

2.82.2  
Volume 30 Number 3

*Indexed*

Subscription \$2.00 a Year

# THE JOURNAL OF INEBRIETY

ESTABLISHED 1876

THE FIRST AND ONLY JOURNAL IN THE WORLD  
DEVOTED TO SPIRIT AND DRUG NEUROSES

EDITED BY T. D. CROTHERS, M.D.

AUTUMN, 1908

<b>A Note on the So-Called Stimulating Effect of Alcohol on Protoplasm</b>	135
By W. HENRY KESTEVEN, M.R.C.S., London	
<b>Treatment of Inebriety by Hypnotic Suggestion</b>	143
By JOHN D. QUACKENBOS, M.D., New York	
<b>The Great Temperance Pioneers in the Medical Profession and Their Work for the Last Century</b>	157
By HENRY O. MARCY, A.M., M.D., LL.D., Boston	
<b>Inebriety in its Relations to Crime</b>	166
By G. FRANK LYDSTON, M.D., Chicago	
<b>Accuracy in Clinical Study of Mental and Nervous Disorders from Alcohol</b>	174
By JOSEPH M. AIKEN, M.D., Omaha	
<b>Alcohol and Moral Degeneracy</b>	182
By D. H. KRESS, M.D., Washington	
<b>Editorial</b>	191
The Work of Our Society. New Studies in the Etiology of Inebriety. Fallacy of the Statistics relating to the Mortality of Inebriety. The Temperance Federation Bureau. Action of Alcohol on the Blood Cells. Report of Work in Three Inebriate Hospitals.	

RICHARD G. BADGER, PUBLISHER, 194 BOYLSTON STREET, BOSTON  
Entered as second-class mail matter April 10, 1906, at the post-office at Boston, Mass.

THE PRINCIPAL SANITARIA OF THE UNITED STATES



# “INTERPINES”

DR. SEWARD'S HOME FOR INVALIDS

*Situated in the Village of Goshen, N. Y.*

REST        COMFORT        HOME-LIFE

Disorders of the Nervous System a Specialty, — a separate department located nearby (fifteen minutes' walk) for mild mental disorders, where the patients lead an *outdoor life on a farm*. All buildings are located amid beautiful and healthful surroundings. Write for booklet.

PHONE    117 J  
            GOSHEN

FREDERICK W. SEWARD, SR., M. D.  
FREDERICK W. SEWARD, JR., M. D.



Information may be obtained at any time from Dr. J. Perry Seward, Associate Physician, 200 West 70th Street, New York City (Phone 18 Columbus).  
Dr. F. W. Seward, Sr., or Jr., may be consulted at our New York city office, 200 West 70th Street (Phone 18 Columbus), at any time *by appointment*.

*We are in our nineteenth year*



# The Washingtonian Home

41 WALTHAM STREET, BOSTON, MASS.

## A HOSPITAL FOR INEBRIATES

THIS INSTITUTION, FOUNDED IN 1857, IS THE  
OLDEST OF ITS KIND IN THE UNITED STATES

It is conducted on a hospital plan, each patient being made the subject of special study and special treatment suited to the requirements of the case. The general plan of treatment is to build up the physical system, restoring both mind and body to a normal condition. This is accomplished by the application of Turkish, Saline, and Shower Baths, Electricity, Massage, Tonics, Diet, and every other means known to science, which by experience have been proved to be of value in these cases. Each case is under the direct personal care of the physician and superintendent, who resides in the house.

"The Home" is in charge of Dr. V. A. ELLSWORTH, who has had long experience in the treatment of inebriety.

*Terms have been reduced to ten dollars per week, payable  
in advance, which includes board and medical attendance*

HON. SOLOMON B. STEBBINS,  
*President*

V. A. ELLSWORTH, M. D.  
*Superintendent and Physician*

# Dr. Barnes' Sanitarium

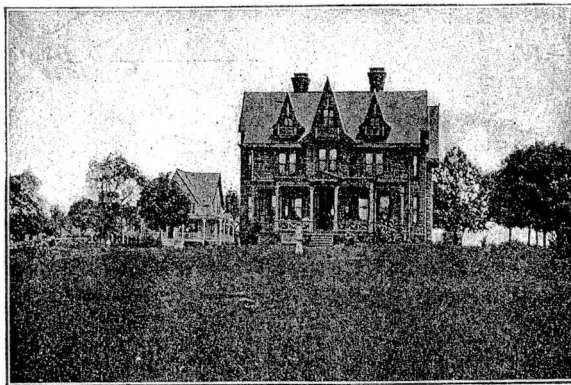
STAMFORD, CONNECTICUT

(FIFTY MINUTES FROM NEW YORK CITY)

## For Mental and Nervous Diseases

With a separate detached apartment for ALCOHOLIC and DRUG HABITUÉS. Under management of experienced, competent alienists. Splendid location, overlooking the Sound and city. Rates reasonable for excellent accommodations. Alcoholic and drug habitues can commit themselves, or be legally committed, for one year or less.

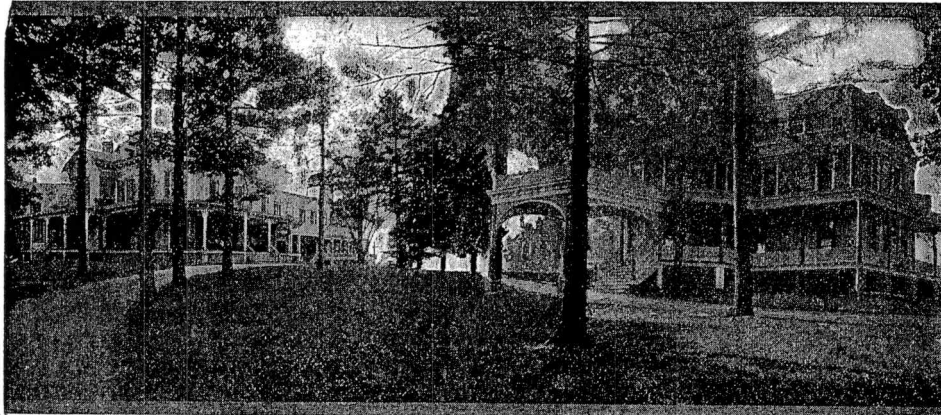
For terms and information apply to



F. H. BARNES, M. D.

TELEPHONE, 9 STAMFORD

STAMFORD, CONN.



**River Crest Sanitarium** UNDER  
STATE LICENSE  
ASTORIA, L. I., NEW YORK CITY  
**For Nervous and Mental Diseases**  
Both Committed and Voluntary Cases received

Home-like private retreat. Beautifully located in a park of twenty acres overlooking New York City. Easily accessible. Detached buildings for ALCOHOLIC and DRUG HABITUÉS. Hydropathy, Electricity, Massage. Terms moderate.

J. JOS. KINDRED, M.D., Pres. WM. ELLIOTT DOLD, M.D., Physician in Charge  
New York Office, 616 Madison Ave., Hours three to four and by appointment  
Cor. 58th St. Phone, 1470 Plaza Sanitarium Phone, 36 Astoria

**THE DR. PETTEY RETREATS**

LIMITED TO THE TREATMENT OF

**Alcohol and Drug Addiction**

958 S. 4TH ST. (Davie Ave.) MEMPHIS, TENN. 3303 PACIFIC AVE., ATLANTIC CITY, N.J.  
1849 DWINNELL STREET, OAKLAND, CALIF. 425 BROADWAY, DENVER, COLO.

These Institutions are owned and controlled by reputable physicians, and are conducted upon strictly ethical lines. They were opened and are maintained solely for the purpose of treating Alcohol and Narcotic Drug Addictions by methods based upon the original investigations of Dr. George E. Pettey, of Memphis, Tenn., and first published to the profession by him in 1901. (See Therapeutic Gazette, October, 1901.)

The method of treatment introduced by Dr. Pettey removes these addictions from the list of almost incurable diseases and renders them the most certainly and readily curable of all the chronic ailments.

For Terms Address the Retreat Most Convenient to You

Dr. S

N



CONS  
BY APP



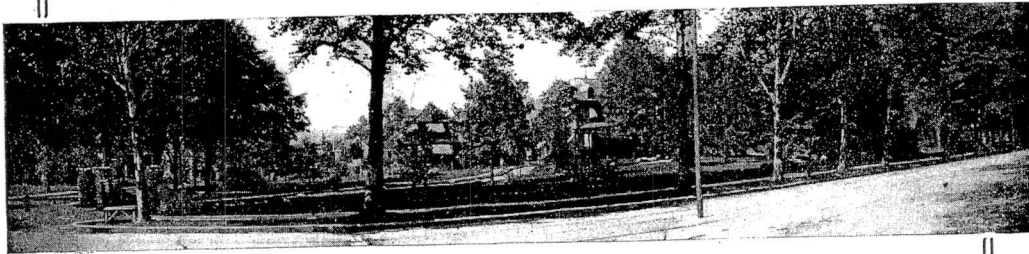
THE SA

The Battl  
habits differs c  
1. No dr  
his bondage.  
2. A pat  
tion fortified b  
for relief.  
3. No rel  
these cases. T  
to a healthy an  
hydrotherapy,  
proper regulati  
Incorrigib

# "NORWAYS"

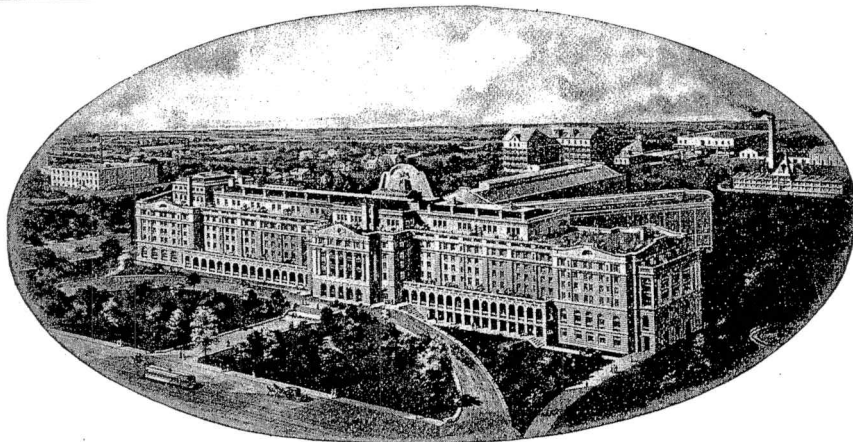
## Dr. Sterne's Sanatorium for Nervous Diseases

No. 1820 EAST TENTH STREET (FACING WOODRUFF PARK)  
INDIANAPOLIS, INDIANA



CONSULTING HOURS  
BY APPOINTMENT ONLY FROM  
10 TO 12 A.M.  
2 TO 4 P.M.

VISITING HOURS TO PATIENTS  
3 TO 5 P.M.  
TELEPHONES : OLD, WOODRUFF 1999  
NEW 290

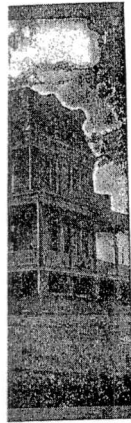


### THE SANITARIUM, BATTLE CREEK, MICH.

The Battle Creek Sanitarium System of dealing with patients who have become addicted to drug habits differs essentially from the methods in common use, and especially in the following particulars:

1. No drugs are used. They are not found necessary, and delay the delivery of the patient from his bondage.
2. A patient is not considered cured until his nervous system has been built up and his constitution fortified by the removal of the conditions which have been the occasion of his resorting to drugs for relief.
3. No reliance is placed upon hypnotism suggestion, deception, or any allied method in treating these cases. The patient is treated as one having a deteriorated organism which requires to be restored to a healthy and normal state. This is accomplished by a combination of physiologic measures in which hydrotherapy, phototherapy, and electrotherapy play a very important part in combination with a proper regulation of the diet, and such mental and moral discipline as may be needed.

Incorrigible, offensive, and insane patients are not received.



NDER  
LICENSE

S

York City.

in Charge  
ntment  
e, 36 Astoria

ATS

n

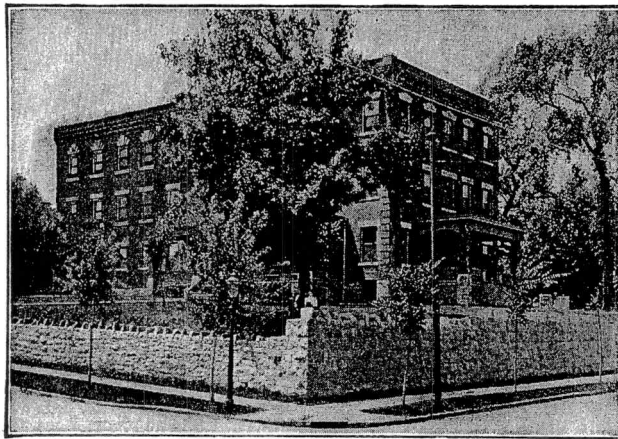
: Crry, N.J.  
OLO.

hysicians,  
d and are  
: Drug  
Dr. George  
on by him

addictions  
st certainly

You



**DR. BURNETT'S PRIVATE HOME**

An aristocratic Sanitarium for Mental and Nervous Diseases, Drug, and Alcohol Habits.

Separate apartments for each; 52 rooms; 13,000 sq. feet polished floors; 6 complete baths; electric light bath on each floor; modern.

Dr. Burnett's preferred method of Morphine treatment; other methods by request. Every case receives Dr. Burnett's personal attention.

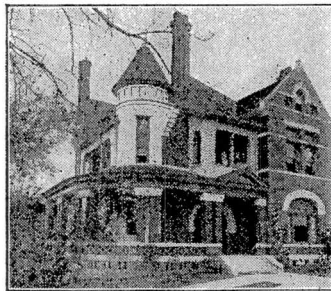
**References by Permission**

T. D. Crothers, M.D., Hartford, Conn.; William J. Morton, New York City; Graeme H. Hammond, M.D., New York City; Frederick Peterson, M.D.; New York City; William L. Leszynsky, M.D., New York City.

Dr. S. GROVER BURNETT, Superintendent and Proprietor  
Clinical Professor Nervous Diseases, University Medical College; formerly Assistant Superintendent L.I. Home of New York for Mental and Nervous Diseases and Inebriates.

Dr. J. ELLIOTT ROYER, Assistant Physician

Address 3100 EUCLID AVENUE, KANSAS CITY, MISSOURI

**Dr. Moody's Sanitarium**

EXCLUSIVELY FOR NERVOUS AND MENTAL DISEASES  
DRUG AND ALCOHOLIC ADDICTIONS

Treatment Modern, Scientific, and Strictly Ethical

Seven acres of beautiful shade and lawn, two main buildings 200 feet apart, and two isolated cottages, all comprising about 70 rooms with new complete steam heating system, electric lights, hot and cold water and artesian city water supply; all the comforts and privacy of home.

Address, G. H. MOODY, M. D.

(For 6 years assistant physician to State asylums at San Antonio and Austin, Texas.)

315 Breckenbridge Avenue, San Antonio, Texas



NEW WEST HOUSE  
ATTRACTIVE ROOMS, SINGLE OR EN SUITE,  
WITH OR WITHOUT PRIVATE BATH.



NEW GYMNASIUM AND RECREATION  
BUILDING, BILLARDS, PHYSICAL CULTURE  
APPARATUS, SHOWER BATHS, ETC.

**THE WILWAUKEE SANITARIUM**  
For Nervous and Mental Diseases

Established in 1884

¶ Situated in the beautiful suburb, WAUWATOSA, WIS. ¶ The new buildings and other improvements recently made, together with the well-known facilities previously in use, provide an equipment of great completeness. As especial merit is the wide separation of the FIVE different houses, giving individualized treatment and environment for all. ¶ Ideally beautiful grounds (22 acres) "set on a hill." Modern bathhouse. All approved uses of water, electricity, heat, light, etc. ¶ The Sanitarium is secluded, yet convenient of access. On C. M. & St. P. R'y, two and one half hours from Chicago; fifteen minutes from Milwaukee. Two lines street cars, five minutes' walk from all cars. CHICAGO OFFICE, Venetian Building, 34 Washington Street, Wednesdays hours 2 to 4 (except July and August). (Telephone connections.) Address, DR. RICHARD DEWEY, Medical Superintendent, Wauwatosa, Wisconsin



NEW ANNEX  
(F. H. PROOF)  
PSYCHIATRIC HOSPITAL, MOST RECENT  
APPLIANCES, CONTINUOUS BATHS  
SEPARATE GROUNDS.

For Treat

Well equip  
inebriety, drug  
of skilled wom  
movements, et  
A strictly ethic

For pa

Long Distance

**RIVERVIEW**

A select pri  
quiet restful su  
and varied, and  
modern conveni  
ful sunny room  
Hudson River  
massage, and el  
Long Distance



ME

Sanitarium for  
all Diseases,  
Bad Habits.  
Rooms for each;  
feet polished  
baths; electric  
floor; modern  
gas preferred  
for treatment;  
by request.  
See Dr. Bur-  
ton.

Permission  
M.D., Hart-  
m J. Morton,  
Graeme H.  
New York  
erson, M.D.;  
William L.  
New York

Director  
of Superintendent  
of Nurses.

Sanitarium

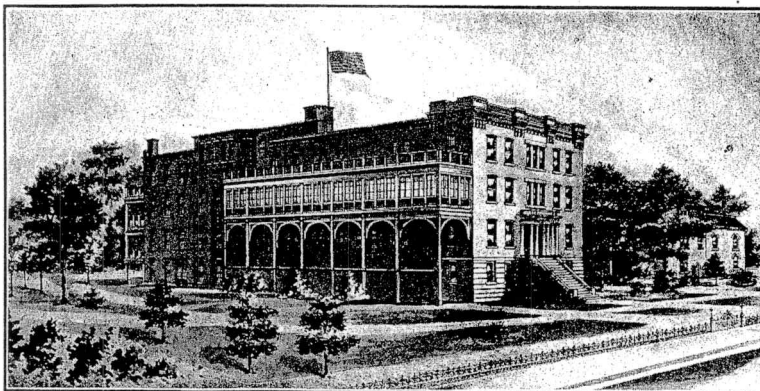
ALL DISEASES  
Very Ethical  
Large buildings 200  
about 70 rooms  
lights, hot and  
comforts and

San Antonio  
Texas



Improvements re-  
sulting in complete-  
ness of treatment and en-  
joyment.  
All approved  
methods. On C. M. &  
street cars, five  
times a day. Wednesdays.  
J. W. WEY, Medical

# NEURONHURST

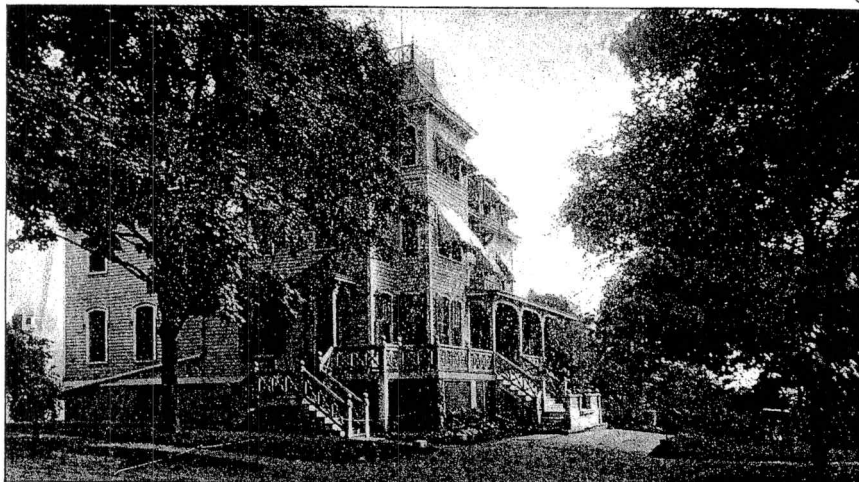


## DR. W. B. FLETCHER'S SANATORIUM

*For Treatment of Mental and Nervous Diseases, including Legally Committed and Voluntary Cases*

Well equipped with all facilities for the care and treatment of all forms of mental and nervous diseases, inebriety, drug addiction, and those requiring recuperation and rest. Gynecological department in charge of skilled women physicians. All approved forms of Hydrotherapy, Balneotherapy, Massage, Swedish movements, etc. All forms of electrical treatments. Phototherapy, High Frequency and X-ray work. A strictly ethical institution. Correspondence and physicians invited.

*For particulars and terms address* DR. W. B. FLETCHER or DR. MARY A. SPINK,  
Long Distance Telephone 381 1140 East Market Street, Indianapolis



## RIVERVIEW SANATORIUM, FISHKILL-ON-HUDSON, N. Y.

Under State License

A select private home for nervous invalids, mild mental disorders, alcoholics, and drug habitues, amid quiet restful surroundings. A detached cottage for suitable cases. The drives are particularly attractive and varied, and facilities afforded for croquet, tennis, and other diversions. Thoroughly equipped with all modern conveniences and easy of access via N. Y. Central and Hudson River R. R. Large verandas, cheerful sunny rooms, including a sun-parlor, are features of the place. Beautifully located, overlooking the Hudson River and Fishkill Mountains. All approved methods of treatment used, including diet, baths, massage, and electricity. Address physician in charge.

Long Distance Telephone 25-L.

JAMES R. BOLTON, M.D., Fishkill-on-Hudson, N. Y.

# RIVER PINES

A COTTAGE SANATORIUM FOR THE  
**Treatment of Tuberculosis**  
 LOCATED AT STEVENS POINT, WISCONSIN

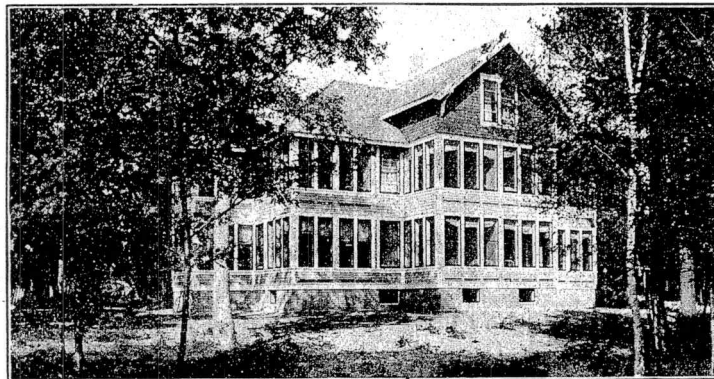
DR. THOS.  
H. HAY

RESIDENT  
MEDICAL  
DIRECTOR

MILWAUKEE  
OFFICE

314 GOLDSMITH  
BUILDING

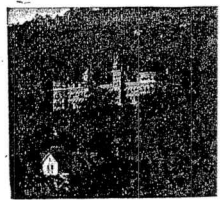
DR. H. E.  
DEARHOLT



MAIN DORMITORY

**E**IGHT BUILDINGS thoroughly equipped and built expressly for the treatment of tuberculosis (pulmonary, post-operative, and closed surgical cases). ¶ Each sleeping-room is open on two sides, faces the south and opens into warmed dressing-rooms by doorways wide enough to pass beds without disturbing the occupants. ¶ Situated in a beautiful twenty-five acre park, removed from the noise and dust of travel ¶ Physician constantly in attendance. ¶ Nursing by graduates with special training and chosen for temperamental as well as professional qualifications. ¶ Auxiliary tuberculin treatment in selected cases. ¶ The diet is carefully supervised and is designed to tempt the appetite to the utmost. ¶ The sanatorium is characterized by a more intimate association of the medical director with his patients than is common — by the attempt to win patients to a realization of the attractiveness of a hygienic life, and away from the habits and attitudes that have been responsible for the disease. *Rates: \$25 to \$30 per week include all "extras" except personal laundry.*

REFERENCES AND FURTHER INFORMATION ON REQUEST



## THE JACKSON HOTEL

Dansville, Livir

FIFTY YEARS OF EXCELLENCE  
 During which the Jackson Hotel has built up a reputation for  
 A MAGNIFICENT HEALTH RESORT  
 Second to none, considering what one should go to secure the  
**THE WEALTH OF EXCELLENCE**

In the care and treatment of patients for more than fifty years of beautiful scenery, pure air, and excellent conditions, especially for the treatment of tuberculosis. **NEW FREPP** equipment with every modern therapeutic method and condition making it a **WORLD-WIDE** reputation held for years when considering the place.

SEND YOUR NAME and special literature will be immediately forwarded. Make yourself familiar with movement being carried on at Health Resort. Address **J. ARTHUR JACKSON**

## Crest GREEN

A quiet refined  
Diseases. No  
sc

H.

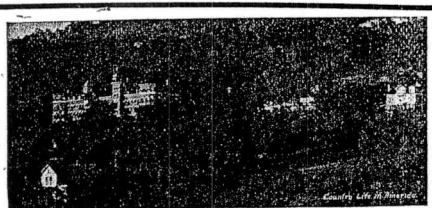
## The Arlington

FOR THE TREATMENT OF TUBERCULOSIS AND MALARIA  
 Under State License

Elevated location.  
Boston. Cottage  
patients

SPECIAL AT  
PHYSIOLOGIC AND  
For booklet address

A. H. RICHMOND  
ARLINGTON  
Telephone 81-3 Arlington



### THE JACKSON HEALTH RESORT

Dansville, Livingston Co., N.Y.

#### FIFTY YEARS OF EXPERIENCE

During which the Jacksons and their associates have built up a reputation and materially A **MAGNIFICENT HEALTH INSTITUTION**

Second to none, counts for much when considering what one should do and where one should go to secure health.

#### THE WEALTH OF EXPERIENCE

In the care and treatment of invalids, continuous for more than fifty years; the environment of beautiful scenery, unusually good climatic conditions, especially valuable spring water; a great **NEW FIREPROOF MAIN BUILDING**, equipped with every advantage for administering Modern Therapeutics, complete a situation and condition most desirable for invalids.

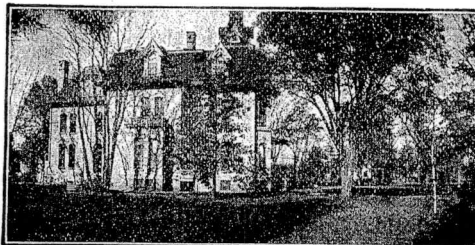
#### A WORLD-WIDE

Reputation held for **FIFTY YEARS** means much when considering the value of a method or a place.

**SEND YOUR NAME** and a request for general and special literature and illustrations and these will be immediately forwarded.

Make yourself familiar with the great health movement being carried on at the Jackson Health Resort. Address,

J. ARTHUR JACKSON, M.D., Sec. and Mgr.



### DR. BROUGHTON'S SANITARIUM

For Opium and other Drug Addictions, including Alcohol and Special Nervous Cases.

Methods easy, regular, humane. Good heat, light, water, help, board, etc. Number limited to 22. A well kept home

R. BROUGHTON, M. D.

2007 So. Main Street, Rockford, Ill.

Telephone 536

## Crest View Sanitarium GREENWICH, CONNECTICUT

A quiet refined home for the treatment of Chronic and Nervous Diseases. No violent cases admitted. In the midst of beautiful scenery, twenty-eight miles from New York.

H. M. HITCHCOCK, M.D.

### The Arlington Health Resort

FOR THE TREATMENT OF NERVOUS, PSYCHOPATHIC AND MILD MENTAL CASES

Under State License

Elevated location. Eight miles from Boston. Cottage plan, six to eight patients in each

SPECIAL ATTENTION TO  
PHYSIOLOGIC AND PSYCHOTHERAPY

For booklet address

A. H. RING, M. D.

ARLINGTON HEIGHTS, MASS.

Telephone 81-3 Arlington

## SAL HEPATICA

For preparing an

EFFERVESCING ARTIFICIAL

### MINERAL WATER

Superior to the Natural.

Containing the Tonic, Alterative and Laxative Salts of the most celebrated Bitter Waters of Europe, fortified by the addition of Lithia and Sodium Phosphate.

BRISTOL - MYERS CO.

277-279 Greene Avenue,

BROOKLYN - NEW YORK.



Write for free sample.

S  
is  
SIN

ly  
e,  
n  
y  
s.  
e  
g  
ll  
n  
o  
d  
s  
e  
s  
k  
-  
7  
-



## *National Association for the Study and Education of Exceptional Children*

An incorporated society, not for pecuniary profit, and devoted to the promotion of a national movement for the solution of the problem of the exceptional child.

It maintains:

a. **The Groszmann School for Nervous and Atypical Children.** MAXIMILIAN P. E. GROSZMANN, Ph.D., Director. Feeble-minded, insane, epileptic, or otherwise clearly abnormal children are not accepted.

b. **Course for Teachers of Exceptional Children.** Intended for trained teachers desiring to specialize for the ungraded classes of the Public School systems.

c. **Physiological and Psychological Laboratory.** Devoted to research on the problem of the exceptional child.

d. **Publicity Bureau.** For the distribution of literature on society proceedings and scientific monographs.

For particulars on the general scope of the Association or any of its activities, address

Secretary N.A.S.E.E.C. "Watchung Crest" Plainfield, N.J.

## The PIONEER CANADA'S GREAT JOURNAL OF .....

### Temperance, Prohibition, and Moral Reform

PUBLISHED WEEKLY BY THE DOMINION ALLIANCE ONTARIO BRANCH

THE LATEST

Doings of WORKERS  
Findings of SCIENCE  
Progress of LEGISLATION

THE BEST

CARTOONS  
ARTICLES, EDITORIALS  
STORIES, POEMS

Every Temperance Worker should have it

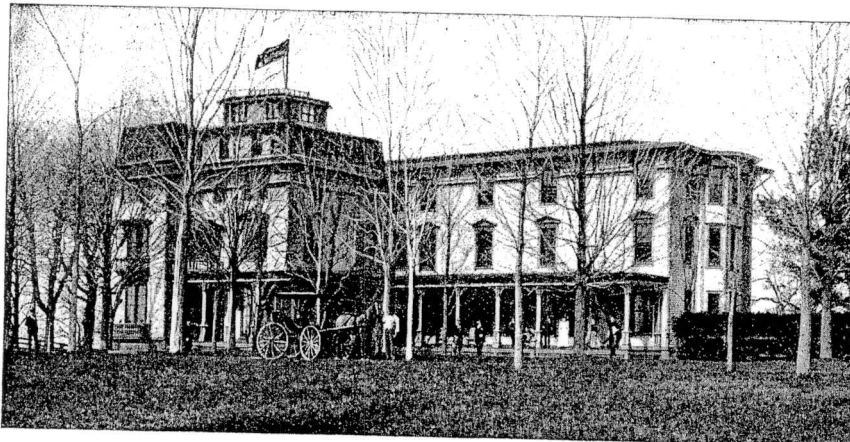
SUBSCRIPTION \$1.00 PER YEAR. Send Post Card for free Sample Copy  
52 CONFEDERATION LIFE BLDG., - TORONTO, ONTARIO

## Walnut Lodge Hospital

HARTFORD, CONN.

Organized in 1880 for the special Medical Treatment of

### *ALCOHOL and OPIUM INEBRIATES*



Elegantly situated in the suburbs of the city, with every appointment and appliance for the treatment of this class of cases, including **Turkish, Roman, Saline, and Electric Baths.** Each case comes under the direct personal care of the physician. This institution is founded on the well-recognized fact that **Inebriety is a disease and curable** and all these cases require **rest, change of thought and living**, with every means known to science and experience to bring about this result. Applications and all inquiries should be addressed

T. D. CROTHERS, M.D., Sup't. Walnut Lodge, HARTFORD, CONN.



# THE JOURNAL OF INEBRIETY

AUTUMN, 1908

## A NOTE ON THE SO-CALLED STIMULATING EFFECT OF ALCOHOL ON PROTOPLASM\*

BY W. HENRY KESTEVEN, M.R.C.S.

HAVING regard to the conflicting beliefs and statements as to the action of alcohol in the human body, it occurred to the writer that in one way — in one particular, at least — he was in a position to investigate and to see for himself the actual facts of the case, and thus to be independent of the evidence of others. This one point was the action of alcohol on simple living protoplasm as seen under the microscope. The following record of observations pursued steadily for several months seems to throw a considerable amount of light on the supposed stimulating action of alcohol.

The experiments were made upon amœbæ, as they seemed to be the best examples of simple protoplasm which were easily visible.

There are different varieties of amœbæ, but the point which makes them most useful for our purpose is the fact that although some of them are very small, and of little or no use for observation, others are decidedly the reverse. The writer has measured one such when it was extended in active locomotion, and found it to be one twenty-fifth of an inch in length, and about a quarter of that in width, that is, about one one-hundredth of an inch, other specimens only measured one five-hundredth of an inch, and others even less than that. All, however, present, according to the textbooks (Butschli, Gilbert Bourne, Calkin) an identical structure. They are said to consist of an ectoderm more or less hyaline, and

endoderm with granular appearance, in which is imbedded a nucleus or sometimes two or more nuclei. When in active condition they move from point to point by means of projections or processes of the hyaline ectoderm, into which stream the granules of the endoderm. These processes are called pseudopodia. By means thereof they attach themselves to the substances with which they come in contact, and then by contraction of the pseudopodia they move their whole body.

They find their food in the water in which they live. The ectoderm closes over nutritious particles, which then pass among the granules of the endoderm. After a time such particles are found to be enclosed in a vacuole, containing also a clear fluid, in which the particles float. These are gastric vacuoles, and it is possible to recognize among their contents a variety of different objects which have been thus enveloped by the creature, for these vacuoles grow in size and coalesce, the granular appearance of the endoderm being in truth largely due to very minute specimens of such vacuoles, several of which will attach themselves or gather round a foreign body which has been thus sequestered, and by coalescence form a vacuole large enough to contain the object and the solvent fluid secreted for its digestion. These, which may be called the secondary vacuoles, also coalesce, mingling their contents so that in the larger specimens it is easy to recognize different varieties of diatom shells, desmids, crystals, vibriones, etc. When, however, by the action of the gastric secretion, the nutritious portions of the contained particles have been dissolved out and digested, the indigestible residue is expelled by rupture of the vacuole at some point in the periphery of the body.

In the endoderm, and sometimes in the hyaline ectoderm, other vacuoles appear, from time to time, which contain only clear fluid. These, which in their earliest form, like the last described, are minute granule-looking bodies, increase in size in the same way as the others; that is to say, by coalescence until the repetition of the process causes distension beyond the retaining power of the surrounding body substance, when rupture takes place and the contents are expelled, sometimes with considerable impulsive force, as

testi  
outs  
Fo  
gest  
ures  
luti  
used  
H  
was  
eith  
blot  
drav  
dry.  
extr  
with  
and  
of th

Se  
this  
the  
T  
the  
reac  
end  
tow  
ing  
min  
mov  
Nod  
out  
cont  
the  
seen  
so n  
min  
did  
"spi

testified by the sharpness of the current formed in the water outside. These vacuoles are no doubt excretory in function.

For our purpose these three functions — locomotion, digestion, excretion — are sufficient, as they are the real measures of the vitality of the animals under examination. Solutions of alcohol in water from one per cent upwards were used.

Having fixed upon the specimen on which the experiment was to be made, as soon as it was seen to be firmly attached either to the slide itself or to the cover-glass, by means of blotting paper as much as possible of the water was withdrawn from the slide without actually leaving the specimen dry. Then the solution was allowed to take the place of the extracted water, thus drenching the animal. The process of withdrawal of the liquid was then repeated two or three times and fresh solution added until the drenching or immersion of the animal was complete.

#### *One Per Cent Solution*

Several different specimens of amœbæ were treated with this solution. The following is a description of the effect of the solution on a typical example of these.

The amœba was a medium-size one, actively moving about the field of the microscope. Immediately the solution reached it the locomotion ceased, and the granules of the endoderm stopped streaming. They massed together toward the center, the ectoderm or hyaline portion surrounding them. The animal remained stationary for seven minutes; then movement commenced in the ectoderm, movement which is best described by the word "sprawling." Nodular pseudopodia were projected in all directions, without locomotion. A vacuole in the endoderm ruptured; this contained only clear fluid. The closure of the breach and the filling up of the cavity by the surrounding walls did not seem to be slower than usual, but there did not seem to be so much "snap" as in the natural animal. After twenty minutes the granules began moving about, but feebly, and did not stream into the hyaline portion, which continued "sprawling"; after thirty minutes locomotion recommenced,

the granules streaming into the pseudopodia. At the end of an hour and a quarter vigorous locomotion was continuing, and the condition of the animal seemed to be identical with what it was before the solution was applied, although the supply thereof was kept up. In fact, the animal was now living, and evidently capable of continuing to do so in a one per cent solution of alcohol.

#### *Two Per Cent Solution*

The animal, as before, a typical example of many under observation, was streaming in an elongated shape across the field, when this solution drenched it. Locomotion immediately ceased; an irregular spherical shape was assumed, the granules streaming hither and thither, but not into the processes of the ectoderm. These the hyaline ectoderm began to form in a sprawling manner, about twenty minutes after the solution reached it. In half an hour locomotion was resumed, but feeble and sprawling in character. This continued for an hour or so. Four and one half hours later the animal was found to be quite quiescent, in spherical form, and entirely detached from the glass. No further change was detected, although it was watched for some hours.

On the same slide, four and one half hours after the addition of the solution, a very large specimen was found, which was apparently quite unaffected by the solution. It seemed quite able to live therein, but all smaller animals were either torpid or dead.

On another slide the experiment was repeated with the two per cent solution, but with no other result discoverable upon two vigorous and fair-sized amœbæ, than to produce temporary check to locomotion, followed by sprawling and irregular movements for about twenty minutes, after which living in the solution seemed to make no difference to either of them, though they were watched for eight hours.

#### *Three Per Cent Solution*

Movement of every kind suspended for seven minutes after drenching. Then the granules began to show move-

ment,  
mence  
no lo  
vacuo  
color,  
bacte  
ruptu  
of the  
to the  
was :  
short  
tinue  
excep  
cease  
being

In  
with  
resist  
minu  
comp  
to ha  
up w  
tion,  
in all

Str  
imme  
After  
podia  
then  
four  
able.  
all at  
moti  
mult  
curre  
chan  
twe  
pract



ment, and the formation and rupture of vacuoles recommenced as before immersion in the solution. But there was no locomotion. In one specimen there were two or three vacuoles containing pigmented matter, reddish-brown in color, and one that contained a clump of what looked like bacteria. This latter, about twenty minutes after drenching, ruptured, expelling its contents to a distance by the vigor of the closure of the space. After half an hour all adhesion to the glass, either slide or cover, was lost, and the amœba was floating loose, but occasionally projecting a nodular short pseudopodium, and the process of vacuolation still continued. No change took place for about twenty-two hours, except that when observed at that time the vacuolation had ceased, the animal was floating freely, no pseudopodia were being formed; it was, in fact, torpid or dead.

In some others observed the appearances were identical with that described. One only appeared to have greater resisting power, and recommenced locomotion about seven minutes after immersion; but it was jerky and irregular, compared with that of normal life. Vacuolation also seemed to have become slow; when the vacuoles ruptured the filling up was markedly deliberate. This retardation in the formation, rupture, and filling up of the vacuoles was observable in all the specimens.

*Four Per Cent Solution*

Streaming locomotion, which was going on actively, was immediately suspended on drenching with this solution. After three minutes, sprawling projection of short pseudopodia commenced, with formation of vacuoles or clear fluid, then pauses lasting for periods varying from one to three or four minutes, during which no motion of any kind was detectable. About an hour later the torpidity became more marked; all attachment to the glass was lost, only a languid sprawling motion was occasionally visible. The animal assumed a mulberry shape and appearance, rolling about in every current excited in the fluid in which it was suspended. No change took place for seven hours, and though watched for twenty-four hours the condition remained the same, and was practically that of death.

*Five Per Cent Solution*

A remarkably large specimen was found and drenched with this solution, but did not show any signs of being affected thereby for five minutes. Then locomotion quite stopped. Granular streaming became slow, sprawling set in, until about fifteen minutes after drenching, the body assumed a spherical shape, with the granules collected in a dense mass in the center, surrounded by a smooth hyaline margin. The appearance was very similar to that seen in the animal treated with one per cent solution. It was quite detached from the glass, and in a state of complete rest. By close watching, however, about half an hour from immersion some slight movement was seen among the granules at one point. Also slight variations in the outer contour noted from time to time indicated that life was still present. Vacuoles then began to appear, first in the hyaline ectoderm, then, in about forty minutes later, in the granular endoderm. About five and one half hours from immersion there was a formation of sprawling pseudopodia, the granular streaming being exceedingly slow. This condition without any locomotion continued for about sixteen hours, and then became more vigorous with sprawling locomotion, and in about two hours more — that is, in eighteen hours from immersion — the creature seemed quite recovered and as vigorous as in simple water.

This, however, was the only specimen that recovered; six other specimens, none of them so large, were examined, and all were undoubtedly dead in three or four hours, though watched for much longer.

*Six Per Cent Solution*

Immediate arrest of all motion. In about twenty minutes after drenching, it was a freely floating, irregular, spherically shaped mass, all connection with the glass having been lost, although it had been gliding along it with the regular streaming movement just before being drenched with the solution. In this condition, with absolutely no sign of life, it remained for six hours. At that point of time the alcoholic solution

in which it  
dinary water  
the end of to  
alcohol seen  
for when the  
gravity of th  
by the fact  
cover-glass,  
therewith;  
creatures ar  
times after  
in the large  
cover-glass.  
with vacuol

In another  
was seen,  
peculiar sh  
hyaline por  
the granula  
some hours  
vacuoles.  
was practic  
specimen w  
exception c  
and what v  
motion in  
drenching  
tained. It  
as it was n  
that it was  
alcohol is  
tolerating,  
practically

This wa  
attached to  
the project  
inal axis.

in which it floated was withdrawn entirely, and for it ordinary water from its native tank was substituted. But at the end of ten hours later there was no sign of change. The alcohol seems to have penetrated deeply into the bioplasm, for when the water took the place of the solution, the specific gravity of the body was less than that of the water, as shown by the fact that it floated against the under-surface of the cover-glass, rolling about with every current, in close contact therewith; whereas, when first discovered in the water, these creatures are always resting on the slide itself, though sometimes after they begin to project pseudopodia some of these in the larger specimens adhere to the under-surface of the cover-glass. This specimen was a large and vigorous one, with vacuoles both digestive and excretory.

In another specimen treated with the same solution there was seen, following the arrest of voluntary movement, a peculiar shrinkage, the effect of which was to cause the hyaline portion of the body to appear almost to separate from the granular endoderm. In this latter there was observed for some hours a slow and irregular formation and rupture of vacuoles. But the result as to regaining activity and vitality was practically the same as that described above. This specimen was watched for about sixty hours, and with the exception of the formation of vacuoles, mentioned above, and what was thought to be a slight attempt at sprawling motion in the hyaline part, about twenty-four hours after drenching with the solution, no signs of recovery were obtained. It might have been alive at the end of this period as it was not tested with return to pure water. Admitting that it was still alive, it would appear that six per cent of alcohol is really more than these creatures are capable of tolerating, and if it be not fatal to them yet renders them practically useless from deep torpor.

*Seven Per Cent Solution*

This was a large-size specimen, streaming along firmly attached to the slide, occasionally changing its direction, by the projection of pseudopodia, at various angles to the original axis.

In it there was one conspicuously large vacuole among several others in the endoderm. This large vacuole contained a solid spherical granular mass, which slowly revolved by independent motion within the vacuole.

Directly the animal was drenched with the solution it stopped its locomotion, nor did it again exhibit that power. The mass enclosed in the large vacuole continued to revolve for some ten minutes after all other motion has apparently ceased. There were other vacuoles, smaller, and containing clear fluid — excretory — or fluid with a few granules which might be the remains of some absorbed material. About six hours later all these smaller vacuoles had discharged, and therefore disappeared. The large one was left, but the granular mass within it was disintegrated, and seemed to fill up a space. The hyaline ectoderm had become more distinct from the granular endoderm, but otherwise there was no change. It was watched for forty-eight hours, but was evidently dead, though preserved by the spirit from active decomposition.

Several other experiments were made with this solution, but the result was the same in all, death being practically caused immediately the animal was drenched.

#### *Conclusions*

No stronger solutions were used. It was evident that although these animals could live in solutions of alcohol which did not exceed five per cent, yet that the effect upon them was in all cases the same; it being simply a question of the degree of paralysis induced. There was absolutely no sign of any stimulating effect. Torpor, followed in many cases to which the weaker solutions were applied by what is known as alcoholism, was the rule; and if life was maintained, it was rarely as vigorous as before the alcohol was added to the medium in which the creature was living.

TREA

JOHN D  
OG

I HAV  
the  
tio  
esp  
amenabl  
The pl  
of self-m  
— a thec  
spheres ;  
and the s  
or better  
is that d  
man.”

best, of  
organs o  
sublimin  
whole pu  
such con  
where it  
personal  
larities in  
by assur  
diseases  
sublimin  
mind —  
propensi  
trollable  
clusively  
liminal s  
dictates  
in which  
men to w  
the mora

So ma

\*Address



## TREATMENT OF INEBRIETY BY HYPNOTIC SUGGESTION\*

JOHN D. QUACKENBOS, M.D., EX-PROFESSOR OF PSYCHOLOGY IN THE COLUMBIA UNIVERSITY, NEW YORK

I HAVE been requested to discuss before you this evening the treatment of the drink habit by hypnotic suggestion; and I shall consider the question with reference especially to the technic, the class of cases that are amenable, time limits of treatment, and permanency of cure.

The phenomena of suggestion are explicable on the theory of self-manifestation in two distinct spheres of consciousness — a theory now generally accepted by psychologists. These spheres are distinguished as the objective or supraliminal, and the subjective or subliminal. The subliminal, superior, or better self — the pneuma or spirit of the New Testament — is that deathless entity that constitutes the true or “inner man.” The objective self is the expression, imperfect at its best, of this subliminal soul through “the flesh,” that is, organs of body and faculties of mind. The possibilities of subliminal control are boundless in the objective life, and the whole purpose of hypno-suggestion is the establishment of such control, either where it has become relaxed or in fields where it has not before been exercised. So long as the subpersonal mind quickens sound organs, all defects or irregularities in the fulfilment of their functions may be remedied by assumption of the natural psycho-physical control, and so diseases that are not organic are curable by appeal to the subliminal self. Still further, all attitudes of the objective mind — its trends of thought, opinions, beliefs, desires, propensities, tendencies, emotions, and passions — are controllable and alterable by this higher human personality, exclusively along lines that are moral and true. For the subliminal self of man, *per se*, is that principle in us which dictates what is right and inclines to good — that “spirit” in which, or under whose control, the Apostle Paul urges men to walk in order that they may neither be condemned by the moral law nor bound by the law of ceremonial.

So man in his higher personality is adequate to the extirpa-

\*Address before the World's Temperance Congress at Saratoga, N. Y. June, 1908.

tion from his objective nature of any abnormal craving or passion, like the craze for intoxicants. The latter is singularly responsive to treatment by suggestion. In fact, many of the popular drink cures are in reality mere suggestion cures, there being no peculiar virtue in the drugs administered, as there is no specific for the cure of drunkenness. The temporary success occasionally met with is due entirely to suggestive action on a susceptible patient anxious for relief. The glamour of mystery plays its part in the process, and thus the charlatan differs from the regular physician who operates on the psychic centers with the full consent and knowledge of the patient.

The notable increase in the consumption of stimulants, especially among the upper classes, estimated at ten per cent during the last decade in the case of men, and a much larger percentage in that of women, is inviting anxious attention to a means of treating the victims of alcoholic inebriety, for which so much has been claimed in this country and abroad. One billion five hundred million dollars are spent annually in the United States for intoxicating drinks, and another billion five hundred million for the relief of the destitution, the punishment of the crime, and the care of the physical and mental diseases that result directly from the drink habit. Especially alarming is the growth of the practice among our women. When the American woman gives herself up to anything, she pushes her devotion to the utmost limit. She makes a god of her very religion; and if she affects a habit she affects it in the superlative degree. I have treated ladies whose weekly bill for champagne alone exceeded one hundred dollars. The punch-bowl figures at all functions, and proud-pied women dip freely therein, ten drinking to-day where one drank a dozen years ago. School misses and college girls are conspicuous among the throng. Such has become the vogue; and worse than this, girls in their teens see no impropriety in drinking publicly with men companions. Flushed with alcohol, they are likely to forget the restraints of modesty. Root passions spring into expression, the conversation tends to subjects which should not be named in decent society, and when the constraints of self-respect break down with the moral elements of the brain cells, gross

indisc  
unobt  
place  
unwor  
society  
in the  
pointe  
hands  
men st  
Ma  
use of  
alcohol  
first d  
boozes  
whiske  
few of  
wine d  
increas  
sluggis  
schools  
philant  
to the  
degener  
arteries  
monia  
the mo  
in the  
being d  
spring  
degener  
so appa  
greatest  
tions.  
And v  
Anythin  
beer. I  
than the  
perance  
sumptio  
and dist

indiscretions are a natural consequence. The abstinent, unobtrusive young woman of the past generation is giving place to a coarse and boisterous bon-vivant, controlled by unworthy impulses, and wholly unfit to fulfil her function in society as an inspirer to meritorious action, or her function in the home as a character-former and a wife. Some one has pointedly said that the moral interests of the nation are in the hands of women, and the only way by which women can lead men straight is to be straight themselves.

Many women have lapsed into the drink habit from the use of patent medicines containing large percentages of alcohol. Many a clergyman can date his downfall from his first dose of Jamaica ginger. The step from "disguised boozes" (upon which \$75,000,000 are annually expended) to whiskey, their main constituent, is more than easy. Not a few of our school children also have become beer and even wine drinkers, especially those of foreign parentage, and the increasing prevalence of this habit is leading to a mental sluggishness, if not defect, among the pupils of the public schools that is attracting the attention of educators and philanthropists. In few, the prevalent wholesale addiction to the use of alcoholic stimulants — with its accompanying degenerations of kidney, brain, heart, liver, stomach, and arteries, its pernicious influence in the causation of pneumonia and tuberculosis; its direct action in increasing the mortality rate in the case of all diseases; the part it plays in the induction of insanity, one third of all mental affections being due to its abuse; and its tendency to transmit to offspring not only epilepsy and mental defect, but marked degeneracy and criminal propensity, is assuming proportions so appalling that it may justly be regarded as perhaps the greatest existing menace to the stability of American institutions.

And what is it that the mass of our people are drinking? Anything and everything but *pure* whiskey, *pure* wine, *pure* beer. It is a poison far deadlier and more rapid in its action than the genuine articles. This fact is ignored by the temperance reformer and often by the physician. The consumption being greatly in excess of the ability of the brewers and distillers to produce wholesome beverages, notorious



adulterations are resorted to. About fifty million barrels of malt liquors represents the yearly output of the United States. Much of this, to meet the demands of trade, is sold when new and imperfectly fermented, and a great deal of sickness is the result. Beer should be stored in cool cellars (*lager* means a storehouse) for from five to eight months before it is fit for consumption; little of the beer sold is properly aged. Besides, the beer drinker in this country has to run the gauntlet of various preservatives, especially formalin, with its destructive action on all the organs; of artificial bitters, like salicin, strychnia, and aloes; of the well-known excito-motor pierotoxin, the active principle of *cocculus indicus*, which has narcotic as well as stimulating properties and is used to impart both bitterness and headiness; and of grains of paradise, or Malagueta peppercorns, which give a hot, strong flavor and provoke thirst, so that the more beer the consumer drinks the more he wants.

Intoxicating liquors are as liable to adulteration; but it must be conceded that it is the raw alcohol as well as the admixtures that causes the chronic catarrh of the stomach, the Bright's disease, the arterio-sclerosis, the palsies and ataxias, the nervous bankruptcy, and the moral degradation of the dram drinker. Good rum as well as bad rum will, when used to excess, gradually convert the different organs and tissues of the body into specimens of degeneration and disease. Bad rum is more prompt in its action, and *almost all the rum that is retailed is bad*. It is the practice of the liquor dealer to stock his cellar with casks of cheap methylated spirit or amylic ether (commonly known as fusel oil), a chemical compound which has been ascertained to produce poisonous effects in a proportion fifteen times greater than ordinary ethyl alcohol, the common stimulant. He then provides himself with a full line of laboratory-made essences — brandy essence (consisting of oil of grapes, acetic ether, allspice tincture, and alcohol), rum essence (composed of butyric ether, acetic ether, vanilla tincture, essence of violets, and ninety parts alcohol), gin essence, hot-drop essence, whiskey essence, etc., and in accordance with the instructions of a handbook furnished by the essence manufacturer proceeds to make from the same barrel of crude grain spirits,

by th  
essenc  
The s  
malt  
Medf  
peach  
of the  
one h  
sixty  
one h  
from  
imita  
fusel  
with  
matu  
gener  
hardl  
hund  
only  
that  
ether  
whet  
river  
misu:  
mora  
adop  
in ur  
the h  
prese  
and a  
TH  
repre  
and c  
Fo  
popu  
trial  
carot  
drinl  
sively  
reasc

by the addition of the prescribed quantity of the several essences, what he advertises over his bar as *pure liquors*. The same barrel gives birth to Bourbon, rye, wheat whiskey, malt whiskey, Scotch and Irish whiskey, Jamaica and Medford rum, Schiedam-schnapps, and Old Tom, cherry, peach, apple, blackberry, and cognac brandy. The cost of the amount of essence required to manufacture in this way one hundred and twenty gallons of cognac, one hundred and sixty gallons of gin, forty gallons of any kind of rum, and one hundred and sixty gallons of any kind of whiskey, varies from three to four dollars. Such are the cheap artificial imitations of distilled spirits, the frightful compounds of fusel oil and whiskey essence, the saloonkeeper palms off with impunity upon the habitués of his cabaret. Properly matured ethyl alcohol or unadulterated whiskey, itself a de-generator of the protoplasm of the brain and nerve cell, is hardly obtainable in an American bar-room. Of every hundred drinks sold in the United States as whiskey to-day, only one is really whiskey; but so clever is the counterfeit that club connoisseurs have failed to detect it. Amylic ether, or the common whiskey of trade (and it matters not whether it is dispensed by a bishop or a bravo) is the "death's river" setting in resistless current toward murder, robbery, misusage of women, paresis, and the asylum. Whatever moral, social, or legislative measures may eventually be adopted looking to the suppression of the drink habit, we are in urgent need of power to restrain in appropriate institutions the habitual drinker of methylated spirits, who is, under the present condition, a danger to himself, a curse to his family, and a nuisance to the state.

The following case of a gentleman who drank whiskey is representative both of the alcoholic disease and its causation, and of the method pursued.

Four years ago, Mr. A., who had vainly resorted to the popular drink cures, was induced by his friends to make trial of psychic treatment. Beginning as a college boy to carouse with his mates, engaging in contests to see who could drink the most beer in the shortest time, he passed successively through the stages of occasional use for convivial reasons, frequent indulgence to brace him for task or pastime,

periodical paroxysms of alcoholic debauchery, until at forty he found himself a continuous drinker impelled by an irresistible and insatiable craving, with marked stigmata of degeneration and a growing incapacity for professional duty. His wife and daughters, for years subjected to constant humiliation at his hands, had come to feel the pinch of want, and smarted under the construction placed upon his actions by a merciless society. Affection had died in his heart, and with it both self-respect and religious sense. In such a case, at least a year is usually required of forced feeding and restricted activity to repair the damaged brain cells and so restore the patient to normal efficiency. But within a week the mental attitude may be permanently changed and the craving for stimulants obliterated, without experience of the nervous exhaustion and unrest that usually accompany discontinuance of the habit. Since his first seance (now five years ago) Mr. A. has experienced no desire for alcohol. The suggestion was given that he would no longer deceive himself with the thought that he could safely take one drink and then stop, but that it was impossible for him ever to want a drink or ever to take a drink for any conceivable reason. He has abstained, not through conscious effort, but spontaneously because of an ingrained disinclination to drink, conditioned by subpersonal control. In this instance it was further necessary to forbid the use of tobacco, the inhalation of which in the form of smoke, by depressing the nerve centers and thus creating an imperious demand for its antidote (whiskey) explains seventy-five per cent of all the cases of dipsomania. The chain of cause and effect was broken at a blow. The patient neither smokes nor drinks. And he has made amends for the suffering he inflicted on his family by exalted action meriting their respect and love. His pastor (Dr. Hillis, of Plymouth Church), writes of him: "His face is all but transfigured. I have never seen a man so happy or more grateful."

In contrast with the foregoing is the following extreme case of chronic poisoning by methylated spirit (fusel oil) excessively indulged in between the ages of sixteen and thirty-seven. Every Saturday night W. B. drank to intoxication, and committed other excesses that fill his mind with remorse,

so that his condition borders on theomania. He imagines the people riding on the car with him know all that he has done, and that the children on the street are cognizant of his misdoings and are calling him names significant thereof. He is afraid of everything. He suffers from hallucinations of vision. A woman with a baby carriage is forever following him. He sees green flashes in the dark, and men going through various motions, and cats flying in his face. Flies attend him everywhere, hovering about, showing him how to use his tools, etc. He does not know the difference between a real and an imaginary fly, and continually shoos the latter variety. Three separate voices talk to him, coming up the dumb-waiter shaft or speaking through the window. They never "let up," even while he is at work, and at times seem so real that he looks around to see who is speaking. One voice will keep repeating some message, laying stress principally on his sins. If he is reading a paper, it reads ahead of him. He hears people shouting, "Here comes the fellow with the white hat on!" Three years ago his mind gave way, and he took a flat-iron and went upstairs to kill a man who was calling him vile names, the man being perfectly innocent. He rallied from this seizure, but returning to his fusel oil, he has become subject to melancholy spells and to attacks of amnesia so that he loses his sense of identity for days at a time.

This is not a common case of three sheets in the wind, but rather of a noble brought to ninepence through incurable degeneration of the brain. There is no hope for such a victim in mental thereology.

By means of the enlightened employment of hypno-suggestion, the transliminal self of the ordinary inebriate may be placed in control. So it is no longer a valid argument for a man to hold that he gets drunk because he cannot help it. Statistics show that the treatment of alcoholic subjects by suggestion (in this country and abroad) gives at least seventy-five per cent of radical cures. All other known methods have never given more than thirty per cent.

Dipsomaniacs, as a rule, are easy subjects, in that they yield readily to the hypnotic influence, and accept unconditionally the suggestions communicated by the operator.



Regular drinkers may be dealt with whenever they can be induced to sober. Periodic drinkers should be treated just before the close of the cycle of sobriety. Regularly recurring debauches have periods of varying length, the longest in my experience being three years; and I have satisfied myself that in many instances a relationship exists between the abuse of tobacco and the oncoming of the irresistible thirst, the depressing effects of the nicotine instinctively suggesting recourse to the antidote. Periodic drink storms are usually forecast by significant indications well known to the family and friends of the victim — irritability of temper, unreasonable suspicion, so-described "cranky spells," abnormal restlessness, unaccountable depression. Immediately upon the appearance of these symptoms the patient should be treated by suggestion, before opportunity is given for indulgence of the craving. Such a subject frequently recognizes his danger and sincerely wishes to be cured. He is tactfully conducted into the transliminal sphere, and then assured that in accordance with his own desire and decree, he has lost all craving for beer, wine, whiskey, that alcohol in any form is repugnant to him, and, as a safeguard, that he cannot swallow it, cannot carry the containing glass to his lips. The society of low companions is tabooed; the pleasures associated with drink and the glamour of the bar-room are pictured as meretricious and placed in vivid antithesis to the chaste delights of home life. The physical, mental, moral, and economic bankruptcy that accompanies dipsomania is held up before the view of the sleeper, and he is forced to the conviction that begotten of this apprehension has come into his soul an abhorrence for drink and all that it stands for. He realizes the presence of efficiency within him adequate to the enforcement of radical abstinence as the principle of his life; and he is rendered insensible for the future to any such combination of passion and allurements as has usually constituted temptation. So he is led instantaneously to scorn recourse to alcoholic stimulants, or to extrinsic exaltation of any kind, either for convivial reasons or in time of depression, misfortune, or sorrow, and to depend exclusively, under any mental or physical strain, on the units of energy legitimately manufactured out of nutritious food, non-intoxicating drinks,

air, ex  
directe  
stances  
satisfac  
abandon

Hypn  
tion. I  
the pati  
without  
plane of  
of thoug  
inspirati  
rote-less  
an eloqu  
viction;  
functory  
is endov  
disingen  
insincere

A sine  
honest d  
those wh  
rule, wis  
beverage  
ninety pe  
approach  
when no  
frightene  
of alcoh  
liver, kid  
of resista  
tubes and  
eliminate  
cular con  
sober inte  
physically  
faculties o  
that they  
address es  
vated men

air, exercise, and sleep. The subpersonal mind is then directed to the vocation or the avocations, or both, as circumstances suggest, and a career of wholesome activities and satisfactory success is imaged as the legitimate result of the abandonment of the compromising habit.

Hypno-suggestion here is clearly of the nature of inspiration. It is a summoning into control of the true man. For the patient freely expresses his best self post-hypnotically without effort, from a plane above that of the will — the plane of apprehension and spontaneous control along lines of thought and action that are worthy and wholesome. And inspiration, to be efficacious, cannot be mere lip work or rote-lesson. It implies a belief in the suggestions offered, an eloquent and incisive manner born of the courage of conviction; in short, it is a transfusion of personality. Perfunctory speeches are of no avail, for the mind of the subject is endowed with supranormal insight, at once detects the disingenuous, and declines impulsion at the hands of an insincere or lukewarm operator.

A *sine qua non* of success is the consent of the patient, an honest desire on his part to reform. Habitual drinkers, those who "soak," as Goldsmith described it, do not, as a rule, wish to be cured. They enjoy indulgence in alcoholic beverages and the false pleasures that attend it, and about ninety per cent of them, women as well as men, resent the approaches of those who desire to save them. Sometimes, when no other form of appeal is effective, they may be frightened into a realization of the fact that constant use of alcoholic stimulants will result in organic changes in the liver, kidneys, and brain, or by lowering the general powers of resistance and at the same time irritating the bronchial tubes and the lungs, through which the alcohol is in part eliminated, markedly predisposes to pneumonia and tubercular consumption. In fact, immoderate drinkers may, in sober intervals, be made to realize, not only that they are physically depraved, but intellectually degenerated as to the faculties of memory, attention, concentration, judgment, and that they are deficient in business tact and in the general address essential to success. Once apprised of their enervated mental condition, they are overcome with remorse and

honestly desire to correct the habit. Under these circumstances it is comparatively easy to persuade a patient to accept treatment, and a rescue may be effected in a week's time. To quote a Hindu proverb, "In the awful silence that follows the storm, not in the silence before it, we should search for the budding flower."

No reference is here intended to dipsomania as a true circular insanity, characterized by irresistibly compelling paroxysms of thirst and accompanied with uncontrollable nervous and mental excitement. It has been truthfully said that a sufferer from this disease is insane before he begins to drink, and would continue to be insane during his period, if whiskey were unobtainable. Thus there may be dipsomaniacs who have never tasted alcohol. The alcohol is a secondary factor. In other words, a man may drink because he is crazy, or be crazy because he drinks, or both; and a physician who grapples with the combination has a veritable wolf by the ears.

It is not claimed that the tendency to relapse is absolutely obliterated by suggestion. The cure may or may not be permanent, as is the case with rheumatism, quinsy, bronchitis, intermittent fever, with its distinct germ and distinct specific. No physician is asked to guarantee a patient against a recurrence of tonsillitis, especially when the patient deliberately exposes himself to the appropriate conditions for a relapse. More cannot be expected of the physician suggestionist who is not a miracle-monger. The utmost he can do in a prophylactic line is to reject all compromises in his treatment, suggest total abstinence, forbid exposure to temptation, and render insensible to the psychology of the saloon. Experience proves that it is always better to deal in drink-habit cases with the nearest of kin rather than directly with the patient, who naturally over-estimates his power of resistance and is singularly impatient of restraint. Courting a conflict with the demon of drink, as many do, is playing with fire.

Various reasons are advanced by backsliders to explain their relapses, and some of them are most trivial, as the death of a favorite dog, dull times, inharmony in the family. Some drink when they feel best, others when they feel worst, other

some beca  
and tank  
gone sober  
"mulled"  
whiskey b  
an afterno  
she experi  
to their fla  
greater sh  
the cumul  
worries.  
to rouse co

A very  
dulgence,  
physical d  
blood or "  
object in v  
tion to a le  
is fraught  
this latter n  
of a friend  
public high  
are you be  
neighborly  
the reply, "

I have a  
ates are ab  
be found t  
ance. Th  
of inhalatic  
brought in  
feet of vas  
promptly a  
and carried  
body. Yo  
are, moreo  
poisons, wl  
and liquefy  
a drowsy,  
prussic aci

some because they deem it a satisfaction to "go off on a tear and tank up." One man used the argument that he had gone sober so long he was justified in spreeing till he became "mulled"—which implied the ingestion of a quart of whiskey before breakfast and twenty-five bottles of beer of an afternoon. A lady admitted her motive to be the delight she experienced in drinking with her admirers and listening to their flattery and compliments. Another lady, with a much greater show of reason, explained her periodicals as due to the cumulative brain fag resulting from a miscellany of little worries. Many drink to dispel the blues, to induce sleep, to rouse courage or confidence.

A very intelligent inventor offered four reasons for indulgence, viz., requirement of the system in consequence of physical depression, sociability, business necessity, and cold blood or "pure cussedness." Sometimes the drinker has no object in view, but seems to be actuated by a sense of obligation to a long-standing habit, periodical conformity to which is fraught with discomfort and misery. The psychology of this latter mental state is illustrated by the following experience of a friend, who last summer met a farmer acquaintance on the public highway, trudging along to a nearby village. "Where are you bound for, Uncle Billy?" he inquired, in a spirit of neighborly bonhomie. "I am going into Johnstown," was the reply, "to get drunk, and O Lord! how I dread it!"

I have already stated that seventy-five per cent of inebriates are abusers of tobacco, and that in this latter abuse is to be found the proximate cause of much alcoholic intemperance. The real danger to the smoker consists in the habit of inhalation, whereby the volatilized poisons of tobacco are brought into immediate contact with many hundred square feet of vascular air sac walls in the lungs, and are thus promptly and fully absorbed to be diffused into the blood and carried on their fatal errand to the several organs of the body. Young subjects immediately learn to inhale. They are, moreover, markedly susceptible to the influence of these poisons, which include ammonical vapors that dry the throat and liquefy the blood—deadly carbonic oxide that induces a drowsy, dizzy condition and disturbed heart action—prussic acid in combination, and nicotine equivalents, all



virulent nerve poisons, capable in their conjoint action of paralyzing the muscles of breathing and so causing death. Schoolboys who become addicted to cigarette smoking exhibit in a brief time its demoralizing effects. Their sallow skins, sunken eyes, and discolored fingers betray the secret they would like to conceal. They are listless, forgetful, backward in study, and conspicuously lacking in power of attention and application. As the habit is pushed they become excessively nervous, suffer from shortness of breath, fluttering heart, giddiness, tremor, insomnia, irritable throat, impaired digestion, malnutrition, and often from dimness of vision, which has been known to culminate in blindness. The whole system becomes tobacconized, the organs and tissues of the body smelling of tobacco reek.

The mental decline is appalling. Boys who begin the use of cigarettes at six or seven years of age, as many do, break down and may become hysterically insane. Boys who contract the habit later in their youth, going to the usual extremes in the abuse of cigarette smoking, are likely to become nervous bankrupts before they are twenty-one. But gravest of all the resulting evils is the lessening or complete loss of moral sensibility, with a conspicuous tendency to falsehood and theft. The moral propensities are eventually destroyed because of the destruction of those elements of the brain cells through which moral force is expressed. The victim degenerates into an unmanly, unprincipled, irresponsible doddy-poll, in splendid fettle for the penitentiary or the madhouse.

Cigarette smoking has become a stigma of degeneration, and for the best of reasons. The association with the habit of moral involution should insure its extinction among refined persons. It is the recognized brand of ethical instability. Especially to be deprecated is its spread among American women, who would do well to remember that it renders a woman not only common, but in the end morally insecure. Society may be tolerant of the abuse in men; but the bounds within which a lady may transgress and remain a lady are too narrow to make any license safe.

The circulation through the brain of tobacco smoke poisons, and alcohol destroys, the capacity for expressing

through  
reform.  
able by  
administ

While  
metaboli  
cell prot  
blood-ve  
exaggera  
bodies.  
withdrew  
for a da  
for six r  
and inc:  
resolutio  
brief pe  
capsicur  
a valeris  
sion, an  
sleep.  
chronic  
times be  
reductio  
who, to  
relatives  
as to the  
are prop  
tongue l  
such cir  
self may

The  
tinct rel  
the bra  
Its adv:  
control  
physica  
ment o  
breakin  
fessiona  
treatme

through the brain earnestness and sincerity in efforts to reform. Fortunately, the damage done to the cells is reparable by the discontinuance of the poisons and the judicious administration of nourishment, general and specific.

While hypnotic suggestion may regulate a disturbed metabolism in the nerve organs or check atrophic changes in cell protoplasm, it cannot be expected to repair lesions in the blood-vessel sheaths or suddenly atone for the results of an exaggerated destructive metamorphosis in the nerve-cell bodies. Therefore, in my treatment, alcohol is immediately withdrawn; stimulating liquid food is given every two hours for a day or two; the phospho-glycerates are administered for six months to a year, with a view to refining the quality and increasing the quantity of the lecithin through which resolution and general manliness are expressed; also, for a brief period, a tablet containing strychnia, nitroglycerine, capsicum, and atropine; fluid extract of coca, if required; a valerianate to control temporarily undue nervous expression, and bromide and chloral, where necessary, to induce sleep. In the insanity of extravagant drinking, coupled with chronic nicotine poisoning, suggestive treatment may sometimes be delayed with advantage until after the compulsory reduction or withdrawal of the artificial stimulant. Patients who, to rid themselves temporarily of the importunity of relatives accept an institutional life, with mental reservation as to their habits at the termination of the period of treatment, are proper subjects for suggestion while *in sanatorio*. "The tongue has taken the oath, but the mind is unsworn." Under such circumstances with the craving in lull, the transliminal self may be successfully impressed.

The success of the treatment outlined above bears a distinct relation to the amount of injury already inflicted upon the brain cells and the accompanying mental deterioration. Its advantage consists in the rapidity of restoration to self-control without the necessity for effort of will, without the physical discomfort or suffering that usually attends abandonment of the habit, and, most conspicuously, without the breaking of family ties and the enforced absence from professional or business duties that are implied in sanatorium treatment.

The views here advanced are based upon an experience with some eight hundred cases of alcoholic intemperance extending over a period of nine years. Of these, between eighty and ninety per cent have been permanently cured. Of the remaining fifteen per cent a number cannot be traced; a number indifferently submitted to one or two treatments out of deference to the entreaties of friends, and hence there was no objective self-surrender; a few had become parietic before the treatment was begun; a small fraction were society women who, in my experience, are almost without the pale of hope. In no other condition that I have been called upon to treat by suggestion am I so unreservedly warranted in saying to the sufferer, "If you sincerely desire to be cured of this malady, and will carry out my instructions faithfully for a year, you can be cured beyond a peradventure."

---

The third Norman Kerr memorial lecture is to be delivered July 18, 1909, in London, by Dr. Laitinen, Professor of Hygiene in the University of Helsingfors, on "The Influence of Alcohol on the Immunity." Professor Laitinen is a scientist of great repute, and is President of the Finland National Board of Health, and member of numerous societies in continental Europe. The lecture will be delivered in English and will attract a great deal of attention.

TH

I

F  
lieve  
alth  
take  
cept

T

out

Ir

give

of al

D

phys

as w

Inde

effec

1785

"An

Hum

Preve

entire

tive

what

indel

York

to th

He q

mode

Rush

\*Ad

gress,

n experience  
nperance ex-  
se, between  
ently cured.  
ot be traced;  
o treatments  
hence there  
ome parietic  
on were so-  
without the  
been called  
warranted  
to be cured  
is faithfully  
ire."

livered July  
giene in the  
hol on the  
pute, and is  
member of  
will be de-  
ion.

## THE GREAT TEMPERANCE PIONEERS IN THE MEDICAL PROFESSION AND THEIR WORK FOR THE LAST CENTURY\*

BY HENRY O. MARCY, A.M., M.D., LL.D., OF BOSTON

**I**T is often stated that the medical profession is responsible in a very considerable degree for the drink habit and the use of narcotics. To this charge the physician may in a measure plead guilty.

For the indefinite past, alcoholic preparations were believed to be, in the correct sense of the word, stimulants, although their narcotic effects were well known. When taken in large doses the direct and remote effects were accepted as injurious.

There have even been exceptions to this rule, both in and out of the profession.

In American medicine we find illustrious men who have given much time to scientific research work to show the effect of alcohol upon the human system.

Dr. Benj. Rush, of Philadelphia, perhaps the most noted physician of his time, prominent in every good work, in civil as well as professional life, a signer of the Declaration of Independence, was pronounced in his opinion as to the evil effects of alcohol, both as a beverage and as a medicine. In 1785 he published a pamphlet of thirty-two pages entitled "An Inquiry into the Effect of Ardent Spirits upon the Human Body and Mind, with an Account of the Means of Preventing and of the Remedies for Curing Them." The entire article is worth a republication to-day. In an objective way he illustrates the effect of alcoholic drink by what he calls his moral and physical thermometer. I am indebted to Dr. Chas. A. Ingraham, of Cambridge, New York, for an admirable historical address in which he refers to this article of Dr. Rush in a most complimentary way. He quotes the following as a curious anticipation of the modern gold cure as it took form in the fertile intellect of Dr. Rush. The association of the idea of ardent spirits, with a

\*Address before the Saratoga meeting of the World's Temperance Congress, June, 1908.



painful or disagreeable impression upon some part of the body, has sometimes cured the love of strong drink. This appeal to that operation of the human mind, which obliges it to associate ideas, accidentally or otherwise combined, for the cure of vice, is very ancient. It was resorted to by Moses when he compelled the children of Israel to drink the solution of the golden calf (which they had idolized) in water. This solution is made, as it most probably was, by means of what is called *hepar sulphuris*, was extremely bitter, and nauseous, and could never be recollected afterwards without bringing into equal detestation the sin which subjected them to the necessity of drinking it.

Somewhat recently I had occasion to examine a little carefully into the practice of medicine during the early part of this century by the leaders of the profession in Philadelphia and Baltimore. I was surprised to find that Dr. H. G. Jameson, of Baltimore, emphasized the injury that occurred from the then common habit of a reduced regimen, the use of calomel and other cathartics, and that he totally forbade the use of all kinds of spirituous liquors by his patients. Referring to his frequent and continued observation as to their injurious effects, he concludes by saying, "We must content ourselves, here insisting upon the facts, whatever may be thought of our theories."

Unfortunately we gather far too little of cotemporaneous opinion from the writers of text-books. One of the chief attractions of autobiographies are the pen pictures of the period. In this respect the autobiography of the late Dr. John C. Warren, of Boston, is of exceptional interest. It portrays the so-called Washingtonian movement and I can hardly do better than let the doctor tell his own story since it is cotemporaneous and graphic.

"In 1827, I joined the Temperance Society. My father, Dr. John Warren, was vice-president in 1813.

"In the same year I brought forward temperance resolutions in the Massachusetts Medical Society; which, after a violent opposition, particularly from Dr. T —, were carried in a large meeting, with very few dissensions. The Rev. Doctors Channing, Gannett, etc., were the most active men at that time in the temperance cause.

T

"From  
formatio  
Sullivan  
Calvinis  
lar move  
the influ

"In 1  
bers of  
were ver  
meeting

"In th  
of the ac  
laid befo  
progress

"Abou  
the Wash  
Society —  
ings, rest  
as occur

"In 1  
Massach  
facts in  
licenses t  
part of t  
of severa

"In th  
various p  
necessity  
reflection  
ing that,

might be  
that in m  
in a wine  
fusion w  
tested its  
it to othe

able, and  
"In th  
Apostle c

\*This art  
Temperanc

“From that period I have followed up the temperance reformation. Mr. Alden Bradford, Mr. Pierpont, Mr. William Sullivan, then gave in their aid. Soon after, the orthodox or Calvinist clergy took up the matter; and, by a slow and regular movement, the country was more or less brought under the influence of temperance principles.

“In 1837 I went to England, and conferred with the members of the British and Foreign Temperance Society (who were very cordial and acted as chairman of a temperance meeting in the heart of the city of London.

“In the same year I had a conference with some members of the administration of King Louis Philippe in France, and laid before them statements showing the importance and the progressive advance of the temperance reform.

“About the year 1840, in consequence of the formation of the Washingtonian Societies, the Massachusetts Temperance Society — the oldest association — suspended its proceedings, resuming their labors occasionally at such opportunities as occurred for making themselves useful.

“In 1848 we made publication of the documents of the Massachusetts Temperance Society, recording the principal facts in its history. At this time (February, 1849) no licenses to retail are allowed by law in Boston and the greater part of the state of Massachusetts. The same is true also of several other states.

“In the summer and autumn of 1849 I received letters from various parts of the country, requesting my opinion of the necessity of alcohol in materia medica. After some months' reflection I wrote a short article for general distribution, showing that, in many cases, alcohol was not necessary; that it might be dispensed with in the preservation of infusions; that in many cases of tinctures a substitute might be found in a wine produced by the fermentation of a vegetable infusion with sugar. This preparation I had made, and tested its effect, first, by taking it myself; second, by giving it to others. The preparation turned out to be mild, agreeable, and efficient in its operation.\*

“In the course of the past summer (1849), the famous Apostle of Temperance, Father Mathew, visited Boston,

\*This article was published and distributed by the Massachusetts State Temperance Society.

partly on the invitation of the Massachusetts Temperance Society, on my application. I met him at the Roxbury boundary, and saluted him in a short speech, to which he replied. On the next day he drank tea at my house with Bishop Fitzpatrick, Mr. William Appleton, and others. Father Mathew employed some months in traveling about this state to give the pledge to many thousands of individuals, and afterward visited the Southern cities.

“For the last seven or eight years, I have ceased to give wine at the dinners of the Agricultural Society, and at other dinners; also at evening parties of scientific persons and others. In the early part of my establishment it was thought necessary for every young housekeeper to lay in a stock of wine, which might grow old, and ripen; and, at that time, I used two or three glasses of strong wine daily, and, at some periods, brandy and water, though not strong. When I began to take an interest in the temperance cause, in the year 1827, I gradually gave up the strong wines, and took the weak French wines. On going to Europe in the year 1837, I was led, while in England, to resume them, though not with good effect. Two or three years after returning from Europe, I gave up the use of it entirely, except as an article of the materia medica; and always found myself better without it, except in case of unusual debility, when, used as a medicine, it has sometimes appeared beneficial.

“On the whole, I can with confidence say, that, if I had never tasted wine, my life would have been more healthy and longer and more comfortable. The efforts which I have been called to make in the temperance reformation, operating, as they have done, more extensively on the prosperity and happiness of the community are a source of more satisfaction than any other labors. Probably my other occupations might have been as well or better performed by some one else; but perhaps it would have been difficult to find another person who would have been willing to undergo the opposition, ridicule, labor, and expense in the cause of temperance.”

His biographer, Dr. Edward Warren, speaks of the customs of 1820 to 1830 in Boston, and states it was the prevail-

ing o  
kind  
high  
in da  
ice p  
sideb  
variet  
Dr. V  
and v  
He  
adopt  
unhea  
and  
neith  
signe  
with a

Th  
were  
Warre  
of Al  
vision  
found  
of Jar  
Th  
Fairb  
Th  
dollar  
Warre  
therec  
cation

Th  
two r  
medic  
Th  
nishes  
vince  
medic  
than f  
the str  
of the

ing opinion that all mechanics, farmers, or operators of any kind should receive a regular supply of spirit. Among the higher classes, not only wine, but alcohol in some form was in daily use. The smoking punch bowl in winter or the ice pitcher in summer was no uncommon addition to the sideboard, which was generally well supplied with every variety of spirit that the taste of each visitor could demand. Dr. Warren commenced his labors with great earnestness and with an interest which never abated through life.

He prepared a series of resolutions which were heartily adopted. They declared that the use of ardent spirits is unhealthy and inconsistent with a vigorous action of physical and mental power, and that the habitual use of wine is neither necessary nor salutary. Such resolutions were signed by most of the physicians in Boston, and published with a great beneficial effect.

The number of drinking houses was diminished and laws were enacted which greatly lessened the sale of liquors. Dr. Warren published a small neat volume entitled, "The Effects of Alcohol," which was widely distributed, under the supervision of the Massachusetts Temperance Society, which was founded in 1813. In a record of this society under date of January 27, 1857, is the following:

The council met at No. 2 Park Street,—Hon. Stephen Fairbanks in the chair.

The treasurer announced the receipt of two thousand dollars from the administrators of the late Dr. John C. Warren, the same to be safely invested, and the income thereof devoted to the dissemination of temperance publications.

The limit of this paper permits reference to only one or two more of the great exponents of temperance among medical men.

The late Dr. Henry D. Didama, of Syracuse, N. Y., furnishes a noteworthy example. Early in life he became convinced that alcohol in any form was not alone unnecessary as medicine, but its use was generally harmful. For more than fifty years he was a leader in the medical profession in the state of New York, the founder of the medical department of the University of Syracuse, and a wise and tactful teacher



and practitioner. At his death he was president of the National Medical Temperance Association. He published many articles upon the effects of alcohol in both health and disease. Many thousands still hold him in tender, loving remembrance, and I am sure he felt that one of his most valuable services rendered was from his study of the deleterious effects of alcohol upon man. He was so sweet and tactful in his teaching that he made few, if any, enemies in the presentation of the subject, and even those who differed from him in personal practice were willing to agree with him as to conclusions.

Dr. Nathan S. Davis, of Chicago, is perhaps the most noteworthy example which the medical profession has furnished in the scientific teaching of the study of alcohol upon the human system. It has been my rare good fortune to have been a colaborer with him, as well as with Dr. Didama, in medicine for more than thirty years.

I am indebted to Dr. I. N. Danforth's recent life history of Dr. Davis. His first publication upon the subject which I have been able to find was an address delivered on Christmas Day, 1854. Delivered at the request of the students of Rush Medical College, entitled, "On the Effects of Alcoholic Drinks on the Human System and the Duties of Medical Men in Relation thereto." The last of his many publications upon the subject was in January, 1904, entitled, "Is Alcoholic Medication Necessary? In other words is alcohol, as it exists in various fermented and distilled liquors, a necessary remedy in the treatment of diseases of any kind or in any stage of their progress." During all the years of his long and remarkable career, he was an active worker in the temperance cause, and no one will ever know how many men he saved from that terrible fate, the death of the drunkard. His hatred of alcohol was so intense that he was often called a "temperance crank," a "fanatic," a "faddist," and various other names which were intended to be opprobrious, but were in the highest degree complimentary.

It must be remembered that in Dr. Davis's early days the use of alcoholic beverages was rather more common than the use of "aqua pura"; nor was it regarded as improper or

especially harmful. The minister, the lawyer, and the doctor each took his "toddy," without any idea of its impropriety, and in the country stores, rum was sold as openly as, and rather more frequently than "lamp oil" or molasses. When the merchant made out his yearly bill against his customers — professional men included, the item "one gallon of rum" occurred about as often as any other item, and the farmer generally needed an extra ten gallons to "get through haying."

"It was several years after Dr. Davis had been a married man, or rather boy, and had graduated in medicine and become a legal voter, before the temperance cause acquired sufficient momentum to be respected or even felt. In those days it took some backbone for a young man to allow himself to be known as a "teetotaller," as the early temperance advocates were contemptuously called, but our young doctor, standing almost alone, swerved not a hair's breadth from his principle of absolute and uncompromising abstinence."

From the very beginning of his medical practice to his last days, he absolutely prohibited the use of alcohol as a therapeutic agent, and not only that, but he talked against it to his patients, argued against it before various medical societies, and in his more public and popular addresses, and wrote against it in medical and secular periodicals far and wide.

It would be impossible at this day to gather all of Dr. Davis's essays and addresses against the use of alcohol in any form, either as a beverage or as a curative agent, but if this could be done, the collection would be about as formidable an array of anti-alcoholic literature as could be desired. Nor must it be forgotten that as long ago as he began practice, and in fact down to quite recent times, the use of alcohol in medical and surgical practice was not only very common, but its use was, by the majority of physicians, regarded as indispensable.

When he came to Chicago, in October, 1849, he brought his temperance principles with him, and they certainly seemed to thrive in the uncongenial atmosphere of this their frontier city, with its cloud of frontier vices. Of course

he preached temperance to the students of Rush Medical College, and later to the students of Chicago Medical College. A little later he delivered and published a lecture descriptive of some original experiments in relation to the effects of alcohol on respiration and animal heat.

It is perhaps a fair and just statement to say that Dr. Davis came to be regarded as one of the best equipped men in the country in regard to the treatment, or more properly the curative management of inebriety. He was chairman of the first Finance Committee of the Washingtonian Home Association; he was also chairman of the Executive Committee from 1865 to 1881. During all these years he was almost invariably present at the stated meetings of the Executive Committee, no matter how inclement the weather or how crowded he might be with professional cares. As one looks over the early records of the Washingtonian Home, one is amazed at the constancy of his attendance at the meetings of the Executive Committee, as well as the meetings of special committees which were frequently required for special duties, and of which "Dr. N. S. Davis" was pretty sure to be a member.

It is well known to all medical men, and to a great many of the laity, that Dr. Davis was regarded as the Father of the American Medical Association, now the most powerful and influential medical organization in the world. Of course his influence in the association was greater than that of any individual, and it is interesting to observe that he never missed an opportunity to urge his temperance doctrines upon this august body. Especially did he enforce his views as to the value — or rather harmfulness of alcohol as a remedy for the treatment of disease in any form. In fact, he took the positive and rather radical ground that, under no circumstances, could alcoholic stimulants be regarded as necessary or even useful. The doctor presented several papers to the American Medical Association enforcing his views, all of which are published in official reports of the "Transactions" of the Association. He also presented various papers based upon carefully conducted experiments, before medical societies or other scientific bodies in various parts of the country, all converging on the single point of

the abs  
or as a

By v  
of ass  
arouse  
of the  
1890,  
ered a  
Temp  
tion w

The  
ferred  
from 1

The  
been 1  
natio  
invest  
indefi

Th  
in the  
not fo  
of alc

Col  
for h  
exten  
excep

the absolutely toxic effects of alcohol, whether as a beverage or as a medicine.

By way of securing a favorable hearing for his views and of assuring their perpetuation among medical men, he aroused the movement which resulted in the organization of the "American Medical Temperance Association," in 1890, and at the meeting in Detroit, in June, 1892, he delivered an address on the "Objects of the American Medical Temperance Association," in which the work of the association was admirably set forth.

The experiences of the illustrious men which I have referred to in this paper cover the period of American history from the establishment of our independence to the present.

They had many co-laborers of less note, but my object has been to show that the influence of the drink habit upon the nation has long been a subject of serious thoughtful scientific investigation. Such men live on in their influence into the indefinite future.

Their mantles have fallen upon worthy successors. Others in their turn will continue in the good work, for the battle is not for the day, and in one form or another injurious effects of alcohol will probably continue for generations yet to come.

---

Coffee inebriates in Paris are regarded as the most hopeless cases for hospital treatment. The brain and nerve degeneration is so extensive that dementia and insanity is the rule and recovery the exception.



## INEBRIETY IN ITS RELATIONS TO CRIME\*

BY DR. G. FRANK LYDSTON, OF CHICAGO, ILL.

**A**LCOHOL is one of the best of man's servants and unquestionably his worst enemy. Alcoholism is primarily a toxemia, pure and simple, whether it be acute or chronic. It should really be regarded as a double toxemia. Every function of the body is vitiated and perturbed by it. Metabolism and the integrity of the glandular system especially are perverted, and, as usual under such circumstances, secondary toxemia results. Auto-intoxication, then, may be inferred in every alcoholic subject. So far as crime is concerned we have to do only with the effects of the double toxemia upon the nervous system; which effects may be primary or secondary. The effects of alcohol upon the circulation are important here, only in so far as they are productive of functional or organic change in the nervous system.

The inebriety question is as important from an evolutionary standpoint as is any other condition bearing upon the physical and social welfare of the race. The moral factor *per se* bears no more relation to the causation of inebriety than it does to typhoid fever. Certain moralists claim that, inasmuch as the inebriate wilfully took the first drink, the question is of moral significance only. This is as logical as that typhoid fever is to be cured by moral persuasion, because, forsooth, the victim voluntarily drank water containing the germs of the disease.

The moralist forgets that he is not confronted by the man as he took his first drink, but by one who has systematically abused his physiologic functions. Admitting that in certain cases the insatiable craving for liquor is a result and not a cause of alcoholism, the physician must accept the physical conditions as he finds them. Whether or not the inebriate was primarily predisposed to drunkenness is a secondary matter. He is called upon to treat a man whose tissues and organs have been saturated and thoroughly poisoned by a

\*Address delivered by invitation at the meeting of the American Society for the Study of Inebriety, Chicago, June 5, 1908.

powerful  
nomania  
subjects  
is a resul  
alcoholis  
and a vic

Suscep  
to other  
grain of  
quantity  
gross in  
tolerated  
effects up  
condition  
the circu  
susceptil  
scribed a

What  
to produ

Briefly  
and secc  
of inhibi  
vessels.

by a dep  
of the tis  
organs o

The e  
liver. F

produce  
as hard  
tracts an  
reduces

ceases w  
occur in  
the bilia  
toxemia  
not resto

The c  
in greate  
vessels.

powerful drug. No logical physician claims that a morphinomaniac is to be treated entirely upon moral grounds. Such subjects are none the less diseased if the craving for morphia is a result of the drug and did not exist primarily. In brief, alcoholism should be regarded as a disease-producing vice, and a vice-producing disease.

Susceptibility to alcohol varies as much as susceptibility to other poisons. Some persons would be killed by half a grain of morphine, whilst others tolerate many times this quantity. What is temperate indulgence in one man is gross intemperance in another. The amount of alcohol tolerated by a robust man would be most disastrous in its effects upon a child or woman. Nervous susceptibility, the condition of the eliminative organs, and the sensitiveness of the circulatory system modify the effects of alcohol. This susceptibility is often discovered late in life. Alcohol prescribed as a remedy has wrought great harm in such cases.

What are the results of alcohol taken in quantity sufficient to produce physiologic effects?

Briefly, alcohol produces primarily a pseudo-stimulation, and secondarily exhaustion and perhaps a varying degree of inhibition of the heart's action, and paralysis of the blood-vessels. It causes congestion which, if prolonged, is followed by a deposit of connective tissue, with resulting condensation of the tissues of the brain, spinal cord, nerves, and important organs of the body.

The effects of alcohol are well shown by the drunkard's liver. Here, as a consequence of long-continued congestion produced by alcohol, occurs the formation of new tissues as hard and firm as those of an ordinary scar. This contracts and strangulates the liver substances, and finally so reduces the size and functional capacity of the liver that it ceases work altogether, with a fatal result. Similar changes occur in the kidney. Considering the extreme toxicity of the biliary and renal secretions, an element of secondary toxemia may be readily appreciated. Moral persuasion will not restore a gin liver or kidneys to a normal condition.

The conditions described in the liver and kidneys occur in greater or less degree in the brain, its coverings and blood-vessels. Even where there is as yet no permanent thicken-

ing of tissues, there is produced by the temporary influence of alcohol disturbed circulation. That diseased brain circulation and structure cause defective reasoning and will is incontestable. Moral means of restoration of the will where such changes have occurred are mere moonshine. This is not, however, an argument against judicious moral means as an adjuvant in the correction of inebriety in general, nor is it a denial of the fact that the strong emotional influence of religious conversion often cures inebriety.

In the majority of cases of inebriety there is a primarily weakened will power, incidental to unstable nervous equilibrium. This may be due to acquired organic disease or to heredity, or may be peculiar to the individual himself. Its recognition is imperative, in studying the general relations of alcohol to vice and crime, for it is the key to the entire situation.

The question of heredity in alcoholism is important. Whether the acquired drunkenness of the parent may be transmitted to the child has been seriously questioned. Probably, in most instances, a bad nervous heredity in the parent is responsible for his own and his child's inebriety, but I firmly believe that indulgence in alcohol in one generation may appear as neuropathy and inebriety in the next, or perhaps in several succeeding generations. Whatever the explanation, a considerable proportion of the children of inebriates become drunkards. Example and early training, of course, often play a subordinate role here.

That a primary neuropathic predisposition to drunkenness underlies many cases of inebriety is easily shown. We will take for illustration half a dozen individuals of average physique and degree of intelligence — men who present no striking differences, intellectual or physical. Subject these persons to the same environment, social influences, and facilities for indulgence in liquor; give them from the beginning the same amount of liquor for a certain length of time, and observe the differences in effects. One subject becomes moody and taciturn; another quarrelsome; another maniacal; another garrulous; still another overflows with good nature. A certain proportion becomes confirmed inebriates. There must be some primary difference of

phys  
wide  
socia  
quie  
whic  
some  
acco  
T  
for  
enh:  
tion  
nali  
T  
unt:  
to t  
alco  
the  
a co  
cal  
F  
bei:  
wil  
by  
the  
wit  
ins  
is b  
J  
tio:  
len  
ma  
Ar  
is t  
ha  
fac  
ref  
alc  
br  
hi:

physical constitution in these individuals to account for the wide variation in results. A and B, perhaps, indulge in a social glass of champagne. B finishes his wine and goes quietly home. A, however, goes on a drunken debauch, which is the forerunner of many more. There is surely some primary structural difference in these two men to account for the difference in actions.

The same primary instability of will is often responsible for other forms of vice, and for crime. This instability is enhanced by alcoholic indulgence. The intimate association of alcoholism with all forms of viciousness and criminality is easily explained upon this basis.

The existence of an unstable will may be unsuspected until its development by the first indulgence in liquor. Add to this primary feebleness of will the poisonous effects of alcohol on the brain, and it is easy to understand that after the individual has been a drunkard for some years he is in a condition in which moral means, and too often even physical means, are of very little service.

Practically, then, inebriety means degeneracy, the subject being usually primarily defective in nervous structure and will power. If he was not so primarily, he has become so by the action of the drug habit. It is a noteworthy fact that the family histories of dipsomaniacs are largely tinged with nerve disorder. Hysteria, epilepsy, migraine, and even insanity are found all along the line. In such cases inebriety is but one of the varying manifestations of bad heredity.

Physical degeneracy alone excepted, alcohol is unquestionably the most potent factor in the vice and crime problem. Here is the only phase of the subject in which the materialist and moralist have ever met upon common ground. Arguments against the truth of the proposition that inebriety is the most important factor in the etiology of vice and crime have had for their basis the cupidity of those who manufacture and sell liquor, the apologies of those who resent any reflection upon the social glass,—the "moderate" use of alcohol,—and, finally, the egotism of the respectable inebriate who sees in the proposition an implied reflection upon his own moral character.

Statistics on the relation of alcohol to vice and crime have



been juggled with *ad nauseam*. Communities in which alcoholic beverages are freely indulged in have been compared both favorably and unfavorably with those in which blue laws prevail. I unhesitatingly state my belief that statistics bearing upon this question are worthless. The relation of alcohol to vice and crime is not to be settled by mathematical computation and comparative statistics, but by physiologic and clinical facts.

Let us revert again briefly to the action of alcohol upon the nervous system. We will begin with the premise that a maintenance of nervous equilibrium is absolutely essential to right thinking and right acting — this from the physiologic, not from the moral viewpoint. If this is true, it is obvious that anything that seriously impairs nervous physiology must necessarily impair the individual's conception of his proper relation to the community. Granting that this is not seriously impaired, but is over-balanced by animal impulses, all that is necessary to impel to criminal or vicious acts is a corresponding inhibition of the will. That alcohol brings this about cannot be denied. The loss of environmental control is of especial importance, for with it comes the removal of the thin veneer imparted by civilization in its broadest sense, and the immediate cropping out of the animal that this veneer so difficultly and so imperfectly conceals. The results vary with the dosage of alcohol and the innate susceptibility of the subject.

The dosage and individual characteristics determine, in conjunction with environment and hetero-suggestion, the degree of viciousness or criminality that results. Theft, murder, suicide, assault, sexual crime, indecency, sexual perversion — any or several of these may accrue from the action of alcohol on the nervous centers. That the sense of moral responsibility can remain unimpaired by the excessive use of a poison that seriously disturbs all the viscera, and particularly the brain, is impossible. A drug which impairs brain functions down to the point of coma is not likely to leave the moral sense unscathed.

Alcohol is not a cause of all classes of crimes. Great crimes, demanding mental activity, keen perception, cleverness of conception, intrepidity, fixity of purpose, great me-

chanical skill, fertility of resource, or a profound knowledge of human nature, are not perpetrated by alcoholics. Many crimes, such as gigantic swindling schemes, demand the highest degree of intelligence.

Petty crimes, and crimes of impulse and emotion especially are characteristic of alcoholism. The occasional drinker is more likely to commit crimes of impulse than the steady drinker, whose consciousness of right and wrong is palsied, it is true, but who is too sodden and inanimate to respond to sources of acute brain excitation. Fully seventy per cent of crimes of impulse, brutality, and emotion are committed by persons whose brains are alcoholized. The central organs of control are out of use for the time being, and at such times certain subjects are very dangerous. I say certain subjects advisedly, for, as already shown, all do not act alike under alcohol. Whiskey is a great demonstrator of character. The old adage, "What's in a man when he is sober comes out when he's drunk," had more than a germ of truth in it. *In vino veritas* was meant in a literal, not a figurative, sense.

The true dipsomaniac almost invariably has criminal tendencies that may develop at any time. His criminality, like his periodic spleen, is of an explosive type. The impulse to kill is especially likely to develop suddenly, like an epileptic seizure.

Alcoholism is often a cause of crime which is so plain and direct that he who runs may read. Excessive indulgence in alcohol often so lessens the earning capacity of the victim that sooner or later he cannot obtain the wherewithal to purchase his enemy. His moral sense is lowered and his appetite for liquor increased from day to day. Should necessity demand, he will steal either liquor or money to buy it, or goods that he can sell to obtain money. Few realize what the craving for liquor means. I have known dipsomaniacs to drink the alcohol from specimen bottles in a museum of pathology. Pure alcohol is often drunk by persons who claim that it gives them more drink for less money than any milder tippie. Among the lower classes even benzine is drunk as a beverage.

Whether alcoholism is on the increase in this country has

been discussed from all sides. As usual, statistics have been invoked to prove the question. I have already expressed an opinion as to their value in the issue under consideration. Although the per capita consumption of spirits has decreased of late years, I am convinced from personal observation, that it is on the increase among the higher classes, especially among women. The high pressure life of America has had its effect here as elsewhere. Tippling among women was once rare, and subject to taboo, whilst now it is so common in our large cities as to pass without comment. The frequency with which even respectable women may be seen in public drinking an antepandial cocktail is a matter of common observation. At ladies' social affairs cocktails are often served; cocktails at women's clubs pass without comment; indeed, they are so common that the situation is often a source of embarrassment to the female teetotaler. If the increase of tippling on the part of women does not indicate a lowering of the moral standard of society, the observations and deductions of physicians and sociologists on the effects of alcohol on women are fallacious. The drinking American woman, already neurasthenic, is fostering degeneracy for the race. No pretext is now too flimsy to excuse the taking "bracers" by society women, whose lives are spent in enervating dissipation and excitement. The shrewd "nerve tonic" patent medicine man takes advantage of the fashionable woman's appetite, and has no difficulty in selling his soul-destroying, nerve-wrecking mixtures of alcohol, morphine, cocaine, and other drugs. The only apparently logical attempt to legislate against drunkenness has been made in England. Its practicality has been demonstrated by experience, but it will surely have the effect of lessening crime. The new English law interferes in no sense with personal rights. The right to sell and to drink liquor cannot be denied. The right to get drunk and become a menace and a burden to society, and the right to further debauch and practically rob a drunkard may logically be denied.

The chief features of the act concern saloon-keepers, associations known as clubs, grocers, drinkers, and drunkards, and even "treaters." The saloon-keeper is forbidden to

sell to drunken people. The burden of proof is upon him to show that drunkenness, when reported, was not his fault; that he took all reasonable means to prevent it. The penalty for supplying a drunkard with liquor is a fine, varying in amount, or imprisonment for a month, with or without hard labor. This applies generally to the person who "treats." There are special penalties for saloon-keepers and club managers.

If a man or woman has been convicted as an habitual drunkard, notification, with photograph and description, is made to every establishment in which liquor is sold, and all license holders, saloon-keepers, club managers, and grocers are warned against selling the person liquors. There is a fine of fifty dollars for the first offence, and one hundred dollars for subsequent ones. Clubs must be registered, and must report on their organization and rules. They may sell liquor only on the premises to members and their guests. These restrictions are aimed at bogus clubs, and are fortified with penalties. Grocers are licensed on the same terms as public houses. The grocer who sells liquor under the name of "groceries" is prosecuted.

Other provisions relate specifically to the drunkard. The police may arrest him, even if not disorderly, if he is not capable of taking care of himself, and he will be held until sober. If the drunken person is accompanied by a child under seven years of age, punishment by fine and imprisonment is provided, being aimed particularly against drunken mothers. Habitual drunkenness is a ground for marital separation. Habitual drunkards may be black-listed for three years, and penalized for soliciting drink.

Licenses have been surrendered since the law went into effect. One paper says, "For the first time for a long period not a single case of drunkenness came before the Kettering Bench yesterday. The presiding magistrate said this was due to the new licensing act, which statement was confirmed by the superintendent of police."

The rise and fall of crime in Chicago has been found to correspond with the privileges accorded the all-night saloon.



## ACCURACY IN CLINICAL STUDY OF MENTAL AND NERVOUS DISORDERS FROM ALCOHOL\*

BY JOSEPH M. AIKIN, M.D., OMAHA, NEBRASKA

IT was my privilege to begin the study of medicine under a man who constantly urged, by example and precept, close observance of the mental and nervous phenomena in each patient, for comparison with their normal psychic and neuronc activities. He counselled that the motive in this was equally as important as the physical examination, and that the attention given them should be no less exacting.

As experience increases I am more and more deeply impressed with the thought that possibly in our zeal for an accurate diagnosis based on correct pathology, we too often neglect to familiarize ourselves with our patient's personal equation and the factors composing it — information which is often of vital importance. The pathologist tells us of structural changes in bodily tissue.

The bacteriologist discovers the microbe that seemingly causes these material alterations, and we are apt to expect definite and constant perverted mental or nervous activities. Experience in the animal kingdom does not justify these conclusions.

I would not in the least discourage autopsies and laboratory studies, but it seems conclusive that our diagnostic and prognostic knowledge will evidence efficiency, as we enlarge our logical clinical study of the living. With our multiplied and simplified instruments of precision for examination, we have attained a degree of accuracy in detecting the presence and nature of pathologic conditions in practically every vital organ and fluid of our bodies, not possible to physicians a generation since. Many advances have thus been achieved. The least progress, however, it seems to me has been made in our definite knowledge of conduct sequential to disordered nerve cells. We know that a focal lesion central to a particular motor or sensory nerve will produce definite conduct on

\*Read at annual meeting of the American Society for the Study of Inebriety at Chicago, Ill., June, 1908.

the part of the muscles which they supply, but it would be an assumption not warranted by clinical facts to state an equation between known cellular disorders in the brain cortex of a man and his mental conduct.

Biology certifies to the existence and operation of laws governing physiologic growth with its attendant mental and nervous activities; it does, not, however, tell us of any rule controlling the phenomena of life evolved through pathologic tissue.

We hail with delight these additions of knowledge regarding the material changes of bodily tissues, but is it not just possible that our fascination for the beauties revealed by pathology have obscured our recognition of psychologic and neurologic evidence? The young physician with a modern education finds structural changes and predicts results in direct ratio to the existing degree of retrogression. The older physician, not so certain of the tissue changes, weighs more carefully the evidence of hereditary handicap, and habit in the individual. It is possible that exceptions are offered against this comparison of physicians, for we are training our young men as men before, by bedside experience in our hospitals and the out clinics of our medical colleges. True, and that fact is an admission of our prior neglect. The older physicians of the present, who have acquainted themselves with the methods of detecting physical conditions in disease, are our astute clinicians. One may be a veritable encyclopedia of physiology and pathology and make a brilliant diagnosis, but wisdom in using that knowledge is not possible of possession except through experience. In the early months of my experience in hospital work among the insane I observed with unusual interest one patient, who passed rapidly through an acute mania to convalescence. He was intellectual and well educated. A shrewd observer of men and events, he saw I was a novice in judging the words and acts of those about me, and their real motives. This observation on his part made me the special object of his petitions for liberty. I asked our senior physician why this patient was not released and will not soon forget his simple but wise reply. "Observe him a little longer, then we will discuss the wisdom of dismissing him." It is need-

MENTAL  
ALCOHOL\*

KA

ne under  
precept,  
enomena  
normal  
that the  
sical ex-  
ld be no

eply im-  
d for an  
too often  
personal  
n which  
lls us of

seemingly  
o expect  
activities.  
fy these

laboratory  
nd prog-  
arge our  
lied and  
we have  
nce and  
ery vital  
icians a  
chieved.  
n made  
ordered  
particu-  
duct on

Study of

less to tell you my judgment was wrong. It stimulated my desire to investigate the whole personal and family history before making a diagnosis, and predicting the prognosis. Family history merits a larger valuation than is usually placed to its credit in the syndrome of mental and nervous disorders. In so far as heredity relates to these conditions, it implies degeneracy acquired through two or more generations. Any factor at work weakening cellular organisms in the individual will most certainly show mental or nervous disorders in succeeding generations.

We are often confronted with mental and nervous delinquents, whose personal habits negate the assumption of an acquired degeneracy and in whom we cannot discover by our most accurate physical examination any causative tissue changes. In these the clinical symptoms are our primary guides toward the physical cause for existing abnormalities. It was the ever present clinical evidence of some agents, somewhere, causing mental and nervous deterioration in our fellowmen, that gave origin to this association of physicians for the study of inebriety. It was the clinical evidence called mental deficiency that impelled this association to name the efficient committee who made diligent and accurate investigation into the cause or causes of this appalling condition in our school children.

When Dr. MacNicholl reported for his committee that of fifty-five thousand school children examined fifty-eight per cent were below the normal standard of intelligence, seventeen per cent were actually dullards, and twenty-five per cent were very deficient, these surprising facts were the product of clinical observation. When in the history of the parents of twenty thousand cases it was found that fifty-three per cent of the children were dullards where the parents were alcoholic, and only ten per cent of dullards came from abstaining parents, we were astonished. Could it be possible that the time-honored whiskey toddy, good for every ache and pain of infancy, middle age and dotage, is not constructive but actually destructive to the nervous tissue of our bodies?

The work of this association has clearly shown the inadequacy of laboratory training in qualifying physicians for "recognition on sight" of psychoses and neuroses proxi-

mate  
of th  
to re  
profi  
syste  
W  
and  
exce  
of in  
it all  
erato  
W  
are j  
and  
tissu  
The  
resu  
char  
indi  
char  
but  
harr  
gym  
duty  
L  
Sou  
troo  
thir  
droj  
big  
out  
thei  
mic  
T  
ciar  
ity  
a ju  
of t  
high  
erty

mately or remotely caused by alcohol. Through the efforts of this association the eyes of our profession are beginning to recognize the wealth of opportunity for interesting and profitable clinical study of conduct on the part of the nervous system, in those with whom we touch elbows every day.

We are learning to rightly interpret the source of mental and nervous acts, classed as peculiar, unusual, strange, or eccentric, and give them a proper setting in the whole range of individual conduct. As medical men we see underneath it all a crippled nervous system which is the dynamo to generate, transmit, and control every thought and act.

We know that nutritional changes in certain nerve cells are primary to weakened, perverted, or lost physical powers, and no less certainly do like conditions in other neuronie tissues cause weakened, perverted, or lost mental powers. The evidence, too, abundantly supports the fact that uniform results are not a necessary sequence to similar pathologic changes in different individuals, nor at all times in the same individual. The particular poison responsible for these changes may not with certainty be determined in every case, but the most obtuse observer knows that alcohol is the most harmful of all. The unlearned pugilist, the more cultured gymnast, the traveler in torrid or frigid zones, the soldier on duty, each regard alcohol as a hinderance to their best efforts.

Lord Roberts forbade its use among his troops in the Soudan, and Sir Frederick Treves said concerning the British troops in the South African campaign as the column of thirty thousand moved on Ladysmith, that the first men who dropped out were not the tall men, or the short men, or the big men, or the little men, but the drinkers, and they dropped out as clearly as if they had been labeled with a big letter on their backs. That was clinical evidence that needs no microscopic nor bacteriologic corroboration.

The clinical experience of Dr. Henry O. Marcy as a physician and surgeon in war and in peace makes him an authority of merit. A man of keen intellect, large experience, and a judicial mind he gleaned the evidence from the great mass of testimony explaining why in twelve months we had the high mortality, so many cripples, and such enormous property losses in the operation of our well-organized railroads



in the United States. These facts revealed many causes, but the paramount cause was the drink habit among employees. An operator who is a temperate drinker gives a wrong order. The train dispatcher neglects to execute a proper order. An engineer under but a single drink, "don't know and don't know that he don't know," and by reckless running invites disaster. These clinical facts should stimulate closer observation, and a more critical analysis of each patient in whom mental or nervous signs are present. This duty well done will lead us to conclude that the overwork, worry, business reverses, religion, or complaints of domestic infelicity, are not etiological, but the logical outgrowth of alcoholism, the psychoses or neuroses which we are asked to treat, coming as secondary or tertiary products.

It seems a bit illogical to condemn any use of alcohol where physical efficiency is wanted, and then to advocate its use, where mental and nervous stability are most desired. Of the many toxic substances whose use disturbs mental and nervous function, the one best known by its clinical signs is alcohol.

Where we see a diminished power of apprehension and elaboration of external impressions, with release of inhibitory control over voluntary impulses out of harmony with the customary conduct of the individual, we should suspect alcoholism. Want of control of the motor elements of speech and dissociation of thought are alcoholic signs. In the alcoholic, judgment in the choice of two movements is not exercised and the act often precedes the decision. The increased purposeless muscular activity represents motor nerves freed from their normal inhibition under will power. The thoughts are migratory, not easily gathered, and the solution of problems, easily and quickly analyzed by the individual not under alcohol, are difficult or impossible under its use.

Alcohol blunts the moral sense, increases the sexual desire, but lessens its power and courts venereal excesses. The thoughtful, careful, astute man of affairs whose opinions we seek, and on whose judgment we rely, becomes careless, indiscrete, and unreliable. As the muscular activities increase, the voice grows louder, expression of character decreases, the smile broadens to silly laughter, proprieties in language become improprieties, contentment gives place to fault-finding,

and love becomes hatred. The clinical evolution of alcoholic poisoning is completely told in the proverb, "A man takes a drink, the drink takes a drink, the drink takes the man."

The clinical picture in chronic alcoholism is a gradual progressive mental enfeeblement, decreasing power for mental or manual work, faulty judgment, defective memory, moral delinquency, occasional delusions, frequent hallucinations, multiplied and multiform neuroses.

It was the clinical observation of the world's greatest writer of epic poetry that "Inflaming wine, pernicious to mankind, unnerves the limbs and dulls the noble mind." Contemporaneous with him was Isaiah, that master teacher of the Hebrew nation who said: "The priest and the prophet have erred through strong drink, they err in vision, they stumble in judgment." Two centuries earlier than these, the wisest of finite men gave it as his clinical observation that, "Wine is a mocker, strong drink is raging, and whosoever is deceived thereby is not wise." Meditating on these indisputable records of the ages, we appreciate the clinical experience of Sir Benjamin Richardson, who wrote that, "Of all men brain workers are the least able to bear up under the ravages of alcohol, this traitor who enters the most precious treasury, the citadel of the mind." These observations are amply corroborated by men well versed in pathologic and bacteriologic work. This needs no higher authority than Dr. Sims Woodhead, of Cambridge University, whose pathologic observations led him to say: "A man under the influence of small quantities of alcohol has no right to believe his own senses. He cannot trust them to give him correct facts, and he cannot rely upon his judgment for the interpretation of facts."

Of the many nervous disorders that affect humanity, no one is so distressing as convulsions. Occurring in the infant, we may find a proximate cause in the food taken, but why should the mother's milk in a normal stomach provoke pathologic action on the part of brain cells? We scrutinize our clinical records for evidence and find that in an equal number of children by alcoholic and non-alcoholic ancestors, the former show the highest ratio of convulsions during in-

fancy. The appearance of convulsions in early childhood, and their cessation when the higher cerebral centers are sufficiently developed for inhibitory control over the motor centers, is a bit comforting to parents, and not a few medical men encourage the belief that with the close of dentition convulsions will cease. The clinician who sees a convulsive boy or girl is apt to suspect epilepsy.

The clinical study of epilepsy is so closely connected with alcoholism that Bevan Lewis in his studies on the pathology of epilepsy brings to light the important fact that the microscopic appearances of the brains of epileptics are similar to those found in subjects suffering from chronic alcoholism. The fact that the structural changes in the cell of the epileptic are not peculiar to epilepsy, but are found in other diseases, and especially alcoholic brain diseases, justifies our clinical observation that epilepsy is often an indirect result of alcoholism.

Spratling's clinical analysis of one thousand epileptics showed that where epilepsy did not prevail in parent or grandparent alcoholism was the most potential of all poisons in preparing the tissues of their offspring for completing the epileptic cycle. Kovalevsky, speaking from clinical observation among the natives of Caucasus, Russia, says that in no other place does he find so large a proportion of epileptics among his patients. He says, too, that there they use wine more commonly than water to quench thirst.

It is the clinical aspect of the moderate drinker we should analyze most carefully. They are the great class who believe there is benefit from alcohol and regard it as a food.

They honestly and strenuously disclaim that the existing mental and nervous instability in their children can possibly be caused by such moderation in drink as they have ever practiced.

It is accuracy in clinical observation by the management of corporations who employ mental or manual labor that impels them to seek the total abstinence employees. It is accuracy in clinical observation that is to-day causing the whole civilized world to understand that any use of alcoholic beverages is detrimental to the commercial interests of the individual, community, state, and nation. It is clinical

evidence that impels the members of this association to a personal abstinence and the professional non-use of alcohol as a stimulant, much less for constructive purposes. It is because of overwhelming clinical findings by the best observers of every age — that we implore our associates whose intellectual moral and social worth we esteem, but whose belief in the constructive properties of alcohol we think are disproven by clinical and pathological evidence — to join us by example and precept in the social and therapeutic nihilism of alcohol. As members of the broadest and most useful vocation man can occupy, we can only rise to the privilege of our opportunities by advocating the noble and eschewing the ignoble things in life.

---

THE POISONOUSNESS OF CAFFEINE

Dr. H. H. Rusby, dean of the College of Pharmacy, of the city of New York, Columbia University, and joint author of the Standard Dispensatory, after deprecating the exaggerated misrepresentations of the injurious effects of tea and coffee drinking, for which certain commercial adventurers are responsible, states that "it is nevertheless true that caffeine is a genuine poison, both acute and chronic. Taken in the form of a beverage, it tends to the formation of a drug habit, quite as characteristic, though not so effective, as ordinary narcotics. While not cumulative in substance, it is so in effects, permanent disorders of the cardiac function and of the cerebral circulation resulting from its continued use. When the caffeine is taken in more concentrated and seductive forms, as in confections and the like, such as the 'stored energy' cubes sold some years ago, the danger of habit formation and the cumulative results become correspondingly greater."— *Druggists' Circular*, Vol. LII, No. 1, p. 24.



## ALCOHOL AND MORAL DEGENERACY\*

D. H. KRESS, M.D., MEDICAL SUPERINTENDENT  
WASHINGTON, D. C., SANITARIUM

**A**MONG the ignorant, alcoholic beverages are considered to be highly nutritious, and because they tend to increase body weight their use has been frequently recommended to the emaciated and the sick. It is not uncommon for nursing mothers to take beer to increase their flow of milk, or because of the soothing influence they exert on the nursing child.

As a result of these views drunkenness among women has been increasing in such an alarming manner that one of the most serious problems that confronts Great Britain is how to check this growing tendency. So rapidly has the drink habit increased among women in the city of London, that at present more women are said to be arrested for being drunk and disorderly on the streets than men. The degenerative influence of this upon the coming generation can be readily appreciated, since the drinking mother disorganizes and demoralizes the home, she neglects the training of her children, and she is unable to hand down to her offspring a healthy heredity. Mothers who believe that alcoholic beverages are valuable nutrients naturally encourage their use among their children as far as their means will permit. In France it is not uncommon to see the mother press the wine bottle to the lips of the infant in her arms. In England the same thing is seen, only beer is used in the place of wine. As a result the working classes of these countries spend a large proportion of their income on drink.

In our English cities on Sunday mornings rows of little children may be seen at the side entrances of saloons, waiting their turn to have the jug or little pail filled with beer for family use. When empty they return to have it refilled. This is repeated again and again during the day. In this way the Sunday is spent by the family of the average British laborer.

\*Paper read at the World's Temperance Congress, Saratoga Springs, N. Y.

By paralyzing or deadening the mind these beverages lead to a forgetfulness of poverty and misery, for the time, and produce a feeling of wellbeing. They also remove the restraint which the mind should ever exert over the baser passions and lead to sensual gratifications. For these reasons these poor unfortunates associate with drink their highest form of enjoyment. That which gives them the inspiration to work during the week is the expectation of having what they term a good time on Sunday.

In the past, woman has been the redeeming factor in race decay, but with this increase of drink among women, one of the greatest barriers to race decay has been removed, and it does not require a prophet or a son of a prophet to predict that race degeneracy, both physical and moral, during the next few years will make rapid strides in civilized lands such as it has never made in the past.

We cannot deny that these beverages produce body weight, but we know that this is no evidence that they are nutrients. The increase in weight is a pathological rather than a physiological process and may be produced with equal success by the use of arsenic, phosphorus, opium, and other poisons. It is known to every physician that while in appearance the drinker may be the picture of health, in reality he is a physical degenerate incapable of recovering often from the mildest disorders. Many are ignorant of the facts and are easily deceived by the fair promises made by alcohol and which it appears to fulfil.

Baron Liebig's statement, "If a man drinks daily from eight to ten quarts of the best Bavarian beer, in the course of twelve months he will have taken into his system the nutritive constituents contained in a five-pound loaf of bread." The poor ignorant man who judges only by what he feels, and by what he sees, can hardly appreciate how true it is, that, "wine is a mocker and he that is deceived thereby is not wise." Alcohol makes the poor man quiet, and believe that he is rich, when in fact he is poorer than he was before taking the drink. It makes the sick man feel and believe he is well and improved in health while under its influence, when in fact he is in a worse condition. It produces a feeling of exhilaration which is interpreted as strength, when by actual

test it is found that the one under the influence of alcohol is weaker, although he feels and believes himself to be stronger.

It produces the fat and weight which so many desire, but this is found to be mere bloat. Judging only and wholly by what the moderate user of alcohol feels and sees, is it any wonder that he is deceived thereby and led to believe that, while it is a curse when taken in large quantities, which all are forced to admit, it is a blessing when taken in so-called moderation.

It is just as difficult to convince the sick man or woman that he or she is actually no better after taking the accustomed glass of beer, or the dose of medicine containing it, although he feels better, as it is to convince the poor man that he is no richer while under its influence, or the weak man that he is no stronger, although he feels stronger. A knowledge and belief of the truth concerning alcohol alone can save men and women from this universal deception.

Upon the physician, above all men, falls the work of undeceiving the poor deceived slave of alcohol. Let them teach the poor that the cost of eight or ten quarts of beer per day, which would total up to about two hundred dollars per year, is too much for the poor laboring man to pay for the amount of nutrition he might obtain from a five-pound loaf of bread, which can be purchased at the moderate cost of ten or fifteen cents. He will, then, if not already a slave to the habit, cease to spend "money for that which is not bread, and his labor for that which satisfieth not." Let them teach the truth that health can only be acquired by a removal of the causes of disease, and never by the use of alcohol or any other drug. Alcoholic drinks produce a species of degeneration of all the vital organs of the body. This was shown during the late war between the British and the Boers. The majority of those who applied as volunteers for the British army were rejected owing to a diseased condition of the heart.

In Germany, it is said, over one half of the young men are incapable of bearing arms on account of the degenerate state of the structures of the heart. In the year 1903, during the Spanish American war, over two thirds of the young physicians who applied as volunteers for the army were rejected for the same reason. At the time when these matters were

discovered it was heralded from the lecture platform, the pulpit, and the press, but it was soon forgotten, and men and women, instead of making reform, go on as before, and continue to do that which is responsible for this condition. What can we hope for in reference to the future?

In America the increase in diseases of these organs has been especially noticeable during the year 1907. The average mortality in American cities from heart disease has increased about twenty per cent over the preceding year.

There has been almost a corresponding increase in the number of deaths from pneumonia and cerebral hemorrhage, or apoplexy. Tissue deterioration and increased blood pressure, the after-results from the use of alcohol, are without doubt the chief causative factors in this high mortality rate from the diseases named.

Dr. Bollinger, of the city of Munich, says, "It is rare to find a normal heart and a normal kidney in an adult resident of that city." But the degenerative effect on the organs named is not the worst feature of this excessive consumption of alcohol. Alcohol affects the brain in the same manner as it does the heart and kidneys. It causes brain degeneracy as truly as heart and kidney degeneracy, and moral degeneracy is always associated with brain degeneracy. The most pernicious effect of alcohol is its demoralizing and brutalizing influence on those who habitually use it. I have no hesitancy in saying it is impossible for any one to be morally what he might be if he uses alcohol even in minute quantities. For this reason, if no other, it should not be prescribed by physicians. In speaking of the influence of beer on the German nation, Professor Edward Von Hartman says, "Although of all nations the German has the greatest capacity for culture, the general culture of its higher classes is undergoing frightful retrogression because of the beer consumption of its students."

Dr. A. Forel, of the University of Zurich, says: "To be convinced of its moral effect one only need to study in Germany the beer jokes, the beer conversation, and the beer literature. Among the academic youth of Germany the drinking of beer has truly killed their ideals and the ethics and has produced an indescribable vulgarity." Any one



traveling in Germany who is at all observing cannot help but be impressed by the truthfulness of Dr. Forel's statement. This is not only the case in Germany and among Germans, the same may be observed in America and in all countries and among all classes where alcohol is either a beverage or a medicine. I believe we shall yet discover that crime and immoral acts are usually committed while the mind is under the influence of alcohol or some other narcotic poison, either directly introduced in the food or drink, or formed within the alimentary canal through fermentation or decay of foods resulting from errors in diet. Just to the extent that drinking becomes more prevalent will vulgarity, immorality, and every form of impurity become more common. In speaking of those who tarry at the wine, the wise man said, "Thine eyes shall behold strange women." I would say to all, therefore, who would be morally pure, "Do not drink wine or strong drink, that ye may put difference between clean and unclean."

About fifteen years ago I had the privilege of assisting in opening up a helping hand medical mission in one of the most degraded portions of the city of Chicago.

That such a place was needed became more and more evident as the increasing multitudes flocked to us for aid. The misery, the sorrow, the degradation — physical, mental, and moral — we there witnessed was appalling and indescribable.

Noting the degenerates in this portion of the city the thought frequently came, "What is responsible for this wretchedness? To this there came but one answer, *ignorance and alcohol*."

A knowledge of the nature of alcohol places a certain restraint upon its use, but where ignorance exists concerning its nature and deceptive influence, the devotee takes it because it affords a short period of freedom from cares and anxieties. His aim is to get all the enjoyment possible out of life, but this enjoyment is associated with drink and sensuality. A very similar condition I found when visiting some of the South Sea Islands a few years later. I have dwelt upon the condition found in the slums of our large cities because the very same causes which are responsible for the physical and moral degeneracy there I found to be responsible for the rapid degeneracy taking place among the innocent natives of the South Sea Islands.

The natives of these islands at first manifested the utmost confidence in the white man, innocently they received as a blessing anything the white man had to offer — tobacco and whiskey were two of the chief commodities brought to these people by the white race. They at first regarded the feeling produced by alcohol as something to be desired to make them courageous. In civilized countries where the nature of these poisons are better understood the use of tobacco and alcohol is confined to adults and chiefly to men. Its use is discouraged among women and youth. But among the natives of these islands its use is encouraged by men and women, by boys and girls. They reason and reason correctly, why should it be withheld from the young if it is a blessing to the old? Its use leading to the gratification of the baser passions lead them to associate with the use of alcohol, their highest form of enjoyment. The results of this upon these races, some of which were at one time ideals in physique, is sad indeed. The ungoverned passions of these savages stimulated by drink has dragged them down to a degradation before unknown, and it has become an almost hopeless task to send missionaries to these lands.

When Captain Cook first landed on the island of New Zealand he described the natives, both men and women, as being perfect in form and features. He declared them to be the finest race he had encountered in his travels. There were no skin or other diseases among them. Men and women at ninety were still muscular and active, showing little evidence of decay. The Moris were probably the finest specimens of humanity with which the Anglo-Saxon race had been brought in contact.

How changed the picture appears to-day, they are fatter but less muscular a nation of bloats. Drunkenness is common, and as a result lewdness and immorality of the worst type exist among men, women, and children. The Moris of to-day are physical and moral degenerates, hanging around wherever whiskey and tobacco are obtainable and wherever opportunities for vice present themselves. They have been reduced in numbers from one hundred and twenty-one thousand to about forty-eight thousand, and the prospects are that degeneracy during the next few years will be much

more marked than during any previous period. The Moris are rapidly nearing extinction. Chief Justice Stout, of Wellington, New Zealand, in recently passing judgments in the case of a drunken Moris, said, "If this drinking among the Moris is not checked, we are in measurable distance of the time when the Mori race will be exterminated."

While the natives of Australia have never been equal in physique to the natives of New Zealand, they too were at one time a strong, robust people. To-day they are almost extinct. I shall never forget the pitiable sight which met my eyes when visiting some of these people on their government reserve. Degeneracy, physical and moral, I found, is stamped on every countenance. Should time continue in but a few years the native Australian would be eliminated by the white man's whiskey and the vices which result from its use.

The Hawaiians were once physically a finely developed people. But whiskey has been doing the same deadly work among them. They are to-day an aimless lot with but one ambition in life, and that ambition is to secure tobacco and drink. They know no enjoyment aside from sensualism. This race is also rapidly nearing extinction.

The Commercial Advertiser of Honolulu a few years ago made the prediction that "There are to-day men living of voting age who will witness the death of the last full-blooded Hawaiian."

The natives of Samoa and Figi are more like the natives of New Zealand in physique. Some of the finest specimens of humanity in the world to-day may still be seen on these islands.

I had the pleasure of visiting a native village. We were invited into the home of the chief. I found the chief a remarkably well-preserved man of fifty-three years, measuring over six feet. His son was somewhat taller. Both were muscular, elastic, well built, and straight as an arrow. These people were no longer savages. They manifested the same courteous, polite, and considerate manner that we could expect to find in a refined American home. They use neither alcohol, tobacco, tea, nor coffee. Their food is most simple. The meal I took with them was composed of tarra root, bread fruit, bananas, and oranges. Such foods do not cultivate a desire for alcohol and tobacco.

B  
vige  
han  
him  
mot  
seer  
thes  
near  
Sam  
sam  
citic  
W  
Sea  
ther  
has  
senc  
pera  
phy:  
will  
thes  
corr  
is so  
men  
tive  
ther  
Fra  
exti  
catic  
shot  
halls  
hol.  
if no  
thar  
crim  
for 1  
large  
pern  
nece  
supp  
orde

Before leaving the chief took a piece of sugar cane and vigorously with his teeth tore off the outer portion, then handed it to me to taste. I noticed his fine teeth and asked him if all his teeth were sound. In response he opened his mouth wide, allowing me to examine them. Every tooth seemed perfect. But what a contrast there exists between these noble Figians and their less fortunate brothers who live nearer the towns. The great majority of the Figians and Samoans, especially those dwelling near harbors, show the same mark of degeneracy that is seen in the slums of our cities.

We owe a duty to the remnant of the people of the South Sea Islands. The white man who should have brought to them a knowledge of something better than they possessed has brought about their degradation and ruin. We need to send to them medical missionaries who are thorough temperance advocates, who recognize not merely the existing physical and moral degeneracy, but also their causes, and who will consider it their chief burden to assist in the removal of these causes. To elevate them morally it is necessary to correct their physical habits. The reason why degeneracy is so very rapid among these people is that women as well as men use alcohol and tobacco. France stands as a representative of the highest form of civilization. During the year 1907 there were nineteen thousand more deaths than births in France. How can we arrest this evil which is threatening the extinction of both civilized and savage races. A united educational campaign should be inaugurated, the aim of which should be to make known to old and young, by lectures in halls and churches and schools, the deceptive nature of alcohol. These talks should be clothed in simple language — if need be, using charts or stereopticon views. But more than this must be done. Why should we continue to punish criminals, then sanction by law an evil which is responsible for nine tenths of the crime? Why tax the people to build large insane asylums and reformatories and prisons, and then permit the manufacture and sale of that which makes these a necessity? Strange that we should with one hand liberally support at an enormous expense our police force to maintain order, then with the other hand put the bottle to our neigh-



bor's lips, or legalize the sale of that which steals away the brain, making men and women disorderly.

The time has come when in the interest of the dying races every lover of humanity must arouse and do all he can by voice, pen, and by vote, to suppress the manufacture and sale of alcoholic beverages to an innocent, ignorant, and deceived people.

In the Southern states so demoralized have the negroes become that the white inhabitants of country districts feel unsafe without police protection. Men dread to leave their homes, fearing that some terrible thing may befall their wives or daughters during their absence. The passions of the ignorant colored man, fevered by drink, make him worse than a brute. As a means of self-protection the whites, who themselves are not abstainers, and who otherwise would favor the saloon, are forced to close the saloon and stop the sale of drink.

It will only be a question of time until the Northern states will be forced to follow the example of the South. Alcohol is brutalizing the ignorant whites of the North as truly as the blacks of the South.

Each state will yet reap the *woe* that must come to it as a result of placing the bottle to the lips of its people by legalizing the manufacture and sale of alcohol. Our country owes much, how much we shall never be able to tell, to the faithful efforts put forth by temperance organizations and workers to arrest the sale of drink. Although the sale of intoxicants has increased greatly during the past few years, had it not been for their efforts the marks of degeneracy would be much greater than it is.

## EDITORIALS

---

*The JOURNAL OF INEBRIETY is not responsible for the opinions and conclusions of contributors.*

---

### *The Work of Our Society*

The annual meeting at Chicago brought out some excellent papers which were read and discussed with great interest. The temperance lunch which followed was largely attended and marked by some very striking speeches, showing the interest in the subject, and that it had become a feature to continue in our future meetings.

The meeting at Saratoga was literally a historic event. It was the first time in history that a few medical men addressed an enthusiastic lay audience on the purely scientific aspects of the subject. It was the opinion of many that this occasion with its four sessions, in which seventeen papers were read either by the authors, or by title, was equally historic with that of Dr. Clark's first temperance society a century ago.

It was also an occasion to meet and become personally acquainted with leading temperance reformers and persons who were promoting the great temperance cause from the moral side, and this in itself created an interest for future co-operation that will be marked. It was very evident that the great leaders in the temperance reform movement recognize the need of scientific assistance and direction and much of the prejudices of the past and criticism of physicians will disappear from this time.

It is the intention to publish all the papers read in the JOURNAL OF INEBRIETY, and our readers may congratulate themselves on being able to read what is said at these two great conventions.

### *New Studies into the Etiology of Inebriety*

A number of prominent writers, among them may be mentioned Dr. Kellogg, in this country, have pointed out states of autointoxication that were very active and always predisposing causes of inebriety. Clinical studies show a very close connection between toxic states and

the impulse to take spirits, and many cases are noted where these conditions occurring in perfectly temperate men were followed by a drink mania.

It is well known that after the impulse to drink has become established, derangements of metabolism always provoke increased use of spirits. This is strikingly confirmed by treatment, especially addressed to stimulate excretion and promote more perfect digestion and assimilation.

Several authors have pointed out that hyperleucocytosis is a frequent symptom of inebriety, both preceding and following the use of spirits. There can be no doubt that toxic states follow the use of spirits, and while these conditions provoke other diseases there is strong evidence that they have a very large influence in exciting the desire for relief from spirits and narcotics.

Recent researches show that without any question deranged circulation in the cortex, following intense heart action, and the presence of toxins circulating in the blood, derange the rhythm and uniformity of the flow of the blood current, and the osmotic processes, this is followed by depression and intense desire for spirits.

It is entirely possible that many cases of inebriety begin from deranged circulation in the cortex, and the extensive damage found afterwards in the occlusion in different areas of the finer capillaries, suggest a distinct physical cause.

Whether these causes are primary or predisposing is not yet clear. In cases of inebriety that have been preceded by great emotional changes and excitement, there must of necessity be capillary derangement in the cortex, with imperfect nutrition and assimilation.

These two lines of approach to the first causes of inebriety suggest some very fertile fields which seem to have considerable clinical evidence to support them.

#### *Fallacy of the Statistics relating to the Mortality of Inebriety*

A critical physician who asserted that the statements of the mortality from alcohol made by reformers were gross exaggerations, was startled to find so small a percentage of death rates attributed to this cause.

In a careful study of one hundred records of deaths by inquiry from physicians and persons who were in a position to know the causes, showed that twenty per cent of all grown persons had used

alcohol to such an extent, that its degenerative influences were positive active causes in the mortality.

His studies extended to five hundred cases and the proportion increased, particularly in one village where fully thirty per cent of all the deaths were due to alcohol, and yet there was no mention made of it as a cause. He finally concluded that the statements of reformers varying all the way from sixty to two hundred thousand deaths annually were specifically due to alcohol was a minimum statement.

This conclusion is confirmed and indicates the fallacy of the present vital statistics. We have long ago pointed out the delusion that death from alcohol implied a vicious moral element, which the friends thought to cover up by naming the last symptom as the cause of death.

This is strikingly confirmed by the enormous increase in death supposed to be due to pneumonia and cerebral hemorrhage. Also Bright's disease, and the very vague uncertain term heart disease. If an accurate study was made of the causes of death, both exciting and predisposing in almost every community, the influence of alcohol would occupy a very large place.

Thus in one hospital where the authorities boasted of their exact diagnosis, and exact statements of the causes and mortality, there were only four cases marked alcoholic and thirty-six pneumonia. The alcoholic cases died in attacks of delirium tremens, and could not otherwise be classified. Of the pneumonia case twenty-three of the thirty-six were inebriates and excessive users of spirits. Pneumonia developed in each one of these persons after they came to the hospital and was recorded as the cause of death. Fourteen were brought in with acute inflammatory conditions of the lungs and more than half of this number had a history of the excessive use of spirits. Of the twenty-two recorded as dying from pneumonia eight were brought in intoxicated and suffering from injury requiring surgical assistance. Four of the others who were admitted to the hospital for severe attacks of rheumatism and others suffering from acute indigestion, enlargement of the liver with jaundice, all having drunk heavily for years, and when pneumonia developed they were recorded as dying from this cause. At a medical meeting, a physician having a large practice said that he had never had a man die from alcoholism or inebriety, and hence he deplored the statistics of persons who claimed that alcohol was the cause of death in a large proportion of hospital cases. Another man in large practice affirmed that he had



never signed a certificate stating that death was caused by alcohol, for this was an unnecessary reflection on the character and conduct of the patient, also that no physician should ever put the stigma of alcoholism on a patient in the public records. These are by no means startling statements of the actual conditions and show how imperfect our knowledge of the mortality is in cases of this kind.

The following extract from an address by an eminent clergyman is a most significant hint for future work.

"The presence of a body of medical men at the World's Temperance Congress held at Saratoga Springs, N. Y., discussing the alcoholic problem along purely scientific lines to an audience of laymen and reformers marked a new era in the study and growth of reform work.

When the physician is trained to advise and council along the new lines of practical philanthropy, and take an active part in general hygienic preventive medicine as seen by the masses, much of the present confusion will disappear."

The best work of our society is not confined to educating the profession, but to pointing out to the laymen means for prevention, and the fallacy of the popular delusions concerning alcohol as a tonic and stimulant, and the safety of moderate drinking.

An army of very enthusiastic reformers are constantly growing, in numbers, and their efforts to change the existing customs and theories concerning alcohol, are becoming more and more intense. It is our duty to become educators and teachers along the lines of exact cause and effect.

#### *The Temperance Federation Bureau*

The Temperance Federation Bureau at Boston has received an offer of an exceedingly valuable building lot in the suburbs of Boston for the erection of a permanent library building. No doubt this will be followed by gifts for the erection of a building. There is no charitable work of far-reaching importance that can be compared with this. Every temperance and scientific man in the country recognizes the need of a central library for the accumulation of the rapidly increasing literature concerning alcohol and its evils. A bureau, where the facts can be collated and grouped and made available in scientific and educational circles is a great need of the times. The exhibit at Saratoga Springs was a revelation, indicating the possibilities and helpfulness of such a work. The bureau is incorporated by the

state  
last  
latic  
All c  
able  
doll:  
auth  
wish  
and  
Seci

T  
clus  
larg  
dosc  
the  
pers  
larg  
the  
also  
and  
site  
pres  
inve

T  
incl  
dur  
con  
one  
wor  
C  
ten  
Ho;  
lon  
lon  
F  
Th

state with power to receive and dispense funds. The work of the last year has indicated its necessity, and so far this year the accumulation of matter and the demands for help are increasing enormously. All of our readers should be subscribers to this bureau and thus be able to make use of its accumulated matters. The fee is only two dollars per year, and brings with it a journal and abstracts, and authors' reprints, some of which are very valuable. Authors who wish their papers circulated can have this done through the bureau, and be sure of reaching a very appreciative audience. Address the Secretary, Miss C. F. Stoddard, 23 Trull Street, Boston, Mass.

*Action of Alcohol on the Blood Cells*

The leading article of this issue is strikingly confirmed in its conclusions by the recent lecture from Professor Metchnikoff, before a large London audience, in which he proves that alcohol in very small doses paralyzes the sagacities and renders them useless to protect the body against microbes. Instances were mentioned where persons brought for treatment suffering from hydrophobia and given large doses of alcohol died soon after. The alcohol had paralyzed the white cells and destroyed their protective power. He showed also that this paralysis was particularly fatal in infectious diseases and declared that all use of alcohol as a protection had just the opposite effect. This lecture will be published in the near future and our present purpose in calling attention to it is to show the trend of new investigations showing the destructive effect of alcohol.

*Report of Work in Three Inebriate Hospitals*

The Dalrymple House at Richmansworth was one of the first inebriate hospitals opened in England in 18—. It receives and treats during the year about fifty patients of the better classes, and those not considered incurable. The treatment extends over six months and one year, and is thoroughly scientific, and represents the very best work done in private institutions in England.

Over sixty per cent of all patients are reported after from five to ten years as temperate and doing well. The Superintendent, Dr. Hogg, in his last report is very emphatic in urging the necessity of a longer stay, and shows by statistics that those who have remained a long time invariably do better than those who go away in a few months.

A number of cases received during the year were drug habitues. They all did well, but required a great deal more care and attention.

*fragments*  
3  
v

A number of patients were discharged on parole, and did well. The difficulty of getting accurate statistics from persons who leave the institutions was mentioned, and the remark is made which is so common in American Institutions, that the patients who do well conceal their treatment and are rarely heard of again, while those who relapse become very prominent and advertise their condition as the fault of the institution and are often the most bitter detractors and critics.

The doctor reports that eight per cent of the patients are physicians. This is one third less than that noted in this country.

Walnut Lodge Hospital, at Hartford, reports for 1907 one hundred and forty-four patients admitted. Of these forty-four were drug takers; four were insane and transferred to other institutions and thirty-one were physicians. The results of treatment were very hopeful, a large number of persons being discharged with every prospect of permanent restoration. All were improved. A large part of the report concerns the methods of treatment by hydropathic, electrical, and radiant light measures. This institution organized in 1878 is the oldest private institution in America that has been under one continuous management. Dr. Crothers is the superintendent, and the hospital is chartered by the state with the similar powers of insane asylums.

A third report is of the Washingtonian Home, Boston, Mass., and is of unusual interest. This hospital was incorporated in 1859 and from that time up to the present has cared for and treated over seventeen thousand patients.

Last year the number admitted was over nine hundred, making it one of the largest inebriate hospitals in the world. A great many of the patients are in acute stages and are admitted for temporary relief. Others remain longer, and the results as reported by the Superintendent, Dr. V. A. Ellsworth, are exceedingly gratifying and hopeful.

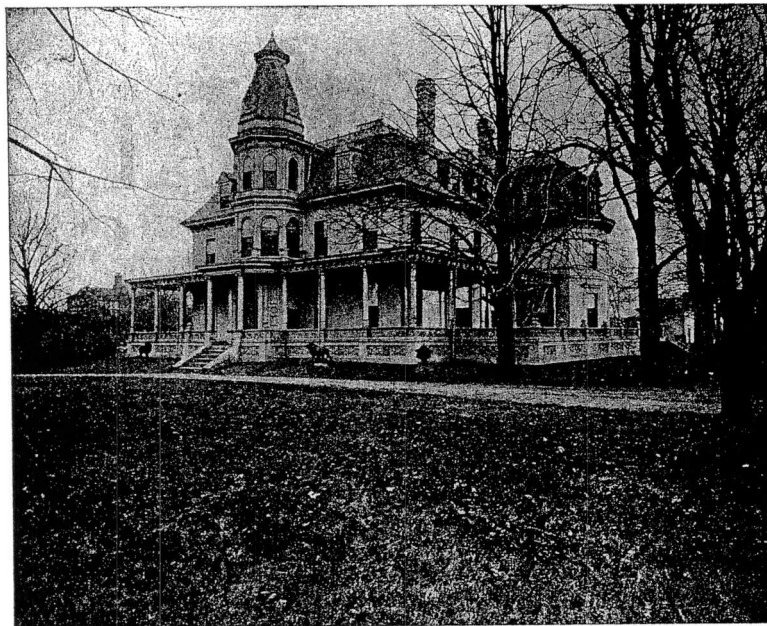
The number of physicians are about eight per cent. This particular fact is mentioned for the purpose of giving emphasis to the very sad failure of medical colleges and physicians generally, who still continue to recognize only the moral side of inebriety. As a result they are too often the victim.

D

S  
diseasF  
treatnI  
quiet  
alley,  
extencC  
a littl  
trains  
Statio

A

TELEPH



# Dr. Douglas' Sanatorium

321 CENTRE STREET, BOSTON, MASS.  
(DORCHESTER DISTRICT)

---

---

Special attention paid to Morphinism, Alcoholism, and other nervous diseases. Mild mental cases also received. Both men and women.

High-frequency electricity, vibration, and other modern methods of treatment are employed.

Ideal location, with fine buildings and extensive grounds, giving the quiet and seclusion so desirable for nervous invalids. Billiard hall, bowling alley, music room. A broad veranda over two hundred and fifty feet long extends around the Sanatorium.

Only a few steps to street cars (Ashmont and Milton line), and but a little farther to the Shawmut railroad station. There are forty-seven trains a day, and the running time is twelve minutes to the South Terminal Station, Boston.

An illustrated booklet sent on application.

Address

CHARLES J. DOUGLAS, M.D.

DORCHESTER, MASS.

TELEPHONE 30, DORCHESTER



# PRACTICAL DIETETICS

With Reference to Diet in Disease

By ALIDA FRANCES PATTEE

*Special Instructor, Bellevue, Hahnemann, Mt. Sinai, and Flower Hospitals, New York,  
and St. Vincent de Paul Hospital, Brockville, Ont., Can.*

A Text-book for the Physician, Student, and Nurse  
as a General Guide for Proper Diet in Disease

A work on the preparation of proper food for the sick and convalescent, giving in detail the method of preparing and administering liquid, semi-liquid, and solid food. Contains the diet list and what to avoid in various diseases, also the proper diet for infants and children as advised by leading physicians and hospitals in New York and Boston.

#### IMPORTANT

**To the Physician**, as a reference book on diet.  
**To the Student**, as it teaches that which they do not get in the class room.  
**To the Nurse**, for their handbag equipment, as it teaches the very things they need to know in their work.  
**To the Hospital**, as a classroom text-book.

The demand for three large editions of this text-book since July, 1903, bespeaks its popularity. It has been —

Authorized for use in the Syllabus for the Nurses' Training Schools of New York State (published by the State of New York Educational Dept.).

Authorized for use in the Boston Public Schools.

Authorized for use in the New York Public Schools.

Adopted by the United States Government (Medical Dept. of the Army).

Adopted by the Schools of Instruction for the Canadian Militia.

Adopted as a text-book by leading Medical Colleges and Hospital Training Schools.

12mo. Cloth, 350 pages. PRICE, \$1.00 net; mail, \$1.10. C. O. D., \$1.25

Special rates on quantities to Training Schools, etc. Complete line of Nurses' Books.  
Send for catalogue.

A. F. PATTEE, Publisher, 52 W. 39th St., New York

TEE

New York,

Nurse  
sease

g in detail  
d.  
er diet for  
York and

oom.  
things they

espeaks its

New York

ng Schools.

D., \$1.25

ses' Books.

w York



# ANTIPHLOGISTINE

Applied warm and thick, is beneficial in all forms of inflammation and congestion



**Q. This box contains over half a billion disease-destroying germs.**

**Q. In the box pictured are enclosed four dozen capsules, each of which contains, in a preparation called YOGURT, from ten to fifteen**

millions of germs. These germs are of a harmless species, and their mission is to drive out of the system disease-producing bacteria, such as are always present in the intestinal tract in cases of *Intestinal Autointoxication*.

**Q. YOGURT** is our name for a remarkable lactic-acid-forming ferment discovered in Oriental milk preparations by Masson, of Geneva, and later investigated by Metchnikoff, of the Pasteur Institute, and other European medical authorities. It has proven a positive remedy for Intestinal Auto-intoxication, and is therefore invaluable in a large number of chronic diseases, particularly in many cases of arteriosclerosis, Bright's disease, skin maladies, chronic rheumatism, rheumatoid arthritis, and chronic biliousness. It is of service in all cases in which stools are putrid, the tongue coated, and the breath bad. It is of great value in typhoid fever and other febrile disorders; also in the intestinal disorders of children, rickets, emaciation and malnutrition.

**Q. Hitherto this remedy has not been obtainable in this country. It may now be secured, freshly prepared and of superior quality.**

**Q. We have succeeded in preparing this ferment in concentrated form, so that it may be administered in capsules.**

**Q. Packages containing four dozen capsules, each postpaid, \$1.00.**

**Q. Manufactured and sold only by**

**The Yogurt Company**

19 College Hall & Battle Creek, Mich.

Send Stamp for the  
"YOGURT BOOK"

### *Just Off the Press*

**A** BOOK of health rules to be followed by all persons suffering from intestinal autointoxication, or from any of the conditions for which it is responsible. It should be read by every one suffering from any of the maladies mentioned above, and by all users of YOGURT. The book will be sent free to any one on request, and upon receipt of a stamp to cover postage. Ask for our "Book of Instructions." Those who are not familiar with YOGURT should also ask for the "YOGURT Book."

Caro

to be  
positio  
the m

PORTER-  
Gentle  
Tablets  
and can'  
never fo  
place of  
and it is  
Y

PORTER-  
Dear  
bination  
Guarana  
types of  
added to  
every on  
headach  
where th  
nabin gi  
the comb  
been my  
Y

Pu  
followi  
Heroin

PO



Careful Laboratory Experiments, backed  
by Clinical Evidence,  
have proven

# CEALGIC

P-R-H

to be superior to all rivals as an analgesic and antipyretic. Its composition, as can be seen by the formula, offsets cardiac depression, the most objectionable feature of the benzol series.

FIVE GRAINS CONTAIN

Acetanilid . . . . . grs. 3	Sodium Bicarbonate gr. $\frac{1}{2}$
Neurodin . . . . . gr. 1.24	Ammonium Chloride gr. $\frac{1}{2}$
Caffeine, Citrated gr. $\frac{1}{2}$	Digitalin . . . . . gr. 1-200

Used and recommended by physicians all over the world

### GOOD WORDS FOR CEALGIC

Strang, Neb., Nov. 26, 1907.

PORTER-RYERSON-HOOBLER Co., Omaha, Neb.  
Gentlemen: Please send me 500 of your Cealgic Tablets by mail, as I forgot them in my last order and can't practise medicine without them. I have never found any other medicine that will take the place of Cealgic Tablets in pain, fever, or la grippe, and it is a "Mother's Friend" in dysmenorrhea.  
Yours truly, A. D. ROUSCH, M.D., M.S.

NEOLA, IOWA, Nov. 29, 1907.

PORTER-RYERSON-HOOBLER Co., Omaha, Neb.  
Dear Sirs: I have found your Cealgic, in combination with Codeine, Salol, and Guarana, the best combination in nervous headaches of women. The Guarana has a splendid action in these intractable types of headaches. I usually employ it in 2-gr. doses, added to the Cealgic with gr. i of Salol, repeated every one or two hours. A great many of these headaches are toxæmic in character, and here is where the Salol acts nicely. Gelsemium and Cannabin given three times a day as a preventive, with the combination mentioned to quell any attack, has been my most effective treatment.  
Yours very truly, J. H. LOWREY, M.D.

LAOAG, P. I., January 20, 1908.

PORTER-RYERSON-HOOBLER Co., Omaha, Neb.  
Dear Sirs: I want to add my testimony to the effectiveness of your Cealgic Tablets in Dengue or breakbone fever. On the morning of November 3, 1907, I was called to see Mr. Z. M. S., the provincial treasurer of Ilocos Norte. I was out of town when the call came, and did not return until 6 o'clock in the evening. I found the patient suffering intensely throughout the whole body, and with a fever of 103 degrees. He had slept only about an hour the night before. I immediately gave him two tablets, told him to take two more at 7 o'clock, and one every hour thereafter until he was relieved, or could go to sleep. On returning the next morning I found my patient had gone to sleep about 8 o'clock and had had a splendid night's rest. Neither the fever nor the pains returned any more, and no further medication was needed. I have had excellent results, though not so marked, in many other cases, and I believe that we have no other medicine in our dispensary that has an equal value in the treatment of this most uncomfortable variety of fever.  
Respectfully,  
C. L. PICKETT, M.D.,  
Christian Mission Dispensary, Laoag, P. I.

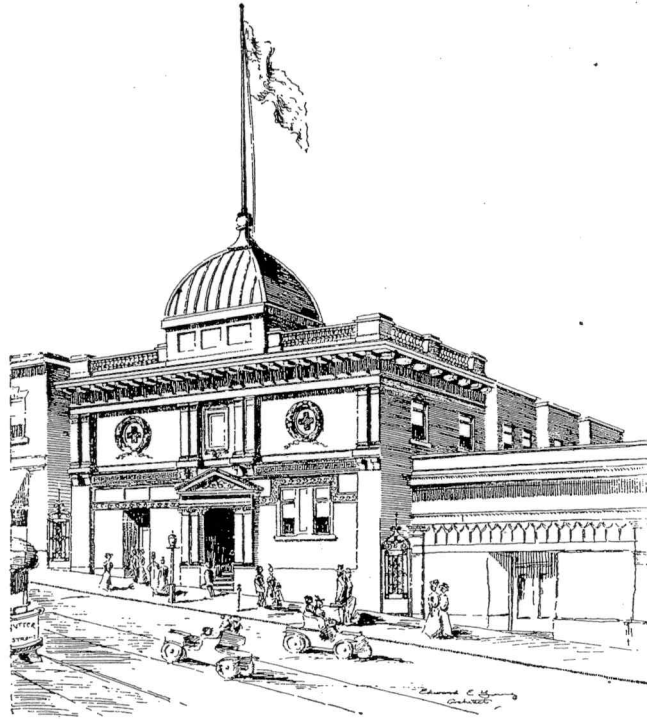
Put up in 5-grain tablets (pink), also in powder form either white or pink, and in the following 5-grain combination tablets for convenience: Cealgic and Codeine, Cealgic and Heroin, Cealgic and Quinine, Cealgic and Salol, Cealgic and Sodium Salicylate Comp.

A trial package of 100 tablets just once to any physician upon receipt of 25 cents.

Write for Literature

**PORTER-RYERSON-HOOBLER CO.**  
*Manufacturing Pharmacists*  
**OMAHA, U.S.A.**





## The New Saint Winifred Sanatorium

1065 Sutter Street,

San Francisco, California.

The Sanatorium Building is constructed of "Armored Concrete," absolutely fireproof and earthquake-proof.

The Sanatorium is centrally located; has one hundred sunny rooms with a full staff of trained medical and surgical nurses.

### SAINT WINIFRED SANATORIUM TRAINING SCHOOL FOR NURSES

A Training School for Nurses has been established in connection with the Sanatorium in which nurses are trained in medical, surgical, and obstetrical work.

### THE PACIFIC MEDICAL JOURNAL

The oldest, best, and most influential medical publication on the Pacific Coast.

Sample Copy Free. Subscription price \$1 per year.

THE PACIFIC MEDICAL BUREAU BUYS, sells, and furnishes all information regarding locations and medical practices on the Pacific coast.

Address,

Pacific Medical Journal,

1065 Sutter Street,

San Francisco, Cal.

F  
A  
N  
B  
F  
U  
N  
I  
G  
T  
C  
D  
  
B

**Ner**

**Cele**

by  
cere  
ner  
stra  
ed  
the  
uab  
ner  
tha  
A  
acti  
este  
with  
syst  
nev  
I  
ner  
be  
—S  
its 1

R  
LONDO

tates

atorium  
 isco, California.  
 crete," absolutely  
 sunny rooms with  
 R NURSES  
 onnection with the  
 al, and obstetrical  
 ion on the Pacific  
 year.  
 es all information  
 Street,  
 Francisco, Cal.

The Principal Sanitaria in the United States

xv

**PAPINE** IS THE  
 ANODYNE PRINCIPLE OF OPIUM, THE  
 NARCOTIC AND CONVULSIVE ELEMENTS  
 BEING ELIMINATED, AND IS DERIVED  
 FROM THE CONCRETE JUICE OF THE  
 UNRIPE CAPSULES OF PAPAVER SOM-  
 NIFERUM. ONE FLUID DRACHM IS EQUAL  
 IN ANODYNE POWER TO ONE-EIGHTH  
 GRAIN OF MORPHIA. IT PRODUCES NO  
 TISSUE CHANGES, NO CEREBRAL EX-  
 CITEMENT, NO INTERFERENCE WITH  
 DIGESTION.

**BROMIDIA ECTHOL IODIA**  
**BATTLE & CO.,** CHEMISTS CORPORATION, ST. LOUIS, MO., U.S.A.

### Nervous Exhaustion

#### Celerina

by its sedative action on the cerebro-spinal centers conserves nervous energy. It eases the strain on a nervous system keyed to the highest tension and, therefore, is an exceedingly valuable means of preventing the nervous collapse or breakdown that might otherwise occur.

As a result of its tono-sedative action, psychic equilibrium is established, and the individual with an overwrought nervous system is given new power and new energy.

In the treatment of functional nervous diseases, Celerina will be found of the greatest value, —sedative in its action, but tonic in its results.

**RIO CHEMICAL CO.**  
 LONDON — NEW YORK — PARIS

## WHEELER'S TISSUE PHOSPHATES

- DELICIOUS — SUSTAINING -

THE IDEAL TONIC  
 FOR  
 FASTIDIOUS CONVALESCENTS



**T. B. WHEELER M.D.**  
**COMPANY**

IN ANEMIA,  
 NEURASTHENIA,  
 GESTATION,  
 CONVALESCENCE,  
 ETC.  
**MONTREAL,  
 CANADA,**

AN ARM OF PRECISION

**LABORATORY,  
 ROUSES POINT, N.Y.**  
 SAMPLES & LITERATURE  
 ON REQUEST

TWENTY-NINTH YEAR OF  
**THE ALIENIST**  
 and **NEUROLOGIST**

AUGUST NUMBER

CHAS. H. HUGHES, M.D., Editor

H. L. HUGHES, Mgr

The *August* number of the ALIENIST AND NEUROLOGIST contains, besides the usual number of selections, reviews, correspondence, obituaries, etc., the following: An Insane Hospital Annex Reformatory and Sanatorium for Insanoids or Semi-fous.— Sleep States.— A Case of Sensory Aphasia in an Octogenarian.— Legal Obscenity and Sexual Psychology.— Woman's Testimony and Doctor's Danger.— The Price of Pure Milk.— Vivisection Without Sympathy.— Men who Mistake Insanity.— Clear Water.— Hardin the Editor.— Mr. Bush and Lincoln's Saloon Relations.— Pharmaceutical Houses.— The Case of Colonel Stewart.— Miracle at the Tomb.— The Battle Creek Sanitarium.— Thomas A. Edison and Mary Baker Eddy. President H. L. Burrel's Theme.— A Tyrannous Court Decision.— The Peril of the Big Navy Gun.— The New England Medical Monthly.— The Wistar Institute of Anatomy.— Prince Zu Eulenburg as a Kleptophile.— Esperanto.— Dr. Conolly Norman.— Union Labor Take Notice.— Legraine's Sculptured Picture of Inebriety, etc.

Subscription: Five Dollars per Annum in Advance

Sample on request

Address

**H. L. HUGHES, Manager**  
 3858 West Pine Street St. Louis, Mo., U.S.A.

D

K

1885

T

Ⓒ A  
 Indep  
 of Leg

Ⓒ “  
 Journ

Ⓒ “  
 fairly  
 of rid

Ⓒ “  
 has  
 mem  
 be de

Ⓒ “  
 be c  
 fourt

## DR. WILLIAM LEE HOWARD

Has just written the best story of the Southern Pacific ever published. It is full of life and love and adventure. The title is

### Lila Sari

The price is \$1.50

*Richard G. Badger, Publisher, Boston*

1885

The "RED BACK"

1908

## The Texas Medical Journal

IS THE POPULAR MEDICAL JOURNAL OF THE SOUTHWEST

☛ A free-lance that goes for the Quacks, in as well as out of the profession. Independent in all things, neutral in nothing that pertains to the advancement of Legitimate Medicine. Subscription One Dollar a year in advance.

OWNED, EDITED, AND PUBLISHED MONTHLY BY  
DR. F. E. DANIEL, AUSTIN, TEXAS

☛ "Dr. Daniel's reputation as a writer is as wide as the land."—*American Journal of Surgery and Gynecology*.

☛ "Dr. Daniel's sense of humor is certainly as sharp as a lance, and his pages fairly twinkle with brightness. His manner of making men and things the butt of ridicule at will is wellnigh inimitable."—*Medical Progress*.

☛ "Dr. Daniel, as editor of the 'Red Back,' the *Texas Medical Journal*, has done some of the best, brightest, and most original work done by any member of the editorial guild medical. There may come a time when he may be dead, but dull,— never."—*Medical Mirror*.

☛ "If we could advertise in only two medical journals, the 'Red Back,' would be one of them."—(Sharp & Dohme, renewing advertisement for twenty-fourth year).

ST  
[ST]

UGHES, Mgr

ST  
vs,  
ne  
ds  
sia  
y-  
—  
y.  
—  
le-  
rel  
ek  
ly.  
irt  
ew  
of  
—  
ke  
tc.

Advance

ger  
U.S.A.



## **SYR. HYPOPHOS. CO., FELLOWS**

Contains the Essential Elements of the Animal Organization—Potash and Lime,

The Oxidising Agents—Iron and Manganese;

The Tonics—Quinine and Strychnine, (each fluid drachm contains the equivalent of 1-64th grain of pure Strychnine).

And the Vitalizing Constituent—Phosphorus; the whole combined in the form of a Syrup with a Slightly Alkaline Reaction.

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

It has Gained a Wide Reputation, particularly in the treatment of 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 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.

This preparation can be procured at all chemists and druggists, everywhere

grain  
Syrup  
ortant  
under  
s, and  
ess in  
es, by  
lation.  
choly;  
From  
ts use  
  
imita-  
at no  
on, in  
r heat.  
quine  
write  
iginal  
bear.



**AK**

**FEELING IS A SENSE**  
**FEELING PAIN**  
**NONSENSE**

— TRY TWO ANTIKAMNIA TABLETS —

**THE ANTIKAMNIA CHEMICAL COMPANY**

ST. LOUIS





Dysmenorrhea  
and  
Ovarian Neuralgia  
Metritis  
and  
Endometritis

# *Antiphlogistine*

(Inflammation's  
Antidote)

For Inflamed and Congested  
Pelvic Viscera

Cases of recurrent dysmenorrhoea with the usual concomitant symptoms, in which all remedial agents fail to effect a cure, are not infrequent. They are not surgical cases, nor will they yield to ordinary local treatment. Drugs are palliative only. Once a month the patient is incapacitated and compelled to take to her bed. If a physician is called he is often forced, against his better judgment, to stupefy her with opiates or other analgesics.

Treat all such patients with Antiphlogistine applied one eighth inch thick, and as hot as can be borne comfortably, as indicated in the illustration, beginning twenty-four hours before the menstrual period is due.

If Antiphlogistine is used for several successive catamenial periods, changing the dressing every twenty-four hours, permanent relief can reasonably be expected.

TAMPONS.— Antiphlogistine, enveloped loosely in gauze and packed around the cervix, makes a very efficient, hygroscopic vaginal tampon.

The Denver Chemical Co.,  
New York.