THE QUARTERLY JOURNAL

DIE

INEBRIETY.

PUBLISHED UNDER THE AUSPICES OF THE AMERICAN ASSO-CIATION FOR THE STUDY AND CURE OF INEBRIATES.

> T. D. GROTHERS. M.D., Editor, 56 Fairfield Avenue, HARTFORD, CONN.

Val Xelox

JANUARY, 1897.

No. 1.

HARTFORD, CONN.;
THE CASE, LOCKWOOD & BR NARD CO.,
PRINTERS.

EUROPEAN AGENCY:

BALLISLISLES TILINDALISL & COX.

RING WILLIAE STREET ON THE STRAND. LONDON, W. C.

Subscription \$2.00 Per Year

TABLE OF CONTENTS.

ANUARY 1897.

	Page
THE FIRST MEETING OF THE ASSOCIATION AND THE ORIGINAL MEM- BERS. DR. L. D. MASON,	2
TIS GROWTH. DR. T. D. CROTHERS,	30 44
THE CONFESSIONS OF A COCAINIST, PROFOUND TOXIC EFFECTS FROM DRINKING STRONG COFFEE. DR. J. T. RUGH,	54 62
ABSTRACTS AND REVIEWS: Degeneration from Toxic Drugs, Inheritance in Inebriefy,	65 68
EFFECT OF TEA CIGARETTES,	69 70
REFORMED MEN AS ASYLUM MANAGERS, ORGANIC MEMORIES, DR. N. S. DAVIS,	79 81 82
DISEASE OF PERSONALITY IN INEBRIETY, CLINICAL NOTES AND COMMENTS,	86 88
LISTERINE. THE STANDAL ANTISEPTIO	
LISTERINE is to make and maintain surgical cleans in the antiseptic and prophylactic treatment and care of all of the human body.	
LISTERINE is of accurately determined and uniform septic power, and of positive originality.	anti-
LAMBERT'S LITHIATED HYDRANGEA. A valuable Renal Alterative and Anti-Lithic agmarked service in the treatment of Cysticis, Rheumatism, and Diseases of the Uric Di	Gout,
DESCRIPTIVE LITERATURE UPON APPLICATION. LAMBERY FHARMACAL CO., ST. LOT	(I)S).

Ready September 1st.

MALTINE

WITH

Wine of Pepsin.

Samples and Literature on Application.

THE MALTINE MANUFACTURING CO.,
168 Duane Street, New York City.

AFTER THE

REMOVAL OF

~ ~ ALCOHOL

IN the treatment of the inebriate, a stage of ${f I}$ profound exhaustion and neurasthenia comes on, an unmasking, as it were, of a nameless variety of neuralgias and states of irritation, both physical and psychical, which tax therapeutic resources to its utmost to meet. Functional changes and perversions that are intense, complex, and very changeable, associated with organic lesions, bom obscure and well-defined, not only difficult to diagnose, but more difficult to treat. These are termed, in general, states of brain and nerve exhaustion, and the usual remedies are quinine, strychnine, electricity, baths, nutrients, and other general remedies. The materia medica is constantly searched for tonics that will lessen this neurasthenic stage, and enable the patient to regain in some measure his lost control of mind and body, and rise above the mental depressions The experience of so common and agonizing. the medical profession proves that Celerina meets these wants more positively than any other remedy.

RIO CHEMICAL CO.,

A full size bottle of CELERINA will be sent FREE to any Physician who wishes to test it, if he will pay the express charges.

ST. LOUIS, MO.

Protonuclein

Is now recognized by those who have carefully studied its effects as the most important therapeutic agent known to the profession.

the nature and function of the leucocyte, stated that in his opinion,

METCHNIKOFF, who discovered "The secret of health will have been discovered when science learns how to increase the number of white blood-corpuscles at will."

Protonuclein produces leucocytosis as soon as taken into the organism, and in this way becomes nature's tissue-builder and antitoxic principle. It is within the leucocyte that all proteid matter is converted into living substance, there that it receives the impress of life, is changed into a cellulized, vitalized pabulum ready for appropriation by the tissue-cells. Protonuclein is obtained from the lymphoid structures of healthy bullocks and pigs by a mechanical process which does not destroy its integrity.

Protonuclein is indicated in all forms of wasting diseases and asthenic conditions. It rapidly restores the vitality of all the tissues by stimulating and supporting assimilative nutrition. It is also indicated in all diseases due to toxic germs and in the treatment of Neoplasms, Ulcers, and all surface lesions, malignant or otherwise. It is also indicated as a prophylactic in exposure to contagion or infection.

Protonuclein is put up as follows: For Internal Use, 3-Grain Tablets (Bottles of 100, 500, and 1000); Powder in Ounces and Half Pounds. For Local Application and Hypodermatic Use, Special Powder in Ounces and Half Pounds.

FOR SALE BY ALL DRUGGISTS

Samples, Clinical Reports, and other literature sent on request.

REED & CARNRICK, New York

Peptenzyme

A PERFECT DIGESTANT

Peptenzyme is a prompt and effective physiological remedy for all forms of Dyspepsia, Vomiting, Cholera Infantum, Malnutrition, etc., as it contains all the ferments furnished by nature for the perfect digestion of all kinds of food.

Peptenzyme also contains the Osmogen or Embryo Ferments, from which spring the matured or active ferments. By the appropriation of these undeveloped ferments the different organs of digestion are strengthened and stimulated to greater activity, so that they are afterwards able to supply the proper amount and quality of digestive secretions. The immediate effects noted are improvements in appetite as well as digestion.

Samples and literature mailed free to any physician, also our new edition of Diet Tables.

REED & CARNRICK, New York

MERGAURO

(THE Tonic ALTERATIVE)

INCREASES THE QUALITY AND QUANTITY OF

RED BLOOD CORPUSCLES

more rapidly than any other known therapeutic agent. Chas. Roome parmele co.,

AVERAGE DOSE 10 DROPS

ATTLEBORO

36 PLATT STREET, NEW YORK.

.

We receive persons suffering from mild mental and nervous diseases, who need the influence of pleasant home surroundings, with the attendance of trained nurses and the watchful care of an experienced physician. Our methods are those which have been found best adapted for the relief and cure of this class of cases, and include Electricity, Massage, Baths, etc. Especial attention given to the preparation of foods to meet individual cases.

For references, terms, etc., address

LAURA V. G. MACKIE, M.D., ATTLEBORO, MASS.

VERNON HOUSE. For the Private Care and Treatment of Mental and Nervous Diseases, Alcoholism, Opium, and other like Diseases of Habit.

holism, Opium, and other like diseases of madit.

Number limited to Ten Patients, affording most constant and careful supervision of each patient by the resident physician and his assistant. Medical treatment and all means to promote recovery made the first consideration. Opportunities for recreation and amusement are also generously supplied. There is also presented perfect home surroundings and an entire absence of all institutional features. Ample accommodations, meeting every requirement. The strictest privacy afforded, and the greatest possible liberty given. Voluntary and committed patients received. Fifteen miles from 42d Street Station, New York, Harlem R. R. Trains every half hour.

ADDRESS, WM. D. GRANGER, M.D.,
Post-Office and Telegraph.

BRONXVILLE, N. Y.

THE

Quarterly Journal of Inebriety.

Subscription, \$2.00 per year.

Vol. XIX.

JANUARY, 1897.

No. 1.

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

THE FIRST MEETING OF THE ASSOCIATION AND THE ORIGINAL MEMBERS.*

BY DR. L. D. MASON, BROOKLYN, N. Y.

At a meeting of physicians, superintendents, and friends of inebriate asylums, held in the parlor of the Young Men's Christian Association, New York, November 29, 1870, at 12 o'clock, noon, the following named persons were enrolled:

Willard Parker, M.D., President, and D. G. Dodge, M.D., Superintendent of New York State Inebriate Asylum at Binghamton.

Hon. J. S. T. Stranahan, President, T. L. Mason, M.D., Consulting Physician, L. D. Mason, M.D., Attending Physician, Geo. J. Bennett, M.D., Brooklyn, Director, and Rev. J. Willett, Superintendent of Inebriates' Home of King's County, N. Y.

W. C. Lawrence, Superintendent, Daniel Allen, R. K. Potter, Theodore Prentice, Directors of Washingtonian Home, Boston, Mass.

^{*} Read at the special meeting of "The American Association for the Study and Cure of Inebriety," held Nov. 20, 1896, to commemorate the organization of the Association Nov. 29, 1870.

P. J. Wardner, M.D., Superintendent of Washingtonian Home, Chicago, Ill.

Albert Day, M.D., Superintendent of Greenwood Institute, Massachusetts.

Joseph Parrish, M.D., President of Pennsylvania Sanitarium at Media, Pa.

C. L. Ives, M.D., Professor of Theory and Practice of Medicine, Yale College.

Alonzo Calkins, M.D., author of "Opium and Opium Habit."

The object of this meeting was to organize "The American Association for the Cure of Inebriates," (this association,) so that to-night we lack only a few days to complete the 26th anniversary of this society.

It would seem superfluous for me to dwell at length on the character and standing of the gentlemen who composed this meeting. Dr. Willard Parker was one of the leading surgeons of New York City, and for many years had held a prominent position as a teacher of surgery. And now, at the latter part of a life brilliant with professional, social, and financial success, he considered it a privilege to join with those who desired to lift the terrible burden of inebriety from its victim.

Dr. Theodore L. Mason was another of those who brought to this meeting an experience that had been developed in the full activity of a busy municipal life, extending over many years. For twenty-one years he had been identified with medical education, as president of the Long Island College Hospital of the City of Brooklyn, socially and professionally, and, in the exercise of his citizenship, he had been identified with almost every movement of note that had taken place during his residence in Brooklyn, and his associates at this meeting found him a most worthy counselor, a close student of the subject to be considered, and a fervent friend and promoter of the proposed organization.

Dr. Albert Day was one who had given his whole life in private and institutional work to the cause of the inebriate, his treatment and cure, and the means of prevention, as well as the means of restoration, as pertaining to the inebriate. He had watched the temperance movement from its infancy, had seen its errors, as well as its successes, and the first application of remedial measures for the cure of inebriety as a disease, and the gradual setting aside of simply moral measures, which at one time dominated and constituted the only means of dealing with the inebriate.

Dr. Joseph Parrish was the prime mover and instigator of this meeting, and this association exists to-day, because of the energy and foresight of Dr. Parrish. At this time Dr. Parrish was past middle life, and in the full exercise of his mental and physical powers, and he threw his whole energy, his mind and heart and soul into this organization. It is needless to add he brought a rare experience as an alienist, as a specialist in mental disease, and also as a specialist in the treatment of alcoholism and the opium habit. As the organizer and first secretary of this association, he was earnest and indefatigable and successful in not only making the various meetings attractive and instructive, but by the work which evolved from the association, by his assiduity and practical suggestion carried the interest across the Atlantic and affected Continental Europe favorably for the inebriate, and to-day England and her colonies, and France and Germany, and wherever an inebriate receives the benefit of asylum, and wholesome and effective laws, it is all due primarily and in its inception to one man, and that man is the late Dr. Joseph Parrish.

I might make mention of the names of Rev. Mr. Willet, Dr. Daniel G. Dodge, and others less conspicuous, it may have been, in professional and social circles, but none the less energetic or in full sympathy with the purpose of the meeting.

My object in thus dwelling on a few of the most prominent and best known of those present at this meeting is to impress you with the fact that these men were not "temperance cranks," in the common language of the day, nor were they

4 First Meeting of Association and Original Members.

those who had a faint conception of the work, the influence, and the opposition which such an organization foreshadowed. They were all men of rare and ripe professional experience, high social standing, and Christian philanthropists in the best sense of the word.

Twenty-six years have passed since these men met and counseled on that memorable occasion. Has their wisdom been justified? Were their surmises correct? Fellow-members, look around you. Asylums for inebriates are seen in every civilized quarter of the globe. Beneficent laws shelter, provide for, and protect him. He is no longer a pariah and outcast in the land, the flotsam and jetsam of the tide of public opinion, and the time is not far distant when he too, like his twin brother, the lunatic, will, in every state and in every country, receive the full benefit of institutional care and beneficent laws. It is well for us to-night to lay our gifts of reverence, love, and respect on the altar of memory, and say of the departed dead, you laid the foundations of this structure on the rock of hope, faith, and charity, — hope in the trust and confidence that your work would succeed, faith in the God above you, and in love for your fellowman.

This association must go on and it will go on with ever successful progress, if the spirit of its founders go with us. Let us see to it that we emulate that spirit, and carry this association forward into the yet unknown regions of scientific research.

Dr. Willard Parker of New York was called to the chair, and Dr. Joseph Parrish of Pennsylvania was chosen secretary pro tempore. On taking the chair Dr. Parker made an address, and it was so characteristic of the man and so fully in sympathy with the purpose of the meeting and the objects for which it was organized, that I shall take the liberty to present the address to you in its entirety.

ADDRESS.

Gentlemen: — The purpose of this meeting is the discussion of the subject of inebriety, and its proper treatment.

It is not a temperance, but a scientific gathering, made up of men having charge of the asylums and homes already established in the United States for the cure of the unfortunate victims of alcoholism.

In the beginning of the present century insanity was regared as a visitation of God's displeasure, and not as a disease, the subject of scientific investigation, and amenable to treatment.

To-day we know, from the statistics of accurate observers, that eighty per cent. of the cases of acute insanity treated are restored to health and usefulness.

The important subject of inebriety is regarded now as was insanity some seventy years ago; the disease being considered irremediable, and its victims as forever doomed.

At the outset we are met by the inquiry:

I. What is alcohol?

The answer is — a poison. It is so regarded by the best writers and teachers on toxicology. I refer to Orfila, Christison, and the like, who class it with arsenic, corrosive sublimate, and prussic acid. Like the poisons, when introduced into the system, it is capable of destroying life without acting mechanically.

II. The character of alcohol being established, we investigate its physiological and pathological action upon the living system. It has been established that, like opium, arsenic, prussic acid, etc., in small doses, it acts as a mild stimulant and tonic.

In larger doses it becomes a powerful irritant, producing madness, or a narcotic, producing coma and death.

III. It being settled that alcohol introduced into the system improperly induces a general disease in that system, as well marked as intermittent fever, small-pox, or lead-poison, the question here arises, can that disease be cured? The an-

Vol. XIX.-2

swer is affirmative. Inebriety can be cured. Like other diseases, however, subject to relapses.

- IV. It will be the object of this meeting to inquire into the best mode of treating inebriety.
 - Whether the city or country offer more advantages.
- 2. Whether large or small institutions accomplish most cures in proportion to the number of patients.
 - 3. What legislation, if any, is needed.

We may inquire also into the advantage of supplementing the asylums with homes in our large cities.

Finally, it must be the steady aim of this body to impart scientific truth, and thus enlighten the mind of the public, inducing it to move in its power, and demand protection against a disease infinitely more destructive than cholera, yellow fever, small pox, or typhus, which are now so carefully quarantined.

At the conclusion of Dr. Parker's address the secretary stated that several gentlemen present had reported that they were in possession of papers to be read before the meeting, and it seemed desirable to arrange an order of business, that they may be properly presented; whereupon Dr. Wardner moved the appointment of a committee to prepare an order of business.

The chair appointed Drs. Wardner, T. L. Mason, and W. C. Lawrence, who retired for a few minutes, and returned with the following order for the essays, which was agreed upon:

- 1. The Pathological Influence of Alcohol, and the Nature of Inebriation, by N. S. Davis, M.D., of Chicago.
- 2. Philosophy of Intemperance, by Joseph Parrish, M.D., of Pa.
- 3. The Disabilities of Inebriates, by the inmates of the Pennsylvania Sanitarium.
- 4. History of Washingtonian Home, by W. C. Lawrence of Boston.
- Restraint as a Remedy for Inebriety, by D. G. Dodge, M.D., of Binghamton, N. Y.

- 6. The relation of the Church to Inebriates, by Rev. J. Willett of Fort Hamilton, L. I.
- 7. Inebriate Asylums in their Relation to Social and Political Economy, by Albert Day, M.D., of Greenwood, Mass.
- 8. Moral and Social Treatment of Inebriates, by P. J. Wardner, M.D., of Chicago.

Dr. Wardner was requested to read Dr. Davis's paper, as the latter was unable to be present.

Dr. T. L. Mason rose to notice the point in Dr. Davis's paper which refers to legal provisions for inebriates, and thought one great object of this meeting should be to consider the question, what can be done to procure legislation that shall recognize inebriety as a disease, as it does insanity, and make provision accordingly.

Mr. Stranahan rose to urge that intemperance should be announced by this meeting as a disease; that this fact being admitted, the next question should be, what can be done to cure and prevent it by individuals, by law, and by the common sentiment of the people, all of which would be influenced by the decisions of this body.

Dr. Parrish then read a paper on the Philosophy of Intemperance, and also a communication to this meeting from the inmates of the Pennsylvania Sanitarium, on The Disabilities of Inebriates.

The question of restraint incidentally referred to in the latter communication elicited considerable remark.

Mr. Willett referred to the experience of the King's County Home, which was conducted without written rules; and though the class of persons received there are many of them taken from prisons and police stations, and some of them belong to what are known as the dangerous classes, he had no difficulty in controlling them without bars or locks.

Mr. Allen had the same views about restraint, and made an earnest appeal in favor of personal influence upon the inebriate. He was not to be controlled, but led, and if he could realize that efforts in his behalf were for his own good, and not

for his punishment, he would appreciate them and be benefited. Mr. Prentice said that the people of Massachusetts had been educated up to the idea that intemperance is a disease, that it was now acknowledged in the courts of that state, and that inebriates were to be treated as diseased persons, and not as criminals.

Mr. Lawrence then read his paper on The History of the Washingtonian Home at Boston.

Remarks were made by Drs. Wardner, Day, T. L. Mason, and Mr. Willett, on the importance of individual effort, and against legal punishment, which were strongly seconded by Mr. Prentice.

Dr. Dodge then read his paper on Restraint as a Remedy for Inebriety.

Adjourned at 4:30 till 8 P. M.

8

EVENING SESSION.

The meeting again assembled at 8 o'clock. Dr. Parker in the chair.

The first order of business was the reading of Mr. Willett's paper on the Relation of the Church to Inebriates.

Remarks were made by several members upon the influence that might be exerted by society to favor the restoration of inebriates; the fact that they were looked upon with suspicion, and constantly circumvented as a doubtful and uncertain class, had much to do with exciting the tendency to drink. If the church and religious associations would receive and foster such persons in their efforts, it was believed much more good would be accomplished, and it was thought that the Young Men's Christian Association in all parts of the country might accomplish great good, by attaching to their rooms lodging houses for inebriates, where they could be taken, instead of to police stations.

Dr. Day read his paper on Inebriate Asylums as they Relate to Social and Political Economy.

A discussion ensued on the question of the treatment of inebriate women in the same building with men.

Dr. Day reported having two ladies in his family, with seventeen men, who ate at the same table, and participated in becoming social amenities.

Mr. Willett spoke of the subject being one of great importance, and gave experiences from the King's County Home, where both sexes are included under the same roof.

Dr. Wardner read his paper on the Moral and Social Treatment of Inebriates. A discussion followed on the practice of holding social experience meetings, which was usual in some of the homes.

Dr. Parrish doubted the propriety of cultivating a tendency in inebriates to refer to their past lives, and make their experiences a subject of ordinary conversation. He feared the tendency of such practice was to cultivate looseness of expression which might lead to caricature and merriment. patients, he discouraged such allusions, and preferred that they should rather forget the past, availing themselves of every opportunity afforded by the present to promote their improvement, and look forward to a better life. He did not deny that such intercourse might be useful, if guarded by the solemnities of a religious meeting, but otherwise should discourage it. He felt sure that public sentiment was often influenced against the inebriate by well-meaning and yet indiscreet advocates of temperance, who present inebriates as subjects of laughter, and make stories and jokes out of their misfortunes, and he hoped the influence of this meeting would be against such performances.

Dr. Day approved of such meetings, and in his early connection with the Home, they became an established part of the discipline and treatment which had continued since that time. He thought much depended on men committing themselves, and that their influence was good upon others. He had found it to work well in Boston, but had not succeeded in establishing the practice when he took charge of the asylum at Binghamton, where it had never been adopted.

Mr. Lawrence found it to work well at the Boston Home,

and more especially being in the city where the old inmates who remained steadfast came to the meetings and strengthened the hands of the new and weaker ones. He discouraged any thing like merriment and caricature, being satisfied that loose conversations upon the subject among each other was injurious, while the earnest appeals of inebriates to each other, based upon experience, were beneficial.

On motion, a committee was appointed to report a plan of permanent organization to-morrow morning at 10 o'clock. Committee, Drs. Wardner, Dodge, and Parrish.

Adjourned.

Wednesday, 10 A. M.

Meetings assembled punctually, and the President took the chair.

The chairman of committee on permanent organization made the following report, which was adopted:

PLAN OF ORGANIZATION.

- 1. The name of this association shall be the "American Association for the Cure of Inebriates."*
- 2. Its members shall consist of Superintendents, Physicians, and Delegates from Boards of Directors of institutions for the treatment of inebriates.
- 3. Its object shall be to study the disease of inebriety, to discuss its proper treatment, and endeavor to bring about a co-operative public sentiment and jurisprudence.
- 4. Its officers shall be a President, one or more Vice-Presidents, Secretary, and Treasurer; each of whom shall perform the duties usually assigned to such officer, and shall be elected at each annual meeting.
- 5. The annual meeting shall be held on the 2d Tuesday of November, at such places as may be agreed upon from year to year.

^{*} This name has since been changed to "The American Association for the Study and Cure of Inebriety."

6. Special meetings may be called by the President, on his own motion, or at the request of two or more members.

On motion, Drs. Wardner, Dodge, and T. L. Mason were appointed a committee on nominations for officers of the association, who, after a few minutes' absence, made the following report, which was unanimously adopted:

For President, Willard Parker, M.D., of New York; for Vice-Presidents, C. J. Hull of Chicago, Otis Clapp of Boston; for Secretary, Joseph Parrish, M.D., Media, Pa.; for Treasurer, Theodore L. Mason, M.D., of Brooklyn.

The following Preamble and Declaration of Principles 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 the 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.
- 4. 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.

8. The law should recognize intemperance as a disease, and provide other means for its management than fines, station houses, and jails.

Dr. Wardner offered the following resolution, which was unanimously adopted:

Resolved, That every superintendent is requested to keep an accurate history of all cases admitted into their asylums, touching the condition of the patient's history, when admitted and while in the house, and enter all the items that may be gathered about their future life after discharge, and give the association the benefit of such statistics, at each annual meeting.

In compliance with this resolution, Dr. Dodge and the secretary were appointed a committee to prepare a statistical table for use in all our institutions, covering the history and condition of the inmates, and that this table be the basis of our statistical reports next year.

Dr. Wardner offered the following, which was adopted:

Resolved, That it is important to connect with our asylums some system of healthy and profitable employment for such patients as can be induced to labor, and that it should be carried on under the direction of the superintendent.

Considerable discussion was had upon this topic. Dr. Wardner stated that the directors of the Chicago Home had had the subject under discussion, but were at a loss to know how to proceed, and were waiting the action of this meeting.

Mr. Willett reported the experience of the Home on Long Island, where they have several means for mechanical occupations, including a printing press, and with inmates who are taken from the dependent classes, labor could be required, etc.

Mr. Prentice stated the practice of the Home in Boston to be, to receive men from the city who were inebriated, sober them, and allow them to continue their occupations, while they boarded and lodged at the Home — so that they were enabled to pay their board from their earnings; but that this plan could only be effective with persons who could find employment in Boston.

Dr. Parrish though that for other classes of patients there might be a system of mental training that would be pleasing as well as valuable in cultivating the judgment and improving the will, and he hoped something would be evolved from our experiences at home that would meet this want.

Dr. T. L. Mason offered the following resolutions, which were adopted:

Resolved, That the question of the cure of inebriates is one which depends largely upon the sentiment and practice of the community.

Resolved, That when the inmates of inebriate asylums leave the care of such asylums, it is the duty of their families, of the church, and of the people at large, to receive them without reproaches for their past lives, and give them encouragement and protection.

This subject was freely discussed, and a number of instances related of men who had left institutions with great promise of security and usefulness, but for want of being cordially received and aided, had become discouraged and relapsed.

Dr. L. D. Mason called attention to the fact that the opium disease required attention from this body. There are, perhaps, no institutions for inebriates, where opium cases are not sometimes admitted. At the King's County Home there are several at this time, and he hoped the subject would receive the attention of the members before the next meeting.

Dr. Parrish exhibited a copy of a bill recently presented to the British House of Commons, and which he believed had passed that body, defining intemperance, and declaring that the man who drinks frequently or habitually, to such excess as to be unable to take care of himself, is of unsound mind; and town and county authorities are, therefore, authorized to erect asylums and take care of such persons. Our laws are at fault in this regard. They do not define what intemperance is, or what an habitual drunkard is, and do not generally authorize anybody to treat him as a diseased person.

The importance of having uniform legislation by the several Vol. XIX.—3

states of this country, was considered. The bill just read was on motion referred to a committee, with instructions to report a form of a law next year. The chair appointed Dr. T. L. Mason, Rev. J. Willett, and Dr. D. G. Dodge.

An informal discussion followed on the value of alcohol and its effects on the body, which is omitted as having little historic interest.

On motion of Dr. Wardner the following resolutions were unanimously adopted:

Resolved, That we thank the Young Men's Christian Association for the use of their parlor, and for the other courtesies extended to us.

Resolved, That we hereby express our thanks to Dr. Willard Parker for the genial and impartial manner in which he has presided over our deliberations; and to Dr. Joseph Parrish for his devoted and persistent efforts in this great and good cause.

The subject of publishing the proceedings and essays read to the association being considered, Dr. T. L. Mason moved that the secretary be authorized to arrange the minutes and papers for publication in pamphlet form, and that five thousand copies be published, the expense to be borne by the different institutions represented.

It was agreed to forward to Dr. Mason, treasurer, an allowance from each institution, to meet the cost of publication, which it was supposed would amount to not less than five hundred dollars.

Dr. Parker made some interesting remarks on the commercial value of men, showing the loss to the community in labor and productiveness of inebriates, and commended the subject to the careful thought and study of all present. Whereupon he was, on motion, requested to furnish a paper on the subject to the secretary for publication with the proceedings.

Adjourned, to meet next year in New York city.

This report of the first meeting is, in fact, a reproduction of the original minutes, and we thought it best to so present it, because this meeting has become historic as the first meeting ever held, as far as we know, in the history of the world, in which the representatives of several asylums for the treatment of inebriety assembled to counsel with each other and to establish an organization which should mutually benefit those who composed its membership and strengthen the efforts then being inaugurated for "The Study and Cure of Inebriety."

We desire, first, to call especial attention to the character and the social and professional standing of the more prominent men who organized this association. Secondly, to the nature of the subjects discussed and the titles of the papers read. Thirdly, to the "Declaration of Principles," which was in reality a "Declaration of independence," for, upon its declaration and acceptance this association became at once independent of and, in a measure, in opposition to the scientific, moral, or religious, and legal views, that then prevailed, in regard to inebriety and the position it held in relation to science, religion or morals, and law. Suffice is to say that our predecessors and the founders of this association laid its corner stone well and truly and in great wisdom, and built for all time — for we believe that this corner-stone of our principles will remain, and that "the stone which the builders rejected will become the chief of the corner," nay, has so become, for, to-day, medical science, religion, and law have all come and placed their offerings of accordance and respectful acquiescence upon it.

Another characteristic of this first meeting was the entire unanimity that pervaded its counsels and the active interest of those who participated in it.

As to the results of this meeting, it was not only to stir the scientific world in America alone, but Continental Europe was soon to be influenced by the proceedings of this association. Like the flash of a search-light across the darkened heavens of obscurity, mystery, and ignorance, our association was now signaling in a silent, but effective, manner. All civilized nations were to interpret the signal and, in due time, respond to us.

Twenty-six years ago this association stood as a lighthouse, casting its rays over the dark and troubled waters of popular and scientific thought, and guiding the seeker after truth to a placid and safe anchorage. Or, we may liken it to a bold headland protruding itself into the sea of stormy opposition and turning the adverse current of thought into proper and scientific channels.

The fact remains undisputed that this association, as the pioneer of correct scientific principles, has led medical science, as regards inebriety, from the low levels and mist-covered valleys of obscure and erroneous conception of the status and true condition of the inebriate to the clear atmosphere of the uplands of unclouded scientific vision, and the true and unbiased medical scientist now accepts and acts on the "Disease Theory of Inebriety," and now, not only the inebriate is regarded as diseased, and so treated, but even in English courts, noted for their conservatism, is regarded as an irresponsible agent, and the laws amended for his relief and protection, and medico legal science has gained a victory on behalf of the irresponsible inebriate.

But we cannot, as an association, rest until we have placed the status of the indigent or pauper inebriate on the same level with the indigent or pauper lunatic. Equally liberal laws for his control and maintenance should surround and be exercised on behalf of the inebriate as are for his unfortunate brother, the lunatic. Nor will this be effected until every state shall have its asylum for the care of pauper inebriates, that state care which is so desirable and effective in the case of the lunatic, and in case where the inebriate has property or controls that of others, laws must be enacted by which, in the earlier stages of his inebriety, he can be controlled, and the waste, ruin, and bankruptcy of his own estate or of the estate of those dependent on him prevented. Our association and an enlightened medical profession must urge medico-legal

societies to push forward the good work of sound and effective legislation to save not only the inebriate from himself, but also society from his wasteful and destructive tendencies.

As an association we must add to our members all those who have a direct interest in the study and cure of inebriety, and in securing the passage of legal measures that shall be effective on behalf of the inebriate.

This association, as the parent society, should establish branch societies in every state in the Union, and every state should have its special asylum for the care and treatment of the pauper inebriate. This association should urge energetically state control of the inebriate. The maintenance and treatment of the great army of inebriates will then be at the least possible expense to the public, and their destructive tendencies restrained and practically rendered inert. But, in order to secure judicious legislation on behalf of the inebriate, this association has another function and that is as an instructor or educator of public opinion. "The Journal of Inebriety," the official organ of this society, does this in a measure, but it only reaches a limited and special class. What is needed is the scientific discussion in a popular manner, that can be comprehended by a fair degree of intelligence the cardinal points of the whole subject. The people must be educated up to the fact that alcohol is more destructive than yellow fever, cholera, or small pox. These have slain their thousands, but alcohol its tens of thousands; and they must be taught that the inebriate is the standing exponent of the evil product of alcohol. Moreover, the disease theory of inebriety must be so presented to our legislators that they will provide and maintain special institutions for the care and treatment of the inebriate.

As an association we must study the great underlying or foundation causes of inebriety, heredity, disease, or accident, or the acquired forms. Our committee on nostrums has shown that many of the so-called *patent medicines are the cause*, oftentimes, of the alcohol or opium habit.

Within a few years, quackery, under the guise of legitimate medicine, with philanthropy as a cloak, and using religious cant with all the adeptness that characterizes hypocrisy appeared in the United States, and attempted also to effect a lodgment in Continental Europe. This association, although maligned and threatened by the syndicate that controlled the so-called cure, held a special meeting and denounced it is the most iniquitous and stupendous humbug of the century. It was also largely through the instrumentality of members of this association, seconded by the intelligent and conscientious members of the medical profession, that the special legislation, backed by the bribery and corrupting influence of this syndicate, failed to mature, and became a dead letter.

Thus has this association been faithful to trusts bequeathed to it by those who founded it.

When Napoleon the Great was in Egypt he encouraged his battalions by pointing to the gigantic pyramids, as they overshadowed his camp, saying, "Soldiers, past generations look down upon you." But, fellow-members, I would not point to the past, however glorious, but to future conquests, and urge you not only for this generation, but for all generations to come, be faithful to the sacred charge intrusted to your care, and emulate the example, conscientious work, rare wisdom, prescience, and fidelity to trust of your predecessors, as shown forth so eminently in not only their first meeting, but throughout their entire connection with this association.

Our principles are just as true, concise, and comprehensive as they were twenty-six years ago.

Let us adhere to these principles which have withstood the assaults of quarter of a century, and with them emblazoned on our standard, as we have in the past, so in the future, withstand and conquer all opposition based on prejudice or ignorance. Only thus will the spirit manifested in the first meeting of this association reach its highest aspirations, and bring to their fullest development the objects for which this association was established.

HISTORIC ADDRESS ON THE JOURNAL OF INE-BRIETY, ITS BIRTH AND GROWTH.*

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

October 9, 1873, I was detained at Binghamton, N. Y., by the sudden illness of a traveling companion. At the hotel I made the acquaintance of some members of the Association for the Study and Cure of Inebriety. This association was holding a special meeting at the asylum in that city, following the regular session held in New York the day before. I was invited to attend the meeting, and heard Dr. Parrish read an elaborate paper on opium poisoning, followed by discussions by Drs. Mason, Parker, Wey, and others. This was my first acquaintance with this association and its members. The next year, 1874, I was made a member and read a paper at the annual meeting. The year after, 1875, I was elected secretary, which office has clung to me up to the present.

The meeting in 1874, at the Young Men's Christian Association in New York city, was of unusual interest. Six elaborate and very suggestive papers were read. The discussions and reports which followed seemed to rouse up new interest and was widely commented on and reported in the daily press. Some of the papers were reprinted and had a wide circulation, particularly Dr. Beard's paper on "Chronic Alcoholism." The transactions of that year were soon exhausted, so great was the call for them.

The next year, 1875, the association met in Hartford, Conn. Six papers were read, and several very elaborate reports of asylums were presented. A number of warm congratulatory

^{*} Read at the anniversary meeting at New York, Nov. 20, 1896.

letters from eminent foreign physicians were read, and much enthusiasm prevailed. The same urgent call for the transactions followed, and some of the papers appeared in English, French, and German journals.

This demand for the proceedings of the association suggested the possibility of a journal which would gather up and put in a permanent form the literature of this subject. The papers read before the association had, in many cases, given a great impetus to the study abroad. Drs. Parrish and Dodge's visit to England and testimony before the parliamentary committee, together with Dr. Dalrymple's visit to this country and report of the work in America, had raised this subject immensely in the opinion of English and American physicians. At about this time appeared the curious circumstance of papers read at the association meeting translated into German and French, then translated back to English and quoted in American journals as from foreign authors. papers of Drs. Parrish, Burr, and Beard, were, in part, republished in many journals in this country as translations and referred to foreign journals. This has continued more or less ever since. Papers, editorial paragraphs, and clinical reports have been translated into German, French, and Italian medical journals, then translated back, and are published in journals of this country as selections from foreign literature. This peculiarity gives the impression that studies from abroad can be quoted as reliable, while the same facts asserted at home may be doubted.

During the spring of 1876 Dr. Magnan of Paris published a report on alcoholism, which attracted great attention. Dr. Bucknil of England attacked the theory of disease in inebriety and roused a controversy which spread through all the journals, and was eagerly followed up and repeated in this country. Dr. Parrish had become prominent as the leader of the theory of disease in this country, and naturally felt great solicitude in the result of this discussion. The need of a journal to group and defend the facts of this theory became

more and more apparent, and Dr. Parrish and myself were asked to formulate some plan and estimates for the publication of a journal. Dr. Parrish had journalistic experience, yet he shrank from taking the responsibility alone, or from having active charge, and preferred that it should be in the hands of a committee.

The time had come for a journal to represent our association and defend its principles, and it was evident that it would encounter bitter opposition, and meet with obstacles that might be fatal to its growth. The theory of the disease of inebriety was confronted by three distinct classes of critics. One who flatly contradicted this theory, and asserted that all drinking was vice and moral disorder. Dr. Bucknil of London and Dr. Gray of Utica Asylum, both eminent and popular alienists, were leaders of this class. Both were caustic voluminous writers with intense convictions, and sought every opportunity to ridicule and denounce this new so-called crank movement.

The second class were the reformers and reformed men and religious philanthropists, who accepted the disease theory in part, especially in extreme degrees of alcoholic excess, but insisted that all cases were moral lapses at first. That first vice, then disease, existed, and the treatment must be directed to the vice side always. They urged that faith, pledge, and prayer cures were the leading essential remedies.

The third class were temperance societies and clergymen, who saw in this theory excuses to drink, and irresponsibility, together with dire disasters to all progress along humanitarian lines. Eminent men in both legal, medical, and theological circles warmly defended these theories, and looked down with lofty contempt on the work and theories of our association.

An annual meeting reported in a small paper-covered volume of transactions, could not rouse much opposition, but a journal that should enter the field to defend these theories must expect criticism and severe opposition. Drs. Mason

Vol. XIX.-4

and Parrish realized this clearly, and after much correspondence and conference, it was decided to begin the journal after the annual meeting in October, 1876. It was thought best to make the secretary the figure-head, or the man in sight, to receive the first shock of criticism and conceal the movements of the real forces behind. I was, at that time, assistant physician in the Binghamton Asylum, and it was thought best to have the journal sent from that place to secure the prestige of authority for the statements it might contain. Dr. Hawley of Hartford, Conn., who was a very enthusiastic member of the association, arranged to have the journal printed at Hartford and secured a considerable advertising patronage to begin with.

The seventh annual meeting was held in the hall of the College of Physicians and Surgeons at Philadelphia, September 26, 1876. This being Centennial year all the members were present and a large audience of persons interested and others The late Dr. T. L. Mason was president. from curiosity. His address was a very clear, conservative statement of the "Disease of Inebriety," and was followed by several excellent papers. Then came a confusing irregular discussion in which a large number of persons participated. Many of these persons wrote out their remarks in full and urged their publication in the journal, and because they were not used became indignant and estranged. At this meeting the journal was formally organized, with Drs. T. L. Mason, Joseph Parrish, and T. D. Crothers as editorial committee. The first two members remained on the committee until removed by death, and always gave the journal their most hopeful aid and coun-The meeting was over and the journal was announced to appear in December. The first question was to make a journal clearly scientific in cast and tone, and free from dogmatism, also to give the principles of the association the clearest general setting possible. In brief, to make the journal a worthy pioneer in a new field and to disarm criticism, arouse inquiry, and attract students of science to follow up the lines marked out in verification or for correction.

Accordingly the first number of the journal, dated December 1, 1876, appeared November 22d. It contained Dr. Mason's address, which gave a clear review of the facts which led up to the question of disease and the growth and experiences of the various asylums and teaching of leading writers on this topic. The tone was scientific, generous, and clearly convincing.

Dr. Beard following, discussed the "Causes of the recent increase of inebriety in America." This was equally admirable in tone and suggestiveness, and was followed by a brief report of the meeting and a short editorial by Dr. Parrish, and the first chapter of an analysis of a hundred cases of inebriety treated at Binghamton.

Five thousand copies of this first journal went out to prominent physicians and medical journals in this country. A large number went over to England, France, and Germany.

A number of journals extended a hearty welcome; others were silent, or displayed a sneering contempt, and a few others became hysterical in denunciations.

The latter were the anti-diseased theorists. The temperance party and friends saw in the journal another scheme of the rum power, to make inebriety respectable.

The third party looked down in pity at the folly of attempting to prove such theories.

The second number appeared in March and soon after the first storm of opposition burst upon the journal. Severe articles appeared in the medical and secular press, denouncing the facts and teachings of the journal, and individual letters came in large numbers criticising the position of the journal and calling attention to its errors and misconceptions. Along with this came contributions from all sorts and conditions of men and women who thought they had something to say along the confused frontiers of science and religion and the drink problem.

Some of these people were very importunate to have their contributions appear in the journal. Such contributions were usually unfit scientifically and brought no new facts or statements worthy of print. Some of these persons sent addresses and papers which were praised by their friends, and when unable to secure their admission in the journal became angry, unjust critics.

The close of the first year of the journal saw no diminution in the storm centers of criticism, but evidently a circle of subscribers and friends began to appear whose enthusiastic support gave renewed encouragement and lessened much of the sharpness of continuous condemnation. The eighth annual meeting was held in Chicago and was not so largely attended. Many excellent papers were read and some confusing discussions followed. Only the papers were published, and the failure to print the discussions brought out another storm of criticism. In reality these discussions were mostly precipitated by reformers who were anxious to mark out boundary lines of vice and disease and convert the meeting into a weak temperance society. For several years the society meetings, after the reading of the papers, would merge into an elementary discussion of these disputed questions in which nothing new was offered and very erroneous impressions were conveyed of the true work. It was finally decided not to accept invitations to visit other places, but to hold our annual meetings in New York where we could be comparatively free from enthusiastic controversialists.

Slowly and gradually the reformer class receded whose efforts each year was turned to modifying our principles and converting the society into a semi-scientific and religious body. The journal became more and more independent, the literature of reform asylums directed by reformed men, grew less, and a wider, more cosmopolitan class of articles appeared. Medical journals who at first looked down upon these efforts, now urged for an exchange of copies, some of the bitter opponents became subscribers, evidently to keep in touch with the progress in this field.

Ten years of struggle and effort went by, the literature had

began to take permanent form and shape and receive recognition in all circles of science. The association meetings furnished a few papers every year, but the bulk of the articles came from all over the world and the value of the journal became more and more apparent. During this first decade the journal suffered greatly from over-zealous enthusiastic friends who possessed very certain knowledge of the progress of science and the course to be pursued by the journal. The failure to follow their dictatorial counsels made correspondence exasperating, and in many ways detracted from a general recognition. One policy strongly urged was to devote part of the journal to temperance and moral work, to take up the evils of alcohol, and become a champion of special theories of cure. Another was to collect facts and statistics for educational work and help on the formation of homes and resorts for inebriates where they could be educated to sobriety.

A third policy was to become severely scientific and publish results of post mortems and only original work, most of which was in German, and when translated was often found to be some paper or facts the journal had previously published, appearing with changes and alterations. Many of these critics demanded that we follow lines of investigation which was utterly impossible. A prominent medical teacher was sure the results of numerous autopsies would bring out facts unknown before. He seemed to forget that the most thorough examination of the cadaver had failed to show any disease that was peculiar and common to insanity. Even recent microscopical study of the brain of acute maniacs revealed no differences from that of a sane person. One class of over-zealous friends of the journal have produced some embarassment in urging the publication of strange remedies said to be followed by remarkable results. This was before the days of gold cure specifics, when sodium calcium, wine of antimony, tincture snake root, and complex forms of cinchona, were among the most prominent remedies urged. A large number of good men have had convictions that specifics would be found for the cure of inebriety. Their views have been urged, and when advised

to make further test before publication became offended. Many of the annual meetings of our association were very unprofitable owing to the element of credulity which gave readers of papers an over confidence in their conclusions which more time and study of the subject would have dispelled. The past ten years of the journal has cleared away much of the confusion and the controversy between the editor and contributor, which is now largely of the past. In the first decade a large number of papers offered contained most confusing statements of the vice impulse and symptom in inebriety. This was objected to by the editor as unscientific and impractical. Other papers were offered giving moral remedies great prominence. This was also objected to. The result was a long controversial correspondence and the withdrawal of the papers. On one occasion a leading medical man became very angry at the publication of his paper with these objectional passages cut out. Later, when the paper was republished abroad and prominently noted, he relented and became a warm friend. The early establishment and growth of asylums for inebriates have created sources of sharp controversy. Several asylums of this class have been closed through the ignorance and errors of their managers, also misdirected public sentiment. To keep out of these storm centers has been the policy of the journal, and while of necessity sailing very close to the turbulent waves, the excitement and tumult have been avoided. The gold cure specifics roused by the temporary flurry in the literature of the subject, which quietly passed away. One of the most gratifying testimonies of the esteem of the opinions of the journal was the large number of inquiries received from Europe concerning the gold cures; also from eminent men and journalists of this country. These inquiries still continue and are religiously answered. One of these specific schemes, finding that the journal was referred to so often as an authority, through an agent opened negotiations for purchase, suggesting an extravagant price. Failing in this they have, at different times, ordered large numbers of certain copies and mailed them with their circulars, creating the impression of full co-

This, like the gold scheme, was of short operation. duration and early death. Probably no one event has done more to raise the literature of inebriety into a permanent place than the International Congress of Inebriety at London in 1887. The eminent character of the persons who participated and the papers presented gave the subject a scientific place not occupied before. The great English opponent, Dr. Bucknil, was silent and his American associate, Dr. Gray, was dead, and a younger generation championed the theory of disease with an assertiveness that was startling. Dr. Kerr followed soon after with a text-book on inebriety which has since passed through three editions. In 1893 our association issued a volume on the same subject made up of papers which had appeared in the journal. This is published by Treat & Co., New York city. In this country the study of the inebriate and his malady has been most prominent. In England alcohol and its action on the organism has been principally studied. A society over which the late Dr. Richardson presided has been engaged in this study for over ten years. The second society for the study of inebriety was formed by Dr. Kerr in 1884, and this, with our society, are the pioneer organizations of the world. In France, Germany, Switzerland, Belgium, and Italy are societies for the study of the abuses of alcohol which occupies the same ground but give more prominence to the action of alcohol. Six International Congresses have been held in continental Europe in which all sides of alcohol and inebriety have been discussed. While these meetings are very largely attended and seem to rouse a great deal of interest, the only real scientific work they have done has been to study the effect of alcohol on the body.

The anaesthetic and depresent action of alcohol has been demonstrated by instruments of precision, and what some of the English physicians have asserted from clinical experience has been confirmed by the results of the laboratory work.

In this country we have led the scientific world in our studies of the inebriate and his malady. The journal still is without a rival; after a quarter of a century, no other journal has appeared to divide the honors. The English society for the study of inebriety publishes a bulletin in which only their transactions appear.

The literature of inebriety, as seen in the Index Medicus monthly reports, comprises from eight to twenty titles of papers, pamphlets, and articles per month. These are exclusively in medical journals, and of course vary widely in value and treatment of the subject. Many of these papers relate to questions of alcohol and its chemico-physiologic action; others concern the inebriate and the symptomology of his malady. Evidently the "Journal of Inebriety" has created a distinct germinal epoch, in which new thoughts, new discoveries, and new conceptions of psychical phenomena are brought into prominence. The long levels of endless repetition of old thought and theories endorsed and repeated over and over are broken up and we have come upon a new era, not free altogether from error or mistakes, but an era of truths not yet fully understood, truths that are literal stepping-stones to broader and higher views. The journal represents an evolutionary movement and struggle to understand the phenomena of the drink craze. To ascertain and point out the causes and laws which control the despoliation and death of a hundred thousand persons in this country alone, we have reached a stage in the progress of thought when the phenomena of life and death are not considered as accidents or chance happenings, but as the operation of laws and sequences that can be traced and studied.

The period we have passed has clearly been formative. The journal has only gone forward and occupied new ground and marked some outlines for others to come along and develop. It has, through its literature, indicated the possibility of knowing the causes and conditions which provoke inebriety, and ascertaining the remedies and means of prevention.

Every year's advance gives renewed evidence that in the future inebriety and its victims will decrease until finally they will disappear and be stamped out as completely as germ diseases. The vast armies of drug-takers, the mental and physical border-liners, who are being driven out, crowded out, and literally switched off from the main line of evolution and growth, to dissolution and death, follow an organized line of descent, unknown at present. Like explorers on the borders of a new land, we can see parts of distant rivers and mountains and long valleys, and feel confident that a great continent, with all its flora and fauna, and wide contour of hill, valley, and plain, stretches out through this unknown.

The "Journal of Inebriety" is the organ of all scientific pioneers who are gathering on the frontiers of this new land. The first quarter of a century has passed and the real work is beginning. Before us are the wide realms of unknown facts with all its complex and matchless laws, the knowledge of which will enable us to understand and successfully treat inebriety. Beyond this the prevention of inebriety opens up almost unlimited possibilities. The contempt, sneers, and opposition which have for a quarter of a century followed every issue of the journal, are still heard. But their hoarse voices are receding and the increasing demands for copies of the journal for libraries, laboratories, and institutions, both in this country and Europe, are significant omens of the future. Most of the early friends and contributors of the journal have passed away and a new generation is approaching this subject from a purely scientific point of view. Thus the "Journal of Inebriety" passes the first quarter of a century of its existence, dimly conscious of the great power and influence which it must wield in the coming years. To all its friends and well wishers, the warmest greetings are extended, assured that on the borders of this new land a new circle of co-workers and enthusiastic students are gathering. As individuals we shall disappear, but the work will go on, and this new realm of pathological psychology will be opened and occupied by a vast population of settlers. The confusion and mystery of the present will lift and reveal the movements of law and forces beyond any present conceptions.

Vol. XIX-5

OPIUM ADDICTION: IS IT A DISEASE!*

BY WILLIAM HUNTLY, M.A., B.Sc., M.D.

Opium addiction can be judged from two standpoints.

We can, in the first place, look at it as a form of indulgence, one among others prevalent in our present day life and subject to the same general rules of moderation, social judgment, and control. Doing this, it is ranked, often unconsciously, with various extravagances of modern life, the luxuries of living and clothing, of food and drink, and we are apt to let the question slip, believing we have arrived at a just conclusion in the matter when we have summed it up in the two words — "moderation and excess." Recent judgments have tended to lead us into this position, and yet, the term "moderation and excess" is, as a rule, so difficult to define that its use results more in confusion than clearness.

The extravagances of modern times in food and drink, dress and dwelling, while, in the elements of excess, terrible evils in themselves, do not directly call for medical investigation of these elements of extravagances.

Now, before we can class opium addiction with such indulgences, we would require to prove opium, in any form whatever, to be a necessity of our daily existence in the same way as food is a necessity, and require to prove, moreover, the presence of a normal appetite in man which the drug is intended to meet and satisfy. Inasmuch as some medical men have mentioned opium addiction in the same breath with excess in eating and drinking, it is necessary to refer to this matter; but reference is made with the purpose of pointing out the utter irrelevancy of the comparison.

^{*} Read before the English Society for the Study of Inebriety.

We can, on the other hand, consider opium addiction as an indulgence sharing certain characteristics in common with other forms of addiction, and possessing certain qualities apart from them and peculiar to itself. In this case our inquiry would be suggested by lines of investigation pursued in such indulgences as alcohol, tobacco, and Indian hemp. There is here again a temptation to prejudge opium addiction by the attitude already adopted by us to those other forms. But, as medical men, we are called upon to leave such general terms as universal addiction, climatic necessity, moderation, excess, beneficial or non-beneficial, and other similar terms, and in a scientific spirit investigate every aspect of the problem. Universality of prevalence, antiquity of habit, racial peculiarity, and idiosyncrasy have all recently been employed in this question. Thus, to illustrate climatic and racial peculiarity, I have sat at table in India with two medical men, one from Persia and another from China, have heard opium addiction in Persia condemned and opium addiction in China condemned, and then the climate of India put calmly forward to support opium addiction in India. We find in tobacco addiction this prejudging from universality of prevalence preventing many men from accepting the finding of specialists on its effects. The eye specialist makes an ophthalmoscopic investigation of an eye and at once, from appearances observed, questions the man about his smoking. So constantly do certain optic phenomena accompany excessive smoking that the specialist concludes the smoking to be the cause. Yet, there are many medical men who deny this connection, basing the denial on general immunity and universality of the habit.

I draw attention to these points, seeing that the whole question of opium addiction has been involved and confused recently by many side questions and issues. Thus, we learn from India that opium smoking is reckoned worse than opium eating, and from China we are told that opium eating is held by the Chinese to be more disreputable than opium smoking; from the Straits we learn that opium hypodermic addiction

is rapidly increasing, and, in the meantime, is more to be dreaded than either smoking or eating. We are again asked to believe from Indian medical evidence that opium addiction, if stopped, becomes the natural and necessary precursor to alcoholic addiction; and we are advised by so distinguished an authority as Dr. Lawrie of Hyderabad to experiment with engine-drivers and signal-men for the purpose of keeping their minds clear and on the alert while on duty.

The general conclusion likely to be come to by a medical man resident in Britain from the reading of recent Indian evidence is that opium addiction is clearly a complicated question requiring still further elucidation. It is hardly to be expected that an indulgence prevailing over a wide area will have no attractions or benefits to recommend it; every form of sensuality has them. The individual who is on the point of entering upon any such form is drawn by these attractions, generally subjective and temporary, which for the time outweigh other considerations. But the medical man ought to be swayed by none of these considerations, and the universality of any practice should be to him no sufficient reason for favorably prejudging.

So much is opium addiction complicated that there are those who would challenge the term "disease" being applied to the habit in general. Those who hold it to be a disease have the satisfaction of knowing that they have an ancient Persian proverb on their side — "Opium, which is a remedy for many diseases, is itself a disease."

Historically, the habit is traceable in its beginnings to the early centuries of the Christian Era. The home of the plant is the shores of the Mediterranean, the discovery of the juice $(\delta\pi\sigma s)$, its mode of extraction, and its medicinal value are assigned with all probability to the Greeks. When the sceptre of Empire was on the march westward the spread of opium was going eastward, borne by those ancient traders and raiders, the Arabs. Persia, India, Java, and China were the routes, and from about the eighth century we find in literature testi-

mony to the use of the drug and the progress of the habit. History gives us no idea of the date of the origin of the alcoholic habit in India. In the records of some of the native states of Rajputana the alcoholic habit goes back to the mists of antiquity, but in the case of opium we get proofs which point us not only to time of entrance, but to the routes by which it came. Thus, at the outset, the habit cannot be defended by adducing antiquity. Without it generations lived and passed away, empires were developed and destroyed, and thus, in history, it lacks a defense which alcohol addiction can easily claim.

Nor can its necessity be advocated by its prevalence. To quote Sir William Roberts in his summing up of the statistics, "only a minority of the inhabitants, generally a small minority, even of the adult males, are opium eaters." The number of females who are addicted to opium is so infinitesimal, that these may be ignored. So far, then, we have a habit or addiction which has grown to its present dimensions within the present era, which, through widespread, is not universal, and which is confined chiefly to males.

In the East, again, we have the Japanese, boldly sustaining a policy of prohibition; we have sectarians among Mahommedans and Buddhists who forbid it. These have assumed an attitude of opposition, not as a result of scientific investigation, but from general experience of the nature and effects of the habit. We have in the laws of China a proof of the feeling against and an example of unsuccessful legislation in the direction of prohibition, and we have, latest of all, British restrictive action in Burma.

For all these efforts at suppression or restriction there must surely be very powerful reasons. Thus, we have reached this knowledge concerning opium addiction, that, in the language of the East, it is recognized as a disease which is mainly confined to males, and to a minority of these, is widespread, though not universal; a disease, the origin and history of which are fairly well known, and towards which, by certain nations and

sects, an attitude of condemnation and opposition has been persisted in.

Possibly, the main objection to any part of the above statement would be raised against the term "disease," being applied to opium addiction. Some have classed opium addiction with tea and coffee drinking. It has been called a tonic, a stimulant, a sedative, a prophylactic, a preventive, a climatic necessity, and other such terms, which, should they be absolutely true, would entitle it to rank among man's best blessings. Without discussing each term separately, their real value is discounted when we recall terms of like praise applied in the past to alcohol, and remember that notwithstanding all, alcohol addiction is scientifically held to be a disease. In many respects opium addiction can be studied along the same lines as alcohol addiction, and it is satisfactory to see the almost unanimous condemnation which has befallen alcohol addiction in the evidence of medical men who minimized the phenomena of opium addiction. It is playing with the subject to rank opium addiction with tea and coffee addiction; it tends little to settle the question to belaud it at the expense of alcohol addiction. Yet, it is satisfactory at length to have obtained from Indian medical men so crushing a condemnation of the alcohol addiction, and to read of their dread of its establishment in India. This was desirable, for in my own experience in visiting natives I found that natives generally had brandy ready to offer to European guests when a friendly visit was paid, in the common belief that alcohol in some form was universally drunk by English.

In India alcohol addiction is prohibited amongst many sects even to the point of forbidding to take as medicine any alcoholic tincture. By one state in Rajputana prohibition, with death as a punishment, was enacted by one of the rulers, and Englishmen, in India, more than the natives of India themselves, will be helped by the strongly expressed adverse judgment on alcohol from medical men before the Royal Commission.

Whether, then, we may belaud or minimize the effects of opium addiction, and whether it is found less or more pronounced in its effects on the individual or on society, opium addiction must ultimately come to be viewed as a disease. We may even describe some of its effects in words which convey the idea that it is a remedy, but when the habit, however begun, has become established, it can be proved to possess certain features which will entitle us to class it among diseases. The history and progress of the cause of temperance, the lengthened and protracted nature of the fight which has wrested province after province from alcohol as a therapeutic measure, and which has resulted in a growing limitation even of moderation in its use as a beverage, furnish us with a guide to the probable final decision of the profession on the opium question. And the confusion which has arisen is easily understood when we remember that opium addiction does not dwell in our midst, appear at our tables, nor make its presence known in the columns of the daily newspapers, as alcohol does.

In my own experience of opium addiction several features in the disease forced themselves into my notice as a medical man. First and before all others was the physical change made on the habitué. This has been denied, and has received no attention from Sir William Roberts in his memorandum. Some medical men indulge in a thoroughgoing denial; others would grant this alteration to those using the drug in great excess and deny it in other cases. I venture to hold that, more or less, it is present in all cases. Our knowledge of alcohol addiction may here help us. Many deny to all, save the drunkard, the seal of alcohol addiction in moderation on the A few skilled observers who have made the subject a special study will trace its markings in habitués of most tem-There may be complications. We may have perate habits. the alteration modified by Bright's disease, by cardiac and lung complications, by liver diseases, and by the temperament and constitution of the individual, but withal the marks of alcohol are there for him who will devote time to their study.

In like manner the alterations from opium are in evidence both in old and young. Surgeon Lieut.-Col. Hendley of Jeypore furnishes a list of 100 cases of children to whom opium was daily given, without, as he holds, any evil effect. In his list we find they are all labelled "healthy." The strangest case in that list is of a baby two months old; the opium was first given when a month old; the drug was administered during the period of one month. The child is reported, by the statement of the parents, to have been "ill since birth"; the reasons for giving opium presumably stated by the parents and recorded, are "to keep it quiet," not to cure or make well, and the medical remark at the close is that it is "healthy." We have here nothing less than a discovery of qualities and effects unthought of by the parents themselves, who did not begin the opium with the idea of improving the health. If there be no discovery we are forced to conclude that the term "healthy" is elastic in its meaning. A further glance at the statistics shows us that the most of the cases have been receiving opium for a few days, weeks, or a few months and none beyond a year. There is no mention of children who have been dosed with opium for two or three years. Now, it is generally agreed that the drinking of milk in some measure retards and counteracts the physical alterations produced by the habit. Therefore, during the period when milk is the sole food, the effects would least readily reveal themselves. and we would expect to see these effects appearing when the child's diet became a mixed one. Thus, we expect to find alteration in the child of one and a half to three years.

Malarial influences, exceptional tolerance, maternal instinct, peculiar climatic circumstances, have been put forward to account for the habit in the young. In the history of opium addiction the likelihood is that the habit of giving opium to children represents the latest development in the progress of the habit among the people, the least ancient development of a not very ancient habit. While there is no great uniformity among medical experts in their search for a basis which will

afford the practice a decent sanction, there is a wonderful uniformity in the reasons of those who give the opium to children.

In Dr. Hendley's list we have some twenty cases of fever out of the hundred receiving opium, yet the invariable reason, not excluding the fever cases, for giving the opium stated in the list, was not to prevent or cure the malaria, but simply to keep quiet. While thus the practice may be credited with a certain degree of antiquity, the one and sole reason for the practice recognized and acknowledged by the natives themselves is, to prevent crying. If there be other advantages they have in these long years never presented themselves to those who adopted the practice, and they do not seem to have thought of giving it in infancy for any other medical reason. Even medical men who went so far as to state that people gave it to children in the belief of its beneficial influence in capillary bronchitis, have never advanced malarial fever in defense of the practice. Brigade-Surgeon Keegan mentions prophylaxis in capillary bronchitis as a belief of the people. Granting this, it serves to show of how little value medically such expressions of native belief are, since there is no general treatment of capillary bronchitis in children which would be more disastrous than routine treatment by opium.

The question of opium addiction in children has a parallel in this country. The habit of giving gin or whisky to children was much more common long ago than now, so common that the gin-nourished child was a phenomenon to be seen and studied. By the growth of education, etc., on the subject, save in the lower ranks, very few, indeed, would carelessly give their infants alcohol. So in the giving of opium to children in India, education and opinion are acting in a similar manner. Yet, the phenomena of the effects of opium are to be seen — the emaciation, the dwarfed body, the shriveled dry skin and glazy look, the look of old age which comes over the child, and other such alterations have all been observed and noted. I can recall no more bitter denouncer of the habit in children than a Brahmin hospital assistant, who through sad

experience in his own family was led to study the question. The addiction complicates all cases of disease occurring during the term of the habit in children, and retards, if it does not destroy the chances of recovery.

In adults opium addiction soon makes itself known on the features. I can recall several impressive cases. In one case two photographs were laid before me of a gentleman living in The photographs represented a year of difference in the man's life. Copies had been sent to his wife in England who had lived in Persia with him several years. The wife, in the return letter, wrote that her husband must have been seriously ill, or had taken to opium. Her latter conjecture was correct. A year's addiction had made sufficient mark on him to allow of an unskilled observer pronouncing on the Again, on an occasion about midday I was seated in the veranda of a castle with thirteen natives around me. knew one of them intimately, but looking at them all I saw that the look and bearing of one was different from the other twelve. I then carefully looked over the twelve, and at the close of my inspection bluntly informed them that twelve were addicted to opium, while only one of them was not. This proved to be the case. The circumstance was unique, exactly the reverse of what is usual, namely, picking out the opium eater from among a group of non-eaters. Long practice and observation would, I have no doubt, make it possible to pick out even the very moderate opium eater from the abstainer. The brightness and clearness of the eye are the first to fade and grow dull, and in the extreme it becomes glazy, the head hangs forward a little and downward, a stoop for which no reasons from work can be brought forward shows itself, leanness, and, in many, a distinct discoloration of the skin, generally over the body, can be observed.

The Eastern proverb that an opium habitué is known three stages off can be verified by any medical man who takes the trouble.

Another point in dispute is the enslaving power of opium.

In this respect opium surpasses alcohol. The impression is conveyed by the statements of medical men that it is taken twice a day, before and near the time of the two principal meals, and, therefore, is an adjuvant to digestion, or a mild stimulant similar to alcoholic drinks at home. The undeniable very large percentage who take to opium for sensual purposes should dispose of the digestive theory.

There is this great difference between opium and alcoholic indulgence even in moderation, that as a rule, wines, etc., are partaken at the close of the day when work is over, and are never in moderate cases consumed to start the day; the general relation to work is more as a mild constitutional stimulant to overcome the feeling of weariness at the close of work, in a word, as a refreshment. The man may take a little more or a little less, but need not have an exact daily amount.

Opium is far more imperious in its demands. It can almost enable a man to regulate the clock. As the time approaches the craving becomes more and more intense, the discomfort greater, and when the time of taking it is past, and the drug cannot be had, wretchedness ensues.

The state of the excessive habitué is well known and is a pitiable one. Before the body can be stirred to work the opium must be partaken. The man's will is helpless until the goad is applied (and this is the case), even in so-called moderation.

I have met with cases among natives, of indulgence in alcohol, tobacco, and opium, at the same time, and when by the necessities of the case, one or other habit had to be abandoned, opium is the one which keeps its grip to the last on the victim. The habitué is its slave. To the confirmed eater, cutting off the drug is immediately followed by loss of the power to work and will, and loss of control of the secretions of the body, seen in running of water from the eyes, nose, mouth, and bowels, in a greater or less degree.

The rule of opium addiction is that the longer the habit is continued the more the consumer is under the grip of his master the more the will power is abolished, the moral judgment weakened, and the hours and power of work dependent on, and carried on under the influence of the drug.

The rule holds good whether in so-called moderation or excess. The man who takes four grains daily lives in the power of that quantity as much as the man who takes forty.

I had all along believed that in this respect opium surpasses alcohol. Lately I came across the short story of a "Literary Gent," by the author of "A Dead Man's Diary," and there is illustrated what is regarded by the author as a law of alcoholic addiction, namely, the necessity of alcohol to inspire the pen of him who has accustomed himself to moderate potations in doing his work.

Whatever may be the exact truth in alcoholic addiction it holds true in opium addiction. Utter wretchedness and helplessness of body and mind succeed any effort to go without.

The questions of moderation and toleration come up for joint consideration. Is it an easier matter for a man to find the limit of toleration for himself in opium than in alcohol? For Englishmen the question is at once answered in the negative. Japanese, as a nation, will not discuss either national or individual toleration. The Buddhist estimate of it results in its condemnation along with alcohol. Burma sees more danger in opium than in alcohol, and the Royal Commission* associates badness of character with opium addiction as a consequence thereof. But the Indian (the conclusion is) has more self-control than the Burman. If this be so, then tolerance is not measured by a supposed mysterious power of the Indians to bear toxic doses with less effect than other nations, but by their greater self-control. We are asked to believe that each opium eater in India (with very rare exceptions) is able to find out his own tolerance; that tolerance may vary from four to forty grains, and that none of these doses when named the dose pointed out by tolerance produces detrimental effects. assign to the average Indian the power to discover, in the case of a drug which is more powerful and more enslaving, what the average Englishman cannot find out in the case of alcohol.

^{*}Page 87, Vol. iv.

I think the extreme cases, and especially the case of De Quincy, tell us that with steady practice any one Englishman or Indian can go on increasing and increasing the opium dose, the immediate toxic effect diminishing as the habit grows.

When begun for pain the opium eater in India goes through the same experience as the opium eater at home. He finds the first amount gradually losing its antidotal effect, the dose requiring to be increased, and as time goes on still further increased. This is the invariable rule. The limit of dose or tolerance, when taken for sensual or other reasons, is frequently gauged by the means of the man. He would take more opium daily if he could afford it. I have often met men who had increased the dose for a season, and then been compelled by sheer necessity to do with a smaller dose, with this result, that the disease for which the habit was begun, such as asthma, was not one whit better, while the new disease induced by opium enthralled and marked the wretched man. To cure these chronic diseases by the opium habit and expect to recover health, is to expect to quench our thirst by the waters of the ocean or by whisky.

The relation of opium addiction to disease may be summed up briefly.

It has not been proved to be a preventive or prophylactic in malaria. Investigation and experience on my own part give no support to this. I find a mildly malarious district to have its habitués quite as much as a marshy malarious one. I find men who have taken to the habit, with a view to mitigate the pains of malaria, too late to escape from the habit, finding its curative uselessness. I find a growing majority of educated and influential natives who would scorn not from religious reasons, but from their conviction of the character of the habit to mitigate the fever by the adoption of such means. I find malarial fever prevailing as much among opium eaters as among non-eaters, even though the habit naturally leads a man to incur less exposure and do less continuous work. These experiences are sufficient for me. Dr. Hendley's list shows that it does not exempt children from fever.

Again, I find that opium addiction does not cure or prevent attacks of asthma as has been claimed, and that the use of the drug medicinally in this disease is under like considerations with the use of other remedies. The opium habit is not to be recommended by medical men as a cure for asthma. In a word, the opium habit as a habit is not curative of any known disease, save, perhaps, as an alternative to alcoholic addiction by those who would favor opium.

And, again, it is clearly recognized that opium addiction renders a man less amenable to treatment when disease arises, and in certain affections in which recovery is critical, hampers and destroys the chances, by lowering the constitutional powers of resistance. It can be easily understood how harmful the opium habit may be in a country in which diarrhoea, dysentery, and cholera are scourges, and how ill adapted the opium habit is to help a man in these illnesses.

What à priori reasoning would lead us to expect was verified in my own medical experience. Looking back at my own experience and study of the habit, the result is a growing conviction of its effects which compels me to assume a hostile attitude to it.

There is much more that might, if space allowed, be said in detail concerning my observations and inquiries. And there is much still to be done. There is, for example, a line of inquiry directed to the trades, in which opium is taken with a certain degree of impunity, and those in which the taking of opium would mean loss of work and place. Questioning a coachman in the employ of the Kotah state I learned that the coachmen dare not take it with any expectation of keeping their post.

I learned that the light porters at our railway stations in India knew well that the opium unfitted them for work, while on the other hand, the native tailor, proverbial for his laziness, sits in the veranda half the day muddled with the drug.

In the matter of servants, Englishmen in India will not keep table servants who are opium eaters. I carefully experimented with two opium-eating servants. On my leaving for furlough, a brother medical who had not expressed himself against opium, asked if I had a good servant I could recommend. I mentioned that I had one who was an opium eater, and added that such constituted no fault in his eyes. His refusal of the offer was more forcible than polite.

Englishmen in India have not found the opium habit one which enhances the value of the servant on the score either of work or punctuality. This line of investigation it is my intention to follow up on my return to India. Dr. Lawrie urges it in place of alcohol for signal-men and other railway employes, in Britain. The result of this I prefer to leave to the imagination. It has not been tried in India, and is not likely to be.

TUBERCULOSIS AND CARDIAC ALCOHOLISM. .

By A. Edgar Tussey, M.D.

Adjunct Professor of Diseases of the Chest in the Philadelphia Polyclinic, Medical Director of the Central Branch of the Y. M. C. A., Philadelphia.

The question, does the use of alcohol act as a prophylactic against pulmonary tuberculosis, is yet unsettled. It is safe to say, however, that the more modern researches are establishing the basis that the pathologic directions pursued by alcohol and tuberculosis are, in many particulars, similar.

Indeed, we feel after looking carefully over the scientific phases of alcoholism in general, and, more particularly, alcoholism as revealed by morbid changes in the great central organ of the circulation, that its prophylactic power is only apparent and the subject must very soon, indeed, be looked upon in a different light.

The truth in reference to the seeming opposition which alcohol offers to the tuberculous process, will, I believe, be contained in the following explanation:

The ability to use larger or smaller quantities of spirituous drinks for a longer or shorter period of time, is an index or register of the amount of vitality which an individual possesses. An organism so constructed as to resist successfully, for a longer or shorter time, the devitalizing effect of such an insidious enemy, is capable, also, of resisting those causes, remote or immediate, which are concerned in the production of tuberculosis, local or general.

We must make a fundamental distinction between indices and prophylactic influences or tendencies.

Will any one attempt, to-day, to defend the position that

the tissue after they have succumbed to the effect which spirituous beverages are capable of producing, are in a better condition to resist the ravages of destructive forces than they were before they became so affected?

Resistance is resistance, and the amount of abuse which some people will endure before yielding any external evidence of a pathologic process which exists within, is indeed most marvelous. After the turning point in the history of such abuse has really appeared, we have no valid ground for arguing that essential power to withstand the effect of one form of disorganizing agency, is not essential power to withstand the effect of another form or other forms.

Does that expression of degeneracy which typhoid fever often leaves in its wake — fatty heart, and fatty degeneration of the muscles in various locations — fit the vital forces for better combating the agencies which are known to produce consumption, or does it lay a foundation upon which phthisis may readily be laid?

Is degeneracy in any form a prophylactic feature in the efforts of the organism to withstand deleterious influences? Who would venture an affirmative answer to such a question?

While it may be found true that tuberculosis and alcohol do not affect the metamorphosis of tissue in exactly the same way, it is true that they both have the power to lower tissue metamorphosis below the functioning point. (The sequel of the retrograde change in either case is practically the same, namely, the reduction of vitality below the vital point.) It is highly probable, too, that the morbid changes in both diseases are produced by processes which are intimately related, if not similar.

I am not as yet prepared to take as radical views on this point as some of our best thinkers have taken. I have seen enough, however, to convince me that the character of the pathologic changes are closely allied, and operate through the same etiologic medium.

We are confidently hoping, too, that the power of the Vol. XIY. -7

microscope will, at a not far distant future, reveal more fully than it has done the deep substratum of cause which is presented in both diseases.

As a fitting negative to the foregoing affirmative, we note in passing, that those persons who offer little resistance to the action of alcohol are much more liable to have their resources reduced to that level, which is a standing invitation to the entrance of tuberculosis into the system.

One of the earliest indices of the fact that phthisis has made a habitat of the human body is the presence of a disturbed condition of the heart.

Everyone knows that the heart suffers soon, indeed, giving tangible expression of the injury received by diminished volume of the pulse and increased rapidity of its rate.

The poison of the disease probably acts both upon its muscular fibers and its motor nerve supply. Add to this effect some loss of that inhibitory or check-rein influence sent down by the pneumogastric nerve; take into account also a morbid irritability of the sympathetic supply, and we are not surprised at the early and varied disturbance in the circulation which is invariably present to a greater or less extent. Perhaps no more accurate register of the amount of resistance inherent in the tissues may be found than the facts which are attainable by a careful study of the arterial blood supply.

Notwithstanding this early effect, we have no clinical evidence that the heart gives up the struggle for life any earlier than the other important centers, the viscera and the structures in general.

The runner who has been injured in the outstart of a race to win a prize may not be fairly expected to arrive at the goal in advance of his fellows, or at the same time.

Will anyone venture the assertion that a heart which has been maltreated, wounded, and crippled, even though the injury be done by a germicide, has not been rendered thereby more or less unfit to hold out in the race for life with its fellow runners?

Let us note, moreover, in this connection, the special affinity which alcohol exhibits for the most highly specialized nerve centers and most delicately constructed muscular elements.

Indeed, it is highly epicurean in its tastes, selecting the daintiest morsels it can find and feeding upon them with remarkable avidity.

We wish to be included among those who contend for the position that consumptives die through the medium of respiratory failure rather than by cardiac failure. It is a biologic truth that the heart is not only developed earlier in intrauterine life than the respiratory center, but has reached a higher level of perfection in its embryonic history.

Structures that have been developed to a greater extent in intra-uterine life than other portions of the body are less liable to early involution than structures which have been developed later.

The heart has been more fully developed in its embryonic condition than the respiratory organs. Therefore, it fails later, is less vulnerable to injurious influences.

But have we the clinical data for the use of our major premise? Undoubtedly we have. We have all noted how the heart continues to beat and to beat, and then to quiver and to quiver, before it relinquishes its last faithful efforts and becomes voiceless forever. Faithful it is, beautifully faithful, to a law of its existence which has fitted it for a function surpassed in the tenacity with which it clings to life by no other part of the vital economy.

The most carefully conducted clinical researches, and the most accurately formulated biologic principles are beautifully harmonious in their testimony that the organ whose every contraction is a beneficent effort to feed the hungry tissues, has had, by the Great Master Architect, impressed upon it a royal seal by which it has raised itself to a higher plane of perfection than the organs and structures which are more or less its subjects.

We may be pardoned for calling attention to the fact that

the length of time occupied in the developing of certain structures is a pledge of the type to which its standard of development belongs.

Pursuant to this law, that the early embryonic period at which the heart has reached a high comparative degree of perfection is the seal and pledge of the beautiful development of which it is potentially capable, the well-known microscopic character of its beautiful muscle cells, the wonderful delicacy and intricacy of its mechanism, nervous and muscular, and the beauty of its inhibitory and accelerator influences, attest yet more plainly that a process of early development is an index of that exalted form of function which is potentially inherent in all structures illustrative of this law.

How fitting it is that such a high order of evolution should characterize the range of the heart's activity since the influence of the fountain head is felt by all its branches, even the most minute divisions thereof.

Because the branches must suffer more than the fountain source we must watch with religious care the great center of supplies.

Alcoholism, then, exhibiting its maximum effect upon the cardiac muscles, ganglions, and nervous apparatus in general, is one of our most serious handicaps in the successful management of phthisis, local or general. If the respiratory centers and machinery yield their ground soon in the course of certain maladies, when the heart has not been crippled previous to the inception of the disease, how much sooner must it give over the struggle when its fountain source of nutrition has been broken by a subtle, all-pervading enemy to the nutritive energies. How silently, too, it engrafts its most pernicious effects upon the cardiac fabric. How difficult it is, at times, to trace the evil done to its real source, we all have seen. In not a few instances, it has been left to the scalpel and the well-directed lens to reveal what was before too obscure to diagnose with any degree of certainty.

The history, signs, and symptoms will, if rightly used, guide

us in a larger proportion of cases to the morbid heart feature present.

Any summing up of our patient's resources, his possibilities and probabilities of recovery, or length of days, which ignores the primary and secondary consequences of the alcoholic heart, must necessarily be radically faulty.

While, as a clinical study, it is impossible to estimate the degree of degeneracy which has taken place it is quite enough to determine that the heart's capacity for work has been much diminished.

Evidences of degeneracy which may be found to be present in various portions of the arterial system, in the viscera and the kidneys, should at once lead us to suspect that the heart is, perhaps, seriously involved in the general process of deterioration.

How much alcohol is capable of seriously injuring the heart is a question which deserves our most careful consideration.

The nervous distortions and obliquities which grow out of our modern civilization present themselves to the medical man as a complicated but most interesting study.

No feature in connection with this study is more marked than the varied responses which are given by the brain and other portions of the body to alcoholic beverages, under their multitudinous forms.

To no morbid influence is the susceptibility of the heart and the more highly specialized centers more varied.

The phrase "moderate use" must always be studied in the light of the susceptibility of the system to its influence. It is only in this way that we can determine whether the use of the drug has been the abuse of it. Any use of it at all would be, in not a few instances, an immoderate use of it. Personal vulnerability must ever be our standard. In this connection, hereditary biases must be taken into careful account.

It is certainly one of the great misfortunes of the human family that the children's teeth are often set on edge because a parent or parents have eaten sour grapes.

Because of hereditary transmissions of physical obliquities,

a few glasses may be the spark to the tinder-box lighting up a conflagration so destructive that no power seems to be able to extinguish it.

Most members of the profession are familiar with the example of the two small children who produced a fatal form of Bright's disease by haunting the family board to drink the few drops of wine which remained in the glasses used by the adult members of the family.

While such examples are rare they should not be without their practical bearing upon a study of this drug.

It may be well to state that malted liquors are especially likely to injure the cardiac walls.

Angina pectoris is probably one of the symptoms to which a fatty heart gives rise. This, taken in connection with the presence of other changes, especially in the kidneys, makes it almost certain that it is a cry of anguish sent up by a heart whose vitality has suffered serious injury. The great frequency with which this symptom is absent makes it necessary to look to other sources for a means of diagnosis.

If the heart has not been injured previous to the entrance into the system of the tuberculous virus, the relation which exists between disturbances in the temperature and the volume and rhythm of the pulse is more or less constant.

I do not look upon the changes spoken of as being reciprocal, but as being products of a common disturbing factor. All disproportionate effects existing among the temperature changes, respiratory changes, and circulatory changes must be looked for in a special, not a common cause of evil. I wish that I might write this basic principle in letters of burnished gold. We must make, too, a proper distinction between a weak heart and an irritable heart. While it is true that a weak heart may be an irritable one, an irritable heart is by no means a weak one. An irritable heart seldom produces dyspnea to any extent, while dyspnea is a constant accompaniment of a weak heart. All organic valvular trouble must be searched for. If found to exist then their true effect must be carefully

estimated. If not present, the problem is less difficult to solve.

It must be remembered, too, that where dyspnea bears a constant ratio to the circulation, a larger portion of it must be sought for as a disturbance which has a more complicated etiology. Marked dyspnea as we meet it in consumption does not imply a corresponding weakness in the action of the heart. I speak of this as it might be argued that because the dyspnea is great and the circulation very defective, a common cause was producing both disturbances, whereas the respiratory difficulty might be traceable largely to other sources.

Dyspnea is properly made up of the operation of six general causes:

- (1) The depressing effect of the tuberculous virus which permits no portion of the body to escape.
- (2) Diminished arterial pressure which embraces all organic valvular lesions not compensated, any and all causes which lower the contractile power of the cardiac muscles.
- (3) Undeveloped respiratory muscles which deprive the possessor of the use of some of the respiratory surface which he possesses.
- (4) An abnormally small vital capacity whose important influence as a factor in dyspnea is almost always overlooked.
- (5) An extensive area of infiltration, with its complicated results.
- (6) The direct and reflex effect of the pulmonary involvement upon respiratory innervation.

We see from the above that while one of the constant effects of tuberculosis is the production of dyspnea, which increases as the disease advances, the endless gradations in severity with whom we become familiar have often a most complicated origin.

All variations in intensity not traceable directly to the general operation of the malady, may be properly styled contingent products. By a wide experience and careful study, we may trace the operation of contingencies and give to them the part which they perform in making up the aggregate of respira-

tory difficulty. It will be readily understood that the operation of a constant cause will be diminished or intensified to widely varying degrees by the absence of pressure of one or more of the contingent influences enumerated. Why should it be thought strange then that presence of even very early involvements give rise to those marked differences in the respiratory disturbances which attend them? All expert chest examiners will readily endorse the statement that morbid changes in the respiration are rarely properly analyzed.

From the foregoing remarks we readily grasp the truth that the amount of dyspnea with which we have to contend, may only be used as corroborative testimony, that the heart is seriously impaired after the operation of the constant effect produced by the general disturbance and the operation of contingent causes in producing it, have both been carefully studied. Where, as previously stated, great weakness of the heart-walls may not exist without serious respiratory disturbance, serious respiratory trouble may and very often exists, in connection with a heart whose functions retain almost their normal integrity.

A small local tuberculous involvement, well-developed respiratory apparatus, the absence of all causes known to intensify the disturbance which we have learned grows out of a small local involvement, a minimum amount of disturbance in the temperature, the absence of any organic valvular heart trouble, with greatly diminished volume of the arterial wave, a rapid pulse, dyspnea proved by the process of illumination just mentioned to be strictly cardiac in its origin, forms a group of symptoms which point with almost unerring certainty to degeneration of the cardiac motor apparatus. I doubt very much indeed, if such a condition as I have just described can be found apart from the history of the use of a sufficient quantity of alcohol to produce fatty degeneration or infiltration of the While the operation of the tuberculous influence is subject to so many variations in its operation upon the respiration, and while dyspnea is so variable a factor to tell us much about the intensity of the general cause, the heart is beautifully exempt from such wide variations, and will probably hold out to the last whenever it has not been broken and wounded in the outstart. We believe that what we have said makes it plain that alcoholism in many of its forms should not be considered as militating against the operation of an agent whose destructive tendencies bear so many points of resemblance to its own. From the truthful statement which this article contains it is left for us to conclude that the long line of evil consequences which grow directly and indirectly out of a crippled heart, render the human body not only vastly more vulnerable to the operation of tuberculosis, but stand directly in the pathway of any course of treatment, I care not how well it may be chosen, which might otherwise have led to success. Since it is so difficult, perhaps impossible, to tell when the process of degeneracy has begun, especially in the delicate heart muscles and ganglia since the individual susceptibility to its most pernicious changes are so varied, is it not a dangerous, an extremely dangerous plan, to use it upon the basis of its germicide power? I believe its most ardent and conscientious advocates will readily agree with us, that when its use has set up a pathologic direction in the course of a healthy tissue metamorphosis, it is no longer valuable as an aid in repelling the advances of those influences which lead to tuberculosis. Since, too, its best friends must admit that no agency is more insidious in its advances than alcohol is, since we may not tell at first, and sometimes not until late in the history of its use, determine when the structures, especially the cardiac elements, have succumbed to its power — to change the current of these lines — does it not appear to you, my brother, as rather solemn practice to advise its use? There is something so sad to me in the thought that men, and women too, I am most sorry to say, are daily doing that which must soon depose the heart from the lofty eminence which it occupied, as a sacred birthright, forcing it to yield the scepter of its royal sway to the enemy to life, which has been invited in to dispute with it the right to a kingdom for which it has been so beautifully fitted to rule.

Vol. XIX-8

THE CONFESSIONS OF A COCAINIST.

It cannot be without medical interest to hear from the lips of a devotee, and that devotee a medical man of great mental endowments and uncommon training, some account of the manner in which he found himself affected by the continued abuse of one of the subtlest of seductive drugs, cocaine, even though his record be not so detailed as that of De Quincey or so thrilling as that of Bayard Taylor.

My patient relates how he first came to take cocaine. was in the year of 1885, when serving in the German Army. "I took it inwardly," he said, "in one-grain doses, and remember very well the marvelous effect when after marching 'par force' thirty miles in ten hours, including one hour and a half rest, I found myself, on arriving at quarters, fresh, untired, not thirsty nor hungry, but with bleeding feet." Going back to his medical studies, he had nothing more to do with the drug for some four years, though frequently brought face to face with morphinists and morphine-maniacs. In 1889, however, he was sent to relieve a country physician, whom he found lying in bed unconscious with a syringe sticking into his breast. Never in his life, he says, has he seen a more startling effect than that which then followed the injection of a twenty-percent. solution of cocaine. "Nearly instantaneously he sat up in bed, with perfectly clear eyes, and received me, a total stranger, in the most cordial manner." The occurrence haunted him day and night, but it was not until summoned to a late confinement some weeks later, when stiff and unable to move with lumbago, that he was weak enough to follow suit. "That night in the month of November, 1889, settled my future. Remembering well the effect of the cocaine, I took a syringeful (one-half centigramme) combined with morphine,

and two minutes afterwards one centigramme. Five minutes later I was ready to start a couple of miles in a snowstorm." He repeated the performance before driving home again. This early repetition, taken in conjunction with the dosage, raises the suspicion as to whether, after all, he has told the truth about the date of his first injection. However this may be, he took cocaine and morphine from that time forwards, increasing the dosage to six or eight grains daily of each drug, and soon (he says within a month) came to take not less than eighty to one hundred and twenty grains of cocaine daily. His highest single dose was twenty grains, the result being that he fell down suddenly, and remained in a cataleptic condition for some hours. His description of his symptoms is graphic, and, I think, in the main reliable:

The first feeling a cocainist has is an indescribable excitement to do something great, to leave a mark. But, alas, this disappears as rapidly as it came, and soon every part of the body seems to cry out for a new syringe. The second sensation — at first, at least, no hallucination — is that his hearing is enormously increased, so that he really (?) hears the flies walking over the paper. Very soon every sound begins to be a remark about himself, mostly of a nasty kind, and he begins to carry on a solitary life, his only companion his beloved syringe. Every passer-by seems to talk about him. Often and often have I stopped persons, or ordered the police to arrest them, thinking they were talking about me. After a relatively short time begins the "hunting of the cocaine bug." You imagine that in your skin worms or similar things are moving along. If you touch them with wool (especially absorbent wool) they run away and disappear, only to peep cautiously out of some corner to see if there is any danger. These worms are projected only on to the cocainist's own person or clothing. He sees them on his washing, in his skin, creeping along his penholder, but not on other people or things, and not on clothes brought clean from the laundry. How is this to be explained?

In my opinion it is a question of disturbance in the frontal cortex, originating, perhaps, in skin dysaesthesiae, and not a simple visual hallucination or retinal projection. Whatever its origin, it is characteristic of the cocaine habit, and readily distinguishable from the hallucination due to alcoholic excess. The sight presented by such a patient "hunting for the cocaine bug" is one which, once seen, can scarcely ever be forgotten. In a recent case — that of the wife of a medical man — the patient was about to consult a skin specialist for this psychical hallucination! He continues:

About the same time appear many other hallucinations of the opticus, and, strange to say, self-suggested hallucinations also. Night turns to day. You sit up in your room syringing till the morning, and then fall asleep in a coma. In my case this occurred to such an extent that I had to engage a hospital warder, who came in the morning to revive me with about ten syringes of five-per-cent. solution, so that I was able to drive, not walk, fearing some one might garrote me.

Other dreadful hallucinations I had in thousands, all of a persecuting character, and frightening the life out of me so long as the effects of the drug lasted. You see small animals running about your body, and feel their bites. Every object seems to become alive to stare at you from all corners — look revolvers, knives, etc., and threaten you. Yet, as soon as the effect of the injection is over, you laugh at it, and produce willingly by a new injection the same terrors. About that time I bought three St. Bernard dogs, thinking they would protect me; but one night I found out they were talking about me — how they could get rid of me — so I stood up and shot one of them with a revolver, which I always used to carry. I think this was the most dreadful night of my life — I standing on the table, with an Indian dagger and a syringe on the ground; one three-feet-high dog going to die, and two rather dangerous dogs roaring and groaning aloud, reproachfully looking at me, who always fancied, "Now comes the moment when they will tear you in pieces." I stood the night on the table, till the arrival of my wardsman, who hardly risked to enter the room.

The strangest thing, however, in the cocaine habit is that

there seem to be two souls in the cocainist — one infested by the cocaine, suffering, and tortured by its effects; the other normal, laughing at his fears, and saying: "What nonsense! it is only an hallucination produced by an injection."

Not frightened enough by these experiences, and escaping from the troubles produced by his conduct, on he goes, taking more and more; and then enters a new kind of illusion, which finishes him up for the mad-house. I mean the revolting, dirty, sensuous illusions. The remembrance of it is for me so awful that I only tell you that one day every person I saw, near or far, appeared to be naked and in the most lascivious positions, alone or with others. I remember on entering the surgical theater to have seen everybody — operator, assistant, students — naked. In terror, I took to flight, ran to a medical friend at a lunatic asylum, and was placed under restraint. Well, this ended (January, 1890) my pure cocaine habit, which in a year's time eased my pockets of about \$8,000.

It was early in 1891 that I first met him in Melbourne. was then a morphine-maniac, as well as cocainist. His appearance was characteristic. He was pallid and yellow, with hands trembling, cold, and sweaty, eyes sunken and glistening, pupils dilated, breathing short and hurried - restless, irresolute, and careless of his personal appearance. He appeared the embodiment of one who had just emerged from some terrifying experience. He soon became known to every chemist in the city, and from one and all bought syringes, cocaine, and morphine whenever money or credit permitted. Frequently his needle would be fastened to his syringe by sealing wax, shellac, etc., and when he had no needle at all he would cut an opening with his knife, and insert the end of the syringe direct. Almost the whole of his body except the face was marked with needle scars. A common practice was to mix four grains of morphine with two of cocaine — "sixpennorth" — in a twodrachm bottle, and inject by syringefuls until all was ex-The change from the shivering wretch before injection to the self-confident neurasthenic after injection struck all beholders. His experiences embraced the whole gamut of wretchedness and shame, and included both hospital and jail.

As regards abstinence, he agrees with Erlenmeyer, that the symptoms are neither manifold nor severe. He said:

The tales about neuralgia, etc., are all lies, and, after two days' abstinence, the craving is relatively small — you feel, in fact, nothing, but the thousand possibilities of suggestion form the real danger. Then comes the maniac desire; it fascinates your whole body. Suddenly your chest seems to be screwed together, you cannot breathe, your eyes protrude, and, if you have no cocaine, you either commit suicide in some way without intending it, or murder one of your warders.

He summarizes the physiological effects of the drug as follows:

The cocainist early loses all appetite for solid food, but likes sweets, lollies, and cakes. Diarrhoea is soon produced, and immediate evacuation often follows big injections. Upon the muscular system the drug, as is generally recognized, acts as a most powerful stimulant for either single or continued effort. [Not only could be make long marches without becoming tired, but on one occasion, after injection, he says he lifted a cab with one hand on the axle.] It increases also the number of the respiratory and of the cardiac contractions (with vascular dilatation), as well as the quantity of urine (with large or repeated small doses, incontinence follows), and, enormously, the amount of sweat. Hence the great loss of weight. It stimulates also sexual appetite, though, later on, power is lost whilst desire remains. After each injection the pupil dilates, but remains dilated only because injections are continued. [When taking very large doses, he remarked that his iris seemed to separate into broad radii, with free spaces between.] As regards the brain, mental processes seem quickened, but a kind of hypnosis intervenes, so that the brain works without, and even against, the will. Immediately after the injection the cocainist becomes excited, and remains restless whilst under the influence. He likes manual work, however trifling, but has neither will nor ability for mental work, because he is bound to inject every five or ten minutes, or, in fact, because he never ceases to inject. The hallucinations and illusions already mentioned make their appearance early. One syringe

self-injected is, in my opinion, absolutely sure to produce the fascinating desire for a second. The individual is almost certainly then a cocainist, and will procure the drug for selfadministration, even when apparently it is impossible to do so. All watching is useless. He has thousands of excuses to get a moment to himself, generally in the neighborhood of some chemist. Unscrupulous - even though still aware to some extent of his ties — he will get it, dishonestly if necessary; and, even when not craving for it at the moment, he will get it, because his only idea is to have it with him. The sense of right and wrong is not abolished, but he does not care much about trifles. Thus he sinks lower and lower, disregards his personal appearance, and, because they will always show, or sham to show, a certain respect to his higher education, he seeks the association of lower people. He thus becomes a scoundrel or criminal, and does not mind to do so so long as he gets his cocaine. It is extremely seldom that he makes a trial to free himself of the habit, mainly because he does not see any reason to do so. Suicide he never contemplates so long as he can get his beloved drug.

For purposes of contrast it may be well to add his experience of the effects of morphine:

A man may be for years a confirmed morphinist without being a morphine-maniac, and the results are very different in the two classes of cases. I have met hundreds of men, distinguished by intellectual power and refined sense, who were confirmed morphinists [and certainly, if his list is reliable, the names fully bear out his statement]. Such hate every low, unaesthetic object, and often indulge in princely habits which may cause their ruin. Morally they never descend to a low level, except, perhaps, during abstinence. By way of illustration I may quote the case of a morphinist who, during abstinence, stole an ounce of morphine, but who, as soon as he had injected himself, sent the money anonymously to the chemist from whom he had stolen it. Mentally there is undoubtedly a stimulating effect on the brain so long as the influence of the The brain seems to work quicker, conceive quicker, and, before all, the morphinists like to do mental, though he detests manual, work. In some eight hours after injection the sublime quietness of mind is replaced by restlessness. The habitue generally becomes pale, and loses both flesh and muscle. Many, to obtain a little color, add a certain

amount of atropine to the morphine. The desire for fluids seems diminished, and satisfied with choice drinks, if these can be had. To this, perhaps, may be ascribed the small quantity of urine generally passed. Morphinists can take regular meals, preferring well-flavored and sour articles, such as curry, pickles, etc. The sexual powers are progressively diminished, and women despised, except the highly educated and brilliant. A sense for the eternal feminine remains, but no power, no desire.

The morphine-maniac is quite a different person. One syringe self-injected for any pain is sure to have, as a necessary consequence, a second as soon as the pains recur, even though distressing sequelae have intervened. Even more dangerous in the establishment of the habit is the use of the syringe for insomnia. Soon he injects for the sake of injecting, until he gradually falls into a state of imagined abstinence. His moral balance disappears early, and for him a word of honor does not exist. Feeling that he is sinking to a lower level, he may make enormous struggles, but in vain. He cannot — he despairs, and gives up every hope. Highly increased doses momentarily restore his moral sense, but when the eight hours are over he is worse. Even when not abstaining, he may commit suicide, because he can no longer face his moral degradation. His despondency, his imagined abstinence, and the frequent injecting soon make regular brain work impossible, except, perhaps, in the morning. Even if able, however, he no longer cares for it, seeing the uselessness of his exertions. So long as he is under the influence he never has hallucinations, Like the morphinist, he becomes and seldom any illusions. pale and wasted, and shows the influence of the drug upon skin, bowels, respiration, eye, etc. He neglects his eating, however, and constipation frequently lasts for weeks, relieved immediately by a large dose of cocaine.

Regarding diagnosis and prognosis the same authority says:

The diagnosis of a morphinist is sometimes exceedingly difficult, because he tries everything to hide his habit. The contraction of the pupils, the marks of the syringe (if hypodermatically administered), and the "going away" from other people at certain hours, are, in my opinion, the only objective symptoms. The morphine-maniac is easily found out by the foregoing symptoms, by his dislike for femalés, and by his sudden nervousness and paleness, which disappear immediately

as soon as he has been, as he calls it, "a few moments in the fresh air." The cocainist is distinguishable by his change of associations, his neglected appearance (of which he seems completely unaware), his dilated pupil, restlessness, hallucina-

tions, illusions, and expression of anguish.

The prognosis is exceedingly unfavorable. It depends in the first degree upon a perfect change of surroundings. The slightest article which could make a cocainist remember some moment of his sufferings is also able to recall the fascination. Even if free for a whole year, he cannot be trusted unless it be in new surroundings. And "kind friends" are only too willing to remind him of things which he has done and of which he is now ashamed. So that, sooner or later, he will take it again for "spite" or "fascination," or some other reason not to be explained by an uncocainized brain. For women the prognosis is — pessima.

With these words he concludes his account, which, though perhaps inaccurate in certain minor details, seems to me of special value in that it proceeds from a skilled observer, who himself has been behind the scenes and watched the phantasmagoria from the subjective as well as the objective side. It throws also an interpreting light even on the classical descriptions of Erlenmeyer, a summary of which may be found in Hack Tuke's Dictionary of Psychological Medicine, 1892, vol. i, pages 236-237. Perhaps, also, the insight thus afforded into the inner workings of an illusionized brain may lead some who have hitherto acted as hard, and even pitiless, critics, to recognize something more than "the party's criminal will" in the resultant phenomena. And may all echo the hope that this particular victim at least may find assistance and not hindrance on the dark and troublous road which he is now treading toward a better adjustment of his vital interrelations.— Doctor Springthorpe, in Australasian Medical Gazette.— Medical Age.

PROFOUND TOXIC EFFECTS FROM THE DRINK-ING OF LARGE AMOUNTS OF STRONG COFFEE.*

J. T. Rugh, M.D., Philadelphia.

On July 10, 1896, E. M. F., a traveling salesman, came to this city, arriving about seven P. M., and with great difficulty walked to his hotel, about one square from the depot. He then complained of great nervousness and involuntary contractions in the legs and arms on attempting to move these parts. On arriving at the hotel, he went to bed, feeling that if he could rest for a while his condition of nervous excitement would pass away. However, he continued to grow worse, and about 9:30 o'clock sent for me. After carefully questioning him, I elicited the following history:

He is thirty years of age, married, and has one child. He has always enjoyed good health, though he has not been very strong. He is a graduate in medicine, although he has never engaged in practice. The family history is negative, except for the occurrence of epilepsy on the maternal side. During his youth, the patient had numerous attacks of petit mal, but never any distinct epileptic seizures. He has never had an attack similar to the present one, and this dates back three weeks, when he started on a tour to New York to place several large orders for his firm. During the course of his work, he was up until one or two o'clock in the morning, and after retiring would get but three or four hours of sleep. Upon waking, he would order a pot of strong black French-drip coffee sent to his room and would drink this before eating his

^{*}Read before the Philadelphia County Medical Society, Oct. 28, 1896,

breakfast, which was very light and simple in character. In the course of the day, he drank ten or twelve large cups of this kind of coffee and ate but little food. If he went to a saloon with a customer, he would order wine or stimulant for him, but coffee for himself, and by this free use of coffee, he was able to fight off the fatigue which naturally attended this mode of life. This course was kept up for three weeks preceding his coming to this city. He drank some liquor, but not enough to produce any appreciable effect, and he was never intoxicated at any time in his life — a fact that is very important in the differential diagnosis, for a number of his symptoms were those of beginning mania a potu.

His pulse was ninety-six and full, but weak; his respirations shallow and numbering twenty-four to the minute. The pupils were normal, the tongue slightly coated, the bowels regular, the skin moist but not flushed, and his expression was agitated with the fear of some impending danger. His muscles were in such a state of tension that upon the slightest movement of arms or legs, clonic spasms occurred, though none was present when he lay perfectly relaxed, which, however, his exceedingly nervous condition would not allow his to do. If he tried to sleep, he would be seized with hallucinations just before losing consciousness, imagining that disasters were about to overtake him and seeing all kinds and shapes of images and objects. Then he would start up with fright and find himself in the greatest nervous excitement. When he stood up, he could close his eyes or look at the ceiling without wavering. His knee-jerks were slightly exaggerated, but sensation was perfect.

The diagnosis of coffee-intoxication was based upon the history of excessive coffee-drinking for three weeks, the absence of liquor-drinking in quantities sufficient to produce constitutional effects, the nervous symptoms (spasms of muscles, hallucinations, and extreme excitability), and the absence of an attack simulating *petit mal* in any way.

The indications for treatment were to clean out the bowels,

to steady the heart by a stimulant, and to give a hypnotic that would quiet without increasing the mental symptoms already present. For the first, I gave calomel, one-sixth grain every half-hour for eight doses, followed by a saline. For the heart, I gave caffein citrate, one grain every three hours, knowing that this would at the same time partly offset the withdrawal of the coffee from his system. Trional (ten grains every two hours for three doses) acted admirably as a hyp-I did not give morphin, which might have had a quicker effect, because of its tendency, in many cases, to produce mental disturbances without thoroughly relaxing or overcoming the nervous tension of the patient. Three hours after this treatment was instituted, the patient was resting more easily and asked for a glass of milk, which he took with a relish. He then went to sleep and awoke the next morning, after five or six hours of sleep, very much refreshed. I interdicted the use of coffee, gave a tonic of arsenic, strychnine, and quinine, and directed the man to spend several weeks at the seashore, as his former condition of petit mal was very liable to become one of true epilepsy unless he raised his system to the best state of health and maintained it there. He went to the shore and two weeks later reported himself as very much improved and feeling better than he had for months.

I have seen two persons who would be mildly intoxicated by drinking a large cup of strong coffee, but have never seen any one affected as this patient was, nor have I been able to find reports of any similar case in the literature of the subject.

— Medical Reporter.

Abstracts and Reviews.

DEGENERATION FROM TOXIC DRUGS.

The following extract from a work by Dr. Searcy will be read with great interest:

"While upon human degeneracy, there is one subject I think worthy of mention. I allude to the general injury done in society to the brain, by the popular use of agents that are anodyne and anaesthetic in effect. It is well to study how such drugs have their effect in the body and why they are so generally used as luxuries. I can probably best illustrate with alcohol, which is very generally used, and which exhibits the methods of action of such agents very well.

"Taken into the general circulation through the stomach, it is diluted with all the blood in the vessels. While alcohol undiluted has a very prompt effect on any of the structures of the body, mixed as it is with all the blood, it is so largely diluted that it only has its effect on the most delicate structures. No structures of the body are so delicate as those that do the functional work of the nervous system. The central axis-cylinders of the nerve-lines and the nuclei of the nerve cells, colloidal in character, are exceedingly delicate and sensitive to the hardening and coagulating effects of alcohol. These exceedingly delicate central structures of the nerve lines and cells have motion as their function — excessively delicate, rapid motion. Anything that hardens or stiffens these structures, so they cannot move or convey motion as readily, arrests their functions in proportion.

"The first nerve cells and fibres reached by the alcohol in the circulation are those of the vaso-motor system that regulate the

calibers of the capillaries. To stiffen or paralyze them is to open the vessels. We see this in the first effect of the drug, in the general flushing of the system, the capillaries everywhere opened, and the heart beating harder and faster to fill the increased spaces. This is what is called the 'stimulating' effect. Soon, however, the most recently developed, and consequently most delicate, consciously acting cells and fibres of the cerebrum are reached. The first subjective consciousness of the stiffening, the drug occasions in them, is a dulling of sensibility, or less sensation. These structures are conscious or sensitive only when in functional motion and in proportion to their motion. To artificially prevent their moving is to have the conscious effect of lessening feeling. Dulled sensation is naturally a pleasant condition. To feel less, or not to be 'so sensitive,' is to feel better. If just enough of the drug is taken to partially arrest the capacity to move and sensate of these cerebral structures, as long as the condition lasts it is subjectively a pleasant one. If more be taken, or enough be taken to arrest all motion and all consciousness in the cerebrum, there is complete anaesthesia; because, as I have already said, in the body of man, practically, all consciousness is 'centralized 'in the cerebrum. If enough of the anaesthetic is taken to arrest motion only in the cerebrum, there is only an arrest of conscious action; but if more, or sufficient be taken to arrest motion in the nerve centers that control respiration or the heart's action, the whole man stops and is dead.

"We need not go further to explain other effects of alcohol in the system, on structures of a coarser, lower grade. This is sufficient for our purpose; sufficient to show why it is used as a luxury. It is its brain effect for which it is taken as a luxury. In time by the use of repeated small doses, or in a single administration of a large dose, we see impairment of all the functions of this exceedingly important organ. And it is the chemical effect of the drug that does the harm to these delicate structures; there is no nutritive effect. Long-continued use brings the previously intelligent man into the defective

class — dependent and delinquent — cared for by friends or by the state.

"There is a long list of such drugs, good in their places as medicines, in popular use as luxuries, reaching all the way from tea, coffee, tobacco, and alcohol up to opium, ether, and the stronger narcotics. Attention is here drawn to them for the wide-spread effect they have in deteriorating human cerebral abilities.

"The effect on the cerebral abilities of the user of such agents is always deleterious, and the tendency is to impair his hereditary transmissions also.

"Of late years there is a general understanding, without its being definite, or scientifically expressed, that the use of such drugs has a deleterious effect on the brain and general nervous system, which, understanding, is growing more and more pronounced. As is generally the case the more capable persons appreciate and learn first valuable information; so that, now-adays, the use of such drugs is being left off more and more by the more intelligent, and their use more and more confined to the incompetent. As the world becomes more and more instructed upon the use of such agents, the gradual effect will be to lessen their consumption, or to limit their consumption more and more to those persons who are born neurasthenic and cerebrasthenic, already pointing downwards in abilities; and, as we see it abundantly illustrated in the world, the use of such agents will tend to hurry on their descent towards elimination. The representatives of degenerating families are now most given to such 'habits' in the best society.

"Among the intelligent classes, however, there is many a person, whose sedative habits impair his general health, and who is in a most constant condition of discomfort, due in part to a general lowering of the cellular tone of his system by inactivity and in part to a constant 'auto-intoxication' from defective excretions, to whom the anodyne effect and so-called 'stimulating' effect of such agents is very pleasant, comforting, and seductive; who grows into the habit of their use very

readily; and who increases his neurasthenia by their use; and impairs his genetic-cell transmissions all the more by their use. We wonder why the children of such prominent men are nervous and hysterical, and often worse; they are very naturally so."

INHERITANCE IN INEBRIETY.

Undoubtedly, however, there are, in the case of insanity more especially, but also in that of other nervous diseases, certain concurrent causes which, where they exist, tend indefinitely to heighten the evil effect of the mere descent from neurotic ancestors, and which deserve to be specially singled out for remark, viz., the inheritance of phthisis; habits of alcoholic excess. As regards the first, there are many recorded facts, and many which I have personally witnessed, that show how disastrous it is for an already neurotic family to unite in marriage with a phthisical family; the offspring may be phthisical, but it is, at any rate, immensely probable that some of them will exhibit the neurotic tendencies of the stock with fresh and severe aggravation. Similarly, if an individual descended from a neurotic, but otherwise healthy stock, has the misfortune to contract phthisis in an accidental manner — e. g., as the result of a neglected catarrhal pneumonia, the new morbid element in this condition may indefinitely aggravate the already nervous tendencies. Such an event is sometimes the precipitating cause of an outbreak of furious and rapidly fatal delirious mania.

The influence of alcoholic excess in heightening existing tendencies to nervous disease, and even creating them de novo, can be easily understood. There can be no doubt that this kind of excess most directly and actively interferes with the nutrition of the nervous centers, tending in fact toward the atrophy of the proper elements of nervous tissue, and the exaggeration of the mere connective-tissue elements of the ner-

vous centers. But, moreover, the nervous centers of many drinkers are hereditarily unstable, hereditarily predisposed to break down in one way or another. Hence the maximum of mischief is produced when such a subject takes to alcoholic excesses.

It seems, then, that the whole evidence afforded by the history of the neuroses points to the conclusion that of all the factors of these diseases which strongly tend to make them obstinate and intractable in type, there is none which is to be compared, on the whole, for efficacy, with a single fact of descent from a strongly neurotic family stock; and that of the subsidiary factors the most important are phthisis and alcoholic excess, which are eminently exhausting and depressing to the individual, and eminently calculated to transmit an enfeebled and badly self-nourishing organism to the offspring.—

[Dr. Hitchcock in Massachusetts Medical Journal.

EFFECT OF TEA OIGARETTES.

One of the most injurious and dangerous of new fashions is the tea cigarette. That this is no empty, baseless story of a new craze is shown by the application made last week to the Commissioner of Internal Revenue at Washington for permission to manufacture tea cigarettes in Michigan. The applicant was told that to engage in such manufacture he must comply with the law governing the manufacturing of tobacco cigarettes, tea being a substitute for tobacco; that he must register, give bond, and so on, and that the cigarettes, when made, must be packed, stamped, branded, and labeled, exactly as the tobacco cigarettes, before the Government would sanction their removal from the factory for sale.

Several descriptions of the tea cigarette have been printed, but these have erred in the presumption that the tea was taken as sold, rolled up in a paper, and smoked. This would be practically impossible, as the sharp edges of the tea would cut

Vol. XIX.-10

the paper in all directions, spoil the draft, and render the cigarettes unsmokable.

To make the tea cigarette one takes a grade of green tea which has but little dust, being composed of unbroken leaf, and dampens it carefully, just enough to permit the leaves to be unrolled without being broken, and so as to be left pliable and capable of being stuffed in the paper cyclinder, while the dampness is not sufficient to stain the paper. The cigarettes are laid aside for a few days and are then ready to be smoked.

The feeling of a tea cigarette in the mouth is peculiar. The taste is not so disagreeable as might be supposed, but the effect on the tyro is a sense of thickening in the head and a disposition to take hold of something or sit down. If the beginner quits them, that settles it — he will not try tea cigarettes again. If, however, the smoker sits down and tries a second cigarette, inhaling it deeply, then the thickening feeling passes and is succeeded by one of intense exhilaration. The nerves are stimulated until the smoker feels like flying, skirt dancing, or doing something else entirely out of the common way. This stage lasts as long as the smoke continues, which is until the reaction of the stomach sets in.

Words cannot describe the final effects of the tea cigarette. The agony of the opium fiend is a shadow to that of the nauseated victim of the tea cigarette. It will be hours before food can be looked at, yet the first step toward a cure is a cup of tea. An hour afterwards comes the craving for the cigarette.

REPORT OF THE SOUTHERN CALIFORNIA STATE ASYLUM FOR INSANE AND INEBRIATES.

This admirable report for two years ending June, 1896, contains many very interesting facts. The following extract is worthy of note:

"There is another element which enters into the dilation of insane statistics in California. I refer to narcomania. No-

where else in the United States is the abuse of opium, morphine, cocaine, etc., so prevalent as on the Pacific Coast, and particularly in California. The Orientals have planted a pernicious habit in our soil. It has thrived. Its noxious influences permeate every stratum of society. All the state institutions for the insane have to deal with the insanities induced by drug inebriety, and the large ratio of mental aberration in our state is due, in a great measure, to the dissemination of this vice, which threatens the vitiation, physical, mental, and moral, of future generations. The number of patients who are committed as insane from narcomania is steadily on the increase. The asylums, hospitals, almshouses, penitentiaries, jails, and police stations give testimony to the accuracy of this statement. This class of dependents adds largely to the burdens of the taxpayer; and could some statute be devised by which the evil might be arrested, the ultimate results would eloquently indorse the wisdom of our law-makers.

"I would suggest that an earnest appeal be made to the legislature for the enactment of such severe inhibitory penalties as shall discourage the indiscriminate sale or distribution of drugs of this character. In my judgment, it should be made a felony to barter, sell, or give away, opium, morphine, cocaine, chloral, and other narcotics, except upon the prescription of a registered physician, the said prescription accurately to state the amount requisite, and to be but once filled."

In a study of heredity 22.31 per cent. of all cases admitted had a history of insane ancestors. In two years forty-seven alcoholic cases were admitted, and twenty-nine morphine and cocaine cases. It is the usual experience in all Eastern asylums that ten per cent. of all general cases of insanity have an alcoholic causation. If this is true in this institution, of the 500 cases during the past two years, at least fifty more had an alcoholic origin, making over a hundred and twenty cases of drug insanities.

The superintendent, Dr. Campbell, is clearly doing most excellent work, and the hospital is evidently well managed and a pride to the State of California.

JUDICIAL EVOLUTION IN THE RESPONSIBILITY OF DELIRIUM TREMENS.

It having been publicly stated that little regard need be paid to a recent isolated judicial charge laying down the criminal irresponsibility of delirium tremens, Dr. Norman Kerr thought it advisable to trace the gradual evolution of this newer, more humane, and juster legal view of accountability in this malady. The Scotch Judge, Lord Deas, in 1867, allowed a plea of delirium tremens in reduction of a charge of "murder" to "culpable homicide," and of another similar charge to "manslaughter," there having been mental aberration short of legally-proved insanity. A like reduction had been frequently allowed by several Scotch judges since. Indeed, in 1889, Lord Young declined to let the case go to a jury and discharged the prisoner (accused of "culpable homicide"), a married woman who, when in delirium tremens, caused the death of her infant child from neglect and starvation, on the ground that delirium tremens was a disease. Apart from mere reduction of the alleged crime, even weak medical evidence of the presence of delirium tremens was accepted as a complete answer by a jury in 1845, Reg. vs. Watson (York Winter Assizes), and also in Reg. vs. Simpson (Appleby Summer Assizes). In 1865 this plea was accepted in the case of Reg. vs. Burns (Liverpool Summer Assizes), Baron Bramwell ruling that, though the quality of the act might be known, the jury might acquit the prisoner if they believed he was suffering from a delusion leading him to suppose that which, if true, would have justified the act. A similar acquittal as insane, Reg. vs. Chaplin (Warwick Assizes, November), took place in 1878, the accused having been charged with feloniously wounding two persons, who, he supposed, had been breaking into his house.

In 1881 (Reg. vs. Davis, Newcastle, April 27th) a verdict of "Not guilty" was returned, on the ruling of Mr. Justice Stephen that delirium tremens was a distinct disease, the secondary consequence of drinking. The *Digest* and *Brett* both hold that the insanity of delirium tremens would excuse a man,

though voluntarily induced. In 1886 Mr. Justice Day (Reg. vs. Baines, Leicester Assizes, January) charged that if a man was in such a state of intoxication that he did not know the nature of his act, he was insane in the eye of the law, and that it was immaterial whether the mental derangement then resulting from such intoxication was permanent or temporary. In 1895 Mr. Justice Hawkins ruled that delirium tremens absolved from responsibility. Lord James (1892) laid down that if the delirium tremens has become chronic in its effects, or so advanced as to cause insanity, "it would be scant justice to ignore it on account of the cause which has produced it." So much for major crimes. In minor offenses this plea had also been allowed, since Lord Deas received it in a charge of theft about a quarter of a century ago; and in 1888 (Liverpool Summer Assizes) a lady laboring under the effects of delirium tremens, who had stolen a purse, a knife, a diamond ring, and 3s., was acquitted. Of recent years the number of minor charges in which this view had been taken had greatly increased.— Norman Kerr, M.D., F.L.S., London, in British Medical Journal.

THE PSYCHOLOGY OF ATTENTION. By Th. Ribot,
Professor of Comparative and Experimental Psychology in the College de France. Authorized Translation. Third Revised Edition. Chicago: The Open Court Publishing Company, 1896. Pp. viii, 120. Price, 75 cents.

This essay deals wholly with the mechanism of attention. Beginning with the spontaneous form, which is caused by emotional states and is the true, fundamental, and primitive form, the author passes to voluntary attention, and finally, without entering the field of psychiatry, discusses briefly the morbid states of attention. The assertion that the mechanism of attention is essentially motor — that is, always acting upon and through the muscles, mainly under the form of inhibition

— is supported by convincing evidence and argument. Most psychologists have overlooked the importance of spontaneous attention and its causation. It is stated that any man or animal hypothetically incapable of experiencing either pleasure or pain would be incapable of attention. It is not the relative strength of a certain state, not the intensity of the impression alone, that acts, but our adaptation or convergence. Our tendencies, as they happen to be crossed or satisfied, causing pleasure or pain — and this epitomizes our emotional life — these are the bases of attention. Tendencies are fundamentally movements or arrested movements; therefore attention, both spontaneous and voluntary, is from its origin bound up in motor conditions.

The physical aspect of the subject is considered and so are the limited contributions of physiology, but the path of the physiological psychologist is not easy, and conclusions are sometimes drawn from premises which the physiologist may still consider hypothetical. Interesting results of psychometrical observations are given, showing the varying activity of voluntary attention in different physical and mental states.

The morbid states of attention are treated of briefly, but with unusual clearness and simplicity of language and classification. The author disclaims the intention of entering the field of psychiatry, but his psychological standpoint forms a complement to the study of the pathology of the subject. The citation of numerous instances adds much to the interest of the work. The book is admirably translated and well printed.

Like the others of this series that have come to our notice, it is well worth the perusal of all thoughtful readers.

THE DYNAMICS OF LIFE — An Address Delivered Before the Medical Society of Manchester. By W. R. Gamers, M.D., F. R. S. P. Blakiston Son & Son, Philadelphia.

In an hour's lecture covering sixty pages, the author gives the latest and most suggestive studies on latent chemical energy, the dynamics of muscle, the dynamics of nerve, and the dynamics of disease, with a note on stimulation in the appendix. This is the most valuable condensed grouping of facts and theories to be found in the English language. No single volume will be of more practical value to the physician, giving clearer views of the phenomena of life, and opening new fields of study and thought. Works like this are invaluable to all thinkers.

ON MEMORY AND THE SPECIFIC ENERGIES OF THE NERVOUS SYSTEM.—By Prof. Ewald Herring. Open Court Publishing Co., Chicago, 1896.

This little work consists of two lectures delivered before the Imperial Academy of Sciences at Vienna, on memory as a general function of organized matter, and on specific energies of the nervous system. The first is a very clear study of the physical basis of memory. The facts of consciousness and sub-consciousness, with organic memory and its relations to habit and culture and reproduction are presented in a graphic, most instructive form. The second lecture brings out the fact that the specific energies of the cell and nerve fibers, both latent and cultivated, bring from the past certain predispositions and carry into the future certain tendencies, which constitute the vigor or weakness of the person. The innate energy of the organs remains unchanged through life, but the functional energy vary within narrow limits. We commend this little work as a most valuable, suggestive study of a subject that is usually confusing in larger works. It is one of the bimonthly issues of the science library of the Open Court Publishing Co.

OVER THE HOOKAH: The Tales of a Talkative Doctor. By G. Frank Lydston, M.D., Professor of Genito-Urinary Surgery in the Chicago College of Physicians and Surgeons; Professor of Criminal Anthropology in the Kent College of Law, etc. Sold by subscription only. Price, in cloth, gilt top, \$4.00. Over 600 pages octavo.

Profusely illustrated from the author's designs by C. Everett Johnson. The Fred Klein Publishing Co., Chicago.

This large, well-printed, and finely illustrated volume represents a good deal of talent and descriptive power in the author. The impression on the reader is that a much better work could have been made of the stories, if served up in a different dress. A genial, rollicking, exaggerated style is so common in the sensational press of the day that it has ceased to become attractive. Stories, no matter how good, must have some distinct personality. Dr. Lydston is a genius in this class of literature, and while this effort is attractive, it is full of unmistakable signs of ability to do far better work. The hero of this book gives a great variety of experience, consisting of adventures, incidents, travels, and descriptions of men, together with his personal opinions on medical and humanitarian topics. All of which is very bright and entertaining and helpful to drive away care for both the physician and his patient. The literary world may expect to hear again from Dr. Lydston in the future.

Appleton's Popular Science Monthly begins the year with a most attractive table of contents. Some of the best discussions of new facts in science are to be found in this journal. No other publication in the English language gives so wide a range of scientific topics in a strong, clear prospective. Social problems and sanitary topics, and almost every question of modern civilization are reviewed in its pages. This journal is practically a course of scientific lectures every month, which no thinking man can afford to do without. Write the publisher, New York city.

The Bulletin of the American Medical Temperance Association is doing excellent work among physicians in this country. Every number contains facts of the greatest interest, directly challenging the theory and practice of many physicians who follow theories of the past without question. It is literally the voice of science calling for the facts on which alco-

hol is used as a medicine, asking for a reopening of the subject, demanding that the new evidence be considered, and that alcohol should be tried by the facts of to-day, not the theories of yesterday. This association and its journal has a great future in the certain evolutions of this subject.

The Temperance Record is an English weekly, edited by Mr. Robert Roe, which is one of the best journals of this class published. Every side of the temperance question is treated with great fairness. Medical lectures and scientific studies are presented on the same page with sermons, essays, and temperance appeals. Every aspect of the drink problem is discussed with candor that is charming. As the organ of the National Temperance League it is really the pioneer of the temperance cause in England, and a model which could be copied in this country with advantage.

The Homiletic Review for January begins the new year with an unusually strong table of contents. The Homiletic horizon is radiant with new and wider conceptions of truth, and this excellent journal gives a clear summary of its progress and development. No more acceptable present can be made than a year's subscription to this journal. Send to Funk & Wagnalls, publishers, New York city.

The Medical Pioneer is the organ of the British Medical Temperance Association, of which the late Sir Benjamin Richardson was president. This journal is exclusively devoted to the study of alcoholic as a medicine and beverage, and its physiological action on the body. It is a thoroughly pioneer journal of intense practical interest to every medical man. It is edited by the well-known specialist, Dr. J. Ridge of Enfield, Middlesex, England.

The *Monist*, published by the Open Court Co. of Chicago, Ill., is without a rival for suggestive stimulating discussions of problems of psychology and religious faith. Every physician

Vol. XIX. -11

and scholar should read this journal, for its influence in opening up new ranges of thought and widening the mental horizon, and bringing one in touch with the great thinkers of the day.

The Journal of Hygiene and Herald of Health has been forty-six years before the public, going out regularly every month with its teaching to a large circle of readers. Its veteran editor, Dr. Holbrook, has the rare privilege of educating and training an unknown audience in the vital topics of health. Send to the editor, 46 East 21st Street, New York city, for a copy.

Editorial.

REFORMED MEN AS ASYLUM MANAGERS.

It is confidently asserted that a personal experience as an inebriate gives a special knowledge and fitness for the study and treatment of this malady. While a large number of inebriates who have been restored engage in the work of curing others suffering from the same trouble, no one ever succeeds for any length of time or attains any eminence. The exceptions to this are traveling lectures and moralists, who depend upon emotional appeals as remedies. Physicians and others who, after being cured, enter upon the work of curing others in asylums and homes, are found to be incompetent by reason of organic defects of the higher mentality.

They bring to the work disordered memories and inability to reason impartially because of such memories. They are emotionally biased and are unable to correct the errors of personal equation. In practice they have irregular and changing conceptions of the case. At one time harsh and severe, at another they are weak and credulous; trusting to military rules of conduct, or no rules but those suggested by the impulses of the moment; assuming the inebriate has power of full control, or that he is unable to direct his conduct.

Books and papers on the nature and treatment of inebriety by such men give striking evidence of this psychical instability to reason and comprehend the inebriate. The strain of treating persons who are afflicted with the same malady from which they formerly suffered is invariably followed by relapse, if they continue in the work any length of time. The constant stimulation of the organic and psychical memories of the past in the efforts to determine what condition and measures are essential in the case under treatment is followed by exhaustion and morbid impulses, that demands relief from drugs, of which spirits and opium are most common. Inductive reasoning from symptoms as to conditions and measures for relief is practically impossible, only in very narrow limits, in such persons. The personality and consciousness are defective, and organic and psychical memories unconsciously bias all judgment. The sense impressions, formerly perverted and palsied by spirits, are roused up again by the contagion of others suffering in like manner. The false ego of the patient after a time impresses itself on the physician whose mind has been in a similar condition. The result is credulity and most unreasoning dogmatism in regard to inebriates and the results of treatment.

The personal experience of the physician who is treating the case is always consciously or unconsciously the basis of all theories of treatment. The man who has obtained relief by certain drugs, or who has, by the pledge or prayer, or forced abstinence become temperate, will reason that these means are effectual in all cases. There is always a dangerous contagion in the emotional strain of assisting others out of the disorder so vividly impressed on the brain of the person who has suffered in a similar way.

Certain temperance and reform lecturers may go on for years appealing to the emotions of inebriates to stop drinking, but they all suffer more or less from psychical strain and contagion. Usually they all break down and return to spirits or drugs after a time. The reformed men who receive inebriates in their family and enter upon the work of personally treating them, living in the mental and psychical surroundings of such cases, usually fail. Notable examples will be found in the managers of the gold cure empirics. Every reformed man as a rule will relapse, particularly if he follows the business of curing others. In the history of asylums in this country, no reformed man has ever continued long in the work, or succeeded as a manager or physician in the medical and personal

cure of inebriates. The successful manager and physician in the personal study and treatment of inebriety must bring to the work a clear, unbiased mind. He must examine the facts of each case and determine their meanings in the spirit of an explorer in a new country. Inebriety is a question of scientific facts and their meaning; there can be no theories or opinions no sentiments or personalities. Each case is a new province of psychological pathology to be studied by itself. All efforts to understand such cases by the way of the emotions, and sympathetic following of the damaged reasoning will fail. No group of facts are final, and no means of treatment can be asserted dogmatically. Each group of facts are held for the present until a larger and clearer view is obtained. Each student who treats inebriety is always ready for new means and measures of treatment.

ORGANIC MEMORIES.

How is it possible to efface the organic memories of years of continuous poisoning by alcohol, by any combination of remedies possible to science? These organic memories have become permanent in alterations and perversions of nerve force and function, and have passed beyond the power of obliteration or removal. Such memories call for a repetition of the narcotic which developed this abnormality, but the checking of this demand for the time is not return to health or restoration. The army of men who assume to be cured by the gold remedies, must of necessity relapse, because no substitution by any remedies can replace the organic changes and memories produced by alcohol. The effort to do this is dangerous, because of the great possibility of still further injuring the organic structures and functions of the body and increasing the degenerations already present. The effect of alcohol on the delicate nerve tissues is practically unknown, and how is it possible to devise remedies to act on an unknown condition in an unknown way? Through the mind these abnormal manifestations called inebriety may be overcome or held in abeyance for an uncertain period. Or through some physilogical changes of structure and function, the demand for drink may disappear, but the conditions and causes of such changes are unknown. It is not possible in the present state of our knowledge of the brain and its physiology to know accurately what inebriety is, or what means or remedies will aid recovery. The scientific student concludes from a survey of all the facts that inebriety, in a general way, is an organized dissolution and disease, along lines of great obscurity. only rational remedies and means for restoration are physiological and hygienic. Measures which will bring rest, change, and building up, and also antagonize the degenerations of the Drugs known or unknown alone are empiric, but means which assist nutrition, elimination, nerve and brain rest, with organic change of structure and function, extending over a long period are the only real appliances known. The inebriate is curable, but only by rational remedies rationally applied.

DR. N. S. DAVIS.

We present the portrait of one of the most widely known physicians in America to-day. For sixty-three years Dr. Davis has been before the medical public as a physician, author, teacher, medical editor, and original investigator. From 1848 up to the present he has taught medicine continuously, and without doubt has been more influential than any other physician in the growth and development of medicine in the West. As the originator and founder of the American Medical Association, and its president, and also president of the ninth International Congress, he has become known to the medical profession all over the world. Among the many topics which Dr. Davis has taken advanced ground and became a pioneer investigator and teacher is that of alcohol. In 1854 he re-

ported some original investigations, showing that alcohol diminished the temperature of the body and thereafter condemned its use in medicine and as a beverage. Other experiments in this direction were made confirming his views, and from that time Dr. Davis has continuously urged, in the lecture-room and in numerous articles and essays, the danger from the use of alcohol and the need of original examination, rather than blindly following the theories of the past.

In 1870 Dr. Davis sent an article which was read at the first meeting of the Association for the Study and Cure of Inebriety, "On the Pathological Influences of Alcohol and the Nature of Inebriation." On different occasions Dr. Davis has contributed very interesting papers for our association on alcohol and inebriety. In 1891 Dr. Davis was made president of the American Medical Temperance Association, founded principally through his efforts, which position he retains up to the present. Dr. Davis has been an honorary member of our association from its beginning, and while urging the recognition of the disease of inebriety, has given more time to the study of alcohol and its effects on the body. His clear, energetic efforts to rouse scientific interest in the study of alcohol have marked a new epoch in rational medicine, a revolt against the delusions and theories which have held sway so long. Dr. Davis has gone far beyond his day and generation in opening up a new field and marking out new paths for scientific medicine in the future.

A man who doubted heredity in inebriety, one of the reasons being his alcoholic ancestry and his total abstinence and disinchination for spirits, had the following history: From boyhood he had used tobacco to excess, smoking and chewing continuously. He was a gormand at the table and suffered from dyspepsia and intestinal disorders. As a business man he was irregular and unreliable, both passionate and suspicious, and of doubtful honesty. As a leader of novelties in every direc-

tion, he was enthusiastic, always advocating some new scheme for sudden wealth, or new plan for relief of evils, and always deserting the present project for some other one. He espoused the Keeley treatment for inebriety, then denounced it for a better gold cure plan. Then he was interested in charities and claimed unusual results from a new plan of helping the poor. He has been an exhorter, a lecturer, a traveling physician, an agent for an Indian show. His social life has been cloudy; three marriages, one death, one divorce, and one separation has marked this part of his career. His unstable defective brain was a distinct legacy from his parents, and the fact that he did not use spirits or have an appetite for them was a mere accident, due to some insignificant causes which only became prominent by accident.

The recent death of Sir Benjamin Richardson takes away from the fields of science a very strong, robust, independent thinker. He examined and formed his own conclusions on all disputed questions and had the courage to defend his convictions at all times and places. He had an unusual power of popularizing facts in science and making them clear to every one. On the physiological action of alcohol he was not only a graphic writer, but an original experimenter, and more than any other man helped to clear away the confusion of theory and rouse new scientific interest in the alcoholic question. His "Cantor Lectures" and other papers on alcohol have been widely read and have stimulated new interest and entirely changed the alcoholic question, from the realm of morals and theories to that of exact study, as a problem in science. Dr. Richardson will be remembered as one of the great early leaders in reform circles who cleared the way and showed that reforms must be founded on truths of science to succeed. that evolution in any field is not by sentiments but by the teaching of facts. He was a leader, and his work and memory will go far down into the future.

The memorial meeting in New York on the 20th of November was very satisfactory. The papers were all historic and grouped many facts that will be of great interest in the future. Dr. Quimbey's paper on alcohol could not be read for want of time, to the regret of many, who will be pleased to hear that it is to appear soon in Life and Health, an excellent journal, edited by Mr. Willis Barnes. Dr. Kerr's paper was read by title and will appear in a future number of the journal. Dr. Shepard's historic sketch of Dr. Turner and his work was very graphic; also Dr. Mathison's account of the first institutional care of opium cases and Dr. Bradner's paper on "Quack Remedies for Inebriety," were of unusual interest. It will be a pleasure to present to our readers, a review of the early history of this effort to bring inebriety into the realm of scientific study. This number of the journal begins a new era in the study of the subject. When another quarter of a century has rolled around our work and these studies will be seen in their true light.

A valued correspondent writes us that he has gathered from correspondents and newspaper clippings the following facts about gold-cure institutes. During the year 1896 twenty-two so-called Keeley gold cures suspended and dissolved. Twenty-seven gold-cure homes, where specific treatment for alcohol and opium was given, have gone out of business. Five new companies have been formed to sell rights to use secret inebriate cures. Three ex-superintendents of gold-cure establishments have committed suicide.

To this we would add that in three years we have made notes of the relapse of nineteen physicians who have been medical directors of gold-cure establishments. Ten of these persons came for treatment in regular asylums, where no specifics were used.

DISEASE OF PERSONALITY IN INEBRIETY.

The physiological and psychic consciousness of the man and his relation to all things external to himself may be called his personality.

In inebriety this is always perverted and changed. In a large number of inebriates abnormal and defective organic conditions exist prior to all use of spirits. The use of alcohol deranges first of all the psychic life with its sensations, desires, feelings, volitions, memories, reasonings, inventions, etc., also the relations to the surroundings. Alcohol attacks the organic harmony of the organism, by depressing, exalting, and perverting vital forces. The nutrition, the elimination, and the conservation of energy are changed. The consciousness of these changes is obscured and covered up. Both the organic and psychic consciousness often fail to reveal the true condition. The personality of the man is broken up. His organism is umbalanced, his mentality is deranged, and this increases with the use of spirits.

The senses become more unreliable and the power of correcting the sense errors more difficult. Doubts of the power of correctly appreciating events and conditions, both external and internal, grow less and less, and finally disappear. A new personality with an exalted ego comes on; or the ego disappears, and an imbecile dependence on others follows. All the higher conceptions of his relations to others disappear, or are so loosely held as to be abandoned at any moment. Nothing remains but the physical or organic conceptions, which dominate. These disturbed organic activities make up the personality and constitute a group of manifestations and symptoms which may be clearly called disease. The organism is disordered, the senses are deranged, the impressions on the higher brain centers are misleading, and the acts and conduct absurd. The temporary palsy from the action of alcohol on the sensory nerves are interpreted as ideal states of health. The increased circulation of the blood in the brain with increased mental activity, is considered renewed power and force.

These delusions grow and extend to all organic sensations, and finally all subjective impressions are perverted, and the real personality is gone. The man is no longer able to measure or estimate his real condition. The personality he displays is an evanescent, unreal one, growing weaker steadily. This dissolution of personality noted in inebriety is constant and uniform. When intoxicated a new personality appears; when sober, the old personality comes back but changed and modified. Finally the alcoholic personality becomes so prominent that all others are obliterated. Surroundings and conditions of life may preserve an automatic personality for a time, but even this becomes changed, and the dissolution of the brain has passed all power of concealment. This disease of personality may be seen in persons occupying places of trust and honor in the community. They are not considered inebriates although known to be using alcohol freely. Such men display great perversions of judgment and character; take anomalous positions on questions of politics, religion, and science; lead some strange reforms or crusades to change the present order of society; or suddenly become defaulters and outlaws, or hypocrites, following lines of conduct that suggest insanity.

Some of these cases are temperance reformers, whose zeal passes all bounds of reason and whose judgment indicates a total loss of the higher conceptions of life. The brain and body is in a state of anarchy. Disease and disease impulses predominate, which may pass on to well-known forms of insanity, or continue until death from some acute disease follows. There is a rich field of psychological study along this line awaiting investigation.

Clinical Notes and Comments.

ALCOHOLISM IN CHILDREN.

Dr. Goriatchkine has made a very interesting report on this subject to the Moscow Society of Paediatrics. He has seen quite a number of cases of ethylism, not only among the poor and working classes, where, unhappily, the example is often set by the father of the family or by the fellow-workers, but also in families belonging to the higher classes.

The author cites, as an example, the history of a little girl of five years, who often partook of cognac, of malaga, and of port wines. The use of spirits began when she was two years of age, on the advice of a physician who was treating her. By little and little the child has become accustomed to this treatment, and actually she takes two small glasses of port and a teaspoonful of cognac each day. The child is anaemic, has restless sleep with nocturnal terrors, and the liver and the spleen are hypertrophied. In other cases the intoxication was more manifest, and showed the ordinary signs of chronic alcoholism.

In order to estimate the frequence of alcoholism in children and the causes which explain it, Goriatchkine has questioned the parents of all the children that he has had occasion to see in consultation at Saint Olga's Hospital. In four months he has been able to collect information of one thousand six hundred and seventy-one children (eight hundred and forty-one boys and eight hundred and thirty girls) from one to twelve years of age; of this number five hundred and six children (two hundred and eighty-two boys and two hundred and twenty-four girls), — that is to say, about one-third, — take alcohol, either as a result of their environment or (in half

the cases) upon the advice of a physician. This abuse often commences in the first year. The author is convinced that, if there are so many alcoholics among the children, it is in a great degree the fault of physicians who habitually prescribe the various forms of alcohol, either to stimulate the appetite or for other objects. Children thus frequently receive different preparations (vermifuges, diarrhoea remedies, etc.) in alcoholic infusion.

However, in the great majority of cases, alcohol is not indispensable, and ought to be replaced by other substances. In all cases the utility of alcohol is far from demonstrated. In prescribing alcohol, the habit may be formed, the need of an excitant may be felt, and in predisposed children, the issue of alcoholic parents, the alcoholic diathesis created by the alcoholism of the parents and remaining until that time in a latent state may often be awakened.

The administration of alcohol in chronic troubles of nutrition, to "give strength" to the child, appears to be not only useless, but even dangerous, on account of the need which it creates. On the other hand, there is no known authentic case in which alcohol shall have rendered real service. The fact that for the past six years alcohol has been used only in cases of extreme urgence at Saint Olga's Hospital (Moscow), is a proof of the manner in which one may omit it in medicine.

Therefore, the author advises strongly, in accord with Strümpell and Smith, to avoid prescribing alcohol as much as possible, and to oppose the parents with all one's power if they try to make children take it, under whatever pretext. — The Charlotte Medical Journal.

BOVININE IN INEBRIETY.

For some time past we have given bovinine in cases of exhaustion and extreme debility, with general good results. In some cases a rapid improvement followed, which could not

be traced to any other cause. Recently, a case of general prostration, following the removal of morphia, was given bovinine exclusively as a tonic every three hours. After the fourth dose a decided improvement began. The nervous irritation became less, and a short refreshing sleep followed. The exhaustion grew less and the heart-beat stronger and less frequent. The second night he slept soundly for four hours. The improvement was steady and rapid for the next four weeks, until discharged. This case was a chronic neuropath and a great variety of distressing neuralgias are sure to follow when morphia is withdrawn. In this instance very little neuralgia followed, and was of short duration, and less acute than usual. The absence of the usual insomnia could only be referable to the chemical and nutrient action of the bovinine. second was that of a former opium inebriate, who suffered from neuralgia, confined to the nerves of the upper extremi-At times he feared he would have to use opium again for relief, and this greatly distressed him. I tried various remedies, but had to change them often to prevent the contraction of an addiction for any one drug. Finally, I gave two-ounce doses of bovinine four times a day. The result was that after two days he improved steadily, the neuralgias disappeared in a week later, and now, five weeks after, there has been no return of the pain. He still uses bovinine, only in smaller doses, and has increased in vigor and strength materially. In a third case, from which the morphia was withdrawn, followed by the usual nausea, with colic pains and general weakness, bovinine was given in two-ounce After the second dose it was retained, and all the acute symptoms subsided, and recovery followed without any unusual symptoms.

In these two last cases the action of the bovinine must have been chemical, as well as nutritional, neutralizing some conditions of acidity, or other chemical states, and supplying some nutrient want or condition of starvation in the system. These three cases are instructive and suggest the possibility that bovinine may, in certain conditions of poisoning from alcohol, opium, or other drugs, be a constructive remedy to check poison degenerations and build up cell and tissue more positively than any remedy known at present. We suggest that our readers try this remedy in similar cases and report the results.

COCAINE POISONING.

Weinrich, of Nitze's clinic (Berl. klin. Woch., March 23, 1896), discusses cocaine poisoning originating from the urinary passages. The symptoms are very variable, but they are mostly referable to the nervous system. Thus, cocaine must be used with caution in neurotic individuals. The symptoms may consist of stupor, vertigo, headache, and these may end in collapse with severe praecordial anxiety. Clonic and tonic spasms are noted, which may produce sleeplessness and restlessness in some people, and unconsciousness in others. Mental excitement and a mild degree of mental aberration may be observed. Paralysis, tremor, slight loss of co-ordination may also be among the motor symptoms. If respiratory difficulty, cyanosis, loss of consciousness supervene the prognosis becomes very serious. The unfavorable action of cocaine on the heart rarely becomes threatening, the respiratory symptoms being the most significant. A feeling of suffocation, with irregular stertorous breathing may arise, and eventually Cheyne-Stokes breathing. Death may result from respiratory paralysis. Idiosyncrasy to cocaine is sometimes very marked, so that the size of the dose may be almost without perceptible influence on the intoxication symptoms produced. The author records two cases of cocaine poisoning, the first he had seen among several thousand of bladder cases which had been cocainised. In comparing experiments on animals with observations on man, it is proved that cocaine can be absorbed from the bladder, but the absorption is so slight as to be practically without significance. With increased dexterity in the use of the cystoscope perhaps weaker solutions of cocaine can be employed or no local anaesthetic used at all. Cardiac and vascular diseases, pernicious anaemia, are contra-indications to its use. The horizontal position should be adopted when it is used. Chloroform may be used when spasms arise, but the chief remedy against cocaine poisoning is artificial respiration. The proposal of Gauchier to add nitroglycerine (coc. mur. Merck 0.2; aq. destil. 10.0; sol. nitroglyc. (1 per cent.) gtt. x) is worth bearing in mind.

IS INEBRIETY INHERITED?

A most prominent question, one, too, which has been made the subject of much inquiry, is the extent to which the habit of intemperance may be the result of a faulty nervous organization inherited from intemperate ancestors. Upon this point there is a large preponderance of opinions, affirming that inheritance is not only a frequent, but a very powerful factor, in the development of drunken habits. As might partly be expected with a subject which the profession at large has treated with extraordinary neglect, the opinions of experts have been widely different, while the laity are inclined to sneer at the idea of drunkenness being inherited. An editorial paragraph, for example, in a contemporary, represents a physican of some repute as giving his opinion that the paroxysmal form of drinking, which is very frequently inherited, is more likely to be amenable to prolonged forced abstinence, than is the form of drunkenness which is the mere result of sottish habits gradually adopted under ordinary external temptation. Now it seems to me that all the evidence seems to prove that the fact of an inherited disposition makes the case more difficult, and more absolutely requiring a long period of detention and enforced abstinence, than those of ordinary tippling. Until recent years I thought paroxysmal drinking practically incurable by incarceration or anything else, that the sufferers from it were almost always members of the families which were strongly tainted with insanity; and that the only paroxysmal drinker whom (in a considerable experience) I ever knew cured, was a man in whose family the insane taint was very slight, if not absent.

The opinion of the physician quoted above represents a belief that is exceedingly prevalent, even among medical men who should know better, respecting the character of inherited tendencies, not only to drink, but to nervous diseases generally. In one shape or another I frequently encounter the idea among medical men, that the nervous diseases of persons who belong to neurotic families are slighter, and more spontaneously curable, than those which arise entirely from external circumstances, in persons whose ancestors have been free from nervous diseases. How such an opinion first arose there is some difficulty in understanding; and as I believe it to be directly contradicted by the results of careful observation, it may be worth while to investigate the matter a little further. — Dr. Hitchcock, in Mass. Medical Journal.

A RARE EFFECT OF TOBACCO.

The following case is interesting, on account of its extreme rarity, and the great importance of the etiological diagnosis. E. H., a healthy looking person, 25 years of age, bookkeeper by occupation, was seized with convulsions, epileptiform in character, five months since. Both of the elements of epilepsy were present, namely, loss of consciousness, and rigidity of muscular system. For two months he had one or two convulsions a week, and they were growing progressively more severe and frequent, although he began taking rather generous doses of the bromides, from the very beginning. The family history was good, there being no narcotic tendency in any member of it, nor had the patient himself exhibited any nervous manifestations, previous to this time. Upon examina-

Vol. XIX. —13

tion, the heart, kidneys, lungs, and liver were found in a healthy condition. The digestion was good, the bowels regular, and no indication existed of any irritation in the intestinal canal. There was no disease of the generative organs at the time, but one year previous he had an attack of gonorrhea. The urethra was examined, and proved to be normal in every respect. The foreskin, so often the cause of nervous diseases, had been removed two years before. There was no history of syphilis, or was there any constitutional cachexia, to which his complaint could be attributed. The eyes, nose, throat, and ears were favorably reported upon by a specialist of recognized ability. After a most careful examination, no cause of peripheral irritation could be discovered. patient's habits were good. He was not addicted to the use of alcohol in any form. He was temperate in sexual intercourse, and at no time practiced masturbation, which is supposed by many to be a very fruitful source of epilepsy. Every known cause of nervous disorders could be eliminated, except the use of tobacco; and although this was not carried to any great excess, still, by the process of exclusion, we became convinced that tobacco was the real cause of his trouble. Prof. John B. Elliott of New Orleans and Dr. R. W. Knox of this city, both of whom saw the patient in consultation, coincided with this view, and the subsequent history of the case proved the correctness of it. All medication was discontinued, and the patient was instructed to stop the use of tobacco entirely, since which time there has been no return of the convulsions. most remarkable feature of this case was, that, while the use of tobacco had given rise to epileptiform convulsions, not one of the more common effects of nicotine poisoning of the nervous system had ever been present. It would have been more in the natural order of things, for at least a slight derangement in the circulation or respiration to have occurred before the climax was reached. In other words, we would have expected a "tobacco heart" to have preceded a "tobacco convulsion." Had not the result of treatment been a complete verification

of the etiological diagnosis, we would have had very serious doubts as to its correctness, for tobacco is an extremely rare cause of such a condition, and besides, this particular case pursued a course contrary to all reasonable expectations.—

J. W. Scott, Houston, Texas, in The Southwestern.

INSANITY CAUSED BY INEBRIETY.

The following table, compiled by *The Voice* from the report of the State Board of Statistics of Mass., ending Aug., 1895, is worthy of note:

QUESTION.	Yes.	No.	Not Ascer- tained.	Totals.	Per Cent. Due to In- temperance of Those Ascertained.
Is the person's insanity due to the use or abuse of intoxicating liquor? Did intemperate habits of one or both	383	1,123	330	1,836	25.4
parents lead to the insanity of the person considered?	20	921	895	1,836	2.1
Did intemperate habits of grand- parents of person considered lead to (his or her) insanity? Did intemperate habits of other per-	184	170	1,482	1,836	52.0
sons lead to insanity of person considered?	41	404	417	862	9.0
Total average of persons considere Total average of cases ascertained, Total cases where insanity was c self or other person, Per cent. of cases ascertained in v sidered was due to drinking habi	aused	nsanity	of per	son co	. 628

"Inebriety. — Approximately, in consequence of the drinking habit, which so generally obtains in the United States, a million of men are impaired in their capacity for the skill in their work, 200,000, with their families, are in constant despair, and 100,000 die annually."

The above paragraph, going the rounds of the press, is undoubtedly a minimum statement. The statistics of any city or large town more than confirms it. The causes of death in charity hositals and in private homes brings additional proof.

BEVERAGE OR MEDICINE.

The determination of whether a certain compound is a beverage or a medicine is clearly set forth in the Intoxicating Liquor cases, 25 Kans., 751.

"If the compound or preparation," said the Court, "be such that the distinctive character and effect of intoxicating beverage is practically impossible by reason of the other ingredients, it is not within the statute. The mere presence of the alcohol does not bring the article within the prohibition. The influence of the alcohol may be counteracted by the other elements, and the compound be strictly and fairly only a medicine. On the other hand, if the intoxicating liquor remain as a distinctive force in the compound, and such compound is reasonably liable to be used as an intoxicating beverage, it is within the statute, and this, though it contain many other ingredients and ingredients of an independent and beneficial force in counteracting disease or strengthening the system." The doctrine of this decision and the justice of the test which it proposes are amply supported by the other authorities, both earlier and later.

OPIUM POISONING AND PONS APOPLEXY.

The symptoms of these two conditions resemble each other so closely that hemorrhage into the pons varolii is often mistaken for opium poisoning. The contracted pupil, contracted so closely that it is not much larger than a pin's head, was supposed to be a distinctive symptom of opium poisoning, and yet that symptom is equally marked in pons apoplexy. In both cases we have the slowness of respiration, the uneasiness, the pinhole contraction of the pupil, the stertorous breathing, the twitching and convulsive movements of the face and limbs. These symptoms may be present in varying intensity, but they are just as likely to be present from one cause as the other. Fortunately, pons apoplexy seldom occurs. Out of 386 recorded cases of brain hemorrhage, three only were of pons

hemorrhage. The symptoms resemble each other so closely that in a trial for murder, in the absence of opium found in the stomach, an autopsy can only reveal the real cause of death. The presence of the clot settles the matter so far as pons is concerned, but even the skill of the chemist fails in differentiating between the vegetable opium and the ptomains generated in the system, both producing the identical symptoms. In face of the liability to errors of diagnosis in which a human life may be sacrificed, would it not be wise to adopt some other punishment for murder than the halter or the electric chair? — Ed. N. Y. Times.

HEREDITY.

Dr. Caulter, medical director of Chicago Life Association, makes the following remarks in the *Medical Examiner* for December:

Alcoholism. — Some may wonder at the presumption which allows the discussion of the subject of alcoholism under the head of heredity. But I venture to say that it belongs there as much as does any condition already referred to. I do not, of course, claim that the desire for stimulants per se is transmitted, but rather a defective brain and nerve power, which defect may become manifest later on in neurasthenia, or retarded development and co-ordinate conditions, all of which very materially decrease the powers and capacity of resistance, and to just such extent increase the hazard of the risk.

I maintain that the persistent use of alcohol is sure to make an indelible impress upon the nerve stability of posterity; the organism receives a certain bias from which it cannot escape, and as such plays an important part in heredity and the family history.

Is it not strange that our honored judiciary do not take a more decisive position relative to an agent which is the acknowledged progenitor of crime, pauperism, and insanity, and which is universally recognized as the principal feeder of our jails and almshouses? And is it not strange that certain of our medical directors who have recognized these conditions as real, live, active elements in the consideration of the hazard, should be considered as cranks or bigots? All simply because they will not suborn conscience by rating as "first class" an applicant who, through alcoholic excesses, either of himself or his ancestry, has impaired that all-important, most delicate physiological function, brain power.

The retrograde hereditary tendency of chronic alcoholics has long been an established fact in neuro-pathology. Dr. Hughes says, "whether alcoholism be a vice or a disease, its ending is invariably in a condition which is either the beginning or continuance of a transmitted neuropathic or neuropsychopathic heritage," either of which are equally undesirable elements in an insurance risk.

SYPHILIS AND PARESIS.

In a paper on hereditary syphilis and general paresis in the insane, by Dr. Williams, occurs the following most significant passage:

"Practically seventy-five per cent. of all cases of general paralysis exhibit proof of primarily syphilitic infection." The history of all cases is "the typical man of the world," ambitious, fond of society and high living, a light sleeper, and a heavy drinker, then come delusions and well-marked paresis." Four cases are noted where syphilitic teeth were prominent, although no history of syphilis could be obtained. Each one had used spirits freely. The pathological conditions in chronic inebriety, syphilis, and paresis, are all alike. The thickened membranes and meningeal changes are the same. The neurosis which predisposes to insanity, paresis, or inebriety may be of syphilitic origin. A history of using alcohol exists in all cases of paresis, and it is significant of contributing causes not yet studied.

TREATMENT OF HABITUAL INEBRIATES IN AUSTRIA.

A most interesting report on "The Treatment of Habitual Drunkards in Austria and the 'Curatel' Procedure" has just been issued. From this report it would appear that legislation on the subject of drink and drunkards has actually taken place in Austria, drunkards coming under the law in that country as "spendthrifts" or "idiots." The process of "Curatel," whereby the court appoints a curator or administrator for persons who do not look after their own affairs and who are unable to defend their rights, is made applicable not only to children, lunatics, and idiots, but also to those who, having been declared "spendthrifts" by a magistrate, have been deprived of the administration of their property. A man may be judicially termed a "spendthrift" if it appears, on examination of the charge, that he is running through his property in a senseless way, and that he is exposing his family to future destitution by contracting loans under reckless or ruinous conditions.

In some kingdoms, as in Galicia and Lodomeria, there is a special law for the prevention of drunkenness, and one section provides that on being convicted of drunkenness three times in the course of one year, the district authorities may forbid the offender to visit public houses or liquor shops in the neighborhood of his domicile for the period of one year, under pain of fine or imprisonment. The inadvisability of mixing mere drunkards with the insane in asylums is fully recognized by the Austrian authorities. Last year a bill for the erection of public asylums or establishments for the cure and reform of drunkards was brought into the Reichsrath by the Minister of Justice. These institutions are intended for the reception of (1) those who have been judicially punished for drunkenness three times in the course of one year; (2) those mentally affected owing to habitual or periodical use of alcohol who have been admitted into hospitals or lunatic asylums, and who, although they

have recovered their sanity, have not sufficient self-command to resist the temptation to drink; and (3) those who, owing to habitual or periodical abuse of alcohol, endanger the moral, physical, or financial security of themselves or their relations. Provision is also made for the compulsory retention of patients for a period which may not exceed two years, and placing the police and judicial authorities at the disposal of the administration of the asylum in order to recover fugitives from the same. Consideration is given to the proper safeguarding of the individual from the illegal and undue application of the various processes upon which detention in an asylum may be carried out.

THE INFLUENCE OF ALCOHOLISM ON THE GROWTH OF CHILDREN.

The New York Medical Journal, November 7th, publishes the following:

"At a recent meeting of the Académie de Médicine, a report of which appears in the Presse Medicale for October 14th, M. Lancereaux reported two cases which had come under his observation. The first was that of a child thirteen years old. From the age of three years she had take fifteen ounces and a half of wine a day. At nine years of age she had had typhoid fever, followed by purulent pleurisy and pneumonia, and since then had coughed continually. The abdomen had enlarged and the patient had suffered from cramps at night. She had had several attacks of epistaxis. When the author saw her she complained of a tingling sensation in the extremities, of nightmare, and of catarrh. She was no larger than a child of nine years; she was thin and pale, and showed no sign of puberty; the heart was large, and the abdomen, which was very large, was distended and flatus; there was also ascites. The liver and spleen were large, and the urine presented albumin. During the patient's stay in the hospital she showed uraemic symptoms. Under the influence of a milk diet the

liver and spleen diminished considerably a year after her admission, but she did not grow.

"The second observation related to a child fourteen years old. When she was twenty months old her mother had given her wine, and from the age of two years she had taken from a pint to a quart of wine a day. When she was eight years old digestive trouble had occurred, and, to strengthen the child, her mother had increased the quantity of wine. At six years of age she had had nightmare and cramps, and the abdomen had begun to enlarge. At the present time she was of about the size of a child of six years. Her height was about thirty inches; her head was small and the expression childish, but she was very intelligent. The thyroid gland was very small, and the thorax was retracted at the upper part and enlarged at the lower part, which was due to the development of the abdominal organs. The abdomen was very large; there were ascites with an abnormal development of the abdominal subcutaneous veins. The heart, liver, and spleen were large. The patient passed a pint of albuminous urine every day. Digestion was badly performed, and the lower limbs were atrophied and paretic. During her stay in the hospital she presented uraemic symptoms. She was placed on a milk diet, and the digestive troubles improved, but she did not increase in size.

"M. Lancereaux stated that he had tried to reproduce these lesions by experimentation in two rabbits who were subjected to progressively increasing doses of wine. One had died at the end of twenty days, without presenting any visceral alterations. The other had died after thirty days, and presented haemorrhage of the stomach. The liver was of a pale grayish color, and the spleen was tumefied.

"The histological examination demonstrated traces of an irritating influence in the liver, which were found principally in the central parts of the lobes. The connective tissues of the postal spaces did not present lesions that were very clear, but

Vol. XIX.-14

the subhepatic veins and the capillaries were filled with leucocytes and proliferated endothelial cells. The glandular parenchyme was remarkable for the considerable size of its nuclei, which were vesicular; the cellular protoplasm seemed to be intact.

"M. Lancereaux thought it was impossible, in view of these observations, to deny the injurious influence of alcohol on the growth of children, and he said that this was one of the causes of degeneration and depopulation which physicians should energetically fight against."

INFLUENCE OF TOBACCO UPON ITS USERS.

Dr. C. H. Powell describes eleven effects of tobacco in an article to the *General Practitioner*. These are as follows: Greater hyperemia of the nasopharynx than any known agent; frequent recurring attacks of quinsy; laryngitis of a subacute form; chronic periodical cephalagia from hyperemia of the frontal sinus; chronic hyperemia of the eustachian tubes; gastric derangements; polyuria, cold hands and feet; impaired intellect; great weakness of the heart's action; lessened respiration; diminished oxidation. Each of these influences is fully discussed. The author concludes that tobacco is one of the slowest, and one of the surest, poisons to the human race.—

Brief.

THE CIVIL CAPACITY OF MORPHINOMANIACS.

M. Berrillon said: A recent civil process presents for consideration by the society the following question: Should morphinomaniacs, by reason of their morbid habit, be considered as incapable of giving proof as to whether they are, or are not, of sound mind (sains d'esprit), to use the expression of the "Penal Code"?

M. H. Lemesle said chronic morphinism presents phases and

degrees variable according to the resistance of the subjects and the doses employed, and which admits of their being classed as morphinomaniacs in very different categories as respects their mental condition. There are periods in which they are absolutely irresponsible, and others in which they are perfectly sains d'esprit, of sound mind.

M. A. Voisin: It is with morphine as it is with quinine and strychnine. Those patients in whom it is indicated bear large doses without risk; morphinism only occurs from the abuse or irrational use of the drug.

M. P. Valentin: Morphinic dipsomania may be likened to alcoholic dipsomania; in each case it is the idiosyncrasy of the subject that creates the peril; the morphinomaniac does not become so voluntarily, he must be predisposed.

M. Dumontpaller: One thing is necessary to establish the "civil capacity" of a morphinomaniac, and it is a certificate of mental alienation. There is no evidence that madness is more frequent in morphinomaniacs than in other neuropaths addicted to morbid habits of the same kind. In all cases there is no identity between madness and morphinomania. — From a discussion by the French Society of Hypnology and Psychology, reported in the Medical Times.

WHEN SHALL ALCOHOL BE GIVEN TO CHILDREN?

Grocz warns against the abuse of giving children wine or brandy in an unsystematic way and in reckless doses, as also against the early use of alcoholic beverages. Besides reporting two cases of acute alcoholic intoxication, which evidenced itself in a comatose condition and severe tonic and clonic convulsions, he mentions severe dyspepsias, cases of epilepsy and chorea as the sequel of an early abuse of alcohol. A certain number of neurasthenic conditions in children are to be traced to it.

For twelve years the police arrests for drunkenness alone averaged in Hartford 62.8 per cent. of the whole number, while drunkenness and its allied offenses numbered 80.67 per cent. This proportion is perhaps somewhat larger than in most places, but it may be generally expected to be at least as high as three-fifths.

Ninety-five to ninety-seven out of every hundred incarcerated in our jails are self-confessed drinkers, although they pleasantly add "moderate" to the title, and from 43.6 to 56.1 per cent. of them are there especially for drunkenness, and fully 66 per cent., or two thirds of them, are there for that and its resulting crimes. There were 1,393 of them there last year out of a total of 2,111.

Of the 381 captives in our State Prison last year, 46.8, or almost half, thought drink had done it. — Prof. McCook, before the Century Club, in Hartford, Conn.

The statute law of Vermont has a provision making it possible for a wife or the children of a person confined in prison for intoxication or crime committed while intoxicated, to recover two dollars for each day of confinement of said convicted person of the party who sold such person so confined any part of the liquor he drank. This section was enlarged by making it possible for the town upon which the family of the convicted person is liable to come for support to bring a like action and recover the per diem damages.

A law was also passed requiring the judges of city, county, and municipal courts, before whom persons may have been convicted of selling liquor, to report such cases to the United States collector of internal revenue, in order that he may ascertain if such person has paid the United States tax.

"Ardendale," Brooklyn, N. Y., an institution for the cure of mental and nervous diseases, alcohol, and drug habituation.

We desire to call attention to the opening of a new institution for the cure of mental and nervous diseases, including alcoholism and the various forms of drug habituation.

The medical director, Dr. Duryea, is peculiarly fitted by long and special experience for the supervision of such an institution.

The staff, both consulting and visiting, are well known not only in their own immediate professional circles, but throughout the land and abroad in their specialities.

One of the consulting staff, Dr. L. D. Mason, has given a lifetime to the study and cure of alcoholism and other forms of drug habituation, and for thirty years has devoted himself to this speciality. He is firmly convinced that patients of the better class should be cared for in private institutions, and that the state or county should provide and care for pauper inebriates only, and that the state or county should not interfere with private institutions in the care of that class of persons who are able to pay for their treatment; in other words, the status of the pauper inebriate should be on the same plan as that of the pauper insane. Dr. I. L. Shaw is one of the leading neurologists of Brooklyn, Professor of mental and nervous diseases in the Long Island College Hospital. Drs. Browning, Barber, and O'Connell are all well known neurologists. Dr. Browning, in addition to his speciality, is also a teacher in this department.

Dr. W. N. Bates of the consulting staff is one of the leading surgeons in Brooklyn, and attending surgeon to Brooklyn City Hospital.

With such a staff the institution ought rapidly to attain a position of desirable prominence and usefulness in the community, and we commend it not only to the medical profession, but to the public generally, as an institution conducted on the highest ethical and scientific grounds.

VINO-KOLAFRA.

The question was asked, Is vino-kolafra in any sense a remedy for inebriety? The following test case was made to answer this question at Walnut Lodge Hospital, Hartford, Conn., T. D. Crothers, M.D., superintendent: H. B., a workman, 32 years of age, and chronic inebriate of fifteen years duration, came for treatment. His father and grandfather both were inebriates, and he used beer and spirits from early childhood. From fifteen he has drank to intoxication at irregular intervals. For the past six years he has been a periodical drinker, having distinct free intervals of sobriety of from two weeks to three months. He has taken the Keeley cure twice and abstained from drink for one month at the first time, and ten days at the last time. Since he has used spirits in greater excess and been more delirious and prostrated than before. At the last attack he was violent and his friends were alarmed, fearing he would commit crime. At the beginning of the attack he was brought to this hospital. All spirits were removed and two ounces of vino-kolafra given every two hours. After the second dose he became quiet, and after the fourth dose went to sleep and awoke quite rational four hours later. This medicine was continued with the addition of a bath and calomel purge for two days, then reduced to the same quantity four times a day. On the fifth day he complained that the drug caused nausea and was unpleasant. It was then discontinued and the usual bitter tonics substituted. In this case the vinokolafra seemed to have some special sedative and neutralizing power which overcame the cell and nerve irritation present. This case seemed to answer the question strongly in the affirmamative that vino-kolafra is a remedy for inebriety, particularly in the early stages of treatment.

Perekhan, J. S.: Ferratin, Iron Tonic and Food. (Chicago Medical Recorder, January, 1896.) The author reviews the literature on Ferratin, quoting Schmiedeberg, Germain, See, Dujardin-Beaumetz, Marfori, Jaquet, Fackler, Einhorn, and

others, and then cites a case of anemia in his own practice "because the improvement under the use of Ferratin was so striking as to merit special mention." Patient, a girl of 17, became anemic after an attack of grippe, lost her appetite, etc.; condition on November 15th as follows: face pale, of wax color, lips and conjunctiva almost white, headaches, insomnia, constipation, shortness of breath, bad appetite, etc. Half gramme doses three times daily, with hygienic regulations, caused improvement after first week, and gradually her appetite returned, headaches and insomnia disappeared, red color was restored to lips and face, and within five weeks the blood corpuscle count showed an increase from 2,100,000 to 4,150,000 per ccm. Author concludes that "Ferratin can be safely recommended as a hamatinic remedy, with suitable diet, hygiene and exercise not to be neglected."

S. L. Reed, M.D., Highland Park, Ky., Oct. 28, 1896, writes: "Have only time at present to copy notes in reference to case in which I used bromidia. Was called suddenly, early on morning, June 10th, to see Mrs. McG. Patient had been under treatment of Dr. R., who had been called, but failed to answer. Found patient suffering with acute mania, very violent and destructive. On questioning family found patient had delivered herself four days previous of a threemonths foetus. Since that time patient had been receiving enormous doses of morphine with no apparent result. patient was beyond control, improvised a straight jacket of her husband's sweater and bicycle belt. Ordered half-ounce Bromidia (Battle & Co.) every half-hour until quiet. In two hours patient was sleeping. Patient continued to receive Bromidia whenever indicated, along with other treatment, and in a few weeks was apparently well, although Dr. R. still has her under observation. This will show the superiority of Bromodia over morphine, especially in cases with head symptoms.

I have had moderate success with Iodia, but could sing the praises of Papine in several columns if I had the time.

UP-TO-DATE TREATMENT FOR EPILEPSY.

Hydrocyanate of Iron-Tilden has been meeting with phenomenal success in combating this dread disease. Epilepsy is an affection so very intractable, as a rule, that the ordinary remedies and methods fail to give even slightly satisfactory results, indeed, they often appear to hasten the very disturbances which they are intended to correct.

Many of the most eminent neurologists have abandoned the bromides and now rely entirely upon the efficacy of the Hydrocyanate of Iron-Tilden. J. H. Dearborn, Beverly, Mass., writes, "I am using Hydrocyanate of Iron-Tilden in a case of epilepsy that has baffled the skill of eminent physicians in London and the States, with marked success. I can heartily recommend it."

Literature and Epitome of Cases in practice will be furnished upon application to The Tilden Company, St. Louis, Mo., or New Lebanon, N. Y.

Professor Thompson writes: Diastase is a vegetable ferment which has the property of converting starchy foods into a soluble material called maltose. Like the ferments in the saliva and pancreatic juice, it acts in alkaline solution, but unlike them, it continues to operate in acid media, and, therefore, its action is not disturbed by the gastric juice. Diastase is a peculiar substance which causes the ripening of fruits and vegetables by converting their starches into dextrins and sugars; hence fruit becomes more and more digestible as it ripens.

Celerina continues to prove a most practical remedy. The following, from Dr. Harrison of Abbeyville, S. C., expresses this fact clearly: "I have used celerina in appropriate cases, and can heartily recommend it to all who wish an elegant preparation, combined with undiminished therapeutic activity. It is peculiarly fitted to such cases as delirium tremens, headache from debauch or excessive mental or physical exertion.

Mercauro, prepared by the C. R. Parmele Co., is undoubtedly a tonic in a large number of cases of inebriety. How it acts is not clear, but evidently it influences in some profound way the nutrition and organic processes, and antagonizes the depression which demands spirits. I would urge that it be given as an alterative tonic in all cases. This form of mercury seems to be preferable to all others.

The Review of Reviews is essentially a busy man's journal, giving a clear idea of the history of the world and its literature. No more useful journal can be found.

The Wheelers' Tissue Phosphates needs no praise; they prove their value wherever used. Such drugs are standards in the treatment of disease.

The Lambert Pharmacal Co. of St. Louis, Mo., has for years put on the market *Listerine*, one of the best standard antiseptics known. Its uniform power and increasing value, wherever used, commends it as the most useful practical remedy which can be used in disease.

P. Blakiston Son & Co., Physicians' Visiting List for 1897. This is the forty-sixth year of its publication and may be said to be an evolution towards a perfect visiting list, far in advance of a host of competitors. It is literally one of the most practical and valuable books of this class on the market.

The Arethusa Spring Water Company of Seymour, Conn., have put upon the market an excellent mineral table water, which has become very popular wherever used. They offer a case on trial to any hospital or practicing physician who wishes to test it.

Maltine is made from three cereals — barley, wheat, and oats. It is rich in diastase. It may be taken either plain, with cod liver oil, with coca wine, with pancreatin, with hypophosphites, etc., in tuberculosis and other diseases.

Vol. XIX. - 15

Reed & Camrick of New York city have two preparations on the market which have become very valuable in general practice. One, called *Protonuclein*, which is obtained from the lymphoid structures of beef and pigs, and is a stimulating tissue builder and nutrient of great value and usefulness. The other is *Peptenzyme*, a digestant and special remedy for all forms of malnutrition. Both of these combinations are very popular and are used extensively. Send for samples and the literature of the subject.

Fellows' Syrup of Hypophosphates may be prescribed as a home remedy for a great variety of nervous and bronchial troubles and general debility. It has been on the market for many years, and has a wide, well-earned reputation.

The Worcester Fire Pail is indispensable in every home and hospital. It is cheap, practical, and always ready for use.

Horsford Acid Phosphate has come to be a home remedy that it is practically indispensable.

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

RUMFORD CHEMICAL WORKS, Providence, R. I.

Beware of Substitutes and Imitations.

ARDENDALE

A Sanitarium for the care and treatment of cases of

NEURASTHENIA, ALCOHOL, AND DRUG INEBRIETY,

situated in a country section of Brooklyn, within driving distance of New York, Jersey City, and Brooklyn, and can be reached in 45 minutes from Brooklyn Bridge via Kings County Elevated R. R. (Brighton Beach Division).

CONSULTING STAFF.

L. D. MASON, M. D. JOHN C. SHAW, M. D.

VISITING STAFF.

WM. BROWING, M. D.
A. S. AMBLER, M. D.
J. T. DURYEA, M. D.

For terms and other information Address, Miss L. Thebaud, Superintendent.

ARDENDALE

P. O. Station, O, - Brooklyn, N. Y.



In La Brippe

behaves as a stimulant as well as an Antipuretic

and Analgesic thus differing from other Coal-

tar products. It has been used in the relief of rheumatism and neuralgic pains, and in the treatment of the sequelæ of alcoholic excess. AMMONOL is also prepared in the form of salicylate, bromide, and lithiate. The presence of Ammonia, in a more or less free state, gives it additional properties as an expectorant, diuretic, and corrective of hyperacidity.— London Lancet.

The Stimulant

AMMONOL is one of the derivatives of Coal-tar, and differs from the numerous similar products in that it contains Ammonia in active form. As a result of this, AMMONOL possesses marked stimulating and expectorant properties. The well-known cardiac depression induced by other Antipyretics has frequently prohibited their use in otherwise suitable cases. The introduction of a similar drug, possessed of stimulating properties, is an event of much importance. AMMONOL possesses marked antineuralgic properties, and it is claimed to be especially useful in cases of dysmenorrhæa.— The Medical Magazine, London.

Ammonol may be obtained from all Leading Druggists.

The Ammonol Chemical Co.,

NEW YORK, U. S. A.

Send for "Ammonol Excerpta," a 48-page pamphlet.

THEKEVIEWORKEVIEWS

: Monthly = Illystrated:



is the one magazine which the world has agreed is INDIS-PENSABLE. It will be more brilliant than ever during 1894. The readers of The Review of Reviews say that it would keep them well informed if it were the only literature printed. It is especially valuable to clergymen, professional men,

farmers, and to all those who can take but one monthly.

FAMOUS PEOPLE AND GREAT JOURNALS HAVE GIVEN IT THE MOST UNQUALIFIED ENDORSEMENTS EVER RECEIVED BY A PUBLICATION:

James Bryce, M.P. Author of The American Commonwealth. "It is just what we have wanted."

Miss FrancesWillard.—"This magazine has the brightest outlook window in Christen-dom for busy people who want to see what is going on in the great world."

Cardinal Gibbons — "To the busy world who have not leisure to peruse the current monthlies, The Review of Reviews will be especially welcome, as it will serve as a mirror, reflecting the contemporary thought of Great Britain and America."

To the best agents we can offer extraordinarily liberal terms, which make The REVIEW of REVIEWS without a peer from the canvasser's point of view.

Review of Reviews,

13 Astor Place,

New York City.

New York World.—" THE REVIEW OF REVIEWS IS Admirable."

Boston Globe.—"To read a number is to resolve to never miss one."
Chicago Tribune.—" That useful and always interesting periodical, THE REVIEW OF REVIEWS."

Atlanta Constitution.—"Gives as clear an idea of the history of the month as could be obtained from volumes elesewhere."

Springfield Union.—"THE REVIEW OF REVIEWS IS the best publication of the kind extant, and no busy man can afford to miss its monthly visits."

SUBSCRIPTION RATES.

Per Year, = \$2.50 Trial Subscription, 5 Months.

Sample Copy, -10 cents.

For this price The Review of Reviews gives as much reading matter as is contained in two ordinary magazines.

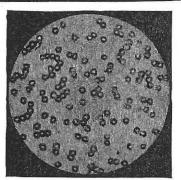
BOVININE

A CONDENSED FOOD

But much more. There are other condensed foods. Bovinine is also living food. In this it has no rival outside the arteries of the living body. It is drawn from the animal arteries alive, and kept alive; and in the living body its only equivalent exists; the vital fluid itself: that is Bovinine.

A Wonderful Conserve of the Living Blood Corpuscles,

or Tissue-forming Cells of Life, preserved without the use of heat or any other agent impairing their vitality; visible in any drop of Bovinine under the microscope, in all their integrity (studding the surface of the slide as in the annexed photo-engraving) and known in thousands of cases to have entered



A DROP OF BOVININE, Showing the Blood-Corpuscles intact. Micro-photographed by Prof. R. R. Andrews, M.D., of Harvard College.

usands of cases to have entered
directly into veins drained of
blood by hemorrhage or innutrition with prompt replenishment
and revival from a dying condition. This has been done, not
only by the avenue of the
stomach, but by rectal enema,
but even wasted and ulcer-eaten
flesh has been regenerated by
topical and hypodermic treatment, and the encroaching degeneration of the tissue not only
arrested but driven back and
driven Out by the vitalizing
power of the Living-Blood Supply, so that great ulcers, which
had for years resisted all medicaments, have been entirely healed
by the local applications of this
eagerly absorbed nutrient matter.
For these astonishing but un-

For these astonishing but unexaggerated facts the most unimpeachable medical authorities can be furnished, with authenticated cases too numerous to be here quoted of innutritive exhaustion, hemorrhage, ulcers, etc., to physicians or others who

haustion, hemorrhage, ulcers, etc., to physicians or others who yoluminous literature of the subject.

woluminous literature of the subject.

All physicians owe it to themselves and to their patients to keep in view the unparalleled life-saving capabilities of Bovinine, the administration of which is practically nothing less than

Transfusion of Blood,

adapted to restore, nourish, and sustain infants, invalids, aged people, and those exhausted by enteric diseases, pulmonary consumption, loss of blood, or inability to digest or even to retain food — when all else fails. More than 25,000 medical prescribers of Bovinine during the past year can be referred to.

THE BOVININE COMPANY,

65 South Fifth Ave., NEW YORK.

CHICAGO.

NEW YORK.

LONDON.

THE HIGHLANDS.

A FAMILY HOME FOR NERVOUS AND MENTAL DISEASES.

WINCHENDON, MASS.

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

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

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

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

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

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

WHEELER'S TISSUE PHOSPHATES.

Wheeler's Compound Elixir of Phosphates and Calisaya. A Nerve Food and Nutritive Tonic for the treatment of Consumption, Bronchitis, Scrofula, and all forms of Nervous Debility. This elegant preparation combines in an agreeable Aromatic Cordial, in the form of a Glycerite, acceptable to the most irritable conditions of the stomach. Bone Calcium Phosphate, Ca2, 2PO4; Sodium Phosphate, Na2, HPO4; Ferrous Phosphate, Fe3, 2PO4; Trihydrogen Phosphate, Ha3PO4; and the Active Principles of Calisaya and Wild Cherry.

The special indication of this combination of Phosphates in Spinal Affections, Caries, Necrosis, Ununited Fractures, Marasmus, Poorly Developed Children, Retarded Dentition, Alcohol, Opium, Tobacco Habits, Gestation and Lactation, to promote Development, etc., and as a physiological restorative in Sexual Debility, and all used-up conditions of the Nervous System, should receive the careful attention of good therapeutists.

NOTABLE PROPERTIES.—As reliable in Dyspepsia as Quinine in Ague. Secures the largest percentage of benefit in Consumption and all Wasting Diseases, by determining the perfect digestion and assimilation of food. When using it, Cod-Liver Oil may be taken without repugnance. It renders success possible in treating chronic diseases of Women and Children, who take it with pleasure for prolonged periods, a factor essential to maintain the good will of the patient. Being a Tissue Constructive, it is the best general utility compound for Tonic Restorative purposes we have, no mischievous effects resulting from exhibiting it in any possible morbid condition of the system.

Phosphates being a NATURAL FOOD PRODUCT, no substitute will do their work in the organism.

Dose.—For an adult, one tablespoonful three times a day, after eating; from seven'to twelve years of age, one dessertspoonful; from two to seven, one teaspoonful; for infants, from five to twenty drops, according to age.

Prepared at the Chemical Laboratory of

T. B. WHEELER, M.D., Montreal, P. Q.

To prevent substitution, put up in pound bottles only, and sold by all Druggists at One Dollar.

Read the pamphlet on this subject sent you.



60,000 SUBSCRIBERS

YOU DON'T THINK IT IS POSSIBLE?

IT IS!

Send 10c. for Three Months' Trial Subscription, and you will learn Why!

NO MORE FREE SAMPLE COPIES.

SUBSCRIPTION BLANK.

Publisher TRI-STATE MEDICAL JOURNAL,

3509 Franklin Ave., ST. LOUIS, MO.

Only Medical Journal in America with a Department devoted to the History of Medicine.

To be Issued Shortly

International Specialist

A Quarterly Journal Devoted to Diseases of the Eye, Ear, Nose, Throat, and Skin, with a Department of Electro-Therapeutics.

300 PAGES IN EACH NUMBER.

Elaborately Illustrated with Chromo-Lithographic Plates, Etchings, and Half-Tone Engravings.

EDITORS.

FOR OPHTHALMOLOGY:

H. Snellen, of Utrecht; A. Jansen of Berlin; Charles A. Oliver, of Philadelphia; Eugene Smith, of Detroit; James Moores Ball, of St. Louis.

FOR OTOLOGY:

Holger Mygind, of Copenhagen; R. C. Heflebower, of Cincinnati.

FOR RHINO-LARYNGOLOGY:

J. Mount Bleyer, of New York City.

FOR DERMATOLOGY:

A. H. Ohmann-Dumesnil, of St. Louis.

FOR ELECTRO-THERAPEUTICS: Wellington Adams, of St. Louis.

SUBSCRIPTION: - \$5.00 per annum in advance in the United States, Canada, and Mexico; £1, 6s. in England, 30 francs in France; 25 marks in Germany; 15 florins in Holland.

Subscriptions should be sent to

DR. R. C. HEFLEBOWER,

Berkshire Bldg., Cincinnati, Ohio, U. S. A.

HYDROCYANATE OF IRON. TILDEN'S

In its Physical and Chemical Properties is somewhat analogous to the ferrocyanide or prussiate of Iron, but in medicinal properties is widely dissimilar. According to Harold Holm, the brains of epileptics show a marked degeneration in the cortical substance, often extending to the psychomoter centers, and in some cases even to the medulla oblongata.

HYDROCYANATE OF IRON.—Tilden

exerts a specific curative influence over this degenerative process, acting as a restorative agent. It combines essentially the tonic as well as the sedative effects on the cerebro-spinal nerve centers. It is the most logical remedy for the

CURE OF EPILEPSY

and all Neuro-cerebral ailments, Chorea, Hysteria, Vertigo, Neuralgia, Nervous Headaches, and Neurasthenia, generally.

HYDROCYANATE OF IRON--TILDEN is put up in one-half and one grain tablets, at \$1.00 per ounce, post-paid, if cannot be procured of druggists. For literature, send to the manufacturers,

St. Louis, Mo. THE TILDEN CO. New Lebanon, N. Y.



BE READY FOR FIRE!

THE WORCESTER Chemical Fire Pail

THE STANDARD OF THE WORLD.

SEVEN YEARS ON THE MARKET AND NEVER FOUND WANTING.

ADOPTED BY A LARGE NUMBER OF

ASYLUMS, SANITARIUMS, and HOSPITALS.

HOLDS TWO GALLONS, EQUAL TO TWENTY PAILS OF WATER.

Being Glass Lined-Never Rusts or Rots
Out..

ALWAYS CLEAN. ALWAYS READY.

The Worcester Fire Appliance Company,

Worcester, Mass., U.S.A.

THE AMERICAN JOURNAL OF INSANITY.

THE AMERICAN JOURNAL OF INSANITY IS A QUARTERLY JOURNAL DEVOTED TO THE INCREASINGLY IMPORTANT SUBJECT OF INSANITY IN ALL ITS RELATIONS.

Inebriety and Insanity will Receive Frequent Attention IN ITS COLUMNS.

This Journal is indispensable to those who desire to keep fully informed upon the medical, medico-legal, statistical, or administrative aspects of mental disease.

THE AMERICAN JOURNAL OF INSANITY has recently been purchased by the American Medico-Psychological Association, from the State Hospital, at Utica, N. Y., where it had been published for fifty years, and removed to Chicago.

The Contents Include: Important Original Communications. Correspondence, Home and Foreign. Reviews of the Literature. News of the Institutions.

Physicians, Medical Jurists, Public Libraries will find this journal valuable.

YOUR SUBSCRIPTION IS INVITED.

PUBLICATION COMMITTEE.

G. ALDER BLUMER, M.D., Utica, N. Y. (State Lunatic Hospital.)
HENRY M. HURD, M.D., Baltimore, Md. (Johns Hopkins Hospital).
RICHARD DEWEY, M.D., Chicago.

SUBSCRIPTION PRICE. \$5.00 PER ANNUM, IN ADVANCE. ADDRESS RICHARD DEWEY, M.D., Managing Editor

Venetian Building, CHICAGO, ILL., U. S. A. 34 Washington St.,

A NEW TREATISE ON INSANITY.

A PRACTICAL MANUAL OF

SECOND EDITION.

By DR. E. RÉGIS.

PROFESSOR OF MENTAL MEDICINE, FACULTY OF BORDEAUX, FRANCE. FORMERLY CHIEF OF
CLINIQUE OF MENTAL DISEASES, FACULTY OF MEDICINE, PARIS.

CLOTH, CR. 8vo, 716 PAGES, PRICE, \$2.50.

Authorized Translation by H. M. BANNISTER, M.D., Chicago, Ill., with a Preface by the Author. Press of American Journal of Insanity.

Exclusive Agents:

P. BLAKISTON, SON & CO., BAILLIERE, TINDALL & COX, 1012 Walnut Street, PHILADELPHIA., 20 and 21 King William St., Strand, London.

1012 Walnut Street, PHILADELPHIA. 20 and 21 King William St. Strand, London.

Dr. Bannister's translation of Régis' treatise ought to have a cordial welcome in America. The book reflects the best of the modern French school, and will infuse a distinctly new elèment into the studies and practice of to-day.

The quality of a treatise on insanity is perhaps nowhere better shown than in the chapter on classification.

Judged by this standard, M. Régis' book is one of marked originality and precision of thought. This chapter alone will be a contribution of mestimable value to the American alienist, both for its clear philosophic method and for the fullness of its subject-matter.—Medical News, Phila., Nov. 3, 1894.

Its author is justly distinguished as an observer, teacher, and writer in this department, and he has given us, as might be expected, a model handbook, remarkable in point of arrangement and clearness. His views also are sound and advanced; and we know of but one recent work of its kind which approaches this in conciseness and fullness.—Boston Medical and Surgical Journal, Nov. 8, 1894.

DR. EMORY LANPHEAR, Surgeon,

S prepared to visit any part of the country in consultation or to perform

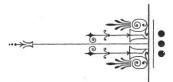
4301 LACLEDE AVE., ST. LOUIS, MO.

SEND FOR A

FREE

SAMPLE COPY

OF THE



American Journal of Surgery and Gynæcology,

LIST OF ALL THE LEADING WORKS

--- ON ---

INSANITY, BRAIN, AND NERVE DISEASES, WITH NAMES OF AUTHORS

AND PUBLISHERS, AND THE PRICE FOR WHICH MOST

OF THEM WILL BE SENT POST-PAID.

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

Bain, Mind and Body. \$1.50.

Buckham, Insanity in its Medico-legal Aspects. \$2.00.

Bucknill and Tuke, Psychological Medicine. \$8.00.

Clevenger, Comparative Physiology and Psychology. \$2.00.

Clouston, Mental Diseases. \$4.00.

Creighton, Unconscious Memory in Disease. \$1.50.

Gowers, Diagnosis of Diseases of the Brain. \$2.00.

Kirkbride, Hospitals for the Insane. \$3.00.

Lewis, Mental Diseases. \$6.00.

Mann, Manual of Psychological Medicine. Cloth, \$5.00. Sheep, \$6.00.

Mills, Cerebral Localization. 60 cents.

_____, Nursing and Care of the Insane. \$1.00.

Osler, Cerebral Palsies of Children. \$2.00.

Kerr, Inebriety, its Pathology and Treatment. \$3.00.

Rane, Psychology as a Natural Science. \$3.50.

Ribot, Diseases of the Memory. \$1.50.

Sankey, Mental Diseases. \$5.00.

Tuke, Mind and Body. \$3.00.

History of the Insane. \$3.50.

Arnold, Manual of Nervous Diseases. \$2.00

Beard, Sexual Neurasthenia. \$2.00.

Buzzard, Diseases of the Nervous System. \$5.00.

Gowers, Manual of Diseases of the Nervous System, \$7.50.

Lyman, Insomnia and Disorders of Sleep. \$1.50.

Mitchell, Injuries of the Nerves. \$3.00.

Roose, Nerve Prostration. \$4.00.

Stewart, Diseases of the Nervous System. \$4.00.

Wilks, Lectures on Diseases of the Nervous System. \$6.00.

Wood, Nervous Diseases and their Diagnosis. Cloth, \$4.00. Sheep, \$4.50.

Parish, Alcoholic Inebriety. Paper, 75 cents. Cloth, \$1.25.

Galton, Natural Inheritance. \$2.50.

Mercier, Sanity and Insanity. \$1.25.

Obersteiner, Anatomy of Central Nervous Organs. \$6.00.

Levinstein, Morbid Craving for Morphia. \$3.25.

G. P. PUTNAM'S SONS,

27 AND 29 WEST TWENTY-THIRD STREET, NEW YORK.

Charcot, Spinal Cord. \$1.75.

Corning, Brain Rest. \$1.00.

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

LEA BROTHERS & CO.,

706 AND 708 SANSOM STREET, PHILADELPHIA Savage, Insanity and Neuroses. \$2.00.

Hamilton, Nervous Diseases. \$4.00.

Mitchell, Diseases of the Nervous System. \$1.75.

WILLIAM WOOD & CO., 56 AND 58 LAFAYETTE PLACE, NEW YORK.

Blandford, Insanity and its Treatment. \$4.00. Branewell, Diseases of the Spinal Cord. \$6.00. Rosenthal, Diseases of the Nervous System. \$5.50. Ross, Diseases of the Nervous System. \$4.00. Starr, Familiar Forms of Nervous Diseases. \$3.00.

D. APPLETON & CO., 1, 3, AND 5 BOND STREET, NEW YORK.

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

Spitska, Insanity; Its Classification, Diagnosis, and Treatment. \$2.75.

Beard, Nervous Exhaustion. \$2.75.

Corning, Headache and Neuralgia. \$2.75.

Wright, Inebriism from the author, Bellefontaine, Ohio. \$1.50.

Wallit Lough, and Opium Inebriates.



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

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

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

All letters and inquiries should be addressed,

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

Vino-Kolafra.

IN THE TREATMENT OF DRUG HABITS.

ALCOHOLISM, MORPHINISM, COCAINISM, CHLORALISM.

Dr. T. D. Crothers of Hartford, Conn., editor of the Journal of Inebriety, in a recent editorial says:

"VINO-KOLAFRA has been used as an antidote to the poison of alcohol and some authorities have called it a specific. Its greatest value is in replacing spirits and lessening the suffering which follows the withdrawal of the drugs. In all probability it can be used to advantage in other drug addictions."

These conclusions are based upon tests made by Dr. Crothers with patients in the hospital for alcohol and opium inebriates, of which he is in charge.

Other physicians in hospitals and in private practice report similar results.

THE BRUNSWICK PHARMACAL COMPANY,

92 William Street, New York.

Vol. XIX. -17

ARETHUSA SPRING WATER

Purest of Table Waters.

FLOWS from a side hill at Seymour, Conn., free from all contaminating surroundings. A truly remarkable water, soft and pure, containing but $\frac{1}{2}$ of 1 per cent. of mineral matter, most all of which is soluble.

Prof. Chittenden of Yale University has made an analysis of "Arethusa" which we are very glad to mail to anyone on application.

"Arethusa" is sold only in glass. Still in one-half gallon bottles and five-gallon demijohns.

Carbonated, in pints and quarts.

The still or natural water is indicated in kidney and bladder troubles.

Carbonated indicated in dyspepsia, diseases of the stomach, and nausea.

Pure water is nature's remedy. If any special drug is indicated, you can use it with "Arethusa" to great advantage.

Our offer of a case of water to any physician in regular practice is open for acceptance.

ARETHUSA SPRING WATER CO., SEYMOUR, CONN.

HOMEWOOD RETREAT,

Guelph, Ont., Canada.

JOSEPH WORKMAN, M.D., Consulting Physician.

STEPHEN LETT, M.D., Medical Superintendent.

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

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

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

FOR PARTICULARS ADDRESS,

DR. LETT, GUELPH, ONT.

FALKIRK.

JAMES FRANCIS FERGUSON, M.D.

DAVID H. SPRAGUE, M.D.

On the Highlands of the Hudson, near Central Valley, Orange Co., New York. A Home for treatment of Nervous and mental diseases, and the alcohol and opium habits.

Falkirk is 800 feet above sea level; the grounds cover over 200 acres; are well shaded and command a magnificent view. The buildings are new, steam heated and lighted by gas, and the water supply is from pure mountain springs-All the rooms face the southwest, and the best methods in sewerage have been followed, and the arrangements for comfort and recreation include a sun room, steam-heated in winter, for sun-baths and indoor exercise.

Dr. Ferguson and Dr. Sprague may be consulted at their office, 168 Lexington Avenue, New York City, Tuesdays and Fridays, between 11.30 A. M. and 12.30 P. M., and by appointment, or may be addressed at Central Valley, Orange County, New York.

BROOKLYN HEIGHTS

SANITARIUM

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

For further information, address -

C. H. SHEPPARD, M.D.,

81 Columbia Heights, Brooklyn, N. Y.

Therapeutic Suggestions

How To Treat a Cough

In an able article under the above heading in the New York Medical Journal, Edwin Geer, M. D., Physician in Charge of the City Hospital Dispensary; also Physician in Chief, Outdoor Department, Maryland Maternité Hospital, Baltimore, writes:—

"The object of this brief paper is not to try to teach my colleagues how to treat a cough, but simply to state how I do it, what good results I get, and to call their attention to those lighter affections of the throat and chest the principal symptom of which is an annoying cough, for which alone we are often consulted. The patient may fear an approaching pneumonia, or be anxious because of a bad family history, or the cough may cause loss of sleep and detention from business. What shall we do for these coughs? It has been my custom for some time to treat each of the conditions after this general plan: If constipation is present, which is generally the case, I find that small doses of calomel and soda open the bowels freely, and if they do not, I follow them with a saline purgative; then I give the following:

R Antikamnia and Codeine Tablets, No. xxx. Sig.: One tablet once every four hours.

"The above tablet contains four grains and three-quarters of antikamnia and a

quarter of a grain of sulphate of codeine, and is given for the following reasons: The antikamnia has a marked influence over any febrile action, restores natural activity to the skin, and effectually controls any nervous element which may be in the case. The action of the codeine is equally beneficial, and in some respects enforces the action of its associate. The physiological action of codeine is known to be peculiar, in that it does not arrest secretion in the respiratory or intestinal tract, while it has marked power to control inflammation and irritation. It is not to be compared with morphine, which increases the dryness of the throat, thus often aggravating the condition, while its constituting effect is especially undesirable."

The London Lancet's Endorsement

"Antikamnia is well spoken of as an analgesic and antipyretic in the treatment of neuralgia, rheumatism, lagrippe, etc. It is a white powder of a slight bitter taste and alkaline reaction. It is not disagreeable to take, and may be had either in powder or tablet form, the latter in five-grain size. It is described as not a preventive of, but rather as affording relief to, existent pain. It appears to exert a stimulating rather than a depressing action on the nerve centers and the system generally."

BROMTDTA.

Formula.—Every fluid drachm contains 15 grs. each of pure Phloral Hydrat. and purified Brom. Not., and 1/8 gr. each of gen. imp. ex. Pannalis Ind. and Hyosoyam.

Dose.—One-half to one teaspoonful in water or syrup every hour until sleep is produced.

Formula.— Papine is the Inodyne or pain=relieving principle of Opium, the narcotic and convulsive elements being eliminated. One fluid drachm is equal in Inodyne power to 1/8 grain of Morphia.

Dose. For adults, one teaspoonful; for children under one year, two

to ten drops. TODTA.

Formula.—Iodia is a combination of active principles obtained from the green roots of Stillingia, Alelonias, Saxifraga, Menispermum and Aromatics. Bach fluid drachm also contains five grains Pod. Potas. and three grains Phos. Fron.

Dose.—One or two teaspoonfuls (more or less, as indicated) three

times a day, before meals.

BATTLE & CO.

CHEMISTS' CORPORATION,

St. Louis, Mo., U.S.A.

Private Home for Female Inebriates.

Dr. AGNES SPARKS receives at her residence,

140 So. Portland Ave., Brooklyn,

a limited number of women ill from ALCOHOLISM, to whom she devotes her special professional attention.

REFERENCES.

Dr. J. B. MATTISON.

Dr. ALEX. J. C. SKENE.

⇒ SYR. HYPOPHOS. CO., FELLOWS ⊱

Contains The Essential Elements of the Animal Organization - Potash and Lime:

The Oxydizing Agents — Iron and Manganese;

The Tonics — Quinine and Strychnine;

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

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

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

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

Its Action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly

into the circulation with the food products.

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

NOTICE—CAUTION.

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

As these cheap and inefficient substitutes are frequently dispensed instead of

the genuine preparation, physicians are earnestly requested, when prescribing the Syrup, to write "Syr. Hypophos. Fellows."

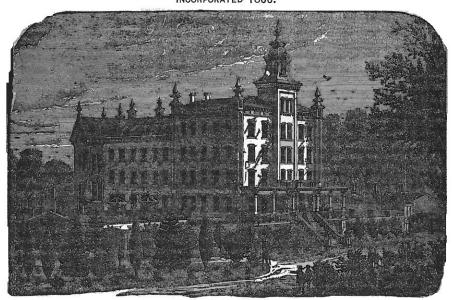
As a further precaution, it is advisable that the Syrup should be ordered in the original bottles; the distinguishing marks which the bottles (and the wrappers surrounding them) bear can then be examined, and the genuineness — or otherwise — of the contents thereby proved.

Medical Letters may be addressed to -

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

ne Inebriate's Home, Fort Hamilton, N. 7

INCORPORATED 1866.



A HOSPITAL for the TREATMENT of ALCOHOLISM and the OPIUM HABIN.

Bresident, JOHN NEVILLE.
Vice-President, M. J. KENNEDY.
Treasurer, Hon. JOHN COWENHOVEN.

Secretary and Superintendent, S. A. A IVA.
Auditor, FRANKLIN COLMAN
Physician, F. LEACH BENDER, M. D.

We are enabled to offer Board, Washing, and Medical Attendance at rates Varying from \$10 to \$35 per week.

Patients are received either on their application, or by due process of law For mode and terms of admission apply to the SUPERINTENDENT at " HOME," 89th Street and 2d Avenue, Brooklyn, N. Y., or at

HOW TO REACH THE INSTITUTION FROM NEW YORK,

Office, No. 9 Court Square, Brooklyn, N. Y.

Cross the East River to Brooklyn on Fulton Ferry boat of Bridge, and party Third Avenue electric cars to Fort Hamilton; or, cross from South Ferry on Avenue boat or by 39th Street Ferry to Brooklyn, and proceed by electric car-Mamilton. Request the conductor to leave you at 89th Street and Third Avenue Telephone Connection. P. O. BOX 42, STATION N, BROOKLYN.

HHHHAT N

"is an organic preparation, and exists preformed n the liver and other parts of animals.

"Terrate i acreddish-brown powder, odorles and tasteless; an contains about 7 per cent of iron. It is not mechanical mixture of iron salts with albumin, but, a genuine chemical cobination. The dose ranges from 5 to 15

grains, and is best given in powder, w fer, or capsule o dren it may be suspended in milks. A solution may be made with the ai odium brearbonate, and this presents some advantages in certain states of h toma h nd

Extract from page 153:

A Practical Treatise on Materia

Medica and Therapeutics.

R. Bartholow, M. A., M. D., LL.D

Professor Emeritus of Materia Medi General Therapeutics, and Hygi in the Jefferson Medical. He of Philadelphia, etc., e

1896,

. .

Ninth Edition, Revised n

"Ferratin is a combination of iron of special utility in the tit is prepared for assimilation both primary and secondary. It is readily taken and will borne by children and fastidious adults, and as a chalybeate is both prompt and efficient. As it is already in combination with albumin, it is especially adapted to the formation of red-blood globules and should therefore be employed when the relative proportion of them is too low. It has the advantage of all other preparations of iron, that they must be converted into his before being absorbed. In anaemia, chlorosis, convalescence from acute diseases, chronic cardiac and renal diseases with anaemia, and in nervous affections, it has been found most effective. That ferratin is taken up in the structure of the blood and tissues is apparent in the act that no portion of that taken, nor any product thereof, escapes by the kidneys."

ROBERTS BARTHOLOW

Clinical Reports Mailed on Request,

By C. F. Boehringer & Sochne, 7 Cedar St., New York.

