activity of the metabolic changes of either nutrition or elimination. Nor is this all. For in the same proportion as the alcohol diminishes the internal distribution of oxygen and thereby acts as a so-called conservator of tissue, it still more actively interferes with the katabolic processes by which the natural excretions are maintained and foreign disturbing elements are eliminated, and consequently it prolongs the morbid processes, favors molecular degenerations, and increases the ratio of mortality. Clinical facts and cases could be cited in abundance, illustrating and sustaining the correctness of

the foregoing views, did my time permit. I will, however, at present only add for your consideration the following questions:

1. If the physiological standard of health requires a natural degree of sensibility of the cerebral hemispheres and the internal distribution of oxygen in natural quantity, and the presence of alcohol diminishes both in direct ratio to the quantity taken, how is it possible for persons in health to use it without injury?

2. If the alcohol, while in the living system, does thus diminish the sensibility of the nerve structures and retard the internal distribution of oxygen, is it not a true anæsthetic and organic sedative, and, therefore, adapted to the treatment of only a very limited number of morbid conditions presented in the progress of disease?

3. Is it not true that all the fermented and distilled alcoholic liquors are genuine toxic products of bacteriological cultures, and ought we not to uniformly designate them as such, instead of continuing to delude ourselves, our patients, and the public generally by calling them tonics, stimulants, or indirect food?

The Secretary, Dr. Crothers of Hartford, read the following report:

A marked event of the past year was a medical Temperance Congress at Staten Island, N. Y., August 16th and 17th, under the management of the Prohibition Park Association. Thirty-one medical papers were read in two days of three sessions each. Our president, Dr. Davis, presided, and it was implied that our association was responsible for this meeting. The papers read were the free expressions of each author, without any restriction. All but four were criticisms and denials of the value of alcohol as both a medicine and beverage.

Several of them were very excellent, calm discussions, clear and thoroughly scientific; others were denunciatory and strong partisan statements. All were earnest, and ex-

hibited a pleasing spirit of inquiry to find the truth and defend it. The four papers on the opposite side were chiefly restatements of chemical theories urged a quarter of a century ago, and were presented with equal fairness and honesty of purpose.

This congress was a very gratifying success, and indicated that a great undercurrent of public sentiment was demanding more accurate inquiry concerning alcohol and its influence, socially and medically.

Another meeting was organized, and this association was asked to conduct it, but it was thought best to wait for a larger support from the profession.

The number of members who have complied with the by-laws are 75 to date. Over twenty have expressed great interest and desire to join the association, but have failed to sign the application.

The number of new members since last meeting has been 21.

Nearly four hundred circulars have been sent to various parties, and the press have very kindly noticed our work. Our association has been noticed abroad, and many warm greetings have been extended to us from all sides.

It is evident that a very auspicious future is before us, and a hearty sympathy will welcome us from the profession so long as we confine our work to the scientific study of alcohol and its influence, medically and hygienically.

The Treasurer, Dr. G. W. Webster, reported a slight balance in favor of the society.

The vice-president, Dr. I. N. Quimby of New Jersey, read the following essay:

Mr. President, I wish to call your attention briefly to

SOME OF THE DANGERS OF THE USE OF ALCOHOL IN  
ACUTE DISEASES.

The pernicious influence of alcohol is observed and felt in every department of life, in church and in the state. The most complicated forms of disease, the lowest debauchery, the

deepest and blackest of crimes, the most abject poverty, pauperism, and wretchedness are all associated with, and immediately connected with the use of alcohol. And the physician must ask himself, What is his immediate relation to this destructive agent?

And if his qualms of conscience are satisfied that he has saved now and then a life by its use he must ask himself that other question, which is not so easily answered— How many lives has he destroyed by his frequent and promiscuous use and administration of alcohol?

The medical profession, as no other body of men, have a grave responsibility and a close relation to society in dealing with this vital question. Therefore, I think we, as physicians, should be extremely cautious and more considerate in prescribing all kinds of narcotics, and especially alcohol, which too many physicians are in the habit of prescribing, in season and out of season, — not so much from a therapeutic standpoint, but rather from long established habit, and early association, forgetting in the meanwhile that the alcohol taken in the sick room is so easily formed into a pernicious habit, which is continued long after the necessity for its use has ceased. I propose, therefore, to show very briefly what I have long believed to be some of the dangers from the use of alcohol in acute diseases.

As time is limited, I will be only able to mention two or three diseases, viz.: typhoid fever, pneumonia, and diphtheria, in which, in my judgment, grave errors are being constantly committed by the frequent and persistent use of the alcoholics.

In the first five years of my practice I was a strong advocate of the alcoholic plan of treating diseases. But as time advanced and experience, observation, and experiments in the treatment of disease ripened, I came to what was at that time (over a quarter of a century ago), and is yet, to a great extent, an unpopular conclusion that I was and had been making a grave mistake in attributing remedial, constructive, or recuperating powers to alcohol, which it did in no way possess.

As this is not the time and place for details, I can better illustrate by giving very briefly the result of the treatment of one or two cases on the alcoholic plan. In 1864, while attending a pretty severe case of typhoid fever, and after treating the case for about ten days on the stimulating and sustaining plan — namely, with milk punch, wine-whey, and champagne alternately with quinine, beef-tea, etc. — without satisfactory results, Prof. Alonzo Clark was called into consultation at my suggestion, when the same plan of treatment, with slight modification and a little more crowding of the alcoholic was continued. The increased amount of alcoholic stimulants given for the next five or six days seemed to improve the patient's condition, so much so that Prof. Clark and myself remarked to the family and the patient that if he continued to improve for a few days longer, he would be out of danger. Our last consultation was held at 11 P. M., but I was suddenly called up at two o'clock the next morning, and found the patient in a state of collapse, his pulse weak and flickering and irregular, his anxious face bore a peculiarly livid and dusky hue, feet and hands were cold and bathed in a clammy perspiration — in short, the man was dying, and in two hours from that time was dead. Now, what was it that destroyed this valuable life? I am firmly convinced that it was not the disease, but rather attribute the fatal termination to the destructive and paralyzing effect of the alcoholic stimulants.

Without going any further into details of the numerous cases of diphtheria and pneumonia treated under the stimulating plan, I would like to mention one other case of diphtheria, the result of which may be of some interest. This was the case of a bright little girl four and a half years old, whom I treated in 1866. When I first saw the patient her pulse was 110, skin hot and dry, respiration thirty per minute, with considerable dyspnoea. On examining the throat I found a large part of the mucous membrane of the pharynx covered with a diphtheritic deposit. I commenced the treatment by giving her a powder composed of calomel five grains,

bis. sub. carb. five grains, ipecac one-half grain, rubbed up with some sugar and laid on the tongue dry (which by the way is a very good germicide, although not so considered at the time) this to be followed in three hours by saline solution sufficient to move the bowels freely. I also made a local application to the throat of nitrate silver forty grains to the ounce, alternated occasionally with a local application of perchloride of iron diluted with water. Internally was given the chloride of potassa, tincture ferri chloride in equal parts, ten grains, and ten drops every two hours with beef-tea, soup, wine-whey and milk-punch, and in fact every form of light nourishment was given every two or three hours. The amount of alcohol given was one-half oz. every two hours. The nose was thoroughly cleansed by syringing with a borax solution several times a day. The room was light and airy, and kept properly ventilated. In this case Dr. H. D. Bulkley of N. Y., a distinguished physician of his day, was called in consultation. Under this plan of treatment the child seemed to be doing well for several days, the appetite was fair, the strength seemed to be sustained, the diphtheritic membrane had nearly disappeared, pulse gone from 135 and 140 to 102, respiration from 31-32 to 22, and the dyspnoea had quite or nearly gone; in fact the child was so much improved that the prospect for recovery was very encouraging, when on the tenth day I was suddenly summoned to the bedside of my little patient, and to my surprise I found her dying. Her face was livid, pulse almost imperceptible, eyes motionless and pupils contracted, in fact, in a short time after my arrival she was dead.

Now, Mr. President and Gentlemen of the Medical Temperance Association, there was nothing so strange, perhaps, about the death of these two patients, although they both died unexpectedly to the physician and their friends, but the declaration I am about to make may be somewhat new and startling, namely: that neither of these patients, in my candid judgment, died from the effect of disease, but rather from vasomotor paralysis of the heart superinduced by the admin-

istration of the alcoholic stimulant, which brought on a sudden and unexpected collapse and death.

The several years' experience with the use of alcohol as a remedial agent, and the loss of numerous patients during that time as illustrated by the two or three typical cases cited above, together with some experiment on the lower animals, thoroughly convinced me that alcohol has not that creative and therapeutic value attributed to it by the vast majority of the profession. Therefore I have almost "in toto" abandoned the use of alcohol as a restorative and curative agent in low forms of fever, etc., for the last twenty-five years, and have substituted therefor, *tr. nux vomica*, *strychnia*, carbonate of ammonia, *sub. carb. bismuth*, etc., which have a happier and better effect upon the system without any of the evils so frequently attended by the use of alcohol, and with a decreased ratio of mortality.

A remedial agent is that which should induce an alterative, palliative, or curative action in the body without injuring the tissue or organs with which it comes in contact.

Alcohol has been used as a remedial agent for several centuries, in which time many grave errors have been made by the medical profession in reference to its *modus operandi* upon the human system. Without going into the details of these errors, it may be stated that it is about fifty years ago when it was thought by the medical profession that *delirium tremens* resulted from a sudden withdrawal of the use of alcohol, notwithstanding the fact that persons were often taken with the disease in the midst of their debauch. "The various studies on alcohol," says Hare in *Sajous' Journal*, '91, "which have been made from time to time for many years by investigators in every civilized country, have not set at rest the incorrect and correct beliefs which have existed in regard to its physiological effects."

However, the following facts have been pretty definitely settled: That alcohol is a narcotic rather than a true stimulant; that when applied to the roots and stems of plants it destroys life; that it produces general and local anesthesia

and is poisonous to animal life; if a drop of alcohol be added to the microscopic preparation, the mobility and life of the bacteria ceases at once; that when applied to the trunks of nerves it paralyzes all the branches, and applied to the brain it impairs both motion and sensation; that the accelerated action of the heart which it imparts is invariably followed by a reduction of its tonicity; that it concentrates in the nerve centers producing a local or general paralysis; that it lowers the natural vitality of the system and invites disease by encouraging the accumulation of fatty and carbonaceous and other waste material; that it retards the destruction of tissue and diminishes the excretion of urea and other secretions, and hence has a tendency to invite inflammatory action, hence, are rather pernicious than beneficial; that by its rapid absorption it affects the movement and vitality of the blood, interfering with its oxygen-carrying capacity, thereby impairing the nutrition of every organ in the body; that when given to a patient exhausted by disease it destroys the metabolic power of the cells; that by its volatile nature it lowers the temperature and induces muscular prostration. Through its paralyzing effect upon the body and mind, it prevents the patient from fully appreciating his own true condition.

The above being some of the effects of alcohol upon the human system, on what practical, philosophical, or theoretical therapeutic basis can alcohol be said to possess all the curative and restorative powers long attributed to it by the profession. To me it is puzzling and beyond my comprehension.

Nothing is food that does not supply or cause to be supplied the material out of which pure blood is formed, and give natural heat and warmth to the body. Food is a substance that must be easy of digestion and easily absorbed by the blood, and capable of being oxidized in the body and giving to it forces which the body will afterward expend in its action. There are many substances that might be used as food, such as chips or corn husks, but they would give the organs of the body so much labor that they would be injured during the process of digestion. So, if you concede the



assertion of some to be a fact that a limited amount of alcohol may be oxidized in going through the system, it cannot be doubted but that the mucous membrane of the stomach, and every organ in the body is more or less injured in the process of its digestion. Therefore it cannot be classed as an innocent or proper food. It is asserted by many that alcohol aids digestion through its power of causing, by irritation, an increased flow of the gastric juice, which may be true, but while the quantity is increased the quality is impaired. Moreover alcohol hardens all the albuminoids of both solids and fluids, rendering them more indigestible, besides causing a precipitation of the pepsin and gastric juice, and having a great affinity for water it robs the food and every organ and tissue of the body of its due proportion of water.

And finally, Mr. President, may the American Medical Temperance Association be the means of projecting unto the scientific words a new proclamation, viz. : that alcohol does not carry life in its right and death in its left hand; that it is not a saver of life into life, but rather a death unto death. That it is not a narcotic irritant and poison on one hand and a balm of Gilead on the other. That it is not a paralyzing and burning fire at one time and a sweet soothing oil at another — that meat, drink, and poison cannot be mingled in the same cup. But rather let it be shown that alcohol is one of the most destructive agents that can be mingled with human tissue, and it cannot safely in any way conserve, promote, or ultimately elevate mankind.

Dr. T. D. Crothers, Secretary, read the following :

I wish to call attention to a chemical fact of heart failure from the medicinal use of alcohol that is not understood by many physicians, and to point out some dangers that come naturally from it. Some notes of a few cases will bring out the facts more clearly. A farmer, aged 34, with apparent good health and constitution up to a few weeks previous to his coming under medical care, contracted a severe cold, followed by a cough. The physician diagnosed dullness over

the upper right lobe of the lung and impending consumption, and ordered two ounces of brandy four times a day, with milk, cod liver oil, and other foods. After a few days low, muttering delirium followed. The brandy and oil was increased, but the patient died from general exhaustion two months after the treatment began. A *post-mortem* revealed hepatization confined to a limited area in the right lung, the rest of which was healthy and clear. The heart was large, distended, and flabby, and arteries rigid; no other lesion was noticed. The record of the pulse and temperature indicated a pulse-beat from 100 to 130, rising ten or twelve beats within a short time, and then dropping back and wavering with sudden rises and falls, until the last day, when it went down rapidly to 60, and then became indistinguishable. The temperature rose steadily from the first week to 100, then changed up and down to 104, and finally, during the last few days, reached 106. Two days before death a sudden, profound failure of the heart appeared, and, although large quantities of spirits were given, little or no response followed.

The inference of death from heart failure, due to alcoholic excess, seems supported by many of the facts. The physician assumed tubercular deposit, and believed that alcohol would arrest it, and doubted all possibility of injury from spirits.

The second case, a strong man of 26, was attacked with diphtheria. The membranous deposit was confined to the palate and nasal passages, and extended down to the fauces and larynx. A council of physicians ordered 2 ounces of brandy and milk every four hours. After the second week this was increased. The deposit of membrane cleared off, and after the third week the case seemed convalescing, when suddenly the heart failed, and pulsation rose to 130, and fluctuated widely for a short time, followed by death. Large quantity of spirits were given without effect. The same high-pulse record marked this case, and the same inference of death from heart failure, as the result of alcoholic exhaustion, seemed apparent. The physicians assumed that

alcohol could not do injury, and its effects were neutralized by the diphtheritic poison.

Case third. — A laborer, in good health, was attacked by typhoid fever. The extreme exhaustion, from the start, encouraged the physician to give 2 ounces of spirits every four hours. The pulse rose to 120, and was thought to be an indication for an increase of the spirits given. Death followed at the end of the tenth day, from heart failure. The *post-mortem* revealed no perforations or common lesions of such cases. The glandular localized inflammation was apparently subsiding, and had passed the acute stage. This seemed to be a similar case of heart exhaustion from the poison of alcohol.

I think it is a fact established beyond question that alcohol, by increasing the heart's action, also increases the tendency to exhaustion. Increased pulsation is increased labor and increase of power, with demands for increased energy and diminished rest for the organ. The increase of ten, twenty, or thirty beats a minute, beyond the normal rate, is the expenditure of so much additional power of the organ.

Repeated experiments and sphygmographic tracings show the effects of alcohol on the heart of a healthy man is to raise the beat and increase the action, afterwards to lower it and lessen its force. The quantity of alcohol that will increase the heart's action ten beats above the normal will, after a time, be followed by a reaction to ten beats less than the normal rate. Sharp, rapid lines of the pulse-tracings from alcohol will be followed by long, feeble markings, showing diminished rapidity and strength. These are facts that can be fully verified by any observer.

It would seem to be a great error to give alcohol in any case of disease marked by profound exhaustion. There might possibly arise conditions of asthenia in the height of the disease in which spirits may be indicated for the temporary increase of the heart beat, and the anæsthesia that would follow. Its use at the outset of many diseases seems countermanded by all modern physiology.

On general principles, and clinically, the increased activity and subsequent diminution of the heart's action brings no medicinal aid or strength to combat disease. This is simply a reckless waste of force for which there is no compensation.

In the cases noted it would appear that death was due, in a large degree, to heart failure from overwork, the result of the chemical action of alcohol. Both nerve and muscular fibres lost the power of contraction and tension from the continued irritation of spirits.

In my opinion, based on a large experience, the continuous use of spirits as a medicine is more dangerous and fatal than when taken as a beverage, either continually or at intervals. In one case the degeneration from alcohol will intensify the diseased processes either in accelerating the special form of disorder or provoking new conditions, complicating normal physiological activities and weakening all possible tendencies to return to health. When taken as a beverage its effects are constantly antagonized, and the degeneration following is slower and less marked.

These cases suggest to me the strong possibility of actually poisoning the patient by the free use of alcohol, under the impression that it is a useful remedy. Without any question or doubt the increased heart's action, extending over a long period, is dangerous. The unknown quantity and degree of vitality and amount of resistance to this peril cannot be measured. Chemically it varies from the chronic drinker of years to one who, after a short period of excess, suddenly dies of pneumonia, Bright's disease, or some other unknown condition, which is practically nothing but heart failure, or exhaustion.

Acute symptoms, indicating local inflammation, are doubtless due, in many cases, to auto-intoxication and poisons generated in the body. Alcohol, in such cases, given to support strength, may act as force-destroyers and generators of additional disease germs.

The medicinal damage done by alcohol does not fall ex-

clusively upon the heart, although this organ may show it more permanently than others. Brain, nerve force, and cell nutrition are markedly influenced, and who can assume that this is ever medicinal and physiological. The evidence of alcoholic damage to the physiological activities of the body is unquestioned; but all the evidence offered, thus far, in support of its medicinal value, is simply theoretical inference, based on clinical observation, open to so many sources of error as to be practically worthless.

I assume that these facts are established and supported by the strongest evidence from competent authorities: that the medicinal use of alcohol (other than that of an anæsthetic for temporary action on the heart) is counter-indicated because it is uncertain and dangerous; that its value, therapeutically, is based on a mass of confusing theories that are unproven; that chemically, it is always a force-destroyer; that chemically and physiologically there are not facts enough ascertained to support any theory of its action on the body, except as a vague possibility.

The coarser lesions coming directly from alcohol are within common observation. But the possible good and medicinal value of alcohol is a great polar region of mystery that is not yet discovered. This is the field and work of our association.

Very interesting remarks were made by Drs. Long, Morrison, Bishop, Stevens, Bassert, Boyers, Weitz, Van Horn, Armstrong, Sherman, Didima, Webster, Quimby, and others. The following are among the more extended remarks:

Dr. Kellogg, of the Battle Creek Sanitarium, said—

MR. CHAIRMAN, LADIES AND GENTLEMEN: I am sure every person present has been most highly interested in the masterly address by Dr. Davis to which we have listened this evening, and has been greatly instructed by it. Dr. Davis, if I am rightly informed, and I have taken some pains to investigate the matter, was the first person in this coun-

try, and one of the first in the world, to undertake a careful study of the physiological effects of alcohol, and the world is indebted to him for the uncontrovertible evidence afforded as the result of his original experiments that one of the most constant characteristics of alcohol is to lower bodily temperature, thus exposing the fallacy then universally believed, as a result of the teachings of Liebig, that alcohol was an excellent respiratory, and hence a useful means of maintaining bodily heat.

It is certainly very astonishing that although nearly one-half of a century has passed since these remarkable investigations were made by Dr. Davis, there are still intelligent persons, and even physicians, who believe alcohol to be possessed of as real a food value as sugar, starch, and other hydro-carbons.

I am sorry that this room is not filled to-night to its utmost capacity, as I am certain that every person who has listened to the admirable presentation of the scientific and medical phases of the alcohol question which has been presented here by Dr. Davis must be thoroughly convinced of the accuracy and truthfulness of the views which have been so clearly and admirably set forth.

I regard, Mr. Chairman, the organization of this association as one of the most important events which has ever occurred in this country in relation to the solution of the drink problem, a question which has enlisted the attention and energies of so many thousands of men and women, especially within the last decade. Medical men can do more than all others for the advancement of the temperance reform. The views held by the laity with reference to alcohol are but an echo of those held and thought by the members of the medical profession. So long as medical men keep up the use of alcohol, its use will be regarded by the people as proper and necessary, and prohibitory laws, while they may restrict to some degree the extending of the evil, would be a dead letter so far as its extermination is concerned. I am not opposed to prohibition; in fact am in favor of every

practical and consistent measure by means of which the drink traffic may be curtailed. But the great and only remedy for this stupendous evil is to be found, in my opinion, in education, and in a question of this sort physicians are more competent to act as teachers than any other class of men. The great trouble is the majority of physicians have given this question so little thought and study; they are on the wrong side of the question and cannot teach the people. Doctors who are the very strongholds of intemperance must be uprooted before any real advances can be made in a thorough-going and permanent reform. Indeed, I am sometimes tempted to think that some members of our profession, even some who may make pretensions to scientific standing, feel themselves called upon to produce a scientific basis in almost every foible or folly which they find prevalent among the large masses of mankind.

A good illustration of this occurred not long ago in the case of a remarkable scientific research executed by Prof. Roberts, an English physiologist of considerable eminence. Dr. Roberts, who has given considerable study to the subject of digestion, the action of special digestive fluids, etc., undertook the study of the influence of various substances upon the digestive process. He experimented with the various condiments, tea, coffee, and other substances, and finally alcohol. He confidently expected to find the digestive process accelerated by alcohol since this agent had been so highly commended, and so universally used by the medical profession for generations as an aid to digestion; but to his astonishment he found that alcohol in all doses, large or small, produced the same effect, namely, a distinct interference to the digestive process.

Repeated experiments produced invariably the same result; there could be no doubt about it. What was to be done? Scientific facts could not be disputed. It would not do for a scientific man to say as theologians sometimes do, "If the facts do not agree with my theory, so much the worse for the facts." There was nothing to be done but to change the

theory to fit the facts. It must be admitted that the common supposition heretofore held that alcohol is an aid to digestion is a mistake. Dr. Roberts boldly takes his stand upon this scientific truth, and one would suppose that consistency would have led the doctor to at once become a teetotaler and a staunch supporter of temperance principles. But, alas! the result was very different. Finding that alcohol really hinders the digestive process, being thoroughly detrimental, nevertheless, as a good reason for its popular use this eminent scientific investigator immediately proceeds to make the alarming discovery that the great evil of modern civilization is not too little digestion, but too much, and that alcohol is an aid by means of which to slow down the great and mighty digestive power of the civilized human stomach, thus preventing what Dr. Roberts describes, to use his own words, "an undue and dangerous acceleration of nutrition."

Too much digestive power is the great foe to modern health, according to the great Dr. Roberts, and so alcohol fortunately comes to the rescue to put a brake upon the modern stomach and thus prevent the acceleration of nutrition as might possibly result in a physiological smash-up! So long as medical men and physiologists are so ready to find apologies for the alcohol habit we cannot wonder that the people are slow to be convinced of the necessity of total abstinence.

So long, too, as doctors administer alcohol to every disease to which flesh is heir, the people will continue to medicate themselves without the doctor's prescription. If the doctor's prescription makes alcohol a good thing for a man who is weak and convalescent from a fever, what argument can be offered to a common layman that he may not properly prescribe alcohol for himself when he is weak as the result of too much work. If alcohol is prescribed by a physician for a man who is nervous because of weak digestion, it is certainly very easy for a woman to conclude that she may with profit prescribe alcohol for herself when she is nervous from too little sleep or too much domestic work. If alcohol



is good for a weak man, a stupid man, a nervous woman or a feeble child, who of all persons alive need alcohol more than the drunkard himself? He is weak, nervous, stupid, and often feeble. His daily dram cures him as really and in the same way as they cure other men or women suffering from the same morbid condition. No man needs alcohol more than does the man addicted to its use, and how shall he be convinced that the alcohol which cures another man who is weak, or nervous, or stupid, is not even good for him!

Dr. Davis has proven by his thirty years' experience in the treatment of disease without alcohol that this drug can be very well dispensed with as a medical agent. Certainly few men in this country, or in any other, indeed, have had a larger medical experience, or more successful medical career than has Dr. Davis. Such a practical fact speaks louder than any argument can do of the utility as well as the positive evil of the miscellaneous doses of alcohol to which the average doctor subjects his patients. My own much more limited experience entirely agrees with that of Dr. Davis. For sixteen years I have had charge of a large medical institution, a hospital and sanitarium combined, in which 3,000 to 4,000 cases, medical and surgical, are annually received, and during this time I have carefully abstained from the use of alcohol as a remedy. I have never used alcohol except in cases which are evidently hopeless, and then employed it simply as a palliative. I never employ it with a curative purpose, and have never seen any reason to regret my disuse of the drug. I believe it can be wholly dispensed with, without in any way detracting from the efficiency of our therapeutic armamentarium. Among other reports I am able to report 800 important surgical cases with only seventeen deaths, and those cases almost without exception were from their very nature hopeless, and within the last year a succession of sixty-three ovariectomies, including several abdominal hysterectomies, a large proportion of which were very bad cases without a single death. (This number has since been increased to seventy-four.)

I am sure that a collection of investigations upon this

subject might show that the very highest medical and surgical results can be obtained without the use of alcohol as a remedial agent.

Before sitting down I wish to move that this association put in permanent form the able address delivered by the president of this association this evening, and that provision be made for its wide circulation among the members of the profession.

Dr. Shepard of Brooklyn, N. Y., said: The question of temperance has been studied from the pulpit and platform, with the result of placing it in the arena of politics, and the solution in the distant future. From the medical standpoint it is quickly realized that, inasmuch as the physician attends the physical man, and is direct and positive in his ministrations, he is a most potent and practical factor in the drama of life, and, therefore, has a vantage ground in approaching this important question. If the body is out of tune, there is little opportunity for the finer graces of life to be appreciated; but if the body is in a normal condition, all things are possible, and there is readily found a way for the indwelling of the amenities and beauties of life.

In no way can the physician serve humanity in a more desirable and acceptable manner than by doing his utmost to prevent disease, in spite of the fact that his livelihood depends on profits due to disease. That a large amount of disease and suffering in the community is owing to the use of alcohol is self-evident. The inquiry, Is alcohol useful as a medicine? constantly presents to every physician, and it may not be too much to say that upon the decision of this question rests the welfare of multitudes. If it is of any advantage to use alcohol medically, it follows as a natural sequence that it will be at least of equal advantage to use it socially. If alcohol is not necessary or advantageous medically, then it would be an easy matter, with an organized effort of the medical fraternity, to wipe it out socially.

The solution of this problem is the one work which this society has before it. While it is not well to prejudge the

case, it is earnestly hoped by many that the medical profession will soon determine on scientific grounds, what the few are now ready to maintain, that alcohol shall no more be found necessary to a most successful practice in the cure of disease. Then it shall follow that the prevention of disease will be more easy of accomplishment, and more universal in its adoption, and that alcohol is not in any proper sense remedial.

It is right that the people should look to the medical profession for instruction and guidance in such matters, and on them, therefore, rests a large responsibility. Their influence in the direction of use or non-use of alcohol will of necessity be extensive in the community. If the physicians of our land were opposed to the use of alcohol in any form, the question of temperance would be in a great measure solved.

It was moved that 500 copies of the president's address be prepared and published for distribution. Carried.

Dr. Bishop of Ohio pointed out some of the dangers from the use of alcohol in diseases of children. A resolution requesting him to prepare a paper to be read at the next meeting was passed.

A committee of the following persons, Drs. Davis, Kellogg, and Long, was appointed to report on statistical facts regarding the results of the use and non-use of alcohol in the treatment of diseases at the next annual meeting of the Association.

A committee on nominations unanimously reported that the following be re-elected for the ensuing year, namely: for President, N. S. Davis, M.D., of Chicago, Ill.; Vice-Presidents, I. N. Quimby, M.D., Jersey City, N. J.; J. B. Whiting, M.D., Janesville, Wis.; F. E. Yoakum, M.D., Shreveport, La.; and J. Taft, M.D., Cincinnati, Ohio. For Secretary, T. D. Crothers, M.D., Hartford, Conn. For Treasurer, G. W. Webster, M.D., Chicago, Ill. Carried.

At a late hour the society adjourned. The next annual meeting is to be held in Milwaukee, Wis., during the first week in June, 1893.

## SECRET SPECIFICS FOR INEBRIETY.

BY NORMAN KERR, M.D.

The author said that a hankering after quick returns was not confined to ordinary trades. Though the legitimate treatment of the disease of inebriety, like the treatment of any other malady on sound scientific principles, was now fairly well known and recognized, the friends of the wretched inebriate were often so utterly heart-broken, and the woe-begone victims themselves so helpless, that there was a continual and loud wail for some specific which would *volens volens* convert the narcomaniac into a sober person. A few minutes' indulgence in that rare pastime of the present superficial age — thinking — ought to convince anyone possessed of ordinary intelligence and common-sense that no such panacea can, from the origin and development of this disease, ever be found. But this widely-felt and despairing yearning for a royal road to temperance constituted a demand, which demand had been met by the supply of an army of secret preparations alleged by the proprietors to be endowed with the power of working what were really miracles, which put the miracles recorded in the Bible altogether in the shade.

One so-called remedy consists of a mixture of fourteen different drugs dispensed twice a week at a Continental dispensary. One of these secret specifics claimed to cure 95 per cent.; other two, 100 per cent. Dr. Kerr had hopes of coming across a secret remedy which would be guaranteed to cure 101 per cent. Some of these cures employed injections under the skin as well as external mixtures. The most recent, consisting only of a medicine to be swallowed, has not failed in a single instance.

There remained potions, mixtures, powders, and other pharmaceutical preparations which were warranted to cure an inebriate without his knowledge, and develop in the

taker an unconquerable aversion from intoxicants, if swallowed unconsciously in tea or any other article of food or drink.

Of course, the composition of these truly magic medicaments was carefully concealed, the ingredients of some of them being changed from time to time to baffle analysis. All this was but a pandering to an unthinking and morbid cry for some supernatural agency to accomplish miracles, the operations of nature being too slow and too undemonstrative for a world in a hurry. True medical science should lift up a warning voice against the dangers of such attempted short cuts to sobriety, which often proved to be the longest way in the end. The reputable and honorable practitioner of medicine would have no secrets from his professional colleagues, and would hasten to make known to them, for their information and criticism, any discovery he might make in rational therapeutics. There ought to be a law enforcing stability in the composition of all pharmaceutical preparations, with registration and an open statement of the contents.

In a recent valedictory address before the graduates of Marion Sims College of Medicine, Dr. Hughes remarks as follows: "The problems you will be called on to solve are those of the effects of alcohol and other drink and drug habits and vicious indulgences and the many other devitalizing propensities and passions of our times, teratological defects, insanity, acquired and transmitted, the psychical and physical interrelation of mind and organism, the relationship of organism to mental endowments and imperfections, faulty methods of education, wrong manners of living, improper modes of travel, and some of the unsanitary social customs of the times on the generation now coming on the stage of life's action, and the entail of these neuropathic, psychical, and social vices, manners, customs, and habits upon posterity, as well as the more obvious demands of the diseased patients who will personally seek your ministrations, and of public and personal hygiene. You are to be sanitarians in the broadest sense of the term; educators of the people in the chief essentials of their temporal if not spiritual welfare."

## TREATMENT OF DELIRIUM TREMENS.

---

BY NORMAN KERR, M.D.

---

The author asked if delirium tremens was a morbid state, which was the issue of neurasthenia, or an effect of alcoholic poisoning. He believed it to be the latter, and that the disease arose from the cumulative specific action of the poison on the cerebral tissue through the alcoholization of the blood. Acting on this belief, he had aimed at eliminating the poison from the brain and nervous system, leaving the healing power of nature to do the rest. This was the view taken in 1854 by Dr. Alexander Peddie, who administered antimony. Dr. Kerr, however, had found the liq. am. acet. satisfactorily fulfill the conditions most favorable to cure. The main point, however, was to avoid the administration of alcoholic liquors and opiates, chloral, bromide of potassium, and all narcotics. The best hope of cure lay in natural exhaustion, inducing sound, refreshing sleep.

The differing results of narcotic and non-narcotic treatment were exemplified in the case of a publican, who, in his second attack, was treated with opium and the bromides, and in his third attack only with liq. am. acet. In the former seizure the patient, aged 48, even after sleep, was so heavy and unrefreshed, and then violent, that it took four men to control him. To save his life he had to be put in a padded room in the workhouse, where he raved till exhaustion procured natural sleep, his only beverage there being coffee. In the latter seizure, two years afterwards, he was treated at home, the only medicine being liq. am. acet., at first in drachm doses every hour; milk, beef juice, broth, and coffee, were frequently given. In about seventy hours he had a sound sleep for four hours, followed in four hours more by a spell of twenty hours' sleep. The latter attack was complicated with an epileptic explosion. The recovery was quicker than

from the preceding attack. These were both typical examples of the graver form of delirium tremens. By a reliance on so safe a sudorific as liq. am. acet., and suitable nutriment, we best fulfill the conditions of cure, as we thereby give the vis medicatrix a fair field and no favor.

#### THE DEMAND FOR STRONG SPIRITS DIMINISHING.

The *Temperance Advocate* gives the following :

"According to a government statistical abstract, there has been a small *per capita* decline in the consumption of distilled liquors in this country since 1875. In 1875, when the population was about 42,000,000, the aggregate consumption of distilled liquors was 66,120,158 gallons; in 1891, with a population of 64,000,000, the aggregate was 91,157,565 gallons: a *per capita* consumption of 1.50 in 1875, and of 1.42 gallons in 1891. The *per capita* consumption of wine and beer, according to the same authority, has in the same period largely increased. In 1875, the wine consumption was 12,954,961 gallons; in 1890, 29,000,000 gallons, of which 24,000,000 gallons were of domestic manufacture. The beer increase is still more striking. In 1875, the beer aggregate was 294,953,157 gallons; in 1891 it was 977,479,761 gallons; a *per capita* consumption of malt liquors in 1875 of 6.71 gallons; in 1891 of 15.25 gallons.

LORD CHIEF JUSTICE HALE was perhaps the first judge to call attention to inebriety as a cause of crime, requiring special study and attention. In 1870 he is reported as saying :

"If the murders and manslaughters, the burglaries and robberies, the riots and tumults, and other enormities committed during the last twenty years, were divided into five parts, four of them would be found to have been the cause and product of drinking."

This state of things demand the most serious consideration.

## Abstracts and Reviews.

---

### • ALCOHOL IN SURGERY.

Mr. Frederick Treves, the well-known surgeon of the London Hospital, in his "Manual of Operative Surgery," has some striking remarks on the risks attending operations on the bodies of drunkards. He says: "A scarcely worse subject for an operation can be found than is provided by the habitual drunkard. The condition contra-indicates any but the most necessary and urgent procedures, such as amputation for severe crush, herniotomy, and the like. The mortality of these operations among alcoholics is, it is needless to say, enormous. Many individuals who state that they "do not drink," and who, although perhaps never drunk, are yet always taking a little stimulant in the form of 'nips' and an 'occasional glass,' are often as bad subjects for surgical treatment as are the acknowledged drunkards."

"Of the secret drinkers," continues Mr. Treves, "the surgeon has to be indeed aware. In his account of 'Calamities of Surgery,' Sir James Paget mentions the case of a person who was a drunkard on the sly, and yet not so much on the sly but that it was well known to his more intimate friends. His habits were not asked after, and one of his fingers was removed because joint disease had spoiled it. He died in a week or ten days with spreading cellular inflammation, such as was far from unlikely to occur in an habitual drunkard. Even abstinence from alcohol for a week or two before an operation does not seem to greatly modify the result." Dwelling on the immense importance to an operator of cultivating "a surgical hand," the same writer points out that "a shaky hand" may be developed by irregular modes of living, by the moderate use of alcohol, and by smoking.



### HEREDITARY MORPHINISM.

Dr. Happel, ex-president of the Tenn. State Medical Society, in a paper on morphinism in its relations to the sexual functions, etc., in *Medical and Surgical Reporter*, gives the history of a number of cases where the children of such parents suffered. He says: "My experience thoroughly satisfies me that when the mother uses morphine habitually the child is born with some defect of the heart, a congenital heart disease; either there is non-closure of the ductus arteriosus, the foramen ovale, and in some cases the inter-ventricular septum is deficient. I do not pretend to assert that the use of morphine is the sole cause of these defects, but that when morphine is used to excess, in the large majority of cases the deficiencies do exist.

Generally, the first intimation that you have of any defect in the development of the child, is that after becoming restless and fretful, a cyanotic condition supervenes. The nurse calls your attention to the fact that the child is "blue." The child may have been, and frequently is, born, as shown in the few histories given, apparently in fine condition. It rests well for the first twelve or twenty-four hours. It is reported to you as an unusually "good child," sleeps nearly all the time, does not want to be nursed, etc. On the second day, however, you are apt to be informed that the child is fretful, restless, colicky, and then later on, that day or the next, that the child becomes blue at times. As a rule this condition grows worse unless you suspect, or know, the cause of the trouble and begin the free use of opiates and stimulants. This condition is easily understood, and the need of the treatment suggested comprehended, if you bear in mind the fact that the child is born an opium user.

Its blood is, so to express it, saturated with the drug. The mother has lived on it, and the foetus has developed under all of its baneful influences.

To finish up and perfect the heart is the last work to be done, and the closure of the foramen ovale and other portions of the heart mentioned being left to be finished after the child

has begun its separate existence, the supply of opiates being suddenly cut off, the equilibrium of the nervous system is destroyed and nature's finishing work suspended.

The closure of the foramen ovale could not be permitted as long as the child existed in utero, and now the work cannot be carried on, with the nervous system crying out for opium: hence, the restlessness which induces irregularities of circulation, blueness, etc.

If this cry of the nervous system can be quieted and the child nourished, nature may be, and sometimes is, able to complete her work.

Both these children were promptly saturated with opium and whisky, both of which were gradually withdrawn, the child being all the while well nourished, with the result in both cases of a cure so far as the congenital heart disease is concerned.

There can be no possible trouble in understanding the rationale of cyanosis in children born of morphine habitués, if they have ever once witnessed the horrible agony of a morphine slave when it is suddenly taken from him. It has been aptly described as "the tortures of the damned."

In every case of cyanosis in the new-born infant, the first step must be then to ascertain, if possible, the habits of the mother in regards to the use of opiates. This will be found no easy task. The confirmed user of the drug will deny the fact as promptly as the question is asked, but the inquiry must not stop with the mother alone.

The husband and the nurse must be interrogated, and still if no light is thrown upon the question, if there is the least reason to suspect the habit, opiates in tentative doses, in the form of *Tr. Opii. Camp.*, must be cautiously given. If the infant is found to tolerate them well, your case can be taken as almost proven.

Under the supervision of the physician, the opium and the whisky, after you have quieted the child fully, must be slowly and carefully withdrawn, being sure not to reduce the dose too rapidly.

It is still an undecided question in my own mind, however, whether, considering the good of the child alone, it were not better to allow it to die.

Morphine becomes, "me judice," a disease transmissible by heredity almost to as great a degree, and in the same way that tuberculosis and such like diseases are handed down. Not that the disease itself is transmitted, but a condition, a soil, a nidus, or whatever you may be pleased to call it, is handed down to the child, and some fortuitous circumstance develops to disease.

The offspring of the victim to the morphine habit has a condition of the nervous system that when once subjected to some exciting cause develops the habit rapidly.

---

#### THE ALCOHOLIC STUDY IN CENTRAL EUROPE.

At the close of the International Alcohol Congress held in Zurich in 1887, a few medical students, with Prof. Dr. Forel (director of the Cantonal Lunatic Asylum) and Dr. Ploetz at their head, formed themselves into a Social Union. This grew, and has developed into the International Union for Combating the Use of Alcohol. This Union has now three branches, in Zurich, Basle, and Berlin, and others are in contemplation in other places. Its object is not rescue work, but rather, as its title indicates, to combat the drinking customs of society. This is done by spreading information in every possible way. With the co-operation of Drs. Granfelt, Helsingfors, and others, this society took the responsibility rather more than a year ago of starting a magazine, in which papers have appeared by eminent scientific men and others on various aspects of the temperance question, and telling how the work progresses in different countries. These have been written in German, French, and a few in English. The circulation is far below that to which its merits and usefulness entitle it, but wherever it is known it is much appreciated, and has already rendered good service.

During the first months of the year a series of lectures were delivered weekly, in a fine hall in Zurich. These included "The Effect of Alcohol on the Human System," "The Influence of Alcohol upon Children," "Alcohol and Insanity," "Alcohol and Crime," "Alcohol and the Social Life," "The Means to be Employed for Combating Alcohol," and "How Women may help in the Temperance Reform." These lectures were delivered by some of the most prominent members in Zurich, and in published form will greatly aid the movement beyond the circle of those who were attracted to listen to them.

The International Congress, the first of which was held in 1885, at Antwerp, Belgium; the second at Zurich, Switzerland, in 1887; and the third, in 1890, at Christiania, Norway, have given a great impulse to the total abstinence movement on the Continent. The fourth is fixed to take place early in September of this year at The Hague, Holland.

In some of the western provinces of Russia a strong movement is going on. In Esthland and Livland, chiefly in the latter, are no less than sixteen active total abstinence societies. An abstinence society is in existence in St. Petersburg with 600 members, whose activity has shown itself in the establishment of no less than eight tea-houses in that part of the city where drinking places most abound, and the foundation of an Inebriates' Asylum is also contemplated.

In Austria a remarkable appeal has been made to the "Upper House," in which the evil effects of immoderate drinking, both morally and physically, on the individual, his family, and the community, are enlarged upon, and the government petitioned to enact a law whereby any who, through the excessive use of intoxicating liquors, have weakened the will-power, and are thus incapable of self-control, can be placed under control in an inebriate asylum.

One of the best signs of progress on the Continent in relation to the total abstinence movement is, therefore, to be found in the fact that many scientific men have written on

the subject, and that quite a number of books, pamphlets, and articles do now exist in the German language. The names and authors of a few must suffice. "Intemperance and the Means for its Suppression," by Dr. A. Baer, Berlin; "The Alcohol Question," by Prof. Bunge, Basle; "A Way Out of the Bread Famine" and "The Cure of Dipsomanics," by Dr. Bode, Dresden; "The Drinking Customs, their Hygienic and Social Signification," "The Establishment of Inebriate Asylums, and their Insertion in the Legislation," and various works on the relation of drink and insanity, by Prof. Dr. Forel, Zurich.

#### OUR COLONIAL DRINKS AND DRINKERS.

The English settlers who peopled our colonies were a beer-drinking and ale-drinking people, and none of the hardships which they had to endure in the first bitter years of their new life caused them more annoyance than the deprivation of their malt liquors.

But as these Puritans grew richer, the first luxury to be brought to the new country was beer, and they soon imported malt and established breweries, and also made laws governing the manufacture of ale and beer, for the pious colonists quickly learned to cheat in their brewing. Malt liquors had become so plentiful in 1675 that Cotton Mather said that every other house in Boston was an ale-house, and Governor Pownall made the same assertion a century later. Virginia was also plentifully supplied with malt liquors, the poorer sort made of molasses and bran, of Indian corn malted by drying in a stove, of persimmons baked with potatoes, of cornstalks cut small and bruised, of pompions, Jerusalem artichokes, etc.

Other mild drinks were made and owned by every family in large quantities. Metheglin, from honey, yeast, and water, was made by the barrel. A sort most esteemed in Virginia was brewed from the bean of the honey locust. Perry was made from pears, and a drink called mobby from peaches, and, above all, cider from apples.

Unfortunately this large catalogue did not long content our forefathers. Cider was distilled into a fiery liquor called pupello or cider-brandy. A fiercer spirit still was made from peaches, and when peaches were not obtainable they made brandy from cherries, plums, crab-apples, and grapes. Cargoes of molasses were turned into New England rum or "kill-devil," as it was everywhere called. This was sold in vast quantities and very cheap.

The Irish and Scotch settlers knew how to make whiskey from rye and wheat, and they soon learned to manufacture it from barley and potatoes, and from Indian corn. So universal was the desire for these fiery liquors that it is said that in some parts of the country there was a still in every house.

Not satisfied with home manufactures, the thirsty colonists imported strong drink in large quantities. The Dutch settlers sent for their beloved gin and aniseed cordial, and many wines came from Spain, Portugal, and the Canaries. Of these the strong Madeira was the favorite with fashionable people, and all wines were strengthened by liberal doses of brandy.

Even the children drank strong drink in those times. In a chapter of advice upon the rearing of children, found in an old almanac, we read that "very young children must not drink cold drinks, but must have their beer heated, and must eat a piece of brown bread before drinking beer or wine." Cobbett, who thought drinking a national disease, said that "at all hours of the day little boys, at or under the age of twelve years, go into the stores and tip off their drams."

In Virginia the drinking among the clergy was notorious. Parton says :

"The tales we read of the clergy of old Virginia stagger belief, though it is clergymen who report them. We read of one who was invited after dinner to a planter's house, where he drank so much that he had to be tied in his gig and a servant sent to lead his horse home. One jolly parson comes down to us, reeling up and down the porch of a tavern, bawling to the passers-by to come and drink with

him. . . . One old clergyman is remembered as staggering towards the altar at the time of communion when the rector . . . . ordered him back to his seat. The monthly dinners of the clergy have not yet passed out of mind, to which men would ride for thirty or forty miles, and revel far into the night."

The Puritan magistrates in New England early made a stand against excessive drinking. In Massachusetts in 1636 drunkards were subject to fine and imprisonment in the stocks, and sellers were forbidden to furnish the tipplers with any more liquor. An habitual drunkard was punished by having a large letter D hung around his neck. In 1639 the court ordered the cessation of the practice of health drinking. In Connecticut no man could drink over half a pint of wine at a time, or tipple over half an hour, or drink at all after nine o'clock at night.

To some noble temperance worker this glimpse, looking backward at the "good old times," may show by comparison much cause for congratulation in the condition of things in these better present times. — *Literary Digest.*

---

#### WORK AND REST.

The following extract from the *Literary Digest*, by Dr. Seeligmuller, is very suggestive :

"Excessive, exhausting, and too long-continued work, insufficient or irrational recreation, and deprivation of the right amount of sleep are some of the main causes for the increase of nerve troubles in our day. The competition in all the professions and callings is so great, that for every person whose powers fail, ten are ready with fresh strength to perform the same or greater labor for the same or even a smaller remuneration. All exciting and weakening amusements should be done away with, and the quiet joys of family intercourse, the conversation of intimate friends, and sociable walks in the fields and woods should take the place of brilliant evening assemblies. Then every person should

pursue some agreeable occupation besides his regular profession, and in the latter he ought to have frequent hours of relaxation to relieve the strain. Mental application, even for healthy, adult persons, ought not to be continued more than three or four hours at a time, and night work it would be best to avoid altogether, as the excitement is apt to interfere with sleep. All who follow intellectual pursuits ought to have several weeks of complete rest at least once a year. Sleep is, however, the principal agent of recuperation. The amount of sleep needed is different for different persons. For the ordinary worker from six to eight hours is absolutely necessary; yet how often, in the battle for existence in our time, is the desire for sleep forcibly suppressed and the night's rest improperly shortened? Sooner or later insomnia wreaks its vengeance on the offender. Many a person who once robbed himself of the necessary amount of sleep would gladly sleep now, but cannot. I do not hesitate to say that nerve troubles first develop into disease when joined with sleeplessness. It appears as a later symptom of a long-standing nervous disturbance, but to the lay minds it appears at the first signs of disorder, and is frequently taken to be the cause. The worker of the nineteenth century works beyond his strength, and in order to keep it up he resorts to stimulants — coffee, tea, spices, alcohol, tobacco. These produce a super-excitation of the nerves, which brings in its train insomnia; and to overcome this, he resorts to narcotics.

“The life of many of our contemporaries consists in taking artificial stimulants to enable them to perform their work, and then resorting to powerful narcotics that can counteract the artificial stimulation and produce rest and sleep. Any one can see that this alternation of stimulation and depression, at least once every twenty-four hours, must weaken the nervous system. Coffee is a powerful stimulant for the heart, and, therefore, those who suffer from palpitation, from hysterical conditions, or from insomnia should avoid its use. Tea in daytime acts more mildly on most people, but taken



evenings, it drives away sleep. The spices are less active nerve stimulants; yet pepper, especially, and some of the others affect the nerves of the digestive organs powerfully, and their liberal use in modern cookery has something to do with the epidemic insomnia. Of the injurious, the actually destructive effects of alcohol taken in excess, little need be said. We physicians are not a little to blame in that we insist on giving large quantities of alcohol in fevers and conditions of exhaustion, not to speak of the methods used to cure the morphine habit, until patients often acquire the drinking habit. The evil results of the abuse of alcohol are not often apparent. Long before *delirium tremens* or other serious brain diseases appear, they are preceded by manifold nervous disturbances, the real cause of which is not often understood. I have frequently found that rheumatic pains, that were ascribed to a cold, were nothing but alcohol-neuritis, a mild form of inflammation of the nerves resulting from the use of alcohol, which disappeared when the practice was given up, only to return with the slightest repetition of the indulgence. Most habitual drinkers, and some of them very early, are subject to changes in the vascular organs, such as fatty degeneration of the heart and arterio-sclerosis, which lead to grave affections of the nervous system, like apoplexy and softening of the brain. Finally, it may be taken as proven that the children of drunkards, if they are not carried off prematurely by brain troubles, are frequently afflicted with serious nervous ailments, such as epilepsy, idiocy, and the like. Tobacco has come to be in our time a national poison in many countries, and most especially in Germany. As sequels of chronic nicotine intoxication may be noted without fear of contradiction: palpitation and weakness of the heart; irregularity of the pulse of which heart-pang or *angina pectoris* is an acute symptom; general nervous debility; tremulousness; disturbances of vision, even to the point of blindness; and hypochondriacal depression, even to the degree of melancholia. The fear-inspiring intermission of the pulse is a frequent cause of inveterate insomnia.

That the children of heavy smokers suffer with uncommon frequency from nervous diseases, is an established fact.

"And now for the narcotics, at the head of which stands morphine. The great danger of falling into the habit of this drug arises from the cowardice and degeneracy of our time. No one will suffer pain, no matter how slight, so long as it is transitory. Not a tooth can be drawn, nor a child born into the world without the use of an anodyne, and when death comes we must have euthanasia. It is said that many physicians lend their hand too willingly, and are ready with the injecting needle to check a pain that could easily be borne, not reflecting that it is immoral to encourage effeminacy, and a dangerous thing to plant the germ of the morbid habit, a terrible passion leads inevitably to physical and spiritual debility and to death. The same is true of the constantly increasing cocainism and hasheesh intoxication. Our generation demands above everything narcotics to produce the sleep that first we drive from us, and afterward so fondly desire; opium, morphine, chloral, bromide of sodium, paraldehyde, hydrate of amyl, urethan, sulfonal, hypnosomnal, and whatever are all their names — one would think names would soon give out, so fast are these children born. But how can we sleep without resorting to soporific? Just as the life of the soul during the day is reflected in dreams, so the conditions of sleep are determined by all that we do when awake. The chief rule is to so act waking that you can sleep. Begin by accustoming yourself to do without excitants. Many a case of sleeplessness I have seen yield when all other means failed, to restricting, or totally abandoning for a time, the use of spirituous drinks, coffee, tea, and tobacco."

---

ALVINA CARSON OF LIVERPOOL leads all other records as a jail repeater, and may be said to be the champion of the world, in having been sentenced and served out the time on two hundred and eighteen occasions. Inebriety, breach of the peace, and assault have been the charges placed against her name, in this record-breaking career.

## HOW COCAINE PRODUCES DEATH.

Maurel (*Bull. Gén. de Thérap.*, March 15, 1892) has published an interesting experimental study of the action of cocaine upon the blood of man and that of the rabbit. Among the many conclusions arrived at by the author, the following may be mentioned: 1. Death by cocaine appears to result from the destruction of the leucocytes, or from the changes produced in them through the influence of the drug. 2. Death appears to take place in two manners — by *saturation of the blood* or by *embolism* — according as the cocaine comes in contact with the blood in *non-toxic* or *toxic* quantities for the leucocytes. 3. In the rabbit, 1 centigramme of chlorhydrate of cocaine is sufficient to kill the leucocytes in one gramme of blood, and 1 centigramme of the salt per kilogramme of the body-weight, injected into the femoral vein of the animal, is likewise sufficient to produce death in less than five minutes. 4. Hypodermically administered, or by the stomach, the lethal dose is three times as large. 5. In man, the leucocytes in one gramme of blood die under a dose of from 1 to 1½ milligrammes; the same effect is produced in sixty grammes of blood, which is the tenth part of the whole amount in a man weighing sixty kilogrammes, by a dose of from 6 to 9 centigrammes of the salt. 6. In the rabbit, the rapidly toxic solutions for the leucocytes are in the proportion of from 75 centigrammes to 1 gramme per 100. 7. In man, the rapidly toxic solutions for the leucocytes range from 10 to 20 centigrammes per 100 of blood, the average being 15 centigrammes. 8. The possibility, on the one hand, of killing a rabbit by an injection of cocaine sufficiently large to destroy the leucocytes in one-tenth of the animal's total amount of blood, and, on the other, the possibility of injecting the same proportionate amount of drug, in the case of man, may give rise to the assumption that such quantities produce the poisonous effects observed by being introduced directly into the blood. 9. In death by *saturation*; in the case of the rabbit, as well as that of man,

the great tendency of the leucocytes is to assume the spherical form. 10. In death produced by intravenous injections, the fatal issue is caused through the rapid death of the leucocytes, which, assuming the form of rigid disks, act as *emboli*. 11. As stated before, death by cocaine is effected through two mechanisms — *saturation of the blood* and *embolism*. 12. From the results of the experiments upon the rabbit, the solutions of the strength of 10 centigrammes of the chlorhydrate of cocaine per 100 grammes of distilled water are seven to eight times inferior to those which are lethal to the leucocytes; but they are sufficient to produce, injected into the cellular tissue, an anæsthetic effect, lasting about fifteen minutes. 13. In all cases, for hypodermic use, solutions higher than 15 centigrammes of chlorhydrate of cocaine per 100 grammes of distilled water, should not be employed. Feeble solutions are free from danger; those composed of 5 centigrammes per 100 grammes of water may be employed in relatively large quantities without producing untoward effects.

The practical inference drawn by the author from this research is, that the danger of hypodermic injections of the chlorhydrate of cocaine lies from the start in the concentration of the solution employed, and not in the quantity of the drug administered; and afterwards, in the accidental penetration of the toxic solutions into the blood vessels.

— *Therapeutic Gazette*.

---

#### THE OPIUM HABIT IN INDIA.

The whole civilized world has, for many years, been pointing with scorn at the British government for its conduct in relation to the opium traffic with China, but the punishment of this national sin is now being administered in the great spread of the opium habit in India and Burmah, and the consequent deterioration of the native races of these countries.

The evils arising from the opium habit have finally become so great that a commission was appointed two years

ago by the British government, as the result of a petition addressed to Parliament by the Society for the Suppression of the Opium traffic. This commission has recently made its report, which is an occasion for still greater astonishment and will be, if possible, an even greater discredit to Great Britain, if the report receives the sanction of Parliament, than was the course pursued by that government toward the Chinese many years ago, in forcing opium upon them in opposition to the protective means widely introduced by the Chinese government. Sir Alex. MacKenzie and other members of the commission declare that the suppression of the opium traffic is impossible with a population of 220,000,000 people to control.

The commission also makes the astonishing assertion that the Chinese and others consume great quantities of opium without damage and "with beneficial results!" Evidently, a commission for the investigation of a humanitarian question like this should have other than a political basis. Further comment is unnecessary.—*Dr. Kellogg in Bacteriological World.*

---

#### ALCOHOL.

In *Merck's Bulletin*, occurs the following :

"It is in instances where as a result of this small yield of energy, the symptoms of marked depression and extreme exhaustion and faintness frequently occur and become a prominent and often dangerous symptom. It is in these instances, also, that, by virtue of the surplus of unconsumed oxygen, small and frequent doses of alcoholic stimulants can be quickly and completely oxidized; thus furnishing to the system at once a volume of heat and energy, without first compelling an expenditure of digestive energy to make the substance used available. This naturally stimulates and innervates the whole system without loss of vital energy, and explains how *alcohol* often carries a depressed and sinking system over many danger points, and thus saves life, when, without its use, death must inevitably have been the result.

“When the system is in possession of full digestive power and can therefore produce the requisite amount of heat and energy and constructive work, by utilizing all the available oxygen through a well-selected diet,—then alcohol, by its power to attract oxygen *away from* the natural food-stuff, and producing a sudden ebullition of heat and spasmodic and irregular periods of stimulation and innervation, becomes an element of danger to the animal economy. It prevents normal oxidation and assimilation, develops suboxidation of the proteid compounds, followed by disease,—not by the action of the alcohol *per se*, but through its secondary effect, viz. suboxidation of the proteid elements.

“Alcohol taken after excessive mental and physical work when the system is already in a state of suboxidation, still further exhausts the oxygen supply, and renders the condition absolutely worse. The sudden development of heat and energy by the oxidation of the dose of alcohol taken, increases the innervation of the system, which, together with the anæsthetic or benumbed condition consequent upon the suboxidation of the proteids and the development of toxic principles, deludes the partaker with the idea that more work can be accomplished. But the never-failing clinical history is one of ultimate disappointment.”

#### SOME FACTS ABOUT OPIUM INEBRIETY.

The New York *Medical Journal* gives some of the conclusions of a recent discussion on opium in India, by the Calcutta Medical Society.

Among the facts it was asserted that opium inebriety was contracted by using it in the treatment of malarial fever, to alleviate rheumatic pains, to cure chronic dysentery, chronic bronchitis, asthma, dyspepsia, and diabetes. Dr. Crombie, who seems to be a warm defender of the use of opium, believes it to be a prophylactic against malaria, and that it enables men to undergo prolonged muscular exertion on a small allowance of food. He asserts that opium can be taken in

small doses with perfect impunity. Also that morphine habit is extremely rare in India. One case of a lawyer is mentioned who took ninety grains a day of morphine and was able to carry on his business without trouble. The *Medical Gazette* comments on this as follows :

" In the course of the discussion it was further represented that opium was taken in India after a man reached forty years of age, under the belief that it checks wear and tear, and helps to conserve the bodily powers as age advances. Dr. Ghosh told of a renowned kaviraj in his quarter, himself an opium-eater, who always advised his friends and neighbors thus : ' Brother, if you wish to live long, take opium every day, and you will never get old or look older than your age. When you commence to take opium, it will be a strong prop to your life, and improve your general health.'

" It was also shown that opium is taken in India as a prophylactic against malarial fever by the inhabitants of marshy and damp districts with decided benefit. In this connection the fact was pointed out that the same habit of taking opium as prevails in the malarial districts of India prevails also in England in the fen districts ; and both in England and India the opium is indulged in on account of its prophylactic and stimulant properties. In the ague and fen districts of Norfolk and Lincolnshire opium-eating is popular, habitual, and common, and is taken by people of all classes, especially by the poor and miserable, and by those who in other districts would seek comfort from gin or beer. The habit also appears to be common in Cambridgeshire.

With the general prevalence of the opium habit in India and in the fen districts of England, if opium was the cause of those dire results to the constitution of the eater or smoker that the opponents of opium taking would have us believe, it is strange that medical men who reside among the people and attend them in their sickness have not observed them. It is remarkable that the opinions of medical men practicing in the fen districts of England familiar with the opium-eaters there are in direct accord with the opinions formed by medical

men in India. For instance, Dr. Elliott, of Whittlesea, who has resided for many years in Cambridgeshire in the midst of the fen district where opium-eating is very common, and has had unusual opportunities of forming an opinion, considers it proved beyond all doubt that the habit is extremely common, that the quantity consumed is great, and that after all it does very little harm."

Strangely, only two men of the society had seen any ill effects on the constitution from the moderate use of opium, and their views were more or less uncertain. These extraordinary statements, so entirely opposed to all experience in other parts of the world, seem to be directed to neutralize the efforts of the anti-opium society of England. To the American reader these statements have a suspicious ring, and we are prepared to hear of some new discovery which the authors will sell for a consideration. Finally, the editor of the *Gazette* closes with the following very startling comment, which seems to throw much light on the motive of this discussion, and suggest that even medical men in far-off India are vulnerable and open to theories and suggestions that are not strictly scientific.

"We earnestly hope that none will be led into the error of interfering with a custom which is hallowed by ancient usage, has the sanction of some of the religious books, does an infinitesimal amount of harm to the human constitution, affects neither the morals of the individual nor the moral sense of the public, produces neither disorder nor riot, but which stands in the same relation to the East as the custom of beer and wine drinking to the West, is a luxury to rich and poor, is a prophylactic against malarial fever, and is a comfort and mainstay to people advancing in years."

---

THE oldest inebriate asylum in Europe is the one founded at Lintorf, Dusseldorf, in Germany, in 1851, for the retention and protection of released prisoners whose intemperance has led to the cause of imprisonment. There are now



five or six inebriate asylums in Germany, and four in Switzerland: Chrischona, in Basle, and Trelex, in Vaud, are under the management of the Blue Cross Society; Ellikon a. d. Thur, in the Canton of Zurich, the only one under direct medical supervision and management; and, lastly, Nüchtern, in Berne Canton, under the management of Pastor Marthaler. There is also an inebriate asylum in Holland, and others are in course of erection or contemplated in Germany, Paris, and elsewhere. It is interesting to note that the legislation so much desired by Dr. Kerr and others in England, in relation to the treatment of inebriates, has really been enacted in St. Gall, one of the largest German Cantons of Switzerland. A law was passed in this Canton in 1891 whereby any one rendering himself obnoxious or dangerous to his family or the community, through drinking habits, may, with a medical certificate, be sent to an inebriate asylum, and be paid for out of the public poor-fund, if his friends are unable or unwilling to defray his expenses.

---

**MARRIAGE AND DISEASE.** A study of Heredity and the more important Family Degenerations. By S. A. K. STRAHAN, M.D., Barrister-at-Law, London, England. D. Appleton & Co., New York, 1892.

This work is a very clear study of hereditary degeneration, in which the fact of the transmission of all qualities, good and bad, physical, mental, and moral, are very strongly urged, and defended with scientific precision. In a series of thoughtful chapters, showing wide reading and thorough induction, he enters into the details and ramifications of his subject, studying heredity in its relations to marriage and such consequent ills as insanity, drunkenness, epilepsy, syphilis, deaf-mutism, cancer, tubercular disease, gout, and rheumatism, together with such special phenomena in connection with the marital relation as consanguineous, late and early marriages, and minor hereditary affections. The whole study is conducted in a clear and admirably logical manner,

and wins the conviction of the unbiased reader. For a condensed and popular summary of scientific opinion, this book is the most satisfactory which has appeared. As an aid to the study of inebriety it is exceedingly valuable, and is, without question, the most important contribution of the year to this topic.

We shall give in the future part of the chapter on "Marriage and Drunkenness," which is very suggestive. The chapter on Instinctive Criminality is also very valuable and worthy of much study.

**THE PHYSICIAN HIMSELF AND THINGS THAT CONCERN HIS REPUTATION AND SUCCESS.**

By D. W. CATHELL, M.D., Baltimore, Md. Tenth edition. The F. A. Davis Co., Publishers, 1892.

In reading this book we were reminded of the definition a distinguished gentleman once gave of ethics. He said the gist of ethics could be thus expressed: "Keep yourself clean, your person neat, and behave yourself." So in regard to this book we believe that the above short summary includes everything treated of in this book.

The publishers have given us a very nice volume, and a convenient one for use.

**INEBRIETY: ITS CAUSES, ITS RESULTS, ITS REMEDY.** By F. D. CLUM, M.D., author of "Men and Women." Philadelphia, Pa. J. B. Lippincott Company, Publishers, 1892.

This is the third edition of a popular work, that is far beyond the average works of the class in accuracy of statement. Such books are very valuable at this time, and we commend this as the best popular discussion of alcohol on the market. The new edition is enlarged and much improved.

*Temperance Shot and Shell* is a curious compilation of eight hundred paragraphs termed *cartridges* for the temperance army, gathered by J. N. Stearns, Secretary of the National Temperance Society, New York city.

No more valuable present can be made to any thinking man than a subscription to the *Popular Science Monthly* for one year. No other journal brings more facts of wider interest to its readers. All fields of science are gleaned for the best thoughts and the latest voices of science.

*The Temperance Record*, the organ of the National Temperance League, published in London, is the best journal in the English language which discusses the popular side of the drink question. Its selections from all sides of this subject gives the reader a clear view which is always pleasing and instructive.

*The Homiletic Review* of New York is a most excellent publication, confined to the higher ranges of theology. The tone is broad, kindly, and clear, and many of the articles are so suggestive and stimulating that it is a rest and keen pleasure to follow them. Send to Funk & Wagnals Co., New York city, for a copy.

*Our Animal Friends*, published by the American Society for the Prevention of Cruelty to Animals, New York city. This is a large twenty-page monthly containing very interesting matter relating to animals and their treatment. All lovers of animals should read this journal, and help this society in their grand work of reform and protection. Send a dollar for a year's subscription to this society, No. 10 East 22d Street, New York city.

In the second annual meeting of the French alienists Dr. Rousset concludes a discussion on the influence of alcohol in the causation of general paralysis with the following statements:

1. Alcoholism leads to general paralysis.
2. Alcoholism causes a pseudo-general paralysis.
3. Alcoholism and general paralysis are first distinct, then lead one to the other.
4. Alcoholism requires a predisposition for the production of general paralysis.

## Editorial.

## INEBRIETY AND DELUSIONAL PARANOIA.

A certain number of inebriates have delusions of persecution, and attribute their use of spirits to the duplicity and wrongs of others. Failure to appreciate and aid them at some particular time; the bad judgments of parents; the temper or infidelity of the wife; the dishonesty of a partner; the envy and jealousy of rivals and associates, with business and social losses, are some of the reasons given by the inebriate in explanation of his drink excesses. Many of these are delusions without any basis, and yet they are reasoned out with plausibility and become fixed conceptions, which grow in intensity during the drink period; but in the free interval (or sober period) are partially forgotten.

Delusions of persecution or the infidelity of a wife, that during the free interval were forgotten or recognized as untrue, may suddenly concentrate into acts of violence when alcohol is used. Such cases are common in the lower courts, and the statement that the person was confiding, trustful, and loving in disposition when sober, but when under the influence of spirits was the very opposite, is the history of many inebriates.

Inebriates of the better class, who possess intelligence and clear judgment, will when drinking not unfrequently exhibit some startling delusions, that for a time control their conduct, and lead to very serious results. The delirium and stupor of alcohol is in most cases attended with delusions and false conceptions, also hallucinations, but they are usually of a minor character and easily corrected, or held so lightly that from advice they may be abandoned.

Beyond this, another class of inebriates display rapid, intense growth of delusions and imperative conceptions that cannot be corrected, and grow with every effort to correct the error.

These persons are paranoics, who from inheritance have some neurotic defect that is intensified by alcohol. They are delusionial maniacs, more dangerous because of the use of alcohol which palsies their moral centers and precipitates to actual demonstration the false beliefs they hold.

Egotistical, impulsive, unstable, and unreasoning, they are likely any moment to form wrong conclusions, and act from them at once. A neurotic of hypersensitive brain and low vitality finds a most seductive relief from the palsy of alcohol; after a time this intensifies the brain defects, arousing delusions and illusions, which the reason cannot correct, and which are dependent on any circumstances and surroundings that may change any moment.

An inebriate with homicidal kleptomania, pyromania, or any other maniac delusions, is ready to execute any of these impulses which circumstances or conditions of time and place may favor.

There are many reasons for assuming that these cases are paranoics, and that the use of alcohol is only a symptom marking a stage in the growth of the case. Where alcohol has been used for a time to excess, positive degeneration from drug traumatism follows. Brain anæmia and perversions are present.

The inebriate is then a maniac whose delusions are of the most dangerous nature. The free interval covers up and conceals this period. The practical fact which should be recognized is that all this large class of dangerous inebriates who commit assaults, homicides, and crimes of violence when using spirits should be adjudged insane, and promptly put under control and medical care. They are almost certain to commit crime, the gravity of which will depend entirely on circumstances that may change any moment. No punishment in jail or prison can prevent this; the use of spirits is only an exciting cause, its removal is not curative, the best resources of medical science combined with control of all the surroundings for a long period of time is the only remedy. Physicians who are called in contested cases of this charac-

ter should have no hesitation in asserting the irresponsibility of all inebriate criminals who have delusions which appear before or after the use of alcohol has begun. Reformed inebriates who display excessive egotism and extravagance in manners with morbid impulses of the appetites, and hysterical credulity, are paranoics. Such persons develop into delusional maniacs from the slightest changes. They relapse very unexpectedly and often commit crime.

In some cases the early history points to syphilis, traumatism, sunstroke, and other injuries, or profound anæmia, with organic changes. The alcohol has been used to relieve the irritation and exhaustion which follows such conditions. From this, delusional mania is a natural sequence. The alcohol may be abandoned, and the person become a reformer and occupy places of confidence and trust. The mania may be covered up in part, and while his character for eccentricity is recognized, his real mental state will appear in some startling crime or strange acts that could only arise from a diseased brain. In times of political excitement and waves of reform movements these men come into notice. They are the extremists and the wild enthusiasts, who endorse and defend strange theories and stranger measures. The lower and more mysterious the origin of the theory, the more credulous they become.

Practically inebriety is in many cases a symptom of delusional mania and paranoia. It is also an active cause of these obscure and most dangerous mental states. The intimate relation between these disorders is confirmed by clinical experience within the observation of every one.

TREATMENT OF INEBRIETY IN GERMANY. — The third annual report (1891) of the asylum for inebriates at Ellikon states that there were 151 applicants, forty-eight of whom (forty-one men and seven women) were admitted. Of these forty-one were discharged, twenty-three of whom have remained abstainers up to the date of the report, while eleven

drin  
more  
35-2  
and

R

I

Colo

“ Re

This

gist

fect

every

high

paper

seen

frequ

or st

traun

poran

torati

far th

In so

toms

of st

acter

every

source

N

anyon

impai

itself

Amne

cleari

trance

drink moderately, and six have relapsed. These figures are more encouraging than those for 1889, and 1890, which show 35.2 per cent. of total abstainers, 29.6 of moderate drinkers, and 35.2 of relapses.

#### RETRO-ANTEROGRADE AMNESIA IN INEBRIETY.

Dr. Eskridge of Denver read at a late meeting of the Colorado State Medical Society a very suggestive paper on "Retro-antegrade Amnesia," illustrated by two cases. This paper has been published in the *Alienist and Neurologist* for July, and is an exceedingly valuable study of a defect that is little known, although it forms a part of almost every medico-legal question involving consciousness and the higher brain operations. We especially call attention to this paper, and some of the similar symptoms and conditions seen among inebriates. Amnesias of inebriates occur most frequently in those cases who become profoundly narcotized, or stupidly intoxicated from alcohol. Some form of drug traumatism occurs, in which the brain centers are temporarily palsied, and their normal activity suspended. Restoration follows, but no one can tell to what extent, or how far the cell and nerve forces regain their former strength. In some instances the first intoxication is followed by symptoms of marked degeneration. In others repeated attacks of stupor from alcohol is not noticeable in the general character of the person. Yet it is a fact beyond question that every intoxication is a literal traumatism to the brain, and source of injury from which there is never full restoration.

Notwithstanding the absence of all general symptoms, anyone who at intervals or repeatedly is intoxicated has an impaired and defective brain, exceedingly liable to manifest itself in varied and most complex diseases of this organ. Amnesia, partial or complete, total and fixed, or transient and clearing up, is more or less incident to each case. The trance cases are extreme types, in which a marked automo-

tism appears, and the patient gives little or no evidence of his real condition. Other amnesias are apparent to the observer in the confusion and impulsiveness of the victim. These conditions follow the usual law of growth, and increase in frequency and completeness with each act. Dr. Eskridge says truly: "We may affirm that whoever has had his memory disturbed by a period of complete or partial amnesia, unless an entire restoration of memory for that period takes place, can never have a complete healthy consciousness." Experience and study of such cases among inebriates would sustain the assertion that healthy consciousness can never be regained after such attacks. Defects of memory and judgment will always follow in these cases. The following is a common illustration of amnesias among inebriates: A periodical drinker will after a certain time in his drink paroxysm have a full blank of memory. Consciousness will return suddenly, and while he may remember some events immediately preceding this blank, an interval extending back of this time, probably covering the drink period, will be also a blank. Such cases will begin to drink in moderation and continue their work, more or less irregularly, growing worse steadily, then go away among strangers to be free from observation, and finally, when the paroxysm ends, consciousness will return, and all the past will be lost, except a short period when preparing or going to some place to continue the drink impulse.

The first part of the drink storm will be apparently recognized and registered by the memory. The acts and expressions of the person will seem to indicate no failure of this faculty. Later it will be apparent that he is not conscious of his conduct or thoughts. Finally he will recover, and amnesia will be found to extend forward and backward from a certain point in the history. Often the retro-amnesias will clear up, and the later remain, or *vice versa*.

Another class of cases, who are constant drinkers, have amnesia which begins at a certain point and extends back for days or weeks. All this time no event has made any re-



memberable record in their mind. Usually these are total, and seldom clear up. Many of these persons conceal this condition, and make every effort possible to find out from their friends what they did, so as to appear fully conscious during this time. A merchant with large business interests, who drinks steadily, has amnesia more or less all the time, and keeps a stenographer to write down all his conversation in business circles; also to keep a record of his acts and associates. This record is the only evidence he has of much of his life.

These cases are almost infinite in number and variety, and are practically unknown and not studied up to this time.

Their medico-legal importance cannot be over-estimated. In the study of the disputed questions of responsibility with an inebriate complication, the integrity of the memory is the very first question to be settled. The statement of the person can be in most cases confirmed or disproved by a class of comparative facts that, to all intents and purposes, may be considered good evidence. The failure of memory is a most suspicious fact in the study of the case, and should take precedence over all inquiries of motives and supposed will power in determining the possible responsibility of any act.

---

#### THE OLD CRITICISM.

A leading medical journal in a recent editorial makes the following rather startling statement: "We are just now largely in the hands of the sentimentalists who would build State hospitals for the drunkards, who would make prisons places of ease and luxury, and whose charity gives to crime the vantage ground and favors the opportunity in the criminal class of indefinitely propagating its species. The inference from this is, that the methods of treating criminals and inebriates in the past are superior, and less dangerous or likely to propagate the evils it aims to prevent."

Such statements are only the voices of poor belated travelers, who still extol the old stage coach, and discern demons in inebriety and crime which can only be driven out by violence. Fortunately the world moves, and the progress of truth is ever onward. Inebriety and criminality are not to be judged by the theories of the past. Every advance brings new views and methods of reaching these evils. Every study of the present system of treating inebriety and crime, from every rational point of view, reveals both the danger and fatality of the present methods. Authorities who have studied the subject exhaustively have repeatedly asserted, that the present legal treatment of inebriety not only failed in every sense, but literally favored and increased the malady, making each victim more incurable; also that the present treatment of criminals was equally fatal and disastrous to the prisoner. These facts have passed beyond question, and can be verified in every town and city in the country. They are not matters of sentiment or theory that depend on individual opinions, but are facts which are recognized with great reluctance by men who are constitutionally adverse to new truths of any kind. Such men are often moderate drinkers, and the theory of disease in inebriety, and the possibility of physical treatment, has a personal application that is disturbing.

The sentimentalists are those who cling to the vague superstitious theories of the past. They are always alarmed at new truths, and have no faith in the eternal order and growth of truth. Such men are rapidly receding, and their hoarse cries grow fainter as the larger, higher truths become known.

State hospitals for inebriates are already in sight, their need and value has passed the realm of question and doubt. Prisons for criminals, that will build up and restore whatever of manhood is not lost, have come to stay. The old conception of vengeance and retaliation, and the old system that crushes out and degrades the physical man to elevate his moral nature are doomed. Already they are crumbling

away, and the revolution and evolution of events will bring in an entirely new system.

Pessimistic alarms and sneers, far back from the front line of advance, are only heard by those who have no conception of the struggle or the movement of new truths on the frontiers of science. The closing century will carry with it to the grave the wreckage of a vast number of theories and superstitions that have dominated the past—among them the vice theory of inebriety, and the controllable wickedness of criminals.

---

#### LIABILITY OF PAUPER INEBRIATES FOR CARE, ETC.

A curious question was raised in a London police court, where a pauper was prosecuted for making himself drunk and bringing on delirium tremens, so as to be treated in the infirmary. The magistrate held that no conviction could be obtained, for the man was ill and unable to maintain himself, and the law could take no cognizance of the way in which the present pauperism was produced. The authorities appealed from this decision. On this the *British Medical Journal* has the following:

“Whatever the ultimate issue of this prosecution, in the existing defective provision for the care of habitual drunkards, we fear that little practical good can follow. If there were power to send such a man to a home for inebriates for a lengthened period for therapeutic treatment, or to a prison specially set apart for such a purpose, on conviction for having made himself chargeable to the rates, penal procedure might be useful. But there is no such power, neither is there such a home or a prison; and the same curative procedure would be much more cheaply and effectively secured by the compulsory legislation for habitual drunkards advocated by the Inebriates' Legislation Committee of the British Medical Association and the Society for the Study of Inebriety.

"Apart from such a practical view of one possible issue of this test case lies the consideration of the most judicious course to pursue with inebriates. Delirium tremens has been held by more than one recognized decision to absolve from criminal responsibility, and with such a precedent in trials for a capital offense a conviction followed by punishment for cost of maintenance and care would be exceedingly interesting. The prosecution now under review involves various intricate and perplexing considerations, and we shall look forward to further legal proceedings with interest."

#### THE QUESTION OF RESPONSIBILITY IN MORPHINISM.

Dr. Parant writes in the *Journal of Insanity* a very interesting review of some recent literature on this subject.

The frequency of crime in which the criminals were under the influence of morphine, and who claimed not to know what they had done, is attracting much attention in France. A distinguished literary man was accused of extreme cruelty to his young child. On judicial inquiry he was found to be a morphimaniac, and although no medical examination could detect any insanity, there was obviously a defect of intelligence and of the will, and he was sent to an insane asylum. A physician, also a victim, shot and killed his uncle without the slightest reason or provocation. Later he had no recollection of the act. This was a morphine trance case. Dr. Guimbail reviews this subject and asserts that the use of morphine causes defect of attention and paralysis of the will. The person is unable to distinguish the good from the evil, or that which is permissible from that which is not. His free will is lost, and he gives way to every impulse. He urges that a moment comes in the morphine taker in which he becomes possessed with disease as much as a genuine lunatic. The morphine taker is at first like an inebriate, later is more especially a dipsomaniac.

The tendency is to recur in periods by longer or shorter free intervals.

The author falls into the common blunder of considering the fact of continual use of morphine an aggravation, rather than an extenuation of the responsibility. The intellectual enfeeblement and diminution of the moral sense of persons who have used morphine for prolonged periods, is admitted as impairing responsibility. When the morphimaniac is literally under a pathological impulse and commits crime, he should be regarded as insane, and treated as irresponsible. This is more apparent when associated with mental disturbance, loss of control, and minor delusions.

Both the correspondent and the author, from whom he quotes, assume that there is some border line between responsibility and irresponsibility which it is possible to define. On one side of this line the use of morphine is an aggravation of the offense to be punished. On the other side the victim is clearly insane and irresponsible.

This view, although confusing and open to very serious mistakes, is a great advance over the usual dictum of judges and opinions of expert physicians on the witness stand.

---

Dr. Kellogg says the rationale of the Gold cure is simply an overwhelming of the system with a poison still more potent than alcohol, until the patient is made so sick from the effects of the strychnia and atropia — two of the most deadly of all known drugs — that he can endure no additional poisoning, not even that of alcohol. The fact that his craving for liquor is at the time abolished makes a powerful impression upon him, which is heightened by the assurance that the appetite is destroyed forever. This cannot be true, as there is no power in any drug to so suddenly change the condition of the body from one of disease to health, when the disease depends upon a morbid state of the vital structures of the body. So long, however, as the individual maintains in his mind the firm belief that he has lost his appetite for alcohol,

he is safe, at least, from this form of intoxication. The moment he discovers the untruth of his fancied security, he is back in the gutter again. The Gold cure, as well as other similar cures, is an ingenious combination of mind cure with a powerful drug. The drug makes the patient sick and temporarily destroys his morbid craving, a result which the physician assures him is permanent, and which is permanent so long as he believes.

*The Medical Temperance Association* has come, not only to meet a growing necessity in the march of science, but to concentrate and direct medical study in this field. Public interest in this subject is far beyond the actual knowledge of the facts and their meaning. A wild, vague, and confusing literature exists, which only medical study can correct. The generous offer of Dr. Kellogg for the best essays on two topics of this subject, will give renewed impetus to the society, and attract much attention to its annual meeting in June next. We have repeatedly called attention to the incongruity of a dozen great moral societies and a political party discussing a purely medical and scientific question, which physicians, in a large measure, ignore. Our association for the study and cure of inebriety with less than a hundred members, has, since 1870, been urging the scientific side of this topic in the face of opposition from all sides; now the Medical Temperance Association appears with the same purpose and object. Both together have less than two hundred members and not more than a third of these are active workers. The problem is simply, How shall we physicians become students and teachers of this great scientific question that is now in the hands of quacks and moralists?

When will medical men bring this topic out of the realm of empiricism into the sunlight of science?

This work has begun, and with pleasure we give the records of the latest society, and extend our full assurance that the work commenced will be a pioneer labor far into the coming century.

## Clinical Notes and Comments.

## DRINK AND PRISON.

"What can be done with a woman who spends the waning years of her life between drink and prison?" The *Daily Telegraph* sorrowfully and pertinently asked this question concerning Jane Cakebread, aged sixty-three, who has been over three hundred times before the magistrate in various courts of the metropolis, and who has spent years in prison solely through drink. Our able and benevolent contemporary recommends "the boasted and boastful religious agencies to which thousands of pounds roll in yearly to try to do something for her." But it will not be useless to remind this powerful organ of public opinion that the case of Jane Cakebread is only one horrid example of many thousands within daily observation, in which religious influences prove ineffective, unless aided by putting the physical basis on which they are brought to bear into the condition of being a more or less normal and healthy instrument. Nor does mere punitive imprisonment for short periods suffice. The only means which long and painful experience has proved to be efficacious in the treatment of habitual inebriety, is preventive detention under circumstances where isolation from alcoholic temptation is combined with suitable moral influence and medical and dietetic treatment. At present such treatment can only be applied at the voluntary request of the drunkard. The British Medical Association has now for many years demanded as a great national boon, and a means of economy, mercy, and social good order, that compulsory detention and reformatory treatment shall be vested in the hands of magistrates, under suitable conditions, and with proper restrictions. The satisfactory, though necessarily very restricted and limited, action of the present law—mainly due to like medical representations through the late

Dr. Dalrymple, M.P.—justifies its extension to the poor and semi-criminal classes. The matter is, we are glad to say, now receiving close attention from a Departmental Committee of the Home Office, before which the Inebriety Committee of the British Medical Association has represented its views, and it is much to be hoped that early legislative modifications in the sense indicated may be effected.—*British Medical Journal.*

#### INEBRIATES AND REPEATERS.

In an interesting paper Dr. J. F. Sutherland gives some striking information as to inebriates convicted for various offenses against the law. He first points out that, though over a million apprehensions, or one to thirty-three of the population, have been effected by the police in the United Kingdom during one period of twelve months, the number of individuals is very much less, one person representing in many instances from ten to fifty apprehensions in one year. More than half a million were for petty offenses. Of the 137,000 persons convicted of the more serious charges, 100,000 were first offenders or casuals, 27,000 intermediates, and 10,000 habituels. Women are three times more prone to these offenses than men. The connection between simple drunkenness and the three other petty offenses of disorderly conduct, breach of the peace, and petty assaults is most intimate, eighty-six per cent. of the persons guilty of these other petty offenses having been drunk when apprehended. There are over 10,000 commitments of women to Glasgow in the year. These convictions represent 3,800 women, of whom 9 per cent. were imprisoned six, ten, twenty, and thirty times, and account for 40 per cent. of the whole. In Scotland a prison, or part of a prison, might be converted into a retreat for one section of inebriate offenders, and for another some of the now almost empty poorhouses under another name. For the refractory class, numbering about 700, cellular confinement might still be needed, and their work could be



made fairly remunerative. The more docile, about 500 in number, might be treated in the poorhouses, and employed in outdoor farming or gardening work. A certain number of workhouses in Scotland might be transformed into homes for inebriates, each with from twenty to fifty inmates. The present judicial procedure with inebriate offenders is a fiasco daily enacted in our police courts at great cost, the offending "repeaters" themselves receiving their brief and useless sentences with the utmost *nonchalance*. Of the present treatment of the habitual drunkard there can be written only "failure."—*British Medical Journal*.

---

#### NEED OF INEBRIATE ASYLUMS.

The President and Fellows of the Irish Royal College of Physicians have petitioned the House of Commons, strongly advocating the compulsory seclusion of diseased inebriates for curative purposes, and pointing out the need of special homes for those who have had their will power so broken down as to be unable of their own account to apply for admission. They say provision would also be made for free medical treatment of those whose poverty prevents any payment on their part, and also for regulating the admission of voluntary applicants to inebriate asylums. And it is with this last-named class that there is most reason for help and hopefulness. Hundreds, perhaps thousands, go down "alive into the pit," because there is for them no retreat from their own vice. Their will power is practically destroyed; their resistance broken down; resolves and resolutions are alike worthless. "If only," they say to themselves—"if only some way of escape yet remained! If only we could be where this deadly temptation could not reach us!" And a home of this class would afford such a refuge, would give time and opportunity for strengthening the weakened nerves, reinvigorating the shattered health, and so building up the moral and intellectual nature of the fallen man that his will

and reason, once more acting harmoniously, should bring him in time to his true position, and send him forth a man among men, to do good service in the cause of truth and soberness.

---

PREVENTION OF COCAINE POISONING. — Accidents from the use of cocaine have become so numerous that it is looked upon by some as too risky a drug to be administered. This is a pity, since with caution it may certainly be used without fear.

Patients should be prepared by giving them a drop of a one per cent. alcoholic solution of trinitrine a minute before administering the cocaine, repeating the dose at intervals if the pulse be not affected and no pain or fullness in the temporal region be felt. The trinitrine acts almost as rapidly and continues to affect the vaso-dilators for upward of half an hour longer than nitrite of amyl, which Prof. Lepine has proposed, but which, on account of its fleeting action has failed to gratify the hopes to which it gave rise.

Prof. Lepine has pointed out the importance of paying attention to the type of patient. The nervous are to be encouraged and calmed, the anemic made to lie down before administering the drug, for thus, as Dujardin-Beaumetz points out, cerebral anemia is avoided. Dr. Lepine's statistics show that in the neighborhood of the face it is unsafe to inject hypodermically more than two centigrammes (one-third of a grain) at a time, and not more than from four or five centigrammes should be allowed to come in contact with a mucous surface. By taking these precautions accident is guarded against. — *Western Medical Reporter.*

---

According to *Metschnikoff*, chloral has the power to anaesthetize the leucocytes and prevent them from destroying the poisonous bacteria. Hence the use of chloral breaks up the natural protective or scavenger powers of the leucocytes.

### A REVIEW OF THE HYPNOTICS CHIEFLY EMPLOYED IN AMERICAN HOSPITALS FOR THE INSANE.

In an editorial article in the *Medical and Surgical Reporter*, June 4, 1892, the writer states that while this subject is of special interest to those having practical relations with the insane, it is also interesting to the general practitioner, it being of the utmost importance that the insomnia of nervousness, incipient insanity, or the first stages of decided mania or melancholia, should be controlled by the best means which experience has pointed out.

While believing that such measures as hot baths, douches, brisk rubbing, hot, nutritious drinks at bed-time, care of the diet, and proper stimulation in the asthenic cases, together with hot appliances and galvanism, should first be resorted to, the author refers in the present article to cases in which these means have failed.

After calling attention to the fact that much valuable work has recently been performed in the discovery and clinical application of new hypnotic substances, the writer believes that no single drug is applicable to every case, but that drugs exist which, properly used, with due regard to their actions, go very far toward affording us a specific.

Before referring to the most useful of these, the author outlines as follows the indications as presented in neurotic conditions:

1. Acute mania, acute delirious mania, acute epileptic mania, and the acute maniacal stages of general paresis or chronic mania. In these the motor and cerebral activity are lessened and strength is conserved. It is in these states especially that hypnotics are urgently demanded, and are the most useful.

2. In the noisy states of chronic mania, late stages of general paresis, and in the restlessness of convalescence from acute psychoses.

3. In the insomnia of acute and chronic melancholia, to aid the recuperative powers through rest.

4. In alcoholic insanity, periodic and circular insanity, and in primary or terminal dementia. The actions are to quiet motor excitement and control the patient, as well as to obtain sleep.

These are the chief indications, according to the author, which present themselves among the communities in American hospitals for the insane, for which every known remedy has been from time to time employed. It would be useless, and beyond the scope of this sketch, as he believes, to quote from the voluminous literature of the subject; so he offers only "certain facts which are of attested value."

The writer states that Sulfonal has been extensively tried since its discovery by Kast, and has been used with positive success by Cramer in 92 cases, with no instance of unpleasant after-effects; also by Schwalbe, who reports success in 66 per cent. of his cases, and by Rabbas, who used it over 200 times with good effect. Papers in praise of Sulfonal have been written by such authorities as Ziemssen, Kast, Engelman, Ostreicher, Schotte, Schmey, Frankel, Salgo, Rosenbach, and others abroad, while in this country we have the contributions of Flint, Wetherill, Sachs, Wilson, Hutchinson, Griffith, Hay, Kierman, and many others.

The author thinks there can be little doubt of the efficacy of Sulfonal in cases of insanity, its chief benefit being derived in cases of simple mania, restlessness, excessive nervousness, *and in all cases in which simple insomnia is to be overcome.* In certain forms of melancholia and in the excessive nervous insomnia of alcoholism Sulfonal is one of the best remedies. No better way of giving Sulfonal has been found than that of Kast—in a half cupful of tea or light broth, two or three hours before its effects are desired.

Sulfonal, says the author, is being extensively used in cases of insomnia, and it has been found repeatedly to produce sleep when other hypnotics have failed. According to the author's view, Sulfonal acts best when given in a single large dose, which at the beginning should not exceed fifteen grains.

### INFLUENCE OF ALCOHOLIC DRINKS ON URINARY SEDIMENT.

Dr. Glasser has examined the urine of persons who were in good health after the use of alcoholic drinks, employing the centrifugal apparatus of Steinbeck. Beside the formation of uric acid and calcium oxalate crystals, the most important findings were an increase in the number of leucocytes and the appearance of cylinders and cylindroids. The increase in the leucocytes was so constant that the writer was able to decide as to a preceding excess in drinking. With the continued use of alcohol, the increase was so great that one would think he had a specimen of urine with pus in it. Hand in hand with this went the augmentation of the number of cylinders. He concludes as follows:

1. Alcoholic drinks, even in moderate quantities, act as irritants to the kidneys, causing the emigration of leucocytes and the formation of cylinders; further, they favor the excessive production of crystals of uric acid and calcium oxalate. This is either due to the increased metabolism of the tissue or an alteration by the alcohol of the relations of solubility of the salts of the urine, so that the oxalate of lime and uric acid are precipitated.

2. This action, after a single indulgence, does not extend over thirty-six hours, and with continuous use is cumulative.—*Deutsche Med. Woch.*

HYPNOTISM AND ALCOHOLISM.—At the Nottingham Medical Congress, Dr. Lloyd Tuckey gave an abstract of a paper upon the Value of Hypnotism in Chronic Alcoholism. He reviewed thirty-one cases of chronic alcoholism he had treated with post-hypnotic suggestion. He had had three successful results in cases of over two years' standing, five in cases of over one year's standing, and five patients, some of whom are still under treatment, are better. In some the influence was nil; in others relapses occurred. He came

forward as a general practitioner, and claimed that hypnotism should take its place in therapeutics by the side of other agents, such as massage and hydro-therapeutics. He was quite satisfied that a certain proportion of cases were cured. The only alternative treatment was confinement to a retreat, which not only broke up the home, but tended to induce a habit of loafing and idleness. He said that casual hypnotization was quite useless, and that regular treatment under supervision for a month was necessary to success. He related two cases in low-class women who eventually relapsed. He had seen no ill effects from the practice of hypnotism by qualified persons.

At a meeting of the executive committee of the Association for the Study and Cure of Inebriety, the following preamble and resolution was unanimously passed:

*Whereas*, In view of the fact that the demand for old copies of the JOURNAL OF INEBRIETY, containing special studies, monographs, and papers, on distinct phases of inebriety, is constantly increasing, together with the call upon the members of this society by physicians from all parts of the country, for statements, studies, and conclusions, relating to the disease of inebriety. Therefore, be it

*Resolved*, That the secretary be authorized to prepare a volume which shall contain the most reliable conclusions and studies of eminent authorities on all phases of the diseases of inebriety up to the present time.

*Resolved*, That the secretary with the publication committee make all arrangements for the printing and issuing of said volume, at the earliest possible moment.

It is a pleasure to announce that this volume will be issued early in 1893, from the press of E. B. Treat of N. Y. city, as one of his famous medical classics.

The Morris steel safes, made in Boston, Mass., are the best on the market. Write for a circular.

The Tanguery Portrait Society of 751 De Kalb Avenue, Brooklyn, N. Y., are a responsible firm. Send for a circular.

PRIZE ESSAYS.

ON THE ACTION OF ALCOHOL AND ITS VALUE IN DISEASE.

The American Medical Temperance Association, through the kindness of J. H. Kellogg, M.D., of Battle Creek, Mich., offers the following prizes:

1st. One hundred dollars for the best essay "*On the Physical Action of Alcohol, based on Original Research and Experiment.*"

2d. One hundred dollars for the best essay "*On the Non-Alcoholic Treatment of Disease.*"

These essays must be sent to the Secretary of the Committee, Dr. Crothers, Hartford, Conn., on or before May 1, 1893. They should be in type writing, with the author's name in a sealed envelope, with motto to distinguish it. The report of the committee will be announced at the annual meeting at Milwaukee, Wis., in June, 1893, and the successful essays read.

These essays will be the property of the Association and will be published at the discretion of the committee. All essays are to be purely scientific, and without restrictions as to length, and limited to physicians of this country.

Address all inquiries to

T. D. CROTHERS, M.D.,  
Secretary of Committee,  
Hartford, Conn.

Dr. Norman Kerr will shortly issue a third edition of his work on Inebriety. Dr. Usher's work on this same topic is receiving a large sale in Europe. Our association will issue a work on the Disease of Inebriety, in Jan., '93. Dr. Mann of Brooklyn has a work in press on this topic. Dr. Wright of Bellefontaine is preparing another larger work on Inebriety. This activity is very cheering, and indicates a wider recognition of this great drink problem.

St. Saviour's Sanitarium at Inwood on the Hudson, in the upper part of New York city, is a new inebriate asylum for women. It is managed by the Sisters of St. Mary. The visiting physicians are Drs. Peterson and Brannan. This asylum is regularly incorporated for this purpose, and a special act of the legislature has given them full powers of control. An elegant building with every convenience, in a pleasing location, and a staff of eminent medical men, is the best assurance that this new asylum will do excellent work in this field. Our association extends a warm welcome to this enterprise and its officers. They will find a large field without a rival awaiting their coming.

The following is the act relating to Saint Saviour's Sanitarium, and for the care of inebriate women:

SECTION 1.—The Corporation known as Saint Saviour's Sanitarium, now established and existing in the City of New York, for the reception and reformation of inebriate women, is hereby authorized and empowered to receive and retain in its custody all such females as its Trustees shall deem suitable subjects for its care, who may voluntarily surrender themselves, or who may be committed to its custody in the manner and for the term hereinafter provided, or for so much of such term as may be necessary in the judgment of said Trustees for treatment and reformation.

SEC. 2.—Any Judge or Justice of a Court of Record in the county or district where an alleged inebriate female resides may commit such female to such sanitarium upon the consent in writing of the Trustees thereof, signed by their Superintendent or Executive Officer, and upon the certificate in writing of two physicians, under oath, showing that such female is over the age of eighteen years, and is incapable or unfit to properly conduct herself or her own affairs, or is dangerous to herself or others by reason of habits of periodical, frequent or constant drunkenness induced either by the use of alcoholic or vinous or other liquors, or opium, morphine, or other narcotic or intoxicating or stupefying substance. But it must appear from such certificate that every physician executing the same is a graduate of some incorporate medical college, and is a permanent resident of the State, and has been in the actual practice of his profession for at least three years, and it must appear upon the face of such certificate



that the physicians executing the same have made a personal examination of the female alleged to be an inebriate, and that such examination has been had within twenty days prior to the application for the commitment. The Judge or Justice to whom any such consent and certificate are presented may require affidavits to be submitted in support of the allegations contained in such certificate, or may institute an inquiry and take proof as to such facts before making a commitment. No such commitment shall be for a longer term than one year, but the same may be renewed for a like term or terms upon a proceeding taken as hereinbefore prescribed in the case of an original commitment.

SEC. 3.— Nothing herein contained shall be construed to limit the right of the courts to review by *habeas corpus* the detention of any person committed under this act.

THE INSANE IN EGYPT.— Dr. Peterson contributes to the *Medical Record* an interesting article on the insane in Egypt. The population of the State of New York is about six millions, the same as Egypt, so that interesting comparisons can be made. New York represents the newest civilization, Egypt the oldest. New York has about sixteen thousand insane under public care, Egypt has only one asylum situated at Cairo with two hundred and fifty inmates. The Koran's prohibition of the use of alcohol is considered to cut off one of the most fertile causes of insanity. It is curious that out of the two hundred and forty-eight patients in the asylum at Cairo, Dr. Peterson found sixty-four cases to be due to hasheesh intoxication.

A somewhat noted teacher and physician who died recently left a will, which has been contested. It appeared in evidence that he had been for years a secret drinker, and latterly had taken morphia at night. This clearly explains his intemperate criticism of the fact of disease of inebriety, and harsh sneers at our journal and its managers. On several occasions, he made a special effort to show the ignorance and dishonesty of our work. This had become a delusion with him, which had grown beyond all possibility of correction.

A HUNDRED YEARS' PROGRESS.— People who are sometimes disposed to despair over the slow progress of temperance work should remember that in 1736 there were in London 207 inns, 447 taverns, 551 coffee houses, 5,978 ale houses, and 8,659 brandy shops, making a total of 15,842 houses at which intoxicants could be purchased—and all this for a population of 630,000. A century later the population had advanced to 1,776,500, but the number of houses where intoxicating liquors were sold had greatly diminished, not then exceeding 5,000, so that, in proportion to the population, there were at the former period nine times as many places open for the sale of intoxicants as at the latter. *Western Morning News.*

---

The American International Medico-Legal Congress of Medical Jurisprudence will be held in Chicago, Ill., in June, 1893. The subject of inebriety will be fully considered. Already several papers are promised in this field. This will be the most important scientific meeting of the year. Clark Bell, Esq., of New York city, is president.

---

*The Pacific Health Journal* of St. Helena, Cal., is devoted to popular questions of science, and is very attractively printed. Such journals have a great influence and power, and should be encouraged.

---

The *Medical Pioneer*, the organ of the British Medical Temperance Association, has appeared. It is edited by Dr. J. J. Ridge, and begins with much promise for the future.

---

The *Bacteriological World* noticed in our advertising pages has no rivals, and is the only journal published in America devoted to bacteriology, and its practical relations to modern medicine. Every specialist and asylum should have this journal. We heartily commend it.

STRYCHNINE IN INEBRIETY.

Dr. R. M. Phelps, First Assistant Physician to the Second Minnesota Hospital for Insane, gives in the *Hospital Bulletin* the following results of a series of investigations into the use of strychnine in inebriety :

"1. Nitrate of strychnia, taken steadily in large doses, has a tendency, first, to impair the appetite for liquor ; later, to make liquor an incompatible or sickening agent for the time being.

"2. The systematic effects of nitrate strychnia seem to be not injurious. Yet I would be far from advising any private or injudicious use.

"3. Chloride of gold and sodium was only given in small doses the last five days of the twenty-one, and it is only mentioned here because it seemed to bring out a positive sickening effect in several who had before only a feeling of indifference.

"4. The systematized methods of administration are important, because the physician is dealing with remedies in doses to be recommended only under close supervision."

The following extract is from Dr. Day's admirable report :

"Without contradiction, then, in every age of the world there have been advocates of temperance, if not of total abstinence. In all the records of the past the student and the antiquarian may find traces of the ravages of the wine-god. He may trace out upon those ancient and wonderful creations of Egyptian art the hieroglyphic history of over twenty-five régimes of kings, all of whom drank of the juice of the grape, pressed as by Pharaoh's butler into the goblet at the festive board, or he may read in the legendary poetry of the old Grecian minstrels the sentiments of the period ; or he may see how Buddha was promulgating to the vast hordes of the East his special law, 'Obey the truth and walk steadily in the path of purity, and drink not of liquors that disturb the reason.' Again, he can turn to the Koran of Mahomet, and learn how his followers are taught to eschew the beverage of the Frank, that utter abomination to all the faithful. Or he may linger before the door of Epicurus, and there read : 'Passenger, here thou wilt find good entertainment ; it is here that pleasure is esteemed the sovereign

good. The waiter will receive thee courteously. But mark, thou must expect only a piece of bread and thy fill of water. Here hunger is not provoked, but satisfied; thirst is not excited, but quenched."

AS EARLY as 1336 opium was adulterated with the gum and milky juice of *Glaucium Lactnea*. At an earlier date cow dung was used as an adulterant. In the detection of these foreign substances, the opium was burned, and if the flame was pure and clear, it was pure; if not, it was bad. Or, it was exposed to the sunlight, and if it liquified quickly it was good, if not, it was condemned.

*The Medicinal Value of a Tried American Remedy.*

Among the few modern synthetic chemicals, which may justly be termed true derivatives of the coal-tar series, *antikamnia* is intensifying its hold upon the confidence of the profession, so that now, as the statistics will show, it is prescribed in excess of any of the preparations of this class.

That this faith is justified in practice is evidenced by its unfailing remedial properties in rheumatism, sciatica, neuralgia, the pyrexia superinduced by sunstroke, hemicrania, and la grippe (influenza and dengue); also all neuroses due to irregularities of menstruation. In *antikamnia* these properties are more speedily, more safely, and more efficiently manifested than in any of the others.

*Antikamnia* is a true derivative from organic substances, and its widespread adoption by the profession has made it the basis of a market for the imitators. After all, "imitation is the sincerest flattery."

*Lactopeptine* has a special value in cases of intestinal troubles and threatened cholera. While it may not cure this disease, it is almost certain to prevent and check the early stages of vomiting and diarrhoea.

Now that the *cholera* is here, no better remedy can be used as a general tonic than *Horsford Acid Phosphate*. Whoever uses this will have better health and more certain immunity from this dread disease.

*An Instructive Christmas Gift.* — With the near approach of the most joyous season of the year — Christmas — it behooves everyone to think of some substantial present to give a son, daughter, or friend. For a son, a father can give no better present than a year's subscription to the *Scientific American*. Many youths having an inventive or ingenious turn of mind have received lasting benefit from carefully reading this most instructive paper. Nearly every number, besides its superb engravings and description of new engineering and mechanical works of magnitude, has one or more articles on subjects in experimental science. It is published by the well-known firm of Munn & Co. of 361 Broadway, N. Y. \$3.00 a year.

We advise all our patients to try *Maltine* in some of its many preparations, for debility and all forms of nerve exhaustion.

The *Bromide of Strontium* is a new preparation that we have found to be of unusual value. The strontium salts seem to have a stimulant action on the nutritive functions, and the bromides appear more powerful in this combination. We urge our readers to try this remedy. It is prepared in Paris, France, and sold by E. Fougere & Co. of New York city.

Dr. Diggle of London reports two cases of brain irritation and exhaustion from over-pressure in children; the use of *Bromidia*, with ice bags to the head, milk diet, and rest resulted in a complete recovery. The value of the *Bromidia* was particularly marked.

The *Bromo-Potash* of Warner's is far more of a specific for inebriety than all the gold combinations ever made. Its physiological action is beyond question and can be demonstrated. To urge this as a specific would far more accurate and reasonable.

The *Dixon Lead Pencils* have passed beyond the realm of rivalry. They are everywhere acknowledged as superior to all others on the market.

*Antiseptics and Disinfectants.*—The prevention of disease is the unselfish mission of the modern physician. Antiseptics and disinfectants to-day occupy the first place in medical and surgical practice. Dilute solutions of acids have been strongly commended as preventive of cholera. The Liquid Acid Phosphate is an efficient agent in securing the desired condition of acidity.

Copper Arsenite Tablet Triturates,  $\frac{1}{100}$  and  $\frac{1}{5000}$  grain, have been extensively and successfully used in dysentery and diarrhoeal disorders, and are indicated in cholera, both for specific action in controlling intestinal secretion and for relieving the profound anæmia.

Eucalyptus and Thymol Antiseptic is adapted for use as an antiseptic internally, externally, hypodermically, as a douche, a spray, by atomization, and as a deodorant. Its application in surgery is unlimited. It is an excellent dressing for wounds. It combines the antiseptic virtues of benzoic acid, boric acid, oil of peppermint, oil eucalyptus, oil wintergreen, oil thyme, and thymol.

Tablets of Yellow Oxide of Mercury, containing two hundredths of a grain of the oxide, are a valuable prophylactic against dysentery enteric fever. They prevent fermentation and putrefaction, and render aseptic the alimentary tract.

Parke, Davis & Co. will be pleased to forward, on request, any information desired concerning these products.

The noted *Fellows' Hypophosphite* is unrivalled as a tonic in all cases of exhaustion from debility and disease. The demand for it is constantly increasing, particularly among physicians.

The *River View Home* is a very charming asylum, under the care of two eminent men, Drs. Watson & Kittredge. Send for a circular.

*Spalding's Home Gymnasium* is most admirably adapted for small asylums and homes, in completeness, simplicity, and perfection of apparatus. See advertisement.

THE QUARTERLY JOURNAL

OF

INEBRIETY.

*Published under the Auspices of The American Association  
for the Study and Cure of Inebriates.*

T. D. CROTHERS, M.D., Editor,  
Hartford, Conn.

\$2.00 Per Year.

---

Vol. XIV, 1892.

---

HARTFORD, CONN.:

THE CASE, LOCKWOOD & BRAINARD COMPANY, PRINTERS.

EUROPEAN AGENCY: BAILLIERE, TINDALL & COX,  
20 KING WILLIAM STREET, ON THE STRAND, LONDON, W. C.

## INDEX, VOL. XIV.

| A.   | PAGE. |
|--|-------|
| Alcoholic Poisoning in London, etc., . . . . .   | 1     |
| Are Hypodermic Injections of Morphia Lawful? . . . . .   | 27    |
| Absence of Reasonable Motive in so-called Criminal Acts, . . . . .                                 | 28    |
| Alcoholism in Fiction, . . . . .   | 57    |
| Alcoholic Delusion, . . . . .  | 75    |
| Alcoholic Phthisis, . . . . .  | 82    |
| Alcohol on the Power of the Muscle to Do Work, . . . . .   | 98    |
| Alcoholism a cause of Insanity, . . . . .  | 184   |
| Alcoholic Trance, . . . . .  | 185   |
| Antipyrin Addiction, . . . . .   | 196   |
| Alcoholic Insanity in Paris, . . . . .   | 198   |
| Alcoholic Insanity, . . . . .  | 261   |
| Anti-intoxications, . . . . .  | 276   |
| Alcohol in Surgery, . . . . .  | 354   |
| Alcohol, . . . . .   | 367   |
| American Medical Temperance Association, . . . . .   | 322   |
| B.   |       |
| Burns, Dr. J. F., . . . . .  | 40    |
| Baker, Dr. L. W., . . . . .  | 156   |
| Bruner, Dr. L., . . . . .  | 249   |
| C.   |       |
| Crothers, T. D., 61, 73, 75, 77, 79, 101, 171, 176, 178, 285,<br>287, 288, 374, 377, 379, 381, 382 |       |
| Crimes from Inebriety, . . . . .   | 76    |
| Cocaine Habit, . . . . .   | 95    |
| Climacteric in Inebriety, . . . . .  | 113   |
| Canada Inebriate Asylums, . . . . .  | 182   |
| Cocainism, . . . . .   | 244   |



|  | PAGE. |
|--|-------|
| Conally, Dr. Norman, . . . . .                               | 244   |
| Clevenger, Dr. L. V., . . . . .                              | 261   |
| Care of Inebriates, . . . . .                                | 296   |
| Conception during Intoxication, . . . . .                    | 298   |
| D.   |       |
| Demme, Prof. R., . . . . .                                   | 50    |
| Deer Park Sanitarium, . . . . .                              | 96    |
| Dipsomania, . . . . .  | 156   |
| Delusions as to Locality in Inebriety, . . . . .             | 218   |
| Dyspepsia among Abstainers, . . . . .                        | 258   |
| Delirium Tremens, . . . . .                                  | 265   |
| Dangers of Morphinism, . . . . .                             | 269   |
| Drug Treatment of Inebriety, . . . . .                       | 285   |
| Diagnosis of Drunkenness, . . . . .                          | 297   |
| E.   |       |
| Early Psychological Symptoms of Inebriety, . . . . .         | 61    |
| F.   |       |
| Fort Hamilton, . . . . .                                     | 97    |
| Fry, Dr. Frank R., . . . . .                                 | 123   |
| G.   |       |
| Grosvenor, Dr. J. W., . . . . .                              | 137   |
| H.   |       |
| Hypnotism in Alcohol and Opium Inebriety, . . . . .          | 66    |
| Hospital Treatment of Inebriates, . . . . .                  | 137   |
| Hereditary Alcoholist, . . . . .                             | 171   |
| Hereditary Morphinism, . . . . .                             | 355   |
| How Cocaine Produces Death, . . . . .                        | 365   |
| I.   |       |
| Interchangeability of Hereditary Transmissions, . . . . .    | 40    |
| Influence of Alcohol upon the Organism of a Child, . . . . . | 50    |
| Inebriate Repeaters in England, . . . . .                    | 93    |
| Insane Criminals in Belgium, . . . . .                       | 97    |

*Index.*

v

| PAGE. |  | PAGE.        |
|-------|--|--------------|
| 244   | Influence of Alcoholic Drinks, . . . . .                 | 193          |
| 261   | Insanity and Tea-Drinking, . . . . .                     | 195          |
| 296   | Inebriety and Crime, . . . . .                           | 288          |
| 298   | Inebriety in Germany, . . . . .                          | 299          |
|       | Inebriety in Its Several Aspects, . . . . .              | 303          |
|       | Inebriety and Delusional Paranoia, . . . . .             | 374          |
| 50    | K.   |              |
| 96    |  |              |
| 156   | Kerr, Dr. Norman, . . . . .                              | 350, 352     |
| 218   |  |              |
| 258   | L.   |              |
| 265   | Liability of Pauper Inebriates for Care, etc., . . . . . | 381          |
| 9     |  |              |
| 285   | M.   |              |
| 297   | Mason, Dr. L. D., . . . . .                              | 28, 113, 218 |
|       | Mitchel, Dr. E. W., . . . . .                            | 148          |
|       | Mass. Hospital for Inebriates, . . . . .                 | 181          |
| 61    | Micro-Organisms and Alcohol in Digestion, . . . . .      | 196          |
|       | Miscarriage of Justice, . . . . .                        | 243          |
|       | Moral of Capital Punishment, . . . . .                   | 287          |
| 97    | N.   |              |
| 123   | New Factor in Inebriety, . . . . .                       | 73           |
|       | New Remedies, . . . . .                                  | 79           |
|       | New Studies of the Opium Disease, . . . . .              | 101          |
| 137   | Notes of Treatment, . . . . .                            | 178          |
| 66    | O.   |              |
| 137   | Origin of Inebriate Diathesis, . . . . .                 | 118          |
| 171   | Old Story of Empiricism, . . . . .                       | 176          |
| 355   | Our Colonial Drinks and Drinkers, . . . . .              | 359          |
| 365   | Q.   |              |
|       | Question of Responsibility in Morphinism, . . . . .      | 382          |
| 40    | R.   |              |
| 50    | Restorative Homes Bill, . . . . .                        | 8, 127, 310  |
| 93    | Responsibility of Inebriates, . . . . .                  | 90           |
| 97    | Repression of Drunkenness, . . . . .                     | 112          |

|  | PAGE.         |
|--|---------------|
| Role of Inheritance of Inebriety, . . . . .                  | 159           |
| Recent Advances in the Study of Inebriety, . . . . .         | 205           |
| Ridge, Dr. J. J., . . . . .                                  | 258           |
| Retro-Anterograde Amnesia in Inebriety, . . . . .            | 377           |
| S.   |               |
| Somnatic Origin of Inebriety, . . . . .                      | 201           |
| Symposium on the Treatment of Inebriety, . . . . .           | 290           |
| Secret Specifics for Inebriety, . . . . .                    | 350           |
| Some Facts about Opium Inebriety, . . . . .                  | 368           |
| T.   |               |
| Trance Case, . . . . .                                       | 78            |
| Treatment of Habitual Drunkenness, . . . . .                 | 85            |
| Treatment of Alcoholism, . . . . .                           | 123           |
| Treatment of Morphomania, . . . . .                          | 148           |
| Talbot, Dr. E. S., . . . . .                                 | 201           |
| Tobacco Insanity, . . . . .                                  | 249           |
| Treatment of Delirium Tremens, . . . . .                     | 352           |
| The Alcohol Study in Central Europe, . . . . .               | 357           |
| The Opium Habit in India, . . . . .                          | 366           |
| The Old Criticism, . . . . .                                 | 379           |
| U.   |               |
| Usher, Dr. J. E., . . . . .                                  | 205           |
| Uncontrollable Inebriety a Form of Mental Disease, . . . . . | 222           |
| W.   |               |
| Wescott, Dr. Wynne, . . . . .                                | I             |
| Wright, Dr. T. L., . . . . .                                 | 118, 194, 303 |
| Winslow, Dr. L. Forbes, . . . . .                            | 222           |
| Washingtonian Home, . . . . .                                | 273           |
| Work and Rest, . . . . .                                     | 361           |

# CHOLERA.

---

## HORSFORD'S ACID PHOSPHATE.

By the researches of Koch and others, it is found that the cholera bacilli require for their growth a mild alkaline nutrient medium, and that acids are most useful to kill them.

Horsford's Acid Phosphate has been successfully employed by the Physicians in Europe and America, and possesses special advantages over other acids, because of its beneficial action upon the nerves and process of digestion, and its tonic and general strengthening effect upon the whole system.

Half a teaspoonful in half a tumbler of water, with sugar if desired, will make a palatable drink.

Send for descriptive circular. Physicians who wish to test it will be furnished a bottle on application, without expense, except express charges.

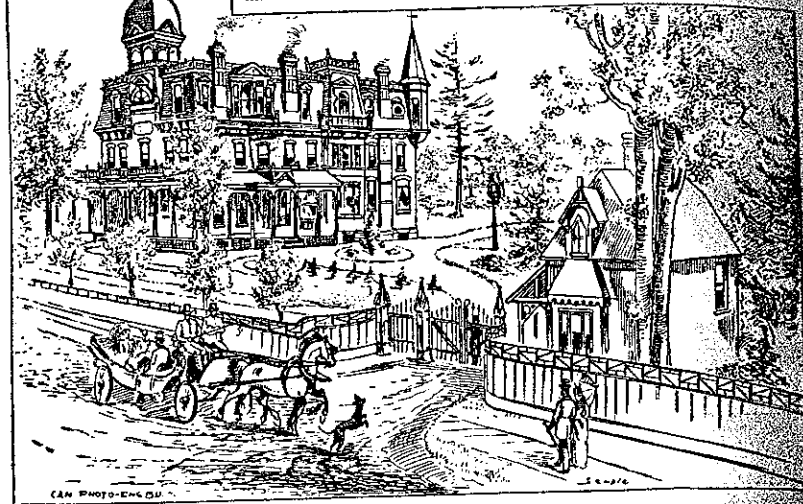
Prepared under the direction  
of Prof. E. N. HORSFORD, by the

*Rumford Chemical Works, Providence, R. I.*

**Beware of Substitutes and Imitations.**

AGE.  
59  
205  
258  
377  
  
201  
290  
350  
368  
  
78  
85  
123  
148  
201  
249  
352  
357  
366  
379  
  
205  
222  
  
1  
303  
222  
273  
361

**DEER-PARK SANATORIUM, Toronto,  
Ontario, a Private Licensed Retreat for  
the Subjects of Narco-Mania.**



**DEER PARK SANATORIUM, Toronto**

**A Private Licensed Retreat for the Subjects of Inebriety or Narco-Mania,**

**President:**

**B. HOMER DIXON, K. N. L.**  
*Consul-General of the Netherlands.*

**Vice-Presidents:**

**D. W. ALEXANDER, Esq.,**  
**HON. CHAS. DRURY,**  
*Ex-Minister of Agriculture.*

**Medical Superintendent:**

**C. SCHOMBERG ELLIOT, M.D., M. C. P. & S.,**  
*Member of the American Association for the  
Study and Cure of Inebriety, New York,  
For three years Examiner in Medical Jurisprudence and Sanitary Science for the  
College of Physicians and Surgeons,  
Ontario.*

is situated at Deer Park, one of the most healthful and beautifully situated suburbs of Toronto, on the high lands immediately skirting the northern limits of the city, and commanding a magnificent view of Lake Ontario and the Queen City of the West. The neighborhood abounds in richly wooded glens and dales and elevated summits, interspersed with gardens, groves, and orchards, with lovely walks and drives in all directions. It is situated in ample grounds, which are adorned by trees, shrubs, and flower gardens, with extensive bowling green and lawn tennis court, and it is very accessible, being not more than two minutes' walk from the Metropolitan Electric Railway on Yonge Street, and only ten minutes from the Toronto Street Cars.

All the surroundings are made so pleasant and attractive that patients will not be subjected to that feeling of social degradation which is commonly experienced in public institutions.

The Board of Management recognize the fact that the sufferer from the insatiable craving for alcohol and other narcotics is the victim of disease, and every means known to medical science will be employed for its eradication.

Patients are admitted upon their voluntary application, or may be committed by the County Judge, under the provisions of the R. S. O., Chap. 246, secs. 100 to 111.

For Forms of application and all necessary information, Address

**C. SCHOMBERG ELLIOT, M.D.,**  
**Deer Park Sanatorium, Toronto.**

**B1**

**Nat**

15.23

5.20

'A  
n Dou  
spring  
with Li  
and sed  
power.  
be a ret  
these ex  
reasons  
T. D.

The  
wonder  
spende  
the Spr  
Georgi  
ride of  
coaches  
Th  
all mod  
venienc  
Th  
Cold B  
tent Re  
Tw  
all poin

H  
Bath

# BROMINE-LITHIA WATER

FROM GEORGIA.

Natural and Free from Organic Matter,

CONTAINING

20.524 GRAINS BROMINE,

|                                |                               |
|--------------------------------|-------------------------------|
| OF WHICH                       | IN CONNECTION WITH            |
| 15.234 grs. Magnesium Bromide, | 1.670 grs. Lithium Bi-Carb.   |
| 5.290 grs. Potassium Bromide,  | .734 grs. Magnesium Iodide,   |
|                                | .280 grs. Strontium Sulphate. |

A fine Lithia spring has been known for some time at a little hamlet called Lithia Springs, in Douglas County, Georgia. Recently an analysis has revealed the fact that it is the only spring known to science which contains Bromide of Potassium and Magnesia; this is combined with Lithium, Strontium, and Iodide of Magnesium. The effect of this water is both a tonic and sedative, and in the army of Nervous cases it gives promise of being a remedy of wonderful power. Theoretically a natural combination of the Bromides with Lithia and the Iodides would be a remedy of great value in a large number of cases. Practically, it has more than fulfilled these expectations, and although this water has been very recently introduced, there are many reasons for supposing that it will become the most widely used of any medicinal water known."—T. D. CROTHERS, M.D., in *Quarterly Journal of Inebriety* for April, 1890.

## WE CHALLENGE THE WORLD!

The attention and careful investigation of the Medical Profession is earnestly invited to this wonderful Water. It is pure, bright, and powerful. *Samples free to all Physicians.* Correspondence solicited, which will be promptly answered. Physicians are cordially invited to visit the Spring, which is located at the village of Lithia Springs, Douglas County, Georgia, on the Georgia Pacific Division of the Richmond & Danville Railroad, 20 miles west of Atlanta, Ga., a ride of less than an hour from the city. Three trains daily. Handsome, commodious day coaches and Pullman Palace cars.

The elegant **Sweet Water Park Hotel**, with accommodations for 500 Guests, all modern improvements, including electric lamps in every room, electric calls, and every convenience known to modern hotels.

The famous *Bromine-Lithia Vapor Baths, Electric, Massage; Plain Hot, Warm, or Cold Baths; Douches, Sponges*, and other forms administered under the supervision of a competent Resident Physician.

Twenty miles west of Atlanta, Ga., and accessible from Boston, New York, Philadelphia, and all points, by every railroad running to Atlanta.

**BOWDEN LITHIA SPRINGS CO.,**

Lithia Springs, Ga.

*Handsomely Illustrated 36-page Pamphlet sent free, showing Hotel, Baths, Springs, Historic Ruins, etc. Send postal card.*

Pharmaceutical Specialties of  
the Farbenfabriken vorm  
Friedr Bayer & Co

**Aristol**

**Europhen**

**Salophen**

**Sulfonal=  
Bayer**

**Phenacetine=  
Bayer**

For Pamphlets Apply to

**W H Schieffelin & Co**  
New York

*Sole Agents and Sole Licensees for  
the United States*

**A**RISTOL is now widely used as an agreeable and effective dressing in all of the operations of major and minor surgery and in dentistry. It is invaluable in ulcerations of all kinds, and in burn blisters and bed-sores. It adheres closely to mucous membranes and wound surfaces. (*Aristol and "Europhen-Aristol," a combination of both remedies, are supplied in ounces.*)

**E**UROPHEN is a complete substitute for iodoform and is a cicatrisant, of special value in specific lesions, catarrhs and ulcerative diseases and all surgical conditions formerly treated by the latter preparation. It has five times the covering power of iodoform and forms an impervious coating over denuded tissue. Europhen has a faint, agreeable odor resembling that of saffron. (*Supplied in ounces.*)

**S**ALOPHEN is a new salicylo-phenol derivative said to be so combined chemically, as to constitute a safer and more effective remedy than either of its components, or any analogous preparation. The reports refer in the highest terms to its value in acute articular rheumatism and allied affections. Competent observers recommend it for all such cases. (*Supplied in ounces, tablets and pills.*)

**S**ULFONAL induces physiological sleep, free from narcosis, and without sequelæ. It acts purely as a hypnotic and claims no analgic powers. Sulfonal is also of the highest value in the neuroses and is largely employed by neurologists. It is a perfectly safe and reliable remedy, and its continuous use does not give rise to a drug habit. Sulfonal must be administered according to directions. (*Supplied in ounces, tablets and pills.*)

**P**HENACETINE continues to justify the high commendations of physicians, and it may properly be considered as the best of the modern antipyretics and anodynes. In *la grippe*, rheumatism, migraine, neuralgia and allied maladies it is a prompt, safe and effective remedy. Phenacetine, unlike the secret mixtures announced as analgesics and antipyretics, is a true organic derivative. (*Supplied in ounces, tablets and pills.*)

**R**IVERVIEW SANITARIUM for the treatment of *Mental and Nervous Diseases, and the Alcohol and Opium Habits.* Furnishing, at a moderate price, all the comforts and privacy of a quiet country residence, with the special care and treatment required by this class of patients. Fully equipped for the administration of Turkish, Russian, Electrothermal and other Baths. Address  
**LUCIUS W. BAKER, M.D., Supt., Baldwinville, Mass.**

# FREE CRAYON PORTRAITS AND FRAMES

To all our Subscribers for 1892.



We, the publishers of "North American Homes," in order to increase the circulation of our journal throughout the United States and Canada, will spend this year over one hundred thousand dollars among our new subscribers in the form of an artistic Crayon Portrait and a handsome frame (as per cut below), to be made free of charge for every new subscriber to "North American Homes." Our family journal is a monthly publication consisting of 16 pages, filled with the best literature of the day, by some of the best authors, and is worthy of the great expense we are doing for it. Eight years ago the *New York World* had only about 15,000 daily circulation; to-day it has over 300,000. This was obtained by judicious advertisement and a lavish expenditure of money. What the proprietor of the *N. Y. World* has accomplished we feel confident of doing ourselves. We have a large capital to draw upon, and the handsome premium we are giving you will certainly give us the largest circulation of any paper in the world. The money we are spending now among our subscribers will soon come back to us in increased circulation and advertisements. The Crayon Portrait we will have made for you will be executed by the largest association of artists in this city. Their work is among the finest made, and we guarantee you an artistic Portrait and a perfect likeness to the original. There is nothing so useful as well as ornamental than a handsome framed Crayon Portrait of yourself or any member of your family; therefore this is a chance in a lifetime to get one already framed and ready to hang in your parlor absolutely free of charge.

## READ THE FOLLOWING GRAND 30 DAYS' OFFER:

Send us \$1.50, price for one year subscription to "North American Homes," and send us also photograph, tintype or daguerrotype of yourself or any member of your family, living or dead, and we will make you from same an artistic half life size Crayon Portrait, and put the portrait in a good substantial gilt or bronze frame of 2 inch moulding absolutely free of charge; will also furnish genuine French glass, boxing and mounting same free of expense. Cut out and send it with your photograph at once, also your subscription. If you can remit by Draft, P. O. Order, Express Money Order, or Postal Note, made payable to

**NORTH AMERICAN HOMES PUBLISHING CO.,**  
 World Building, New York.

Agencies—Any newspaper publishers, Rev. T. Dewart Talmadge, }  
 all mercantile agencies and banks in New York City. }

**PATENT OR NO FEE.**  
 A 48-Page Book Free. Address  
**W. T. FITZ GERALD, Att'y-at-Law, Cor. 8th and F Sts., WASHINGTON, D. C.**



# THE MEDICO-LEGAL JOURNAL,

A QUARTERLY DEVOTED TO THE SCIENCE OF MEDICAL JURISPRUDENCE,  
*Published under the Auspices of the Medico-Legal Society of the City of New York.*

This Journal will publish the leading papers of the Medico-Legal Society, and a resume of its transactions. Its columns will at the same time be open to contributions from all sources and from all parts of the world, on appropriate subjects and questions. It will endeavor to chronicle interesting facts and scientific deductions within its domain, and keep a record of current events, especially in the trial of cases in the courts which involve Medico-Legal questions.

The Price of the Medico-Legal Journal has been fixed at \$3.00 per annum, in the hope and with the expectation of its receiving a generous support from all classes of intelligent readers. Every branch and department of Medico-Legal Science will be carefully represented, and assurances have been received from the ablest professional names in Law and Medicine of efficient aid and support by way of contributions to these columns. It will be found to be of interest to every lawyer and physician, and full of profit to the general reader.

SUBSCRIPTIONS may be made to any officer of the Medico-Legal Society, or to CLARK BELL, Esq., Editor, 57 Broadway, New York, of whom specimen copies can be obtained on application, at 40 cents each.

## MEDICO-LEGAL PAPERS. SERIES 3.

This is a volume of 530 pages, issued by the Medico-Legal Society of New York, containing certain of the papers read before that Society, from January 1, 1875. It contains papers and articles by Dr. A. O. Kellogg, Mr. Clark Bell, Mr. R. S. Guernsey, Dr. George M. Beard, Dr. J. J. O'Dea, Mr. Morris Ellinger, Mr. Jacob F. Miller, and many others.

It has portraits of Mr. Clark Bell, Judge Charles P. Daly, Wm. G. Davies, Dr. Beck, Dr. R. Swayne Taylor, E. W. Stoughton, Geo. M. Beard, M. D., Dr. Connolly, Judge Beach, and others.

Price, Cloth, \$3.50.

Paper, \$2.50.

Address the Publisher,

LEON P. KUHL,

or CLARK BELL,

No. 817 Broadway, N. Y.

No. 57 Broadway, N. Y.

## HOMEWOOD RETREAT, Guelph, Ont., Canada.

JOSEPH WORKMAN, M. D.,  
*Consulting Physician.*

STEPHEN LETT, M. D.,  
*Medical Superintendent.*

A PRIVATE ASYLUM FOR THE CARE AND TREATMENT OF THE  
INSANE, INEBRIATES, AND THE OPIUM HABIT.

This admirably appointed and salubriously-situated retreat, whilst possessing all the advantages of a larger institution, enjoys the privacy and quietness of a gentleman's residence.

THERE ARE A FEW VACANCIES FOR BOTH MALE AND FEMALE PATIENTS.

FOR PARTICULARS ADDRESS,

DR. LETT,  
GUELPH, ONT.

## THE HIGHLANDS.

A FAMILY HOME FOR NERVOUS AND MENTAL DISEASES.

WINCHENDON, MASS.

This "Family Home" is conducted by Dr. Frederick W. Russell, who has made the study and treatment of mental and nervous diseases, physical and nervous exhaustion, opium and alcoholic inebriety a specialty. The Home is not an institution or asylum. It is to all intents and purposes a "Family Home," where everything is made as homelike as possible. Patients are not subjected to the care of common nurses, but are provided with companions. Intelligent gentlemen are employed as attendants and companions of the male patients, and educated American women of experience are the attendants and companions of the lady patients.

The feeling of social degradation that is commonly felt by patients in Retreats and Public Institutions, who are subjected to the control of uncultivated nurses, is not experienced here. The utmost possible liberty is permitted, under suitable guardianship, to all the patients, and each one is regarded and treated as a member of a private family. Each case receives the attention and study given to private practice, and when needed the ablest medical talent in the country is called into consultation.

The Highlands, so called, is a pleasant mansion with cottages annexed, situated in the midst of ample grounds, on an eminence overlooking the town of Winchendon and the valley of Millers River. From the windows a superb range of hills and mountains can be seen, reaching from Wachusett in the southeast to Monadnock in the northwest.

A piano room, billiard room, bowling saloon, and ample stabling are provided on the grounds. The drives in the vicinity are considered delightful, and for healthfulness of location the Highlands are unsurpassed.

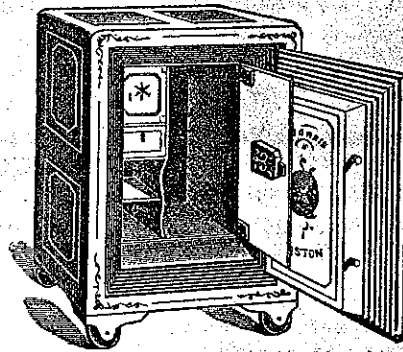
Dr. Ira Russell is the founder and superintendent of the Home, and letters of inquiry should be addressed to Dr. F. W. Russell, the superintendent. For information we are permitted to refer to the following gentlemen:

- |   |   |
|---|---|
| C. F. Folsom, M. D., Prof. Mental Disease,<br>Harvard College, 15 Marlboro St., Boston. | G. F. Jelly, M. D., 123 Boylston St., Boston.                                       |
| W. C. Williamson, Esq., 1 Pemberton Sq.,<br>Boston.                                     | C. H. Hughes, M. D., editor of <i>Alienist and<br/>Neurologist</i> , St. Louis, Mo. |
| J. H. Hardy, Esq., 23 Court St., Boston.  | E. C. Spitzka, 130 E. 50th St., New York, N. Y.                                     |
| Rev. G. J. Magill, D. D., Newport, R. I.  | W. W. Godding, Superintendent National In-<br>sane Asylum, Washington, D. C.        |
| Wm. A. Hammond, M. D., 43 West 54th St.,<br>New York.                                   | Clark Bell, Esq., editor of the <i>Medico-Legal<br/>Journal</i> , New York City.    |
| S. G. Webber, M. D., 133 Boylston St., Bost'n.  | T. D. Crothers, M. D., Hartford, Conn.  |

# E. C. MORRIS & CO.,

64 Sudbury St., Boston, Mass.

## FIRE AND BURGLAR-PROOF SAFES.



Bank Safes, Bank Vaults, Bank Vault  
Doors, and Deposit Work of  
all kinds.

*THE BEST SAFE IN THE WORLD.*

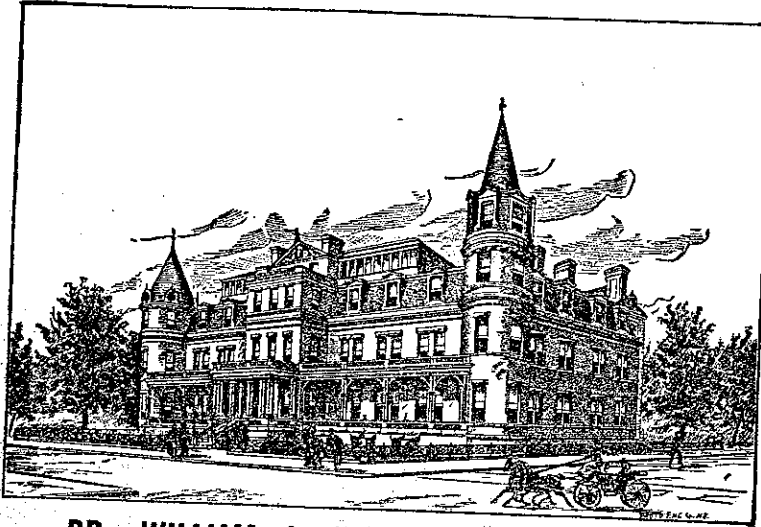
*150,000 IN USE*

*ALWAYS PRESERVE THEIR CONTENTS.*

150 sold in Lynn, Mass., since that great fire, where 50 of our safes were subjected to intense heat, preserving their contents.

**CHAMPION RECORD** also in the great Chicago Fire in 1871, in the great Boston Fire in 1872, and in all the great fires since. Send for circulars.

**AGENTS WANTED.**



**DR. WILLIAM A. HAMMOND'S SANITARIUM**

—FOR—

**DISEASES OF THE NERVOUS SYSTEM,  
WASHINGTON, D. C.**

DR. WILLIAM A. HAMMOND announces to the medical profession that he has returned from New York to Washington, D. C., where he has established, in a building especially erected for the purpose, a "Sanitarium" for the treatment of mild and curable cases of mental derangement, diseases of the nervous system generally, cases of the morphia and chloral habits, and such other affections as may properly be treated by the remedial agencies under his control. His experience during many years has convinced him that most diseases embraced within the above-named classes can be managed much more successfully in an institution of this kind, under the constant supervision of the physician and with the aid of means not otherwise at command, than when the patients are seen by their medical advisers at intervals of several hours or days.

The "Sanitarium," which has been constructed under the superintendence of A. B. Mullet, Esq., late architect of the United States Treasury department, is situated on Columbia Heights, at the corner of Fourteenth Street and Sheridan Avenue. The position is the highest in the immediate vicinity of Washington, the soil is dry, and all the surroundings are free from noxious influences. It is readily reached by the Fourteenth Street Railway, the cars of which run to the doors. The building is very large, and as perfect in structure and arrangements as is possible from a knowledge of sanitary science and of the requirements of such an institution. It accommodates about thirty patients. So far as the rooms, table, etc., are concerned, they are equal to such as exist in the best hotels of our large cities. Electricity in all its forms, baths, douches, massage, inhalations, nursing, etc., are provided as may be required by patients, in addition to such other medical treatment as may be deemed advisable.

A large "Solarium" for sun-baths and exercise in cold or inclement weather, and heated with steam in winter, is constructed on the top of the main building.

Each patient is thoroughly examined by Dr. Hammond and receives his daily personal attention, while Dr. E. L. Tompkins, a physician of ample hospital experience and of tried executive ability, resides in the institution, and has, under Dr. Hammond, the immediate superintendence.

The "Sanitarium" is now opened for the reception of patients.

For further information Dr. Hammond can be addressed at The Sanitarium, Fourteenth Street and Sheridan Avenue, Washington, D. C.

The MERRITT IS *A Simple, Compact Machine,  
Within the Means of All.*

EVERYBODY'S

TYPEWRITER.

SENT TO ANY ADDRESS  
ON RECEIPT OF \$15.00.

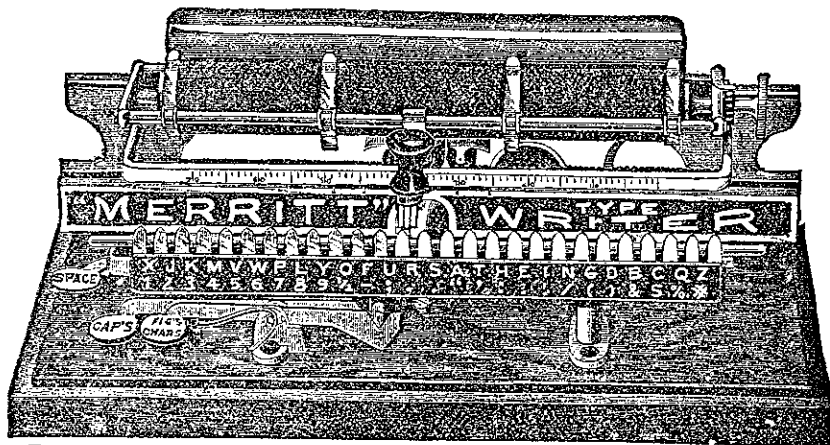
**SPECIAL CHRISTMAS  
MACHINES.**

MERRITT TYPEWRITER, OAK case, specially selected from rich, rare and beautiful wood, highly polished and finished, with dove-tailed corners, gilt trimmings, handle and fastenings, plush lined, on receipt of \$18.50.

LEATHERETTE case, elegant finish, satin lined, nickel plated and highly polished throughout, on receipt of \$17.50.

*Prints from Clear  
Metal Type,  
is Self-inking. Is the  
only low-priced Ma-  
chine that will both*

**DUPLICATE  
AND  
MANIFOLD!**



This is exact copy of The "MERRITT'S" work. It is equal to that of any High Priced Typewriter. Relieves fatigue from steady use of pen. Improves spelling and punctuation. Interests and instructs children. The entire correspondence of a business house can be done with it. Learned in a half hour from directions. Prints capitals, small letters, figures and characters,--78 in all. Price \$15, complete.

Mention this publication.

Write for Circulars, Voluntary Testimonials and sworn-to Speed Test of 60 words a minute.

**LYON MANUFACTURING CO.,**

Sole Agents,

59 FIFTH AVENUE, NEW YORK CITY.

# The Bacteriological World And Modern Medicine.

DOCTOR —

Do you want to keep abreast with the most recent advances in every department of modern medicine? If so, subscribe for

**The Bacteriological World and Modern Medicine.**

*Here are a Few of the Good Features of the Journal.*

I.

**I**T is the only journal which gives each month a complete review of the most recent reliable work in bacteriology.

II.

**O**NE of the editors is an experienced bacteriologist, a student of the famous Pasteur, and devotes his entire time to practical bacteriological work and original research in the Laboratory of Hygiene of which he has charge.

III.

**E**ACH number of the journal contains practical instruction in bacteriology, which will enable any intelligent physician to begin practical work in the study of bacteria, if disposed to do so. There is no more fascinating study, and no line of research which yields greater returns for the time and effort invested.

IV.

**T**HE medical literature from every country is drawn upon for the very latest and choicest results of scientific research and practical experience, and the results recorded in the monthly columns of this journal.

*Issued Monthly. Subscription \$2 per annum.  
Send money at our risk.*

**Modern Medicine Publishing Company,  
BATTLE CREEK, MICHIGAN.**

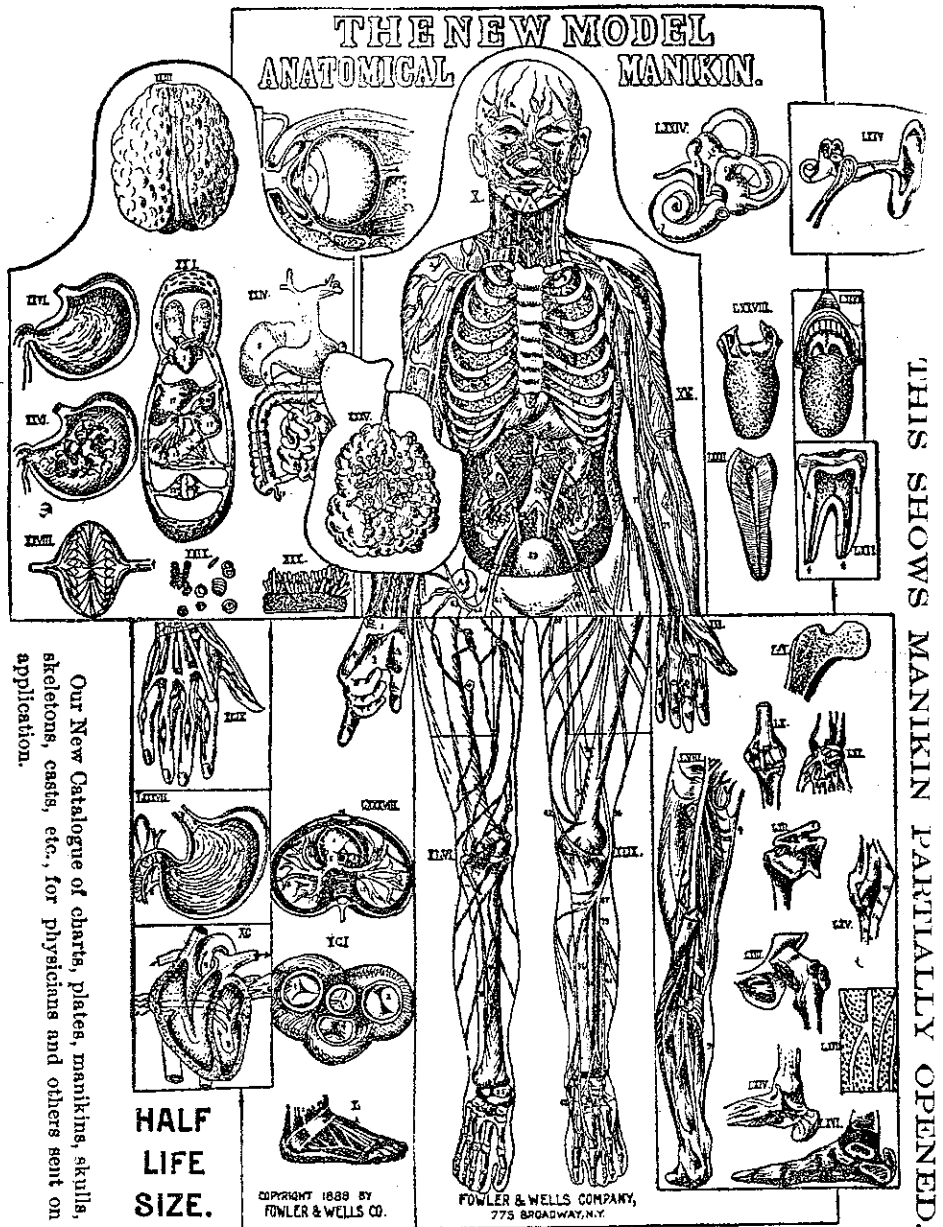
NY ADDRESS  
OF \$15.00.

**ER.**  
n Clear  
l Type,  
Is the  
ed Ma-  
ill both  
**ATE**  
**LD!**



rk.  
e-  
f  
ter-  
res-  
ith  
.  
e.  
.  
ARK CITY.

Mention this publication.



THIS SHOWS MANIKIN PARTIALLY OPENED.

Our New Catalogue of charts, plates, manikins, skulls, skeletons, casts, etc., for physicians and others sent on application.

HALF  
LIFE  
SIZE.

COPYRIGHT 1888 BY  
FOWLER & WELLS CO.

FOWLER & WELLS COMPANY,  
775 BROADWAY, N.Y.

**THE NEW MODEL ANATOMICAL MANIKIN.**

Has more than one hundred views of portions of the human body, with a number of special manikins, some greatly magnified, showing eye, stomach, kidneys, etc., normal and diseased. Printed in colors on cloth-lined material. It folds together like a book, and when closed is about eighteen inches square. It is the latest and best manikin published. Price, with descriptive manual of Physiology and Hygiene, \$12.00, prepaid. Agents Wanted. Address, naming this journal,

**FOWLER & WELLS CO., Publishers, 777 Broadway, New York.**





# BROOKLYN HEIGHTS

## SANITARIUM

A PRIVATE HOME for the *special* treatment of Rheumatism, Gout, and all allied diseases, by the use of *Turkish, Russian, Roman, and Electro-thermal Baths*, and other remedial agents. Organized over twenty-five years ago, it is now the oldest Turkish Bath Establishment in this country. The long experience and constant development of the baths, both practically and therapeutically, give promise of the very best results in the treatment of these cases. The Home is elegantly situated on Columbia Heights, overlooking New York Bay. The rooms are large and sunny, and every appliance found valuable by scientific experience is used, making it a most desirable residence for invalids who need special treatment. To *Rheumatics* and *Chronic Invalids* unusual facilities are offered for both restoration and cure.

For further information, address—

**C. H. SHEPPARD, M.D.,**

81 Columbia Heights, Brooklyn, N. Y.

**JUST PUBLISHED.**

### → Gould's New Medical Dictionary ←

∴ Compact, Concise, Practical, ∴

Accurate, Comprehensive, Up to Date.

It contains Tables of the Arteries, Bacilli, Ganglia, Leucomaines, Micrococci, Muscles, Nerves, Plexuses, Ptomaines, etc., etc., that will be found of great use to the student.

Sample Pages, Descriptive Circulars, etc., sent free upon application.

Small Octavo, 520 pages, Half-dark Leather, . . . \$3.25

With Thumb Index, Half Morocco, Marbled edges, 4.25

From J. M. DACOSTA, M.D., Prof. of Practice and Clinical Medicine, Jefferson Medical College, Philadelphia: "I find it an excellent work, doing credit to the learning and discrimination of the author."

**P. BLAKISTON, SON & CO.,**

∴ PUBLISHERS ∴

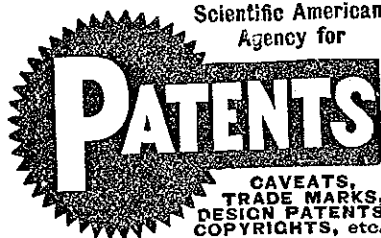
1012 WALNUT ST., . . . PHILADELPHIA.



**HE Missed his Opportunity! DON'T Miss Yours, Reader.** The majority neglect their opportunities, and from that cause live in poverty and die in obscurity! Harrowing despair is the lot of many, as they look back on lost, forever lost, opportunity. **Life is passing!** Reach out. Be up and doing. Improve your opportunity, and secure prosperity, prominence, peace. It was said by a philosopher, that "the Goddess of Fortune offers a golden opportunity to each person at some period of life; embrace the chance, and she pours out her riches; fail to do so and she departs, never to return." How shall you find the golden opportunity? Investigate every chance that appears worthy, and of fair promise; that is what all successful men do. Here is an opportunity, such as is not often within the reach of laboring people. Improved, it will give, at least, a grand start in life. The golden opportunity for many is here. **Money** to be made rapidly and honorably by any industrious person of either sex. All ages. You can do the work and live at home, wherever you are. Even beginners are easily earning from \$5 to \$10 per day. You can do as well if you will work, not too hard, but industriously; and you can increase your income as you go on. You can give spare time only, or all your time to the work. Easy to learn. Capital not required. We start you. All is comparatively new and really wonderful. We instruct and show you how. **Free.** Failure unknown among our workers. No room to explain here. Write and learn all **free.** by return mail. Unwise to delay. Address at once. **H. Hallett & Co., Box 880, Portland, Maine.**

If you wish to advertise anything any where at anytime, write to GEO. P. ROWELL & CO., No. 10 Spruce St., New York.

Scientific American  
Agency for



For information and free Handbook write to  
MUNN & CO., 301 BROADWAY, NEW YORK.  
Oldest bureau for securing patents in America.  
Every patent taken out by us is brought before  
the public by a notice given free of charge in the

**Scientific American**

Largest circulation of any scientific paper in the world. Splendidly illustrated. No intelligent man should be without it. Weekly, \$3.00 a year; \$1.50 six months. Address MUNN & CO., PUBLISHERS, 301 Broadway, New York.

ITS

atism, Gout,  
Roman, and  
ganized over  
establishment  
of the baths,  
st results in  
n Columbia  
sunny, and  
m'ing it a  
Rheu-  
h restoration

lyn, N. Y.

ary

Micrococci,  
be

lication.

25

25

erson Medical  
ing and dis-

I HIA.

# LIST OF ALL THE LEADING WORKS

— ON —

INSANITY, BRAIN, AND NERVE DISEASES, WITH NAMES OF AUTHORS  
AND PUBLISHERS, AND THE PRICE FOR WHICH MOST  
OF THEM WILL BE SENT POST-PAID.

P. BLAKISTON, SON & CO.,  
1012 WALNUT STREET, PHILADELPHIA.

- Bain, Mind and Body. \$1.50.  
Buckham, Insanity in its Medico-legal Aspects. \$2.00.  
Bucknill and Tuke, Psychological Medicine. \$8.00.  
Clevenger, Comparative Physiology and Psychology. \$2.00.  
Clouston, Mental Diseases. \$4.00.  
Creighton, Unconscious Memory in Disease. \$1.50.  
Gowers, Diagnosis of Diseases of the Brain. \$2.00.  
Kirkbride, Hospitals for the Insane. \$3.00.  
Lewis, Mental Diseases. \$6.00.  
Mann, Manual of Psychological Medicine. Cloth, \$5.00. Sheep, \$6.00.  
Mills, Cerebral Localization. 60 cents.  
———, Nursing and Care of the Insane. \$1.00.  
Osler, Cerebral Palsies of Children. \$2.00.  
Kerr, Inebriety, its Pathology and Treatment. \$3.00.  
Rane, Psychology as a Natural Science. \$3.50.  
Ribot, Diseases of the Memory. \$1.50.  
Sankey, Mental Diseases. \$5.00.  
Tuke, Mind and Body. \$3.00.  
———, History of the Insane. \$3.50.  
Arnold, Manual of Nervous Diseases. \$2.00.  
Beard, Sexual Neurasthenia. \$2.00.  
Buzzard, Diseases of the Nervous System. \$5.00.  
Gowers, Manual of Diseases of the Nervous System, \$7.50.  
Lyman, Insomnia and Disorders of Sleep. \$1.50.  
Mitchell, Injuries of the Nerves. \$3.00.  
Roose, Nerve Prostration. \$4.00.  
Stewart, Diseases of the Nervous System. \$4.00.  
Wilks, Lectures on Diseases of the Nervous System. \$6.00.  
Wood, Nervous Diseases and their Diagnosis. Cloth, \$4.00. Sheep, \$4.50.  
Parish, Alcoholic Inebriety. Paper, 75 cents. Cloth, \$1.25.  
Galton, Natural Inheritance. \$2.50.  
Mercier, Sanity and Insanity. \$1.25.  
Obersteiner, Anatomy of Central Nervous Organs. \$6.00.  
Starr, Familiar Forms of Nervous Diseases. \$3.00.  
Levinstein, Morbid Craving for Morphia. \$3.25.

G. P. PUTNAM'S SONS,  
27 AND 29 WEST TWENTY-THIRD STREET, NEW YORK.

Charcot, Spinal Cord. \$1.75.

*Journal of Inebriety.*

417

List of all the Leading Works, etc., — Continued.

- Corning, Brain Rest. \$1.00.  
Dowse, Syphilis of the Brain and Spinal Cord. \$3.00.  
———, Brain and Nerves. \$1.50.  
Ferrier, Functions of the Brain. \$4.00.  
Ireland, The Blot on the Brain. \$3.00.  
Ireland, Through the Ivory Gate. \$3.00.  
Letchworth, Insane in Foreign Countries. \$3.00.  
Meynert, Psychiatry. \$2.75.  
Tuke, Insanity and its Prevention. \$1.75.  
Althaus, Diseases of Nervous System. \$3.50.  
Beard, American Nervousness. \$1.50.  
Stearns, Insanity, its Causes and Prevention. \$1.50.

LEA BROTHERS & CO.,  
706 AND 708 Sansom Street, Philadelphia

- Ross, Diseases of the Nervous System. \$4.50.  
Savage, Insanity and Neuroses. \$2.00.  
Hamilton, Nervous Diseases. \$4.00.  
Mitchell, Diseases of the Nervous System. \$1.75.

WILLIAM WOOD & CO.,  
56 AND 58 Lafayette Place, New York.

- Blandford, Insanity and its Treatment. \$4.00.  
Branewell, Diseases of the Spinal Cord. \$6.00.  
Rosenthal, Diseases of the Nervous System. \$5.50.

D. APPLETON & CO.,  
1, 3, AND 5 Bond Street, New York.

- Bastian, The Brain as an Organ of Mind. \$2.50.  
———, Paralysis from Brain Disease. \$1.75.  
———, Paralysis. \$4.50.  
Hammond, Nervous Derangements. \$1.75.  
Maudsley, Physiology of the Mind. \$2.00.  
———, Pathology of the Mind. \$2.00.  
———, Body and Mind. \$1.50.  
———, Responsibility in Mental Disease. \$1.50.  
Hammond, Diseases of the Nervous System. Cloth, \$5.00. Sheep, \$6.00.  
Ranney, Applied Anatomy of the Nervous System. \$6.00.  
Stevens, Functional Nervous Diseases. \$2.50.  
Webber, Nervous Diseases. \$3.00.

E. B. TREAT,  
5 Cooper Union, New York City.

- Spitska, Insanity; Its Classification, Diagnosis, and Treatment. \$2.75.  
Beard, Nervous Exhaustion. \$2.75.  
Corning, Headache and Neuralgia. \$2.75.  
Wright, Inebriism from the author, Bellefontaine, Ohio. \$1.50.

# 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 October, 1889, over TEN THOUSAND PATIENTS have been treated, and while many have been entirely and permanently cured, 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

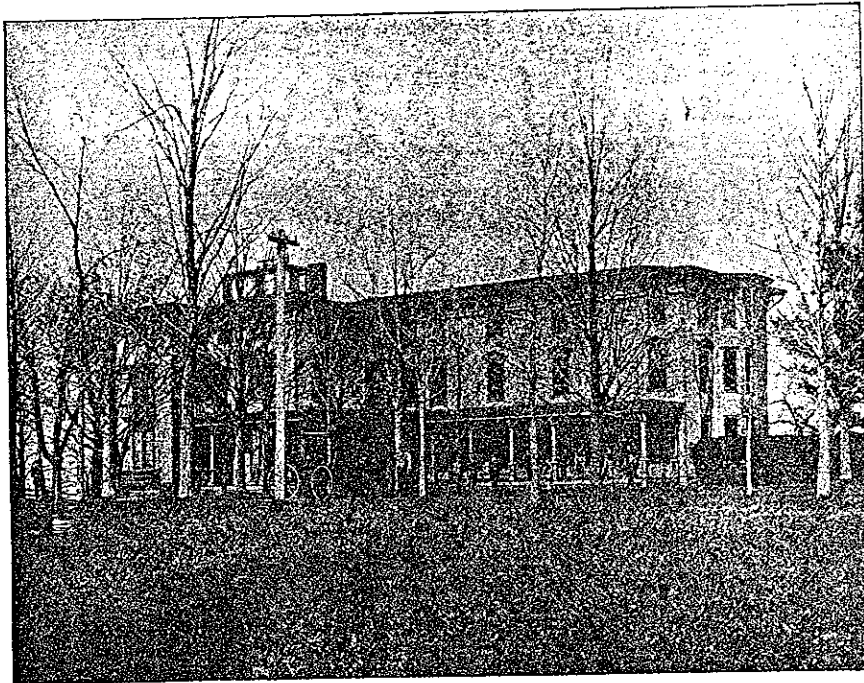
**ALBERT DAY, M.D.,**

SUPERINTENDENT AND PHYSICIAN.

January 1, 1890.

# Walnut Lodge,

A Private Hospital for the  
Special Treatment of Alcohol  
and Opium Inebriates.



**T**HIS Institution was founded in 1878 on the modern view that *Inebriety* is a disease and curable. Each patient is made the subject of special study, and special medical treatment suited to the exact requirements of the case. The general plan of treatment is building up the diseased organism and restoring both mind and body to a healthy and normal condition, with *brain and nerve, rest, etc.* This is accomplished by *Turkish, Russian, and Saline Baths, Electricity, Massage,* tonics, diet, and every other means known to science and experience which have proved to be of value in these cases.

This Hospital is pleasantly situated in the suburbs with the best surroundings, and every appointment of an elegant residence.

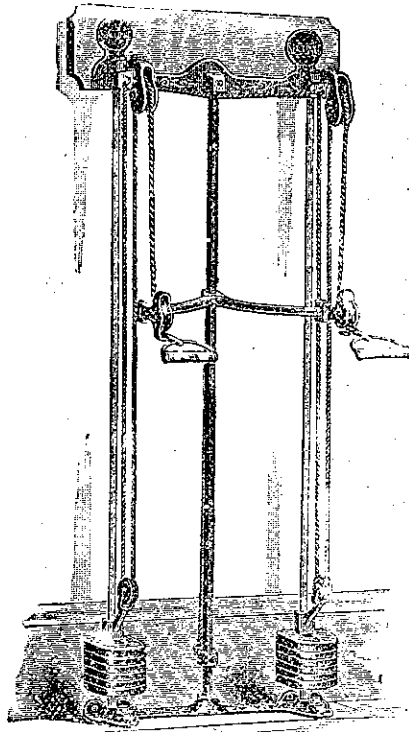
Experience proves that a large proportion of cases who come under treatment, and who unite with the physician in the use of all means of treatment, are permanently restored and cured. Each case has the direct personal care of the physician and attendant; and no one is received for less than four months unless by special arrangement.

All letters and inquiries should be addressed,

**T. D. CROTHERS, M.D., Hartford, Conn.**

A. G. SPALDING & BROS.,  
MANUFACTURERS OF  
Athletic & Gymnasium Goods

OF EVERY DESCRIPTION.



The illustrations represent the VICTOR PULLEY WEIGHT Machines Nos. 5 and 6. The most practical Machines in existence for GYMNASIUM and HOME use. Simple in construction, noiseless in action, and can be adjusted to either side of a closet door, when wall space is not available.

Price, No. 5,  
Japan Finish, with Adjustable Bar,  
\$12.50.

Price, No. 6,  
(Same as No. 5, but without Adjustable Bar), - - \$10.00.

Price, No. 7,  
Japan Finish. - - \$6.00.

Victor Pulley Weight, No. 5.

Estimates and Drawings for Colleges, Clubs,  
Public and Private Gymnasiums.

THE MOST PRACTICAL APPARATUS KNOWN

FOR PHYSICAL DEVELOPMENT AND EXERCISE FOR HEALTH.

Illustrated Catalogue Free.

Also Free, a Valuable Book, 72 Pages, Physical Culture Fully Illustrated.

CHICAGO. NEW YORK. PHILADELPHIA.

## PENSIONS

THE DISABILITY BILL IS A LAW.  
Soldiers Disabled Since the War are Entitled.

Dependent widows and parents now dependent whose sons died from effects of army service are included. If you wish your claim speedily and successfully prosecuted, address

**JAMES TANNER,**

Late Commissioner of Pensions. **Washington, D. C.**

# Dysmenorrhœa

AND ITS ALLEVIATION.

OVARIAN.

SPASMODIC.

INTERMENSTRUAL.

NEURALGIC.

MEMBRANOUS.

TUBAL.

The prominent symptom in all cases of dysmenorrhœa, is the severe pain which demands relief, and which in nearly every instance, is mitigated by the use of whiskey or morphia, both of which are very injurious. A succedaneum for whiskey and morphia is a great desideratum, and this we find in ANTIKAMNIA (opposed to pain.)

Samples in powder and tablet form, sent free on application.

Address: THE ANTIKAMNIA CHEMICAL COMPANY,

ST. LOUIS, MO., U. S. A.

## RIVER VIEW HOME.

*A Sanatorium on the Hudson River.*

ADVISORY BOARD.—Prof. H. MARION SIMS of New York. Prof. T. GAILLORD THOMAS, of New York. Prof. SENECA D. POWELL, of New York. Prof. WM. A. HAMMOND, Ex-Surgeon General, U.S.A., Washington, D. C. Dr. T. D. CROTHERS, of Hartford, Conn., Ed. of *American Journal of Inebriety.*

FOR NERVOUS DISEASES and OPIUM CASES, mild mental and select alcohol cases. A Home for Invalids or Convalescents. Strictly on the family plan. Hour and half from New York. Charming scenery and healthy location. For circulars and terms, address, RIVER VIEW HOME, Fishkill-on-Hudson, N. Y., W. S. WATSON, M.D., C. M. KITTREDGE, M.D., Proprietors.



# WORKS

IN

## *The Humboldt Library on Psychology.*

- No. 13. Mind and Body. The Theories of their Relations. By ALEX. BAIN, LL.D.
- No. 22. Seeing and Thinking. By WILLIAM KINGDOM CLIFFORD, F.R.S.
- No. 32. Hereditary Traits and other Essays. By RICHARD A. PROCTOR.
- No. 46. The Diseases of Memory. By TH. RIBOT. Translated from the French by J. Fitzgerald, M.A.
- No. 52. The Diseases of the Will. By TH. RIBOT. Translated from the French by J. Fitzgerald, M.A.
- No. 55. } Illusions. A Psychological Study. By JAMES SULLY.  
No. 76. }
- No. 65. Conditions of Mental Development and other Essays. By WILLIAM KINGDON CLIFFORD, F.R.S.
- No. 82. Illusions of the Senses and other Essays. By RICHARD A. PROCTOR.
- No. 87. The Morphine Habit. By DR. B. BALL, of the Paris Faculty of Medicine.
- No. 95. The Diseases of Personality. By TH. RIBOT. Translated from the French by J. Fitzgerald, M.A.
- No. 101. Æsthetics; Dreams and Association of Ideas. By JAMES SULLY and GEORGE CROOM ROBERTSON.
- No. 105. Freedom in Science and Teaching. By ERNEST HÆCKEL of the University of Jena, with a prefatory note by Prof. Huxley.
- No. 112. The Psychology of Attention. By TH. RIBOT.
- No. 113. Hypnotism. Its History and Development. By FREDRIK BJÖRNSTRÖM. Translated from the Swedish by Baron Nils Posse, M.G.

*The above are sold for 15 cts. each. Double numbers 30 cts. each. Sixteen books sent to any address on receipt of \$2.*

## *The Humboldt Library.*

Nos. 1 to 111, inclusive, contains over 6,000 pages and is bound in 10 volumes, Extra cloth at \$2.00 per volume, or \$20.00 for complete set to June, 1892. Sent by mail, or prepaid express, for \$2.00 per volume, or \$20.00 for the set of 10 volumes.

*The Humboldt Publishing Co.,*  
28 Lafayette Place, NEW YORK.

## BROMIDIA

### The Hypnotic.

**FORMULA.**—

Every fluid drachm contains 15 grains EACH of pure Chloral Hydrat. and purified Brom. Pot., and one eighth gram EACH of gen. imp. ext. Cannabis Ind. and Hyoseyam.

**DOSE.**—

One-half to one fluid drachm in WATER or SYRUP every hour until sleep is produced.

**INDICATIONS.**—

Sleeplessness, Nervousness, Neuralgia, Headache, Convulsions, Colic, Mania, Epilepsy, Irritability, etc. In the restlessness and delirium of Fevers, it is absolutely invaluable.

IT DOES NOT LOCK UP THE SECRETIONS.

## PAPINE

### The Anodyne.

PAPINE is the Anodyne or pain relieving principle of Opium, the Narcotic and Convulsive elements being eliminated. It has less tendency to cause Nausea, Vomiting, Constipation, etc.

**INDICATIONS.**—

Same as Opium or Morphia.

**DOSE.**—

(ONE FLUID DRACHM)—represents the Anodyne principle of one-eighth grain of Morphia.

## IODIA

### The Alterative and Uterine Tonic.

**Formula.**—

IODIA is a combination of active Principles obtained from the Green Roots of STILLINGIA, HELONIAS, SAXIFRAGA, Menispermum, and Aromatics. Each fluid drachm also contains five grains IOD.-POTAS. and three grains PHOS-IRON.

**Dose.**—

One or two fluid drachms (more or less as indicated) three times day, before meals.

**Indications.**—

Syphilitic, Scrofulous, and Cutaneous Diseases, Dysmenorrhea, Menorrhagia, Leucorrhoea, Amenorrhoea, Impaired Vitality, Habitual Abortions, and General Uterine Debility.

Specify (BATTLE) when Prescribing Our Preparations.

## BATTLE & CO.,

Chemists' Corporation,

ST. LOUIS, MO.

*Branches*

76 New Bond Street, LONDON, W.  
5 Rue de La Paix, PARIS.  
9 and 10 Dalhousie Square, CALCUTTA.

logy.  
ms. By  
KINGDOM  
RICHARD  
Translated  
y.  
other  
ys. By  
he Paris  
RIBOT.  
Ideas.  
ERNEST  
by Prof.  
RIBOT.  
FREDRIK  
G.M.G.  
30 cts.  
of \$2.  
olumes,  
ORK.

## →: SYR. HYPOPHOS. CO., FELLOWS ←:

Contains The Essential Elements of the Animal Organization — Potash and Lime;

The Oxydizing Agents — Iron and Manganese;

The Tonics — Quinine and Strychnine;

And the Vitalizing Constituent — Phosphorus; the whole combined in the form of a Syrup, with a slightly alkaline reaction.

It Differs in its Effects from all Analogous Preparations, and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

It has Gained a Wide Reputation, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases.

Its Curative Power is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.

Its Action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation with the food products.

The Prescribed Dose produces a feeling of buoyancy, and removes depression and melancholy; *hence the preparation is of great value in the treatment of mental and nervous affections.* From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

### NOTICE — CAUTION.

The success of Fellows' Syrup of Hypophosphites has tempted certain persons to offer imitations of it for sale. Mr. Fellows, who has examined samples of several of these, *finds that no two of them are identical*, and that all of them differ from the original in composition, in freedom from acid reaction, in susceptibility to the effects of oxygen when exposed to light or heat, *in the property of retaining the strychnine in solution*, and in the medicinal effects.

As these cheap and inefficient substitutes are frequently dispensed instead of the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. Fellows."

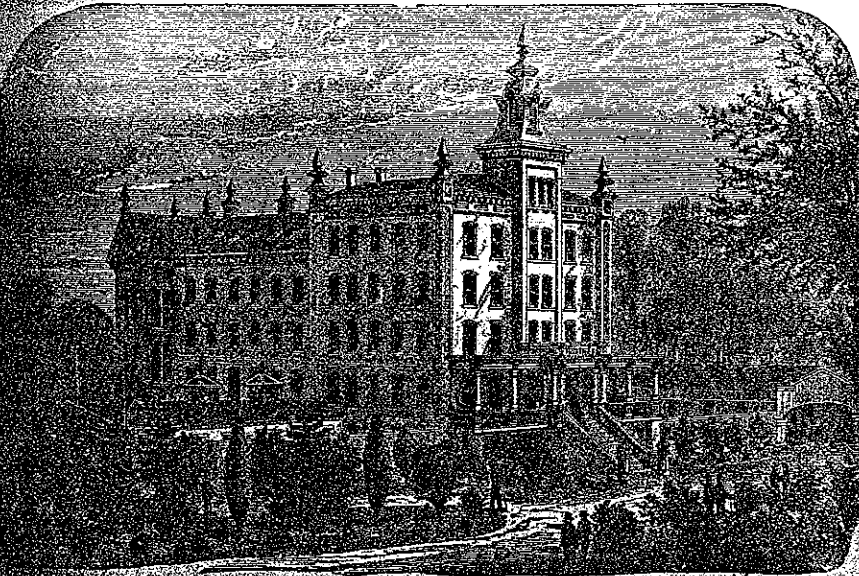
As a further precaution, it is advisable that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear can then be examined, and the genuineness — or otherwise — of the contents thereby proved.

*Medical Letters may be addressed to —*

Mr. FELLOWS, 48 Vesey St., New York.

# Inebriate's Home, Fort Hamilton, N. Y.

INCORPORATED 1866.



## HOSPITAL for the TREATMENT of ALCOHOLISM and the OPIUM HABIT.

HON. GEORGE G. HERMAN, *Vice-President*, SAMUEL A. AVILA  
HON. WILLIAM M. THOMAS, *Secretary and Auditor*, J. W. RICHARDSON,  
J. A. BLANCHARD, M.D., *Consulting Physician*, L. D. MASON, M.D.

Buildings are constructed for this special purpose, and they are more complete and better for the treatment of Dysomania and the Opium Habit than those of any similar institution in the world. They are situated on one of the most attractive points on the Bay of New York, and stand on a point within one thousand feet of the Narrows, commanding a full view of the whole Eastern Shore of the Island, also the broad expanse of the Upper and Lower Bay, dotted with the representative sails of the fleet, and enclosed on the horizon by the blue outlines of the Jersey Coast to the North and the Ocean to the South. There are separate dining-rooms, lodging-rooms and parlors, billiard and reading-rooms. There is also a lecture-room for religious services, readings, concerts, etc. All the New York papers and other newspapers and periodicals are regularly taken.

MANAGEMENT is systematic, thorough and adequate. There has been no change in the staff of officers since the inauguration of the Home.

CLASSIFICATION of patients originated with and is peculiar to this institution. Being determined upon a strictly commercial basis, it is made to depend upon the character of the lodging and other accommodations which the patients or their friends are willing to pay for.

On this equitable arrangement we are enabled to offer board, washing and medical attendance at rates from \$10 to \$40 per week. Those paying \$16 and upwards, according to size and situation of the rooms selected, are provided with a single apartment and a seat at table in private dining-room—the accommodations in the select rooms and the table being in every respect equal to those of a first-class hotel. The rate may be had on terms to be agreed upon.

RESTRAINTS.—Our system of restraint is compatible with the fullest liberty for each boarder to avail himself of all the recreation, amusement and enjoyment which the billiard-room, park and grounds, readings, lectures, concerts, musical exercises, etc., afford.

DISCIPLINE.—The established code of discipline is comprehended in the observance of THE GOLDEN RULE, as universally understood by gentlemen and ladies in the guidance of well-regulated and social relationships.

Patients are received either on their application or by due process of law. For mode and terms of admission apply to the Superintendent, at the Home, Fort Hamilton (L. I.), New York.

Two daily mails and telegraphic communication to all parts of the country.

HOW TO REACH THE INSTITUTION FROM NEW YORK.—Cross the East River to Brooklyn on Fulton Street and proceed either by Court street or Third ave. horse cars to transfer office; or, cross from Jersey on Hamilton Avenue boat and proceed by Fort Hamilton cars to transfer office thence by cars to the Home. Request conductor to leave you at the Lodge Gate.

# SERVICEABLE SPECIALTIES

**PICHI** (*Cubana Umbellifera*) is an excellent  
sedative, and diuretic in disease of the  
Urinary Organs.

It has been found efficient in gonorrhoea, cystitis,  
urinary calculi, and all irritative and inflammatory con-  
ditions of the bladder and urinary tract.

The Pharmaceutical Preparations of Pichi are Pichi  
Extract, Pichi Syrup, Pichi Extract, Pichi and Soluble Elastic  
Capsules, Pichi Syrup.

**CACTUS GRANDIFLORUS** is a heart tonic  
*par excellence*. In these days when so  
many nervous die of heart failure, the  
selection of a heart tonic is important.

According to Dr. W. H. H. Home, M.D., an *London Doctor*,  
it is equally valuable in nervous and functional disorders of  
the heart, such as palpitation and strophantus, are unsatis-  
factory, such as palpitation, irregularity, fluttering, inter-  
mission, slow or rapid action, arising from debility, wear,  
exhaustion, or the excessive use of tea and tobacco, com-  
monly called as cardiac nervousness.

**CREOSOTE** is of all the methods of treating  
consumption the most satisfactory.

We supply creosote in Soluble Elastic Capsules (Cod  
Liver Oil, or Mannus, Creosote, Tannin, and Enteric Pitt),  
or Creosote coated with a material that resists the action of  
the gastric juice, but dissolves in the duodenum.

Send for literature or samples of these products.

## PARKE, DAVIS & COMPANY,

DETROIT, NEW YORK, AND KANSAS CITY.