## THE QUARTERLY JOURNAL

OF

# INEBRIETY.

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

T. D. CROTHERS, M.D., Editor.
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#### TABLE OF CONTENTS.

JANUARY, 1898.

	Page
ADDRESS ON THE TWENTY-SEVENTH ANNIVERSARY OF THE AMERICAN ASSOCIATION FOR THE STUDY AND CURE OF INEBRUETY. DR. LEWIS	
D. Mason,	1
THE PROGNOSIS OF INEBRIETY. Dr. J. M. FRENCH,	17
ALCOHOLISM IN WOMEN - ITS CAUSE, CONSEQUENCE, AND CURE. DR.	
AGNES SPARKS,	31
NEW AND SUCCESSFUL METHOD OF TREATMENT FOR THE OPIUM HABIT	
AND OTHER FORMS OF DRUG ADDICTION. DR. J. E. KELLOGG,	58
THE FIRST INEBRIATE ASYLUM AND ITS FOUNDER. DR. CHARLES H.	
SHEPARD	50
ON EPILETSIA ALBOHOLICA. DR. HEINRICH, STERN,	81
ANNUAL MEETING OF THE ASSOCIATION FOR THE STUDY AND CURE OF	
INEBRIETY,	97
ABSTRACTS AND REVIEWS:	
FEMALE INEBRIETY	101
INEBRIETY IN FRANCE.	104
EDITORIAL:	
- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1-	121212
STUDY OF INEBRIETY,	111
Lecture Bureau,	113
CROOKED IDEAS,	114
BIASED JUDGMENT,	117
NEW METHODS OF TREATMENT FOR INEBRIETY,	119
THE ANNUAL MEETING,	120
CLINICAL NOTES AND COMMENTS,	122

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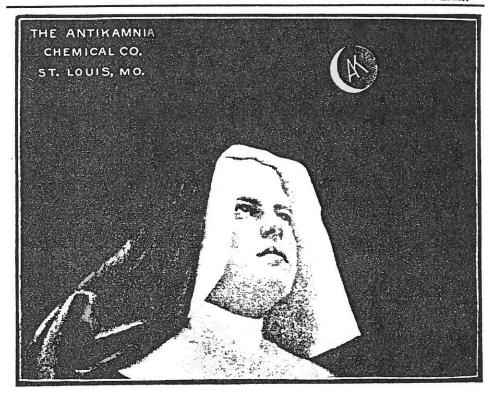
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J. EDWARD TURNER, M.D.

#### THE

#### QUARTERLY JOURNAL OF INEBRIETY.

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JANUARY, 1898.

No. 1.

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

AN ADDRESS ON THE TWENTY-SEVENTH ANNI-VERSARY OF THE "AMERICAN ASSOCIATION FOR THE STUDY AND CURE OF INEBRIETY."\*

By Lewis D. Mason, M.D.

President of the Association.

Friends and members of the American Association for the Study and Cure of Inebriety:

The meeting organizing this association was held Nov. 29, 1870, in the parlors of the Young Men's Christian Association of the city of New York.

This is, therefore, the 27th annual meeting. It was my privilege to be present at the first meeting — the meeting of organization. I was a "looker on in Venice" — a junior curious to see what my elders would do — I am positive, however, that no one then present realized or fully seized in his mental grasp the magnitude of the work undertaken, and the many years of toil and weariness that would necessarily elapse before even approximate success could be attained, for it was nothing less than to radically change public opinion on a subject almost as old as humanity itself; at the second session, held

<sup>•</sup> Delivered before the Association at a meeting held in the Washingtonian Home, Boston, Mass., December 8, 1897.

Wednesday, Nov. 30th, the following preamble and resolutions were "carefully considered and unanimously adopted."

Whereas the "American Association for the Cure of Inebriates" having met and considered important essays on the various relations of inebriety to individuals, to society, and to law, and having seriously determined to use their influence in all suitable ways, to create a public sentiment and jurisprudence, which shall co-operate with true methods for the recovery of inebriates, do make the following declaration of their principles:

1. Intemperance is a disease.

- 2. It is curable in the same sense that other diseases are.
- 3. Its primary cause is a constitutional susceptibility to the alcoholic impression.
- This constitutional tendency may be inherited or acquired.
- 5. Alcohol has its true place in the arts and sciences. It is valuable as a remedy, and, like other remedies, may be abused. In excessive quantity it is a poison, and always acts as such when it produces inebriety.
- 6. All methods hitherto employed having proved insufficient for the cure of inebriates. The establishment of asylums for such a purpose is the great demand of the age.
- 7. Every large city should have its local or temporary home for inebriates, and every state one or more asylums for the treatment and care of such persons.
- The law should recognize intemperance as a disease, and provide other means for its management than fines, stationhouses, and jails.

These principles were, a year later at the annual meeting, reiterated by the following resolutions offered by a special committee:

Whereas, It is the practice of many persons to denounce inebriety as a crime, and inebriates as sinners, and

Whereas, Such persons are reluctant to admit the fact that inebricty is a disease, lest such admission should seem to palliate the offense and relieve the inebriate of responsibility; therefore,

Resolved. As the expression of this association, that we are dealing with inebriety as a disease, without reference to the motive or want of motive in the inebriate himself.

Resolved. That the effect of poison on the blood and nervous system, and the reflex action of this morbific agent upon the whole physical structure is the same in the virtuous as in the ricious, and that antecedent or subsequent moral conditions are incidental to the main fact of disease.

Resolved. That any average percentage of public crime being accounted for by the fact of the confirmed inebriety of the criminal does not, in our opinion, increase the responsibility, nor should it add to the punishment of such offenders.

Resolved, That we have no controversy with the dogma of criminality as applied to the act of drunkenness, while we do not charge the inebriate with being a criminal.

Whereas. Intemperance is a fearful drain upon the productive interests of the community, which is increasing in magnitude every year, and

Whereas, The measures hitherto adopted to suppress or

even curtail this evil have been unavailing, therefore

Resolved. That in the opinion of this association it is the duty of legislatures, as a measure of State economy, to provide means for the erection and encouragement of hospitals for the detention and treatment of inebriates.

Thus this association spoke with no uncertain sound when it took its place and asserted its position before the tribunal of public opinion; no equivocation or retraction has escaped its lips since it commenced to speak on this subject; for nearly twenty-seven years it has been consistent and faithful to its principles as already expressed.

This "declaration of principles" was in reality a "declaration of independence."

It was diametrically opposed to the pre-conceived notions of Church and State, and the medical profession, if they did not oppose it, gave feeble support, if any.

The Church maintained that the disease theory of inobriety was directly opposed to spiritual and moral law, "no drunkard could inherit the Kingdom of heaven." and it was an attempt to convert a "vice" into a disease, and could not fail to put a premium on vice and increase the vicious habit under the supposed phase of disease.

#### 4 Address on the Twenty-seventh Anniversary of the

The State maintained that the assertion that inebriety was a disease rendered the inebriate irresponsible for his acts, and so undermined and disturbed the criminal code as pertaining to drunkenness, and medical jurisprudence would have to be revised. As to the medical profession, the larger proportion ignored and a certain number opposed the disease theory of inebriety, while the secular and religious press began to decry the presentation of such a pernicious theory; the former denouncing this "coddling of drunkards," and the latter made its assaults in the name of morals and religion. So that we may frankly assert that all the professions, the press, and public opinion were positively opposed to us. It is easy to conceive then that the proclamation of the declaration of our principles, through the medium of the press, created a social agitation that even at the present time is hardly quiescent.

When Luther nailed his celebrated theses against indulgences to the door of the Castle church of Wittenburg, on that memorable night of All-Saints Eve, the sound of his hammer was heard throughout Europe, from the throne of the Vatican to the remotest confines of Papal supremacy; and as its echoes resounded then not only through Germany but throughout the whole civilized world, overthrowing superstition and error, and enthroning righteousness in the hearts of the people, so this meeting, its members small in numbers, but strong in the consciousness of the correctness of their assertions, took that action, that agitated the whole social fabric, and caused ignorance and error to tremble on its throne; and as the German monk defied the papal hierarchy, doing that which he knew might be fatal to himself, so these men, not to better their condition, but apparently in opposition to their worldly interests, and opposed to public opinion, proclaimed their Theses, that which they believed to be the correct view concerning alcoholic inebriety. And as Luther lived to see Germany freed from the papal voke and the principles he taught established even beyond the seas, so some of us have lived to

see Church, State, the medical profession, and the intelligent public converted to our views, which at first they so And now these original principles, unviolently opposed. altered "one jot or tittle," remaining as they were proclaimed, are incorporated in the advanced scientific thought of to-We believe that the influence of this first meeting will go on, through all time, that there will not be any retrograde movement, and to-day we hand down, as a most sacred charge to our successors, this declaration of our principles; safeguard them, defend them if need be; demonstrate, advance, and incorporate these principles in the professional, scientific, and secular thought of your day.

Under the disease theory of inebriety we have developed laws for the control of the inebriate and put into operation agencies establishing, regulating, and sustaining special asylums for his care.

Laws both foreign and American have been amended or enacted to meet the necessities involved in regarding inebriety from the new standpoint, and all civilized nations have considered, or are considering, a subject so pressing, so urgent, so vital to every community: the care and control of the inebriate.

And now, in compliance with the law of demand and supply, and fully in accord with the sentiment of the times, we see public asylums and private retreats established and being established, at or near the great centers of population in every civilized community.

But as in the moral world there is good and evil, religious true and false, consistency and hypocrisy, so in the material, the substance, the shadow, the gold, the spurious metal, in each case the antithesis, the direct opposite in character, and yet so often and so artfully disguised that the very elect in religion and morals are deceived, and the scientist by the temporarily successful imitation of the fraudulent substitute for the original. So legitimate medicine is ever shadowed by charlatanism, its antithesis, and yet its too often successful imitator; and

Vol. XX. - 2

so, clothed in the lambskin of legitimate medicine and borrowing the disease theory of inebriety, a wolf, in the most gigantic, arrant, and unmerciful form of quackery that ever invaded a nation, stalked around with the effrontery that characterizes every form of chicanery, even entered the pulpit, sought and received the endorsement of the secular and religious press, posing as an angel of light, hiding the cloven foot of diabolicism in the folds of a mantle of fictitious charity, transforming inebriates not into sober, decent members of society, but into mild forms of chronic dements or possibly precipitating them into the more active forms of insanity in the remarkably short space of thirty days, provided suicide or sudden death during a supposed period of convalescence did not supervene.

The legitimate result of all forms of quackery, sooner or later, is collapse, but not extinction, simply change of form, which is protean.

> "Age cannot wither her or custom Stale her infinite variety."

It has been so, and so it will always be.

But an imperfect or incorrect copy of some fine painting does not impair the original. Look upon a copy of the celebrated masterpiece of Leonardo di Vinci, and then turn and gaze upon the original mural painting, time-stained, faded, and partially obliterated, and yet how the master-hand is seen, and how far it exceeds any attempt at imitation; and so art will ever have its imperfect, deceptive imitations, and medicine its charlatanism; but as virtue will ever be triumphant over vice, so both art and medicine will ever remain upon their lofty pedestals, undimmed, untarnished.

A very curious and interesting incident that ushered in this special form of quackery was the enthusiastic reception that it received from the secular and religious press, and eventually from the general public. The same press and public that had flung (metaphorically) every objectionable epithet at the original promotors of the disease theory of inebriety, now, under the form of charlatanism, applaud it to the very

How strange, how passing strange, is the inconsistency of man! Public opinion nailed to the cross as a malefactor the only true representative of Divinity that ever trod this sin-cursed planet, and public opinion shouted when the corrupt and blasphemous Herod spoke; "It is the voice of a God." Human nature is the same to-day as it was 2,000 years ago, and " vox populi" is not always " vox Dei."

Like "The moon, the inconstant moon, that monthly changes in her circled orb," public opinion proves likewise variable, and so is it to be wondered at that under the guise of quackery the originators of the so-called "cures" are often lauded to the skies? "Sic transit gloria mundi," and as earthly glories perish, was our well-beloved theory in this instance to perish in the mud and slime of vulgar quackery. Nay, we may regard the disease theory of inebriety as fully established, for has it not been born in the throes of legitimate medicine. Let us not be discouraged because a likely child, of golden promise, in its early youth has been . kidnapped by the old witch of charlatanism and forced to parade in the tawdry spangles and drapery of a third-rate comedian. But this little cyclone of quackery is waning, its violent struggles to attain continued recognition are now feeble, its attempted grasp on legislative action as a rule has not been successful, and we may say that legitimate medicine, temporarily overshadowed, again is recognized as it has always been the special field and only authority on this important subject, and those who were temporarily dazzled by the prospect of vast fortunes suddenly attained have found the Klondike of their hopes, cold, barren, and distant, and all that remained of their investment hunger, starvation, fever, cold, and frost, and those of the regular profession who, alas, strayed from the safe fold of legitimate medicine have returned laden with the

necessary yet costly experience that "all is not gold that glitters."

There is, we believe, a great lesson to be learned here, and the duty ought to devolve on all regular medical societies, our association and kindred associations, to unite always in opposing all forms of quackery affecting any department of medicine, and act together, act promptly and effectively; for have we not all a common interest in maintaining the honor and dignity of our profession and in protecting society against that ruthless invader, that hydra-headed monster, quackery? It was a matter of surprise to note that institution after institution was established under this peculiar form of charlatanism, without leave or license from town, county, or state, receiving and treating persons whose mental condition was at the best very feeble, presenting opportunities for concealed fraud, and even secret acts within the confines of the penal code. Such a condition could not prevail in Europe, ought not to prevail here, and it would be well if this association would carry out a resolution passed at a meeting of this society held March 23, 1893, at the New York Academy of Medicine, in order to discuss the subject, "Secret and Specific Cures for Alcohol and Opium Inebriety."

Resolved, "That it is the sense of this meeting that all institutions for the care and treatment of those addicted to the use of alcohol, opium, or kindred drugs, should be under the supervision and inspection of a state commission which should consist of experts in these specialties, and which should exercise its duties, under the same privileges and opportunities as are now extended to a similar commission consisting of experts on insanity, whose duty it is to supervise and inspect the care and treatment of the insane in the various insane asylums of the state."

The passage of such a law, based on this resolution, would drive "institutional quackery" out of the land, and limits its sphere to bottles, conspicuous labels, and lying circulars.

This association at the meeting referred to was ably

seconded by the medical press. At that time and at all times this society has opposed all forms of quackery, and all legislation or public action favoring such, and, as a rule, has been successful. As an association we should be strongly organized to secure legislative action in the various states, favorable to the advancement of the objects for which this association was founded, and opposing all forms of legislation detrimental to the interests we have endeavored to establish.

We have thus dwelt on this phase of the subject because we believe our specialty - the cure of alcoholism and kindred drug "habits"— is a most inviting field for quackery and venders of patent medicines, etc., and we would urge this association to learn the lesson of the past, "To lengthen its cords and strengthen its stakes:" advance to a wider field of activity, do not simply act on the defensive but also on the offensive, and enter upon the warfare with determination to expose and pursue with relentless activity all measures that will suppress an evil that, while professing to cure, is too often the cause or continuance of the alcohol and other drug habits.

This association does not, however, limit its study to the cure of inebriety alone, but considers it in its various other phases, and especially does not fail to recognize the fact that the old adage, "An ounce of prevention is worth a pound of cure," applies with equal force to inebriety as to other forms of disease, and apprehending that not the cure, but the prevention of disease is the "crowning glory of medicine." We study not only how to cure inebricty, but the means also to prevent it, and so prophylaxsis is fully considered, and hence we encourage all measures that would dissipate ignorance as one cause, and to endorse and act in concert with the effort to establish instruction in "physiological temperance" as now taught in the public schools, a system inaugurated in and emanating from the city of Boston. The respected head of this method is one of your own talented townswomen, the fame of whose endurance, courage, and intelligence is not only local, but transatlantic, and wherever the young are taught

and schools established her honored name will go down to posterity.

This association has also a "committee on nostrums," a standing committee whose business is to report at the regular annual meeting and at stated meetings the result of its analysis of so-called cures or specifics for the cure of alcoholism and other drug habits. The efficient chairman, Dr. N. Roe Bradner of Philadelphia, and his associates did most effective We can only now refer to this very full report which was most favorably received by the medical profession and the press. In this report it is demonstrated from the analysis of many specimens that the so-called cure was either incrt as far as active principles were concerned and so were mere frauds, or when an active agent was employed, alcohol "substituted" alcohol when the "cure" was for "drunkenness," and opium or its alkaloid when the cure was for the "opium habit." We commend this report to all interested persons, and trust that the committee will extend its examinations by chemical analysis, not only to the so-called cures for the alcohol and opium habits but to that large class of patent medicines for various painful affections, as neuralgia, rheumatism, or gout, the basis of which is not unfrequently a narcotic, disguised in some form and speciously advertised as "purely vegetable and perfectly harmless."

Lamentable examples are not infrequent where persons have innocently become the victims of the alcohol or opium habit or that of other drugs of pain-relieving properties through these drugs artfully concealed in proprietary medicines, and it is the duty of this association through its special committee to warn the public against all such nostrums; let us trust that this committee will continue to be vigilant, active, courageous in the special line of duty it has assumed, and that they will receive not only the encouragement and support of the medical profession but of the public also, whose interests in this particular they have volunteered to protect.

One leading object of this association has been educational,

and its views have not only been presented in the JOURNAL OF INEBRIETY, the organ of the association, but in the medical and secular press, and the voice of its various members have been heard from time to time in prominent medical societies, notably "The American Medical Association" and "The New York Academy of Medicine." presenting and defending the cause we represent. On the other side of the Atlantic our members have been repeatedly received and honored, and their advice and experience sought in the framing of laws that should control and in establishing asylums that should shelter the inebriate.

It would ill-become me to pass over in silence the one thing that to my mind has done much more than any one thing to mold public opinion and bind the old world to the new in this departure of progressive medicine. It must be said that without the faithful, conscientious, untiring energy evinced in the conduct of the JOURNAL OF INEBRIETY our mission would have been a failure.

Foreign as well as American thought has flowed through its pages as a stream ladened with rich treasure.

No book has issued from the American press, on the subject of inebriety from the pen of any individual member of this society. It was needless, it would have been simply a repetition of facts already well and widely known through the medium of the Journal; hence, when the subject was discussed, as to the publication of our views in book-form, a selection of papers published from time to time in the Journal, was issued in such form, constituting a most valuable addition to works upon the subject of inebricty in its various phases. We may also add that any one who is the fortunate possessor of a complete file of the Journal of Inebriety to date has the best library on the subject extant, for in the pages of the Journal the best thought by the most competent writers on this subject has expressed itself for the past twenty-seven years.

We cannot now particularize in detail the many valuable

essays that have emanated from our association, or from our members in connection with other associations, but among the most important subjects discussed we may make mention of the following:

Inebriety from a psychological standpoint and its relation to medico-legal jurisprudence.

Alcoholic Coma and its differentiation from other forms of coma, especially with reference to the care of persons found unconscious on the streets or elsewhere by the police.

A report of the Committee on Nostrums on the so-called "cures" for the alcohol and opium habits, and a report by a special and joint committee of the American Medical Temperance Association and this Association, on Alcohol in Modern Therapeutics, being conclusions drawn from the answers of many physicians to fifteen leading questions on this all-important subject.

To epitomize briefly, our position is as follows:

1. Beginning as an association November 29, 1870, we have held annual meetings since that date and occasionally special meetings.

2. We have published a quarterly journal during twentytwo years of that period. We have published a volume of

essavs.

3. We have read and published as an association several hundred papers bearing directly on the subject of "Alcoholic Inebriety," or kindred drug habits.

4. Our testimony has stimulated inquiry and investigation all over the scientific world, and has influenced and secured the establishment of "inchriate asylums" and special legislation affecting inchriates here and elsewhere, and the organization of similar societies in England, France, Germany, and Sweden.

5. We have stimulated scientific research in this field of

medicine by the proper award of prizes.

 We have, by our special committee, advertised and exposed, by proper chemical analysis, many nostrums and proprietary medicines and so-called cures for the alcohol and opium habit.

- 7. The literature of inebriety has been greatly enhanced by the original observations of our membership, the subject-matter of whose essays would fill many volumes and have been of great value to those who desire to study the subject from the files of back numbers of the Journal of Inebriety, the organ of the association. From these essays passages have been freely quoted by writers in France. England, Germany, and Russia.
- And finally, we have put on a definite basis, amidst much opposition, the only tangible and true method of dealing with inebricty, namely, as a disease.

As a result of the work of this association the law is much more lenient than formerly to the inebriate, and the confirmed alcoholic inebriate, or the victim of any drug habit, has the plea of irresponsibility now advanced in his behalf, and we have no doubt but that in time this class of persons will have the law as liberally construed for them as it is now for the insane, in degree at least. In this connection we desire to refer to the co-operation of the Medico-legal Society of New York city, and especially the valuable essays of Clark Bell, Esq., its honored president, on the relation of medico-legal jurisprudence to inebriety.

The action of the members of this association, more especially through the Kings County Medical Society of Brooklyn, N. Y., has rendered the care of persons found unconscious on the streets much more consistent with the laws of humanity and medical science than formerly.

And we have no doubt but that the reports and papers on the subject of "Alcohol in Modern Therapeutics" as well as the consistent precept and example of leading members of our association, as well as similar societies here and elsewhere, has done much to very greatly limit the indiscriminate use of alcohol in modern practice at home and abroad.

We might consume a great deal of your time in giving in detail the more important features of the work of this association, that which it has accomplished, and the influence it has exerted, but as the time is limited, let us hasten to present briefly the practical issues of the hour. We need

Vol. XX. - 3

First, adjunct societies made up of the medical representatives of all institutions, state or private, that either wholly or in part devote themselves to the cure of inebriety and kindred habits. Such organizations are needed in every important state in the Union, based on the principles and methods that govern this, the parent society.

The advantage of each state having its special organization would be in interesting and invoking legislation in behalf of laws that should control and care for the inebriate and in establishing private and public asylums in his behalf.

Second. Every state ought to secure the enactment of laws that would protect society against secret and pernicious nostrums or patent medicines, and charlatanism in any form, and especially nostrums or specifics for the so-called cure of alcoholism and the opium or kindred habits.

Third. To secure the enactment of laws in every state that would subject all institutions for the cure of alcohol, opium, or kindred habits to regular official inspection in the same manner that public and private asylums for the insane are now subject to stated inspection; such a plan put into vigorous action would do away with "institutional quackery."

In addition to the above suggestions, stated organizations, and special legislation, let me call attention to the JOURNAL OF INERRETY, under the management of an editorial committee,— Dr. T. D. Crothers being the editor-in-chief. Its pages are open to all original and useful contributions on subjects pertaining to inchriety and kindred drug habits. The influence of the Journal would be largely increased in proportion to the number of its subscribers and the membership of this organization, and we commend this matter to your serious attention, and urge you to take all legitimate measures to increase the circulation of the Journal and widen its sphere of influence.

Johnson, the noted lexicographer, once said, "I remember a passage in Goldsmith's 'Vicar of Wakefield' which he was

afterwards fool enough to expunge, it was this: 'I do not love a man who is zealous for nothing.'"

We might change this saying of Goldsmith's and assert, "We do love a man who is zealous for something," provided that something is worthy of zeal; and what better incentive to your zeal could I hold out than to make this organization so useful in the past, in organization, membership, and influence, second to none in the Union, not in the spirit of ambitious strife, but because "It is good to be zealously affected always in a good thing."

But as a proper underlying motive should be the originator and sustainer of all well-directed and successful zeal; so if you will analyze the motives of the founders of this association, it will appear that they were animated not alone by a scientific spirit which justly and properly directed their efforts, but their simple faith, unbounded courage, and scientific knowledge were tempered with compassion for that vast multitude whose condition was misunderstood, who were regarded as criminals, social outcasts, parials of society.

"For God and our fellowman" was the sentiment actuating the motives of our predecessors, and every true reformer should inscribe upon the standard under which he wages warfare, this legend, and underneath:

#### "In hoc signo vinces."

May the mantle of those who have gone before, the pioneers of this glorious work, fall upon worthy shoulders; and may the motive and spirit that actuated them actuate us in the prosecution of our efforts to redeem from despair and ignominious death a great multitude of our fellow-men.

And let us not forget. -

"Man's only relics are his benefits.

These, be there ages, be there worlds between,

Retain him in communion with his kind."

Here, in this venerable city, from whose steeples in colonial days rang out the alarum when the liberty of her citizens was threatened, or peals of joy when victory crowned their efforts, and where in later days from platform and from pulpit her orators pleaded for humanity and the brotherhood of man.

Here, under the influence of the venerable past, and surrounded by historic memories, let us renew our allegiance to our principles and resolve to set in full and effective motion those agencies that shall rescue our fellowman from a yoke more galling and a burden more oppressive, more fatal, than the greatest tyrant ever imposed upon a people, or the darkest slavery ever witnessed.

#### SYMPTOMATOLOGY OF ALCOHOLISM.

A careful study of 400 alcoholics has been made during the last fifteen years at Zurich under Forel's supervision, and again the fact of heredity is emphasized; 43 per cent. of the cases had one or both parents alcoholic, and 40 per cent. had nervous or mental antecedents. Fifteen per cent. of the patients were wholesale or retail dealers in liquors. One hundred and thirty-two out of 346 had become alcoholics without drinking liquors, consuming merely beer, wine, or ciders. Alcoholism is most frequent between 20 and 60 (93.5 per Below that age a case is almost sure to be direct cent.). heredity. All the cases showed various physical, mental, and moral alterations: degeneration of the heart, arterio-sclerosis. affections of the stomach, tremor, ataxia, pupillary troubles, general denutrition, etc. One-fifth were sexual perverts (hyperesthesia, precocious debauchery, inversion, exhibitionism). Fourteen per cent. were epileptics: in six cases the attacks followed alcoholic excess and disappeared entirely when the patients refrained from alcohol. The point is noted that the griefs to which patients frequently refer their alcoholic excesses are often found to have followed them. — Ann. d. Soc. Méd. Chirode Liége, June.

#### THE PROGNOSIS OF INEBRIETY.\*

By J. M. FRENCH, M.D.,

Medical Director Elmwood Sanitarium.

Th question of the prognosis of inebriety, in the sense in which I shall consider it, does not concern itself so much with the probabilities of a cure of the disease as with the possibilities of its return. It does not question the fact that the craving for alcohol may be completely eradicated, and the nervous system in great measure restored by a proper course of medical and hygienic treatment continued for a sufficient length of time; nor does it deny that under proper conditions the disease which has been removed need never return. It does inquire what these proper conditions are, and how and to what extent they may be obtained. It does consider the difficulties in the way of securing permanent results, and study how they may be overcome.

It must be remembered that inebriety follows the same lines as other diseases, and must be judged by the same general principles. Let us compare it with such diseases as diphtheria, malarial fever, or consumption. We do not consider that a second attack of diphtheria argues against the curative power of the anti-toxin which was injected at the time of a previous attack. If a man has once suffered from any form of malarial disease, we understand that, no matter how radical or effective may have been the treatment which was given him, if he remains in a malarial region, and continues to breathe an atmosphere laden with the bacilli malariae, the disease will be wellnigh certain to return. We do not deny the possibility, or even the reality in a considerable proportion of cases, of a cure of consumption, in so far as the healing of the lesions

<sup>\*</sup>Read at the Twenty-seventh annual meeting of the Association for the Study and Cure of Inchristy,—Dec. 8, 1897.

and the disappearance of all active symptoms constitute a cure. But we know that, even in those cases where this fortunate result is obtained, there ever remains the original predisposition, with added weakness as the result of mischief already done, and that the utmost care is necessary, as to environment and self-protection, to prevent the reappearance of the disease in an active form. In this case the correspondence between phthisis and inebriety is close. Though the subject be cured, so far as the disappearance of the appetite and the improvement of the general health are concerned, he is left with an added susceptibility to the disease, which calls for the greatest care to prevent its return.

It is certain that out of every thousand boys who have never tasted alcohol, a considerable proportion will learn to use it, will acquire the appetite, and in the end will become habitual drunkards,—that is, will suffer from the disease of inebriety. Do not reason and common sense teach us that, out of a thousand cured inebriates, it is equally certain that a much larger proportion will sooner or later return to their cups, no matter how thoroughly they may have been cured? Because, as a rule, the original causes which led them to drink will continue to operate, and to these will be added the habits and associations of years, and this without any return of the diseased appetite, until it has been brought back by the actual use of alcohol, its chief, if not its only, exciting cause.

That is to say, the man who was led to drink originally from a sociable disposition, good fellowship, and the treating habit, going on gradually and sometimes imperceptibly until an appetite has been formed which in due time becomes uncontrollable, does not have his nature changed by the removal of his craving for alcohol. Neither have his habits and associations, formed during his years of indulgence, been blotted out. The tendency of both these elements will be towards a return of the disease.

If we admit, then, that a man may be cured of the disease of inebriety, and yet sooner or later relapse into drinking habits—and I think that we cannot well avoid such an admission—we are at once met with certain important questions.

What are the probabilities that a cured drunkard will remain permanently sober? By what causes are such men led to relapse, and how and to what extent can these causes be avoided? Why does one cured man return to drink, and another remain sober? How far is the second drinking due to desire, and how far to weakness? How much can be done by medical treatment to prevent a recurrence of the disease, and how much by other means? And what are those other means?

There is, perhaps, no safer definition of inebriety, for my purpose at least, than that of Dr. Norman Kerr, who restricts it to "an overpowering impulse, craze, or crave, which tends to drive certain individuals to excess in intoxicants." Adopting this definition, an inebriate is an individual who is the subject of an overpowering impulse, craze, or crave, which tends to drive him to excess in intoxicants. The curability of this impulse, in so far as it is a disease, has been asserted and successfully maintained by this association from its formation. The staying-cured of the man, is, however, of infinitely greater importance, and the end towards which all our efforts are directed.

In order to form an intelligent opinion as to the permanency of the results secured in any given case of inebriety, it is necessary, first of all, to know the man. His physique, his temperament, and disposition, his habits and tastes, his general health and previous or co-existing diseases, his mental ability and moral character, all are proper subjects of study. His heredity, too, is of the utmost importance. Was he born sound — "mens sana in corpore sano" — with nerve-cells of normal balance and inhibitory power; or is he by nature a degenerate — "a morbid deviation from a normal type"? Is he inclined by heredity, either direct or indirect, to inebriety, narcomania, epilepsy, insanity, or any other form of nervous instability?

Again, what are his circumstances and surroundings -

in short, his environment? His occupation, education, and culture, pecuniary circumstances, family and social standing? Is he married or single? Has he a pleasant home, or is he a homeless wanderer? Has he an object in life, a work to do, an end to accomplish, an ambition to attain, something to take up his mind? or does he drift with the tide?

Too great importance can hardly be attached to the ctiology of the disease. What were the causes which led him to drink at first, and finally resulted in his contracting the disease of inebriety? Was it heredity, direct, indirect, or complex? Was it a sociable disposition and drinking companions? The use of alcohol as a medicine? Mental or physical overstrain? Mechanical injury? Adverse circumstances? Exhausting disease? Or was it indulgence in licentiousness or other evil passions? Does he love the taste of liquor, or does he take it for the effect? On the specific answer to these and similar questions, the prognosis very largely depends.

Still further, how far has the disease progressed? How badly has the individual been damaged by alcohol? To what extent has the integrity of his nerve-centers and organs of nutrition suffered from its use? Even though not born a degenerate, yet the injurious effects of alcohol may have progressed to such an extent as to be practically irreparable. If serious structural disease of the heart, lungs, brain, liver, or kidneys has resulted, the prognosis is proportionately unfavorable.

In studying heredity, which is the first of the remote or predisposing causes of relapse to be considered, it does not so much matter whether it is direct or indirect, immediate or remote. In either case, the fact remains that a large proportion, probably more than half of the whole number of inchriates, were born wrong, endowed by nature with a defective nervous system, and are only to be cured by "beginning with their grandfathers." It may be that there was inchricty in their ancestry, or just as likely it may have been some other

form of degeneracy and disease, nervous or constitutional weakness. Thus epilepsy, insanity, neurasthenia, hysteria, consumption, and even pauperism and crime, by transmitting an unbalanced and defective condition of the nervous system, may predispose to inebriety in the descendants, as well as to the diseases mentioned. Which one of the many allied conditions actually results, depends largely upon the environment. The degeneration progresses in the line of the least resistance. And in whatever form it may have originated, heredity constitutes a distinctly unfavorable element in the prognosis. Inherited conditions are more difficult to eradicate than acquired ones, and relapses are correspondingly more liable to occur. By no means would I be understood as saving that hereditary inebriety is in all cases incurable, for my own observation has convinced me to the contrary. A case in point was that of a man who was born a victim of neuroses. with a distinct hereditary tendency to alcoholism. For years he had been entirely unable to control his appetite, and drank large quantities of whisky almost constantly. After a thorough course of treatment he had no desire to drink, and was greatly improved in general health. He so continued for two years, when, worn out with hard work and continuous strain upon his nervous system - he was a railroad conductor - he suddenly felt like "going to pieces," as he himself expressed it, and knew that a return to drink would be easy. Instead of yielding to the condition of depression, he called upon the Lord to help him - for the man was a Christian and promptly took a vacation. This union of faith and works was effective, and the man was saved. Two more years have passed, with no return of the critical symptoms.

Another case, a nephew of the first, was like him born with an unstable nervous system — a typically "nervous" person, eccentric, unbalanced, and plainly at times on, if not over, the border of mental soundness. After being treated for inchriety, he became calmer and more self-controlled, and somewhat less excitable and eccentric, but continued to smoke

Vol. XX.-4

cigarettes to excess. For two years and ten months he worked hard, the latter months being confined in an office eleven hours a day for seven days in a week. At length his health broke down. He became irritable and complaining, fretful and fault-finding — and finally took a glass of beer to quiet his nerves. He next drew his money from the bank, disappeared mysteriously, and for six weeks wandered over the country on a protracted spree. At the end of that time he turned up at home, penniless, and was promptly sent to me for further treatment. Had he been as wise as the former case, and taken the needed rest in season, all this might have been saved. While these two cases illustrate the dangers of overwork and overstrain of the nervous system, they seem to me especially to show the dangers to which hereditary neuroses expose their victims.

If the patients treated be classified according to their occupation, education, social, financial, and moral standing, it will be found that the relative proportion of relapses varies according to the class of patients considered. Beginning at the bottom of the scale, with the bums, tramps, and deadbeats, the pauper and criminal classes, relarse is the rule, persistence the rare exception. It may safely be said that but few of these men are worth treating. It is easy enough to sober them up, and remove their morbid craving for alcohol. At this point they are apt to be enthusiastic in praise of what has been done for them, and to speak with unbounded confidence of their own future. But once they are turned loose upon the world and left to shift for themselves, they seldom fail to return promptly and regularly to the gutter from Occasionally even one of these whence they were taken. disappoints expectations and goes back on all precedents by developing some degree of manhood and self-respect, and living a sober and clean life. But such cases are so rare as always to be a surprise. As a rule, effort is thrown away upon them. These are the men who were born degenerates. They are irresponsible in every walk of life. They have no mental balance, no moral stamina. And no form of medical treatment has yet been discovered which can put backbone into a jelly-fish or brains into a fool.

The large body of honest laboring men, principally in agricultural, mechanical, and commercial pursuits, furnish a much larger percentage of permanent cures. There is always hope for the man who will work; and per contra, the man who will not work is beyond hope. He may as well be left to die in the gutter, where his natural level is found.

The largest percentage of permanent cures and the smallest proportion of relapses will be found in the class of patients coming from the so-called higher walks of life, the educated and well-to-do, those engaged in the higher kinds of skilled labor, in the professions, and in literary and scientific pursuits. These men are of a better organization naturally, and their environment is of a higher order, they have more to live for, more to induce them to remain sober and abstinent. So, too, men with a home and family do better than single men and homeless wanderers. Men who come of good families are far more hopeful subjects than those whose origin is in the gutter. The stream cannot rise higher than its source.

Doubtless, the real reason for the varying proportion of relapses in these different classes is to be found not chiefly in the occupation, education, pecuniary circumstances, or social standing of the patients, in themslyes considered, but rather in the factor which stands back of all those things; namely, those differences in the physical constitution, mental characteristics, and moral stamina, which have led to the differences in occupation, education, and mode of life. The better a man's natural balance and force of will, the better are his chances of remaining sober and becoming a good citizen, when once the diseased appetite is removed. The temperament and disposition are also important. I have learned to look for relapse in the sweet-tempered, pleasant dispositioned patient, and to be much more hopeful of the arbitrary, uncomfortable, unyielding, cranky individual. He has more will-power, more

resisting force. When cured, he knows enough to stay cured, and will not be led to drink just to please his companions.

As a result of these considerations, it will readily be seen that those institutions which receive their patients largely by legal commitments, especially if they are made up of the habitués of the police court, may be expected to show a much larger percentage of relapses than those which receive only voluntary patients, and those mainly of the better classes. The only advantage in the former case lies in the fact that patients may be detained for a longer time than they are usually willing to remain when the treatment is voluntary.

We now come to consider the etiology of inebriety as a factor in the prognosis. The particular importance of this element lies in the possibility which exists in a certain proportion of cases, of removing the cause, once its nature is understood. Take away a man's craving for alcohol, and turn him loose in the world. If the causes which first led him to drink — when he had no appetite — continue to act, then he can hardly fail to contract anew the habit of drinking and the disease of inebriety. If, however, they can be removed, or the individual strengthened to resist them, it will be possible to prevent this result.

As illustrating this fact, let me state a few cases. The first I shall give substantially as reported by the physician in charge and sent to me by the consultant. A farmer, aged 40, had drank hard liquors to excess for years. Had taken the "Keeley Cure" twice, with negative results. On June 29, 1896, he was first seen by the physician reporting the case. He was suffering from delirium tremens, and had been taking—according to his wife's statement—two quarts of rum daily for two months previous to this attack. It was noticeable that he never showed the usual symptoms of drunkenness, even when taking large amounts. His physical constitution was good. Examination showed a spot of gray hair on the head at the site of an old injury received in childhood. At this spot a depression of the bone was found. On con-

sultation with another physician, it was thought that possibly there might be thickening of the dura mater, with adhesions, and that this might produce irritation, and cause the desire for alcoholics. It was decided to operate. The surgeon proceeded to trephine at the site of the old injury, and removed one button from the outer border of the right parietal hone, about one inch from the median line. Adhesions of the dura mater were found and marked thickening of the bone, with conclusive evidence of pressure. Recovery was uneventful. So far as can be learned, he has never taken any form of alcoholic since that time, or shown any desire to do so. The removal of the cause removed the desire for drink, and the disease subsided.

Another case, quite unlike the first, but illustrating a much larger class of cases, was reported to me by a friend who has an extended experience in the treatment of alcoholics, but is now, and was at the time of the occurrence of the case recorded, engaged in general practice.

N. I., of Scotch ancestry and Irish birth, 52 years of age, tall, thin, sharp-featured, and of a light complexion, had been a confirmed "spreer" for 35 years. His father was a very nervous man, extremely irritable, and a steady drinker. His brothers were of a nervous temperament, eccentric, and one of them at least on the border line of insanity. He married at 40 a woman 15 years his junior, and physically as well as mentally his opposite - small, dark, phlegmatic. Although a periodical drinker, he was a man of ability, a hard worker, and commanded a salary of \$150 a month as bookkeeper. The intervals between his sprees were of varying length, sometimes several years and sometimes not more than three months. During these intervals his active mind was always seeking something to busy itself about - riding some hobby, or following some fad. He would for months at a time play on his violin at every possible spare moment. Then he would stop playing entirely, and for months at a time never touch his violin. At another time he would smoke incessantly -

then not at all. Or he would cat mince pie at bedtime regularly for months together, or drink enormous quantities of strong coffee — and then stop entirely. These and other irregular things he had done all his life up to this time. He always had some excuse for his sprees. Sometimes it was sickness, in his family or himself, sometimes business troubles, sometimes simply a longing for a spree. At 52 the sprees were growing more frequent, and he was haunted by the fear that he might not much longer be able to provide for his family.

He was a member of the Episcopal church, in which he was an active worker, and during most of his leisure moments his mind was on the work of the church. He often spoke of it as his lifelong regret that he could not have been a clergyman. One day, when mentioning this to my friend, his physician, who had carefully studied his case, the doctor replied with the suggestion that he might become a "lay-reader." This idea seemed to please the man, and together they went to see the bishop, and consult with him about the new plan. The result of the conference was favorable, and in a few weeks the bookkeeper was studying Greek in his leisure moments with the enthusiasm of a schoolboy. He has now been engaged in his new undertaking for nearly three years, and is free from his tormenting desire for "something" for the first time in his life. His unsettled mind has at last found a satisfactory object to occupy itself about, and is at rest. His fads and hobbies are all dropped — unless we look upon his work as a lay-reader as a hobby, which it undoubtedly is to a certain extent - and he shows none of the restlessness and uneasiness of former years. All his friends remark the great improvement which had taken place in him. Of course, time may develop a change in the present hopeful outlook, but one thing is seemingly sure, that this is the right course to pursue.

Not always, nor in the majority of cases, is it possible to remove the cause. It then becomes an unfavorable factor in the prognosis. For example, an incurable organic disease, serious valvular disease of the heart, by the irritation which it produces, is often the cause of a resort to alcoholic stimulation, so called. It is also a serious obstacle to treatment, and afterwards has a constant tendency to lead to a return to drink. A patient of my own, a retired boot manufacturer of about 60, had not long before contracted the habit of drinking and the disease of inebriety. He had a serious organic disease of the heart, which was probably the origin of the impulse which led him to drink. He had always hated the sight of a drunkard, and claimed not to like the taste of liquor, or have any appetite for it, yet he drank to excess. Three months after treatment he relapsed into his old habits, with no apparent cause. I believe that it was the mechanical irritation of the valvular lesions that led to his relapse.

Adversity is often a cause of first drinking, and even more frequently of relapse. One of my patients remained sober and industrious for two years after treatment, and there was every reason to expect that he would continue so, when his wife died, and left him with a large family on his hands; times were hard, no work to be had, want came to the door—and so he got drunk.

Licenticusness is a common exciting cause both of the first drinking and relapse. Probably more cured drunkards begin to drink again in connection with this vice than in any other way. As an example, a patient of the lower class of day laborers, after years of drunkenness, was treated for inebriety, and remained sober and industrious for sixteen months. He then left a good situation, followed a woman of the town to a low resort, and lived with her there for three weeks before beginning to drink, though the woman herself was frequently drunk. This is mentioned as a proof that the cause of his downfall was not primarily the appetite for liquor, but licentious indulgence.

The use of liquor as a medicine no doubt leads to the formation of an appetite in many cases, and brings about the downfall of a still larger number of cured men. To obviate this danger in some degree, it is my belief that proper in-

struction as to the true nature of alcohol, and the dangers attendant upon its use, are imperatively needed, and should be given during the course of treatment of every case of inebriety, as well as be taught to the children in our schools

Patients should be cautioned on this point, and advised never, under any circumstances, to use alcohol as a medicine, or permit its use by a physician in their own case. Whatever their disease, it is better for them to die sober, than to live and become drunkards. They may, however, be safely assured that there is no danger of their dying from the want of alcohol; for there is no condition either of disease or accident, likely to arise, of all the multitudes which were formerly considered as calling for the use of alcoholic stimulants, in which the well-equipped physician of to-day does not possess safe and efficient substitutes, which will do their work even better than alcohol.

Among certain nationalities, and in certain occupations and classes of society, the use of alcoholic beverages of various kinds is universal, and the thought of abstinence from them is as foreign to these persons as would be that of abstaining from fruit to a vegetarian. Under such circumstances but little can be expected save a speedy relapse to drink, and return to inebriety. Not until the habits and prejudices of ages can be overcome, and a new generation be trained in more healthful ways of living, can favorable results be looked for in these cases.

The social disposition which leads so many young men to drink, cannot be removed by medical treatment, or any other available means. Something may be done in many cases, however, to prevent the disastrous results which often follow from this disposition, by warning the patient of his danger, strengthening his powers of resistance, and removing him from his old surroundings when this is possible.

Every cured inebriate has to meet with varied temptations. Old companions seek him out, and strive to lead him back to his former haunts and pleasures. Habit claims him, associations fascinate him. Other appetites and passions assert

themselves. So long as the memory of the miseries and degradation of drunkenness remains keen and acute, he stands But by and by these dark pictures fade out; the new war of sobriety begins to seem monotonous; there is a longing for a new sensation: and unless some potent interest or ambition has come into his life to take the place of the pleasures of alcohol, and especially if he lack a well-balanced nervous system and normal brain-cells, he turns back to drink, and is lost. There is nothing to be accomplished by drugs in this line. One glass undoes the work of months or years - for no treatment, medical, mental, or moral, can enable a man who has once been a confirmed drunkard to become and remain a moderate drinker. The first glass — then all is chaos. Over the door which leads to that first glass, write on the one side, "Facile decensus averni"; and on the other, "All hope abandon, ye who enter here."

General Booth, in his wonderful book, "In Darkest England, and the Way Out," appeals to the world for the support of a plan for the relief of the submerged millions. In stating to the reader those things which he regards as requisites of the success of his plan, he mentions the following:

- (1.) "The first essential which must be borne in mind as governing every scheme which may be put forward is, that it must change the man, when it is his character and conduct which constitute the reasons for his failure in the battle of life."
- (2.) "Secondly, the remedy, to be effectual, must change the circumstances of the individual, when these are the cause of his wretched condition, and lie beyond his control."

The physician who has devoted himself to the study and cure of inebriety, is dealing with the world's submerged millions. When everything has been done for them which can be done in the way of medical treatment, even if that term be used in its broadest sense, the degree of ultimate success which he can hope to secure, depends very largely upon the extent to which he can carry out the two principles laid down by Vol. XX.—5

General Booth as fundamental to the success of all reform work.

First, the man himself must be changed. The question is, how far can he be led to help himself, by adding reform to cure, by seeking a worthy motive in life to take the place of the old craze for alcohol and narcotics, and by exerting all his powers to live a sober and temperate life?

Secondly, the man's environment must be changed. To what extent is it possible to place him under such circumstances and under such surroundings, that the causes which originally led him to drink will no longer operate upon him, while a more healthful way of living shall strengthen his power to resist evil influences, and point him upward?

In the last analysis, upon the practical answers which can be given to these two questions, will depend, in large measure, the prognosis as to the permanent results in any given case of inebriety.

According to Dr. Brunon, in the Normandie Medicale, the population in Brittany is being decimated rapidly by alcoholism. Alcohol has become a part of the staple food of the home. Bread, coffee, and eau-de-vie form the basis of the dinner and frequently even the coffee is absent. The most distressing feature of the case is the lamentable effect this use of alcohol has on the young. The infantile mortality is enormous, such as met with nowhere else. Of fifty children who had come to the free dispensary of Dr. Brunon two began to drink coffee and alcohol before they were a month old, four at three months, two at five months, five at eight months, one at ten months, five at eighteen months, fifteen at a year, and nineteen at three years. With these facts staring us in the face it can no longer be a matter for surprise that the population of France is diminishing year by year, that the rural population is degenerating, that crime and insanity are greatly on the increase, and that industry is on the decline .- Medical and Surgical Reporter.

# ALCOHOLISM IN WOMEN — ITS CAUSE, CONSE-QUENCE, AND CURE.\*

By Agnes Sparks, M.D., of Brooklyn, N. Y.

Alcoholism in women has heredity as a genetic factor to a lesser degree than in men. Departures from ancestral health find their entailment in the gentler sex more often along the line of other and less complex neuroses.

Alcoholism in women presents somatic factors in causation, in larger measure than in men. The mistaken ethics of a social code that impels to accept, all to often, the proffered poison, and so tends steadily down to a disturbed physique that involves structural impairment and a badly crippled morale, does not obtain so largely among them.

The most potent cause is two-fold. First in frequency is a neurasthenic condition due to lack of nutrition and the wear and worry of domestic life and social demands—an exhaustion for which relief is mistakenly sought in the transient aid of alcohol, all unaware, or unmindful of the vital fact, that its taking incurs large risk of creating a morbid condition that often finds expression in inebriety.

The other factor is the pain and unrest incident to disorders of their sex, for which solace is found in the anæsthetic and paralyzing effects of alcohol — an effect that with startling and sorrowful frequency ends in this toxic disease.

Apart from the frequency with which alcohol is used to spur flagging energy, to obtund distressful feeling, or bring oblivion from cark and care, probably the genetic condition

<sup>\*</sup> Read before the Medico-Legal Society, October 20, 1897.

most often met with is one involving painful performance of her special function. The average woman finds this a time of discomfort, more or less pronounced, to relieve which, rum in some form is used — a heritage of tradition both in precept and practice unsafe — with a result just as in the pernicious plan of giving opiates at these periods, of inducing or recurring condition of rise and fall as regards well being until the interim is fully bridged, and a state of more or less steady inebriety ensues.

Inebriety from a fondness for alcohol, per se — vicious indulgence — obtains less often in women. Why, goes without saying, and so this neurosis in them presents the strongest possible proof that its origin lies in perturbed physical conditions — in fine, that it is a disease: no mere moral obliquity, as many — well-meaning, but mistaken — would have us believe.

The consequence of alcoholism in women is less promptly patent than in man. Albeit none the less sure, it obtains more slowly. This from varied causes that act over larger area and with greater energy in men. In the earlier stages of inebriety in those cases where volition is not entirely ended, a peculiar shrinking from publicity protects some women against the objective symptoms noted among men at a like period of their disease; but with increase of toxic power due to constant or recurring taking, this protective shield gives way, and a well-marked consensus of symptoms, psychical and somatic, lays bare the varied ravages of the disease. Among them, the latter lead, and, early and often, those along gastric lines. To detail is not needed; but, so well masked may be the true status - in every case of marked disorder in this regard, if not vielding to the usual remedies, the doctor should make bold to question the patient, direct, as to rum being a factor for ill.

With progress of the toxic force widespread disturbance of functions presents — scarcely any escape — and as the dis-

order deepens into structural change, the signs of health infraction become more pronounced and prolonged.

On ovulation, the alcoholic impress is one of deranged, rather than, as in opium inebriety, suspended action, and so it comes to pass, unfortunately, that the average female alcoholist is not sterile. Just the reverse obtains with the woman morphinist, and it is one of the mysterics of a Divine Economy that this beneficent law does not extend the same wholesome result in her alcoholic sister, and so shut off, in large measure, a diseased, depraved progeny that tends to curse every community with a physical and moral blight, the extent of which is beyond compute, and with which no other agent for ill can compare.

Sequeling visceral disturbance comes psychical derangement, ranging from slightly erratic outbreaks to furious maniacal outbursts, or a more or less steadily stupid condition. The latter is less frequent than in men, the inebriety of women more often being periodic. While the signs of psychical ill health may be less gross than in men, they just as surely show the fell power of this poison to distort and destroy along higher lines of life, and transform many a winsome woman into one far removed from her gentle self, and deserving the largest measure of sympathy and relief.

The prognosis of alcoholism in women, eligible for treatment, is better than in men. Barring advanced cases, the outlook for recovery is hopeful to an extent that warrants placing every patient under proper care. The betterment gained by well-directed treatment in some cases is surprising, and were this fact well known, would, it is safe to say, lead to a larger optimism among medical men as to cure. Risk that the disease will recur is large. This, however, by persistent treatment, favoring environment and watchful care, may be brought largely to a minimum, and many a life seemingly given over to rum bondage till death, can be reclaimed.

The treatment of alcoholism in women, to be most effective, must be two-fold — curative and preventive. Touch-

ing the former, modern medicine has made such advance as places present treatment much in the van of everything that has been. As a valued psychical adjunct, the doctor must be firmly impressed with a belief in his power to help, and the impress of this opinion must be made on the patient, to the full, if the maximum of good would be gained. A supreme confidence along this line is an immense factor in reaching the goal desired, and so far as concerns non-coercive care, is almost a sine quæ non.

The remedial agents of greatest worth in warring on this disease are strychnine, arsenic, electricity, and hypnotism. But, before any of them can be made of most service, certain untoward conditions claim attention. The gastroalvine status must be righted, and nothing will better do this than a mild nightly mercurial and a morning aperient water. Uterine luxations should be reduced, ovarian discomfort must be ended, and, unless removal be called for, galvanism holds out largest promise for good.

The question of abrupt or gradual rum quitting will present. Case conditions must decide. If possible, the former should obtain. As a rule, fear of ill results is unfounded, and the effect on patient's morale will be good. If sudden stopping be deemed unwise, let the usual stimulant be discarded, and alcohol in like amount with milk be given — to be ended as soon as possible — or, better still, the compound tincture of cinchona combined with nux vomica and tincture gentian, or the mineral acids.

Having paved the way for the main treatment, strychnine leads the list. There has been such a consensus of opinion and such a volume of fact to this effect as cannot be gainsaid or set aside. It is best given subcutaneously, in the form of nitrate one-thirtieth to one-twentieth grain thrice daily. As a rule, it will be best not to exceed the latter dose, and if strychnism presents, a decrease is in order. The average alcoholic is very tolerant of this drug: this fact should not be forgotten. These full doses may be given a month, if well

borne; after that, one-sixtieth to one-fortieth will suffice, and, with or without arsenic, should be given for months.

Arsenic in inebriety is not given the credit it deserves. It is a multum in parro remedy — a general tonic, a non-neuralgic, an anti-malarial, a nutrition promoter, in fine, an all-round roborant, admirably adapted to the cure of this disease. Fowler's solution is best: 4 to 8 drops after each meal. It may sequel the strychnine giving and not be pushed beyond slight face puffing. It should be long continued — in this is its chief value — 4 to 12 months.

Electricity is another remedy, the worth of which in the treatment of inebriety is much more than the average doctor will admit. Ignorance of its value comes from inexperience. Study and practice of this valued aid must be had if one would be well equipped. There are few facts in medicine better fixed than the power of galvanism to raise the lowered nerve tone, and relieve the varied neuralgiæ so common to this disease. Constant current seances, 10 to 20 minutes each, may be given daily, for weeks, and a specially opportune time, when sleep is impaired, is at night. When used for neuralgia, each attack, be they frequent or few, must be met promptly. The Faradic current, while less widely useful than the Constant, may be given daily, 20 minutes seances, general Faradization, as a tonic, and to remove the peculiar unrest—"fidgets"—noted in some cases.

Hypnotism acts best in periodic cases. Seances should he had between drinking bouts. No case should be deemed unyielding till several attempts have proved futile. It is very effective in some temperaments. The condition of each case must govern as to time and extent of seances. To a minor degree, most women can be brought under hypnotic influence if, as we have urged, the physicians be largely optimistic as to treatment, and will stamp the impress of that optimism on the patient. In every case, effort to this end should be made. Despite adverse opinion, hypnotism is sometimes an immense power for good.

We have noted the biggest guns in the battle with this disease. Minor ones are of value. Full feeding ranks first; generous diet, with codliver oil and malt if need be, must be given. If patient be pallid or heart action weak, steel and strophantus should be used. The Turkish bath fills an important role as sedative, eliminant, and soporific. A morning cold shower is a capital tonic. If an hypnotic be needed, trional outranks all others; dose: 15 to 20 grains dry on tongue, at 7 P. M., or in hot milk or bouillon at bedtime.

The pain peculiar to chronic alcoholism can often be eased by cannabis and quinine. If not, coal tar products may succeed. All failing, an opiate can be given, but must not be morphia; that is unsafe; it is snareful; chronic alcoholics take to it too kindly. Codeine may be given. This drug, for the greatly increased use of which in America during the last six years, the profession is mainly indebted to Dr. J. B. Mattison  $-\frac{1}{2}$  to 2 grains, Merck's phosphate or sulphate, by skin or mouth, is an efficient anodyne, and the risk of tolerance is vastly less than with morphia.

One remedy, radical, and a dernier resort, remains to be noted. Granting the woman has been given treatment, proper, persistent, and prolonged, without avail, she should be desexualized. This, whether maid or matron, for many a former would not have the courage of conviction equal to that of a young woman brought to my notice, who refused an alluring offer of marriage, solely because she was a periodic alcoholic. It might be curative: it surely would be preventive, and better, by far, unsex the woman, than have her beget a brood tainted with this curse of the world.

Special stress must be laid on the need for treatment long continued. Lack of this is the largest factor in failure. It is absurd to suppose that a system bruised and battered by alcoholic excess for years, can be brought back to health in a few weeks or months. The good work must go on, if need be, for years. True, much may be done in some cases by less protracted care, but, as a rule, the risk of recurrence makes the

longer treatment of greatest worth. The skillful doctor repairs or retards the ravages of renal or cardiac disease by care, years continued, and the same wise effort along alcoholic lines must obtain if the largest measure of good would be gained. There is great incentive to such effort. Even now, thirty to fifty per cent. of alcoholic inebriates, properly treated, recover, and with a clearer insight of causative conditions, and a larger and more extended remedial régime, there is full warrant to think this good result will be greater.

No case should be deemed beyond hope till every aid that scientific treatment can now surely extend, under either willing or coercive care, and continued, if need be, for years, shall prove of no avail.

So much as a present spur. When we face the future, and realize the fact that in the new century, so near, the question of alcoholism on the physical weal of human kind will be the question, outranking all others — phthisis not excepted — to engage attention of scientist and sanitarian; when we give due thought to the fact that alcoholism is not only a curable, but a preventable, disease, we must be profoundly impressed by the immensity of its importance, and let our every effort array against it, for it compasses not only the welfare of a present host, but that of millions yet to be.

Dr. J. F. Southerland, in a paper at the Moscow meeting, remarked in regard to the alcoholic before the law, that punishment for a crime committed during drunkenness is, in this nineteenth century, a monstrosity. The punishment should be for the drunkenness, which should be considered a misdemeanor. The alcoholic should be regarded by the law in the same light as an insane person. He should be deprived of his civil right, and incarcerated until cured in some special institution.

A NEW AND SUCCESSFUL METHOD OF TREAT-MENT FOR THE OPIUM HABIT AND OTHER FORMS OF DRUG ADDICTION.\*

By J. E. Kellogg, M.D., Superintendent Battle Creek Sanitarium, Battle Creek, Michigan.

The increase of drug addiction in this country, and probably in all civilized countries in various forms, notwithstanding the earnest efforts of numerous temperance organizations, the terrible penalties inflicted by nature upon the victims of this form of vice, and the frequent and earnest warnings uttered by many of the medical profession, is ample justification for the existence of this association, and it is a fact which calls for most earnest consideration.

That the increase, relative as well as numerical, or neurotic individuals, as shown by the fact that the number of insane and imbeciles per thousand or million at the present time is nearly three times as great as fifty years ago, is both the cause and the consequence of the increased prevalence of drug addiction, probably no one will deny; but it is not my purpose in this paper to enter upon a consideration of the causes of drug addiction, nor methods of prevention, and I only briefly refer to this phase of the subject in order to call attention to the following principle, which I regard as being of fundamental importance in dealing with this class of cases.

The majority of persons who acquire the vice of drug addiction are peculiarly constituted individuals, who may be divided into several classes, as

<sup>\*</sup>Read at the Twenty-seventh Annual Meeting of the American Association for the Study and Cure of Inebriety, at Boston, Mass., Dec. 9, 1897.

- (1) Those who live upon the sense plain, regarding the body as a harp of pleasure to be played upon so long as its strings can be made to vibrate by force of will or the aid of artificial excitements, and who, when the natural resources of the body are exhausted, seek artificial and unearned felicity through the aid of various nerve tickling, pain, and trouble-annihilating, felicity-producing drugs.
- (2) Those hypersensitive, neurotic, delicately organized individuals, a rapidly-increasing class, who are the natural result of the artificial brain and nerve-destroying and race-deteriorating conditions of our modern life. These persons, lacking physical capacity for enduring the pains, hardships, and tribulations of life, from which they suffer untold and indescribable agonies, seek relief in some nepenthe which promises them ease from the present stress of suffering, overlooking all considerations respecting what the future may have in store for them.

Therapeutic methods which do not recognize this principle, and which do not take into consideration the predisposing influence of constitutional tendencies which may be either hereditary or acquired, are likely to prove mere temporizing measures, which deliver the victim of the drug addiction from the ditch of habit, only to give him an opportunity to fall back into the same pit. All who have had experience in the treatment of this class of patients know that the history of nearly every case comprises an account of numerous unsuccessful attempts to escape from the thralldom of the drug or drugs to which the individual has become enslaved. The patient generally enumerates a half-dozen or more certain cures which he has tried, institutions of various kinds which he has visited, and at which cures are guaranteed, and not infrequently it appears that the patient's time for a half-dozen years or more has been chiefly occupied in going from one to another of such institutions, seeking help, but finding none, except a mere temporary surcease of bondage, or, what is perhaps still more common, deliverance from the jaws of one drug demon only to fall into the merciless clutches of another.

Without stopping to enumerate the numerous pathological changes, either general or specific, which result from the various soul and body-destroying drugs, it is necessary to present a brief summary of the more important of the general morbid conditions encountered, in order to make clear the rationale of the methods of treatment to which I wish to call attention. As I have observed in these cases, the following conditions are practically common to all the ordinary forms of drug addiction which present themselves for treatment, especially, and in the most pronounced and typical form, in victims of the opium habit:

- 1. An unbalanced condition of the vasomotor functions. This loss of vasomotor control is without doubt the cause of the persistent insomnia, the watery diarrhea, and numerous other symptoms which follow the withdrawal of the whole or even a considerable part of the daily dose of opium in a case in which the drug has been largely used.
- 2. An extremely irritable condition of the sympathetic nervous system, shown by marked hyperesthesia of the lumbar ganglia of the abdominal sympathetic and the solar plexus, with a large group of associated symptoms, such as anorexia, nausea, vomiting, griping, purging, palpitation of the heart, sense of weight and constriction in the chest, shortness of breath, sensation of smothering, sinking feeling, sensation of impending death, extreme nervousness, with indescribable sensations, extraordinary restlessness, paresthesias of all sorts, shivering, general tremor, perspiration, etc.

Opium apparently excites the involuntary muscular fibers in the body while temporarily paralyzing the sensory nerves or fibers. Cocaine dilates the pupil, but at the same time causes contraction of the small blood vessels through its influence upon their constricting fibers. A moderate dose of alcohol causes flushing of the surface, but a man far under

the influence of alcohol has a pale skin. Under the prolonged influence of these constricting drugs, the sympathetic nervous system develops a certain compensation, just as do the nerve centers which control the heart and the heart muscle itself, in cases of obstructive valvular disease of the heart. In the middrawal of the drug, the compensation is no longer required, hence the unbalanced condition manifested by the symptoms mentioned and numerous others which at once appear.

- 3. Cardiac weakness. This is due to the influence of lethal drugs upon the vasomoter and sympathetic nervous systems above referred to. The symptoms of heart weakness are palpitation of the heart, a weak, irregular, fluttering pulse, extreme pallor, faintness, and smothering sensation.
- 4. Reappearance of chronic pains and other distressing symptoms, for the relief of which the drug was, perhaps, at first administered.
- 5. Extreme unrest and anxiety, grief, indecision, childishness, utter inability to engage in mental diversion or occupation of any sort. In many cases a condition closely akin to acute mania.
- 6. Complete or nearly complete loss of fortitude, no courage to endure suffering or annoyance, peevishness, unreliability, generally a determination to obtain the drug by any possible means, without regard to consequences.
- 7. In cases in which the drug has long been used, and in large quantities, a condition of general malnutrition.

The above is a very faint picture of the condition of a person who has long been addicted to an enslaving drug, as opium, after the drug has been removed, but it will perhaps suffer for my purpose, which is merely to bring forward the general conditions which must be considered in the application of treatment.

Treatment. In the title to my paper, I have spoken of the treatment to be presented as new. I do not wish to be understood as having a new panacea to offer, nor some unique or newly-discovered drug or method to exploit. The measures which I shall describe are none of them new as therapeutic procedures. The general plan of management I have not seen fully described as a whole. Though I am sure many of the measures employed have been used by others, I have been led to think that the method as a whole is the result of my personal experience during the last twenty years in the treatment of this class of cases at the Battle Creck Sanitarium. I have undertaken to write this description of it by the earnest request of numerous physicians who have sent patients to the Sanitarium for treatment, or who themselves have been patients. The general plan of management divides itself naturally into three periods, as follows:

First period, that during which the drug is being withdrawn, lasting one or two days.

Second period, that immediately following the complete withdrawal of the drug, lasting from one week to ten days.

Third period, beginning with the recovery from the acute symptoms resulting from withdrawal of the drug or drugs, and lasting from three to six months, or until the individual is fully reinstated in physical, mental, and moral health.

I will now undertake to describe briefly my mode of managing these cases in each of these periods.

Treatment during the withdrawal of the Drug.

In the beginning of my experience with this class of cases, I sought to alleviate the sufferings of the patient by very gradual withdrawal of the drug, but I soon discovered that by this method the patient's sufferings were not really mitigated to any considerable degree, while not infrequently his patience was exhausted by the length of the struggle, and I am thoroughly satisfied that it is in every way better for the patient to make a short, sharp fight, and have the battle over than to endure the long drawn agony of the gradual reduction of the drug during several weeks.

My usual plan is to divide the dose the first day, and the second day give none at all. In very many cases, only one dose is administered after the patient begins treatment. If the size of the dose is not very large, say not more than four or five grains daily, it is not infrequently withdrawn at once, none at all being administered after the course of treatment has begun. Sometimes a placebo, in the form of a normal saline solution, is administered, although as a rule I find it much better to let the patient know exactly his condition, the amount of the drug he has taken, and when he has discontinued it, so that he may be encouraged to enter more heartily into the battle for the mastery of the habit.

Attendance. I invariably put the patient to bed, with the understanding that he shall remain in bed for at least one week, and, perhaps, two weeks, and during this time he is not allowed to dress, though he may be often taken out for a brief half-hour in a wheel-chair. After treatment is begun the patient is kept in a special apartment by himself, no one in contact with him except his nurse or nurses, and his attending physician. This apartment is fitted up with all the appliances necessary for the special treatment required, having bathtub, spray, the douche apparatus, electrical appliances of various sorts, for the administration of galvanism, fara lizism, sinusoidal current, etc. Facilities for the electric light bath, with the administration of the d'Arsonval current, together with other hydrotherapeutic and other rational measures, are close at hand. The patient is taken to this apartment in his night clothing, and is kept under the close observation of an attendant every moment, so that he shall have no opportunity whatever to get access to drugs of any kind. Great care is taken in the selection and training of nurses for the care of this class of patients. They must be persons of dignity of character and bearing, good judgment, resolution, ability to command the respect of the patient, trustworthy, and exceptionally skillful, not only in the ordinary care of the sick.

but in the employment of hydrotherapeutic measures of all sorts, electricity, massage, manual Swedish movements, etc. The nurse must be of cheerful disposition, full of tact and resources, able to interest and divert his patient's mind during the weary hours of his conflict. He must be untiring in energy, unflagging in interest, and faithful in the minutest details in the carrying out of instructions. The success of these cases depends very largely indeed upon the tact and efficiency of the nurse or nurses — for at least two nurses are required in every case, one for the day and the other for the night, and sometimes an assistant nurse is needed during the first twenty-four hours or forty-eight hours.

The physician must possess, in addition to all the knowledge and qualifications of the nurse, a sufficient amount of experience with these cases to understand the significance of every symptom, and so be able to meet promptly each indication by rational means. He must be thoroughly possessed of the idea that it is the patient, not his habit, which is to be cured. He must have a ready command of all the resources of physiological medicine, he must have that confidence born of successful experience which will enable him to say to his patient with absolute assurance that however threatening and distressing any symptom may be, relief will certainly come, and that without long delay, if he will but exercise sufficient patience. He must be able to command the fullest confidence and respect of his patient, and this will not be gained by yielding to his importunities, but, rather, by demonstrating to him that there is a better way than that which he proposes. When the patient discovers that the physician is really master of the situation, and puts himself absolutely in his hands ready to co-operate to the utmost of his ability, the battle is more than half won.

Drugs. I have no hesitancy in saying that any system of treatment of the opium or alcohol habit, or any other form of drug addiction which depends for its success upon the ad-

ministration of a substitute drug, is, and must be, a failure. The patient either becomes the victim of the new drug, or returns to the old one. That there may be now and then an exception to this rule does not weaken its validity more than does the fact that patients sometimes escape from the thralldom of a poison habit without any treatment whatever, through the aid of an intercurrent illness of some sort or some favorable combination of circumstances. I do not say that no drug of any sort should be used, for I quite frequently find it advantageous to make use of medicinal agents of various sorts for the palliation of some pressing symptom. For example, for relieving the severe diarrhea, I find it advantageous to employ subcarbonate of bismuth in large doses, and the fluid extract of coto bark. I begin the use of these remedies as soon as the first symptom of diarrhea appears, and they may be employed with advantage even before the appearance of diarrheal symptoms in cases in which the history of the case shows that severe symptoms of this sort may be expected. In very exceptional cases. I sometimes administer a few small doses of atropia. Strychnia I never find occasion to use, and I find no advantage whatever in the use of bromide of potash, chloral, hyoscyamus, and the numerous other drugs which have been so largely used in these cases. For years I made use of these drugs and others, but I found that they mitigated the patient's symptoms very little, while they deranged his digestion to a great degree, and thus only postponed the moment when the vital forces of the patient could begin to rally to the restoration of normal conditions.

Dict. During the period of withdrawal of the drug, I find it advantageous to give the patient a fluid diet. The diet may consist of kumiss, buttermilk, malted nuts, or fruit juices, such as unfermented grape juice, raspberry juice, blackberry juice, etc. These I allow the patient to take freely. They help to sustain his energies, by increasing the volume of the blood, and preventing to a large degree the sensation of

"goneness," smothering, and similar other heart failures. Taken hot, it is extremely palatable, and is the most supporting of all food substances with which I am familiar. I give the patient as much food as he will take once in four hours. If nausea and vomiting prevent taking of food by the stomach, I administer an enema consisting of two ounces of malted nuts, dissolved in six ounces of water, and mixed with two beaten eggs, with the addition of half a dram of salt. This enema is administered with a rectal tube, and is retained as long as possible. It should be repeated every four hours, the bowels being washed out every other time half an hour before the nutritive enema is given. Meats and all other solid foods are carefully excluded from the dietary, also beef tea, which, like beefsteak and other meats, certainly excites the nerves and increases the craving for the drug.

Symptomatic Treatment. It is my custom to administer The patient generally the last dose of morphia at night. manages to get through the night very comfortably, but, a few hours after the times for the morning dose has past, various nervous disturbances begin to make their appearance, and by the following night the battle is really begun. As soon as marked nervousness appears, and without waiting for the patient to become greatly agitated, he is placed in a full bath at a temperature of 92 degrees to 93 degrees, or sometimes a slightly higher temperature, as 95 degrees, is employed, but often a slightly lower temperature, as 90 degrees, is found preferable. A bath at this temperature is known in hydrotherapy as a neutral bath. Its temperature is practically that of the skin, consequently neither thermic nor secretory reaction is produced. The body is surrounded by a neutral medium, and thus the disturbing influences of environment of the patient, whether it be a high or low temperature of air, changes of temperature, contact of objects, friction of cloth ing, or whatever it may be, is shut off.

Under the calmative influence of the neutral bath, the

irritability of the nerve centers is radically lessened, and the patient becomes quiet. The bath may be continued for an indefinite length of time, as it neither communicates heat to the body nor absorbs heat to a very considerable degree, and sets up no energy-dissipating reflexes. The patient is generally kept in the bath from three-fourths of an hour to an hour and a half, at the end of which time he is removed, enveloped in a Turkish sheet, and gently rubbed until dry. Not infrequently be falls asleep in the bath. After the bath, the patient generally finds himself very comfortable for an hour or two, then it may be repeated. If necessary, the patient may be kept in the bath almost continuously. Not infrequently it is advantageous, for a change, to apply some different form of sedative bath. One of the very best is the wetsheet pack. The sheet should be wrung out of water at about 75 degrees F., and should be made as dry as possible, so as not to produce too great nor too prolonged reaction. The patient is enveloped with this sheet in the usual way, only it is often advantageous to leave the arms outside of the wet sheet. Care must also be taken not to allow the patient to get chilled, as the reactive capacity of a person in this state is very much reduced. The patient generally falls asleep in the wet-sheet pack. He should be allowed to remain in the pack as long as he is comfortable, or as long as he sleeps. The covers should be carefully regulated, so as to prevent profuse perspiration. After the pack apply a tepid sponge bath.

Great care should be taken to avoid very hot treatment, or prolonged sweating, as these weaken the heart. The electric light bath for two or three minutes, but not long enough to produce perspiration. often affords great relief to the patient, and is an excellent preparation for a neutral bath or the wet-sheet pack.

It is advantageous to administer a faradic current while the patient is in the full bath. This is best done by means of a special faradic apparatus, arranged for the administration of electrohydric, or so-called electrothermal bath. A high tension and rapidly-interrupted current should be used. I find the rapidly-alternated sinusoidal electric current preferable to the faradic in these cases, and also find exceedingly useful the falvano-hydric bath, which is perhaps the most sedative of all electric applications in cases of this sort. Great care must, of course, be employed in the application of the galvanic current.

Restlessness, fidgets, and a general uneasiness are relieved in a marvelous manner by the baths given, as described, but great care must be taken to regulate the temperature of the bath exactly, and to bring it within the range of the temperature mentioned. A higher temperature depresses the heart and a lower temperature exhausts the nervous energy and increases the irritability of the already over-excited centers.

Massage, properly employed, has a wonderfully soothing effect in these cases. The manipulations must be applied with great gentleness, however, and by a skilled masseur or masseuse. For the trunk and limbs centrifugal friction should be applied. The stroke being wholly in the direction from the heart toward the periphery, a sedative effect will be produced. Massage of the head and back applied in the manner which I have elsewhere described\* is also wonderfully efficacious in relieving the patient's sufferings. It is important that something should be done for the patient every moment when he is not at rest. The maintenance of a constant watchfulness on the part of the nurse, anticipating every want of the patient, and meeting as far as possible all his whims and fancies, so as to allay mental irritation, and to keep his mind continually occupied and diverted, is of great importance.

Cardiac Weakness. I am satisfied that far less importance and significance attaches to this symptom than is generally given to it. The heart certainly derives no strength from

<sup>\*</sup>The Art of Massage, by J. H. Kellogg, M.D., published by the Modern Medicine Publishing Company, Battle Creek, Mich.

morphia or any other drug, and the withdrawal of a toxic agent cannot, in my opinion, entail fatal results through the failure of the heart function. No matter how pressing the symptoms may seem to be, nature will come to the rescue in time to save the patient's life. Nevertheless, the inconvenience which the patient suffers from this symptom is not infrequently very great, and on this account it is worthy of careful attention. Of the several hundred cases of morphia addiction which have been under my care, not one has died from heart failure or any possible connection with the heart. In fact, I have been obliged to record but one death of a patient under treatment for the morphia habit, and this occurred several days after the patient was entirely relieved of the drug and of a craving for it, and was due to causes which could not be directly connected with the habit or the treatment administered for his cure. The quantity of morphia used in some cases has been extraordinary, in two or three instances more than one hundred grains of morphia being administered hypodermically each twenty-four hours. In one case a patient took by the mouth a full ounce of morphia each day, a halfounce at a dose. In this case I could not believe the patient's statement until verified by the assistant under whose charge the patient was placed, and who saw the dose taken.

The neutral full bath, wet-sheet pack, and other measures already suggested, are highly effective means of relieving cardiac disturbances. A still more effective measure, which acts more directly upon the heart, is the application of hot and cold sponging to the spine, from the base of the skull to the lower dorsal region. This application may be made in such a manner as to serve as a most powerful cardiac stimulant, or so as to stimulate only in moderate degree. Two sponges are required, and a vessel of very hot water, and in another vessel a quantity of ice-water or pieces of ice the size of the fist. The spine is first sponged with hot water for half a minute. The heat should be as great as can be borne,

50

but care should be taken not to injure the skin. The other sponge is then applied for fifteen or twenty seconds, being wrung just dry enough out of the ice-water so it will not drip. For a more vigorous application, a flannel cloth wrung out of very hot water may be applied to the spine, extending from the base of the skull down between the shoulder blades, and being kept in contact with the skin for one or two minutes; then a smooth piece of ice the size of the fist may be rubbed over the same surface, being moved rapidly up and down the whole length of the surface under treatment for five or ten seconds. These applications should be continued in rapid alternation for ten or fifteen minutes, or until the pulse is improved to a satisfactory degree.

Palpitation of the heart is relieved by centrifugal friction, or downward stroking of the trunk and limbs.

The neutral bath has a remarkably quieting and toning effect upon the heart, as does also the wet-sheet pack.

In cases of extreme cardiac weakness, a hot bath, preferably the electric light bath, may be applied for one or two minutes, followed by a dash of cold water, preferably a shower or spray, lasting one second. Or the alternating hot and cold shower may be employed. This is the most powerful of all cardiac stimulants, and the effect is lasting to a remarkable degree. It may be repeated as often as necessary.

Free water drinking, begun before the drug is withdrawn, and continued during the treatment, is advantageous as a means of maintaining the volume of the blood, which in itself is of the greatest service in sustaining the heart's action.

The value of hydrotherapeutic measures mentioned in toning the vasomotor and sympathetic systems, and in restoring a normal balance, can not be overestimated. The skin is the most important sense organ in the body, and one of the most complicated, which is easily seen when one recalls its numerous sensory functions in relation to general sensations and the senses of touch, vision, and temperature. It is richly supplied with constrictor and dilator vasomotor nerves and afferent, as well as efferent, sympathetic nerves. Through these two systems of nerves the most important organic reflexes are set up by applications to the surface, which affect in the most profound manner the functions of the nerve centers, the organs of circulation, and all the processes of nutrition.

Vomiting and Diarrhea. Under this system of treatment, vomiting and diarrhea are seldom very troublesome symptoms. Not infrequently patients who have abandoned the attempt to dispense with the use of morphia under other systems of treatment in consequence of the persistent and intractable character of these symptoms, have expressed great surprise that they have suffered so little inconvenience in this direction. Nevertheless, they sometimes do occur, though I have never found either of these symptoms, or both combined, so stubborn as to make it necessary to abandon or even suspend the treatment or to administer a dose of morphia for their relief, at least not since the plan of treatment outlined has been fully developed.

When vomiting appears, the following measures are used: The patient is kept as quiet as possible in bed, a hot bag is placed at the spine, or in place of it hot and cold applications are made to the central portion of the back. An ice bag is placed over the stomach, and the patient is made to swallow small bits of ice, or if. as is sometimes the case, the taking of substances into the stomach increases the nausea and vomiting, the ice is simply held in the mouth. An ice bag is sometimes placed about the throat and wrists. In some cases an ice bag at the back of the neck is found of service. The patient lies still and keeps his eyes closed. The nausea almost always lasts but a few hours, and is sometimes very quickly relieved. Subcarbonate of bismuth in twenty or thirty-grain doses every hour is sometimes of value.

For the diarrhea it is seldom necessary to administer any specific remedy outside of those which have already been

named, which, by restoring the vasomotor equilibrium, prevent the outpouring of serum into the lower alimentary canal and excessive peristalsis. The hot enema is often a measure of real service. A quart of hot water, hot as can be borne, is administered after every movement. The fluid extract of coto bark, two to four drop doses, with subcarbonate of bismuth in thirty-grain doses, is administered every two hours when the patient is awake, during the first twenty-four hours, when diarrhea exists, and if there is reason to expect this symptom to be troublesome, the use of these remedies is begun as soon as the drug is withdrawn.

In some cases a strong galvanic current, applied by means of large sponges presenting a surface of at least one-half square foot each, one over the solar plexus and lumbar ganglia, the other over the spine opposite, is the most effective means of relieving sympathetic irritation which gives rise to disturbance of the alimentary canal, manifested by vomiting and diarrhea. The negative pole should be applied at the back, the positive in front.

Faradism and the sinusoidal current are also of great value in allaying gastric and intestinal irritability. These should be applied in the same way as galvanism. The applications may be made for twenty to thirty minutes, or even longer.

The galvanic current applied, one electro (the negative) over the cervical sympathetic, the other over the solar plexus and lumbar ganglia of the sympathetic, is also an effective means of controlling nervousness arising from irritability of the sympathetic. The negative pole should be applied at the neck, the positive over the abdominal ganglia.

The sinusoidal electrical current, especially the high tension or rapidly-alternating current, is of very great value in these cases. It may be applied to the spine and abdomen by means of large electros, or through sponges held in the hands, or by the application of one electro to the front, while the other is brushed over the surface. Great relief often follows

the application of the current to the patient through the hand of the nurse.

Pain. This symptom, often exceedingly troublesome, is, after all, less difficult to control than might be inferred from the patient's account of his sufferings, past and present. The pain actually suffered is generally not nearly so great as the patient represents it to be, as his desire for the drug leads him to exaggerate every subjective symptom to an enormous extent. Galvanism, the high tension sinusoidal current, the d'Arsonval high tension current, hot fomentations, mustard fomentations, turpentine stupes, the cotton poultice, menthol liniment, massage, and the ice bag, are measures which should be successively tried and repeated. Some one of them or some combination of two or more will afford relief. For headache, hot application to the back of the head, combined with applications of cloths wrung out of ice water to the whole face, is a most effective measure. A compress, consisting of six or eight thicknesses of soft cheese cloth is best for the purpose. By the combination of the measure above suggested, the patient almost invariably gains the victory and begins to feel that he is free, before the morning of the second day, so that the actual battle against the drug really does not last more than about twelve hours, and is often less than this. The patient generally obtains several naps before morning, and by ten o'clock the next day after the withdrawal of the drug, he is able to sleep under the influence of the treatment ad-The diarrhea and vomiting have ceased, the ministered. nausea has disappeared, and if, on account of vomiting, the patient has not been able previously to take much food, he very soon gets an appetite. The time has now arrived for the beginning of the

## Treatment of the Second Period.

For the first day of this period no vigorous treatment should be applied. The patient should be allowed to rest as

Vol. XX. -8

much as possible, such palliative measures being resorted to as may be indicated by any threatened return of nervousness or other unpleasant symptoms, the measures of treatment being essentially the same as those already outlined. At bedtime a prolonged neutral bath should be administered, temperature 92 degrees F. to 95 degrees F. The length of this bath should be forty-five minutes to an hour and a half, or until the patient feels inclined to sleep. He should then be quickly and carefully dried, and put at once to bed. He will very likely sleep four or five hours, after which his uneasiness may return. A hot and cold application may be made to the spine, gentle centrifugal friction may be applied, or, if the patient is inclined to be nervous, another neutral bath may be applied. either with or without electricity. In the absence of these facilities, a wet-sheet pack, either complete or involving only a portion of the body, as the trunk or the lower half of the body, including the hips and legs, may be administered. Sometimes a moist abdominal bandage alone is sufficient to secure good sleep. This application, under the name of umschlag, or Neptune's Girdle, is very widely used in Germany, especially among neurologists, as a remedy for insomnia, and, after employing it for more than twenty years, I am bound to say that I know of no more serviceable agent for this purpose. aside from the neutral bath. The readiness with which this measure can be applied, renders it exceedingly practical and advantageous when other means are not accessible.

During the first week after withdrawal of the drug, insomnia is the most annoying symptom with which the patient has to contend. He is nervous, petulant, irritable, and imagines he will never sleep. He should be instructed that two or three hours of natural sleep without the employment of any drug whatever is of greater value to him than ten hours of sleep under the influence of any hypnotic drug. A drug which so profoundly affects the system as to compel sleep, at the same time to an equally profound extent disturbs and

interferes with those subtle processes by which the body is repaired and recuperated. Under the influence of a sleepproducing drug, "nature's sweet restorer" fails to restore the wasted energies.

The important thing for the victim of the drug habit who has been rescued from the drug itself is to be recuperated as quickly as possible, and brought as fully and as quickly as possible into a normal state. This can only be effectively accomplished by physiological measures, which favorably influence, and do not discourage nutrition and the natural reparative processes of the body.

The second day of the period of convalescence we may begin more active tonic and recuperative measures. The patient should be given, on awakening in the morning, a cool sponge bath, followed by a light massage. The moist abdominal bandage which is worn over night should be replaced by a dry flannel bandage. He should still adhere to a fruit diet, but beaten eggs may be added to the kumiss, and he may take stewed fruit or baked apples, with granose or zwiebach, softened with hot fruit juice of some sort. His principal meals should be taken at S A. M. and 3 P. M. At 12 o'clock and 7 a couple of glasses of kumiss or kumyzoon may be administered, or, if these are not obtainable, fresh buttermilk. If the patient eats freely of malted nuts at the two principal meals, he will probably scarcely feel the necessity for the minor meals at 12 and 7 o'clock, and if he eats nothing at night, he will be likely to sleep better and will feel much more refreshed on awakening in the morning than if he eats late. Nothing should be taken before 3 P. M., except kumiss, buttermilk, fruit juice, or stewed or fresh fruit. About 10.30 A. M. the patient should have a fomentation to the spine, followed by a cold shower for three seconds. The temperature of this shower bath should not be above 70 degrees, and the effect is better if given at 60 degrees, or even as low as 50 degrees. When the last-mentioned temperature is used, the

bath should continue for not more than one second, and should be immediately preceded by a hot bath. After drying the patient, he should be rubbed with oil, preferably cacao butter or lanolin. He should then be taken out of doors in a wheelchair and allowed to doze if he desires to do so, in some quiet, shady corner, and should be encouraged to take a nap of an hour or so before dinner, but should not be dressed. In the afternoon the patient may have hot and cold sponging of the spine, or an application of static electricity, preferably the static charge or the electric breeze. At bedtime the neutral bath should be administered as usual, and the moist abdominal bandage should be applied. From day to day during the week of convalescence this treatment may be increased in vigor. Joint movements may be added to the manipulation of massage proper. As the bowels and stomach become less sensitive, abdominal massage may be applied, after each meal, to encourage digestion. The electric light bath or hot full bath for three to five minutes, followed by a cold shower bath for two to five seconds, may be employed after the third or fourth day. If the patient has occasional nervous attacks, the prolonged neutral bath or wet-sheet pack may be resorted to with excellent effect, but care should be taken not to continue the bath long enough to produce perspiration.

#### Third Period.

By the end of the week, if the patient does well, the appetite will be nearly normal and the sleep reasonably good. The patient should be content, however, with a simple diet of fruits, nuts, and grains, and five or six hours' good sleep at night. The physician should not on any account become discouraged and administer sleep-producing drugs, for these lead directly back in the direction of the drug habit from which the patient seeks to be delivered.

The thing which now remains to be accomplished for the patient is to build him up, to make him a strong, self-con-

trolled, well-poised man or woman. For this a more or less prolonged course of physical, mental, and moral training is required in most cases. Before beginning the course of treatment, the patient should be instructed that when the immediate effects of the withdrawal of the drug have been overcome by treatment, he is by no means out of danger, but must then begin a course of thorough health training by means of treatment and regimen, whereby he may be thoroughly fortified against a downfall, which is otherwise almost sure to come. He needs to be born again, physically speaking, and perhaps mentally and morally speaking also. His will is weak, his inhibitory power is small, he has so long yielded to sin, the clamorings of appetite are too strong for him to resist. He has no fortitude to endure patiently grief or trouble. He has been accustomed to flee to his nerve-obtunding drug as a refuge from every pain and trouble, disappointment, and sorrow. His nutrition is greatly impaired, every function is disturbed, his mental and moral tone is as low as his physical, and he needs thorough-going reconstruction. This can be accomplished only by the stimulation of the normal tissue changes under the influence of those physiological aids by which the nutritive processes may be modified and directed in normal channels.

The diet must be so regulated as to provide suitable material for the construction of sound tissues, and such as to furnish the largest possible amount of blood and tissue building elements in a form most easy of digestion.

All this can be best accomplished by the employment of such physiological measures as hydrotherapy, massage, electricity, gymnastics, manual Swedish movements, medical dietetics, and a helpful environment, but both the treatment and regimen must be carefully graduated and systematized in administration. The patient's daily program must be so complete as to include, control, and occupy every hour, and comprise all his habits of life. This may be best accomplished in a well-equipped and scientifically conducted institution especially prepared for the training of chronic invalids, where the effects of treatment may be carefully watched by an experienced physician, and modified from day to day as the patient's symptoms may indicate to be necessary.

It is important that the patient should be separated from his friends and associates and from his accustomed environment until a thoroughgoing change has been accomplished in him, physically and mentally and morally. It is especially important to thoroughly cure any physical ailments which may have been the incidental cause of the contraction of the habit in the first place, such as a chronic neuralgia, a dysmenorrhoea, or an insomnia. The patient must be trained to endure hardship; he must be made to feel and appreciate keenly that it is a terrible humiliation and debasement for a human being to become a slave to a thing, and be made willing to suffer much rather than accept relief at the hands of such a fascinating and seductive tempter as an enslaving drug.

It is astonishing what a change may be effected in a weakly man or woman who is not yet too far advanced in years, by a few months of thoroughgoing, rational health culture. There is no difficulty in keeping up the patient's interest, and even enthusiasm, when his training is based upon accurate data obtained by a thorough examination, and conducted on scientific lines. The examination should be such as to make it possible to make a graphic and mathematical expression of the patient's physical condition. The dynamometer will show the strength of every important group of muscles. thus obtained, placed upon a properly-constructed chart, will show the relation of the individual to the average man or woman of the same height, and will show at a glance any special weaknesses or deficiencies which require particular attention. Examination of the blood will show the proportion of hemoglobin and the number of corpuscles, red and white, per cubic millimeter. The examination of the stomach, if this organ is seriously involved, making such an examination necessary, shows not only the size and position of the organ,

but the exact amount and kind of work which it does, and the indications for diet and treatment. The examination of the excretions, repeated from time to time, serves as a means of regulating the regimen and treatment. The examination is not complete without a careful psychological examination by the aid of the chronometer and other means for the exact study of the nervous forces and functions.

I am glad to say that when I have been able to keep a patient under treatment long enough to carry out the full program of treatment which I have outlined, I have never yet had the humiliation of seeing him relapse. The great difficulty is to keep the patient long enough under training. These. patients are quite too often decidedly self-confident and exuberantly hopeful. When they find themselves delivered from the irresistible longing for the accustomed drug, they almost invariably feel that the whole work is accomplished, and that they have nothing more to fear. Nevertheless, I am confident that the subsequent treatment is necessary to reinstate the individual and fortify him, mind and body, or he is very prone to relapse.

I append a few illustrative cases to show the practical application of the method of treatment outlined, duplicates of which might be presented by the score.\*

## POTASSIUM PERMANGANATE IN OPIUM-POISON-ING.

Dr. Moore states that more than ninety instances of the successful use of potassium permanganate in opium-poisoning have been reported. He advises the administration of seven or eight grains in diluted solution to antidote the opium or morphine in the stomach, and this is to be followed by one grain in solution at frequent intervals, to antagonize the morphine subsequently eliminated by the gastric mucous membrane. The subcutaneous injection of a one-per-cent. solution is also recommended as a physiological antidote.

<sup>\*</sup> These cases will appear in the April number.

# THE FIRST INEBRIATE ASYLUM AND ITS FOUNDER.\*

By Charles H. Shepard, M.D., Superintendent Brooklyn Heights Sanitarium, Brooklyn, N. Y.

In glancing backward fifty years or more we find the state of public opinion on the question of the use of alcohol so different from what now obtains, as to cause wonder that such a condition could have prevailed. When the story of "Deacon Giles' Distillery" came out it caused a sensation that sorely disturbed many of the churches, and yet it was but a bit of satire on the fact that one of the deacons of a church was running a distillery. When the Washingtonian movement was started many were roused out of a spirit of lethargy, and, for a time, it seemed as though the days of alcohol were numbered. In like manner, it has been with many other efforts, and with those private struggles with the drink demon. They were mostly directed toward the emotional side of man's nature, and, while apparently successful for a time, but few were of enduring record. At that time it was not uncommon. nor was it considered degrading, for a gentleman to get drunk. It was rather the mark of a good fellow. The decanter stood on the sideboard ready for all guests. Every well-stocked cellar had barrels of cider, if not madeira and port. Women were not always averse to taking a social glass of wine, and at times, urged the guest to partake. Beer was brewed in many a farmhouse, and it was not uncommon for the mother of the family to make a little current wine each year for use in the household, and even the farm laborer had regularly

<sup>\*</sup>Read before the American Association for the 'Study and Cure of Inebriety at the twenty-sixth annual meeting, in New York city.

rations of some kind of alcoholic drink served in the harvest field; and no raising-bee or public gathering was complete without alcohol in some form. The songs and legends, as well as the polite literature of that day, reek with the fumes of alcohol, and a gathering of friends would be dry indeed without the inevitable alcohol. The most able statesmen of the day were known to indulge freely, and by some this was considered indispensable to success in any great effort. It was then that a drink of cold water would be refused a fever patient. Alcoholic stimulants were given for any and every ailment, and even the doctor was expected to take a "little" at every house he visited. Alcohol in some form was on the table of every well-to-do family, and even the clergyman was expected to have his "toddy."

This is but a faint picture of the times when Dr. J. Edward Turner entered upon the activities of life, and by its strong contrast throws into bold relief the mind of the man who emerged from such surroundings, and entered upon a crusade, both vital and far-reaching, to reverse this condition, for the benefit of mankind.

Born in Bath, Maine, October 5, 1822, of English ancestors, who were among the early settlers of that city. His father was a farmer and ship-builder. The son attended the Academy in Bath, assisted his father in the ship-yard, and afterward studied medicine in Philadelphia. By his preceptors he was recognized as being an earnest student. He practiced for two years in Trenton, N. J., and then turned his attention to the work that thereafter exacted all his time and effort. A case of intemperance in a near relative, one that demanded his closest supervision, led his reflections to the formulation of a plan of an institution in which the inebriate should be medically treated, should have seclusion and protection and be surrounded by such moral and intellectual influences as were calculated to bring about a reformation. He

set forth the then novel idea that inebriety is a disease, and, as such, was curable.

Not daunted, but, rather, urged on, by opposition, he consecrated his whole life, giving his earnest thought and indomitable spirit to the work of winning over public opinion and the co-operation of the scientists and the thoughtful philanthropists of his age to the treatment of the inebriate as a sick man and not as a criminal.

He was a philosopher, daring to use his own reason despite antiquated opinions and book authorities. In reading the signs of disease, he was possessed above most men, of that faculty called intuition, which enabled him to see at once the cause and reach for the remedy. Unable to get along with the faulty methods of the day, he was obliged to seek out a better way, and when he had found what, to his mind, was satisfactory, there was no peace for him but in work to bring it about. Of pleasing and most courteous manner, his naturally broad and catholic mind was still further enlarged and illumined by contact with the best minds of the day, for if ever a man aimed high, it was Dr. Turner, who "hitched his wagon to a star."

Buoyed up by his own faith, he found, as all pioneers have found, that his greatest obstacle to success was the dense ignorance in the community regarding the subject.

His contention for the necessity of an asylum for the inebriate was, "that the patient was wholly irresponsible, and that while in an institution he was necessarily restricted from and relieved at once of the cause of his malady, whereas in the insane asylums the physician might be a long time before he could ascertain the cause of the disease. . . That a disease produced by a broken moral and physical law, is as much a disease as if hereditary, and should be treated as such. . . While the poisonous draught is the cause of all his woes, it is also the source of all his consolation. It puts to sleep the torments of his stomach, soothes his agitated nerves,

and gives a momentary respite to his infernal misery. . . . Dipsomania undermines the moral sensibility of its victim, deprives him of the knowledge of right and wrong, destroys all the ties of affection that bind him to wife, parent, and children, in a word, it makes him a liar, thief, a murderer, a monster, and a demon."

Dr. Turner was one of the first to note the fact that the brain has an affinity for alcohol which no other organ possesses, and that this condition pervades the entire nervous system, and produces a complete prostration of its highest and most important functions. Hence, the mind is impaired, the will of the individual destroyed, and, at last, the victim of this malady becomes a wandering maniac. As the chronic insanity of inebriety produces more than forty per cent. of the constitutional insanity of the United States, this stage of the disease should be treated in an inebriate asylum, where the patient would be entirely separated from insanity produced by other causes. His investigations showed that inebriety was the prolific mother of insanity and idiocy. By providing asylums for dipsomaniacs it would relieve hospitals for idiots and the insane.

As Dr. Turner has written. "The destruction of the physical and mental powers of the people of the United States, by this disease alone, is so vast, were it to go on unchecked, that it would require no voice of inspiration to sound the downfall of our republic and the annihilation of our people."

He was a thinker from whom we have now much to learn, his ideas are more and more coming to be recognized as vital truths, and the future will vindicate him as being many years in advance of his age.

At first his ideas were treated with a contempt that only served to arouse all his energies to a more careful study of this theory. This study resulted in an emphatic conviction of the truthfulness of the theory. Finding so little sympathy in his own country, he determined to go sbroad and present his

ideas of an asylum before the leading medical men of the world, visiting Paris and the larger cities of Great Britain. Two years were spent in their hospitals and the discussion of his views with the medical men connected therewith. There, as in this country, he found no general acceptance of his theories, for most of the medical men of that day drank more or less freely. He then returned to America and commenced anew an earnest investigation of facts, and was thus the first man to approach the subject from a scientific standpoint. The great enthusiasm and perseverance, which was a marked feature of his life, came out clearly in this work. The persistent inquiries which he made among those in possession of facts concerning the inebriate were rewarded by a fund of accurate knowledge. This knowledge sustained his theory of disease, and demonstrated the need of an asylum. He then made a tour of the hospitals in New York and Philadelphia, making notes and observations and enlisting the sympathy of eminent men. Among others, Drs. Valentine Mott and John W. Francis very warmly approved and endorsed his plan of an asylum and the theory of disease, and all their lives they continued to be his warmest friends. In an address before a small parlor group of men, who had met to talk over the scheme of an asylum, in the winter of 1847, Dr. Mott used the following language, which Dr. Turner quoted ever after with intense satisfaction: "In my professional life of over forty years I have accumulated facts enough to prove beyond all doubt that inebriety is a disease, affecting every membrane, tissue, and nerve of the human mechanism, producing in its victim a compound fracture from the crown of his head to the sole of his foot, as well as mental and moral dislocation. The successful treatment of such a malady must come from the application of the legal splint and bandage to the sick man, to hold him in place during the process of healing, otherwise the treatment fails and the patient dies."

The opposition to the idea of disease and hospital treat-

ment was very bitter among the religious and secular press, and but few men were bold enough to sustain or urge the views of Dr. Turner. In 1848 he made a second voyage to Europe, both times going as third-class passenger in order to save money to prosecute his work. He carried letters from the Russian minister to the authorities at St. Petersburg, and was given every facility to study the drink question in the hospitals and police courts of St. Petersburg and Moscow. He then traveled in Germany, Italy, and France, and came home in 1849. His plans received a warm endorsement from many of the leading medical men, and their courtesy was shown in giving him all facilities to study hospital plans and methods. But he could get no open or public endorsement, though the private sympathy he enlisted was a great stimulus to him in all after life. Up to 1850 he had spent about six years in active efforts to create a public sentiment in favor of the hospital treatment of inebriety. It is doubtful if any new truth was ever urged upon the minds of the professional world by means and methods so exact and so far above all suspicion of personal motives.

His next move was to go personally to all the leading men of the country and solicit them to subscribe for the stock of a company to build an inebriate asylum. Sixteen years of patient labor were given to secure subscriptions to the capital stock, and during that time over seventy thousand calls were made, the most of the travel by rail being done by night, to leave the day free for labor.

The first application to the Legislature of the State of New York for a charter for the Inebriate Asylum was made in 1852. The charter was granted in 1854. May 15, '54, the first meeting of the Board of Directors was held in the Tract House, New York. It was called to order by Anson G. Phelps, and John D. Wright was chosen President of the Corporation, N. A. Prince, Registrar, and J. E. Turner, Treasurer.

A full account of his efforts would fill a large volume. 1857 he commenced circulating what became a monster petition, asking the state legislature to grant one-tenth of the excise money for the purpose of building and maintaining the asylum. Said Dr. Turner, when pleading for this grant before the Finance Committee of the legislature, "Of all the maladies to which man is heir, there is none that requires an asylum for its medical treatment more than dipsomania. The drunkard, without a hospital, perils his own life, jeopardizes the lives of others, and dies at last a case of suicidal madness." In 1859 such a law was enacted. In May, 1858, the gift of 250 acres of land as a building site was accepted by the Board of Directors from the city of Binghamton, N. Y. ground was broken for a building in June, and the corner stone was laid on the 24th of September, the same year. though the rain poured in torrents, the programme was carried out minutely and with great enthusiasm. The Masons laid the corner stone, and addresses were made by Dr. John W. Francis, Rev. Dr. Bellows, Edward Everett, Daniel S. Dickinson, and the president of the institution, Hon. B. F. Butler, and a poem was read by Alfred B. Street.

They all recognized the genius and enthusiasm of Dr. Turner as the originator and founder of the plan of hospital treatment. Said Rev. Dr. Bellows, "I rejoice to be able to lift to the pedestal of this majestic occasion, and there to place before the eyes of the friends of the unfortunate, of the inebriate, and his wretched victims less miserable than himself, the name of the first man who proposed and advocated, and successfully carried into effect, the project of an inebriate asylum, Dr. J. Edward Turner. May God reward his faith and works."

Dr. Turner was the active spirit and chief leader of the entire movement. He drew the plans of the building at Binghamton, with the aid of a local carpenter, who acted as builder under his care, and purchased or begged all the material, employing and paying all the help, and superintending every detail. This plan grew out of his studies of European asylums, and the result was one of the most beautiful architectural buildings in the country. The president and board of directors were active professional men, who, finding Dr. Turner so very energetic and clear as to the details of building and the method of organization, left the entire business in his hands, and, beyond advice and consultation and monthly meetings of the board, did but little except to write letters and solicit aid from personal friends. One thing quite remarkable was, that while some of them were liberal contributors to the capital stock of the asylum, none were able to secure anything from others, though all were provided with books for that purpose. Every dollar was obtained by Dr. Turner personally.

Before the first story was completed more than twenty-eight hundred applications were made for admittance. In June, 1864, the building had progressed so far that it was deemed wise to open it for patients. A number of inebriates were admitted, and Dr. Turner was then placed in charge as superintendent.

While engaged in building the asylum and traveling to all parts of the state, collecting money and influencing the legislature at Albany, Dr. Turner found time to marry. In October, 1862, he was united to Gertrude, the daughter of Col. George Middlebrook, one of the oldest and most respected settlers of Wilton, Conn. His life work was at its height. He had created a favorable public sentiment, roused an interest in inebriate asylums all over the world, founded the first asylum, and begged the money and material to build it. The work was partially completed, the state was aiding in the work by appropriating a part of the excise funds. One wing of the building was completed and opened for patients. All over the state an active interest was manifested in the work. Dr. Turner was enthusiastically praised and recognized as the

presiding genius and founder of this, the latest, most promising charity of the world. The former sharp opposition had grown insignificant and unworthy of notice, and the work went on with an ever widening prosperity. He had given over a quarter of a century of unselfish work, and his success at this point was phenomenal.

Dr. Mott was the second subscriber to the capital stock of the asylum, taking ever after an active interest in all its work. He also contributed \$500 a year for three years. He was elected president of the corporation April 1, 1861, and delivered his inaugural address at Binghamton Nov. 20th, the same year, in which he said: "It is impossible to estimate too highly the patient firmness, the unwavering fidelity, and the earnest perseverance with which our Secretary, Dr. Turner, has for now seventeen years and more followed up his original idea of a hospital for the treatment of inebriates. Gradually he secured the approbation and support of the different professions and men of wealth and financial influence, until this structure arose like a genial exhalation, to shed showers of peace and plenty and purity upon the land. Dr. J. Edward Turner is no common benefactor. His name will shine forth as one of the most distinguished among the great and good men, not only of our own country, but of the whole civilized world, and in all coming time. For his eminent services he has received no recompense, nor has this enterprise at any time been encumbered in progress by any salaried officer."

The board of directors were in full sympathy and worked unitedly with him in all directions, and his plans for the future of the asylum and its prosperity were broad and farsighted. A palatial building, liberally endowed and complete in every respect, with room for rich and poor, with workshops, farm labor, winter gardens, and every appliance which science has only recently shown to be essential in the treatment. His ideal, as projected at Binghamton, was at least a

century ahead of the times. It was practically a workhouse hospital, on a military basis, restraint and control being the corner stone. Each case was regarded as a suicidal mania, needing positive restraint and constant care and watching. No one was received for less than one year, and every tenth case was a charity patient. Improved arrangements for bathing, including Russian baths, were provided, and each patient was required to take two baths a week, and spend a certain number of hours in the gymnasium or workshop. Elaborate rules were laid down regulating all the conduct and care of the patient, and a most thorough system of medical and military treatment enforced. There is not an institution in the world to-day with so complete a system, and every practical man has recognized this almost wonderful conception of the means and measures necessary for the cure of these cases.

Such was the institution and the state of public opinion created by the master hand of Dr. Turner. Such was his confidence in the integrity of human nature that it never occurred to him to entrench himself, as he might easily have done, in his stronghold. If every one associated with him had been as unselfish and as anxious for the public welfare, all But, alas, they were not. would have been well. came a dark chapter in the history of the asylum, and an unfortunate one for Dr. Turner. The opposition which had retarded the work for a quarter of a century seemed to die away in part, only to break out again with renewed vigor when the question of treatment arose. Dr. Turner's management of the asylum and its patients was sharp, distinct, and emphatic. The institution was a hospital, and the remedies were physical, and the individuality of the patient must conform to the principles and laws of the asylum. Dr. Turner had formed very clear conceptions of the practical needs and methods of treatment, which were far in advance of his time. Looking back after a period of thirty years of experience and advance in this direction, one is greatly surprised to find how

accurate Dr. Turner's measures and methods of treatment were. Every asylum superintendent realizes, from actual experience, that control of the patient and all his surroundings should be absolute, to make the treatment a success. That this control should extend over a long period of time, and not be governed by the will of the patient or his non-expert friends. This was the first principle of treatment laid down and defended by Dr. Turner. On the other side, the moralists and the friends of the patients assumed that each case should have full liberty to determine the question of treatment, and that moral appliances should be foremost of all; also that the asylum should be made a popular resort for the patients in every way; that restraint should be only nominal, and that the patient's choice and discretion should be consulted.

These views and their advocates were treated with just contempt by Dr. Turner and the board of directors, who were in full accord with him in his conceptions of treatment. In 1865 Dr. Willard Parker of New York city was elected president. Unfortunately, he was a man without any clear conceptions of the inebriate, or comprehension of the work that Dr. Turner had sacrificed so much to bring about. His success was due to his keeping on the popular side of the questions of the day.

About this time an unscrupulous lawyer became a member of the board of trustees. He was a man whose only purpose in life was to get rich, and the asylum and its work was to him a means to that end. The financial records of the asylum leave no doubt on that point. Soon after Dr. Parker became president he declared that the mental irritations and complaints of the patients under treatment were evidence of the failure of the methods of Dr. Turner, which he proposed to remedy, by a larger liberty, and the placing of the inmates on their honor, etc. Dr. Turner replied "that these patients were suffering from a physical disease, and the source of mental irritation was from within. The promise and pledge had

iong ago been exhausted, and the asylum never recognized any promise or honor of the patient. These restraints were lessened as the patients improved, and manifested greater physical strength," etc.

This was the beginning of a conflict between Dr. Turner and Dr. Parker, who was instigated and seconded by his lawyer friend on the board. Then began a series of intrigues to get Dr. Turner's friends on the board replaced by others who would unite with Dr. Parker and his plans. This was, in too large a measure, successful. The year 1866 was passed in the most disgraceful efforts to drive Dr. Turner away, and make his management a failure. Slanderous and untruthful statements were given to the press, even claiming that Dr. Turner himself had set fire to the building, as though he could destroy the child of his own creation. The asylum was practically the battle ground, and, as far as possible, the patients were made parties to the conflict. Finally, the board resolved to close the asylum, ostensibly until the completion of one wing, but literally until the conflict could end, or Dr. Turner would resign.

The personal popularity of Dr. Parker gave him the power to crush out the man who had conceived the original idea of the asylum, whose heroic labor had built the institution, and who was thereby made a wanderer in the land, and died before his time, a broken-hearted man.

The Rev. Dr. Edward Andrews was called upon and told that Dr. Turner was an outcast, a man without a country, etc., but he replied, "The man whom you have thus maligned is one who has fully redeemed all his pledges and promises. It was my good fortune to have been born in the old town of Ipswich, Mass., where my parents attended the same church with those of Dr. Turner's parents. . . . This work of the asylum will be a monument to its patient, faithful, and untiring projector, long after his slanderers' tongues have been silenced in the grave."

One of the local trustees described Dr. Turner to the board of state charities, on their first visit to the asylum, as a very wicked man, who had attempted the destruction of the asylum by fire, about whom no one knows very much, who came to this country from England some twenty years ago, and as one of those peculiar characters floating about and known as English adventurers. One of the board, as soon as he could secure attention, replied: "When a boy, and attending the Bath, Me., Academy, the projector and founder of this asylum, which we have so much admired, was a schoolmate of mine, and we were seated side by side for years."

James W. Beekman said, regarding Dr. Turner's superintendency: "That out of an expenditure of \$401,635.29, there was but two cents missing, that the asylum was open about three years, and in that time the income exceeded the expenditures, including \$10.000 paid for furnishing the wards of the asylum, and for the support of six charity patients, by more than \$700, that not a death occurred among its patients under the management of its founder, and that, beside all this, more than half of its patients were discharged cured."

Two years before, Dr. Mott had offered a resolution that Dr. Turner should receive a salary, and all expenses incurred in building the asylum, and that this be credited as paid-up stock to the asylum. Among the discreditable proceedings of the new board, was the refusal to recognize this resolution as binding. Had Dr. Turner secured this when first offered, it would have saved him the loss of the asylum. Inasmuch as he had received no salary for all his years of labor, it would have been only justice to have given him this recognition.

The patients were sent away, and Dr. Turner continued the management and erection of the asylum wing with all the energy of his earlier efforts, when an incident occurred which roused the most intense personal feeling. It was never forgotten, and it changed the whole tenor of his life. Dr. Parker and the lawver member of the board resolved to starve out Dr.

Turner and family. Selecting a favorable moment, when the doctor was away, they issued special orders that no groceries or farm supplies should be sent to the asylum from the town, and the asylum farmer should, under no circumstances, give Dr. Turner's family any milk or produce. Had it not been for some neighboring friends his family would have suffered. Up to this time the struggle had been for a great scientific truth, in which Dr. Turner had been conscious of the right, and hopeful of ultimate triumph. Now it became a personal matter, the lion in his nature was roused, and to the latest moment of his life he never forgot or forgave those men. In speaking of this event, he said "he suddenly realized that these men were desperate and determined to carry out their projects at all hazards, no matter what the consequences might be."

The storm was at its height; his friends on the board who had supported him with great energy and spirit saw that the outcome of this contest would be to destroy the asylum, and urged that he accept some stated sum and leave the work. To abandon the creation, which was the result of his lifelong efforts, to surrender the asylum, for which he had given so many years of labor, and now, when he was on the eve of demonstrating its success, be forced to leave it to the care of those who had no idea of the work, caused the most intense sorrow and disappointment.

Dr. Parker and his advisers realized that they had roused a dangerous antagonist in the founder; that although they had forced him to resign, and tried to ruin him as far as possible, he might at any time appear in some unexpected way and take possession of the asylum, and shed a lurid light over their proceedings. To save themselves from this contingency they transferred the property to the State of New York for one dollar consideration, making it a state asylum, expecting in this way to have more certain control of the management. In their eagerness to accomplish this they made a fatal blunder.

The asylum was a stock company, and could not be transferred or sold without the consent of the majority of the stockholders. This consent was not gained; the board of trustees assumed ownership and sold it to the state, and it was accepted with their deed. To-day the magnificent property called the New York State Insane Asylum, at Binghamton, N. Y., is not legally owned by the state, but has been secured by fraud, which will some day be revealed, and, it is to be hoped, will be righted.

In February, 1867, Dr. Turner left the asylum permanently, and went to his home in Connecticut. In May following the asylum was opened for patients, and Dr. Day was made superintendent. The contest among the trustees as to the legality of their work and who was entitled to vote still continued. Dr. Turner's friends determined to dispute every effort and to keep the management from degenerating into a "ring," whose only purpose was pecuniary and political gain, but they failed, and, one by one, dropped out. A campaign of abuse and misrepresentation followed, which was without foundation or excuse, but the great facts of his work were not successfully assailed, rather, they were more fixed and made more apparent by such personal opposition.

Thirteen years later the asylum at Binghamton was declared a failure, and changed to an insane hospital. Five different superintendents had each tried to treat the inebriate on the popular plans of the president, and failed. In truth, the more closely the facts regarding the conduct of Dr. Parker and his associates are inquired into, the worse do they appear. Political intrigue and dishonest management hurried on the final end of the asylum, but not until the conception of its founder and the inspiration which he left in the work had taken root in many new asylums all over the world.

Dr. Turner never recognized defeat. A short time after leaving the asylum in February, 1867, he started out on what he humorously called his "second campaign." This was to

secure subscriptions for rebuilding the asylum, parts of which had not been completed, and also to procure assignments of the original stock to him by the old stockholders. All his old friends gave him their stock and aided him in every way. This necessitated a long tramp of six years, visiting every prominent man in the country, many of them over and over again, soliciting stock and subscriptions, and explaining the plans and methods of Binghamton and the wrongs he had suffered. He thus made the personal acquaintance of most of the distinguished divines, jurists, physicians, scientists, and statesmen of the day, and secured their hearty sympathy and co-operation in his humanitarian enterprise. The list of subscribers grew daily, and embraced the most influential men in the country. Over ninety-five per cent. of the stock was transferred to him, and he was literally the owner of the asylum. Still he kept on. Now and then he appeared at Binghamton, looking around with great interest at the changes going on, and seemed to become more enthusiastic after each visit.

At length, in 1876, he began a suit against the trustees of the asylum and the State of New York, in the United States Circuit Court. After several hearings and a large volume of testimony was taken, the judge decided against the case on some technical point, but gave leave to amend the complaint, and begin the case in a different way. An appeal was taken to hold the case open for the future, but, unfortunately, it was never carried any further. Several important legal points were involved, requiring a long contest before a decision could be reached, and Dr. Turner was unable to pay the necessary expenses to this end. Several leading men offered to carry on the suit and pay all the bills, taking a per cent. of the stock of the asylum as pay, but for some unknown reason Dr. Turner declined this proposition, possibly fearing that he would again lose the asylum by some treachery. He seems to have thought that in the near future he could carry on this suit alone, and

have the support of public opinion, and be reinstated as superintendent and owner of the asylum, without difficulty.

He then determined to start another "campaign," as he called it. This was the organization and building of a great woman's hospital, for inebriates and opium-eaters. This project was begun in 1875, and, after the halting of the suit, in 1877, he gave all his energies to that work. With a subscription book he started out on the same beaten track which he had traversed for over thirty years. Year after year he worked, traveling night and day, all over the country, in all seasons, and by all sorts of means. He thus procured the largest personal endorsement and subscription lists of names of leading men of the country that had ever been gathered, excepting that of Binghamton asylum. In the winter of 1881, the Legislature of the State of Connecticut gave him a charter for the first asylum for women inebriates ever projected on a large scale, called the National Women's Hospital. Once more this great genius of an organizer was directing the formation and growth of an asylum that might have gone down to all future time. On the 10th of October, 1881, a few hundred farmers and professional friends gathered on a magnificent hilltop, and broke ground for this last new humanitarian work of his life. A young son and daughter of Dr. Turner shoveled the first dirt and wheeled it away. Some speeches, a poem, a prayer, and the work began. The day was cloudless and beautiful, and will never be forgotten by those who could appreciate Dr. Turner and his far-reaching work.

The plan of the asylum was spacious and artistic, and the scheme of subscriptions for building the asylum showed masterly art. In all probability no other institution was ever planned with such skill to reach the hearts and homes of the benevolent, and no other asylum had such a certain promise of success. Dr. Turner had neglected to secure a permanent control of the asylum at Binghamton when it was offered him by resolution of Dr. Mott; now he seemed to have made

another mistake in attempting so great a work alone, as its completion would have necessitated years of the most arduous toil. Three years passed by, and the subscription books of the hospital had grown to enormous proportions. Leading benevolent men had promised large assistance, material for building, both marble and granite, was offered free, and even the railroad company had offered low freights. Over half of the material for the building was pledged by responsible men, and Dr. Turner was in Ohio soliciting the iron for the work, when suddenly, like a stroke of lightning from the clear sky, came the news that a resolution had been offered in the Connecticut State Legislature to repeal the charter of the hospital. It was the same old battle, inspired by the friends of Dr. Parker, now dead, supported by a group of men whose names will go down into the future despised and condemned. It was pitiful to see the "old pioneer." of forty years of labor for asylum work and inebriates, pleading for the life of this hospital before the legislative committee, offering the magnificent subscription books in evidence and urging the necessity of the hospital, which every advance of science revealed more and more clearly.

But all in vain, the charter was repealed, and another event was added to the history of the retrograde movements of ignorant law-makers. The State of Connecticut practically destroyed one of the most magnificently-planned hospitals, whose future would have been an honor to the state and a blessing to countless homes and families all over the country.

The news of this repeal was maliciously spread far and near through the press, and for the first time in a long life of battling, Dr. Turner went home sick and discouraged. Then followed a serious illness. After a time his enthusiasm returned, but his vitality was not equal to the work he was continually putting upon it. He then planned to write a book on the history of the movement, and, with this as a permanent

record, he proposed to go before the public in the "last great campaign," as he styled it.

Chancellor Walworth, the second president of the asylum, in a conversation with the founder, said, "The history of the asylum must be written, and no one can accomplish that work so well as yourself. Such a history will expose the most wicked and cruel conspiracy ever enacted in the growth of any institution, and 'stranger than fiction' will be the verdict of the reader."

Nearly two years went by before the book was written and published. In 1888 Dr. Turner issued a large volume called the "History of the First Inebriate Asylum in the World." This was a general history of his forty years' efforts, full of personal details of men and events which were prominent in the asylum at Binghamton. Here follows his most pathetic summing up at the end of the book:

" It has been discussed and decided by many of the friends of the founder that a man who would exhaust his estate, mortgage all his property, and live in hotels and railroad cars for seventeen years, and permit himself to enjoy his home less than four weeks each year, and give his time in behalf of a public charity without a moneyed consideration, is either an idiot, a lunatic, or an unnatural father. Yet there are thousands of men who would make the same sacrifice, with like circumstances, if they were called upon to accomplish a similar work. The labors of the founder have extended over a period of almost fifty years, in which he has fought a campaign of many skirmishes and battles, with varied success. All the great and good men who were associated with him in this memorable work have passed away, and not one is left in this dark day of the asylum's history to speak in its behalf or help Although their labors in the material asylum in its work. have perished, yet the idea which built it is immortal."

In many respects the book was remarkable, and will be read by future generations with increasing interest. He then started out again to sell the work and solicit aid to push on the suit against the state for the asylum at Binghamton. His enthusiasm was unabated, but the storms of over forty years had left their impress. He still dreamed of the final restoration of the asylum at Binghamton, and the completion of the women's hospital as the crowning events of his life. Night and day he traversed the streets of New York and other large cities, urging the necessities of these asylums, selling his book, and creating interest among public men. How far he was successful it is impossible to determine. The week of his death a number of wealthy men had agreed to meet for the purpose of forming a company to test the question of ownership of the asylum at Binghamton.

This is but a meagre outline of the trials and disappointments endured by one of the most heroic souls that ever lived. And for what was all this done and suffered? Simply that some of those who had made wrecks of their lives might be restored to themselves, their families, and society. The sufferings and privations he endured, the scorn and contempt that sometimes greeted him, and extended even to his family, were enough to have crushed out all ambition, were it not that he was a proud man, and while he felt the grasp of the present, lived in the future, always conscious that his work would yet be recognized and understood. He often said that he would rather have built the asylum at Binghamton than have been President of the United States or to have accumulated the greatest wealth possible.

The application of science to charity is a memorable feature of the age, and in no way is it more apparent than the work of Dr. Turner in establishing the first inebriate asylum, by which he inaugurated a new era in the perpetual conflict which individuals and society sustain with this peculiar form of error and suffering, and assured the only available means of a gradual and progressive triumph.

Dr. Turner was a highly sympathetic and sensitive man.

He felt most keenly all the slights and disappointments that were put upon him, and again he could not see a case of destitution or suffering from disease, without endeavoring in some way to alleviate the sufferer. Much of his energy was spent in doing for others and denying himself.

Only when people see the magnificent building erected for an inebriate asylum, and consider that its erection was the work of one man, through sheer industry in soliciting and collecting subscriptions for an object upon which he was an enthusiast, can they understand the chief feature of the character of Dr. Turner. In the midst of all his grand plans for the future, maturing hopes, and expectations, the end came. On his deathbed he said he had never been nearer the realization of his life work than at that moment. While on a visit home he was seized with acute nephritis, and died after a short illness, July 24, 1889, sixty-six years of age.

In the little cemetery at Wilton, Conn., lies the body of Dr. Turner, without a more enduring monument to mark his resting-place, but he carved out a monument by the strong influence of his life, and his ideas are marching on, and when the list of world heroes is made up of those who sacrificed themselves for the good of mankind, who died that others might live, his name will be placed high on the scroll of fame. The world is now fast coming to his advanced ideas of the treatment of the inebriate, and may the time soon come when the people of the great State of New York shall see the wrong that has been done to their benefactor, and through him to themselves, and restore the New York State Inebriate Asylum to its rightful and legal use.

# ON EPILEPSIA ALKOHOLICA.\*

BY HEINRICH STERN, Ph.D., M.D., NEW YORK.

More powerful than the Pope in the darkest period of mediæval ages, more potent than the strongest bonds of solidarity, more arbitrary than any religious decree has ever been, alcohol holds its sway over the entire world and indomitably rules the fate of nations and of men.

The influence of alcohol, conquering the mightiest and overwhelming the fittest was deified, for humanity in its childhood at the dawn of civilization idolized and worshiped all which to it was invincible, impenetrable, and mysterious.

It is to the researches of our times that we have become aware and fully acknowledge what a treacherous foe we have in alcohol. Thus we have the Alcohol Question, and this is, above all, a physiological and chemical problem.

Long-continued indulgence in alcohol produces among the somatic symptoms dyspepsia and gastric catarrh; fatty and atheromatous degeneration of blood-vessels, heart, liver, and kidneys; hyperæsthesia, anæsthesia, and in a few advanced cases hemianæsthesia; sensory disturbances, as disturbances of vision, loss of pulpillary reflexes, subjective noises (ringing and tingling); motor disturbances, as tremor, idiopathic febrillary twitchings of the tongue; disturbances of speech; in grave cases epileptic neuroses, and finally paralytic conditions of the muscular system. Among the physical symptoms occurring as the result of excessive use of alcohol are, gradual decrease of memory, confusion of judgment, impoverished im-

<sup>\*</sup>Read before the Medico-Legal Society, March 17th, 1897, N. Y. City.

agination, decrease of moral sense (complete moral degeneration in very advanced cases) and morbid irritability and passionateness.

Such is the somatic-psychical results of chronic alcoholism. These changes are more or less pronounced, and are dependent as to their degree of severity upon different facts, among which I enumerate—form of alcoholic beverage and chemical type of alcohol, duration of alcoholic poisoning, resistency of the individual constitution and environment.

The mildest type of chronic alcoholism is represented in the drinker who indulges in alcoholic beverages more on account of habit than of desire. This species of habitual drinkers are often for a long time enabled to attend to their vocation, and with the exception of a chronic gastric catarrh and occasional attacks of hemicrania and vertigo, no other bodily symptoms of alcoholism may be detected. The more advanced types of alcoholism, however, present in addition thereto the train of neurotic symptoms — tremor, paralysis, epilepsy, and disturbances of intellect.

One symptom, though, every stage and every degree of chronic alcoholism has in common, and that is the defect of the moral sense, the progressing decay of morality. In the beginning, not easily traceable and often recognizable only in the indifference towards the family, in inattention to the demands of refinement, in the relaxation and the cessation of former ideal aspirations, and in a too yielding and condescending disposition, we meet towards the latter stages of alcoholism with the complete decay of the ethical sense and of the morals.

This alcoholic degeneration which, per se, does not necessarily indicate a well-defined disease of the mind, is the basis of the real psychosis. Chronic alcoholism, especially in its initial and less advanced stages, often only predisposes the drinker to neuroses of intellect, and makes him particularly susceptible of contagious and infectious diseases. In severer cases of alcoholic poisoning we find the vitality and resistancy

completely undermined and we meet with grave disturbances of psychical life. These disturbances are all of a toxic origin and are pronounced cachectic phenomena, which, though not solely and absolutely characteristic of alcohol poisoning, always occur in typical forms after abuse of alcohol, thus suggesting their dependence upon the toxic influence of the latter. In the train of alcoholic degeneration we notice a number of distinct types of psychoses, among which are delirium tremens, delirium tremens febrile, alcoholic melancholia, alcoholic mania, alcoholic dementia, and alcoholic epilepsy.

Alcoholism — in its acute and chronic form — may become an important etiological factor of epilepsy.

Before proceeding any further, I may be justified in explaining in a few words what "epilepsy," according to our present state of knowledge, implies.

Under "Epilepsy" we understand:

- 1. Loss of consciousness with tonic-clonic convulsions of one or more muscles or of the whole body grand mal.
- 2. Loss of consciousness without or with only very slight convulsive movements petit mal.
- Certain phenomena acting as equivalents to the typical symptoms epileptic equivalent.

Epilepsy, like fever or cough, is only a symptom, and not a disease per sc. For convenience's sake it may be subdivided into two great classes, viz.: Epilepsy caused by traceable organic disease; and epilepsy which may be termed idiopathic. Basing on this subdivision the present writer classifies, viz.:

- I. Symptomatic Epilepsy.
  - a. Epilepsy caused by anatomical changes—molecular epilepsy.
  - Epilepsy caused by toxic influences toxic epilepsy.
- Idiopathic Epilepsy,— epilepsy not traceable to anatomical substrates of pathological changes, or to toxic influences.

The idiopathic type is an affection of the vaso-motor centre

in the medulla oblongata — (probably also of the centre in the Cortex Cerebri) and consists of an increased irritability of the same, and we may term this type of epilepsy a vaso-motor neurosis.

Symptomatic epilepsy — the type produced by organic lesions or by chemical influences — does not resemble the idiopathic type of epilepsy. However, some observers have noticed that the more deviating and atypical the seizures are, the more both types resemble each other, and that in some cases all phenomena of idiopathic epilepsy also occur in the symptomatic epilepsy, and vice versa, and in certain cases the lines of demarcation between the two types are finally obliterated. Such cases have been recorded by Meyer, Levy, Hirt, Landouzy and Siredey, and Adamkiewicz.

And now let us see what the different authors have to say about the etiological relation of alcoholism to epilepsy.

### Schüle says:

"Much greater and more pronounced (than the effect of acute alcohol poisoning) are the injurious results of chronic alcoholism. In two ways: a. On the blood, the corpuscles of which change, and whose coagulability is increased. b. On the nerves, whose functional activity become first stimulated, then overexcited and finally paralyzed. In grave cases we find here the motility-neuroses of epilepsy."

#### Portal states:

"Experience has proven, that not only children, but also adults, after excessive use of food-stuffs — and especially of alcoholic beverages — have become epileptic. Among the observations of Tissot and other physicians of this type of epilepsy, we find some cases where the seizures only lasted during the time of the acute indigestion, but they report other cases where after the indigestion had disappeared and had left no apparent injuries, the attacks recurred and became more frequent and violent."

Magnan asserts that those acute alcoholists who have epi-

leptic seizures, most always indulge in "absinthe."\* thinks that acute alcoholists, in whom the epileptic symptoms do not appear, are users of wine or brandy.

Nothnagel says:

"Although not so frequently as generally supposed, certain causes seem actually to be the etiological factors of epi-

"The first place among these causes telongs to the habitual drinking of greater quantities of alcoholic liquids, the dipsomania; epilepsia potatorum has long since been recognized. .The seizures of the latter, leaving aside the complications and violent symptoms of alcoholism in the intervals, are nearly analogous with the attacks of ordinary epilepsy. . . . The first appearance of the seizures does not always precede the other grave symptoms of alcoholism, but the epileptic seizures may even introduce the whole train of symptoms characteristic of that condition. The first seizure occurs now and then just after a heavy intoxication; at other times, however, at such a period when on account of certain reasons total abstinence had been observed; in still other cases an external accidental influence effected the first insultus."

Nothnagel, in his further explications, disproves Magnan's assertion that epilepsy of drinkers is only caused by the excessive indulgence in "Absinthe," and shows that although comparatively little "Absinthe" is consumed in Germany, the Epilepsia Alkoholica is not of such rare occurrence in that country.

Westphal observed epileptic seizures in individuals, who only manifested an epileptic condition during an attack of delirium tremens.

Forel noticed that,

"Especially whisky drinkers develop Epilepsia Alkoholica, which is curable through abstinence."

<sup>\*</sup>The leaves and tops of artemisia absinthium contain Absinthin, a very bitter, yellowish white powder, and a volatile oil, to which its effects upon the nervous system are principally due. A fincture flavored with aromatics, forms the cordial "Absinthe," largely used in France, where its injurious effects have attracted the attention of sanitarians. "Absinthe" certainly exerts a specific physiological action, but it must not be forgotten that the preparation is of an extremely alcoholic nature.

# Demme says:

"From cases occurring during a period of twenty-eight years, at the Jenner Hospital for Children, we have collected a series of published observations, partly from the twenty-second, partly from the twenty-seventh yearly report, which confirm the truth of these conclusions (the artificial increase in arterial tension produced through the influence of alcohol is full of risk and irrational). There are cases of epilepsy and chorea, in older children, not affected with hereditary alcoholic influence, in which, according to the history of the case, the copious and steady use of alcoholic drinks was unquestionably responsible for the seizures; the etiological importance of the alcohol in these cases is proven by the fact that after the complete withdrawal while under hospital care, without the use of medicine, the epileptic attacks ceased, and the chorea was cured within a comparatively short time.

"With reference to the question whether in childhood, the more serious illnesses are directly influenced by the early use of alcohol. I repeat that, in accordance with our observations, there is no doubt that marked excesses in brandy, also in wine, may lead to general epilepsy, certainly one of the most serious and obstinate diseases of the nervous system. Fortunately, however, this result of alcoholism is of rare occurrence.

"The observations of Dr. James Edmunds are also appropriate in this case. These demonstrate the probability of the sequence of convulsions and other forms of brain irritation upon the plentiful use of alcoholic drinks given by mothers and nurses for the purpose of quieting the infant."

Alcoholism, however, is not only a possible etiological factor of epilepsy of the indulger himself, but also of epileptic or epileptiform affections of his offspring. I do not say that the acquired epilepsy of the parent per se, is transmitted to the children or following generation\* (which is not merely a symptom but a traceable somatic deterioration) under certain conditions, is apt to produce again in the progeny the epileptic symptom of the parent, and this even occasionally in a more

<sup>\*</sup> I refrain from speaking of the inherited alcoholic habit of the parents, which may be the result and symptom of an inherited psycopathic affection.

pronounced and aggravated form. In other words, the inherited alcoholic degeneration predisposes the offspring to an early epilepsy.

Krafft-Ebling says:

"It is probable, that otherwise mentally sound and zober parents, if coitus and intoxication accidentally concur, beget umbecile and even idiotic, or epileptic-idiotic children."

Hitzig states, that the offspring of drinkers inherits as great, if not a greater, tendency to diseases of the nervous system than the children of nervous parents or those of unsound mind; such children, he says, die from convulsions and other epileptic conditions very early in life, more frequently even than do the children of nervous parents.

Demme, during a period of twelve years, acquired accurate knowledge of the private circumstances of ten families, belonging on the one hand to the drinking, on the other, to the temperate class.

Thus of 57 children of habitual drinkers there were only ten, or 17.5 per cent., in normal condition during their child-hood, while of the sixty-one children of the temperate families, fifty, or \$1.9 per cent., were in a normal state in their youth.

Out of the fifty-seven children of drinkers, twenty-five died during the first weeks or months of life, some from lack of vitality, some through eclamptic seizures (ædema of the brain and its membranes). Six children were idiots, five children remaining almost dwarfish. Five children, as they grew older, became subject to epileptic attacks. One boy was afflicted with severe chorea, which terminated in idiocy. Five children had congenital diseases. Two of the epileptics referred to were themselves alcoholists, as a result of hereditary transmission; the outbreak of their trouble was directly connected with pronounced acute alcoholism and was directly continuous with it.

Schüle remarks:

"The instances of epileptic children begotten during in-

toxication, which were procured by Demeaux, Flemming, Ruer, and others, are not only testified to by their sad frequency, but are also proven experimentally by the birth of healthy offspring, if the father in meantime became freed from his passion."

Tiedeman is of the opinion that children, generated during intoxication, will suffer of such incurable nervous diseases as epilepsy, and he thinks that posterity has to suffer for the sins of the fathers.

Wilson states, that

"The descendants, without a special appetite for strong drink, and in the absence of certain specific, morbid manifestations, are singularly liable to mental and nervous diseases, especially to convulsions and epilepsy."

Torget is of the opinion that chronic alcoholists always beget epileptic children, while an acute accidental intoxication of the father at the time of coitus would not produce such a result in the offspring.

Although epilepsy due to alcoholism is a well recognized fact, the literature upon this subject is quite scarce, and wherever I found quotations alluding to that condition, they invariably were only of an abbreviated nature. It seems to me that either not sufficient attention was given by otherwise careful and painstaking observers to the epileptic symptom of alcoholism, or that they considered the latter such a wellproven fact - by common experience - that they deemed it unnecessary to give conscientiously prepared statistics or to attempt pathological explanations. However, the older observers are excusable, as they only recognized as epilepsy such attacks which are now designated as "grand mal," and the younger generation may also be forgiven, partly on the ground of the infrequency of the epileptic symptom of alcoholism in certain countries, partly on account of their extended exploring tours into the microcosmic world of the bacteria.

Alcoholism — especially in its chronic form — is rather a typical condition of somatic and psychic deterioration than a

clearly defined disease. A condition which is characterized by lesions of the nervous system and the viscera, by grave disturbances of nutrition, and by pronounced intellectual and ethical deterioration. Congestive and inflammatory processes, sclerosis, steatosic and atheromatous degeneration affect the different tissues and organs of the body and produce their specific and typical train of symptoms. Hence the epileptic symptom of alcoholism — epilepsy — as the outcome of chemical or anatomical changes.

Although alcoholism produces well recognizable anatomical changes, which in turn may again give rise to epilepsy or other symptoms of degeneration, I hold that those chemical alterations of the composition and vital energy of the plasmatic units, which we cannot definitely comprehend at the present day, and which in this instance are brought about by the influence of alcohol, are the principal causative factors of the type of epilepsy in question and of kindred neuroses. The nutritive exchange of the cells in an organism saturate with alcohol is impaired. The normal vital activity of the plasmatic unit, its inherent ability to affect chemical change, is partly or totally suspended, - is paralyzed if physiologically, and poisoned if chemically viewed. This is especially true of the cells of the nerves, and if nerve matter and nerve tissues become in any way impaired, serious consequences will result in the nervous system as well as in the system at large.

Anatomical changes may be the result of impaired molecular nutrition, but long before these are developed and are recognizable, chemical changes must necessarily have taken place. We have to turn to Physiological and Pathological-Micro-Chemistry therefor and not to mere Pathological Anatomy, if we want to trace the very beginnings of degeneration.

That the chemical changes due to alcoholism, even if no anatomical degeneration has taken place, are alone capable of producing a neurosis of alcoholism, as epilepsy, is my firm conviction, although I cannot conclusively demonstrate it today.

Concerning the Symptomatology of Epilepsia Alkoholica. I want to state that while in some cases epilepsy is only of secondary importance, being merely an occasional symptom of the alcoholistic condition, it is necessarily of the utmost value and consequence in such cases, where the other symptoms of the former alcoholism have disappeared or are obliterated. For Epilepsia Alkoholica will subsist as long as the epileptic seizures continue, which first originated as a result of alcoholism. The latter, in the meantime may have been apparently obliterated. The general characteristic indications of the condition of acute or chronic alcoholism, plus the symptoms of epilepsy in its petit or grand mal or equivalent variety, are also the characteristic features of Epilepsia Alkoholica. However, these symptoms do not all appear together. During the paroxysms, the epileptic features are easily recognizable, while in the intervals the symptoms of alcoholism may more or less present themselves. In many cases—during long intervals especially - there are even no characteristics of alcoholism. The petit and grand mal varieties, the first with a comparatively long-continued unconsciousness, were the conditions met with in my cases. I did not as yet come across a case of alcoholic epilepsy in the state of the epileptic equivalent.

I am able to report five cases of pure alcoholic epilepsy which occurred in my private practice. This number may seem, but certainly is not, an unusually large one in this region, for I contend that Epilepsia Alkoholica is of much more frequent occurrence than practitioners in general are led to believe. If the physician spares neither time nor labor to study minutely his alcoholist-patient's previous history, his general systemic condition,— especially when in the state of saturation,— he will soon be convinced that eventual convulsions and unconsciousness may bear an epileptoid or genuine epileptic character in many instances.

Case 1. H. W., male, age 41, of German extraction, married, musician, comes from a healthy stock. Patient — with the exception of the usual exanthematous diseases of childhood — was never sick, and shows no symptoms of any organic affection. In his thirty-seventh year he was suffering under the strain of incessant work, and to prevent collapse he resorted to the excessive use of alcohol. One night, when playing in the orchestra, he had what he considered "a fainting spell"—a loss of consciousness of about one minute's duration. Ever since then the patient experienced severe headaches, occasionally of three days' standing, and kindred attacks, sometimes two or three in succession, befell him and most always at the time he was playing in the orchestra.

During this period, in which he continued to drink, his wife noticed a progressing debilitas memoriae and a slower and more retarded manner of speech, also occasional paroxysms with loss of consciousness and consequent sopor.

The deprivation of alcohol, and a general anti-alcoholic treatment improved the patient to that extent, that he has now on the average only about one seizure in two months,—attack in the nature of petit mal.

Case 2. J. P., male, age 49, German, at present without employment, married, father of three healthy children; parents were healthy and lived to an old age, no neuroses in rest of family. Patient does not remember ever having been sick. Examination reveals irritability in the epigastric region, and internal hæmorrhoids. Six years ago, through reverses in business, patient contracted the alcohol habit. He would occasionally drink to unconsciousness, and remain in a lethargy-like condition for thirty hours and longer. About a year afterwards typical, epileptic parexysms set in. These exacerbations occurred always after a well-marked prodromic stage — headache and vertigo — and an aura epileptica of a sensorial nature — patient having the sensation as if something would rise from the stomach upwards, and when the pharynx was reached, the attack occurred.

I happened to be present at about sixty attacks of this patient. Each seizure invariably was initiated with the epileptic cry. Falling down, unconsciousness, tonic-clonic convulsions, cyanosis, grinding of the teeth, foaming at the mouth, and post-epileptic stupor and weakness characterized the attacks. On account of spasmodic contractions of the urethra

after the exacerbations, I had to resort occasionally to the catheter, the introduction of which was quite a task. Urinalysis never revealed any abnormal urinary constituents.

Status Præsens.— Patient is well nourished. Tremor in hands and feet. Manner of speech is very slow and incoherent, occasional aphasia. Progressing amnesia, deterioration of intellect and loss of will power. Attacks, though rarer, continue, but three or four always occur in succession — within six or eight hours. Sooner or later patient may be subject to epileptic dementia.

Case 3. On the first of June, 1895, I was called to J. A., female, age 45, Irish, married, mother of eight children, who are all alive. Personal and family history good, no previous disease or attack. Patient complained of "sour stomach" and "sick headache." A superficial examination convinced me that patient had been drinking, which was admitted. Family affairs had driven her to whisky, the first dose of which she had taken two days previously. Towards evening of the same day I was again summoned. I found patient in a state of somnolence. The attendants told me that she had had a "fit and twitchings all over the body." Patient soon after awoke and regained her senses: soon after, however, she had a second attack which was one of undoubted epilepsy, viz.: Tonic and clonic spasms of the thoracic muscles of respiration, very pronounced evanosis, no perspiration, foaming at the mouth and loss of consciousness: a comatose condition lasting for about an hour terminated the attack. During the night she had two similar seizures, as the attendants informed me.

Previous epileptic paroxysms were absolutely denied by the family and the patient, who, under the circumstances, felt quite comfortable the next day. She complained of slight vertigiousness, and a burning sensation on the meatus urinarius during micturition. Epigastric region was tender upon percussion, congestion of liver and gastro-hepatic catarrh being present.

Patient discontinued alcoholic beverages until middle of March, 1896, when, on account of family trouble, she freely indulged in them again. On March 8th she had an epileptic seizure similar to those which occurred in June. On March 20th, 24th, and 25th the attacks recurred. On the latter day I observed some characteristic features of alcoholism, tremor and trembling of the tongue; appetite and digestion were

greatly impaired, and an intestinal obstruction of a very stubborn nature was present. Amnesia, semi-unconsciousness, hallucinations, great fear and raptus suicidii which was reported to me, convinced me that the present status was one of melancholia alkoholica. Hallucinations continued and were of a religious character. This condition lasted for about two weeks, during which time she refused all nourishment but milk.

From July 16th to July 26th epileptic seizures recurred; tremor, incoherent language, melancholia, and defective memory continued.

In the night of September 5th I was summoned to the patient and found her lying on the floor, breathing heavily, and totally unconscious. Eyes staring and wide open. From that time until October 6th patient was more or less unconscious, but had some lucid intervals of very short duration. For a fortnight a quasi-continuous, convulsive epileptic condition, so to speak, a status epilepticus prevailed, patient having had as many as fifteen daily seizures. Repeated urinalysis revealed presence of acetone and diacetic acid.

After a profound comatose state patient succumbed finally on October 6th. The family did not permit an autopsy.

Case 4. G. H., male, age 38, American, a merchant, individual and family history good. Patient had a peculiar habit of going once a month "on a spree" and generally stranded in some suburban town, from whence he came back to the city a sober man again. In March, 1895, during one of his whisky excursions, he suddenly developed symptoms which seemed peculiar and strange to the trained eye of the inn-keeper at whose tavern he stopped while in a little village on the Hudson, and the worthy boniface telegraphed to H.'s family. That very evening three of H.'s brothers brought him to my house and left him under my care. In the night H. had a specific attack of epilepsy — cry, falling down, unconsciousness, spasm of muscles of respiration, severe cyanosis, convulsions, and following sopor.

Physical and psychical examinations on the next day revealed flabby muscles, deficient reflex irritability, a fresh wound on the tongue from biting, extreme nervousness, restlessness, insomnia, a very slow manner of speech, and a morbid state of dreariness and discouragement. Urinalysis — excess of phosphates, but no abnormal constituents.

Energetic anti-alcoholic treatment (partly of a moral nature) resulted in a perfect cure of the alcoholic condition, as well as of the epileptic symptoms. Patient became a total abstainer and remained so ever since. He is now a man of 250 pounds in weight, healthy, vigorous, and ambitious.

Case 5. M. H., female, age 40, German, spinster, weakly developed, came first under my care about two years ago. Her former physicians had ordered her to take Cognac as a general tonic and stimulant. Thus she contracted a moderate liquor habit. When first seen she complained of dizziness, migraine, disturbed vision, neuralgic pain in the dorsal region of the spine, forgetfulness, aphasia, and occasional unconsciousness. She explained that "a peculiar sensation would come over her and she would faint." I repeatedly had occasion to be present during some of these attacks, and I am convinced that they were epileptiform, resembling the petit mal. Patient had her first seizure about three months after her medicinal indulgence in alcohol. Previous epileptic attacks were positively denied. The use of alcohol was forbidden, the attacks became less frequent, patient had no seizure for the last eight months.

Among my patients the earliest period at which any of them was first attacked with alcoholic epilepsy was in the thirty-seventh year, and the latest period at which the first attacks occurred was in the forty-fifth year. The number of my patients is, however, too small to draw any deductions as to the period of life in which Epilepsia Alkoholica begins to appear most frequently. Case 3, interesting in every respect, is particularly so on account of the absence of glucose and the unfailing presence, after the attacks, of both acetone and diacetic acid in the urine.\*

<sup>\*</sup>Detection of acetone (Heinrich Stern, Urinalysis, New York, Pelton 1897).

By Chautard's test: Reagent: Aqueous sol. of magenta decolorized by sulphurous acid. To 5 c. c. add one drop of reagent. If acetone be present in quantities over 0.01 per cent. a violet color will appear in five minutes.

By Lieben's test: Reagents: Potassium iodide and liquor potassae. Distill small quantity of urine if possible. Take into a test-tube 4 c. c. of liquor potassae, add 1.35 gramme of Pot. iodide and boil; next float the urine (a distillate if possible) upon the test solution. Notice at the point of contact, precipitation of phosphates.

To my mind, there is no doubt, that the occurrence of acetone and diacetic acid in this case is solely due to alcohol, particularly so, as the patient at those periods had no desire for food at all and sustained life with small quantities of milk only.\*

This is the more convincing when we consider the relationship of alcohol to acetone and ethyl-diacetic acid.

Ethyl acetate,  $C_2$   $H_5$  O.  $C_2$   $H_3$  O, is prepared by distiling acetate with sulphuric acid,  $H_2$  S  $O_4$ , and alcohol,  $C_2$   $H_5$ . O II — metallic sodium dissolves in ethyl acetate, with formation of sodaceto-acetic ether and sodium ethylate.

If acetic acid be added to the solid product, acet-acetic ether (ethyl-diacetic acid) C  $\rm H_3$ . C O. C  $\rm H_2$ . C O. O  $\rm C_2$   $\rm H_5$ , ( $\rm C_6$   $\rm H_{10}$  O<sub>3</sub>) separates as an oily liquid.

Ethyl-diacetic acid under the action of alkalies takes up water and decomposes into acetone, alcohol and carbon dioxide,  $C_6$   $H_{10}$   $O_3$  +  $H_2$  O =  $C_3$   $H_6$  O +  $C_2$   $H_6$  O + C  $O_2$ .

which becomes yellow and filled with molecules of iodoform if acetone be present.

Detection of ethil-diacetic (diacetic) acid.

By V. Jaksch's test: Reagents: Ferric-chloride solution, sulphuric acid and ether. To the freshly voided urine add a few drops of ferric-chloride solution. If phosphates be thrown out, filter them off, and add a few drops more of the ferric-chloride sol, to the filtrate. If red color appears, boil half of urine, to other haff add some sulphuric acid and ether. If red color is not pronounced or does not occur at all in the boiled urine, and if it becomes of a lighter shade after twenty-four hours in the sulphuric acid-ether mixture, and if acetone in excess be found in the distillate, diacetic acid is present

<sup>\*</sup>Acetone and diacetic acid may be products of albumin decomposition, and acetone occasionally appears after the excessive use of food stuffs, rich in proteid matter. The amount of milk taken by this patient was, however, so very insignificant, that the formation of acetone and diacetic acid can only be ascribed to the excessive use of alcohol.

Alcohol, in my opinion, caused acetomæmia and diacetæmia, in case No. 3. One or the other or both these conditions may have possibly been the direct etiological factor or factor of the epileptic attacks. However, there is no doubt that the long-continued comatose state before the final catastrophe was due to diacetæmia, or to a very kindred condition.

As to the *Prognosis* of Epilepsia Alkoholica I can only say, that it depends entirely on the alcoholic condition of the system, and for the *treatment* the usual antidotes of alcoholic poisoning and saturation should be administered.

In Medico-Legal respects, Epilepsia Alkoholica should prove very interesting. While alcoholic intoxication, according to the prevailing laws, does not excuse from legal responsibility, the peculiar epileptic consciousness, or rather unconsciousness, will, at least it has done so in one or two instances on this side of the Atlantic. The great cardinal factor, alcoholism, is not recognized by our antiquated system of justice, as a legal cause of irresponsibility, but the mere occasional symptom of that condition. Epilepsia Alkoholica, if brought forward as a defense, would in all probability be recognized as such.

A law has been passed in Indiana which makes it unlawful under heavy penalties for any corporation, company, firm, or person to sell, barter, furnish, or give, directly or indirectly, to any minor any eigarette, eigarette wrappers, or any substitute for either, or to produce for, or to persuade, advise, counsel, or compel any child under said age to smoke any eigarette. And it is made the special duty of prosecuting attorneys to enforce the provisions of this act, and they may summon any minor who may have or have had in his possession any eigarette, and compel him to testify before the mayor of a city or a justice of the peace as to where and of whom he obtained such eigarettes.

# ANNUAL MEETING OF THE ASSOCIATION FOR THE STUDY AND CURE OF INEBRIETY.

The twenty-seventh annual meeting of this association was held in the Hall of the Washingtonian Home, 41 Waltham Street, Boston, Mass. December 8, 1897. The president, Dr. L. D. Mason, in his opening remarks called attention to the fact that twice before this association had held its annual meeting at Boston. On both occasions public meetings had been held in this hall. The late Dr. Albert Day, so well known to us all, will always be remembered for his untiring efforts to make our meeting both profitable and pleasant. The Washingtonian Home, as pioneer with us, has taken a very important part in the history of this movement, and, under the care of Dr. Ellsworth, we all feel that still greater advances will be made, and it is a pleasure that we meet here again to talk over the greater work that is destined to occupy a large place in the new century to come.

The superintendent of Washingtonian Home, Dr. V. A. Ellsworth, welcomed the society in the following words:

Mr. President, Members. Delegates, and Guests of the "American Association for the Study and Cure of Inebriety":

On behalf of the executive committee of this institution I most cordially extend to you a glad and open welcome. The Washingtonian Home is proud to receive as her guests representatives of the medical profession who are interested in discussing this alcoholic question, which to-day is so much agitating the minds of the general public, namely, the care and cure of the inebriate. You are here, firstly, for the general good and advancement of the cause; secondly, to renew old acquaintances and make new ones; thirdly, to take a few hours' recreation from the arduous labors of your home duties. It

is hoped that you will not be disappointed in any respect. In consulting the programme you will find there is plenty of room for a sufficient amount of good, earnest work. This is the month of Christmas, and, in again extending you a hearty welcome to Boston, I cannot close without also adding my best wishes for a "merry Christmas" to every one. I think the Christmas spirit is a proper closing of a year of good work, of "Peace on earth, good will to men."

The secretary, Dr. T. D. Crothers, read the annual report, which will appear elsewhere.

The chair appointed a Committee on Nominations, Drs. Quimby, Russell, and Shepard. On motion of Dr. Quimby, the Committee on Nostrums, the Executive Committee, and the Committee of New Publications were continued for another year.

Dr. J. M. French, Medical Director of the Elmwood Sanitarium, at Milford, Mass., read a paper on the Prognosis of Inebriety. A vote of thanks was given to Dr. French for his excellent paper. The president's address was delivered, after which the society adjourned until 2 P. M.

The meeting called to order at 2 P. M. Dr. Quimby, chairman of Committee on Nominations, reported the following officers:

President, Lewis D. Mason, M.D., Brooklyn, N. Y.; First Vice-President, Isaac N. Quimby, M.D., Jersey City, N. J.; Second Vice-President, J. W. Grosvenor, M.D., Buffalo, N. Y.; Third Vice-President, James T. Searcey, M.D., Tuscaloosa, Alabama; Fourth Vice-President, J. H. Kellogg, M.D., Battle Creek, Michigan; Fifth Vice-President, J. T. Eskridge, M.D., Denver, Colorado; Sixth Vice-President, Homer J. Hall, M.D., Franklyn, Indiana; Sceretary and Treasurer, T. D. Crothers, M.D., Hartford, Conn.

Honorary members. — Dr. Legrand, Superintendent of the Asylum for Insane, de Ville-Evrard Seine-et Oise, France: Mayor Pool, M.D., London, England; Ira Van Geason, M.D., Director of New York Pathological Institute, New York.

The following new members were proposed and voted in:
Thomas B. Keyes, M.D., Prof. Harvey Medical College,
Chicago, Ill.: Heinrich Stern, M.D., 1338 Lexington Ave.,
New York city; George H. McMichael, M.D., 75 West Tupper
St., Buffalo, N. Y.: Henry W. Coe, M.D., Portland, Oregon;
Joseph M. Dovle, M.D., Inebriates' Home, Brooklyn, N. Y.;
John E. Pope, M.D., Marshall, Texas; A. J. Thomas, M.D.,
Med. Supt. Insane Asylum, Evansville, Indiana: Edward C.
Smith, M.D., South Wilton, Conn.; F. D. Ruland, M.D.,
Westport, Conn; W. H. Porter, M.D., Spokane, Wyoming;
W. H. Montgomery, M.D., Philadelphia, Pa.; Daniel L.
Brower, M.D., Chicago, Ill.; J. W. Robertson, M.D., San
Francisco, Cal.; W. I. Herdman, M.D., Ann Arbor, Michigan;
J. T. Duryea, M.D., Supt. King's Co. Hospital. Brooklyn,
N. Y.

The following papers were read and discussed at some length:

"Treatment of Inebriety by Baths," by Dr. C. H. Shepard, Brooklyn, N. Y.; "Treatment of Delirium Tremens, with a case," by Dr. V. A. Ellsworth, Boston, Mass.; "The Insanity of Inebriety," by Dr. T. D. Crothers. Hartford, Conn.; "The Use of Alcohol in Practical Medicine," by Dr. I. N. Quimby, Jersey City, New Jersey; "Some New Methods in the Treatment of Opium Addiction," by Dr. J. H. Kellogg, Battle Creek, Mich.

In the evening, at 8 P. M., the annual address was delivered by Dr. Ira Van Geason, Director of the New York State Pathological Institute, "On some Recent Researches on the Action of Alcohol on Brain Cells."

Dr. Crothers moved a vote of thanks to the speaker for his very interesting and graphic presentation of the new facts along this line, which was unanimously adopted.

Dr. Shepard moved that a hearty vote of thanks be given

100 Annual Meeting for the Study and Cure of Inebriety.

to Dr. V. A. Ellsworth and the directors of the Washingtonian Home for their courtesies and the use of the hall for this meeting. (Carried.)

These papers and the discussions which followed will appear in future numbers of the Journal. The annual address by Dr. Van Geason will be embodied in a future paper which will be published in the Journal.

## CHILDREN BORN OF INEBRIATES.

The British Medical Journal gives the following:

"It is well known that neuroses and diseases of nerve centers are frequent in the children of drunkards. On the other hand, simple malnutrition is not rare in such offspring. A case of this kind was reported in the twenty-fourth number of the Gazette Hebdomadaire for this year. A strong, healthy woman married, at the age of seventeen, a man known to be very intemperate. The couple lived together for nine years, and the mother bore five small and sickly children. Four died of exhaustion within ten days after birth, while only one lived to four years of age. The mother got a divorce granted, and married a healthy man free from any vice. She has since borne two children; one was four years of age when the report was made, and quite strong, the other was fourteen days old, well-nourished, and free from any sign of weakness. There was no evidence that the first husband or his children were syphilitic, while the contrast between his children and those which his former wife bore to her second husband could be explained only in one way, which was self-evident."

# Abstracts and Reviews.

### FEMALE INEBRIETY.

In these days of skeptical criticism and unbiased investigation, not a few of our most cherished traditional beliefs have been unable to stand the tests of truth and fact. To those exploded traditions must, we fear, now be added the faith in the superiority of Continental over British people as regards sobriety, at least if we are to accept statements made by high medical authorities at a meeting of the Society of Public Medicine in Paris. The increase of inebriety has of recent years been the despair of the thinking members of the profession as well as of the judicial, philanthropic, and governing classes in the principal European countries. At this moment drastic special legislation for the involuntary therapeutic detention and care of habitual drunkards is occupying the attention of the Austrian and other governments of the Continent of Europe. The discussion to which we refer arose on the report of a Scientific Commission, with Dr. Duclaux as president, which had set forth that, beyond a certain dose, alcohol, of whatever origin, and whether in wine, beer, cider, or spirits, is a poison of which the effects are deadly on the physical and moral health of the population. Subsidiarily, drinking caused the growing expenses of hospitals and asylums for the insane. The Commission pointed out that the injurious effects produced by alcohol were heightened by the imperfect rectification of alcohol and by the addition of toxic essences; while they strongly recommended the reduction of the number of places for the sale of liquor, and the enlightenment of the people on the perils involved in the abuse of alcohol, and in the special

toxicity of some beverages consumed, by courses of instruction to all from the period of school onwards.

One of the most remarkable features of the discussion were Dr. F. de Grandmaison's statements as to the extent of female inebriety, of which few except those who have given special attention to the subject could have any suspicion. He characterized as an illusion the tradition that ethylism was confined to the stronger sex, which he at one time believed, till painful experience had disillusioned him. Of the first 500 women who had presented themselves to him for treatment at the externe department of the Laënnec Hospital, 156 showed undoubted signs of chronic alcoholism (31 per cent.), while of the men 70 per cent. were similarly affected. These patients did not all confess to alcoholism, but the symptoms were unmistakable - tremors of the hands or of the tongue, muscular cramps, morning phlegm, business dreams and nightmare, with dyspeptic troubles. Of the objective symptoms the hand trembling was the oftener observed. Of the subjective, the general identity of the professional dreams was most striking. The dreams of non-alcoholized nervous women were differentiated from those of the alcoholized, by the former subjects seeing themselves pursued by animals - generally small animals, like cats or rats - and by the latter dreaming of falling down precipices, drowning in water, or throwing themselves from heights. The muscular cramps and the paresis of the limbs, which were less frequently seen, were indicative of a peripheral neuritis, a late as well as very gradual manifestation of alcoholic poisoning. Fifty-one per cent. of these women were between twenty and forty years of age, the active period of existence, though there were five cases below twenty (three at eighteen and two at nineteen), or 3 per cent. Above sixty, 7 per cent. were met with. Of the 118 female cooks attended, sixty were inebriates (in round numbers 50 per cent.), thus not belying their reputation. Of the twenty-seven laundresses. nine were alcoholics, or one-third. Of the seventy charwomen, thirty-four were drunkards (48 per cent.). Of nine itinerant dealers (costermongers), all were chronic alcoholists; and among seventy-two seamstresses six (or 8 per cent.) were excessive drinkers. Of the 156 treated, only four had phthisis; twenty-two were either hysterical or neuropathics, confirming the opinion that female hysteria is often of alcoholic origin. Of six suffering from arterio-sclerosis, in two (both cooks) the symptoms seemed to have arisen from alcohol; three had gastric ulcer apparently due to spirits. In nine of the 156 alcohol had appeared to predispose to influenza.

Dr. Bourneville stated that of 1,000 children at Bicêtre (1880-1895), in 471 only the father had been a drunkard, in eighty-four only the mother; but in sixty-five both parents were intemperate. Alcoholism was not known to have been present in the parents of 209 children, while there was no family history in 171 cases. In fifty-seven instances conception had taken place during the intoxication of the father, and in twenty-four other cases there was a strong probability, but no certainty, of this having occurred.

M. Yvon, who maintains that even the most highly rectified and unsophisticated alcohol is always hurtful, the more hurtful the greater the quantity taken, has calculated the daily quantity of absolute alcohol consumed in the form of beverages by a drinker whose consumption "was not exaggerated." The daily allowance comprised one bottle of wine (half a bottle at each of the two meals) containing 10 per cent. of alcohol; one bottle of beer between meals (ditto); and one petit verre of cognac (at 50 per cent.). The wine contained 66 c.cm. of alcohol, the beer 40 c.cm., and the cognac 12 c.cm., making a total of 118 c.cm. This quantity of alcohol representing 237 c.cm. of brandy, which, with an alcoholic strength of 50 (one-half), would be equivalent to about a quarter of a litre.

The information thus elicited points to a grave state of matters in France, but these efforts of the medical profession to arrive at the truth and enlighten public opinion, are a hopeful augury of success in what Dr. Laborde calls "the struggle against the true enemy." Already it is understood that the Supreme Council on Education for France will approve the proposal that the dangers of alcoholism should form part of the teaching in schools of all grades. The teaching is to be given by means of dictation, composition exercises, and arithmetical problems on the material losses caused by intemperance.

- British Medical Journal.

#### INEBRIETY IN FRANCE.

Dr. Legrain, director of the journal called *Alcohol*, the organ of the Sociétés Féderées contre l'Usage des Boissons Spiritueuses, energetically denounces the increase of drunkenness. At Roubair in 1892, 296 drunkards were sent to prison; in 1894, 356; in 1896, 642. It is not uncommon to see at funerals relations of the deceased who have drowned their grief in the bottle, and are present at the ceremony in a state of inebriation.

Appleton's Popular Science Monthly begins the new year with a rich table of contents. Papers on medical and scientific topics of most timely interest, sketches of notable leaders of science, editorial comments on the advances of science, and notes of books, all comprise a most attractive volume. We have repeatedly commended this as the most valuable monthly for every specialist and scientific man. Send to D. Appleton & Co., of New York city.

The Review of Reviews is essentially a busy man's journal, where he can see at a glance the literature and thought of the day. One who would keep up with the time should have this on his office table.

The Philadelphia Medical Journal is a new weekly issued by a very distinguished board of trustees, and edited by a well-known editor, Dr. G. M. Gould. This is a most promising attempt to issue an independent medical journal, on the same level with the London Lancet and Medical Press and Circulars. The first issues are robust and attractive in plan and quality. The new features are weekly summaries of all the best papers in other journals. To many this will be most attractive. Editorial comments and news are also bright, clear, and attractive. This journal will have no rivals, and find a clear open field to build up an independent American paper, which shall reflect the highest thought of medical progress.

The December and January numbers of the Homiletic Review are particularly noticeable for several strong discussions of topics of interest in both professional and lay readers. A year's subscription would be a most acceptable present to any clergyman. Send to publishers, Funk, Wagnalls Co., New York city.

The Scientific American is one of the most attractive weeklies published for the news along the frontiers of science. Every issue is more absorbing than a work of fiction. Science is now a part of the culture of the age, and everyone should become acquainted with its facts.

AN EPITOME OF THE HISTORY OF MEDICINE. By Roswell Park, A.M., M.D., Professor of Surgery in the Medical Department of the University of Buffalo, etc. Illustrated with portraits and other engravings. One volume, royal octavo, pages xiv, 348. Extra cloth. Beveled edges, \$2 net. The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street, Philadelphia, Pa.

This large, finely-printed work of fourteen chapters, and three hundred and forty pages, is a very interesting grouping of the leading facts in the history of medicine. As a well-

arranged, adjusted assemblage of the facts and their relation to each other, there is much to criticise. But as a sketchy, readable review, it is pleasing, and will serve an excellent purpose in clearing away the ground and preparing for a more historical, logical treatment of this subject. The author very clearly calls attention to the neglect in medical schools in not giving the students some account of the history of medicine, and thus preparing them to appreciate the changes of the present. In this volume the author traces the birth, growth, and death of many of the theories and schools of practice, and points out the evolution of the great principles of science which have led up in successive stages to the present. Short graphic pictures of the long line of heroes and illustrious men who have made medicine what it is are given. The effects of theories and individual personalities, and work along certain lines, which influenced strongly the current of progress, are brought out in a very interesting way. The work, as a whole, is an excellent contribution to this much-neglected field of study. It is most useful and helpful as a work of reference, and will find a welcome in every medical library. The large, clear type and paper is a model for books of study, and the author has the pleasure of seeing his work in the best possible form for comfortable reading.

STIRPICULTURE, OR THE IMPROVEMENT OF OFF-SPRING THROUGH WISER GENERATION. By M. L. Holbrook, M.D., Editor Journal of Hygiene, etc., New York. M. L. Holbrook & Co., Publishers, London. S. N. Fowler & Co. 1897.

The following from the preface gives a clear conception of the work: "The time has come for man to take a special interest in his own evolution, to study and apply so far as possible all the factors that will in any way promote race improvement. In the past this has not been done. We are not yet able to do it perfectly; our knowledge is too deficient,

lack of interest is too universal, but we can make a beginning; greater thoughtfulness may be given to suitable marriages; improved environment may be secured, better hygienic conditions taken advantage of; food may be improved; the knowledge we have gained in improving animals and plants, so far as applicable, may aid us; air, exercise, water, employment, social conditions, wealth and poverty, parental conditions, all have an influence on offspring, and man should be able to some extent to make them all tell to the advantage of future generations." In the first and second chapters the general history of the ancient and modern efforts to change and to improve the race stock are given in a brief, pleasing style. The third chapter, on "Heredity and Education," is the best popular presentation of the various theories of heredity which has appeared. This is most admirably and clearly put, and the reader is made familiar with the discussions and obscure theories which have been offered as an explanation for heredity. The other chapters, on "Germ Plasm and its Relation to the Offspring," "Fewer and Better Children," are general popular studies of these topics, very clearly and frankly presented. The last topic, "A Theoretical Baby," is very suggestive contribution along this line. One of the most pleasing features of this work is its fresh candor and reasonableness of statement. The views of the author and the authorities which support him, and the line of reasoning is so frank and natural that the reader is convinced at once. Such works are very helpful and will do a great deal to attract attention to a most practical topic. This work is written for the nonprofessional men and women, and will be read with absorbing interest by every thoughtful reader, both professional and laymen.

ELEMENTS OF LATIN. For Students of Medicine and Pharmacy. By Geo. D. Crothers, M.D. The F. A. Davis Company, Publishers, Philadelphia, Pa., 1896.

This work of two hundred and forty pages is designed to

give the principles of Latin etymology and construction, essential to a proper knowledge of pharmacal and medical terms in text-books of medicine. To a large number of students, and even many medical men, this work will be a valuable assistance in the study of exact terms and exact meanings. It is a pleasure to welcome such works. They indicate a strong tendency to bring down to an accurate level many terms and phrases now so indefinite and uncertain in medicine. Such a work will find a welcome place in the library of every medical scholar.

THE PSYCHICAL CORRELATION OF RELIGIOUS EMOTION AND SEXUAL DESIRE. By James Weir, Jr., M.D. Second edition, greatly enlarged and elaborated. Cloth, \$2.00. Owensboro, Ky. 1898.

This work, intended as a popular discussion of topics not well known, is of exceeding interest. The first part is a study of the relation of religious emotion and sexual desire. The conclusions he has reached are sustained by a great variety of facts, gathered from many sources, which will be invaluable to any one who may wish to go farther in this field. To most readers these facts are new and startling, and will excite much interest. The rest of the work contains very suggestive papers On Hypnotism, its Psychology: Virginity and Effemination: Border Lands and Crankdom: The Methods of the Rioting Striker an Evidence of Degeneration; Genius and Degeneration: Prophecy and Insanity: Occultism: The Effect of Female Suffrage on Posterity: Animism and the Resurrection: Suicide in the United States: Is it the Beginning of the End? All these papers are graphic and very suggestive discussions. in which the reader may differ widely from the author. Taken altogether, the author has grouped a very stirring, stimulating volume, which will set his readers thinking. Such works may rouse sharp criticism, and te condemned in many ways, but they are infinitely superior to the low, placid levels

of iterative discussion of time-worn topics. The work is published by subscription, and is a well-printed, attractive volume.

A MANUAL OF MEDICAL JURISPRUDENCE. By Alfred S. Taylor, M.D., Lecturer on Medical Jurisprudence and Chemistry in Guy's Hospital, London. New American edition of 1897 from the twelfth English edition. Thoroughly revised by Clark Bell, Esq., of the New York Bar. In one octavo volume of 831 pages, with 54 engravings and 8 full-page plates. Cloth, \$4.50; leather, \$5.50. Lea Brothers & Co., Publishers, Philadelphia and New York, 1897.

Taylor's Jurisprudence, like Gray's Anatomy, has come down for nearly half a century as the great standard authority on this subject. Edition after edition has been sold, each one revised and improved, until now this volume is the twelfth, and is revised and brought down to date under the care of the Hon. Clark Bell. The peculiar excellence of this work is that it represents the best and most reliable facts which have become settled principles. The test of criticism for over forty years has sifted out theories and opinions, and left general facts which the reader can depend upon. Every medical man and specialist is liable to be called in court at any time and questioned on the facts which this volume contains, hence it becomes a necessity to be familiar with the general principles which govern cases in question. The fault of other works is usually that they are too condensed, or too elaborate and detailed. This work avoids this error, and gives, in eight hundred pages, a full, clear summary of what each one should know and requires in a study of disputed cases. In the October number of this JOURNAL we printed an excellent summary of the Jurisprudence of Inebriety, an extract from this work by Clark Bell, Esq., the American editor. Other equally interesting facts are found in this work, relating to morphine, cocaine, and various narcotics which have come into medicolegal notice. The chapters on Life Insurance, and Medico-Legal Surgery, and some new chapters on Insanity, are of unusual interest, and new to most readers. The particular clear headings of chapters and topics give great practical value as a work for consultation. Frequent references to cases and American authorities are very valuable. This is literally one of the few books which are necessary in every library, and one which does not become old or lose its value after a few years. To all specialists Taylor's Jurisprudence is one of the few books which must be consulted before any general knowledge of the subject can be obtained.

Dr. Clauston of Morningside Asylum, Edinburg, says no one should use alcohol:

- Who have any family history of drunkenness, insanity, or nervous disease.
  - 2. Who have used alcohol to excess in childhood or youth.
  - 3. Who are nervous, irritable, or badly nourished.
- 4. Who suffer from injuries to the head, gross diseases of the brain, and sunstroke.
- 5. Who suffer from great bodily weakness, particularly during convalescence from exhausting diseases.
- 6. Who are engaged in exciting or exhausting employments, in bad air and surroundings in workshops and mines.
  - Who are solitary or lonely, and require amusement.
- 8. Who have little self-control, either hereditary or acquired.
- 9. Who suffer from brain weaknesses, the result of senile degeneration.

### Editorial.

### STUDY OF INEBRIETY.

One of the serious difficulties is the inability of the inebriate to assist in ascertaining the real facts of his case. He is unable to form rational conclusions from his disordered sense impressions, and his failure to discriminate facts and his relation to them destroys the reliability of his statements concerning his case. The majority of inebriates have positive convictions concerning the causes and conditions of their drink malady. Others have confused, changeable opinions, which are controlled by the surroundings. A third class are always in a confused state about themselves, and never form any opinions or express convictions of the past, present, or future. The first class often reason clearly on their condition, but, starting from false and supposed facts, become more positive of their conclusions the longer they are retained. man reasoned that the severe restrictions and restraints of early life reacted in excesses when he became of age. In reality, he came from inebriate ancestors, and early showed a morbid craving for all forms of drinks and condiments. The restrictions were to overcome this tendency, which broke out in manhood. Another reasoned that his malady came from overwork and bad home life; literally, he suffered from sunstroke, and used bitters for a year as a tonic, then began on spirits. Persons of this class reason with great acuteness, and ere very emphatic in their convictions. A physician, who was a periodical drinker, wrote exhaustively on the causes of in ebriety, based very largely on his own experience. His reasoning could never be supported by others, and was in reality delusive and unreal. In the same way an insane man's

writings on insanity may be acute and clear on some lines. but can never be sound as a whole. In the effort to find the causes and conditions of the inebriety, the victim's statement of his case requires the most careful study and discrimination, and is only true when supported by evidence from other sources. No personal experience as a user of alcohol can give any reliable knowledge of the physiological or psychological action of spirits. On the contrary, it unfits one to judge, except in the most general way, of the effects. In a certain case a very clear teacher of mental medicine made a diagnosis of an inebriate, which proved afterwards to be based largely on patients' statements; the treatment which followed was fatal. This diagnosis assumed that a will-power of control existed when certain irritations were removed. Many cases have come under my care where the medical diagnosis and treatment have sought to cure the drink craze by the moderate and regular use of spirits. This was acting on the judgment of the patient. Strong convictions prevail in the public mind which are fostered by the inebriate views, that repugnance and disgust for the taste of spirits are curative. The idea prevails that the disappearance of the desire for spirits is a return to health. This all accurate study disproves, and the patient's reasoning is found delusive. In some institutions and in certain circles of medical men, great importance is given to the statements of inebriates as to the causes and progress of their treatment. A recent paper, by a prominent physician, is composed largely of the statements of inebriates of why they drank spirits, and the results of a special remedy. This is not only erroneous, but dangerously misleading. In two of these cases the opinions given were false. No study of such cases is of any value based on such statements. Practically the ancestral history and diseases point out the probable line of inquiry in all cases. Where this is obscure and doubtful, a study of childhood through puberty is a fertile field. Culture and surroundings, with occupation and climate, and the forces of psychical life. which includes all the mental strains and shocks, are also fields of inquiry. The patient's statements of the facts along these lines may be in many ways correct, but he cannot reason as to their influence and power over his life. These facts should be ascertained beyond all the personality of the patient, and outside of his views or opinions. The study of inebriety must be conducted on lines of exact, well-attested facts, and facts which can be tested and confirmed. No opinions or convictions of patients as to their own case should have any weight in forming conclusions, unless sustained by facts from other sources.

#### LECTURE BUREAU.

A plan has been proposed to organize a scientific lecture bureau for the purpose of presenting the modern researches concerning the effects of alcohol and the disease of inebriety, to popular audiences of temperance workers and others in all our large cities.

It is expected that a number of eminent men familiar with these topics will prepare one or more popular lectures and deliver them within a reasonable distance of their homes for a small gratuity.

The Bureau will arrange topics and dates, so that all temperance workers and others interested can hear the most authoritative teachings of science, and see the leaders and persons who have made this a special study. It is believed that there are a large number of thoughtful persons who would welcome lectures on the scientific aspect of the drink problem, coming from men of reputation and prominence. It is also thought that such a course would be of great value and helpful in clearing away the prejudice and placing the drink problem in a clearer light to the public.

A correspondence is solicited from all persons interested in this movement.

Twenty-one years ago a young lawyer was placed in an asylum for inebriates as an incurable. He had alcoholic delirium and delusions and had apparently lost all power of recovery. Four months later he begged to go out in the world again and was confident of final cure. His sister and physician persuaded him to stay a year. He did so, cheerfully applying himself diligently to study during this time. Last December this man took his seat in the United States Senate, a highly respected, noble man, who had occupied several responsible positions of trust. All inebriates may not rise to these hights, but all can recover and remain temperate with the use of means, and by following the great laws of nature.

Dr. G. Sims Woodhead, M.D., F.R.C.S.E., the Director of the Research Laboratories of the College of Physicians and Surgeons in London, has been made President of the British Medical Temperance Association, following the late Dr. B. W. Richardson. Dr. Woodhead is an honorary member of our association. The interest he has shown it. our work, gives many pleasant promises for the future.

#### CROOKED IDEAS.

Our esteemed old friend, Dr. C. H. Hughes, has ventured on a free criticism of what he calls our *crooked ideas*. He doubts the following statement, "Acute alcoholic intoxication is always followed by general palsy." After calling for proof, he admits this may be often true especially in the neuropathic, then declares "that some of the world's best work in every walk of life, even in poetry and in the pulpit, have been executed under acute alcoholism."

This seems to ignore the fact that the action of alcohol on the brain and nervous system is always that of a depressent and paralyzant. Numerous observations by eminent men in both this country and Europe prove this fact. ments of the senses before and after the use of alcohol show that alcohol in one-ounce doses visibly depresses and lowers sense acuteness and activity. The rapidity of thought, the clearness of memory, the capacity to reason, the power of control by the will, are measurable by instruments, and are all found to be lowered and palsied by alcohol. Some observers believe that these effects can be seen from the use of a smaller amount of alcohol; others believe that only from a repetition of this amount of alcohol can its paralyzing action be recognized. But all agree that these effects are positive and due always to the action of alcohol, both on a temperate and intemperate person. On a drinking man this lowered sense and brain activity would be more difficult to prove, because there would be no previous health records to compare it with. In the free intervals of the periodic drinker these data could be made, for comparison when intoxicated. These measurements and tests are so simple and available to any one that there should be no doubt of their meaning.

The palsy of an intoxicated man is apparent to the senses, and clearly it is only an extreme later stage of what began with the first dose of alcohol. This could have been seen and tested in the early stages, and was the same condition at the beginning, and not a different one. While we know very little, comparatively, about the action of alcohol on the brain and body, we can measure and prove with great certainty its depressing and paralyzing action on the senses, and the mental and muscular activities of the body. Exactly what amount of alcohol will produce a measurable palsy, recognized by our present methods, is not certain, but any general degree of toxicity cannot be mistaken for increased vigor, stimulation. or exaltation. How any original intellectual work of any

kind can be done in this condition is incomprehensible. in vino veritas there can be any truth, or how Webster or any person alcoholized could exhibit any mental superiority, is not explainable by any modern teaching of science. Our critic speaks of "morbid inebriety and normal inebriety, psychological toxic symptomology and pathological toxic symptomology, normal and abnormal intoxication, a normal response of the normal nervous system to the action of alcohol, and an abnormal response to an inherently abnormal neural mechanism to alcohol, alcohol as a test of neural stability and a proof of neuropathic instability." Unfortunately, these terms are not translatable into the language of modern research. Our critic continues, "Alcohol brings out the true latent nature of the man, normal or morbid. In the exhilarant stage it shows psychical exaltation and exhilaration in the line of the normal mental action of the individual. In the neuropathic it brings into morbid activity latent psychiatric tendencies, exaltation and strength, impulses to violences, perverted and imperative morbid conception." While these views are charming in their simplicity, their acceptance must rest entirely on faith. If the action of alcohol is always that of depressent and paralyzant, there can be no true exhilaration following its use. The supposed exhibaration is irritation and excitement. This is true by tests and measurements; the senses and mentality appear more acute, but in reality are feebler and weaker. The functional vigor may become impulsive and explosive, but it is lowered in force and duration. The delusive faith of the drinking man in his increased power from alcohol cannot be The normal and most stable brains are first disturbed, irritated, then depressed, and quickly become unstable. The depression may be slight at the beginning, and the irritation more prominent, but soon lowered and unstable functional activities follow. In the abnormal and unstable brains, depression and anæsthesia appear at once, and create an impression of increased vigor and power. This is seen in the impulse

for more alcohol, and is clear evidence of neuropathic degenetion. The same palsy and paralysis occur in all cases, depending on the powers of resistance. The phenomena of intoxication or poisoning from alcohol is simply anaesthesia and paralysis. There can be no normal or abnormal stages; there are endless varieties and degrees of intensity, there are local central palsies, in which some part of the brain is disabled and other parts are active. The normal coordination is always deranged, and the higher brain activities can never act in full Personal experience and untested theories can never point out the facts of the toxic action of alcohol. It is now possible to measure the operations of the senses and brain. and determine clearly how far alcohol exalts or depresses them. It is not a question of opinions. If there is a stage of exhilaration with increased vigor following the use of alcohol. instruments of precision will show the facts. If alcohol is a stimulant to certain normal brains, and not to others, the proof can be easily gathered. Up to the present all studies and tests point to the physiological action of alcohol as that of a depressant, anæsthetic, and paralyzant. To confirm or disprove this is the true work of all scientists and would-be critics.

### BLASED JUDGMENT.

Replies or even recognition of the many criticisms made on the Journal, and its editor, would occupy nearly all the pages of the Journal. It is of psychological interest to note that the same objections and identical criticisms are offered year after year, usually by different men. A long time ago a neurologist gathered his criticisms into ten pages of what he thought to be destructive and final. This same criticism has come to us over a dozen times in twenty years, urged by different men, who ordinarily would not have known the work of each other. At first it was violent and personal, now it is

mild and apologetic, the dogmatic tone is modified, and the authors deplore the need of making public corrections of the errors which this journal is teaching. It was deemed wise to pass all criticisms unnoticed, and trust to the future to settle the points in controversy. Many of these critics have been the subjects of personal inquity and study for the purpose of ascertaining their individual personality, from which their convictions could be determined. In a number of cases they were moderate and at times excessive users of spirits. One, a neurologist, whose bitter words suggested intemperance, is now an inebriate. Another, who is very fierce in his condemnation, is a wine-drinker at the table and on all occasions. Some of these critics have joined the gold-cure specifics, and from the extreme of skepticism have gone over to childlike credulity.

All of them complained that the opinious expressed in this journal were biased, and represented prejudice rather than calm, impartial study of facts. From the beginning, a quarter of a century ago, it has been distinctly stated that the opinious and facts published in this journal were those of today, open to correction and modification to-morrow.

Nothing has ever appeared in the JOURNAL which could be justly called final truths; everything has been based on the facts available and as understood to-day. If some author defends views widely differing from those facts supposed to be accurate, he must give reasons and facts for his conclusions, which can be studied and considered by the reader. If he claims to be a user of spirits at the table and as medicine, there are grave doubts of his unbiased power of judgment. The Journal has many times declined papers considering strange views, based on the views of persons who were moderate drinkers. There were no facts from which to judge them, and the author claimed superior knowledge by reason of his use of alcohol. A neurologist recently affirmed "That he would rather rely on the opinions of incbriates than the views

of abstainers who had no personal experience, on questions of inebriety." This reflected very strongly on the intelligence of the author. Railroad companies, bankers, and all persons who employ help in positions of trust, have found by bitter experience, that opinions and acts of drinking men are dangerous qualifications to depend upon. How much more this is essential in the study of facts relating to inebriety. The drinking man is biased always, and is a bad judge of facts and their meaning, especially if they touch on his own life and surrounding.

### NEW METHODS OF TREATMENT FOR INEBRIETY.

We assure our readers that the new methods of treatment for inebriety are increasing, and that our pages have been for years too small to record them. So we must content ourselves with only occasionally noting some of these new discoveries. The apple and orange cures are starting up again. They consist in using three times a day large quantities of these fruits. The grape, dates, figs, lemons, bananas and onion cures are of the same, used in the same way. The bark, iron, steel, and gold cures are familiar, and the electrical cures have very vociferous defenders, particularly in large cities. Now Dr. Evelyn of San Francisco claims as a result of fifteen years' experiments he has found a new cure for inebriety, both acquired and inherited.

It is the inoculation of horse blood — on the same lines as the vaccination remedy for small-pox. He injects alcohol into the blood of the horse and gets as a result a substance he calls "equisine," which, after sterilizing and mixing with chloral, and being subjected to a freezing process, is prepared in small plaques, made by saturating paper with fluids and then baking them. The skin of the arm or leg is scarified and a plaque, applied, moistened with boiled water. In bad adult

cases a plaque is applied once a week for eight or nine weeks. Dr. Evelyn declares it never fails if no sedatives or narcotics are used.

Dr. Hall, who claims he has had forty years' experience, has found an ether in amylic alcohol, whose action is destructive to all taste for spirits. He can cure every one in all conditions of life.

Dr. Plaukgrade has found a gray powder in the ruins at Thebes which he has analyzed, and is now making and using as a sure remedy for inebriety. The results have astonished the discoverer, and no failures have followed its use in several hundred cases. Another pioneer, with M.D. to his name, comes forward with a large volume of evidence, to support his claim of cure, by free injections of salt water, to which is added a secret preparation of lime and potash. Large quantities of water are also used by the mouth. The desire for drink, attacked from both the bowels and the stomach, disappears, and never returns after the second battle. The settlement of the conflicting claims of the ever-increasing army of inebriate specific discoverers will be awaited with great interest by all who believe in evolution.

#### THE ANNUAL MEETING.

The twenty-seventh annual meeting at Washingtonian Home, Boston, Mass., indicated a great advance over all previous meetings, in breadth of papers and scientific treatment of the subject of inebriety.

The secretary's report was a historic commentary on the work of asylums in this country. The president's annual address was along the same line, only more historic. The paper of Dr. French was clear and very suggestive, and Dr. Shepard's paper called renewed attention to a phase of the treatment of inebriety which is coming into great prominence. Dr. Ellsworth's case of delirium tremens and its modern treatment

was warmly welcomed and endorsed, as at least a quarter of a century ahead of the usual practice in such cases.

The "Insanity of Inebriety," by Dr. Crothers, was a restatement with additional illustrations of some modern views.

Dr. Quimby's paper "On Alcohol in Medicine," was a plea to reëxamine the theories of nature and action of alcohol on the body, and a demand for rational reasons for its use. Dr. Kellogg's paper described some new methods of treating opium cases, with more rapid and certain results, illustrated by some cases.

The evening address by Dr. Van Geason was a graphic presentation of the new physiology of the brain cells and fibers, and the damage which occurred to them from alcohol and other poisons. He described all pathological changes as degeneration, inflammation, and necrosis, and showed that after a certain point restitution could not occur, as the injury was permanent.

Other papers read by title were excellent, and it was new in the history of our association not to have the so-called moral side brought up in some form. There has been a great growth, and the purely scientific study of the inebriate is now fully recognized, and we may all look forward with increasing confidence to a new era of research, with new facts and new views of the malady of inebriety beyond any present conception.

Medical Jurisprudence of Insanity or Forensic Psychiatry is the title of a new work in press, by S. V. Clevenger, M.D., a well-known Chicago specialist. The special feature of this work will be the questions of life and death, and the disposition of property, by faulty minds. Inebriety, morphinism, and other poison diseases will be treated at some length. This book will be issued by the Lawyers' Co-operative Publishing Co. of Rochester, New York.

Multzyme is the pure and unfermented essence of malt extracted and concentrated by a new process, which preserves the starch digesting principle of malt, known as diastase. Dr. C. C. Fite of New York is secretary and general manager, and is well known to the medical profession. While the company is a new organization, it will be seen that Maltzyme is in reality the result of many years' practical experience in the manufacture and sale of medical malt preparations. Practically, this is one of the great new modern preparations which have proved very valuable in many neurotic diseases.

Horsford's Acid Phosphates, for nervous exhaustion, is practically a physiological remedy, which has been tested and its merits have been established beyond question. One has only to try this remedy to realize its merits.

The Jackson Sanatorium of Dansville, New York, has been forty years treating nervous invalids, and is one of the great health resorts of this country. No more pleasant home can be found for invalids of every class.

Surup Hypophosphates compositions, prepared by Fellows, is a well-known preparation of iron, manganese, potash, lime, and strychnine, and quinine, the virtues of which cannot be over estimated in nearly all cases of nervous debility and exhaustion.

The Sound View Hospital, at Stamford, Conn., under the charge of Dr. F. J. Biggs of New York, is making most elaborate experiments on the blood treatment of disease. Bovine blood is used under rigid scientific conditions, and the results are very satisfactory. A great variety of decenerative diseases are found to be checked and recover by haematherapy, and, so far, the facts of cure are really remarkable.

Wheeler's Tissue Phosphates is a literal natural food product, that has attained great prominence as a remedy.

The Sanitarium at Ardendale, Brooklyn, New York, is a very pleasantly situated home for neuraesthenic, alcoholic, and opium cases. Its staff comprises some of the best men in the profession at Brooklyn.

Of Borinine in inebriety too much cannot be said. In certain cases its effects are marked in the rapid disappearance of the drink craze, and restoration of the impaired functional activities. In some cases the changes are so prominent that it looks like a specific. In all cases it is a most valuable tonic, and should be included among the standard remedies for this affection.

Of the institutions we take great pleasure in commending, the following are most prominent: Home for Female Inebriates, Dr. Sparks, Brooklyn, N. Y. The Attleboro Sanitarium, Dr. Mackie, Attleboro, Mass. Falkirk, Dr. Ferguson, Central Valley, N. Y. The Highlands, Dr. Russell, Winchendon, Mass. Brooklyn Heights Sanitarium, Dr. Sheppard, Brooklyn, N. Y.

The Caroid tablets, made by Charles Roome, Parmele Co., X. Y., are the latest and best digestive remedies which have been issued. In some cases their action is specific, resulting in practical cures of conditions which have defied all other means. Every dyspeptic and nervous invalid from digestive troubles should try this new remedy.

Celerina has become almost a new remedy in the hands of the Rio Chemical Co. It has won a new circle of friends, who find it a most valuable tonic and mild hypnotic. It is very valuable in many cases of opium and alcoholic addiction, giving the relief called for without leaving any bad effects. It should always be used in the various and complex neuroses which are so common in nearly all asylum cases.

#### VALUABLE REMEDIES WORTHY OF ATTENTION.

Especially at this season are the tablets of "antikamnia and codeine," each containing 4\frac{3}{4} grains antikamnia and \frac{1}{4} grain sulphate codeine, worthy of attention in the treatment of pulmonary diseases. This combination is a sedative to the respiratory centers in both acute and chronic disorders of the lungs. In diseases of the respiratory organs, pain and cough are the symptoms which especially call for something to relieve; this combination does this, and, in addition, controls the violent movements accompanying the cough. To administer these tablets in the above conditions, place one tablet in the mouth, allowing it to dissolve slowly, swallowing the saliva. The Antikamnia Co. have issued a pocket tablet book of great value, also a skeleton calendar for 1898, of much interest to all physicians.

" Baltimore, Md., May 10, 1895.

"Wherever Hamannelis is indicated 'Pond's Extract' is the only reliable preparation to employ. In my subcutaneous method of cure for morphinism, I use Pond's Extract as a topical application and find that it admirably controls any inflammatory process by its pronounced sedative, astringent, and antiseptic properties.

I. E. Hamilton, A.B., M.D."

The following for Bromidia is very striking:

"I have given your Bromidia with success as a remedy for Insomnia, especially where produced by excessive study or mental work.

Dr. Lutet Salvect.
Physician to the Holy Apostolic Palaces.
The Variean, Rome.

September 1, 1897."

### **NERVOUS EXHAUSTION**

### HORSFORD'S ACID PHOSPHATE.

Recommended as a restorative in all cases where the nervous system has been reduced below the normal standard, by overwork, as found in brain-workers, professional men, teachers, students, etc.; in debility from seminal losses, dyspepsia, of nervous origin, insomnia where the nervous system suffers.

It is readily assimilated and promotes digestion.

### Dr. EDWIN F. VOSE, Portland, Me., says:

"I have prescribed it for many of the various forms of nervous debility, and it has never failed to do good."

Send for descriptive circular. Physicians who wish to test it will be furnished, upon application, with a sample by mail, or a full-size bottle without expense, except express charges.

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

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Beware of Substitutes and Imitations. Vol. XX.-17

## ARDENDALE

A Sanitarium for the care and treatment of cases of

NEURASTHENIA, ALCOHOL, AND DRUG INEBRIETY,

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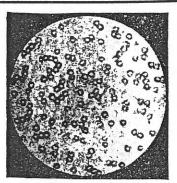
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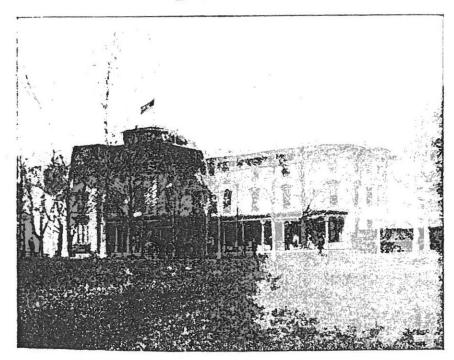
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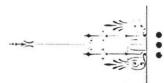
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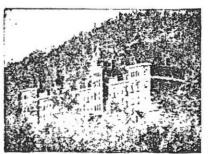


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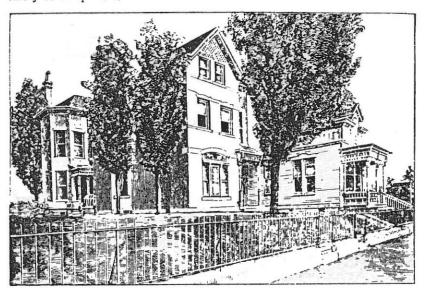
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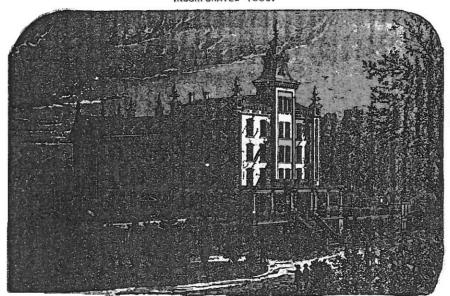
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Cross the East River to Brooklyn on Fulton Ferry boat or Bridge, and proceed by Third Avenue electric cars to Fort Hamilton; or, cross from South Ferry on Hamilton Avenue boat or by 39th Street Ferry to Brooklyn, and proceed by electric cars to Fort Hamilton, Request the conductor to leave you at 89th Street and Third Avenue.

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