HORSFORD'S ACID PHOSPHATE IN CHOLERA.

By the researches of Dr. Koch, it is now known that acids are most useful to kill the cholera microbe, and have been successfully employed by the profession in Europe.

Dr. Chas. Gatchell, of Chicago, in his "Treatment of Cholera," says: "As it is known the cholera microbe does not flourish in acid solutions, it will be well to slightly acidify the drinking water. This may be done by adding to each glass of water half a teaspoonful of Horsford's Acid Phosphate. This will not only render the water more palatable, but also render it more agreeable to the taste. It may be sweetened if desired. The Acid Phosphate, as recommended, will also tend to invigorate the system and correct debility, thus increasing the power of resistance to disease. It is the acid of the system, a product of the protoplasm, and [sic] will not create any disturbance liable to follow the use of mineral acids."

A recent report from Bangkok, Siam, states the facts in the case of a native, who was attacked with cholera. The usual treatment failed to afford any relief, and the case appeared hopeless. Prompted to the attending physician to try Horsford's Acid Phosphate. After the second dose he commenced to revive, and in six hours after, he was pronounced out of danger.

Pamphlets sent free. Physicians desiring to test Horsford's Acid Phosphate will be furnished a sample, without expense, except express charges.

BEWARE OF ImitATIONS AND DANGEROUS SUBSTITUTES.

RUMSFORD CHEMICAL WORKS, PROVIDENCE, R.I.
HORSFORD'S ACID PHOSPHATE,

(LIQUID.)

Prepared according to the directions of Prof. E. N. Horsford of Cambridge, Mass.

Universally prescribed and recommended by physicians of all schools.

As a Substitute for Lemons or Lime Juice.

Acidulated drinks are refreshing at all seasons, but the constant use of lemons is apt to interfere with the regular action of the bowels. Horsford's Acid Phosphate, with water and sugar only, makes the purest and most wholesome lemonade, and at the same time one of the safest and finest curatives known. It thoroughly quenches the thirst, prevents derangement of the stomach and bowels, aids digestion, cures lassitude, relieves the exhaustion following excessive physical or mental labor, and invigorates the system. Many prominent physicians have used Horsford's Acid Phosphate in their practice, and give it unqualified approval.

We have received a very large number of letters from physicians of the highest standing, in all parts of the country, relating their experience with the Acid Phosphate, and speaking of it in high terms of commendation.

Physicians desiring to test Horsford's Acid Phosphate will be furnished a sample without expense, except express charges. Pamphlet free.

PROF. HORSFORD'S BAKING PREPARATIONS

are made of the Acid Phosphate in powdered form. They restore the phosphates that are taken from the flour in bolting. Descriptive pamphlet sent free.

RUMFORD CHEMICAL WORKS, Providence, R. I.

Vol. IX.—18
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 tainted term.

Send address for our Medical Almanac, containing valuable information.

THE NEW YORK PHARMACAL ASSOCIATION,
P. O. Box 1574.
NEW YORK.
Dr. Kerr, after welcoming the members, said:

The past half century has exhibited no more striking phenomenon than the rise and progress of the great Temperance reformation, the jubilee of which was celebrated all over the world a year or two ago. The early abstaining heroes, the memorable men of Preston, and the other brave souls who, some fifty years ago, amid the scorn, the contempt, and the ridicule of the learned, the religious, and the fashionable, founded that grand reformed of which total abstinence and prohibition are to-day the practical outcome, had for their aim two great ends—the rescue of the intemperate and the prevention of intemperance.

The undaunted Temperance pioneers thoroughly understood the material character of the intoxicating principle, and its physiological influence on the body and brain of man. In a word, our nephilistic ancestors had a clear conception of the genesis of inebriety, and had their nephilian progeny all shown as intelligent a comprehension of the subject, there would have been little occasion for the assembly to-day of a
Colonial and International Congress for the consideration of the remedial and legislative needs of the habitual drunkard.

Of recent years, however, there has in some quarters set in a bad fashion of stigmatizing early temperance advocacy as "low," and of boasting of the so-called "higher platform" of the modern temperance crusader. The true doctrine was taught by the founders of teetotalism, and the pretentious "higher platform" is simply the exclusion of one-half of the truth (the physical aspect) concerning intemperance.

The earliest teaching was that intoxicating liquors are dangerous articles, that there are multitudes of persons so susceptible to the narcotic influence of the witching poison that, whatever their accomplishments or their station, if they drink at all they drink to drunkenness; that the confirmed inebriate is a diseased individual, undergoing the tortures of a living death, manifesting symptoms characteristic of the operation of an irritant narcotic poison. Some of our latter-day enthusiasts deny that inebriety is ever a disease, insist that the fault always lies with the drunkard, never in the drink; that only the evil-disposed and fools fall victims to alcoholic excess.

Need I add that the former well-informed friend of the inebriate recognizes the physical phase of narcotic indulgence, the arduous and protracted character of the struggle of the habitual drunkard for emancipation from his tyrannous task-master; while the latter ill-informed visionary indignantly denies that there is any physical element in the matter, asserting that drunkenness is nothing but a wanton immorality, a willful sin, and complacently declaring that moral and religious influences are alone of service in the reformation and cure of the inebriate.

The illustrious forerunners of Temperance, Erasmus Darwin, two centuries ago, and Benjamin Rush, a century ago, besides other far-seeing and profound thinkers long before, knew and taught the truth. It is not the vicious, the ill-disposed, or the poor who alone swell the great army of the drunken. The most guileless spirits, the purest
Disease and Treatment of Inebriety.

minds, the warmest hearts, the most unselfish souls, the loftiest understandings, and the clearest heads have gone down before the irresistible power of the Bacchic tyrant.

Swells the refrain of ten thousand parrot voices, "Men become drunkards because they drink." If ever it were true, in the language of Tennyson,

"That a lie which is half a truth is ever the blackest of lies. "
"That a lie which is all a lie can be met and fought with outright, "
"But a lie which is part a truth is a harder matter to fight,"

it is here. Men become drunkards through drinking, it is true. That is, drinking is the means by which they attain to a state of intoxication. But the majority of those who drink do not become drunkards. Only a certain proportion drink to excess. Drinking, though a cause, is not the sole cause of drunkenness. It is, in our country, and in some other countries, the principal means by which drunkenness is arrived at. In other lands, to some extent even among ourselves, opium or some other narcotic anaesthetic is the intoxicating agent.

The act of drunkenness should not be confounded with the disease of inebriety. There may be a succession of drunken acts, yet no diseased condition underlying these. On the other hand, where there may have been no actual drunkenness, or even limited drinking, the individual may have been the inheritor of so strong an inebriate predisposition as to have been unable to taste an intoxicant without drinking to excess.

Inebriety may be defined as a disease of the nervous system allied to insanity, characterized by an almost overpowering impulse to, or craving for, the oblivion of narcotism. It is, in reality, an intoxication mania.

The causes of inebriety lie deeper than the mere inebriating substance; and until we unravel the etiology and pathology of the disease, until we fully comprehend the philosophy of intemperance, though we even succeed in expelling alcoholic intoxicants from within our borders, the remote causes of inebriety will continue to operate, pleasure seeking
mankind will strive to appease its craving for narcotism by some other inebriant, such as opium, or chloral, or ether, or, as is already being furtively used, chloroform.

The disease of inebriety assumes varied forms. Inebriates may be classed as periodical and constant. The occasional drunkard does not generally labor under the disease, so need not be regarded here. The periodic attacks may be quotidian, tertian, quartan — once a week, once a fortnight, once a month, once every two or three months, or they may occur irregularly. Functional disturbance is the most common cause of periodic outbreaks. There are other periodicities, such as the periodicity of climate, of season, of occupation, and of occasion.

The indulgence of the inebriate may be social or solitary. The majority drink freely only when in "good company," but a considerable minority are secret drinkers.

The particular form which inebriety may take may be determined by the complicating affection. Thus we have the inebriety of insanity, of syphilis, of sunstroke, and of injury (traumatic inebriety).

The form may correspond to the particular inebriant used. In this way we have alcoholomania, opiomania, morphinomania, chloralomania, etheromania, chlorodynomania, chloroformomania.

Alcoholic inebriety is not confined to ardent spirits, though strenuous efforts are being made to show that beer is harmless, while spirit is injurious, and to establish a difference in kind between the action of fermented wines and spirituous liquors. At the Dalrymple Home nearly 10 per cent. of the cases treated have been examples of beer and wine inebriety. The difference is in degree, not in kind. All intoxicating drinks are poisonous. The lightest beers and the finest fermented wines are as truly, though not so strongly, intoxicating as are the coarsest and cheapest spirituous drinks.

The real question to which an accurate reply should be sought is, "Why do men fly to narcotics?" If we can ascer-
Disease and Treatment of Inebriety.

...tain this, we will be in a position to understand the alarming nature and extent of the inebriety which is so prevalent among us.

Fashion; the habits in which they have been brought up from their childhood; custom, which, with its hoary head and blanched locks, has made the intoxicating cup seem natural and familiar; tradition, which has shed so venerable and be
ign an aspect on drinking; poesy, which has breathed around the intoxicating bowl garlands of surpassing beauty; piety, which has blessed and sanctified the inebriating cup, account for probably the great majority of attempts on the part of individuals to drink moderately. The greater part of these, fortunately, though many injure their physical system and shorten their life by what may more truly be called "intemperate" than "moderate" drinking, have never become "drunkards" in the ordinary acceptance of the term, i.e., they have never lost complete self-control. All who are slain by alcohol are not inebriates. Many who have been killed by it have never once been what is denominated "drunk," in the whole course of their lives.

But, though the majority of drinkers stop short of habitual or periodical intemperance, there is a vast array of men and women — and, alas, of children — who, from various predisposing causes, are so handicapped in the race for "moderation," that, strive as they may, they are unable to attain to it. They set out on their alcoholic career with an utter abhorrence of excess, and with a resolute determination never to exceed, never to come under the grinding yoke of strong drink. They have been educated from infancy in the art of drinking. Infants in arms, they have imbibed the intoxicating draught, it may be, from the maternal bosom. As children they have been accustomed to see fermented wine on the social board, to witness their parents and visitors partaking of it, as a matter of course, without any apparent ill effect; they have been treated to a sip, then half-a-glass, then a glass of some comparatively light, pleasant wine or beer, as an integral part of their daily diet. In adolescence or manhood...
they bound forth on the path of life with a buoyant step, quaffing the alluring and enlivening cup, thinking no evil and fearing no harm. Oftener, and yet more often do they, all unconscious of peril, resort to the narcotic for the pleasurable though fleeting sensation which follows, till, bye-and-bye, before they feel the chain even tightening, they are firmly bound by the gilded fetters of an acquired appetite for intoxicating agents. With many such the habit has been so confirmed, the brain and nerve centers, if not the body, have been so affected by alcohol, that a veritable diseased condition has been established which renders exceedingly difficult the cure of what was once perhaps only a social indulgence, in which pre-disease state the entire abandonment of intoxicants would have been comparatively easy.

Whatever the difference of opinion as to the precise character of the drinking habit in the first instance, the latter stage is admitted by nearly all to be an unmistakable stage of actual disease.

Causes may be considered as predisposing and exciting. An exciting cause provokes the inebriate paroxysm in a constitution predisposed to inebriety, while the same excitant has no effect in stimulating a person who has not this predisposition to excessive narcotic indulgence.

What are the causes which have hindered so many from steadfastness in "moderate" or rather "limited drinking"?

Above and beyond all other predisposing causes stands heredity.

This heredity may be regarded as twofold. There is the direct alcoholic inheritance. That drunkards beget drunkards is an axiom dating from very early times. There are also large numbers of children born with an inherited and extremely delicate susceptibility to the narcotizing action of alcoholic intoxicants, whose parents were not in the habit of getting drunk, but drank regularly and freely, physiologically intertemperate, though considered by the world to be models of sobriety.

There is also the indirect inheritance of alcohol. Under
this category are ranged individuals who have no special pro-
civity to excess, who have no direct though latent proneness
to inebriety, but who are weighted from their birth by a con-
trolling power too feeble to stay the advances of alcohol
within their very being. Alcohol, if it gain an entrance into
such constitutions by however tiny an inlet, slowly yet steadily
widens the aperture by increasing in volume, as the dykes
built to resist the encroachments of the ocean, till all the defenses
are swept away by the overpowering and overwhelming flood.
In no inconsiderable proportion of cases this defective power
of control is the product of alcoholic indulgence on the part
of one or both parents.

I have seen the alcoholic habit in the parent bear diverse
fruit in the persons of the offspring, one sister being nervous,
excitable, and inebriate, a second consumptive, a third insane;
one brother an epileptic and a periodic inebriate, the second
in an asylum, the third a victim to chronic inebriety. In
another instance where all the four children have become
habitual drunkards the grandfather had also been addicted
to excess.

The heredity is sometimes crossed. The daughters of a
drinking father, and the sons of a drinking mother may be
the only children affected with the inebriate taint.

The heredity may be either insane or inebriate. As in-
ebriate parents not unseldom beget insane offspring, so from
the parentage we sometimes get inebriate children. The
heredity may be of some other type. Any transmitted dis-
case or effect of disease which increases nervous susceptibility,
unduly exhausts nerve strength, and weakens control,
may bear a nervine crop, in the form of asthma in one child,
hysteria in another, epilepsy in another, idiocy in another,
and inebriety in another.

A considerable predisposing cause is the effect on the
system of accident or disease — traumatic inebriety. Blows
or falls on the head and sunstroke, are typical examples of
this class of causes.

Injudicious diet and bad hygienic conditions, by their de-
pressing influence on the nervous system, predispose not a little to inebriety. Thus it is that the improvement of dwellings for the poor is so valuable an aid in true Temperance effort.

The influence of sex, age, religion, climate, race, education, pecuniary circumstances, occupation, marital relations, temperament, and associated habits, are all worthy of inquiry. The terrible increase of female inebriety in England of late years is a fact of serious import to the future of the British race, as yet little recognized, and less understood. The health, sobriety, and morality of the coming generation, are deeply involved.

Intoxicating drinks themselves, by their toxic effect on body and brain, markedly predispose to inebriety, by degeneration of tissue, by perversion of function, by brain disturbance, by dulling of the moral sense, and by paralysis of will, all of which unhealthful conditions may be handed down.

What are the causes which excite to inebriety? Some form of nerve shock takes the lead. The shock may be caused by sudden and appalling bereavement, financial ruin, worry, unhappy marriage, disappointed afflection, desertion, or sudden and unexpected good fortune. Accidents and disease excite as well as predispose. I have known, for example, sober men and women precipitated, as it were, into drunken excess, immediately after sustaining some obscure brain injury, and in convalescence from enteric fever. Some occupations, such as liquor trafficking, sedentary employment, and daily newspaper work, are more exciting to Intemperance than others, being more productive of nerve exhaustion. Climate exerts an influence. I have seen an Italian who led an abstemious life at home, suddenly break out here into inebriate habits. The state of the atmosphere, and the direction of the wind, have a marked effect on some inebriates. Functional derangement is an influential factor. So is idleness. Overwork, overstrain, sociability, and intoxicants, themselves all excite to an outbreak.

Age must not be left out of consideration, the inebriate
climacteric ranging generally between thirty-five and forty-five. Unhappily, of recent days, tender years have not secured exemption. Children of eight, six, and even four years, have had attacks of delirium tremens, while even younger little ones have exhibited a mania for intoxicating beer, wine, and ardent spirits. I have heard children who had been rendered insensible by an accident, on recovering consciousness, ask for gin, or some other similar drink.

The pathology of inebriety is a most interesting study, and reveals the fact of diseased conditions of brain and nerve centers, antecedent to both constant and periodic inebriety.

The importance of a knowledge of the causation of inebriety, consists in the basis which this affords for judicious treatment. When we have discerned the unhealthy condition preceding an attack of disease, we are in a favorable position to prevent a recurrence by remedying the prior morbid state.

Philanthropists and quacks—the former from the highest feelings of benevolence, the latter from the lowest motives of the pocket—have eagerly sought for some charmed elixir, some de-narcotizing talisman, which would cure drunkenness and restrain the drunkard from even tasting an intoxicant again. The magic potions have been in number without end. Each in succession has been proclaimed a perfect cure. But all the pretentions advanced on behalf of them have been found baseless, from the curious alcoholic extract of frog, to the “bark cure,” which latter is believed by good Christian people among us to have miraculously cured thousands of the worst drunkards in an American city. The nostrum had in reality cured no one there, but has caused many a reformed inebriate to relapse into his previous drinking habits. Verily, John Bull should, by the transformation of a letter, be called “John Gull”!

Others, again, in the fervor of their rage against the consumption of the flesh of slaughtered animals as food, have solemnly declared that the cause of drunkenness is the eating
of beef, that we are mainly indebted for our inebriety to the
devouring of pork pies, sausages, and the fleshpots of Egypt
generally, and that abstinence from fish, flesh, and fowl
would destroy the crave for narcotics. A knowledge of the
ture nature of inebriety and of the facts, would dispel this
astounding delusion. Whole races—who would not taste
animal food if they were put to death for their refusal—will
get as thoroughly and as often drunk as you choose to
supply them with the wherewithal.

There are certain indications of sound treatment. The
first is the withdrawal of the narcotic poison, so that the
toxic process may cease. This can be immediate with
alcohol, ether, chloroform, and chloral, but generally should
be gradual with opium and morphia. The second indication
is the removal, if possible, of the exciting cause. The third
consists in the repairation of the physical damage wrought by
inebriety, the remedying of the pre-inebriate morbid condition,
and the strengthening of the moral control.

In all these curative measures medical treatment is
called for. As is the treatment of insanity, the physical
disease should be dealt with, moral and religious influences
having their appropriate sphere of action. The bodily
unsoundness must be set right, while the concerns of the
mind, the conscience, and the spirit are not overlooked.

The disease should be dealt with in its early and more
curable stage, as the more chronic it becomes the more difficult
is the cure. As skilled advice is not usually invoked
until the disease is in an advanced stage,—the clergyman,
the lawyer, and every irregular and amateur practitioner
having been consulted before the medical man,—in most
cases removal from the former inebriate associations affords
the best hope of benefit. Sometimes, though rarely, this
may be secured by a voyage in a teetotal ship, or by residence
with an abstaining family; but as a rule the only resource
is to try a residence in a Home for Inebriates. This should
be of at least twelve months' duration. As many such
establishments are really homes for the confirming or train-
Disease and Treatment of Inebriety.

ing, and not for the cure of inebriety, it is imperative that the most scrupulous care be taken to see that the institution is genuine, and does not allow the presence of intoxicants.

The results of the treatment at the Dalrymple Home for Gentlemen at Rickmansworth are most gratifying. There have been 103 admissions and 85 discharges. Of the patients who have been treated in that Home (which is the only retreat for males with a disinterested proprietary, and at the same time licensed under the Habitual Drunkards Act), more than one-half have been restored to their friends, and have been enabled to again fulfill their duties in life. A like experience has rewarded the treatment at other genuine homes in this country and abroad. So that it may fairly be claimed that one-third of discharged male inebriates have been cured. The record is not quite so favorable in the case of females.

In America and in many of our Canadian and Australian colonies there is excellent legislation for the compulsory committal of inebriates to authorized homes for care and treatment; but in the United Kingdom a lively jealousy of interference with the liberty of the subject has prevented us from being favored with a similar provision. The British Legislature is so enamored of freedom that it has declined to emancipate the drunkard's hapless wife and starving children from their slavery, or by effective temporary seclusion to give the broken-down, volitionless inebriate his only human hope of deliverance from a worse than Egyptian bondage. Involuntary internment in a genuine retreat for inebriates would be the freeing of many an abject serf, for such might truly, with the poet, say of themselves:

"Our freedom chained; quite wingless our desire;  
In sense dark-prisoned all that ought to soar!  
Prone to the center; crawling in the dust;  
Dismounted every great and glorious aim;  
Embroiled every faculty Divine."

Our Habitual Drunkards Act, which will expire in two years, unless renewed, empowers an inebriate, in the presence
of two justices, to sign away his liberty for any period not exceeding twelve months. As there is no licensed accommodation for patients under £2 2s. per week, there is therefore no provision whatever under the Act for the poor, or for persons of limited means. In America, and in our colonial possessions, it is far otherwise. There the State of the inebriate can be held liable for the cost of his maintenance, and when no funds are forthcoming, he is treated for a time at the public charge.

There is a residuum of inebriates in whom the disease has become so confirmed that they are apparently incurable. They are not amenable to treatment, and, therefore, have to be discharged from hospitals. Inebriates, as their retention would interfere with the treatment of the other more hopeful cases. For this residual chronic, insusceptible class, provision should be made for compulsory and permanent constraint. It would be true economy for the State to provide for all these classes of inebriates, who for criminal and police expenditure necessitate an enormous annual outlay.

The Medico-Legal Relations of Inebriety are of deep interest. In some countries crime committed during insanity from drink is not visited with heavier penalties than if the insanity were from other causes, and, therefore, exempts from responsibility. In America, France, and England full responsibility is, however, exacted. In America, the severity of the law is in practice mitigated in capital cases by the choice of degrees in criminality. The result of our present jurisprudence is that men and women have been sometimes severely punished for deeds done when the doers were undoubtedly beyond control, and even unconscious of their violence. Our existing jurisprudence was built up when we had little knowledge of the physical phases of inebriety, and a mixed commission of legal and medical experts might be able now to somewhat modify, in the interests of justice, our criminal procedure with reference to the diseased inebriate.

To the great Republic of the West the world is indebted
for the dawn of a new era of hope for the habitual inebriate, who has been too long the scorn, as well as the reproach, of modern civilization. In the victorious freeing march of the beneficent Temperance reform, not a few human captives have been rescued from a living death, not a few human slaves have been restored to abstaining liberty and life. With a fuller knowledge of the causes and conditions of inebriety, which we trust the labors of this Congress and similar efforts will afford, we may confidently look forward to a more successful, because a more intelligent warfare, against intemperance, to the more effective protection of those who have to come after us from the sorrows and the evils of narcotic excess, to the more hopeful treatment of a dire and dreadful disease.

A general recognition of the diseased state of the inebriate may not be realized in our day; full justice may not be accorded to his physical infirmities in our time. But our duty is clear. Our mission is to proclaim the truth. Strong in the righteousness of our cause, let us be content to sow the seeds of knowledge. Let us, each one of us, in our heart of hearts, say with the grand old Quaker poet of America:

"I have not seen, I may not see,
My hopes for man take form in fact,
But God will give the victory
In due time. In that faith I act."

The following Address to Her Majesty Queen Victoria was adopted, and the President was authorized to sign it on behalf of the Congress:

To Her Most Gracious Majesty Victoria,
Queen of Great Britain and Ireland.

We, the members of the Colonial and International Congress on Inebriety, assembled at London this sixth day of July, eighteen hundred and eighty-seven, under the auspices of the Society for the Study of Inebriety, respectfully tender our homage and congratulations to your Majesty on your Majesty's long and beneficent reign.
Disease and Treatment of Inebriety.

"We desire to record our thankfulness to Almighty God for those graces and virtues and that ever-living interest in the material and moral well-being of the people over whom your Majesty rules, which have touched their hearts, and have won the devotion and affection, not only of your Majesty's loyal subjects, but of all the nations of the earth.

"While we beg to acknowledge our gratitude for the deep interest which your Majesty has taken in the sobriety of the British people, we humbly submit to your Majesty's consideration the pitiful case of the subjects of the truly terrible disease of inebriety, who from unhealthful conditions have fallen victims to alcoholic excess, and have thereby been so enchained in will that they are, without remedial moral and legislative treatment, unable to resist the power of intoxicants.

"We fervently pray that your Majesty may be long-favored by the Almighty with health and happiness, and long spared to reign over your Majesty's devoted subjects, as well as to afford your Majesty's royal encouragement to every judicious movement for the welfare and the improvement of mankind.

Norman Kerr, M.D., F.L.S., President."

The President then resigned the chair to Dr. Cameron, M.P., who presided at the morning sitting.

There were sixteen hundred and twenty-six persons of both sexes in the insane hospitals of Pennsylvania for 1886. Of this number only two were dipsomaniacs, eight were opium cases, one of cocaine inebriety. One hundred and twenty-three are put down to intemperance.

In many cases the inebriety of the children have been traced to the social and business disturbances of the parents at the time of conception.
Alcohol on the Heart.

ALCOHOL ON THE HEART.*

By Dr. B. W. Richardson, F.R.S.

Dr. Richardson said that his observations had taught him that although the primary action of alcohol was upon the nervous system, the first organ which bore witness to the action was the heart. This is not peculiar, because the heart is always the first witness to the fact of nervous disturbance. When the sphygmonophone is applied, the mere act of the patient listening to the sounds disturbs the heart and alters the pulsation. The effect of odors and of strange sights is the same.

The distinguished Dr. Wilson Phillip showed, originally, and Dr. Richardson has since confirmed it, that if the surface of the brain of an animal be simply exposed to the action of alcohol the motion of the heart is influenced, and the disturbance is so rapid that it looks as if there were a direct impression from the brain to the heart.

Dr. Richardson then demonstrated from pulse readings what were the dangers that occurred in the circulation through an acute course of alcohol leading up to complete intoxication. These changes were written from the pulse of those affected by alcohol, and they showed a deviation from the standard in every stage. After a complete intoxication up to the fourth degree, the pulse would recover its tone if it were left to gain its natural condition, but it was quite three days before the return to health was declared.

In the inebriate the heart was never allowed to declare itself naturally. Once put off the natural lines, and if continued off, then it will, in time, become so fixedly unnatural that intervals of relief from the disturbing agent extending over eighteen to thirty-six months were often required before the circulation re-assumed the role of health.

* An address delivered before the International Congress of Inebriety.
Vot. IX.—20
To what extent the heart is disturbed in the inebriate was a point which Dr. Richardson next demonstrated from pulse readings. He showed: (1) the reading of a natural pulse; (2) the reading of a pulse of an inebriate at his best; (3) the pulse of the same man after he was what he called "elevated," or supported by a full measure of alcohol; (4) the pulse of the same man during the period of depression following upon the alcoholic indulgence.

These readings showed the continued and continuous variation and irregularity of action of the heart. Among all the stages of the life of this man, the character of the changes exhibited being as varied as his words and actions, his circulation was at the best feeble and uncertain, watery. Under the alcohol it was sharp and vehement, but easily depressed; under depression it was simply, as the old writers well expressed it, "rotten." It showed no regular outlines. While then, it may be true, and, no doubt, is true, that alcohol acts primarily on the heart, its mode of action is through the circulation by a third movement back again upon the brain, the volition, the emotion, and the reason.

So soon as these changes, therefore, become permanent or habitual, they produce that confirmed disease and habit of body which we call inebriety, the center of which is in the heart and circulation. At first, the heart of the inebriate is made tense and full by alcohol. This, under continuance, extends to permanent enlargement of dilatation with stretching of the valves, especially the semilunars, and distention of the arterial system throughout, leading to loss of elasticity. As a further change, there is modification of structure, both cardiac and vascular; a feeble, large heart, dilated, rigid arteries, distended and bulging veins. The corporeal mechanism is, in short, changed altogether. As an accompaniment of these changes of structure there is a change of disposition of will, of nature.

There are many who are not, strictly speaking, accepted as inebriates, but who are really so, in a minor degree, against their own admission or belief. They are inebriates
of the minor key. They tell the physician nothing more than the fact that they know and feel the "sustaining" power of alcohol. They feel, they affirm that they cannot live without it, and when abstainers assure them that the sense of the requirement is an idea, and no more, they reject the statement as either ignorant, unsatisfactory, or even cruel. This sense of want, in fact, divides the moderately inebriate from the truly temperate. The nonsense, if the want is the true sense of the danger, this fact they who do feel the want know quite well, and they who do feel it know partly, their better judgment leading them to it as the first step towards positive inebriety. In confirmed inebriates the state of the circulation is supposed by the sufferer to be actually natural. It is strange to say, but it is correct, that the confirmed inebriate forgets what it is to be a natural man. He is in a distinct and unnatural sphere, like a man who has been cast amongst savages and made to acquire, by habit, their habits, tastes, and tongue. With the circulation so modified, the heart so feeble, the arteries so imperfect, as in the confirmed case from which the pulse reading was taken, there could be nothing but uncertainty of physical and mental manifestations.

From these reflections on the changes of the heart and circulation under inebriety, Dr. Richardson surveyed the question of treatment. Here two facts presented themselves—firstly, that with the heart and circulation of the pathological inebriate state there can be no rapid or immediate change, that is physically impossible; secondly, that so long as alcohol is permitted to enter the inebriate body there can be no chance of successful restoration of the natural state.

There were, therefore, on pure physiological lines of argument, setting all sentiment on one side, only two elements of cure for the inebriate, minor or major—namely, time and total abstinence from alcohol. It is not simply that the evil spirit must be cast out, it must be kept out until the body it has perverted comes back to its own natural state, and has, so to speak, been born again.
For what may be classified as the minor forms of inebriation, two years, at least, of abstinence are necessary in the adult, fully-developed sufferer; for the major form, two to six years are necessary in order to insure a restoration from the disablement that has been developed and sustained into permanent habit of disease.

Up to this present time nothing more has been discovered as a cure for inebriety, and this discovery is of much value. But we need not suppose that science has exhausted all her other resources. In plain truth, she has but just begun to see her way. Let those practitioners of medicine who are called upon to treat the inebriate sick get into their mind's eye the exact condition of the circulatory organs of those who are under their care; the large, feeble heart, the arteries, like an india rubber ring that, from long use, has lost its grip over a book or parcel of letters which it has held together, inelastic and ready at any moment to give way, the veins or rivers of life distended and unresistant, and he will fairly grasp the difficulties which lie before him from their core. Then he will be in a condition quietly to study out how thiscrippled state may be helped so that time for recovery may be shortened and recovery itself be made more complete.

He (Dr. Richardson) had no doubt that some aid would come from this study. But one thing at a time, and the first thing was a clear and absolute definition of the physical nature of the evil that had to be met and relieved in the disease of inebriety, which, in however many forms presented, was one disease with variety of phenomena, dependent on a common causation and a common cause.

Where rheumatism is associated with inebriety, often sensory hallucinations or melancholy will appear. Where the use of spirits is continuous for a long time, general paralysis may be expected. Dementia will follow in periodic inebriety where the drink craze is severe. Hereditary disposition to inebriety may be surmised when the drink craze is sudden and of long duration.
OBSERVATIONS ON INEBRIETY.*

BY REV. J. W. HORSEY, M.A., OXON,

Late and last Chaplain of H. M. Prison, Clerkenwell.

As chaplain of H. M. Prison, Clerkenwell, to which there were in a single year 20,000 admissions, the questions connected with the subject of inebriety inevitably came prominently and perpetually before me, especially as my friends were almost exclusively those on remand or awaiting trial. In an ordinary prison half of the inmates would, by a moderate computation, owe their position directly, and an additional one-fourth indirectly, to intemperance, but at Clerkenwell many had not had time to get sober by the time I saw them; many were entering upon, and many recovering from, delirium tremens, and many were plainly dipsomaniacs, and even then and there suffering from the drink crave, either in its circumstantial or periodic form. I proceed to give some observations as succinctly as possible under a few distinct heads.

1. Inebriety and Crime.—My estimate of seventy-five percent, as the proportion of crime attributable directly or indirectly to intemperance is a moderate one, for other observers and experts give a higher figure. From the evidence given before the Lords' Committee on Intemperance, I find that the mean of the estimate given by chief constables of counties is higher. So is that of the governors and chaplains of gaols. Our metropolitan magistrates, as far as I have heard from them or read their utterances, would take a higher figure. When I obtained a return of all the charges at a court for a week, I found that of 154 no less than 12 were for drunkenness. Frequently I would find that out of any twelve on my daily lists of newly received

* Read before the International Congress of Inebriety.
prisoners ten or eleven, invariably nine, were drink-caused cases. Getting a return of the cases for a week in another prison, I found that of 216 convicted prisoners 187 were convicted for drunkenness or offenses arising therefrom. The Swansea Stipendiary told the Lords' Committee that three-fourths of crime, or a great deal more, is the result of drinking; Mr. J. Jervis that three-fourths of crime in Portsmouth is attributable to drink; and the Crown Solicitor for Ireland that three-fourths of all the crimes prosecuted by indictment in Ireland (and a portion of the summary cases) are so caused, directly or indirectly. Take, therefore, whatever class of experts we may, they either confirm or go beyond my estimate.

2. Inebriety and the Law.—A committee of the House of Commons, in 1872, reported “that there is entire concurrence of all the witnesses in the absolute inadequacy of existing laws to check drunkenness, whether casual or otherwise; rendering it desirable that fresh legislation on the subject should take place, and that the laws should be made more simple, uniform, and stringent.” And again, “that small fines and short imprisonments are proved to be utterly useless.” The matter, however, seems to have run the usual parliamentary course of much evidence, some debate, no action. I have dealt with the question at length in my “Jottings from Jail” (Fisher Unwin). Suffice it here to say that I obtained answers from the governors and chaplains of all English and Welsh prisons to certain questions, and it was almost unanimously asserted that the present system of imprisonment for drunkenness was not to an appreciable extent curative, many being hardly sober when discharged, and confined not so long as the natural consequences of a debauch might keep them to their own homes. If the idea of retributive or punitive justice enters into the normal sentences of three or seven days, they are but mockery and shams; if the curative or reformatory idea is supposed to be co-existent, the present system is simply unkind to the person supposed to be affected by it. And, moreover, there is
Observations on Inebriety.

not only the absence of benefit, but probably the presence of harm, not merely moral from the low estimation of the evil which must come from the slight punishments or checks, but also physical, as short sentences on the lowest scale of diet tend rather to increase intemperance, and sharpen rather than allay the appetite or craving for alcohol. Secondly, it was almost unanimously answered that the fact that the period of a month, which is the maximum that can be inflicted for the offense of being drunk and disorderly, was obviously insufficient for reformation and deterrence, while, morally and physically, benefit would certainly accrue to the majority of habitual drunkards by an increase of the maximum punishment and the adoption of a progressive system of penalties. "Why can't the magistrate give me time in prison to get straight," was a typical and reasonable complaint of a prisoner. Let an habitual drunkard come in for the usual short term sodden, inflamed, and shaky, and in a not much better state will he or she be discharged; but let them have received a longer sentence for some concomitant offense, e.g., an assault, and they seem on exit some years younger, and even their weight having not unfrequently increased.

3. Inebriety and Immediate Abstinence.—A prison official is in a better position than any one else to see whether or not there is truth or wisdom in the idea, carefully promoted by not a few doctors, and eagerly caught at and preached by their patients, that an habitual drinker, or even an habitual drunkard, must be "let down by degrees." An ordinary perusal of the papers would prepare one to believe the fact that at any moment our prisons must contain thousands of living contradictions of this common and popular fallacy. Years of drinking may have preceded the momentary crime that brings on a man years of penal servitude; another may be hardly sober when admitted for his three or six months for an assault committed when drunk, and yet at once his drink is stopped, except in a few cases of incipient delirium tremens, when (in some prisons, not all) a little
Observations on Inebriety.

alcohol is given, until the fit has passed. Why, even in cases of prisoners who have been opium-eaters or chloral-drinkers, and have a far stronger and more abiding crave than that the dipsomaniac knows, there is no “letting down by degrees”; while the simple drunkard, who ventured to quote the wisdom of his quondam associates, or even of his doctor, as an argument for receiving some proportion of what had been his daily poison, would probably find himself by no means “let down” by degrees by the warden to whom he addressed his request. “It is impossible for me to give it up,” has often been said to me by those who have, unfortunately for themselves, been externs from a prison point of view. “How would you manage if you were run in?” I would answer. “At any rate I can’t give it up at once.” “Again, how would it be if you were run in?” I remember a clever doctor who was under my care for three months before he was hung, saying to me, before he admitted his guilt, “this imprisonment is a blessing to me, for I could not, or would not, cure myself of the morphia habit, and now through prison I am free.” I commonly noticed that the inconvenience from the sudden cessation of a narcotic, remained twice as long as that arising from the loss of alcohol, but frequently the latter would be dissipated in a week, and the former in a fortnight. Dr. B. W. Richardson, when first studying alcohol, sensibly enquired of all our prison doctors what evil effects they observed from the sudden and total disuse of alcohol. One word sufficed for the answer—“None.”

4. Inebriety and Suicide.—No one in the world, I presume, has had the opportunity and necessity of studying the phenomena of suicide as much as has been my lot. I have had 27 on one day under my care for attempting suicide; 61 in a single month remanded for this offense; 395 in a year; while, as one memorial of ten years spent in Clerkenwell Prison, I have full notes of 3,101 cases. Intemperance was almost usually the cause. When I specially tabulated 300 consecutive cases I found 172 were due to drunkenness, and
in 145 of this number no other cause could be found as contributory. "Crime is æstival," is a well-known canon, and suicide presents no exception to the rule, because drinking is, for several reasons, more common in summer than winter. Even of 46 consecutive cases of attempts at suicide on the part of boys and girls, I find ten were directly caused by intemperance. An hereditary tendency to suicide was to be observed in but a few cases, but where suicidal mania was evidenced by repeated attempts I only call to mind one instance in which intemperance was not a contributory cause of the attempt, and even here I see the girl, who attempted her life to my knowledge twenty-eight times in two years, was once in that period sentenced to a month for being drunk and disorderly. With the majority the idea of suicide never was entertained, and was even abhorrent, except when in liquor.

5. Intemperity and Infant Mortality.—Infanticide is the most common form of murder, and alcoholic infanticide accounts for the majority of cases of slaughtered innocents. Three hundred inquests in London, and more than half that number in Liverpool, are held annually on babes that are overlain, and most of these are found to have been slain on Saturday night, when the alcoholized mother is unable to hear or feel the cry or the struggle of the infant, if that be not already narcotized by the alcoholized milk from her breast. I have had five women in prison at once for infanticide, and only one was sober at the time of the child's death. Others die by drinking the gin left about by the mother. Others have no fair chance of life and health in view of the laws of heredity and the physical influence of the mother's habits and state. Hardly a week passes without some horrid act of child murder committed by those who, when sober, may be as affectionate and careful as any. The mortality amongst the infants of the intemperate probably accounts for more deaths than all other causes of preventible mortality put together. After much observation and record of cases it seems to me that 64 percent would be a moderate estimate of the

Vol. IX.—21
death-rate in the first year after birth of such ill-fated children. I select some typical cases out of my note-books:
(a) A man aged fifty has two children alive out of thirteen, and says, “I am one of the worst drunkards in the world; my wife don’t drink so regular, but very hard when she goes about it.” (b) Man, fifty-three, has had eleven public houses, and wishes he had never known the trade; his wife died of alcoholic phthisis, and he usually has twenty glasses of beer per diem; has had nine children, of whom one survives and is a paralytic. (c) Man, thirty, in prison for a drunken assault on his wife, who also drinks; one of seven children lives. (d) Woman, forty-one, has a drunken husband; she claims to be temperate for the last two years only; of eighteen children fourteen are dead and one in an asylum. (e) Man, thirty-six, a drunkard; seven of eight children died in infancy. (f) Woman, forty-two, imprisoned for drunkenness; her husband also drinks much; two of ten children survive. (g) Woman, fifty-two, stole when drunk; husband gets drunk every Saturday; has seven children alive out of nineteen. (h) Woman, thirty-eight, both parents drink, and all their nine children are dead. (i) Woman, forty-four, husband died of paralysis of the brain from what she calls “a gay life”; she drinks hard, and has been several times in prison; one of her twelve children is alive. (j) Woman, thirty-one, twelve years immoral, a hard drinker, and occasional thief; has had nine children, “All dead, thank God,”—to which ejaculation, when one weighs the forces of heredity, environment, and example, one is tempted to respond, “Amen!” (k) Man, fifty-four, an old soldier; murdered his wife, who was an habitual drunkard; has had nine children, still born. (l) Woman, forty, charged with neglecting her children; drunk when apprehended, has been drinking since her first child; three of thirteen are alive. These cases, taken out of a multitude, give 114 children out of 136 who have predeceased their parents, many being still-born, and many dying early in infancy. Is this either inevitable or inexplicable?

Inebriety and Sex.—Prison experience clearly affirms the
Observations on Intemperance.

great increase in late years of female intemperance; the great difference between the fashions and habits of intemperance in the male and in the female; the greater susceptibility of females to the contraction of the habit or disease; and the infinitely greater difficulty there is in curing a female dipso-
maniac or even habitual drunker.

As to the first point, it is from the increase of drunkenness among women that we find the proportion of male to female prisoners not seven to one, as it used to be, but three to one at the outside. In the apprehensions for simple drunkenness in London, the women were, in 1878, just 1751 behind the men, in 1879 only 530, and in 1880 only 470. In some London police divisions, as Westminster, St. James', Lambeth, and notably Marylebone, there have been more women than men apprehended for being either drunk, or drunk and disorderly. In 1880, in London, 7,431 females were apprehended on the latter charge; in 1882 there were 8,927. But the most important and most saddening thing is to scrutinize the records of those who have been over ten times convicted, and are chiefly habitual drunkards. In this category in 1884, taking the figures for England and Wales, there were 5,188 males, and 9,451 females. Looking at it in another way, we see that the men are only 10 per cent. of the total commitments of already convicted offenders, but the women are 31.6 per cent. Looking back over a series of years, we see that the men in this incurable class have varied only from 8.2 per cent. to 10.1 per cent., whereas the women begin 27.3, and steadily increase up to 33.2 per cent. Taking seven years to see if there be an increase amongst the women, we find that in 1878 they numbered 5,673, and in the succeeding years 5,800, 6,773, 7,496, 8,946, 9,316, and 9,451. This increasing preponderance of women, who have caught up, outstripped, nearly doubled the men in this special class, is almost entirely due to the distinctive character and the increase of female intemperance, and the absence of any effort on the part of the State to deal rightly with the disease.

With regard to the fashions and habits of female drinkers
we notice that they chiefly consume spirits; often drink earlier in the day, and more continuously through the day than men; that delirium tremens is not so common, but the dipsomaniacal craving more common in their sex; that they are almost usually, solitary drinkers, where the male's drinking will be circumstantial and partly originated, and partly increased, by companionship; and that, for various reasons, they, more than men, conceal and even deny the fact of their drinking, though when on the brink of an alcoholic death.

Thirdly, there is no doubt of the peculiar susceptibility of women to contract habits of intemperance at the times of pregnancy, lactation, and middle age, even apart from the criminal, if it be not ignorant, advice given them by midwives and some doctors. Nor, again, of the connection between dipsomania and a disordered state of the uterus. A restoration to purity of life is frequently the cause of astonishing progress in combatting the dipsomania of long standing.

Lastly, there is simply no comparison between the difficulty of curing the male and the female dipsomaniac. I only remember one instance in prison of the drink crave surviving in a man after six months of abstinence in prison, but with women I have known of its existence and periodic potency after two years, or even more, of abstinence in a penitentiary. When asked if I have known of female drunkards being cured, I can only say that I have known some cases. Engrossing occupation and strong religious sentiment will usually cure the male, especially when conjoined with the use of physical and medicinal aids; but innumerable instances prove that these same causes most frequently do not produce the same effect in the female. In the male some external temptation usually causes the relapse; in the female self is the tempter.

6. Inebriety and Heredity.—No evidence from prison is needed to prove the hereditary character of intemperance and dipsomania. It is the acquired habit more than the natural characteristic that is most surely transmitted. At one time there were in separate cells for being drunk and
disorderly a grandmother, a mother, and a daughter, the latter having a baby girl at the breast. What chance had the baby of escaping the scourge her progenitors twined and applied. "I was born in prison while my mother was doing a month for drink," said a prisoner to me, "and I expect to die in prison." Another man was only thirty-three, but had two terms of penal servitude, and shorter punishments; when free he was a great drinker, and came of a drunken family, his mother having drowned herself when in drink, and of four uncles one poisoned himself, one hung himself, and one got twenty years for murdering his wife. A mere lad was in for a drunken assault; his father and mother were drunkards, and separated, and he and his brother (who also drinks) were the survivors of eight children their parents damned into the world. I might multiply cases ad infinitum, but the point is admitted.

In conclusion, I would merely express my thankfulness for the attention this Congress, and the Society which summons it, will cause to be drawn to the phenomena of inebriety, and especially to the physical side of the matter, which must ever be kept in view by those whose professions or inclinations lead them to dwell chiefly on religion or on law as palliatives or remedies.

The march of civilization is always followed by a rearguard of inebriates and insane. They are the unfit, the worn-out, the incompetents to bear the strains of intense and rapidly-changing environments, conditions of living, of work and thought. This rearguard is a perpetual menace and obstacle neutralizing and shadowing the results of all progress and advance in the great evolutionary race-march of the age.

Where the father is nervous, irascible, and changeable, and the mother of feeble judgment and under the influence of her emotions altogether, the children will become inebriates from the slightest exposure.
HOMICIDAL AND SUICIDAL INEBRIETY.*

By Surgeon-Major Robert Pringle, M.D.,
H. M.'s Bengal Army.

The prevalence, alas! of inebriety, with its consequences, affecting the safety both of the individual and the public, has lately led to the passing of an act known as the Habitual Drunkards Act, 1879, yet those who have studied the subject most, have felt that the legal powers necessary to deal with inebriety in its various phases must be increased if the public is to be protected from some of these phases of inebriety, at present absolutely unknown to the public, and as yet not sufficiently studied by the profession. As, however, all legal help to be of any practical value must have for its basis a careful study of the diseased condition, known as inebriety, which, now that heredity and environment are bearing the harvest, which was to be expected, has reached a prevalence calling for further legislative action and powers, it has occurred to me that a discussion at this Colonial and International Congress, on what appears to me a unique instance of the diseased condition under notice, founded on careful observation and study of the case, and supported by a full confession of the crime and the previous history, and symptoms might be of benefit not only to the sufferers themselves, but to the public at large. I have accepted the offer of the President to read a brief paper on the case, looking to the subsequent discussion to draw out further light on the subject, and thus to attract the attention of the profession, and through them the legislature to an unknown, or at least little studied danger in our midst, not to the individual alone, but to the innocent, unprepared, indeed, unsuspecting public, by whom he may be surrounded, when laboring under

* Read before International Congress of Inebriety.
this mental derangement due to this diseased cerebral condition. With this preface, or rather apology, I enter on the subject of this communication.

I have for long felt that suicide and homicide, the result of alcoholic stimulation, are but phases of a cerebral condition, which may lie dormant or inactive through life, or if only lighted into action by some specific inherent power in alcohol, may exhibit themselves in every phase of these two great final symptoms, murder and suicide—from the slight attempt at suicide or the angry blow of the partially inebriate, to the complete and rapid attainment of self-destruction, and the perpetration of the foulest murder, or the most carefully and deliberately plotted scheme for murder designed and carried out with a skill and forethought more in keeping with the impulse and instinct of one who had made murder a profession, rather than the sudden unexpected and uncontrolable development of a latent force in the brain of a well educated, God-fearingly brought-up young man, described by his superior officer at the trial for murder as the smartest man in the regiment when sober, and the most foul-mouthed and insubordinate when drunk. And I repeat, it is only because we possess in the confession of one who stated that on two previous occasions, when he indulged very freely, he was on one of them prevented by the merest accident from murdering a comrade, and on the other from taking his own life, that it seems to me we have a light thrown on the subject, which we will do well to discuss, more especially since, as far as my knowledge goes, a similar case, illustrated by a similar confession, has not previously been brought before the profession. I use the term alcoholic stimulation advisedly, because I am quite satisfied from the observations and experience of thirty years' service in India, that there is such a condition as narcotic stimulation, which will produce homicidal or suicidal tendencies, and that certain narcotics, such as the various preparations of Indian hemp, when indulged in to excess in certain cases do certainly produce these results, and what is called "running a malk" is really the
homicidal or suicidal development of narcotic stimulation, acting on certain diseased cerebral conditions.

Now, the points to be ascertained in the diseased condition under notice are the following: 1st. What are the symptoms, if any, which would point to the latent presence of this diseased cerebral condition; and 2d, the best means of restraining or curing them.

With reference to the first point, the confession of the prisoner under consideration clearly lays down the fact of this poor man knowing that he was a victim to this diseased cerebral condition, which might be lighted into activity by any excessive indulgence in alcohol; for after suffering from two attacks of this derangement, one homicidal and the other suicidal, he came to a Temperance meeting I was holding in his regiment, and there and then signed the total abstinence pledge (for in the Soldiers' Total Abstinence Association in India, of the executive committee of which I was at the time, and continued so till I left India, chairman, there is no doubt basis), and he told me himself, in the condemned cell, before he made the confession which he subsequently did, that had he been true to that pledge he would not have been in that cell. The premonitory symptoms of such a condition existing can, I fear, only be ascertained by an excessive indulgence in alcohol lighting up an action, its intensity being in proportion to the quantity consumed. Thus, for instance, a few glasses may tend to the hasty blow of the partial inebriate, and a few more to the foul murder of a kind and compassionate host, as given in the case recorded in India, the details of the perpetration of which are I think unequalled, even in the tales of horror associated with what the Bible in Prov. iv, 17, describes as the "wine of violence."

As regards the second point, viz., the restraining or preventing of the development of this latent homicidal or suicidal tendency, there can be no doubt this poor victim of this diseased cerebral condition felt, that there was only one means of restraining or preventing the outburst of this latent
force, and that was in total abstinence from alcohol in any shape and at all times. How true and successful this decision was, was amply proved by his rapid promotion following his mode of performing his military duties when sober; and the consequences rapidly following the failure to maintain this mode of restraint and prevention, also sadly proves what alone was the proper treatment in his case. For obvious reasons I withhold the name of this young man, and the details of where the occurrence took place, but the man being a soldier the facts elicited at the trial are of course carefully recorded, and are available for any one who would like to study them in detail. In my opinion some of the most remarkable points in the case are the manner this soldier went about the murder of his comrade, which took place in the center of a crowded cantonment, in a barrack filled with his sleeping comrades, after four-and-twenty hours of heavy drinking, which, as he told me, took all his savings, after all this it would appear that he planned and carried out the deliberate murder of a comrade, against whom he personally had no grudge whatever, but of whom some soldier had thoughtlessly said, "It would be well if his peg was vacant," or some similar slang barrack expression. The man who had spent a whole day in drinking from canteen to canteen, and goes to his bed, as he told me, with a private supply, rises in the dead of night, and commits the murder in such a manner as to bring the guilt upon him only in a chain of circumstantial evidence, but not a vestige of visible evidence. No human eye saw the deed done, and, but for the fullest confession of his guilt, this man would have been executed on circumstantial evidence alone. There was nothing about this poor man to show that his antecedents were such as to account for his being able to plan so careful, yet deliberate, a murder; on the contrary, as I said before, he was a member of a God-fearing family, piously brought up, and his exemplary behavior, while in confinement, and under trial, and subsequent to his sentence being passed, I know, for I saw him repeatedly, made such an impression on his heathen and
Mahomedan guard and jailor, that the latter was touched to pity for him, and said to me, "The Government let their youths get as much liquor as they can drink, and, when mad with it they commit murder, it hangs them for it." Never was a truer and sadder charge brought against any government. Uncomplainingly this poor man underwent treatment during his confinement in a large central prison, which was a disgrace to the English Government, not a regimental polo pony in the station but was better treated in its master's stable, or the polo-ground, than was this victim of a vicious canteen system, suffering from a latent and little known or understood disease, who was confined in a barred cell, with a palm-leaf thatch hurdle to keep out the cold, in the height of winter, in a station where ice is made by exposure to the midnight air of water in special vessels—and the poor fellow subject to dysentery—guarded by natives, and ultimately chained to a post like a mad elephant, forsaken apparently by his countrymen, the Chaplain and the Army Scripture Reader, and a comrade or two beside myself, alone seeing him. As for the rest of his countrymen, too many, alas, as I had cause to learn, knowing nothing of this latent diseased cerebral condition, considered him a drunken good-for-nothing soldier, unfit to have his life prolonged into a life-long punishment. Notwithstanding all this, the full confession of his crime, and the admission that he alone was to blame for it all, followed by the spirit of his last words on the scaffold, illustrate and encourage the hope that even in such a dark history, it is possible that, by God's mercy, there may be light at its close.

And now, what practical lessons are to be learnt from this sad history?

1st. That it is possible for a human brain to carry on its functions without any discernible defect, or fault, and yet to be liable to an outburst of homicidal and suicidal mania, such as I have described, and this more than once, and—

2d. That entire removal of the exciting cause effectually keeps this diseased condition in a latent state, though it had
Homicidal and Suicidal Inebriety.

been twice lighted up before. I have collected a number of cases bearing on this diseased condition, but would only point to three, two of which occurred in India within the last six months, one in the case of a railway employé, who, when drunk, was reproved for something he had said or done, and rapidly following each other committed both homicide and suicide, and the other of a poor, wandering, Eurasian "loafer," who, because he was checked for his behavior, after having had some drink, by his kind host who had given him shelter and food, nursing his wrath, took advantage of his benefactor being asleep, and foully murdered him, with a brutality which was perfectly diabolical. The third case is reported in the Times, of the 3d June, and the remarks of the presiding magistrate are worthy of note. Mr. De Rutzen is reported to have said he should send the case for trial, adding—"These cases would never happen if persons were not allowed to remain in public houses until they became drunk. The wonder to him was that there were not more of such cases." The Mahomedan jailor in India, and the English magistrate in London, place their fingers on the plots in the liquor traffic system in both countries, but both, I fancy, were ignorant of the true physiologically diseased cerebral condition to which the acts were due. If all cases of attempted murder, whether followed or not by attempted suicide, were carefully inquired into, I am sure, in the majority of cases, a previous history, like that illustrated in the confession under discussion, would be elicited, and, if so, and the public are to be protected from an unknown, dangerous inebriate at large in their midst, some extra legislative power, as regards restraint and treatment, will have to be granted, that cases similar to that of the poor man we are considering, may be prevented from ceaselessly, yet secretly, and deliberately taking the life of an innocent and harmless man "only doing his duty," as was the case of the non-commissioned officer, who lost his life owing to the thoughtless remark of one who had been justly reproved for some breach of military discipline.
Since the preceding was written a most remarkable case of murder has been reported from India, for the details of which, and the judgments of the officers acting as sessions judge, and the final Court of Appeal, I am indebted to the Pioneer Mail of the 11th May, 1887. The judgment of the sessions judge (owing to the defective character of the medical evidence), appears to have lost sight of the real cause of the murder, but that of the final Court of Appeal, viz., that of Sir Lepel Griffin, acting as such, is a model of clearness, and logical reasoning. He dismisses the medical evidence in terms which the profession would do well to lay to heart, and this society may feel not only fully justifies its formation, but shows a marked necessity for its increased activity, such as probably has not been thought of before, and for this cause I give a long quotation from the judgment. When I entered the service of the late "H. E. I. C.," in 1854, a course of study of insanity, with clinical lectures on the cases, was made obligatory on all candidates for admission into the service; and well do I remember the valuable lessons learnt at the Morningside Lunatic Asylum, from that most careful and accurate observer, the late Dr. Skae. Indeed the lessons there learnt led me to study insanity most carefully, as met with in India; and on one occasion this study was the means of enabling me to obtain the immediate release of a sane man, who had been put into the lunatic cells as a dangerous lunatic, whereas he was a most sane individual, resisting a most deliberate plot to plunder him. But to return to Sir Lepel Griffin's remarks and judgment, in which he places the following on record regarding the medical evidence in the case: "We have no history of his family, and cannot say whether he had any constitutional predisposition to madness, either hereditary or congenital. We are not informed (and here I think the evidence of the regimental surgeon is deficient and unscientific) of the previous history of the seaco (trooper), what were his habits, whether addicted to intoxicating liquors or drugs, whether he had at any time previous to his reception into hospital received any
severe physical injury, or shock, or whether he was of such debauched habits as are most commonly the direct predisposing causes of mental disease. It is possible that the medical officer, who is a young man, has not specially studied mental pathology, and it is unlikely that in his position he could have had much experience in the treatment of cerebral disease, and, seeing that the whole case turns on the mental condition of Musar Ali, I think we might have expected a more careful and scientific analysis of his symptoms.

Sir Lepel Griffin confirmed the sentence of death passed by the lower court, attaching no weight whatever to the plea of "spiritual delusions" advanced in palliation of the charge.

I offer no apology for the long quotation, from which it is clear Sir Lepel Griffin traces the true cause of the murder, not to "spiritual delusions," a most dangerous theory in a country not wanting in fanatics, but to some diseased cerebral condition, inherited or produced by indulgence in narcotics, rendering the victim subject to impulses and passion, which, but for the indulgence might have lain dormant, or it may be unknown, and the stimulant narcotic drugs often taken in India to nerve the would-be hero for some grand deeds of daring are not unfrequently resorted to for baser purposes; and who can tell, with the knowledge acquired from previous experience, for murder, the outcome of religious fanaticism. When this latter takes place, the perpetrator of it, to acquire a lasting fame, may plead spiritual or Divine commands as his authority, himself and his relatives carefully concealing all that would lead the authorities to suspect the deed to be the result of narcotic indulgence; as by this time, the natives in India, and particularly those in cantonments, know that any crime, such as murder, committed by a European soldier, under the influence of drink, is viewed and punished as deliberate murder, and no allowance made for the condition into which his own acts brought him. In the case in question there were evidences of narcotic indulgence in some of the prisoner's acts recorded in evidence.
My introduction to field service in India, in 1855, was seeing my commanding officer shot dead in front of me, the second bullet passing over my head, and when the murderer was apprehended, and told his musket was loaded, he coolly remarked, it was for the lieutenant of the company, Mowbray Thompson, who subsequently escaped from the massacre at Cawnpore, and added, he intended to load again and shoot the Doctor Sahib (myself). When asked what harm I had done him, his remark was, "He is an Englishman, and that is enough." This was in February, 1855, and the remark, no doubt, was one of those little clouds of the then coming mutiny; in his case the product of thought acting on a narcotically diseased brain, which had received from whispers or eavesdropping vague impressions of the approaching rising, on which, no doubt, he had been pondering; and a slight reproof, and trifling punishment, from which he was released before its expiration, was the light to the train; and the result—an explosion which assumed the phase of murder, limited mercifully to one individual, though intended to include every European officer with the detachment.

Now that narcotic indulgence is, alas! far from uncommon in this country, these cases may be of importance, where heredity and environment have produced in Britain the mental conditions, which it is much to be feared are present in India, to a far greater extent than the authorities are aware of, or the medical profession sufficiently alive to. In conclusion, it would almost seem that the would-be want of responsibility attached to murder and outrage on the plea advanced in a case this day (June 19th), viz., that it was done "under the influence of drink," has reached such an extent that, as the London magistrate, already quoted, points out, it is time some legal protection was granted to the public from the consequences of those allowed to become drunk in the public houses of this land. The victim pays for his crime with his life, but the true cause pointed out by Mr. De Rutzen remains unchecked, indeed, unnoticed.
AN INQUIRY CONCERNING THE INFLUENCE OF ALCOHOL ON MIND AND MORALS.

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

The two great principles, Good and Evil, which under various names and personifications have claimed the attention of the world in all times and in all countries, and the history of whose conflicts is the history of mankind, are not simple, indivisible elements. They consist of parts. They are composed of divisions and subdivisions. It may be said that flowing into them from all directions are tributary streams of good or of evil; some, small and apparently trivial, others, mighty, impetuous, irresistible, swelling the tide of the whole, and giving volume, power, influence, and dominion to the grand total.

One of the mightiest contributors to the power of evil is alcohol. Through drunkenness, or rather through the deeds of prevailing inebriation, alcohol augments the momentum of crime, and deepens its flood; while through its habitual or chronic influence upon the nervous basis of intellectual and moral projection, without, of necessity, the complication of actual drunkenness, alcohol affixes and perpetuates criminality upon generation after generation.

The elementary and essential conditions which cause and constitute inebriation are some of them of such a nature that they exert powers which, in the end, are more destructive and far reaching than any possible demonstration of mere drunkenness itself. To rightly comprehend those pernicious and invariable constituents of the drunken state which are so potent for evil, it is necessary to analyze them as they appear in the man actually drunk.

The most striking as well as important effect of alcohol upon the nervous system is paralysis. When taken into the
human system in a quantity sufficient to produce the slightest indication of intoxication, it paralyzes to some extent or other the entire nervous organism. When the quantity of alcohol consumed is considerable, the impediments in nervous function are exhibited in many ways. Some notice of the invasion or inception of the paralytic onset may prove interesting as well as profitable.

When a quantity of alcohol is received in the stomach (after the initial nervous shock, which soon passes off), the first notable appearance will be an occasional slipping or sliding of the feet upon the pavement when walking. In the slight motor paralysis then present the foot is not raised quite as high as it is in the usual and undisturbed state of the nervous energies. The consequence is, that any trifling irregularity in the pathway will intercept the moving foot, and a slipping or sliding of the sole of the shoe upon the pavement will be perceptible every few steps that are taken. There are other very delicate motor disturbances that are observable at the beginning of inebriation from alcohol, but they may be omitted from notice at present.

Careful attention will likewise detect at this conjuncture a weakness and levity in the operations of the intellectual faculties, auguring partial paralysis of their nervous bases. This change does not, of course, always appear in the same identical way, although it is generally very obvious in some direction or other. The inebriate perhaps, instead of preserving a dignified and unobtrusive demeanor, such as may be natural to him, will feel impelled to assume the characteristics of assertive geniality. He will seem to be impressed with the idea that he must make a hit in personal magnetism and goodfellowship. He will probably express his feelings in some attempted witticisms, born of his own internal incongruities, and without legitimate parentage or natural association. He must, forsooth, without provocation or solicitation, perpetrate some pun, some joke, some little pleasantry, before he parts with any familiar interlocutor.

Many of the so-called "flights of eloquence" in oratorical
Influence of Alcohol on Mind and Morals.

Efforts, likewise betray the dwarving influence of alcohol upon the intellectual faculties. In their more pretentious passages, the baseness of their origin may often be surmised through their 

* Advertisement* and unexpected associations and suggestions. But when analyzed, they are perceived invariably to consist of the merest fustian. Undoubtedly the thoughtless world is often deeply moved by this kind of speech; but the movement is in ways that lead to tears and woe, not peace and contentment. Alcohol is a bad counselor.

The disabilities attending the operation of the moral powers, consequent upon the primal impediments thrown in the way of nerve function by alcohol, are possibly less conspicuous than those attending the motor and intellectual movements; but they are none the less real. In the first slight impressions of incipient paralysis the lines of restraint in reference to the moral duties are somewhat relaxed. The soul is not held in its careful and exalted position in respect to the moral responsibilities incumbent upon it. This is especially evident in the indefinite and lax liberality of sentiment displayed by it in relation to follies, indiscretions, and even vices, wheresoever they may appear. And indeed, for this proffered charity in behalf of wrong-doing, the inebriate mind is prone to assume unto itself great store of credit, as though worthy of praise for a broad and enlightened sympathy with the weaknesses of poor human nature.

There is nothing disagreeable to the drunkard in the condition of incipient intoxication. Quite the reverse. It is a happy state, as of one having been relieved of the cares of life; such, for example, as the acute and rigid feeling of accountability, which a truthful report from a healthful nervous function always impresses upon individuality.

But the present inquiry is chiefly concerning intoxication when fully established. In complete inebriation there is evident incoordination of the motor functions. It is through the unwilling displays of motor incapacity that the drunken state is first perceived. The characteristics of the motor disabilities in drunkenness very accurately measure the usual
extent of co-existing intellectual and moral incoherence. The latter may be examined through the former. The actual, but imperfectly seen, may be illustrated by the obtrusiveness of what is plainly visible to all.

When the reeling gait, the rolling eye, the indistinct articulation, the distorted countenance of a man thoroughly drunk are seen, the complete subjugation of his motor capacities is readily admitted. Unlike most agents having control over nerve function, as, for example, strychnia, prussic acid, and many others, alcohol exerts its pernicious influence upon the universal nervous organism. And yet while the abject condition of the motor functions evinces the paralysis, to some extent, of the motor centers of the nervous system, it is observable that the disabilities of the nerve centers are not equally complete, even under apparently equal conditions of alcoholism. Sometimes a man is very drunk in his legs and his motor functions in general, and yet is not equally overcome intellectually. And this demonstrates the truth that there is no natural affinity, no special tendency, of alcohol towards one portion of the nervous centers more than to another. Seen in differing relationships, its guilty influence is perceived to be impartial, universal. The paralysis of the centers and systems of common sensation (anaesthesia) is also of varying degrees of intensity in different seasons of equal intoxication, as well as in different individuals. The consequence is, that the perceptive functions are unequal in acuteness and reliability in drunkenness. The coordination nerve centers likewise display evidences of similar irregularities in nerve capacity when they are under the impress of alcohol. The ideas and conceptions of responsibilities, rights, duties, and the like, are repressed and obscured; and the moral nature of the inebriate is greatly impeded in its movements, if it is not entirely extinguished.

One of the immediate effects of this general disturbance in nervous function is, the new and unnatural relationship which the several nervous sub-systems assume towards each other. Instead of harmony, there is distortion in their
mutual interdependence; and the elements of thought—sensation, perception, association, suggestion, memory, and so on—are forced into strange and absurd situations and attitudes. The expression of ideas, born of such parentage, shows them to be of fantastic origin. Thoughts and phrases are surprising, uncommon, *bizarre*. The looker-on is astonished. For, while the enunciation of the ideas of drunkenness shows that they are *possible*, yet they are not composed of the common elements of thought, naturally allied. The consequence is, that these wonderful and inexplicable phenomena of the mind are frequently viewed as the exponents of exalted mental brilliancy and power, while, in fact, they are infallible evidences of mental debility, discordance, *rot*. This is the specious brightness, without force, with which alcohol invests the human mind.

Is a mind under the influence of alcohol capable of self-control? To answer this question it will be well to observe the effects of habitual alcoholism on the mind, as compared with other habitual states into which the mind may fall. And a mere statement of certain well-known facts will, I think, be sufficient to determine the answer. The healthful mind always improves with opportunity. Habitually active in any direction, its aptitude, its skill, strength, and quickness increase in its particular species of movement. As a man works at a trade, he improves until he ceases to be a bungler, and becomes an expert. And the same is true of professional life; and indeed of all the various kinds of mental, moral, and physical activity of a legitimate nature. When the alert and unpoisoned mind finds itself in a wrong place, and surrounded by undesirable circumstances, it not only extricates itself from difficulty through its own efforts, but it prepares, by premeditation, a way of escape in future embarrassments; and it possesses and exercises the power to give execution to its plans. The drunkard, likewise, humiliated and endangered, fully determines never again, while intoxicated, to be guilty of his old line of follies and delinquencies. What is the outcome? Every season of complete inebriation
Influence of Alcohol on Mind and Morals.

is characterized by substantially the same phenomena. There is no practical change, certainly no improvement in conduct. Be it the first or the last season of intoxication—from young manhood to old age—similar periods in the debauch are attended by like manifestations. In the early stage of drinking, the fun, the foolishness, and the extravagance are the same; while later on, there come in view the same vile ideas, the same cursing rigmarole, the same threats; in short, the same mental and moral baseness that have always distinguished corresponding seasons of alcoholic excess. And thus it is throughout the drunkard's life. The drunken mind never improves, nor changes; it cannot. Alcohol possesses undivided sway over the faculties of drunken men. Humanity is not capable of asserting itself while alcohol is in possession of its instrumentalities. Alcohol never strengthens nor brightens nervous function.

When drunkenness has passed off the mind resumes its natural state and equilibrium; such is the usual mental movement in the ordinary recurrences of drunkenness and sobriety. But in course of time the use of alcoholic drinks becomes habitual. Now the habitual disuse of function will at length render function impossible. Absence of function will not only produce incapacity to act, but will occasion actual atrophy of structure. It will, in the course of generations, eventuate in the absorption of entire organs; or rather, in their non-development. This is observable in the eyeless fishes inhabiting subterranean waters, as well as in many other examples. In a parallel way the alternations of latency with activity of moral function, that characterizes the recent drunkard, give place to a steady and enduring incapacity of nerve in the chronic inebriate. The habit of untruthfulness, always present in the drunken state, ceases to be intermittent. It is fixed, in the form of a constitutional moral incapacity and unreliability. The moral constitution of the chronic inebriate has at length taken a final position; and the approximation of the family strain towards criminality has taken the first irrevocable step. The new constitution in progeny begins where the old one ends, in the progenitor.
Influence of Alcohol on Mind and Morals.

Heredity hands down the hateful deformation. And thus
the progress of alcoholism through two or three generations
fully develops the criminal constitution.

To use an expressive phrase, alcohol always "gets there."
It may develop the criminal constitution in other ways than
that just indicated. Sometimes it operates through physical
injury to certain nerve centers by means of hypertrophy and
pressure of adjoining tissue; as through hyperplasia of the
connective tissue. Or, it may act by mere automatism —
that is, through the unconscious representation of the moral
deficiencies inseparable from long continued drunken courses.

The chronic inebriate, then, transmits a moral constitu-
tion of lower grade and coarser grain than his own primitive
and normal constitution. His constitutional proclivity to
lying — so surely the outcome of alcoholic habits — in its
natural affiliation with nearly every species of vice and im-
morality, readily reappears in his posterity in the guise of the
swindler, the gambler, the traitor, the false friend, the
insidious enemy; while other and more brutal criminal pre-
dispositions appear in their due time, and in their proper
generation.

Consciousness, according to Wundt, while a unit, is also
a unification of parts — of perception, representation, idea,
feeling, and volition. But if these elements of consciousness
are imperfect, as through the disabilities imposed by alcohol,
the resulting state of consciousness will be correspondingly
imperfect. Consciousness, while the principal basis of con-
duct, is not an infallible rule of right and fact. It is evident
that a state of the nervous organism, wherein the entire
round of the nervous centers is paralyzed in various degrees,
the nervous functions which are unified in consciousness,
must give to that mental trait an imperfect and misleading
character. The consciousness of drunkenness is of necessity
misdirecting, and the conduct of drunkenness must be largely
irrational and vicious. No matter how honest and sober
a man may be, he is a bad witness respecting facts that come
under his observation when intoxicated.
Abstracts and Reviews.

ARSENCIAL AND ALCOHOLIC POISONING.

Drs. Cushing and Prince lately presented a case before the Massachusetts Medical Society that is of medico-legal interest. The patient was a chronic inebriate, who became paralyzed. An analysis of the vomitus and excretions showed arsenic in poisonous quantities; it was evident he had been given arsenic for some unknown disease. The question came up, Was the paralysis due to alcohol or arsenic, the latter given for criminal purposes? Dr. Prince found a typical case of alcoholic paralysis, such as loss of sensation, with hyperesthesia, pain, and atrophy, with reactions of degeneration, and characteristic delirium. The characteristic symptoms of arsenical poisoning were also present in all their details. It appeared that he was at the house of a friend who had persuaded him to invest large quantities of money in a patent medicine he was interested in, and was under treatment of a quack doctor, and alternated from there to a house of ill-fame. The circumstances of the case indicated an effort to take his life by arsenic, and the intervention of paralysis, either due to the arsenic alone or to the alcohol he had taken, the latter producing multiple neuritis. This case excites much interest, and may come into court, when a differential diagnosis between these two forms of paralysis will be studied.

CURABILITY OF INEBRIETY.

The following extract from a paper read before the English Society for the Cure of Inebriety, “On the Prevailing Indifference to Inebriety,” by Mr. Trevor, Secretary of the Church of England Temperance Society, indicates an ad-
Abstracts and Reviews.

Vance of half a century over the American Temperance Society's work:

"Numberless institutions are spread over the country, thank God! for the general treatment of disease, such as hospitals, infirmaries, and the like, while there are also admirable institutions for the treatment of diseases of a special character,—consumption, cancer, fevers, diseases of women and children, and of bones and special organs; but for the treatment of the poor diseased inebriate there are about sixteen recognized retreats or organized establishments only, as far as I have been able to gather, all the results of private enterprise, and in nearly all of which detention is voluntary, which experience shows is next door to useless if a permanent cure is wished for or expected. Let me ask you to note this significant fact, which is surely a terrible sign of the direction in which the stream of inebriety is now running, and fraught with so much disaster to the whole community, viz., that out of these sixteen inebriate retreats, all but two (both licensed under the Habitual Drunkards Act) are for females alone; and I may add a remark I once heard made, that the applications for admission to these retreats for females were always very far in advance of their possible accommodation. Thus it may be truly said, to the everlasting reproach of this Christian country, that the only refuge open to the penitent dipsomaniac or the habitual drunkard who cannot pay for his detention in one of these private homes, is the ward either of a workhouse, a goal, or a lunatic asylum, and not there even until he has qualified himself for entrance and reception by becoming either an absolute friendless pauper, a disgraced criminal, or a mindless lunatic. The necessity for such retreats or homes for the cure of inebriety is not only absolute and urgent, but it seems to be a paramount duty, especially on the part of a nation calling itself Christian. But the value of them is beyond all contradiction. There is doubtless still room for much improvement in their method and management, but the results are, on the whole, most satisfactory and encour-
aging. Doubt is often cast upon the permanency of the cure of inebriety; but there is surely the same uncertainty as to the permanent cure of all other diseases and evils. And yet, I hear no objection to the attempts which are made on all sides, with very strong hopes of success, to reform the criminal, to restore the insane, to repair the damaged body, to bind up the broken-hearted, and recover the fallen. Then why should such exception be taken to the permanency of the cure of the inebriate? But the results of medical and Christian experience show beyond all question that inebriety may be cured as effectually and reliably as any other of the many ills which flesh is heir to, hampered though its treatment is by many complications. At any rate it has been said authoritatively that one out of three men who have been under anything like proper treatment in an inebriate asylum has been saved,—a result for which, I think, we may well thank God and take courage.”

INEBRIETY IN MINNESOTA.

A few years ago this State built a fine building for the exclusive treatment of inebriates. Before it was put into practical operation, the medical treatment of inebriety was denounced so bitterly that the building was changed to an insane asylum, with an inebriate ward. From the last report only four inebriates were under treatment, while nearly four hundred insane (who of necessity are largely incurables) occupy the fine buildings. This is the same blunder which has been made many times before. These four hundred insane should be scattered round in small homes, and farm hospitals. Many of them are incurables, and all that can be done is to house and protect them. While the inebriate is to a large degree curable, and can be made self-supporting. It is this neglect and failure to care for the inebriate that keeps the insane asylums full. When inebriety is regarded as a disease and is treated in hospitals, the State will be doing a charitable work that will be felt in all circles and societies.
Abstracts and Reviews.

The Medical Record has eclipsed all their rivals in offering to send free to every medical journal proof slips of all the papers to be read at the International Congress at Washington in September next.

The Demorest Monthly is a most excellent, pure-toned, healthy, bracing journal. It is also progressive, and should be read by every family in the land.

The Science Journal comes each week with a rich freight of new and most fascinating matter.

The Scientific American keeps abreast of the restless march of science, always giving the latest news from the "front of this field."

The Homiletic Review, published by Funk & Wagnalls, has some very entertaining and instructive papers in the July and August numbers.

The Electrical Engineer of New York city grows in value every month. The new lands of electrical force are opening wider every day, creating new interests, which this journal most aptly describes.

The June, July, and August numbers of the Popular Science Monthly may each be called a separate library of the best thought and latest researches of science. This monthly has become an essential to every library in all conditions of life.


These three works should have a place in the library of every thinker and student. They place the best thought of the day in the reach of all persons.

Vol. IX.—24

This is a capital little book, full of hints and suggestions of great value to both the nurse and physician. The author understands clearly what a nurse should and should not know in the care of mental disease, and has a concise, happy way of expressing it. This book is unique in both the manner and the manner of presenting the subject, and we advise our readers to possess it as a really valuable aid to the often very confusing field of practical treatment of this class. A physician should know what a good nurse is and what he is required, and this work supplies the facts in this field.


This work is especially devoted to the phenomena of nervous diseases and their recognition from the symptomatic and diagnostic side. The following paragraph from the introduction gives a good idea of the plan of work: "When a case offers itself for examination the physician must needs travel from the symptoms back to the lesion, and not from the lesion to the symptoms. He does not say this man has a clot in the brain, therefore he has hemiplegia; but he begins with the paralysis, and passes from it by a process of induction to the lesion. Hitherto, the authors of textbooks have traveled from the lesion to the symptoms. The present treatise is an attempt to follow the route which the practitioner must pass over daily." The author starts with the different forms of paralysis, passing from motor to sensory symptoms, and ending with the lesions of consciousness and intellect. The faults and omissions of the work are so few compared with its merits and the suggestive, practical interest which it creates in these subjects that it may be justly called the best practical work on this subject published. The author is clearly a thoughtful and thorough student, also an excellent teacher, knowing exactly what is needed and how to present it in its most attractive way. We have published some extracts from its pages elsewhere, and heartily commend this work to our readers.
INTERNATIONAL MEDICAL CONGRESS ON INEBRIETY.

The first International Medical Congress for the Study of Inebriety, which convened in London, July 5th and 6th, marked the beginning of a new era in the history of this subject. The exercises began July 5th with a special reception to Dr. T. D. Crothers with other American and foreign delegates. Among them were Drs. Parrish, Wright, Thwing, and Mr. Schemerhorn of America; Dr. Mœllier of Brussells, and Dr. Koch of Holland, and others.

The following is the official record of this occasion:

On the afternoon of Tuesday last, an influential and representative company assembled in the rooms of the Medical Society of London, on the invitation of President and Council of the Society for the Study of Inebriety, at a reception to Dr. T. D. Crothers, Hartford, Conn., U. S. A., Secretary to the American Association for the Cure of Inebriates, and editor of the Quarterly Journal of Inebriety. Among the audience were members of the medical profession, visitors to the Congress on Inebriety, and leading temperance workers. After a service of tea and coffee, the chair was taken by the president, Dr. Norman Kerr, who said that for the marked advance of the recognition of inebriety as a true disease calling for treatment like other diseases, for the establishment of special homes for the purpose, as in insanity, and for legislation to protect the inebriate against himself, the world was indebted largely to American physicians, several of whom were with them that day. He (the chairman) rejoiced at the presence of so many abstainers and prohibitionists, as the physical aspect of intemperance ought never to be forgotten. Alcoholic in-
toxicants were always poisonous, and no moral or religious influences could modify the action of a material chemical poison. They all hoped for amended and improved legislative measures for the effective cure and control of the diseased inebriate (poor as well as the rich). A year and a half ago they had welcomed the president of the American Association, Dr. Parrish, and now they had the pleasure to welcome his active colleague, Dr. Crothers. Dr. Kerr concluded by proposing the following resolution: "That this Congress of British, Colonial, and foreign members; comprising members of the legislature, ministers of religion, physicians, lawyers, philanthropists, abstainers and non-abstainers, prohibitionists, and other friends of the habitual drunkard, convened by the Society for the Study of Inebriety, offers hearty welcome to Dr. T. D. Crothers, Hartford, Conn., U. S. A., secretary of the American Association for the Cure of Inebriety and editor of the Quarterly Journal of Inebriety.

"That this Congress tenders its hearty congratulations to Dr. Crothers and his American colleagues for the excellent work done by their association and journal in enlightening the profession and the public on the physical aspect of inebriety; and trusts that through the united efforts of all who are interested in temperance and legislation the time will soon arrive when the diseased state of the inebriate will be generally acknowledged, and when effective measures will be passed by the legislators of every country for the judicious care and treatment of all inebriates willing to be treated in special homes, and for the compulsory seclusion in such institutions of inebriates unwilling of their own accord to put themselves under restraint."

The resolution having been seconded by Dr. G. B. Clark, M. P., was carried by acclamation, after which Dr. Crothers delivered a brief address, in which he reviewed the history of the movement in America. Dr. Joseph Parrish of America, afterwards read a short paper on the subject of "Is there a Climacteric Period in Inebriety?" Dr. T. L. Wright, also
of America, read a short paper, in which he spoke of the morbid force of the drunkard's convictions. He said that a sober person in the witness-box testifying to events that had occurred when he was intoxicated was less reliable than an intoxicated person testifying to events that had occurred when he was sober. Dr. Thwing, Dr. Koch, Dr. Bridge-water (Harrow), and Sergeant-Major Hackett afterwards spoke, the last-named gentleman dwelling upon the difficulty of placing destitute inebriates in positions where they would be properly cared for. The chairman remarked that the present condition of the law was accountable for that difficulty. He thought it was a national disgrace that there are no places for the treatment of male inebriates unable to pay. Female inebriety was increasing enormously.

The regular session of the Congress began the next day, the 6th, at 10 a.m., at Westminster Town Hall. Dr. Cameron, M.P., vice-president, as chairman, opened the exercises with a short address on the importance of a medical study of inebriety, then introduced the president, Dr. Norman Kerr, who delivered an address on *Inebriety; a Disease Requiring Medical, Moral, and Legislative Treatment.* This was a most suggestive and graphic presentation of the disease of inebriety, and its treatment in special hospitals.

*Inebriety in Austria* was the title of the next paper, by Chevalier Max Proskowitz de Proskow-Marstorff. The author stated that in Austria inebriety was increasing everywhere on a dangerous scale. The consumption of alcohol was 6.7 litres a head in a population of 39,000,000; but in some districts 15½ litres was the average (4½ litres go to a gallon). In all Austro-Hungary there was an increase of nearly 4,000,000 florins in the cost for alcohol in 1884–85 over 1883–84. In 1885 there were 195,665 different places (stations, ginshops, and subordinate retails) where liquors were sold. Dr. Julius Wolff had shown that the proportion of liquor stations to the inhabitants varied from 1 for every 173 to 1 for 1,181. In districts where the most spirits were used there were fewer fit recruits. Of 2,742 homicides and
Editorial.

murders in Austria in 1876-80, 978 were by drunken persons; in Bohemia, 103 out of 435; and in Moravia, 74 out of 242. Austrian inebriety was increasing in county and in towns. 33.41 per cent. of the insane in the Vienna asylum were from alcoholism, or seven times more than ten years ago. Alcoholism and inebriety had spread more rapidly since spirits had been made from molasses, potatoes, sweet turnip, Indian corn, etc. Inebriety was also causing grave diseases. The Austrian Inebriety Society has asked the Parliament to establish homes for inebriates. By the Austrian Penal Code (1852) accidental intoxication exempted from criminal responsibility; but it was an aggravation if the person knew from experience that he was very emotional when intoxicated. Inveterate drunkenness was a misdemeanor in craftsmen working on roofs or with material easily inflammable. Austrian workmen generally took spirits to breakfast. Introducers of spirits into factories were severely punished. In the Tyrol, C. Payer says that, two-thirds of the people are inebriates, including women. At the request of the Inebriety Society, the common Imperial Minister of War had requested commanders of troops and garrisons to insure the sale by settlers of tea and coffee at low prices. The Chevalier Proskowetz de Proskow-Marstorff had asked Parliament to teach the intoxicating nature of alcohol in schools. The Austrian Inebriety Society was founded on January 17, 1884, and had done good work by collecting statistics, publishing pamphlets and proceedings, chemically examining spirits, and promoting tea-cars and coffee-rooms.

The following are short abstracts of several papers which were read:

The Physical Aspect of Inebriety, by N. S. Davis, M.D., Chicago, President International Medical Congress. The conflict between the vice view and the disease view of inebriety is the result of a misapprehension of terms. Inebriety is inherited as cancer or consumption is inherited, but no one is born with a cancer or a tuberculous lung. Some are
Editorial.

born with such a physical organization as embodies a liability to cancerous growth and tuberculous development. In the same way the drinking parent begets a child with a degenerated type of organization, rendering the latter liable to inebriety, as to convulsions or imbecility. Therefore, if such a congenitally weak child drinks at all, he cannot resist the narcotic power of alcohol. Inebriety is a disease, inasmuch as it is a departure from health, persisting, in certain cases, after the immediate act of drunkenness is over. While inebriety is primarily the result of voluntary drinking in most cases, there being some self-control in the early stages, if persisted in from year to year until permanent tissue changes are established, the inebriate is no longer able to exercise self-control. He should then not be held responsible for his acts, but should be recognized, legally and morally, as in a similar category to the insane, and appropriate asylums should be provided, where he should be compelled to reside till forced abstinence and medical treatment effected a cure.

Legislation for Inebriety, by Dr. Petitian, Liège. Alcoholicism in Belgium has augmented with frightful rapidity, and calls for immediate and thorough action. England and the Netherlands, these two classic countries of progress and liberty, and France had adopted repressive measures. Belgium ought not to lag behind. At present, the alcoholized man, unless in extreme insanity or violence, is not dealt with. He is not responsible, being under the power of alcohol, and yet he has the control of his family, the administration of his affairs, and he is a juryman. He cannot be interdicted unless he is mad, yet he has lost his will, is no longer free, and more responsible. This newly-discovered disease—inebriety—ought to be recognized by the law. The inebriate should be liable to interdiction, not only by his family, but by a public officer. This can be done now only in the event of fury or imbecility, but it can be done in a lucid interval. The alcoholized man, when his diseased state is medically and legally recognized, ought to be interdicted. When he is interdicted, there ought to be power to shut him up in a
Editorial.

special home, where he should be treated and obliged to work according to his strength.

Asylums for Inebriates in Sweden, by Axel Dickson. In Sweden there are two such asylums. One is at Bie, under medical superintendence, where the charges can be afforded by only the economically independent. The other is for working people, at Tornas, the charges varying from £11 to £22 per annum. The patients have to work on the farm, in the dairy stables, and elsewhere on the premises. One year's residence is required. No intoxicants are allowed. The farm has been open for only six months. Already there have been seven patients, some of whom are hopeful cases.

German Law on Inebriety, by Professor Binz, Bonn. Prof. Binz stated that, by the German Penal Code, § 261, No. 5, whoever surrenders himself to drinking so as to fall into a condition in which, through the interposition of the court, foreign help must be resorted to for his support or for the support of those whom he is in duty bound to maintain, is punished with imprisonment. On a repetition of the offense, imprisonment can be arranged in a work-house for a longer time. The closing hours of drink places are usually 10 o'clock P.M. in the country and 11 P.M. in towns.

Inebriety in Belgium, by Dr. Möeller. The author traced the history of the movement for legislation for inebriates in Belgium, particularizing the labors of Drs. Petéthan, Harella, Carpentier, Jansen, and others. Dr. Carpentier had found ninety per cent. of his post mortems on males and ten per cent. of his post mortems on females at the Brussels Hospital show signs of incurable organic alcoholic disease. The ages at which these inebriates had begun to drink ranged from fifty-five to eight years. In Belgium they were agitating (1) for interdiction of the inebriate; (2) for seclusion of the inebriate in a special asylum for treatment of his disease. Dr. Möeller was in favor of the government opening such establishments, rather than their institution by private individuals. Inebriety was a true disease, and required not only medical treatment, but also legislative care and control.
Continental Legislation for Inebriates, by the Rev. Dr. M. De Colleville, Brighton. In Austria, Belgium, France, Germany, Greece, Holland, Italy, and Switzerland, drunkenness is not in itself an offense, but public and disorderly drunkenness is punished by short imprisonment and fines. In some countries the fines are increased by the number of convictions. In some places bankrupts and paupers, as well as interdicted persons (for prodigality), are not allowed to enter a drink establishment for thirteen months or more, as at Lucerne and in Galicia, except for food in necessity. Drunkenness is spreading beyond the Northern Continental regions. Italy and Greece are becoming infected. Corn and other allied alcohols discovered by Libavius in 1585 (Halle University), had greatly increased drunkenness. In France, in 1855, 511,280 gallons of etheylc and 40,566,642 gallons of heavier and more hurtful alcohols were consumed. This, with the alcohol of wines, etc., gives an average annual use per head of four gallons. Laborers and mechanics are there losing £40,000 annually. There has been a decrease in Holland, North Germany, Russia, Norway, and Sweden. Only in fury, etc., is there interdiction. By the German Penal Code, Clauses 361 and 362, boisterous inebriates can be sentenced for two years to prison in-door or public work out-door labor. The English Habitual Drunkards' Act should be made compulsory in the freeing of the inebriate from his slavery, as a fit memorial of the Jubilee year.

Dr. B. W. Richardson presided in the afternoon session, and delivered an address on Alcohol and Its Effects on the Heart. Other papers were read as follows: Jurisprudence of Inebriety, by Clark Bell, Esq., Ex-president Medico-Legal Society of New York; Pathology of Inebriety, by E. C. Mann, M.D., Brooklyn, U. S. A.; The Relation of Disease to Inebriety, by L. D. Mason, M.D., Consulting Physician, Fort Hamilton Home for Inebriates; A Prison Chaplain's Observations on Inebriety, by Rev. J. W. Horsley, M.A.; The Meeting-Place of Vice and Disease, by Alfred Carpenter, M.D., J.P.; Homicidal and Suicidal Inebriety, by Surgeon-Major Pringle, M.D.
The president, Dr. Kerr, read a paper on the following: *Colonial Legislation for Habitual Drunkards.*—In view of the approaching expiration of the Habitual Drunkards Act, 1879, and the call for permanent and improved English legislation for habitual drunkards, I have to lay before you the result of a special inquiry into our Colonial legislative provision, immeasurably more satisfactory than with us, for the numerous and wretched victims of the terrible and truly serious disease—inebriety. For the information which I am enabled to present to you I beg to acknowledge most grateful thanks to the High Commissioner of Canada, Sir Charles Tupper, and to the Agents-General of South Australia, Victoria, and New Zealand, Sir Arthur Blyth, Sir Graham Berry, and Sir F. Dillon Bell, with their respective secretaries.

**Canada.**—Nearly all the Canadian Provinces have effective legislation.

**Ontario.**—An inebriate can be admitted, provided it is certified to the satisfaction of the superintendent that applicant is an inebriate, simply on voluntary application and the signature of an agreement to conform to the rules for any period not exceeding twelve months. Within that term he can be discharged either as cured, as incapable of benefit, as (with means) having neglected to pay for his maintenance, or as refractory. An habitual drunkard can be committed to a home by the provincial secretary, after inquiry by a judge. The inquiry can be asked for by any friend, and the indicted has eight days' notice, with power to produce and examine witnesses. Twelve months is the full term, and the committed can be discharged in the same way as the voluntary patients. Any voluntary or involuntary patient can, on escape, be retaken and reconveyed to the home by any official or by any person authorized by the superintendent. The inspector appointed by the lieutenant-governor can, subject to review by a county court judge, sell inebriate's property to pay for maintenance. Poverty is no bar to committal, but those who are able, or whose family are able to pay, are compelled to do so. The lieutenant-governor has power to purchase, equip, and maintain a hospital for inebriates; the inspector of prisons and asylums having the same power over an inebriate's retreat as over asylums for the insane.
Quebec.—Habitual drunkards can be interdicted by a superior court judge, as in insanity, after a report by a family council, the petitioned against having eight days' notice to show cause against the interdiction, which involves loss of civil rights. The curator can proceed against persons wilfully selling or giving intoxicating liquor to the interdicted. The curator can place the inebriate in a special home.

Nova Scotia.—Interdiction and power to intern the interdicted similar to Quebec, only fourteen days' notice must be given to the inebriate.

New Brunswick and Manitoba.—The interdiction is by a judge, and a committee of the inebriate is appointed. There is the same power to confine in any place of which the judge may approve.

South Australia.—Patients may be admitted for any period not exceeding twelve months, on attestation by any justice. On production of a certificate by two medical practitioners, and an application by any friend, any judge or special magistrate or two justices, can order commital to a home for a period not exceeding twelve months. An incorrigible inebriate (that is, one convicted of drunkenness three times within six months) can be similarly committed. Any patient who has escaped can be retaken and reconveyed to the retreat by any person authorized in writing by the superintendent. There is power over the property of patients able to pay, but those unable to do so can be employed at a fair rate of wages.

Victoria.—Voluntary admission can be had on application to any justice. A county court judge can order commital to a home on production of a statutory declaration by two medical men, and application by a friend. On escape, any one authorized in writing by superintendent can retake and reconvey to the home. The medical superintendent can appoint a substitute to act in absence.

New Zealand.—Voluntary application for admission may be made to a judge. A judge, on certificate of two doctors, may order detention in an asylum, twenty-four hours' notice of the procedure having been given to the alleged inebriate. Patients are bound to work, the penalty for refusal being £50. Patients are received though they cannot pay for their maintenance.

It is only fair to add that there is as yet very limited accommodation in Special Homes for Inebriates in the Colo-
nies, a practical haven of refuge, and a means of restoration
to health for the narcomaniac, which is much more abundant
here. We have a number of such homes for the well-to-do,
though none licensed under our Act for the poor. Is it not
high time that the legislature of the United Kingdom should
take a lesson from her vigorous Colonial offspring by caring
for the destitute as well as for the rich diseased drunkard, by
offering an opportunity for the treatment of every inebriate
willing to give up his freedom for a time, and by investing
the proper authorities with power to compulsorily seclude
the victim to narcotics for the threefold purpose of effecting
his cure, of saving his wife and family from a life of inex-
pressible sadness, and of protecting the community from the
violence and riot of a morbid maniac?

A grand dinner closed the exercises in the evening, of
which the following is an account:

On Wednesday evening, July 6th, two hundred and fifty
ladies and gentlemen sat down to dinner in the Westminster
town hall, Dr. Norman Kerr, F.L.S., in the chair. Among
those who had accepted the invitation were Lord and Lady
Denman, Lord and Lady Mount-Temple, Baron Ferdinand
de Rothschild, Sir Wilfrid Lawson, M.P., Sir Trevor Law-
rence, M.P., Dr. Cameron, M.P., P. Maclagan, M.P., T. W.
Russell, M.P., W. B. Rowlands, Q.C., M.P., William John-
ston, M.P., Dr. Clark, M.P., Sir Edwin Saunders, Drs. Par-
rish, Crothers, Wright, and Thwing (U.S.A.), Dr. Moeller
(Brussels), Drs. B. W. Richardson, Alfred Carpenter, Dan-
ford Thomas, Mrs. Norman Kerr, and a number of other
ladies, clergymen, and representative temperance reformers.
The dinner was served by A. B. Marshall, of the West End
School of Cookery. The Anglo-Hungarian band played dur-
ing the evening.

The toasts were honored in five varieties of non-intoxi-
cating wine, imported by Frank Wright, Mundy & Co. There
was also on the table Brunnen table water and Brin's
oxygenated lemon water, charged with oxygen prepared from
the atmosphere.
The toasts were "The Queen and the Royal Family," by the chairman; "the Houses of Parliament," by Sir Edwin Saunders, F.R.C.S., responded to by Lord Denman and Mr. P. Maclagan, M.P.; "Religion. Law, and Medicine," by Lord Mount-Temple, responded to by Rev. Dr. Lansdell, F.R.G.S., the distinguished Siberian traveler, Mr. W. B. Rowlands, Q.C., M.P., and Dr. Withers Moore (president British Medical Association); "The Study and Cure of Inebriety," by Dr. J. S. Bristowe, F.R.S., responded to by Dr. Crothers; "Our American Guests," by Dr. B. W. Richardson, responded to by Dr. Joseph Parrish; "Temperance Organizations," by the chairman, replied to by Sir Wilfrid Lawson, M.P. (U.K.A.), Canon Ellison (C.E.T.S.), and Mr. John Taylor (N.T. League); "Our Foreign Guests," by Dr. T. L. Wright, reply by Dr. Moeller (Brussels); "Legislation for the Inebriate," by Dr. Alfred Carpenter, J.P., responded to by Sir T. Lawrence, M.P.; "Our Colonial Guests," by Dr. Danford Thomas, reply by Rev. J. Gelson Gregson; "The Dalrymple Home," by Consul-General Waller, replied to by Dr. Cameron, M.P., president of the Dalrymple Home; "The Ladies," by Dr. George Harley, F.R.S., replied to by Dr. Thwing (Brooklyn, U.S.A.). The company separated at an early hour after having spent a very pleasant evening.

A large party of the Colonial, Foreign, and Provincial visitors were entertained at lunch at the Dalrymple Home, Rickmansworth, on the following day, the 7th inst. The guests, who went out by train from Euston via Watford, were conveyed by carriages in waiting at Rickmansworth station, to the Home, one mile distant, and were received by Canon Duckworth (the chairman), Dr. Norman Kerr (consulting physician), Mr. Branthwaite (the medical superintendent), and the committee of management. After lunch, an informal meeting was held in the spacious concert room, when Dr. Parrish, Dr. Crothers, Dr. Wright, Dr. Thwing (U.S.A.), Dr. Moeller (Brussels), and others expressed their delight with the charming grounds, their high opinion of the scientific and practical methods of treatment of the disease.
inebriety, and their gratification at the excellent results already attained.

It will be of interest to our readers to hear some of the conclusions which seemed evident. The number of the papers both presented and read at this Congress, and their general literary and scientific character, was unmistakable evidence that the disease of inebriety had been recognized, and an interest created for a wider, clearer knowledge of this subject.

It was also evident that the time had come to organize and place on a scientific basis the many facts concerning inebriety which have been known and urged by observers all over the world.

The evidence on which the disease of inebriety and its curability by medical means in hospitals are based, demanded a recognition, and received it in this Congress beyond the expectations of its most sanguine supporters.

Leading medical men in both Europe and America either contributed to this Congress or endorsed it with letters of hearty sympathy. The large number of leading scientists and distinguished men who joined in the banquet, and the full reports given in the medical, secular, and temperance press of the proceedings, indicated beyond all doubt a great advance of public sentiment, and the permanent growth of the teachings of the Journal of Inebriety and its numerous writers.

The papers presented by the Americans at this Congress indicated a more thorough study of inebriety, but the thoughtful, conservative tone of the English papers, and the statistical papers of delegates from the Continent, showed a solidity of growth in the study of this subject very promising for the future.

Both the addresses and papers presented to the Congress were more suggestive of the possibilities from further study in this field than of the results already accomplished. This was the grand feature of the Congress, showing that practical men had begun on the practical side of this great new land of psychiatry.
Editorial.

Of course such a movement, with all its praise and enthusiasm, must bring out some adverse criticism. Here as elsewhere the same temperance reformers and clergymen were shocked and pained at the infidel error of attempting to recognize a physical side to this subject. Happily many of the best men in these classes supported this movement with much enthusiasm. While the success of this Congress was due to the efforts of its talented president, Dr. Kerr, it was evident to all that the subject had grown to such proportions that hereafter it would be discussed in great conventions, of which this was but the beginning.

The social features of the Congress were very pleasing, and will be long remembered by all who participated. The American delegation formally thanked the president in a printed letter for his courtesies. It is very pleasing to note that the papers by Drs. Parrish, Wright, Mason, and Mann attracted much attention, and quite a demand for separate copies was created, which the temperance press supplied.

Our space prevents further reference to this most interesting event, which we hope to outline more fully in the next number.

UNCONSCIOUS DECEPTION IN INEBRIETY.

The following case excited much interest in a large circle of friends, and came to my notice for advice. A, a wealthy brewer, who had been a widower for years, died, leaving most of his property to his sister-in-law. This was unusual, as he had brothers and sisters and others who had more claims on his property. He was an excellent business man, kind and conscientious and above reproach. The family physician, an inebriate who drank steadily for years, and was also a man of character and respectability, volunteered under oath an explanation of this peculiar will. He said on such a day he overheard the sister-in-law urging and threatening the brewer to have his will changed. The next day he overheard a strange man writing it at the suggestion of this woman. This occurred a few days before the death of the brewer.
As the doctor could have no visible motive, and the act was strange and unusual, a detective was called in to confirm his sworn statement by other evidence. It was found that the doctor was ten miles away on the night he alleged to have heard this effort to change the will, and his associate physician made a visit at nearly midnight of that day, seeing no one but the nurse. It was also found that he did not call on the day he swore he heard and saw a strange man making out a will. It was also found that the will was written several months before in a distant city, and had not been altered in any way from the first writing. The indignation of the friends at this evidence prompted them to arrest the doctor for perjury. The doctor was very positive of his correctness, and the case came under my notice. The result of an examination made it very probable that the doctor had heard in his rounds some suspicion that the testator of the will had been forced to make such a will. This suggestion had revolved itself in his mind until he conceived that he had overheard this very thing. From this the false conception grew, and finally shaped itself into the writing scene.

There was no object in the statement, as the parties to be benefited by such a statement were not friendly to him, and those who would suffer were his friends. My opinion that this was a case of unconscious deception, growing out of a degenerate and diseased brain, was accepted, and the charge of perjury was withdrawn. Yet the doctor insists it was true, and thinks the deception was in the investigations of the detective.

The American observer notes the fact that inebriety in England is hedged in with social customs, hygienic and sanitary conditions, making its study and treatment a more difficult problem than in America. It is also clear that inebriety is literally poverty of both mind and body more than in America, and is a symptom of degeneration, more than accidental conditions. The unsanitary conditions of homes and absence of home life are apparently greater.
sources of danger than the saloons. The physical degeneration of the inebriate is more prominent among the lower classes. Public drinking and intemperance on the streets are not uncommon, but they are not as frequent as the inebriate and his saloons. It is estimated that there are at least 100,000 inebriates in the United States, and this number is increasing. The inebriate is a danger to himself and others.

A Boston journal presents some statistics of the arrests for drunkenness and assault in ten leading cities of the country. In every city but one, the highest rate of arrests in the country, the least arrests of any cities for drunkenness and assault. The inference is that these are the most temperate law-abiding cities of our country.

Governor Hill, in his veto of the New York High License Bill, brought out some curious facts of the number of licenses granted per one thousand inhabitants of the leading cities of New York State. Buffalo has nineteen licenses to every one thousand people, the highest on the list; New York, the state's capital, has one hundred and twenty; Albany, the least, has seven and Brooklyn five. Troy has ten, Syracuse eleven, and Utica twelve. This shows that the temperance movement is gaining ground in New York, and that the inebriate is on the decline.

Many homes have been established for inebriates, but with few exceptions, they are inadequate for the work, because based on crime, the unfortunate. Habitual Drunkards Act has been an obstacle in the growth of asylums, but as the act expires soon, great efforts are being made to pass a more practical bill. In many of the discussions noted the confused attempts to explain will and disease in inebriety indicates an early stage of the study of the subject.
and Rochester eight. These curious statistics indicate a
great variety of local causes which permit spirits to be sold
so freely in one place and checks it in another. In Buffalo
the climate is no doubt a predisposing cause. The sharp
extremes of high winds and cold rains have much to do in
breaking up the nervous equilibrium of the body and intensi-
ifying the nutritive disturbances calling for the narcotic of
alcohol.

In the comparison of the histories of many cases of
inebriety, certain ranges of fact appear in a regular order.
Continuous chains of cause and effect run through all the
events. What appears to be the free will of the victim is
but a narrow channel along which he is forced by conditions
which he cannot escape. Appeals to his feelings and reason
are useless, for these faculties are unable to direct or control
the progress of disease. Often the victim is unconscious
that he has lost his power of control, unconscious of the
march of events; the steady disintegration of brain vigor
and health, and never realizes it. Delusions of health and
self control become fixed as the disease goes on. The range
of his mental powers steadily narrow and approach the ani-
mal in comparison, and are finally lost in a general dissolu-
tion.

The delay in the appearance of the Journal was for the
purpose of publishing some of the papers and proceedings of
the Congress of Inebriety. Other papers and proceedings
will appear in the future numbers of the Journal.

The time for argument to prove inebriety a disease has
gone by. The facts of inebriety are so accessible and
numerous that it is a question of observation and interpreta-
tion of these facts, and not of theory or speculation. Opin-
ions on questions not based on facts may differ, and even
the teaching of facts may vary with the observer, but the
truth is always and ever the same.
Clinical Notes and Comments.

GEYSER SPRING WATER.

In 1870 an experimental drilling near Saratoga Springs struck a vein of mineral water at a depth of one hundred and thirty-two feet in the solid rock below the surface. The pressure of gas was so great that the water was forced out over thirty feet above the surface, and has flowed continuously ever since. From analysis this water is found to be very rich in chloride of potassium, bicarbonate of soda, magnesia, and lithia, and coming from such a great depth is free from impurities common to other waters. Unlike other Saratoga waters it is found to be a marked nerve tonic, especially in cases of nervous prostration associated with dyspepsia. We have used it in a few cases of alcohol and opium inebriates, giving it in small doses night and morning with the best results. Its tonic effect comes no doubt from its action on the liver and other glandular organs, and while not purging the bowels, it seems to excite to a healthier action. The natural carbonic acid gas in this water has a marked medicinal value, and so far there seems every indication that this Geyer water will be found a nerve remedy of great power. We urge our readers to try it in all neurosial diseases.

The Lactated Food is one of those remedies that are almost a specific in some cases of inebriety.

The Acid Phosphates of Horsford is probably the most extensively sold and widely known of all remedies in the market.

Parke, Davis & C°'s Coca Cordial is a most excellent preparation for all cases of nervous disease, and should be used in all cases of inebriety and opium taking.
Clinical Notes and Comments.

Lactopeptine has come to be regarded as the great new remedy for nutrient disturbances.

Peptonized Cod Liver Oil and Milk, by Reed & Carnrick of New York city, has a special power as an oil tonic and stimulant which is invaluable at times.

The Murdock Liquid Food will be found of good service in anemia and insomnia and dyspepsia.

The Anglo-Swiss Milk Food can be used with most excellent results as a concentrated food for nervous invalids.

Colden's Liquid Beef Tonic is a stimulant of great power. It can be used in the place of alcohol in emergencies, with the best results.

Maline with Altimeters is combined with the most valuable alternatives known, such as iodides, bromides, and chlorides, and will be found a remedy of the highest value in syphilis and all depraved conditions of the blood. Each fluid ounce of Maline contains: chloride calcium, 5 grains; chloride magnesium, 5 grains; bromide sodium, 5 grains; iodide potassium, 1 grain; iodide iron, ½ grain.

Valentine's Preparation of Meat Juice has proved in our hands to be superior to any other form on the market. As a stimulant and tonic it seems unrivaled in alcohol and opium cases.

W. H. May, M.D., New York city, says: "I have had very successful results in the administration of Bromidia in cases having their origin in disorders of the nervous system, such as cholera infantum, paralytic, insomnia, etc. But I find it to be of special value in treatment of delirium tremens, and the results of debauch; it being retained upon the stomach and speedily controlling the most dangerous symptoms, and producing the desired calmness and sleep necessary when morphia and other soporifics have failed to do so, and thus rendering the disorder amenable to further treatment. Have also prescribed it successfully in the terrible state of nervous exhaustion due to opium, habits endeavoring to relinquish the habit. And, finally, as result of experience, I pronounce it the 'hypnotic par excellence.'"

Fellow's Hypophosphites are an excellent combination of remedies that have been found of great value in nervous prostration, anemia, and many other diseases of nutrition.
The document appears to be an advertisement for Colden's Liquid Beef Tonic. It highlights the tonic's efficacy in various medical conditions, emphasizing its value as an invaluable aid in medical practice and its range of action embracing all cases of debility. The advertisement also mentions Glenn's Sulphur Soap and Constantine's Fine Tar Soap, with claims of their effectiveness and affordability. The text is dense with medical terminology and promises of relief from various ailments.
KIRKBRIDE.

Dr. N. Roe Bradner's Villa, near Burlington, N. J.,
FOR THE PRIVATE TREATMENT OF THE INSANE.

The profession is notified that this establishment is now open, and ready to receive patients in any stage of mental disease.

The location and accommodations are perfect, and our aim is to allow no place in America to equal the private treatment for the wealthy insane.

Dr. Bradner, recently of Philadelphia, was formerly at the Pennsylvania Hospital for the Insane, associated with Dr. Thomas S. Kirkbride, whose memory our Villa is named, and has made a specialty of mental diseases, during his whole professional career—nearly twenty years. Your correspondence and visits are solicited.

Address BURLINGTON, N. J.,

Dr. N. Roe Bradner, Jr., A. M., M. D.,
Physician in Chief.

TO ADVERTISERS!

For a check for $2 we will publish a ten-line advertisement in One Million issues of leading American Newspapers and complete the work within ten days. This is at the rate of only one-fifth of a cent a line, for publication in a single issue of any paper, and consequently will be placed before One Million different newspapers purchasers—for Five Million Examiners, if it is true, as is sometimes stated, that every newspaper is looked at by five persons on an average. Ten lines will occupy about 75 words. Address with order of Adv. and check, or send 30 cents for book of 75 pages.


We have just issued a new edition of our book called "Newspaper Advertising." It has 16 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:

DAILY NEWSPAPERS IN NEW YORK CITY, with their Advertising Rates.

DAILY NEWSPAPERS IN OTHER TOWNS PAYING more than 1000 dollars, classified alphabetically.

DAILY NEWSPAPERS IN OTHER TOWNS PAYING more than 100 dollars, alphabetically.

A COMPLETE LIST OF NEWSPAPERS IN WHICH TO ADVERTISE EVERY SECTION OF THE COUNTRY, being a choice selection made up with great care, guided by long experience.

NEWSPAPERS IN A STATE. The best one for an Advertiser to use if he will use but one.

NEWSPAPERS IN ADVERTISING DAILY NEWSPAPERS in many principal cities and towns, a list which offers peculiar inducements to some advertisers.

NEWSPAPERS IN LARGEST CIRCULATIONS. A complete list of all American papers having circulation more than 2000 copies.

NEWSPAPERS IN LOCAL NEWSPAPERS, covering every town of over 1000 population and every important county seat.

NEWSPAPERS IN LOCAL NEWSPAPERS, in which advertisements are inserted at half price.

NEWSPAPERS IN VILLAGE NEWSPAPERS, in which advertisements are inserted for $1 a line and appear in the whole lot—over half of all the American Weeklies.

Send to any address for THIRTY CENTS.
BROMIDIA
The Hypnotic.

**FORMULA.**

**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, Menispernum, and Aromatics. Each fluid drachm also contains five grains IOD-POTAS and three grains PROS-Iron.

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

**Indications.**
Syphilitic, Scrofulous, and Cutaneous Diseases, Dysmenorrhea, Menorrhagia, Leucorrhea, 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.
6 and 10 Dalhousie Square, CALCUTTA.
Medical and Surgical Sanitarium,
BATTLE CREEK, MICH.

This institution has for nearly eighteen years enjoyed an increasing patronage from all parts of the United States and Canada, during which time

MORE THAN TEN THOUSAND PATIENTS

have enjoyed the benefits of its unrivalled facilities for the treatment of all forms of Chronic Diseases, including special treatment for the EYE, EAR, THROAT, and LUNGS, together with diseases peculiar to each sex.

Special Attention Given to Nervous Diseases.

The managers have spared no expense to perfect the appliances of the establishment to the highest degree, and regardless of cost, and a personal acquaintance with the leading Sanitariums of both this country and Europe enables us to say that no where else in the world can the invalid in search of health find so great an assemblage of means and appliances for combating disease as are to be found here, including Galvanic, Faradic, and Static Electricity; Massage; Swedish Movements, Manual and Mechanical Turkish, Russian, and Roman Baths, and all forms of Water Baths.

The Buildings of the institution consist of two main buildings, one of which is shown in the accompanying cut, and fourteen cottages. Increasing patronage has made necessary the erection of another large structure, a portion of which will be ready for occupancy by July 1, 1874, making the total length over 450 feet. To these advantages are added.

A SALUBRIOUS LOCATION.

A Water Supply, pronounced by an eminent chemist to be of "Extraordinary Purity," buildings constructed expressly for the purpose, and fitted with all modern conveniences, including elevator, electric call, etc., thorough ventilation, the most perfect system of sewerage which can be devised, making contamination impossible, a full corps of competent and experienced physicians and well-trained assistants; in fact, EVERY CONVENIENCE AND COMFORT for the invalid which money or ingenuity can provide.

J. H. KELLOGG, M. D., Superintendent, or, SANITARIUM,
BATTLE CREEK, MICH.
PRIVATE TREATMENT OF OPIUM HABITUÉS.

DR. J. E. MATTISON, Mem. Amer. Assoc. for the cure of Inebriates, N. Y. Neurology Soc., etc., 152 Livingston St., Brooklyn, N. Y., continues to receive a limited number of Opium Habituees, to whom he gives special and exclusive attention.

The cardinal objects sought are the thorough restoration of the patient, by the easiest and most effectual methods. Length of treatment varies with the case. Patients select. No alcoholics. Strict privacy. Personal attention. Highest references.

"HOME EXERCISER."
For Brain-Workers and Sedentary People.

Gentlemen, Ladies, and Youths; the Athlete or Invalid. A complete gymnasium. Takes up but 6 inches square floor-space; something new, scientific, durable, comprehensive, cheap. Send for circular. "HOME SCHOOL FOR PHYSICAL CULTURE," 16 East 14th Street, N. Y. City. Prof. D. L. DOWD.

Wm. Blabie, author of "How to get Strong," says of it: "I never saw any other that I liked half as well."

THE HUMBOLDT LIBRARY OF POPULAR SCIENCE.

Price 15 Cents Per Number.

To Subscribers, One Year (12 Numbers), - - - $1.50

This Library comprises many of the best popular scientific treatises of the day. The works are well printed, on good paper, in convenient octavo form—the size of the North American Review. Seventy-six numbers have already (January, 1860) been published. Write for a Descriptive Catalogue to the Publisher.

J. FITZGERALD, 393 Pearl St., New York City.

MONEY to be made. Cut this out and return to us, and we will send you free, something of great value and importance to you, that will start you in business which will bring you in more money right away than anything else in this world. Any one can do the work and live at home. Either sex: all ages. Something new, that you can make money for all workers. We will start you; capital not needed. This is one of the genuine, important chances of a lifetime. Those who are ambitious and enterprising will not delay. Grand offer free. Address Trees & Co., Augusta, Maine.

Vol. IX.—57
ANGLO-SWISS MILK FOOD.
MILKMAID BRAND.
Made at Cham, Switzerland,
BY THE
ANGLO-SWISS CONDENSED MILK CO.

PRESCRIBED BY LEADING PRACTITIONERS,
AND USED IN PROminent INSTITUTIONS.

Decided superiority is claimed for the Anglo-Swiss Milk Food in comparison
with any other Farceneous Food for infants and invalids.

Chemical Analysis.

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>5 to 6%</td>
</tr>
<tr>
<td>Nitrogenous matter (Nitrogen)</td>
<td>2.25 to 2.35%</td>
</tr>
<tr>
<td>Carbohydrates, soluble in water</td>
<td>14.5 - 15%</td>
</tr>
<tr>
<td>Carbohydrates, insoluble in water</td>
<td>54 - 55%</td>
</tr>
<tr>
<td>Fat</td>
<td>4 - 5%</td>
</tr>
<tr>
<td>Ash (including 0.05 Phosphoric Acid)</td>
<td>2 - 2.5%</td>
</tr>
</tbody>
</table>

The proportion of nitrogenous matter or plastic aliments to carbo-hydrates or
respiratory constituents in mother's milk is 11.5, and in this food the propor-
tion is practically the same, namely, 13.5. The fat, as a respiratory substance
is here reduced to the equivalent of starch.

"My analysis perfectly agrees with the analysis given on their labels and
bears witness to the excellent and rational manner in which this food is
compounded."—Dr. E. GEISSLER, Dresden, April 10, 1889.

"I have used Anglo-Swiss Milk Food in my practice, and commend it with
certainty to those who may need it for infants or invalids. The introduction
of the Anglo-Swiss Milk Food into America is a great blessing to sick children,
weary mothers, and almost discouraged physicians, for medicine will not take
the place of food."—E. A. JENNINGS, M.D., Provident Dispensary, 63 W.
14th St., New York.

"Used in New York Infant Asylum."—J. LEWIS SMITH, M.D.

"Has yielded most favorable results."—J. C. GUERNSEY, M.D., Philadel-
phia.

"The Diarrhea had been persistent for months in spite of the use of other
foods. After using two days the evacuations became normal, and the puny
child is now plump and healthy."—GEO. M. OCKFORD, M.D., Vincennes,
Ind.

"Used in our Sea-Side Nursery. It nourishes and strengthens every child to
whom it is given."—JOHN W. KRAMER, M.D., Master of St. John's Guild.

"Our little ones love it. It regulates and strengthens the bowels."—SIS-
TERS OF CHARITY, St. Vincent's Home, Philadelphia.

"We find that it agrees with each case."—M. SPENCER, Matron Philadel-
phia Infant's Home.

Samples Furnished to Physicians Gratis.

Address, Anglo-Swiss Cond. Milk Co., P. O. Box 3773, N Y.

SOLD by DRUGGISTS GENERALLY.
WASHINGTONIAN HOME,
No. 41 Waltham Street,
BOSTON, MASS.

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

Up to January, 1884, nearly EIGHT 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.

WORKING CLASSES ATTENTION! We are now prepared to furnish all classes with employment at home, the whole of the time, or for their spare moments. Business new, light, and profitable. Persons of either sex easily earn from 50 cents to $2,00 per evening, and a proportional sum by devoting all their time to the business. Boys and girls earn nearly as much as men. Those who act this may send their address, and test the business, we make this offer. To such as are not well satisfied we will send one dollar to pay for the trouble of writing. Full particulars and sample free. Address Geza Reed & Co., Portland, Me.
MONEY.

Fortunes are almost daily made by

SUCCESSFUL OPERATORS IN STOCKS, GRAIN, AND OIL.

These investments frequently pay from $500 to $3,000 or more on each $100 invested.
It is always a good time to operate. Chances are daily and hourly presented for realizing exceedingly large profits, without risking more than the amount of money invested.
I buy and sell Stocks, Grain, and Oil on commission, in any amount, on margins to suit customers. Stock Privileges a specialty.
Address for circulars.

WILLIAM E. RICHARDS,
Banker and Broker,
38, 40, and 42 Broadway, New York.

GREEN SPRING SANITARIUM AND WATER CURE

FOR THE TREATMENT OF
NERVOUS AND MENTAL DISEASES,

Including the Alcoholic and Opium Habit; also diseases incident to women, Skin Diseases, Chronic Rheumatism, and Dyspepsia.
Seventy miles west of Cleveland, in a natural grove of 400 acres. Sixteen years successful operation. Means bed and board complete. Treatment by Baths, Electricity, and Massage a specialty.
One of the largest Medicinal Springs in America. Elegant apartments. Terms Moderate.
For particulars, address

JOHN S. MARSHALL, M.D., Superintendent.
GREEN SPRING, OHIO.
SUBSCRIBE FOR THE
ARCHIVES OF PEDIATRICS,
A MONTHLY JOURNAL DEVOTED TO THE
DISEASES OF INFANTS AND CHILDREN.
EDITED BY
WILLIAM PERRY WATSON, A.M., M.D.,
Instructor in Diseases of Children in the New York Polyclinic.
The Archives of Pediatrics is the only Journal in the English language devoted exclusively to the Diseases of Infants and Children.
It is especially adapted to the physician in active practice, who could not from other sources obtain the best current literature on this subject without great expense of time and labor, and an annual outlay of several hundred dollars.
During 1856 Dr. De Fonzo William of Philadelphia, will contribute a series of articles on The Surgery of the Genito-Urinary System in the Young.
Each number contains sixty-four pages, making at the end of the year a volume of 768 pages, which will form an invaluable "Encyclopedia of Pediatrics."
A strict supervision is kept over the advertising pages, and nothing is admitted to this Journal but what is germane to the physician's use.

SUBSCRIPTION PRICE $3 A YEAR, IN ADVANCE.
Specimen Copy Sent on Application.
JOHN E. POTTER & CO., Publishers,
617 Sansom St., Philadelphia, Pa.

THE PRIVATE INSTITUTION FOR
FEEBLE-MINDED YOUTH,
AT BARRE, MASS.,
ESTABLISHED JUNE, 1848,
Offers to parents and guardians superior facilities for the education and improvement of this class of persons, and the comforts of an elegant country home.

GEORGE BROWN, M.D., Superintendent.

N.W. AYER & SON
ADVERTISING AGENTS
TIMES BUILDING, PHILADELPHIA
Cor. Chestnut and Eighth Sts.
Receive Advertisements for this Paper.
ESTIMATES for NEWSPAPER ADVERTISING FREE
Send 10c in stamps for AYER & SON'S MANUAL
THE

CHICAGO MEDICAL JOURNAL AND EXAMINER.

EDITORS:
S. J. JONES, M.D., LL.D.  W. W. JAGGARD, A.M., M.D.  H. H. MOYER, M.D.

A Monthly Medical Journal; 52d Volume.
SUBSCRIBE FOR IT. $3.00 PER ANNUM.

THE JOURNAL AND EXAMINER contains Ninety-six Pages of leading Medical, Benevolence, and Medical Literature, a rich supply of advertisements, and is issued on the first of each month.

The matter consists of Original Articles from the pens of some of the best known members of the Profession, Foreign and Domestic Correspondence, Reports of Societies and Associations, Reviews and Editorials, Items of interest to Physicians.

NEW YORK. Send in your Subscriptions now and we will send you back numbers to make present volume complete without extra charge.

Advertising Rates or Specimen Copies seal upon Application.

SUBSCRIBE NOW. $3.00 PER ANNUM.

Address CLARK & LONGLEY, Pub's,
163 & 165 Dearborn Street, CHICAGO, ILL.

SUNNYSIDE,

A PRIVATE MEDICAL HOME FOR NERVOUS INVALIDS,

204 LEFFERTS PLACE, BROOKLYN, N.Y.

This well-known Home, established eight years ago, with handsome furnished apartments, receives a limited number of either sex of MENTAL AND NERVOUS DISEASES, DIPSOMANIA, AND OPIUM HABIT, and offers to each patient all the attention, comfort, and attractiveness of a home, together with medical treatment. Application may be made either by mail or personally.

OPIUM HABIT AND DIPSOMANIA
receive special attention, and patients enjoy the strictest privacy.

EDWARD C. MANN, M.D., Medical Superintendent.

Consultation Hours until 11 daily, and after 4 P.M.
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 to the trial of cases in the courts which involve Medico-Legal questions.

The Price of the Medico-Legal Journal has been fixed at $1.00 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 assurance has been received from the ablest professional men 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 office of the Medico-Legal Society, or to CLARK BELL, Esq., Editor, 37 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 350 pages, issued by the Medico-Legal Society of New York, containing certain of the papers read before this Society, from January 1, 1875. It contains papers and articles by Dr. A. O. Kellog, Mr. Clark Bell, Mr. R. S. Courney, Dr. George M. Beadle, Dr. J. J. O'Flanagan, 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. Beadle, M. D., Dr. Connolly, Judge Beck, 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., STEPHEN LETT, M.D.,
Consulting Physician, 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.

YOU can live at home, and make more money at work for us, than at anything else in this world. Capital not needed, you are started free. Both sexes; all ages, termers free. Better not delay. Give me nothing to send your address and find out, if you are wise you will do so at once. H. HALLATT & Co., Portland, Maine.
MALTINE.

MALTINE is far superior in nutritive and diastatic value to any Malt Extract manufactured in the world. There is no reconstructive that excels Maltine in building up many wasting Diseases.

MALTINE, in its different forms, is the only Malt Preparation we now employ, being in palatable, digestible, and easily assimilated. Of its efficiency in appropriate cases there is no more doubt in our minds than there is of the curative power of Quinine, Cod Liver Oil, & Bromides, and the Iodides.

It deserves to stand in the front rank of reconstructive preparations, by their preventive, corrective, and curative power, are probably the most widely useful therapeutic agents that we possess.

J. MILNE FOTHERGILL.

Out of 12 trade samples of Malt Extract examined by Messrs. Lumian & Dimmock, only one possessed the power of acting on starch. These samples were Maltine, Coates, Story & Co.'s Extract, and Keppel's Malt Extract.

WILLIAM ROBERTS, M.D., F.R.S.

I have subjected "Maltine" and "Trommer's Extract of Malt" to an exact quantitative comparison of their diastatic activity.

The results demonstrate conclusively the far greater diastatic value of Maltine, and enable me to state, without any qualification whatever, that it far exceeds in diastatic power any of the six preparations of Malt which I have examined.

R. H. CHITTSERDEN,
Professor of Physiological Chemistry in Yale College.

At the International Health Exhibition held in London, England, the gold medal and the highest award of merit were given to Maltine by a jury composed of the best chemists in Europe, and recent analyses made by the most reliable authorities in Europe and America prove conclusively that Maltine—in nutritive and diastatic value—is superior to all other Malt preparations now on the market.

Note.—Physicians will observe that Maltine, as now prepared, is not so fluid as formerly made, being of a more fluid consistency; and, while retaining the nutritive and diastatic value, which has given it precedence over all other Extracts of Malt, it is rendered entirely agreeable to the taste of the most fastidious, and is more easily administered. As now prepared we positively guarantee that Maltine will not ferment or congeal in any climate or at any season of the year.

COMPLETE LIST OF MALTINE PREPARATIONS.

MALTINE (Pills), MALTINE with Phosphates, from, Quinia, and Strychnia.
MALTINE with Alkaline, MALTINE Fermented.
MALTINE with Cod Liver Oil, MALTO-VERMIF.
MALTINE with Hypophosphates, MALTO-VIBURIN.
MALTINE with Peptones.
MALTINE with Pernis and Pancreatin.
MALTINE with Cascara Sagrada.

Send for Pamphlet giving comparative analyses by twenty of the best Analytical Chemists in this country and Europe.

We will be happy to supply any regular practitioner with eight ounces each of any three Maltine Compounds that may be selected from our list, providing he will agree to pay express charges on same.

THE MALTINE MANUFACTURING CO.,
LABORATORY, Yonkers-on-Hudson. 182 FULTON ST., N. Y.
Peptoned Cod Liver Oil and Milk.

The finest division of oil globules reached in any emulsion or preparation of Cod Liver Oil. 

**Peptoned Cod Liver Oil and Milk.**

*No. 1.*

200 Diameters.

*No. 2.*

200 Diameters.

All preparations of Cod Liver Oil, but the plain, in the market, are Emulsions. It has been stated by some, regardless of the names given them. Their nature and ease of digestibility over the plain Oil must consist in the division of the oil globules. Any physician who has a microscope can compare **Cod Liver Oil and Milk** with the various preparations of Cod Liver Oil, and he will find that the oil globules of **Cod Liver Oil and Milk** are from 10 to 100 times finer than any preparation of Cod Liver Oil. In the market, and 5 per cent. finer than in nature's Emulsion, milk. This should be the guide to the use of Cod Liver Oil in every practice.

MRS. REED & CARNICK, New York City—Dear Sirs: I have examined your Peptoned **Cod Liver Oil and Milk** microscopically, with the following results: This preparation shows extremely minute oil globules suspended in a clear solution. The mean diameter of these globules is rather less than 0.0004 millimeter (about 0.0006 inch), and the largest is not over 0.0005 millimeter (about 0.0007 inch). For comparison it may be stated that the average diameter is from one-third to one-half that of the red blood corpuscles. These photographs show the oil as prepared in the milk, and Emulsions of cod liver oil in the market. They have all been photographed under exactly the same conditions. In some of the specimens, the globules, when spread out in a very thin layer, gather in clusters, giving an uneven field, but not affecting these data. Very truly yours, JAMES E. DUGAN, M.D., Ph.D., Feb. 26, 1885. Fellow in the Johns Hopkins University, Soc'y of Baltimore Microscopical Society.

**ANALYSIS OF PEPTONIZED COD LIVER OIL AND MILK** by Prof. Attfield, Ph.D., F.C.S., etc., author of a Manual of Medical and Pharmacological Society.

I have analyzed Peptoned **Cod Liver Oil and Milk**, and find that it is exactly what the makers claim it to be. The sample submitted to me has all the properties of a specimen prepared by myself except that its viscosity has produced a more perfect emulsion than my hand alone. This is submitted to a test with a microscope, that regards perfection of emulsion—

Peptoned Cod Liver Oil and Milk is in a finer state of division than the butter is in ordinary milk.

**JOHN ATTFIELD.**

Peptoned Cod Liver Oil and Milk is also combined with Hypophosphites of Lime and Soda.*

*Of the preparation of Oil on the market, No. 1 contained the largest and No. 2 the smallest oil globules in Peptoned Cod Liver Oil and Milk, in comparison with all the other preparations of Cod Liver Oil in the market.

Samples sent on application by Reed & Carnick, 6 Harrison St., New York.

VOL. IX.—28
A FREE COPY
OF THE
AMERICAN NEWSPAPER DIRECTORY,
WILL BE SENT,
CARRIAGE PAID,
TO
ANY PERSON
WHO IS
A PATRON
OF
GEORGE F. ROWELL & CO.'S
NEWSPAPER ADVERTISING BUREAU
TO THE AMOUNT OF
FIFTY DOLLARS.

Geo. F. Rowell & Co. have just issued a new edition (the 16th) of their Book called "Newspaper Advertising." It has 272 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:
DAILY NEWSPAPERS IN NEW YORK CITY, with their Advertising Rates.
DAILY NEWSPAPERS IN CITIES HAVING more than 120,000 population, omitting all but the best.
DAILY NEWSPAPERS IN CITIES HAVING MORE than 60,000 population, omitting all but the best.
A SMALL LIST OF NEWSPAPERS IN which to Advertise every section of the country; being a choice selection made up with great care, guided by long experience.
ONE NEWSPAPER IN A STATE. The best one for an Advertiser to use if he will use but one.
BARGAINS IN ADVERTISING IN DAILY Newspapers in many principal cities and towns, a List which offers peculiar inducements to some Advertisers.
LARGEST CIRCULATIONS. A complete list of all American papers issuing regularly more than 25,000 copies.
THE BEST LIST OF LOCAL NEWSPAPERS, covering every town of over 5,000 population and every important county seat.
SELECT LIST OF LOCAL NEWSPAPERS, in which Advertisements are inserted at half price.
5,179 VILLAGE NEWSPAPERS in which Advertisements are inserted for $1.00 a use, and appear in the whole at one-half of all the American Weeklies.
A copy of this book will be sent free by mail to any address on receipt of Fifty Cents.
Wells, Richardson & Co.'s

LACTATED FOOD,

REPORT OF ITS USE IN
ALCOHOLISM AND OPIUM HABIT,

By T. D. Crothers, M.D.,

Editor of Journal of Inebriety.

"The Lactated Food has been used in six cases of inebriety, and one of
morphinism.
In four of the cases of inebriety it was used in the stages of prostration fol-
lowing inflammation of the stomach, from excessive use of spirits. In two of
these cases it served to allay the vomiting, and was followed by a rapid ces-
tation of all the acute symptoms. It was given in these cases alone for two days
with the best results. In the third case it greatly lessened the vomiting, and
acted as a stimulant. In the fourth case no effects were noticed; but two days
after when the acute symptoms subsided it was given with marked stimulant
action. In the fifth and sixth case of inebriety, it was given in large doses at
night and seemed to stop all uneasy stomach sensations, and quiet the nervous
system like a narcotic. It was given for the insomnia in both cases with
general good results. In the morphia case it was taken in the middle of the
night to produce sleep, and also in the daytime as a stimulant in the place of
beef tea. The taste became unpleasant to the patient, but this was overcome
with oil of wintergreen, and its use was continued as a stomach and brain stimu-
ulant with marked good results."

No Preparation Equal to it in the Opium Habit and Inebriety.

SUMMIT PRIVATE HOSPITAL FOR NERVOUS AND MENTAL DISORDER.
200 LEFFERTS PLACE, BROOKLYN, N. Y., JUNE 19, 1886.

"I have given Lactated Food, made according to published formula, a good thorough trial
in cases of the Nervous System, and also in the Opium Habit and Dipsomania, and have
been greatly pleased with the results that have followed its administration.
It is a diversified digestion depending on nervous function, alteration of the saliva, digestive
action of the gastric juice, pancreatic indigestion, intestinal indigestion, and toxicity of the liver,
it has proved itself a desirable and useful remedy, and I have no hesitation in recommending it to
my professional brethren. There is no preparation equal or in the opium habit and inebriety.
"EDWARD C. MANN, M. D."

If any physician that has not yet made a trial of the Lactated Food will write us, we will
send a package of our regular size, post-paid, without charge, with the understanding that it will
be given a careful trial as soon as possible.

We shall see every precaution to maintain the high standard of this Food, and to insure
perfect satisfaction to the profession in its use.

WELLS, RICHARDSON & CO.,
BURLINGTON, VT.
A SELECT PRIVATE HOME
AT BURLINGTON, NEW JERSEY,
FOR NERVOUS INVALIDS,
WHO ARE MORE SATISFACTORILY TREATED AWAY FROM THEIR OWN HOMES,
SUCH AS MIND AND HABIT CASES,
INSOMNIA, HYSTERIA, PROSTRATION FROM
OVERWORK, AND ALLIED CONDITIONS.

APARTMENTS.—Large, well furnished, convenient, and cheerful.

BATHS.—Russian or Vapor, Medicated, and Electric.

NUMBER OF PATIENTS.—Limited to five, thus admitting of
direct personal treatment of each patient by the physician.

For further information address:

JOSEPH PARRISH, M.D.

BURLINGTON, NEW JERSEY, U. S. A.

January 1, 1886.

Edwin Alden & Bro.

For cost of advertising in any paper or
list of papers published in the United
States or Canada, send to the ADVERTIS-
ING AGENCY OF EDWIN ALDEN & BRO.,
Cincinnati, New York,
Corr. 5th & Vine Sts., 117 Broadway, Street.

* Our "Newspaper Combinations," a book of
150 pages, containing prices of advertising. All
instructions, etc., sent on receipt of 50c. Our "Am.
Newspaper Catalogue" containing names of every
newspaper published in the U. S. and Canada,
sent on receipt of price, $1.50. Estimates free.
THE BENEFIT

OF THE
FREE SURGICAL HOSPITAL FOR WOMEN,
supported by the
Murdock Liquid Food Company, Boston,

Is being recognized in all parts of the United States. Ladies suffering for the want of an operation (known as capital case) are coming from all sections.

Liquid food is given before and after all operations.

The quarterly report ending June 1, 1887, shows

132

Operations were made, and the patients came—

1 from Texas.
2 from Colorado.
1 from Montreal.
2 from Alabama.
5 from Prince Edward Island.
4 from Connecticut.
4 from Vermont.
10 from Maine.
4 from New Hampshire.
97 from Massachusetts, from 29 towns and cities.

Any physician having a surgical case can have a bed assigned to them by informing us of the case.

In addition to our

150 FREE BEDS,

we have just completed a Septic Hospital of 12 Free Beds, all for Surgical Cases.

The Surgical Staff at Murdock’s Free Hospital for Women are in daily attendance, except Saturdays, to examine patients and assign beds.

EVERY BED FREE.

Cases have been built up by the use of our Liquid Food for 30 to 60 days so that the wound healed without the aid of an operation. We also have cases where life has been sustained by its aid alone for several days. When not retained by the stomach, injections can be given with success.

Liquid Food is adapted for all ages, in health or disease, as it will make, by the use of one tablespoonful four times daily for an adult, eight per cent new blood weekly. It is recommended by the Medical Profession as the ONLY RAW FOOD KNOWN, free from insoluble matter, drugs, minerals, salts, or acids, and carries the blood corpuscles.

If a baby does not thrive, never change its food, but add five or more drops at each feeding, and its lost or needed vitality will be developed in 30 days.

Our Free Home for Homeless Boys contains 50 beds, and is located at 11 to 21 Causeway Street. When any of the boys suffer from Scarletta, Eczema or other skin diseases, they recover quickly by the use of our Liquid Food.

We use in our Hospital 300 large bottles of every lot made. This gives a guarantee of sweetness of every bottle sold, and is not given by any manufacturer or any other preparation in the world.
THE QUARTERLY JOURNAL
OF INEBRIETY,
PUBLISHED AT HARTFORD, CONN.,
IS THE
ONLY JOURNAL PUBLISHED DEVOTED TO THE MEDICAL STUDY
OF
INEBRIETY, ALCOHOLISM, AND OPIUM MANIA.

Every leading and professional man who would keep up with the progress of
the times, should read this Journal.
It comes home to every one who is interested in this topic, full of suggestion
and-instruction, pointing out the practical solution of one of the most difficult
problems of modern times.

Subscription Price, only $2.00 per Year.

TO ADVERTISERS.
This Journal was established in 1876, and is the organ of the AMERICAN
ASSOCIATION FOR THE CURE OF INEBRIATES, and taken in all the Asylums
and Hospitals in this country, and many in Europe. It is accepted as
authority, and circulated among physicians, lawyers, judges, and philanthro-
pists, from Maine to California, and in the Provinces of Canada, and all the
European nations.

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

WALNUT LODGE, HARTFORD, CONN.,
FOR THE
SPECIAL TREATMENT* OF
INEBRIATES AND OPIUM CASES.

Such persons are recognized as diseased, requiring absolute removal from
temptation; rest, change of thought and living, with legal control; also, every
means known to science to bring about restoration. These combined with
pleasant surroundings, and the influence of a true CHRISTIAN HOME, give
assurance of a permanent cure in most cases. The Lodge is attractively located
in the suburbs, where a limited number of patients are received, all of whom
come under the direct personal care and supervision of the physician.

Address,
T. D. CROTHERS, M. D., Supt.,
HARTFORD, CONN., U. S. A.
The Inebriate's Home, Fort Hamilton, N.Y.
INCORPORATED 1866.

A HOSPITAL for the TREATMENT of ALCOHOLISM and the OPIUM HABIT

President: Hon. GEORGE G. HERMAN. Vice-President: SAMUEL A. AVILA.
Secretary: WILLIAM M. THOMAS. Treasurer: J. D. WHITMORE.
Assistant Treasurer: A. BLANCHARD, M.D. Assistant Treasurer: J. D. MASON, M.D.

The buildings are constructed of the best materials and are admirably adapted for the treatment of inebriates and those suffering from the Opium habit. They are situated on one of the most attractive points on the Bay of New York, and stand on a hill five feet above high water. The view comprehends a fine prospect of the Upper Bay and Long Island Sound, with the great banks of sand and the broad expanse of the Upper and Lower Bay, dotted with the representative ships of all nations, and framed on the horizon by the fine outlines of the Seven Sisters of the North shore of the Atlantic Ocean, the Brandon Point, Brightwater Island, and the hills of Brooklyn and the mountains from which the sea takes its name. There is also a lecture-room for religious services, reading, concerts, etc. All the New York papers and other periodicals are regularly received here.

THE MANAGEMENT is economical, thorough, and capable. There has been no failure in the management and in the medical officers since the inauguration of the home.

THE CLASSIFICATION of patients is based upon the peculiarity of the institution. Being a religious and philanthropic society, the management is made to depend upon the character of the patient, and the knowledge and skill of the medical officers as to his habits and his position in the home.

By this equitable arrangement we are enabled to offer board, lodging and medical attendance at rates varying from $10 to $20 per week. Those paying $20 upwards, according to the size and situation of quarters selected, are provided with a single apartment and a seat at table in private dining-rooms. The accommodations in the select rooms and the table being in every respect equal to those of a first-class hotel.

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

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

Patients are received either upon 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.

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

A Palatable Preparation of Coca Erythroxylon.

Containing in an agreeable vehicle the active medicinal principle, coca (with the bitter, astringent constituents of the drug).

The sweet and soothing effects of Coca Cordial have been long noticed by the profession. It is recommended for the prostrated and the debilitated, and is especially useful in nervous and dyspeptic cases. It may be used alone or with other remedies. It is equally adapted for internal use, and is made into a delicious cordial.

In a great variety of affections it has proved itself to be a truly ranking in therapeutic importance with opium and quinine.

The Coca Cordial presents the drug in a palatable form, commending it especially to the large class of persons of delicate nervous organization, for whom it is most often indicated.

In its preparation the astringent and bitter constituents of Coca which are not essential to its medicinal action have been eliminated, while care has been taken to retain unchanged the active principle, coca. "One fluid-ounce of the cordial represents sixty grains of coca, leaves of good quality, the vehicle employed being an agreeable cordial of a rich vinous flavor.

If we shall be pleased to send on application a circular more fully descriptive of Coca Cordial and its application, and we trust physicians will communicate to us the results of their experience in the use of this preparation, so far as it is likely to be of general interest to the profession.

PARKE, DAVIS & CO.,
Manufacturing Chemists.

NEW YORK:
65 Maiden Lane and 21 Liberty St.

DETROIT, MICH.