

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

THE QUARTERLY JOURNAL  
OF  
INEBRIETY.

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

T. D. CROTHERS, M.D., Editor.  
56 Fairfield Avenue,  
HARTFORD, CONN.

---

Vol. XXII.

APRIL, 1900.

No. 2.

---

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

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

Subscription \$2.00 Per Year.

# TABLE OF CONTENTS.

APRIL, 1900.

	Page
THE CHILDREN OF THE FEMALE INEBRIATE. DR. W. C. SULLIVAN,	129
ARE THE USES OF TOBACCO DETRIMENTAL TO MANKIND. DR.	
T. H. MARABLE.....	139
ON MORPHINISM. DR. LOUISE G. ROBINOVITCH.....	150
ALCOHOL AND ALCOHOLISM. AND ITS RELATION TO THE MEDICAL	
PROFESSION. DR. CHARLES MARIE.....	163
MORPHINISM INFLUENCING THE DISPOSITION OF PROPERTY.....	179
ALCOHOLISM. DR. JULES MOSEL.....	191
ALCOHOL IN ACUTE PSYCHOSIS.....	201
REPORT OF WALNUT LODGE HOSPITAL.....	207
ABSTRACTS AND REVIEWS.....	215
EDITORIAL:	
THE EXPERIMENTS OF PROF. ATWATER,..	224
INEBRIETY IN THE NAVY.....	227
SOME IMPORTANT MEETINGS.....	

## LISTERINE

Listerine assures to the Medical Profession a non-poisonous antiseptic of well proven efficacy: uniform and definite in preparation, and having a wide field of usefulness.

On account of its absolute safety, Listerine is well adapted to internal use and to the treatment of Catarrhal Conditions of the mucous surfaces.

LITERATURE DESCRIBING THE BEST METHODS FOR USING

Listerine in the Treatment of Diseases of the Respiratory System

WILL BE MAILED TO YOUR ADDRESS, UPON APPLICATION.

**LAMBERT PHARMACAL CO., St. Louis.**

**W**HEN several hundred medical men have tested a remedy, and found it good, there is a temptation to try it. But when thousands of medical men all over the world have tried and tested a preparation like Aletris Cordial in the diseases in which it is recommended, viz.: Amenorrhœa, Dysmenorrhœa, Leucorrhœa, Prolapsus Uteri, Sterility, to prevent Miscarriage, etc., and have given the most brilliant reports as to its value, it seems as though physicians who have cases of this kind would have an irresistible desire to at least test it.

---

Sample sent to any Physician who will pay express charges.

---

Always Specify

**Rio Chemical Co.,**  
ST. LOUIS, LONDON, PARIS, MONTREAL.

CURES CATARRHAL AFFECTIONS, PILES. STOPS BLEEDING, SUBDUES INFLAMMATION.

FOR

PONDS EXTRACT

ALL PAIN

BEWARE OF WORTHLESS IMITATIONS.

The advertisement features a central graphic consisting of a dark triangle with a white circle inside. Inside the circle is a dark, six-pointed star with a white center. The words "PONDS EXTRACT" are written across the center of the star. The text "CURES CATARRHAL AFFECTIONS, PILES." is written along the left side of the triangle, and "STOPS BLEEDING, SUBDUES INFLAMMATION." is written along the right side. The word "FOR" is positioned above the star, and "ALL PAIN" is positioned below it. At the bottom of the triangle, the text "BEWARE OF WORTHLESS IMITATIONS." is written.

**PAPINE** IS THE PAIN  
RELIEVING PRINCIPLE OF OPIUM.  
ONE CAN DISPENSE WITH OPIUM  
THE NARCOTIC; ONE CANNOT  
DISPENSE WITH OPIUM THE  
PAIN-RELIEVER. PAPINE PRO-  
DUCE NO TISSUE CHANGES, NO  
CEREBRAL EXCITEMENT, NO IN-  
TERFERENCE WITH DICESTION.

Sample (12 oz.) Bottle Ecthol Sent Free on Receipt of 25 Cts. to Prepay Express.

**FORMULA:**--One fluid drachm is equal in  
anodyne power to 1-8 gr. Morphine.

BROMIDIA  
ECTHOL  
IODIA

**BATTLE & CO.,** <sup>CHEMISTS</sup> CORPORATION, ST. LOUIS, Mo., U. S. A.

---

*Private Home for Female Inebriates.*

Dr. AGNES SPARKS receives at her residence,

140 So. Portland Ave., Brooklyn,

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

**REFERENCES.**

Dr. J. B. MATTISON.

Dr. ALEX. J. C. SKENE.

# RICKINE

---

---

DEAR DOCTOR :

We have been made the custodian of a valuable formula—a veritable physician's friend—upon the condition that we would supply it *only* to physicians. We have accepted the trust, and beg to call your attention to it.

As a reliever of pain, having its origin in nerve disturbances, whether by cardiac action or otherwise, it is without a rival. Its action in all forms of Headache, Hemicrania, Neuralgia, etc., is satisfactory both to the patient and physician. It is the

## PHYSICIAN'S FRIEND,

in that by use the administration of the products or alkaloids of opium can be somewhat abbreviated, which, to many, "is a consummation devoutly to be wished."

It is invaluable as a remedial agent for the control of the temperature of the human body. Experience demonstrates that it causes no gastric disturbances.

This valuable remedy can only be obtained direct from us, *by physicians only*, and as we anticipate a constant and increasing demand for it send in your order at *once*, so that there may be as little delay as possible in your receiving it.

The dose of Rickine is from five to ten grains, repeated in an hour if the desired effect is not obtained from the first dose. As high as sixty grains may be administered during the twenty-four hours to an adult.

Rickine is prepared in powder form, as well as in 5-grain tablets, and is packed in tin boxes, each containing one ounce (either form) and cannot be obtained in any other way.

There has been a demand for the following formulas, which we are now making:

Rickine and Codeine,	Rx. Rickine	4 3-4 grs.
	Codeine	1-4 gr.
Rickine and Quinine,	Rx. Rickine	3 grs.
	Quinine	2 grs.
Rickine and Salol,	Rx. Rickine	3 grs.
	Salol	2 grs.

Prices same as Rickine: 65c. per oz. or an assorted order of ten ozs. \$5.75.

---

MANUFACTURED ONLY BY

THE G. F. HARVEY CO.

SARATOGA SPRINGS

- - - - NEW YORK.

## WHEELER'S TISSUE PHOSPHATES.

Wheeler's Compound Elixir of Phosphates and Calisaya. A Nerve Food and Nutritive Tonic for the treatment of Consumption, Bronchitis, Scrofula, and all forms of Nervous Debility. This elegant preparation combines in an agreeable Aromatic Cordial in the form of a Glycerite, *acceptable to the most irritable conditions of the stomach.* Bone Calcium Phosphate,  $\text{Ca}_2\text{PO}_4$ ; Sodium Phosphate,  $\text{Na}_2\text{HPO}_4$ ; Ferrous Phosphate,  $\text{Fe}_3\text{PO}_4$ ; Trihydrogen Phosphate,  $\text{H}_3\text{PO}_4$ ; and the Active Principles of Calisaya and Wild Cherry.

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

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

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

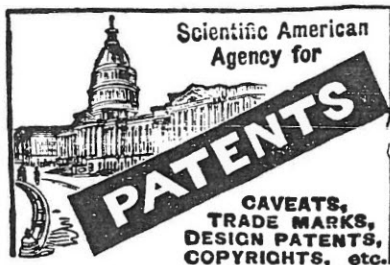
**Dose.** — For an adult, one tablespoonful three times a day, after eating; from seven to twelve years of age, one dessertspoonful; from two to seven, one teaspoonful; for infants, from five to twenty drops, according to age.

*Prepared at the Chemical Laboratory of*

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

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

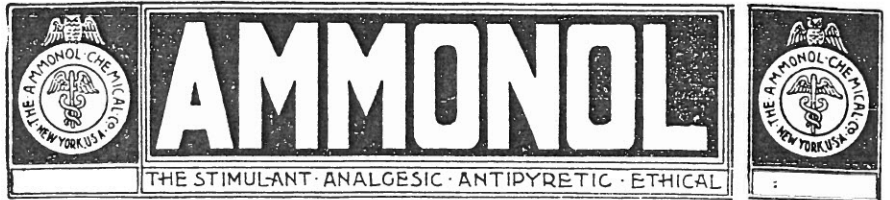
Read the pamphlet on this subject sent you.



For information and free Handbook write to  
MUNN & CO., 361 BROADWAY, New York.  
Oldest bureau for securing patents in America.  
Every patent taken out by us is brought before  
the public by a notice given free of charge in the

**Scientific American**

Largest circulation of any scientific paper in the  
world. Splendidly illustrated. No intelligent  
man should be without it. Weekly, \$3.00 a  
year; \$1.50 six months. Address, MUNN & CO.,  
PUBLISHERS, 361 Broadway, New York City.



## In La Grippe

behaves as a stimulant as well as an **Antipyretic**  
**and Analgesic** thus differing from other Coal-

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

## The Stimulant

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

*Ammonol may be  
obtained from all  
Leading Druggists.*

**The Ammonol Chemical Co.,**  
NEW YORK, U. S. A.

*Send for "Ammonol  
Excerpta," an 81-page  
pamphlet.*





## **A Private Home for Nervous Invalids**

A limited number of patients will be received at my residence for the care and treatment of Nervous and Mental Diseases requiring *Isolation*. Elegant location combined with all the latest modern conveniences. One block from Troost Park. Inspection desired.

*References* :— [*The Medical Profession of  
Kansas City and Vicinity.*]

ADDRESS :

**JOHN PUNTON, M.D.,  
KANSAS CITY, MO.**

OFFICE :  
Altman Bldg., 11th and Walnut Sts.

RESIDENCE :  
2901 Forest Avenue, Telephone 337.

ANTIKAMNIA & QUININE LAXATIVE TABLETS

FIVE-GRAIN ANTIKAMNIA TABLETS

ANTIKAMNIA & QUININE TABLETS

ANTIKAMNIA & CODEINE TABLETS

UNIFORM  
ACCURATE  
RELIABLE

AK

AK

AK

AK

SEND US YOUR CARD AND WATCH THE EFFECT  
THE ANTIKAMNIA CHEMICAL COMPANY — ST. LOUIS, U.S.A.

THE  
QUARTERLY JOURNAL OF INEBRIETY.

Subscription, \$2.00 per year.

---

Vol. XXII.

APRIL, 1900.

No. 2.

---

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

---

THE CHILDREN OF THE FEMALE INEBRIATE.\*

---

BY WILLIAM CHARLES SULLIVAN, M.D.

*Medical Officer of Her Majesty's Prison, Pentonville.*

---

In the paper which I have the honor to read before you to-day, my aim has been to bring to your notice a series of observations touching the influence of maternal inebriety on the development of the offspring. These observations I have been led to record, not because their results present any startling novelty — they are indeed largely in accord with the indications of *à priori* reasoning — but because they illustrate in a very vivid and forcible fashion the important rôle which the alcoholism of women may play in racial deterioration.

I venture to think that at the present moment such a demonstration may not be wholly superfluous, seeing that from statistical indications, upon which it is needless to enter here, it would appear that the recent growth of alcoholism in this

---

\* Read at the January meeting of the English Society for the Study of Inebriety.

country has been relatively at least as marked in the female as in the male population.

Before dealing with the details of the inquiry it will be desirable to mention briefly the source and character of our facts.

Our observations were carried out in the women's section of Liverpool Prison, an institution which presents the most extensive field for the study of female inebriety to be found in these countries. As an evidence of its unique position in this respect, I need only refer to the fact that its figures for female recidivism are in excess of those for any other prison in the kingdom. For example, during the year in which most of these observations were made, there were no less than 2,290 instances in which women committed to this prison had already served upwards of twenty terms of imprisonment.

From this abundant material I have selected a series of cases, one hundred in number, of chronic drunkards who have borne children, and from the history of these children, and more particularly from the indications given by the infant mortality, I have endeavored to trace the action of the parental intoxication.

In order to avoid possible sources of fallacy, care was taken to exclude all cases in which the influence of alcoholism might have been complicated by other factors making for degeneracy. Thus all cases were eliminated in which there was a suspicion of syphilis, and all cases where the family history suggested a constitutional susceptibility to tubercular diseases. Those cases were also omitted where the antecedents, the presence of anomalies apart from the drink habit, and the peculiar cerebral reaction to alcohol indicated the existence in the stock of a marked tendency to nervous degeneracy.

Selected subject to these reservations, our cases are fairly representative of the average prison drunkard of the proletariat; of course, the fact that they do belong to a special class, and are, therefore, colored by the characteristics of that

class, and influenced by the environmental conditions normal to it, must be constantly borne in mind in estimating the general significance of our results.

Naturally, with a view to the special objects of our investigation, cases were chosen in which the alcoholic habit was in active operation during the reproductive career. As regards the form of alcohol consumed, the majority of our patients drank both spirits and beer.

In order to define more clearly the scope and value of the information obtainable by the clinical method employed, we may formulate the aim of our inquiry in the queries:

(1) Does maternal inebriety produce a high rate of infant mortality?

(2) With progressive increase of the maternal alcoholization, is there progressive decrease of infant vitality? And if so, do modifications of the normally progressive course of maternal intoxication produce corresponding effects on the progression of the infant death rate?

(3) Amongst surviving children is there any evidence of unusual frequency of nervous abnormality?

(a) *Alcoholic Maternity and the Infantile Mortality.*—Twenty of the hundred women in our series were able to give details of female relatives, also drunkards, who had had children. Of these 120 female inebriates were born 600 children, of whom 265 (44.2 per cent.) lived over two years, and 335 (55.8 per cent.) died under two years, or were dead-born. In over 60 per cent. of the children dying in infancy the assigned cause of death was "convulsions."

*Per se* the death rate just stated has no very definite significance; to give it meaning we must have some standard of comparison, and the best standard would obviously be sober families of the same stock. Twenty-one of our patients were able to give information regarding sober female relatives, sisters, or daughters, who had had children of sober males. The drunken and sober families compare thus:

Drunken mothers (21 cases), 125 children, of whom 69 (55.2 per cent.) died under two years.

Sober mothers (28 cases), 138 children, of whom 33 (23.9 per cent.) died under two years.

Thus the death rate amongst the children of the inebriate mothers was nearly two and one-half times that in the children of sober women of the same stock.

It may be of interest to cite one or two concrete instances of this contrast in individual families.

Obs. 1. — S., æt. 42. Prev. impris., 23. Drunkard since first confinement; beer and whiskey; usual symptoms; has recently made grave attempt (automatic) to commit suicide. Parents and other relatives sane and sober; husband sober. Five children; first living, and healthy; aged twenty-two; second died of measles at three years; third died of convulsions at seven months; fourth died of convulsions at six months; fifth dead-born. A sister of sober habits had eight children, of whom six are living and healthy.

Obs. 2. — H., æt. 50. Prev. impris., 53. Drinking over thirty years; beer and spirits; usual symptoms; no D. T., but has latterly had visual hallucinations. Father drunkard; mother sober. Husband drunkard. Has had seven children, of whom all but one, the third, died of convulsions in infancy. The surviving child, a girl, is healthy and sober, married to a sober husband, and has had two children, both living and healthy.

Incidentally it may be noted that cases like the last, where one or two children survive, are sober, and give birth to healthy infants, are a further proof that we are not dealing with degenerate and exhausted stocks, in which the rôle of alcoholism is merely to hasten an inevitable and desirable extinction. Nor are similar cases at all uncommon; even in our series where only a very small proportion of the surviving children had reached the procreative age there were nine such observations.

Of course, our cases were not observed under the condition of laboratory experiment, and we cannot dissociate the direct influence of the intoxication on the organisms of mother and child from the indirect action of the parental vice through deterioration of a *milieu* already unfavorable to infant vitality. Hence we are unable to assign an exact significance to our figures, though they of course represent accurately enough the *practical* result of maternal drunkenness.

(b) *Progressive Death Rate in the Alcoholic Family, and its Modification by Intervening Circumstances.* — In eighty of our cases, omitting instances of mixed paternity, the number of children reached or exceeded three. Classing these children in the order of their birth, we can compare the death rates in the different groups so formed. Combining the figures of the smaller classes, in order to secure groups numerically adequate, our results, expressed in percentages, are as follow:

	Cases.	Dead and Dead-Born.	Dead-Born.
First born, . . . . .	80	33.7 per cent.	6.2 per cent.
Second born, . . . . .	80	50.0 "	11.2 "
Third born, . . . . .	80	52.6 "	7.6 "
Fourth and fifth born, . . . . .	111	65.7 "	10.8 "
Sixth to tenth born, . . . . .	93	72.0 "	17.2 "

The type of alcoholic family suggested by these results — a type characterized by decrease of vitality in the successive children — is fully realized in many of our observations. We may cite the following:

Obs. 3. — S., æt. 34. Prev. impris., 37. Drinking since first confinement; beer and spirits; usual symptoms; one attack of D. T.; attempted suicide twice; parents sober; husband drinker; six children; first, second, and third living and healthy; fourth, aged six, of low intelligence, suffers from incontinence of urine; fifth, aged four, epileptic idiot; sixth, dead-born; has recently had an abortion.

Obviously, in the course of an individual's alcoholization many circumstances may occur to modify the regularity of its progress. Can any reaction of this modifying influence on the offspring be traced by our test of infant mortality? Clearly this will only be possible in very rare instances, and in respect of the grosser and more obtrusive agencies. In our cases evidence on this point was available concerning two such agencies of opposite tendency. Thus it was found in all the instances (seven in number) where conception was known to have occurred during a state of drunkenness, that the infants died soon after birth or were dead-born, though in several of the cases the children so conceived were the first born, and had, therefore, as we have seen, a relatively good chance of life. In some of the cases subsequently born children survived. These facts suggest very strongly that the reinforcement of the alcoholic conditions at the time of conception aggravated its action on the embryo, reducing the vitality of the latter to a degree usually related to later stages of the intoxication. It is to be noted that in three of these cases this first pregnancy occurred before marriage. Possibly we should not be in error in attributing to a conception in drunkenness a certain influence in the causation of the high death rate of illegitimate children.

Of opposite effect to the condition of which we have just spoken, enforced sobriety by imprisonment during a part of pregnancy appears capable at times of modifying the normal type of the alcoholic family in a favorable direction, the temporary decrease of intoxication enabling the infant organism to acquire a sufficient degree of vitality to survive when earlier born children have succumbed.

This result can only ensue, of course, when the incarceration extends over a certain period, and occurs at a stage of the maternal career when the organic changes of alcoholism are not too far advanced — two conditions which are rarely united. The following observations will illustrate the point:



Obs. 4. — W., æt. 30. Prev. impris., 109. Drunkard before marriage; chiefly spirits; very violent after drink; attempted suicide once. Father fairly sober; mother notorious prison drunkard; husband drinks, and has had D. T. Three children: first born nine years ago, died when a few days old; second living and healthy, aged three (born in prison, where the mother spent last two months of pregnancy, and also eight short sentences in early part of same pregnancy); third, dead-born.

(c) *Nervous Degeneracy in the Surviving Children.* — The facts which we have just cited would lead us naturally to expect that the surviving children in the alcoholic family should show some trace of their exposure to an agent of such obvious potency. Unfortunately the conditions of our investigation did not admit a full determination of this point, and inquiry was, therefore, limited to ascertaining the frequency of major epilepsy in our cases. Of the children comprised in our series 219 lived beyond infancy, and of these nine, or 4.1 per cent., became epileptic. Many of the others, moreover, counted here as non-epileptic, had not reached the age at which epilepsy most commonly appears, and some of these may quite possibly have developed the neurosis later. Even, however, if we ignore this possibility and accept our figures as they stand, they give a proportion of epilepsy in our heredo-alcoholics enormously in excess of the most reliable estimates of its frequency in the general population.

Having thus summarized the results of our observations, it remains to deal in a few words with their interpretation.

It has been contended on clinical evidence by many authors since the time of Morel that the condition of artificial degeneracy produced by chronic alcoholization reacts on the development of the offspring of the alcoholic individual; that, as we now express it, the germ plasm is accessible to the influence, direct and indirect, of the parental poisoning, and from that influence there results a deterioration of the stock. As

this deterioration naturally affects most severely the latest evolved parts of the organism. it is in the higher cerebral centers that the defective development of the heredo-alcoholic finds its chief expression ; parental alcoholism produces mental degeneracy in the offspring.

In addition to this mode of action affecting the germ, we have to consider in the case of maternal alcoholism other influences of greater potency, namely, those acting on the developing embryo. These latter comprise, on the one hand, the indirect results of disorders in the maternal organism, whether generalized lesions leading to defective nutrition, or morbid conditions localized in the generative apparatus, and, on the other hand, the direct poisoning of the fetus by alcoholic excesses during pregnancy. We have further to bear in mind the possible effects of drunkenness during lactation.

Finally, all these modes of influence are reinforced by the malign modification of the social *milieu* which parental drunkenness entails.

Applying these considerations to the facts we have noted, we may advance these propositions :

(1) Maternal inebriety is a condition peculiarly noxious to the vitality and to the normal development of the offspring.

(2) While its influence, particularly as measured by the test of infant mortality, appears to be exercised in considerable degree indirectly through deterioration of the *milieu*, a large part also depends on the primary action of the poison. The reality of this latter mode of influence is evidenced by the tendency to still-births and abortions, by the frequency of epilepsy in the surviving children, by the prevalent mode of death, by the effects of modifications of the intoxication.

(3) This primary influence of alcohol is due in part to the effects of the poison on the maternal organism : in part to a direct toxic action on the embryo, owing to continued excesses during pregnancy and lactation.

(4) The first of these modes of primary influence is by its

nature permanent, with a tendency to increase. The second mode, while tending also to a constant and constantly increasing operation, is susceptible of temporary augmentation or diminution.

(5) Under these combined modes of influence, the normal tendency of the family with alcoholic maternity is towards a type the inverse of the syphilitic family; that is to say, the first-born children are normal, then come more or less defective children who live beyond infancy, then children dying in infancy, then still-births, and, finally, abortions.

(6) Deviations from this type are probably due in many cases to oscillations in the intensity of the second mode of influence. Deviations originating in this fashion may be seen, for instance, in the death in infancy of the earliest born children of the family as a result of conception in drunkenness, and in the survival of late born children when the mother has been imprisoned during part of pregnancy.

It is hardly necessary to point out, in conclusion, the evidence which these observations furnish as to the social gravity of female inebriety. Our inevitably gross method of inquiry could only detect the extreme and gravest effects of this agency: it is legitimate to infer that in earlier phases, and in more moderate operation, it must also exercise a malign influence, capable of producing other morbid conditions, slighter in degree, less obtrusive in character. And this inference is not a matter of merely plausible speculation; it can be confirmed by appeal to another order of facts. I need only cite one instance: the socially unadapted classes of humanity — the criminal degenerate, the prostitute, the vagrant — are recruited in no inconsiderable proportion from the offspring of the alcoholic; in the genesis of the cerebral defects which underlie the aberration of conduct in these classes, must we not assign a certain rôle to the influence of the parental intoxication?

And this view leads naturally to the indication of social

prophylaxis. In suppressing the female drunkard, the community not only eliminates an element always individually useless, and constantly liable to become individually noxious; it also prevents the procreation of children under the conditions most apt to render them a burden or a danger to society.

---

#### COLD BATHS IN THE TREATMENT OF DELIRIUM TREMENS.

Maurice Lettulle, in *La Presse Médicale* of July 8, 1899, describes the case of a man thirty-three years of age, admitted to the Hôpital Boucicaut with a severe attack of delirium tremens, which had begun four hours before. At the time the patient was in intense excitement, but was capable of answering questions. The muscles of the trunk were in a constant tremor, and the limbs were thrown about with great violence. A camisole was applied which, instead of calming, seemed to aggravate the excitement. The temperature on admission was 104.5° F., and the face and extremities were cyanosed. Seven hours after the beginning of the attack he was given a cold bath of 64.4° F. He remained in the bath for thirty minutes, and at the end of that time suddenly passed into a state of collapse, with the pulse remaining at the same rate as when he entered the bath, 108. In the meantime the temperature had fallen to 92.6°. This was ten minutes after the bath had been given. From this extremely low point the temperature gradually improved until twelve hours after the bath had been given, when it was normal. The patient did not have a return of the delirium. The author enters into a consideration of the literature of the treatment of delirium tremens by cold baths. He regards it as a distinct improvement upon the use of opium, chloral, or digitalis. The bath in the case described was administered for too long a time, but he thinks it is justified in these very grave cases, and in the case in question it was followed by a lowering of the temperature and a disappearance of the delirium.

ARE THE USES OF TOBACCO DETRIMENTAL TO  
MANKIND?

---

By T. H. MARABLE, M.D., OF CLARKSVILLE, TENN.

---

The tobacco plant belongs to the order *Solanaceæ* and the genus *Nicotiana*. The order to which tobacco belongs has rather a bad reputation, as almost every one of this genus contains poisonous plants, and they are generally unsightly or have an unpleasant odor.

Among the disreputable kindred of tobacco are night-shade (*Solanum nigrum*), horse-nettle (*Solanum Carolinensis*), belladonna (*Atropa Belladonna*), henbane (*Hyoscyamus niger*), and Jimson weed (*Datura Stramonium*). The character of the order is somewhat relieved by the Irish potato (*Solanum tuberosum*).

The first detailed account of smoking among the Indians is given by Oreido. It was used by them to produce stupor and insensibility. The smoke was taken by inhalation through the nostrils by means of a hollow forked cane in one piece about a span long. When used the forked ends are inserted into the nostrils, the other end being applied to the burning leaves of the herb. This implement is called tobacco, from which the name tobacco is taken. There are four ways in which tobacco is used for its effects by men — chewing, snuffing, smoking pipe or cigar, and smoking cigarettes. You will note that I class

cigarette smoking as a distinct manner of using tobacco, for indeed it is, and I think the most dangerous form in which tobacco can be used.

Physiological action of tobacco is hostile to all forms of life. On man the effects have been very minutely observed. In small doses it occasions a burning sensation in the tongue, a sensation of heat in the throat, a sense of rawness throughout the œsophagus, and a feeling of warmth in the stomach. The effect produced when used in excessive quantities, faintness, giddiness, nausea, vomiting, gastrodynia, cardialgia, torpor, sleepiness, palpitation of the heart, hypochondriasis, deafness, amblyopia, delirium, general relaxation of muscular system, trembling, complete prostration of strength, coldness of the surface, cold, clammy perspiration, convulsive movements, paralysis, and death. These conditions and symptoms have all been repeatedly noted by physicians and reported in medical journals.

As to the composition of tobacco smoke numerous investigations have been made. Kissling, experimenting on cigars, found that a large proportion of the nicotine passes unaltered into the smoke. Dealing with a tobacco containing 3.75 per cent. of nicotine, he recovered from the smoke 52.02 per cent. of the total nicotine consumed, while in the unconsumed remains of the tobacco the proportion of nicotine was increased to 5.03 per cent. With a second sample of tobacco, having likewise 3.75 per cent. of nicotine, the smoke yielded only 27.83 per cent. of the total nicotine consumed, and the percentage in the unconsumed remains was raised to 4.51. From a tobacco containing only 0.30 of nicotine he recovered 84.23 of nicotine in the smoke.

The composition of tobacco smoke is highly complex, but beyond nicotine the only substances found in appreciable quantities are the lower members of the picoline series. Dudley has made experiments seeking to explain the poisonous

effects of cigarette smoking. He states, besides combustion, destructive distillation takes place in the pipe, cigar, and cigarette as the result of heat, and the exclusion of the oxygen of the air which has been completely used up in passing through the red hot burning tobacco in front of that which the fire has not yet reached. The products of this destructive distillation are ammonia, a yellow and very poisonous substance of disagreeable odor called nicotianin, some nicotine, though most of the latter has been destroyed by heat, and many other products of minor importance. When there is a layer of fire one sixty-fourth to one-sixteenth of an inch in thickness, as the air is drawn through the hot carbon, this is reduced to carbon monoxide, and as such is drawn into the mouth, for when it passes beyond the fire there is no air or oxygen to convert it back to carbon dioxide. Its well-known poisonous effects when inhaled are the results of its affinity for the hemoglobin of the blood, converting the oxyhemoglobin into carbonic oxide hemoglobin, a stable compound not reduced in the circulation; hence, producing permanent asphyxia. Schtscherbak experimented upon animals by forcing them to inhale the smoke from a burning cigar, but permitting them to exhale freely. He found exalted faradic excitability of the motor centers and subjacent medullary substance. When the nicotine was removed from the tobacco smoke by passing it through hydrochloric acid this was not observed. Subcutaneous injections of nicotine (0.50 gramme) also increased the faradic excitability, showing the same symptoms by injection of nicotine as are seen from inhaling tobacco smoke, and proving that nicotine is taken into the system by smoking. The cheapness of the cigarette enables the young to buy and use them. Ninety per cent. of cigarette smokers inhale the smoke. The cigarette is smoked to the end and discharges directly into the mouth of the smoker everything that is produced by the burning. The cigarette is rapidly burned and the smoke inhaled,

thereby increasing the proportion of the poisonous substance which is drawn into the mouth, and when the saliva is retained the fullest effect of all the narcotic ingredients of the smoke will be produced upon the nervous system of the cigarette smoker.

Coomes of Louisville considers the use of cigarettes particularly injurious, because of the almost universal practice of inhaling their smoke and expiring it through the nose.

Dudley, *Medical News*, 1899, says more injury results from cigarettes than from cigar or pipe smoking, because as a rule the smoke of the former is inhaled.

Cersoy, a French writer, finds smokers' vertigo confined to those who inhale tobacco smoke, and ascribed the injurious effects to its action upon the pneumogastric while it is retained in the pharynx, larynx, and trachea, and that the cardiac, pulmonary, and digestive disturbances are mainly the result of enfeeblement in pneumogastric action.

Hall of Texas holds smoking to be the most noxious form of using the weed.

Tucker, Analyst to the State Board of Health, New York, in his report on cigarettes, says that careful analysis of tobacco and paper failed to reveal other injurious substances than the tobacco itself; the evils of cigarette smoking being due, he thinks, to their cheapness, enabling excessive quantities to be used both by children and immature persons who usually inhale the smoke.

Dumas reports a series of cases from Algeria on the noxious effects of tobacco, among which is a case of angina pectoris ascribed to excessive cigarette smoking, which resulted fatally.

Lewin of Paris, 1895, states that the deleterious effects of tobacco are observable after its use in any form — smoking, chewing, or snuffing. Typical nicotinism occurs, as a rule, after a long-continued use of tobacco, sometimes not until twenty years or more. While many smokers reach old age,



many people do not live to old age because they are smokers. In higher schools non-smokers get on better than smokers, children from nine to fifteen years of age who smoke showing less intelligence and laziness. Adults are liable to cephalic pressure, insomnia or its converse (sleepiness), melancholy, aversion for work, and dizziness.

Kitchen, *Medical Record*, 1890, says that the stimulating and narcotic properties of tobacco have an effect upon the body in moderate use as well as in immoderate use, the effect being simply in proportion to the quantity used, though the effects of moderate use may not be measurable by ordinary means. It is easy to see the effects of large amounts of tobacco in the stunted growth of adolescents, in functional cardiac disorders, loss of appetite, neuroses of motion, intellectual sluggishness, loss of memory, color-blindness, marked blunting of various functions of sensation.

J. W. Seaver of New Haven, 1894, gives particulars of the comparative condition of seventy-seven non-users of tobacco, twenty-two irregular users, and seventy habitual users, at Yale University. In weight the non-users, in 1891, increased 10.4 per cent. more than the regular users, and 6.6 per cent. more than the occasional users. In height the non-users increased 24 per cent. more than the regular users and 14 per cent. more than the occasional users. In height the non-users increased advantage over the regular user of 26.7 per cent., and over the occasional user of 22 per cent. In lung capacity the growth was in favor of the non-user 77.5 per cent. when compared with the regular user and 49.5 per cent. compared with the irregular user.

Huchard of Paris, 1890, cites the effects of tobacco, which form part of a treatise on diseases of the heart. He reviews the chemistry and physiological action of tobacco, showing its effects on the nerve centers, the pneumogastric nerves, the vascular system, and on muscular tissue. He considers the

chief action to be upon the *medulla oblongata*. He describes what is termed the "irritable heart of smokers," in which there may be acceleration or slowing of the pulse, intermittence and arrhythmia of the heart, lipothymia and syncope, angina, præcordial anxiety, palpitation, sudden and distressing arrests of the heart, and extreme irritability of the circulatory functions. This action of tobacco is usually ascribed to its effect on the nervous system in general, and the pneumogastric in particular; but this is not all; much is due to its action on the muscular system in general, and particularly upon the vascular walls. Tobacco is not simply a cardiac poison: it is also an arterial poison. The vaso-constrictive action of nicotine has been thoroughly demonstrated. The effects of tobacco resemble absolutely those produced by galvanization of the great sympathetic; it is probably through the nerves that nicotine acts upon the vessels. The tetanizing process produces, in reality, a muscular ischæmia, which explains in part the tremor, muscular weakness, and paresis observed in nicotinized animals. This vaso-constrictive action produces disturbances in various organs. The nerve centers show signs of ischæmia, cerebrospinal irritation, headaches, with vomiting, morning fatigue, impairment of memory, physical irritation, inaptitude for work, and even transitory aphasia, with incomplete hemiplegia alternating from right to left. The respiratory apparatus, besides serious attacks of dyspnœa produced by the action of tobacco on medulla and respiratory muscles, may exhibit disturbances attributable to contraction of the pulmonary vessels. The diuretic effect of tobacco is also explained by this hyper-arterial tension. But it is upon the heart itself that the most deplorable effects of this vascular tetanization are produced. Certain attacks of angina and disturbances of rhythm may be ascribed to spasm of the coronary arteries and consequent ischæmia. The hard, small, tobacco pulse is also explained by this vaso-constrictive action. At first these troubles are functional, but in

time, from repetition or permanence of these vascular contractures, a sort of peripheral circulatory barrier is set up. Arterial tension is increased, the heart suffers from successive dilatations, which in turn becomes permanent, and there is produced finally a general arterio-sclerosis, which, if it involves the heart muscle, may produce various degenerations, of which dystrophic sclerosis is the most common. We may have two or three different forms of angina pectoris from tobacco: 1. Functional angina, relatively benign, resulting from a spasmodic state of the coronary arteries, and without a myocardiac lesion. This is the tobacco spasm. It is rapidly cured by the discontinuance of the tobacco habit. 2. Organic angina, of serious character, resulting from coronary sclerosis — the tobacco sclerosis. It is not curable. 3. A gastric form, which is the most benign of all, a functional angina, resulting from frequent disturbance of digestion produced by tobacco, such as gastralgia, dilatation of the stomach, etc.

Dumas doubts the efficacy of tobacco smoke in arresting the development of the tubercle bacillus from his experiment in the case of a young subject who smoked by inhalation almost continually, but finally developed phthisis, which improved after he ceased to smoke for a time, yet became worse on his resuming it, death finally resulting. The observer considered it a case of phthisis provoked by the abuse of tobacco smoking. I do not believe tobacco prevents tuberculosis. Have seen four cases of tuberculosis within past twelve months, primary involvement in lungs, secondary tuberculosis of throat. These men were users of tobacco, chewed and smoked.

Broomhead records the death of a boy aged 13 following nausea and vomiting after cigarette smoking, terminating in convulsions and subsequent respiratory failure.

The following is what Dr. Bartholow says on the subject: "It is high time something were done to put a stop to this frightful evil which is stunting the growth and ruining the health of thousands of boys. It is just horrible to see these

boys, little fellows, many of them not more than eight or ten years old, not street boys, but well dressed and carefully nurtured boys, gathered in knots in some corner where they think they will not be observed, learning to smoke. Parents see their sons getting thin and yellow and irritable, the family doctor is called in, and without going to the root of the evil, prescribes tonics which do no perceptible good.

“ The prodigious increase of cigarette smoking among boys in the last few years is an evil which will tend to the deterioration of the race if it is not checked. But it is not hard to account for. Boys are very imitative. They follow the fashion with promptness and zeal. Cigarettes are the rage at Harvard. It is the correct thing to smoke these poisonous little rolls of tobacco and paper. Whatever is fashionable in a great school like Harvard is sure in a very short time to be fashionable among young men and boys all over the country. Another great cause of the mischief is that boys are very fond of imitating their elders. Smoking in public places ought to be discouraged. There ought to be a sentiment created against it, and the press is the power to create such a sentiment. Every man when he smokes in public ought to think that he is encouraging some boy to smoke. The boy will smoke a cigarette imagining that he will get less tobacco in that way, and ignorant of the fact that cigarette smoking is the most pernicious form in which tobacco is used. Tobacco in any form is a great injury to a growing boy, and the fashion of inhaling the smoke and then forcing it through the nose is deadly in its effects. It causes catarrh in the air passages, throat, and nose, and makes the smoker disgusting as well as puny and stunted. You will find that these cigarette-smoking youths have impaired digestions, small and poor muscles, irritable tempers, and a lack of capacity for sustained effort of any kind, and I believe that you will find that they do not succeed in life. The men who win are men of strong physique. A cigarette-smoking boy will not make a strong man. These are some of

the evils which the individual brings upon himself. But the mischief does not stop with the individual, but is transmitted to his offspring. Nervous peculiarities are just as readily transmitted as physical peculiarities. The acquired irritability, imperfect development, and loss of nervous force of the father is inherited by the child, who in turn further impairs his health by the same process, so that in the course of three or four generations there must be a great deterioration in the race. The sale of cigarettes to boys should be prohibited by law."

It is truly melancholy to witness the great number of the young who smoke now-a-days, and it is painful to contemplate how many promising youths must be stunted in their growth, and a physical and mental wreck before arriving at man's estate. Look at the pale, young face, imperfect development, and deficient muscular power of the cigarette fiend; the action of the heart and lungs is impaired by the influence of the narcotic on the nervous system, but a morbid state of the larynx, trachea, and lungs results from the direct action of the smoke. The voice is observed to be rendered hoarser and with a deeper tone.

The General Assembly of the State of Tennessee in 1897 passed an Act prohibiting the importation or sale of cigarettes, and fixing a heavy penalty for its violation. The law was at once recognized as an eminently proper and beneficial one, and the only question upon which there was any doubt was as to the validity of the clause prohibiting their importation for sale. The question came before Judge Lurton of the Federal Court, and the clause was held to be invalid in that it conflicts with the inter-state commerce clause of the Federal Constitution. The question was also ably presented to the Supreme Court of Tennessee, whose decision outranks that of the Federal Judge, and is the settled law, unless the decision of Judge Lurton shall be affirmed by the Supreme Court of the United States.

Our Supreme Court in the case of *Austin vs. the State* undertakes to settle the question in a very elaborate and strong

opinion by Judge Caldwell. The broad position is taken in this opinion, and very properly so, that any article that is noxious or deleterious to health does not come within the provision of the commerce clause of the Federal Constitution. The fact is cited that the Supreme Court of the United States has held that discolored or adulterated oleomargarine is an article whose importation can be prohibited by the states. Upon this principle there seems to be no controversy, and the only remaining question, as said by Judge Caldwell, is this: "Are cigarettes legitimate articles of commerce?" Continuing, Judge Caldwell says:

"We think not, because wholly noxious and deleterious to health. Their use is always harmful and never beneficial. They possess no virtue, but are inherently bad, and bad only. They find no true commendation for merit or usefulness in any sphere. On the contrary, they are widely condemned as pernicious altogether. Beyond question, their every tendency is towards the impairment of physical health and mental vigor. There is no proof in the record as to the character of cigarettes; yet their character is so well and so generally known to be that stated above that the courts are authorized to take judicial cognizance of the fact. No particular proof is required in regard to those facts, which, by human observation and experience, have become well and generally known to be true. Nor is it necessary that they be formally recorded in written history or science to entitle courts to take judicial notice of them. It is a part of the history of the organization of the volunteer army in the United States during the present year, 1898, that large numbers of men, otherwise capable, had rendered themselves unfit for service by the use of cigarettes, and that among the applicants who were addicted to the use of cigarettes more were rejected by examining physicians on account of disabilities thus caused than for any other, and perhaps every other reason. It is also a part of the unwritten history of the legislation in question that it was based upon

and brought to passage by the firm conviction in the minds of the legislators and of the public that cigarettes are wholly noxious and deleterious. The enactment was made upon this idea, and alone for the protection of the people of the state from an unmitigated evil. Such being the nature of cigarettes they cannot be legitimate articles of commerce.

"Every state has the right under its police power to prohibit the importation and sale of all articles inherently unworthy of commerce, and unfit for the use of its people. Indeed, an active duty rests upon the legislative branch of the state government to enact appropriate laws for the protection of the public against the hurtful influences of such articles; and in the discharge of that important duty the members of the legislature must be allowed to act in accordance with the dictates of their own best judgment. The right of a state to protect its people in their comfort, health, and safety, against the importation and sale of non-commercial articles has long been recognized and never questioned by the Supreme Court of the United States."

In support of this decision numerous cases are cited involving adulterated oleomargarine and other articles unfit for public use.

The Supreme Court takes judicial knowledge of the hurtful nature of cigarettes, and very properly assumes that there are none who are ignorant of their tendency and effect.

The output of cigarettes in the United States for February, 1898, was 282,124,590.

---

#### THE PILOCARPINE HABIT.

The *Pharmaceutical Era* of July 20, 1899, describes an example of this queer habit. The individual who possesses this unique appetite began some years ago the use of morphine, to which he added later cocaine; a third was added, namely, pilocarpine. His habit was to take an injection of pilocarpine, which was followed a half-hour later by an injection of two grains of morphine, and in another half-hour a grain of cocaine. It is stated that the victim is a physical and mental wreck.

## ON MORPHINISM.

---

BY LOUISE G. ROBINOVITCH, B.L., B.S., M.D.,  
PARIS, FRANCE.

---

Medical literature is replete with treatises on the remedial management of morphinism and allied ailments; yet their origin, their pathology, should be deemed quite as worthy of investigation.

Is a subject addicted to morphine in possession of the normal mental equilibrium, and, if not, how does this equilibrium differ from the normal?

In the large class of hereditary degenerates the clinician is confronted with a most astonishing variety of mental manifestations. They perform acts of which they are either ashamed, or which they subsequently deplore; and yet, in both cases, they find it impossible to govern or restrain their inclinations. "C'est plus fort que moi" is an expression which gives the correct description of such patients' condition under those circumstances. They struggle against their abnormal desires with all the strength of will they possess, but generally fail to conquer their inclinations. I have a patient under observation, who, coming from a highly nervous and insane family, suffers from a most peculiar impulse, which prompts him to grasp any inanimate object and to squeeze it until he exhausts himself; he then loosens his grip. He is subject to a series of other as remarkable obsessions and impulses, but this one developed to such a degree that he became incapacitated for his work and had himself committed to the Sainte-Anne Asylum. He has an appetite, so to speak, for catching hold of objects and



squeezing them. He is perfectly lucid; understands that he must not give way to his impulse; but when under its influence his will power is reduced to the point of non-existence. At first, this impulse came only at rare intervals, but in 1897 it had become almost constant: no sooner did he loosen his hold upon one object than he would grasp some other, such as a chair, a table, a projection of the wall, a door knob, his mother's skirts, a penholder, etc.

Another patient under my observation at the Sainte-Anne Asylum is subject to an impulse which prompts her to kill her two younger children, the eldest one having absolutely no influence upon her. Yet she actually loves all three of them equally: she mourns her fate; she would do anything in her power to rid herself of that impulse, as she is a devoted mother and wife. She, too, is perfectly lucid mentally, having neither delusions, hallucinations, illusions, nor delusional interpretations.

Such patients, belonging to the class of hereditary degenerates, are not different as a class from the morphinomaniacs. The latter class, as it is understood by M. Magnan, is rather rare. The morphinomaniac is a patient who eats morphine by force of impulse, just as both of the above-cited cases perform their acts through the influence of irresistible impulse. The morphinomaniac is like the dipsomaniac, who drinks alcohol because of the promptings of impulse, although he tries his best to resist it. A dipsomaniac in M. Magnan's service at the Sainte-Anne was so grieved because of her affliction that she put fæcal matter into the alcohol so that the disgust consequent might prevent her consuming the draught, but even this heroic measure failed completely. When the impulse came she swallowed the mixture and satisfied her craving.

The morphine-eater differs from the morphinomaniac just as the chronic alcoholic differs from the dipsomaniac. Both the morphinomaniac and the dipsomaniac absorb their re-

spective drugs by impulse, while the chronic alcoholic and the morphine-eater indulge their craving because of lack of resistive will power, the difference between the two lying entirely in the form. Clinically, however, both belong to the class of mental degenerates.

We are not prepared to localize the cerebral lesion which causes the disease, as one could localize it in a right or left hemiplegia, but the lesion exists, nevertheless. Whether the appetite is too exaggerated, the will too weakened, or whether there is simply a general solution of continuity in the connecting fibres which, by their communicating agency, maintain the psychic harmony, there certainly is a material cerebral defect.

Morphinomaniac or morphine-eater, the subject generally presents quite a clinical tableau, indicative of mental degeneracy, of which the most prominent feature is only one symptom.

The following cases serve to sustain this position regarding the status of the morphine-eater :

Mlle. Anite C., modiste, thirty-four years old, entered the Sainte-Anne on the 12th of April, 1897. She is a natural child. Her father died of an apoplectic attack ; her mother had numerous nervous spells ; she was irritable and unruly, and inflicted bodily punishment upon her children to an unusual extent ; she also drank to excess. She was the mother of nineteen children, the greater number of whom died during infancy, or were still-born. Five children are now living, of whom, besides the patient, there is one sister who is extremely nervous, irritable, and who, like the patient, also has the morphine habit.

From the age of twelve the patient has been of a melancholy turn of mind, and once, while under the unkind treatment of her mother, she attempted to commit suicide by swallowing an infusion made from matches. At the age of thirteen she had typhoid fever in a severe form. At fifteen she, for the first time, had an attack of hysteria, which was preceded by an

aura with hallucinations. Flames flashed before her eyes, and then came a convulsive attack; but she did not bite her tongue, and there was no foaming at the mouth. These attacks lasted from ten to fifteen minutes. At the age of sixteen she fell in love with a man with whom she lived nineteen months. At the end of this time she found it uninteresting to continue her relations with him and began practicing abortions on herself, which soon caused a metrapéritonitis. As a result of this it soon became necessary for her to enter a private sanitarium for treatment. She secured admission to the Dubois Hospital, where she, for the first time, received hypodermic injections of morphine, and soon became addicted to the drug. Her physician vainly endeavored to suppress the injections; she bought some morphine herself clandestinely, and after her discharge from the sanitarium, in 1881, she used daily twenty centigrammes of morphine, in ten injections, daily.

She came home incompletely cured, still suffering from pelvic pains, to allay which she soon began to take thirty centigrammes of morphine daily. This continued for a year. Naturally, as a result of this system of life, she lost her appetite, slept badly, and suffered almost continually from oppressive nightmares. The malaise in the mornings was relieved by fresh injections of the drug. Menstruation stopped completely, and she found herself an absolute slave to the medication. She was forced to gradually increase the dose, until she was giving herself from ten to twenty consecutive injections at one time. She made such concentrated solutions that she had to keep them warm in order to prevent crystallization of the morphine salt. The constant puncturing of the skin soon brought on troublesome abscesses, for the treatment of which she entered the Necker Hospital in 1883. She left there, however, after a short stay, as she could not endure the progressive diminution of the morphine doses. In 1884 she was treated at various hospitals, notably at the Charité and the Beaujon. The sudden suppression of the drug in the latter

hospital caused overpowering vertigo, vomiting, and syncope. Not possessing sufficient courage to undergo this strict régime, she soon obtained her discharge. In 1885 we find her again, however, entering the Charité. At that time she presented marked amblyopia of the left eye and suffered from a premature falling out of her teeth. After a lapse of a month she obtained her discharge without having improved to any appreciable extent. She was taking four grammes of morphine in thirty grammes of water, by the mouth. As this had no pleasant effect upon her, causing her, on the contrary, to suffer from headaches and extreme excitement, she again had recourse to the hypodermic injection, taking two grammes and a half of morphine a day. This abuse was followed by a profound cachexia, which forced her again to enter a hospital, the Hôtel-Dieu this time. There she again deceived her physicians, secretly giving herself injections, and, upon being discovered, was sent away. As her condition was precarious, she committed herself to the Sainte-Anne Asylum on the 16th of February, 1886.

She was very emaciated, weighed only forty-four kilogrammes, and presented hysterical spots and anæsthesia. There was complete loss of appetite, obstinate constipation, a bleeding gingivitis, and looseness of the teeth, due to a general alveolar periostitis. Sleep was absolutely impossible. The method of gradual diminution was employed, and the patient apparently stood it very well, until it was learned that she received morphine carefully packed in spools of silk or in the candy which was brought her from the outside.

The morphine was then suspended abruptly on March 24th: she became much excited, had incoercible vomiting, diarrhœa, and alarming symptoms of collapse. A few days later, however, she began to feel better, her appetite returned, and she even increased in weight. This improvement became so marked that menstruation, which had ceased entirely during the previous six years, reappeared.

The patient left the asylum on the 1st of June, 1886, in good condition, the amblyopia having completely disappeared. But on her return home she found herself near her sister, who was also suffering from morphinism. The patient, under the influence of her surroundings, again picked up her morphine habit, taking injections of two grammes a day.

In 1887 she was treated at the Salpêtrière. In 1888 she entered Laennec, where she administered to herself clandestine injections, and upon this being discovered, was summarily discharged. On the 9th of January, 1888, she entered the Sainte-Anne.

She then presented hallucinations of a most terrifying nature; she was persecuted by ferocious horned animals, etc.: she slept badly, had involuntary laughing spells, and exhibited suicidal tendencies. These were caused by her despair of recovery from the morphine habit. Her memory was much impaired, particularly in reference to recent events. Her gums were inflamed, her eyes tearful, her general physical condition reduced, and her heart was in such a feeble state that it was necessary to suppress the morphine abruptly. She was given coffee and sparteine to sustain her, and chloral to enable her to sleep. From the 9th to the 18th of January she exhibited alarming symptoms of collapse, diarrhœa, vomiting, and epigastric distress. On the 19th, however, she had so greatly improved that her physician was astonished. On the same day she was discovered giving herself an injection of morphine. She had hidden a syringe and a solution of the drug in her bustle. "I have tried," she said, "every possible means to get along without the morphine, but it was impossible." She left the asylum on April 22, 1888, in good physical condition, but returned on the 15th of October of the same year, and was discharged on the 22d, only to return on the 26th of December. She left on the 5th of February, 1889, but again suffered from indulgence in the drug, and the following

dates of subsequent admissions and discharges to Sainte-Anne :

Entered October 4, 1889; discharged October 26, 1889. Entered April 1, 1890; discharged, April 19, 1890. Entered March 6, 1891; discharged May 23, 1891.

In 1891 she suffered a severe shock, caused by the death of her brother. He was found drowned. "When I saw him at the morgue," she said, "I was like an insane woman; I wished to carry his body home; I refused to believe that he was dead; and on the day of his funeral I did nothing but laugh; I wished to sing all the time; it was all involuntary." This tempestuous grief only served as a new spur to her old habit. She began using larger doses than ever. "I wish to hear no more about a cure," she said, and, fulfilling her declaration, she kept away from the hospitals until the 26th of January, 1895, when she was forced again to seek admission to the Sainte-Anne Asylum. She suffered from highly depressing nightmares, had visual hallucinations, and saw imaginary people, such as a woman with a black veil, etc. She realized, however, that these visions were purely imaginary. She left the asylum on the 10th of November, 1895.

In speaking of her sufferings from deprivation of the drug, she said: "This winter I was at death's door; I took almost nothing during six months, and for eight consecutive days I had absolutely nothing." As soon as she left the asylum she again started her old practice of morphine injections, and continued them until April, 1897. As she then fell into a very alarming condition, she began to diminish her doses, taking only twenty centigrammes a day. In conjunction with this, however, she also took five grammes of chloral and twenty grammes of laudanum daily. This caused insomnia and loss of appetite, and she again came to the Sainte-Anne on the 12th of April, 1897. She then weighed but forty-four kilogrammes and eight hundred grammes. The method of progressive diminution was employed, and the treatment was finally fin-

ished on the 23d of April. She improved rapidly, and in July weighed three kilogrammes more than she did at the time of her admission. She was discharged on the 23d of July, 1897.

Coming from a highly neuropathic and psychopathic family, this patient had manifested from her very earliest age most prominent psychopathic symptoms. She had hysterical attacks, had attempted suicide, and could not accommodate herself to her surrounding circumstances. The appetite for morphine was only one prominent symptom of a disease based upon the deep root of degeneracy which she inherited from her ancestors.

In further illustration of this class of degenerates, I would cite the following case of cocainism and morphinism:

Georges B., twenty-six years old, born in Geneva, entered the Sainte-Anne Asylum on the 26th of March, 1897. The patient's father was a man of high accomplishments, who died of an apoplectic attack. His mother died of heart disease. A grand-uncle on the mother's side was somewhat neurasthenic. The patient, although very intelligent, is singularly lacking in enterprise. During his varied career he exhibited a great lack of stability. In 1886 and 1887 he studied pharmacy; then he determined to change his vocation, and began the study of medicine. He undertook the task of acquiring many languages, and as a result of some whim settled upon engineering as his career. He succeeded in becoming a civil engineer, and even obtained a position as such with a railroad company. In 1889, while in Spain, he contracted syphilis, and subsequently suffered from blennorrhagia. In 1890, while in Malaga, Spain, he suffered considerably from cystitis, for which his physician gave him a hypodermic injection of morphine. The dose of from one to two centigrammes a day was repeated, but had no beneficent effect upon him. On the contrary he only suffered from nausea and headaches. After a continuous use of the drug for some days, however, the unpleasant effect

wore off by degrees, and he began to like its results. "The more accustomed I became to the use of morphine," he said, "the more pleasant its effects became." His physician eventually gave him a hypodermic syringe and a prescription for a morphine solution, thus enabling him to administer the injections whenever he felt the need of doing so; beginning with doses of from one to two centigrammes a day, which, as he put it, made him feel as if he were "floating on cotton." So pleasant was this sensation that he soon made the slightest provocation a pretext for administering to himself an injection. He used the drug for ameliorating the effects of the slightest fatigue or a headache, and particularly to "increase his mental activity." He continued these injections until 1893.

One day he had some unpleasant words with the family of his fiancée, which quite disturbed him, and upon his arrival home he immediately gave himself an injection of twenty centigrammes of morphine. This was the first large dose he had ever taken. His father died soon after, and the shock of grief was another occasion for the self-administration of a large dose of the drug. This time he gave himself twenty-five centigrammes. In describing the effects of this dose, he said that he felt a strong arterial throbbing at the temples, heard singing and ringing in the ears, seemed to see a mist before his eyes, and now and then saw brilliant flashes of light.

In 1893 he lost all interest in his work, and decided to try his fortunes in South America. He undertook the voyage, and went without his beloved drug for forty-five days, the time consumed in making the passage across. On his arrival in Chile, however, he found it difficult to make his living, and became considerably oppressed, ate badly, and slept poorly. He rarely took the injections now because of his pecuniary difficulties, but on the occasions when he could afford to indulge himself he gradually increased the dose until in March, 1894, he found it absolutely necessary to take one gramme and twenty centigrammes a day. Meanwhile he was gradu-



ally failing in health and losing both appetite and weight, as well as becoming more and more depressed. He then attempted to rid himself of the habit by substituting sparteine, but failed in the attempt. He entered a hospital for treatment, but being unable to stand the method of sudden suppression in vogue there, he obtained his discharge. He then contracted typhoid fever, for which he was treated during a period of four months, with opium, wine, and morphine. At the expiration of that time he found himself penniless, but managed to scrape together enough to procure morphine, the drug, as he put it, having "in more than one instance encouraged and sustained him," lending him strength to "struggle against the thought of suicide." In June, 1895, he found himself with absolutely no means of procuring morphine, and while searching in his valise, with the hope of finding some remnants of a former supply, he chanced upon a bottle of cocaine, which he had at one time used upon the advice of a druggist as an antidote to morphine. He had recourse to this drug "in order to sustain my strength, which was failing rapidly, and to calm my hunger for morphine." Within the course of twelve hours he took a gramme and a half of Merck's cocaine without the slightest poisonous effect. "I went out the following morning," he said, "much invigorated, although I had been fasting since the morning before." Soon after this he became intimate with a druggist who generously supplied him with both morphine and cocaine. At first he only took fifty centigrammes a day of each drug. In August, 1895, however, he obtained a position as chemist at the municipal laboratory at Valparaiso, where he remained four months. As he continued using both drugs he soon began to experience auditory hallucination. At night he thought he heard his manager saying to him: "Ah, ah, here you are, I see you; you are not working; you are giving yourself injections instead of doing your work." As he was poorly paid at the laboratory he decided to return to France, and arrived home

in September, 1896. Here he stayed with his uncle, who supplied him with morphine and cocaine. "It was only humane," he said, to do this. But the patient was not satisfied with the small doses supplied him by his uncle, and soon started in selling his clothes to procure money with which to purchase the drugs. Toward March, 1897, he totally lost his appetite, and the ability to sleep, and began to exhibit delusions of persecution. He imagined that everyone was ridiculing him, and was firmly impressed with the idea of everyone's animosity toward him. An increase of the dose of the drug caused his delirium to become more active. On the evening of the 25th of March he imagined that he was pursued by enemies, and cried: "Help, help! Murder!" He ran to the police headquarters, begging for protection. When brought to the Infirmerie du Depot he imagined that insects were crawling under his skin. At the Sainte-Anne his hallucinations ceased after the first day. The method of progressive decrease was employed, and he was discharged, cured, in July, 1897.

Extracts from the notes of G. B. — "It is a common belief that the use of morphine induces voluptuous dreams and indescribably pleasant sensations, similar to those produced by opium, as stated in the accounts of opium smokers in the East. . . . I have found that morphine calms, cools, and represses progressively any physical desires. It ends even by producing temporary sexual impotency. There is, in connection with the latter, a total indifference to the opposite sex, this indifference sometimes becoming an aversion. The male morphine-eater never thinks of woman. Once the morphine becomes a daily necessity, it is also an irresistible, absolute, and sole passion, excluding any other satisfying agent of the senses, passions, or inclinations. Morphine admits of no rival. It temporarily suppresses all physical as well as moral sufferings. It excites the intellectual functions, and causes a feeling of self-satisfaction that surpasses any other pleasant sensation. I have endeavored, at different times, to

gradually diminish my daily doses, centigramme by centigramme, but I have soon found myself suffering from marked malaise, oppressive anxiety, and neuralgic headaches: my skin became covered with cold perspiration, and I yawned incessantly. I felt unable to move or to do anything whatsoever."

In speaking of the effects of the gramme to gramme and a half of cocaine, which he took daily in connection with his morphine, he says: "These large doses of cocaine plunged me into a condition of drowsiness, hebetude, and ecstasy of a peculiar nature. I gave myself hundreds of hypodermic punctures, which caused me to lose a considerable amount of blood, for I made intravenous injections. I remained in a condition of stupor, hypnotized by the glittering of the needle and the syringe. Sometimes I even experienced cataleptic attacks, falling asleep in an upright position, both arms uplifted, holding the needle and syringe for hours at a time. Once I remained in such a position for four hours and did not feel the least bit fatigued when I regained consciousness. Sometimes I saw small, almost microscopic, animals, which ran back and forth upon my skin, and gave rise to a creepy sensation. My general sensibility became dull: I could not smell as well as usual. But my hearing became more acute than ever, and I at times heard with such intensity that the process became painful: the slightest noise became abhorrent, and I often stopped my work crying for absolute quietness. I soon began to have hallucinations. The howling of a dog in the yard sounded like the voice of my employer, who seemed to be reproaching me. The cracking noise of a panel or window made me imagine that I was being watched, or was to be interfered with in taking my usual injections."

The high intellectuality of the subject does not exclude the possibility of his being a degenerate. M. Magnan in his *Recherches sur les centres nerveux* cites many cases of so-called superior degenerates who, while of a highly intellectual order,

nevertheless manifest most extravagant obsessions and impulses.

A lady of our acquaintance, of a highly cultured mind and nature, is subject to an impulse which prompts her to chew uncracked wheat. If she does not satisfy her craving she becomes uneasy, restless, and unable to perform her daily tasks. "I cannot understand it," she said, "but I simply must chew the grain." She keeps a supply of wheat ready at hand upon her work-table, and no dictates of conventionality can interfere with her indulgence of her strange appetite. She looks upon it as a slight oddity, but the clinician realizes the importance of the symptom and its underlying fundamental hereditary causes.

The morphine-eater's malady differs in no way from this clinical manifestation, except it be in form. There is here, as there, an underlying history of degeneracy, which is characterized by many a clinical feature, the predilection for morphine being the most prominent symptom in the former.

The question naturally arises, are such patients curable? Certain it is that they improve under close supervision. Where, however, as demonstrated in the first case above quoted, the hereditary influence is quite marked, and the unknown anatomical lesion is, inferentially, pronounced, the instability of the mental equilibrium is such that a permanent recovery is almost not to be hoped for.

---

Dr. Legrain's investigations on alcoholic inheritance are tabulated as follows: In the first generation from inebriety the mental and physical degenerates were seventy-seven per cent. of all. In the second generation ninety-six per cent. were defectives. In the third generation not one escaped, all were idiots, insane, hysteric, or epileptic.

## ALCOHOL AND ALCOHOLISM AND ITS RELATIONS TO THE MEDICAL PROFESSION.

---

By CHARLES MAEFIE, M.D., EDINBURGH, BOLTON, ENGLAND.

---

It is our duty to help forward any movement that will improve the lot of the fallen and falling alcoholics in the hope of their again becoming useful members of society. It is calculated that 60,000 deaths occurred last year from consumption, and that as many died from the effects of alcohol — two preventable complaints. If we turn to our asylums we find about twenty per cent. of their inmates are insane from drink; to our workhouses, a majority of their inmates have led selfish, alcoholic lives in the past; to our law courts, where we find not less than thirty per cent. of the cases arise directly or indirectly from drink.

In statistics obtained from the United States we have 909 replies from prison governors, which show the proportion of crime in the licensed states due directly or indirectly to drink to be not less than seventy-two per cent., while a similar report from one hundred and eight officials in prohibition states gives a percentage of thirty-seven, and a considerable number of these latter were "boot-leggers," in jail for selling whisky. Out of 1,017 jailers, only 181 placed their estimate below twenty-five per cent., and fifty-five of these were from empty jails in prohibition territory.

I may here inform you that in 1898 the town of Bolton stood at the head of the list of the large towns of Lancashire for sobriety, taking the police-court record of cases as our guide, with 4.21 imprisonments from drink per 1,000 of the inhabi-

tants, while such towns as Bootle and Salford show respectively 20.23 and 15.11 per 1,000 of inhabitants. The state should punish and confine the drunkard and not make him. The mode of admission to inebriate homes should be less strict and should not be voluntary, but in proper cases under compulsion on the oath of two medical men and by the order of a J. P., the licensee should have complete control of the inmates under sufficient government inspection. No doubt the Act of 1898 will do great good, but it only touches the outer fringe of the question. So far the home authorities have been dilatory in putting its machinery into motion, and the weakest point in the Act is that it has left the establishment of homes to the local authorities. By it a court of summary jurisdiction may order that criminal habitual drunkards may be detained in any state or certified inebriate reformatory for a period not exceeding three years. The same can be applied to persons convicted of drunkenness three times within the year, and power is granted to county and borough councils to establish inebriate homes under their own entire control. The Act does not touch the regular soaker who is never drunk, the steady drinker who swallows his week's wages in drink and starves his wife and children, the intermittent drunkard, quiet and unobtrusive, but persistent — as one remarked to me, "Why shouldn't I take what I enjoy?" only the noisy and the criminal. Yet when we read of London calculating to commit nearly 400 and Manchester no fewer than 200 in the year to inebriate homes, we hope for good results to the community as well as to the individual.

Our profession should closely watch the effect of this Act, and when the time is opportune point out its faults and shortcomings, and use every endeavor as individuals and as a branch to extend its scope. But government should be stirred up to initiate laws for the proper control of the trade. It has become such a power in the land that even the church is losing her influence with the people, and the state is in danger of

being controlled by "the swollen tyranny of drink." Here again our profession, with our opportunities, can help to form opinion. We can be agents for good in convicting and convincing the public, showing it how by abstinence disease may be avoided and the span of life extended, for it is dishonoring to a country to have overflowing workhouses and jails. As J. A. Steward puts it in *The Minister of State*, "While justice is justice it is no credit to a state to have overflowing jails." We all know that the Local Veto Bill of Sir William Harcourt died in the birth, but on the question of local veto or direct government control I do not wish to dilate; there are smaller, but yet important, matters that we may influence. There are opportunities of exercising a limited local veto. Landed proprietors have the power of vetoing a license for any building for the sale of intoxicants on their estates; why should not a community have a similar power of veto by a two-thirds or three-fourths majority of the householders when a license is asked for new premises within its borders? Limited local veto has been successfully carried out in the United States and Canada, and the governments of Norway and Sweden have controlled the traffic, though the Russian government has seemingly landed itself in a financial dilemma by attempting to monopolize and regulate the trade.

At the International Medical Congress in Washington in 1887 a statement was subscribed to by many leaders of the profession in which, among other recommendations, the following was made: "We declare that we believe alcohol should be classed with other powerful drugs." The fetching of alcoholic beverages by children should be put a stop to. I am glad to say that the outcry against this custom has reached the trade, and the habit has been considerably curtailed, and the justices have decided to stop it; the giving of sweets is altogether stopped. There should be a stricter enforcement of the law against supplying drink to the already inebriated, and the medical magistrates have a great opportunity.

I know cases difficult of diagnosis will constantly occur, and opinions differ on what is and what is not intoxication. The Duke of Argyle remarked in the House of Lords, when a question about whisky and drunkenness was being discussed, that it was difficult to get a Highlander to confess to his having seen a compatriot drunk. The reply usually came, "Na, but 'ave seen him aften that ye wad jist ken that he had been tastin'."

Under 2,000 death certificates have alcohol as a primary or secondary cause of death, though the registrar-general's last report shows the death-rate from intemperance, both among males and females, to have been the highest on record. Yet it has been calculated that 60,000 deaths result annually from the abuse of alcohol, directly or indirectly. Many place the deaths from this cause at nearer 100,000 per annum. Why this non-conformity of certified deaths with actual deaths from alcoholic abuse? Because the medical man is only called upon to certify the immediate cause of death, which may have been cerebral apoplexy, without necessarily certifying alcoholism as a predisposing cause; because medical men wish to spare the family feelings; as Whiteing, in "No. 5, John Street," says, "Half the certificates we write are mere anodynes for the public conscience"; and because medical men wish to protect the public from the industrial insurance companies through their agents, who in this as in other ailments look to the death certificate as a protection from fraud (?) on the part of the insured or the friends. The forms for insurance are often filled up without consulting the party to be insured; death takes place and the death certificate states that the deceased suffered from some chronic ailment for months or years before the date of the insurance policy. Our certificate thus often becomes the ground to the insurance company for the payment of a fraction of the original sum insured. The state has enacted that the friends of a deceased can demand a death certificate from us free of charge, and that the registrar must



be paid according to fee scale for the registration of death and for each copy of the death certificate. Is it consonant with our dignity or our sense of justice to our profession that we act as the jackals of the industrial insurance companies, and that we, through our endeavor to protect the needy and often innocent friends of the deceased, render the registrar-general's returns on death from alcohol or other ailment worthless? I say "No."

We must impress on the state through our powerful association and the General Medical Council the need for having the death certificate treated as a confidential document, which should be transmitted direct to the registrar.

As units of society the profession can exercise great influence for good in the direction of temperance, and we are greatly helped at the present day by the steady advance in temperance views of the higher and middle classes of society, by the more enlightened working men, and by the immense strides the teetotal movement has made. The opinion of the profession to-day is that a condition of health requires no alcohol, and the like opinion applies to highly-seasoned and indigestible foods. The social board still groans under its load of delicacies, and the custom of passing wine still holds its ground at too many of our social gatherings. As Dr. Grindrod says, "The association of indulgence in the use of intoxicating liquors with the intercourses of social life forms a strong inducement to the formation of intemperate habits." It may encourage the "feast of reason and the flow of soul," but the profession should in their social capacity discourage by example the regular use of alcohol at meals, as one glass lightly taken is apt to lead to another more lightly taken. We should abstain from "treating" with alcohol, whether among our social acquaintances or that ingrained custom of treating workmen to an encouraging glass.

Doubtless, in the first half of this century the medical profession prescribed alcohol without due discrimination; it was

pleasing to the patient and friends, as it too often is at the present day. I regret to say that public bodies and leaders of public opinion do not always give the profession credit for having helped the community to form a truer opinion of the dangers of alcoholic beverages, even in moderate use. I will detain you for a moment to give two illustrations of my meaning. The North Bolton Church Mission issued a leaflet, dated November, 1898, in which among other matters it says: "May we, as clergy, be allowed to beg the doctors to warn young mothers and our young girls against the hideous consequences of the vice of casual spirit drinking?" On their very knees they beseech us to begin what we have been preaching for more than a quarter of a century. Again, in the Manchester Guardian of February 15, 1899, at the annual meeting of the Manchester and Salford Women's Christian Temperance Association and Police Court Mission, Mrs. Gamble, the honorary corresponding secretary, is reported as follows: "In the latter part of the year 600 copies of a letter signed by the office bearers were sent to the medical men practicing in the city and neighborhood, calling attention to the amount of inebriety, for the origin of which 'doctor's orders' was given as the reason or excuse, and urging their responsibility in this matter."

Certainly we have not thundered our views from platforms, nor trumpeted them from the house-tops, nor roused the sympathies of a re-echoing press by measured advertising, but in the silence of the sick chamber, at the couch of the dying, and in the secrecy of the consulting-room, we have by precept and prescription taught what we know of the good or evil of alcohol.

The insinuation is a glaring economy of the truth, and before such insinuations are published to the world one would expect any fair-minded society or individual to first probe the truth about "doctor's orders." There are two sides to a ladder. No drunkard ever takes the blame for his or her de-

graded condition, as the profession so well knows. According to them their own family circle and nearest friends are their direst enemies, and how often has a chimerical "doctor's order" been given as an excuse. I could understand our being urgently requested to avoid prescribing alcohol in any form on account of the moderate use of it becoming a habit and ultimately developing into a craving. The medical profession is as anxious that alcohol should not be abused and that human beings should not suffer in mind and body from its effects as any teetotaller can possibly be.

To quote Dr. Clouston of Edinburgh: "Primarily they (the medical profession) were scientific men — a doctor might be a religious man, he might be a teetotaller, but primarily he was in the world to do certain medical and scientific things — and from the medical and scientific point of view they read this great absolute physiological fact before them: that the first thing that alcohol did in 99 cases out of 100 was to affect the mental working of the brain of the man who imbibed. . . . As scientific men they had to ask what was the ultimate or the general effect — not the immediate effect."

Many of the public and temperance bodies are either ignorant of or blind to what the profession has been doing during the last few decades. Every home in these isles I am sure could give evidence of the trend of the opinion of the profession with regard to the prescribing of alcohol during the last fifty years, and my own experience of the profession during the nearly thirty years I have had the honor to count myself a member of it has been a steady determination to forego the employment of alcohol unless under a conscientious belief that alcohol, and alcohol only, could stay life's ebbing tide. Look at the readiness with which the profession employs the most recent remedies — substitutes for alcohol — in the hope of producing effects as beneficial as alcohol, but without the alcoholic recoil. Note the effect of the mind of the profession on our insurance companies. The scientific facts the profes-

sion has adduced have enabled the insurance companies, according to Dr. Kerr, to prove that while the death-rate in the general section amounts to 98 per cent., that in the temperance section amounts to 70.9 per cent. Many companies that have general and temperance sections accept abstaining lives at a 10 per cent. reduction on their premiums. From last year's report of the Sceptre Life Association there were 66.41 deaths among the moderate lives, and 51.14 among the abstaining, and during the past fourteen years 79.63 per cent. deaths of the former and 57.33 per cent. of the latter. Last year's report of the United Kingdom Temperance and General Provident Institution "confirms the preceding fifty-seven years' testimony" as to the general longevity of assured abstainers. In the general section the expectancy was 411 claims, and the actual claims 373; in the temperance section the expectancy was 380 claims, and the actual claims 247. Take the other side of the picture: The Associated Scottish Life Offices show the annual expected and actual mortality per cent. of males among beer-sellers, inn-keepers, hotel-keepers, etc., to be: expected, 1.47 per cent., actual, 2.02 per cent.; and of females: expected, 2.02 per cent.: actual, 2.25 per cent. The time was when no insurance company would accept a teetotaler.

The profession has been active in the promotion of temperance in our workhouses. Dr. Kerr says, "There has been a diminution in twenty years of nearly 60 per cent."; and yet pauperism, especially in this part of Lancashire, according to Sir John Hibbert, is on the increase. I had a certain confidence that I would be able to place before you detailed statistics of the consumption of alcohol in the chief British hospitals, but I have failed to get a reply to my request for information except in a few cases. St. Thomas's Hospital in 1888, with an average daily number of patients amounting to 374, spent £1,063 in alcoholic beverages, and in 1898, with a daily

average of 407 patients, spent £ 241. The Hospital for Sick Children, Great Ormond Street, shows:

Year.	Number of Patients.	Cost of Alcohol.
1873	572	£ 106 1 7
1888	1100	23 10 8
1898	2067	43 2 2

From the establishment of the London Temperance Hospital to December, 1897, — this hospital received its first patient Oct. 6, 1873 — alcohol had been given twenty-five times among 13,984 patients, and last year it was given six times among 1,290 in-patients. As far as I can calculate from the report the total would only amount to a few ounces altogether, and yet the returns of the London Temperance Hospital compare favorably with those of other London general hospitals, with its seven per cent. in twenty-four years to ten per cent. fully in the others.

From Scotland I have two reports, one from Edinburgh and the other from Glasgow, which show a diminution in the amount consumed per patient per annum. In the Presbyterian Hospital, New York, the consumption of alcohol during 1898 was 3.67 oz. a head, the total of patients having been 20,190. One of the hospital secretaries writes me in reference to the great diminution in the amount of alcohol consumed at his hospital to-day and in the past: "Either the secretary and staff drank it, or the children must have had alcohol baths." To go outside these islands: Surgeon-General the Hon. F. H. Lovell reports a decreased consumption of alcohol in the hospitals of Trinidad amounting to no less than 60 per cent. Dr. Dawson Burns says: "I believe it is true with regard to the hospitals of London that the amount of alcohol given now is not more than one-half what it was twenty-four years ago." Lord Lansdowne, secretary of state for war, says: "In the last twenty years the number of court-martials, minor punishments, and fines for drunkenness in the army had approximately diminished by one-half."

We have, therefore, confidence in proceeding on the lines of recent years, and are encouraged to prescribe alcohol in diminishing amounts.

It is not necessary in health, and can be looked on as a luxury with possibilities for local and far-reaching secondary effects. But in "deviation from the healthy standard," we must bear in mind the need for the utmost caution when we turn for help to alcohol. In convalescence from disease it has been proved useful by encouraging the appetite; in acute disease and threatened collapse, many have found it successful in staving the failing powers until the crisis; and in old age the flickering flame has been steadied by small doses of alcohol. My opinion is that we should abstain from prescribing alcohol until other and harmless remedies have failed to produce the desired effect. Even a small dose, well diluted, is sufficient to produce an inflamed appearance of the stomach, as Dr. Beaumont pointed out, while Parkes and Wollowicz showed that one ounce increased the heart pulsations by 8,172 in twenty-four hours; both Richardson and Ridge, the one on the hearing and the other on the sight, showed that even a two-drachm dose well diluted impaired them, as well as muscular sensibility. Congestion of the retina with a similar dose was noted by Nicol and Mossop, and Krapelin found that the color sense, in discrimination and speed, was impaired under moderate doses of alcohol.

In sudden emergency, and often far removed from other potent remedies, we may have to employ alcohol, as when threatened heart failure from loss of blood or other cause. No matter, in such cases, what temperance views we may hold, a serious responsibility rests on each one of us. But when there is other material and opportunity, in face of what is known of the silent and insinuating influence of alcohol, we should have recourse to them. Hot water as an aid to digestion and as a stimulant is not prescribed with that frequency it ought to be, while we are apt to forget that hot diluent drinks are much

more useful than alcohol in warding off a chill, and we should strongly denounce the use of alcohol in these, pointing out how the warmth of the hot drink does the good, and not the alcohol that is too frequently added. How often does a hot saline enema stir up the failing heart after severe hemorrhage! Then properly-prepared and administered food, either given by the mouth or rectum is the most powerful stimulant to flagging energy, and it is as important to have foods carefully prescribed at the commencement of an illness as at the end, when perhaps all the resources of our art may fail if the feeding of the patient has not been carefully attended to in the first instance. In the tinctures of the various carminatives, such as of cardamons, capsicum, etc., combined with a bitter, we have efficient and ready stimulants that will aid many a drooping appetite and encourage a sluggish stomach to overtake its duty.

But I need not weary you with too much detail, for in turning to our Pharmacopœia and our Extra-Pharmacopœia for substitutes for alcohol, we are at once impressed with the fact that most drugs have more or less stimulant properties, either local or general, for example, phosphorus, arsenic, and iron, chloroform, and the ethers, and the various alkaloids — all stimulant in medicinal doses.

But we have to deal with substitutes for alcohol in those diseases where alcohol has usually been prescribed. For this we have the various preparations of ammonia, as the carbonate and the aromatic spirit; also the alkaloids — strychnine, digitalin, and strophanthin; oxygen gas and hyoscine. The use of alcohol is to “restore flagging vital actions and check excessive or irregular movements.” The stimulant action of those named is followed by no “recoil,” only what is implied in the gradual cessation of their action, requiring or not a repetition of the dose, according to circumstances, and the repetition of a stimulant dose does not result in any morbid craving. On the subject of carbonate of ammonia, Anstie says, in com-

paring it with alcohol, " that precisely similar benefits (though less in degree) may often be obtained by the use of carbonate of ammonia "; and further: " This general agreement of two such remedies as alcohol and ammonia in the effects they produce in acute disease attended with severe exhaustion is very significant." They remove coma, check delirium, arrest convulsions, and restore sound natural sleep. With the carbonate of ammonia or the aromatic spirit we may combat the effects of a disease exhausting to the nerve centers or the heart.

In strychnine and digitalin, employed especially subcutaneously, we have much more powerful aids to flagging nerve power or failing heart vigor than alcohol, and both quantity and effect can be much better regulated than in the usual mode of alcoholic administration, care being taken in giving digitalin to combine it with a nitrite. Oxygen also may be employed as a helpful substitute, especially in chest affections, and I am glad the profession is recognizing its usefulness and giving it its proper place in medicine.

But alcohol has been proved a powerful soporific in febrile states with sleeplessness; yet we need not turn to it for aid as in hyoscine or that, with a minimum dose of morphine or heroin to counteract the first disturbing effect of the hyoscine, we have, while a cardiac stimulant, a useful calmer of disturbed cerebration, and much more powerful and certain than alcohol. Of course, in cases of immediate urgency, sulphuric ether may be subcutaneously employed.

But some may ask: What about alcohol as a food, which these remedies are not? With our present knowledge of the requirements of the body, and the most recent modes of preparing readily assimilable foods, administered per os or per rectum, and with our certain knowledge of the poor dietetic properties of alcohol — though these are denied by a few — that point need not enter into our consideration. Intravenous and subcutaneous alimentation are but in their infancy, and have not arrived at that certainty in administration that their



employment can be undertaken by every medical practitioner. Though it is twenty years since Zuntz and Meering first suggested the direct injection of nutriment into the venous circulation, it is only recently that Lilienfeld has shown that alkaline solutions of grape sugar and conglutin can, in nutritive amounts, successfully be so introduced in the lower animals. According to von Leube, alkali, albumin, and syntonin "are alone suitable for subcutaneous injection." Recently alkaline solutions of the yolk of egg have been injected subcutaneously with advantage in children suffering from malnutrition. But to those of the profession who conscientiously believe that alcohol and alcohol alone is the remedy, let me impress on them the need to prescribe it on the lines that Sir B. W. Richardson did, and with a due sense of their responsibility, in measured quantities of absolute alcohol or spirit of wine as a prescription, never as a last resource or promiscuously, because it will please the patient and friends. Our duty is to discourage its being looked on as a useful article of the household economy on the same level as Epsom salts and castor oil, to be employed as occasion arises.

There is a form of medication much in vogue at the present time by means of wines of various remedies — such as coca, quinine, kola, beef and malt, etc., and the makers of these impose on a credulous public by their attractive advertisements and misleading recommendations. Even medical men are called in to encourage the use of these medicated wines by a judicious presentation of a small bottle and a promise of further samples on request. Whatever may be the advantage of the medicament, one thing is certain, that few of the public who quack themselves with these proprietary articles are aware that the basis of the solvent or preservative is alcohol, often port or sherry.

Whatever malt may be capable of doing it is certain meat extract has no sustaining effect, but when these are combined with a stimulant of doubtful composition I consider no

medical man is justified in prescribing them, for should there be an imaginary success from their use, as will so often happen in convalescence from any disease, the patient will prescribe it wholesale to friends. Should any of us have a case where one or other of these medicaments may be considered useful, let it be prescribed in aqueous solution flavored with some harmless ingredient; or if a malt let it be a standard malt extract.

But prevention is better than cure, and the medical profession has always taken the lead in that, exercising often great self-denial in initiating and encouraging means to prevent, alleviate, or cure the ill's flesh is heir to, always striving for the good of humanity, though often discouraged and harassed by the whimsical acts of a pliable government or the taunting sneers of a clique of fanatics.

But with all precautions in the prescribing of alcohol there will still remain a large class who will claim our help to quench the irresistible desire for stimulants. So far no remedy has been discovered that will aid us in the efficient cure of drunkenness, but many have been recommended, and it is a field from which rich harvests have been reaped by the omnipresent quack. Many of their nostrums owe their activity to alcohol or aromatics. One of the oldest and most esteemed in religious circles was a dipsomania cure, the daily allowance of which was equal to about an ounce of whisky a day; another cure contained alcohol, a mercurial salt, and sugar. It is supposed that the original mixture contained apomorphine muriate in sufficient quantity to produce a nauseating effect. Under the wing of religious institutions a third cure enjoyed much popularity, but a government prosecution gave it its quietus.

It contained 0.11 per cent. of strychnine. Various powders containing ginger, capsicum, etc., have been employed; there was Dr. D'Unger's cure, where an extract of red cinchona bark macerated in proof spirit was employed in daily diminishing doses as a certain cure in seven days. Even liniments

were employed, and the various wines of cinchona, coca, kola, pepsin, and quinine. Each has had its day and ceased to be. Hypnotism, of course, has been tried. But among the profession strychnine and the essences — for example, of capsicum, ginger, or cardamoms, have enjoyed the greatest reputation as aids or substitutes, not as cures. Great things were hoped for from coca and its alkaloid, but they also have been found wanting. My own experience of these was negative, except in one case, and the only one, where I was certain the treatment was carried out persistently. The wife was entrusted with the adding, surreptitiously, of a solution of the hydrochlorate of cocaine to the husband's tea, coffee, or beer. At the end of a month he complained to his wife that his desire for beer had gone.

Electricity, massage, and cold baths have all been tried, and in some cases with advantage, as an aid to other means. In my own practice I have not yet found anything of avail in the case of the confirmed drunkard except confinement in a home or asylum: but with the intermittent I have found personal influence of most account and by impressing on the delinquents the fearful consequences of a continuance in the same course, picturing in the darkest colors the pains and penalties that result, have brought back to light many who had entered the downward path.

A strict diet I have always enforced with sufficiency of exercise, of which cycling is one of the best, and mental occupation, and where necessary an occasional soporific in the shape of a chloral draught. I debar meat, except tripe, sweetbreads, calf's head or sheep head, and prescribe chiefly a milk and vegetable diet with fruit, and even these in moderation, as I consider excess in eating, by creating digestive troubles, often creates a desire for stimulation and tends indirectly to alcoholism. If a smoker I allow tobacco in moderation, as I agree with Sir Henry Thompson that tobacco in moderation is an ally of temperance. Yet I am aware that Dr. Talbot of

Chicago, who has made a special study of the subject, considers tobacco more toxic and productive of more serious degeneracy than alcohol or opium. In the present state of the law I have often availed myself, where there has been an element of lunacy in the case, of a lunacy certificate, and in this connection the profession in Bolton owes a debt of gratitude to our present courteous and open-minded chief magistrate for his willing readiness at all times, without infringing the law, to aid the profession in saving to future usefulness a fellow creature.

But, government having moved to help the helpless, we look forward to great opportunities for good, both as regards drink and the drunkard, but there are but two sure measures for the cure of the inebriate: Want of easy opportunity in his daily life to obtain drinks, and power to enforce complete abstinence once the craving is established.

---

#### ALCOHOL AS A REMEDY IN DISEASE.

Dr. J. H. Yarnall, in Medical Summary, does not think much of alcohol as a medicine.

He says that alcohol is not a food, and that even as an emergency stimulant it can be replaced by something better. Alcohol does not warm the body, the apparent warmth of the surface being at the expense of the internal organs. **Travelers in the far North have found that by total abstinence they were able to endure greater hardships and to walk longer journeys.**

Dr. Yarnall thinks that alcohol, instead of preventing disease, really makes the system more susceptible. The soldiers in India who used no alcoholic beverages were less in the hospital, endured fatigue and exposure better, and were less liable to disease than those who drank even moderately.

He quotes Dr. Kellogg as saying that alcohol could be dispensed with in the compounding of medicines. A number of authors and authorities are quoted to sustain the objections against this agent as a medicine, and the author concludes that we should no longer use alcohol either as a preventive or as a curative medicine.

MORPHINISM INFLUENCING THE DISPOSITION  
OF PROPERTY.

---

A case came before the court in Pittsburgh, Pa., in which the question was raised of the impairment of the mind from morphine in the disposition of property by a will.

The following statement and opinion of the judge was given to show cause for presenting the case for a trial by jury:

**Prior to the death of Mr. Callery, who was husband of the woman who made the will, Mrs. Callery, the testatrix, was strong and vigorous in body and mind. She was her husband's helpmate, as well as companion; he consulted her about every important business matter, gave her credit for his success, and showed his respect and confidence by bequeathing her his whole estate. She was an excellent mother, and took a keen interest in household matters, charities, and social duties. But after her husband's death in 1889 a gradual change took place. An appetite for morphine, whose use began in a prescription given to relieve the torture of rheumatism in 1883, grew until she was in complete subjection, and culminated in death from morphine poison in 1897. Her craving became so strong at times that she would beg and cry for her dose in anticipation of the regular time. Repeated and persistent efforts were made under the direction of experts towards relief, and these in the earlier stages of the habit were aided by Mrs. Callery, but without any permanent results. The habit steadily grew, and a marked change soon became apparent in body and mind. She lost one-third of her weight, her skin assumed an ashy hue, her lips became blue, and the pupils of her eyes contracted, she lost interest in matters which had formerly given**

her pleasure, and stayed most of her time in her room. Her moods changed frequently and rapidly. At times she was quiet, at other times excited and angry; at one time rebellious, and at another submissive and passive. She had periods of melancholia and apathy, during which she would for hours sit with her eyes closed, not noticing the surroundings, refusing or declining to respond to the physician, her family, or attendants. She opposed the marriage of her only daughter, who had been her devoted nurse, because she did not wish to lose her services. She failed to visit her eldest son, though she knew he was lying next door at the point of death for three weeks, and she left for New York without any special urgency when her daughter was in hourly expectancy of confinement.

It was while in this broken mental and physical condition that Mrs. Callery made the will in controversy. Drs. Ayers and Emmerling, neurologists, who are deservedly recognized as high authority in such cases, were emphatic in their opinion that she could not at that time have had an intelligent comprehension of the business in hand. And there is in the will a discrimination shown against her daughter which seems on the case as presented grossly unjust. Property variously estimated as worth from \$65,000 to \$200,000, which had been Mrs. Callery's separate estate, was given the daughter, while the estate received from her husband with its accretions, estimated to be worth one million four hundred thousand dollars, was given the three sons. If Mrs. Callery had undertaken to make a will when in her prime, the presumption is that she would have given equal shares to her children. If she had made any discrimination at all it is natural to suppose that it would have been in favor of the more dependent. If she had foreseen her daughter's unselfish devotion during her long illness, it is but natural to suppose that marked appreciation would have been shown. If basis for such presumption be asked it will be found in Mr. Callery's declaration that he had given his wife his estate in the confidence that she would do justice to his chil-

dren, and her acknowledgment after his death that she had accepted the estate in trust to make equal distribution, followed by the will of 1892, making equal division. It has been suggested that the discrimination shown in the subsequent will may have been the result of the marriage of the daughter, but a complete answer to this is that Mrs. Callery's opposition to her son Charles's marriage was much more violent, for reasons which did not involve her personal comfort, yet a few months afterwards, in the same will in which she discriminated against her daughter, she gave him a share equal with his brothers. The case as presented shows then that notwithstanding Mr. Callery's confidence in his wife's sense of justice and her confession that equality was his measure of justice, not one dollar of his estate was given this contestant, his daughter, for, as has been seen, the devise to her is of Mrs. Callery's separate estate; and no reason for discrimination is shown other than is attributable to the impaired condition of testatrix's mind. The explanation may lie in unreasoning and perhaps unconscious resentment against the daughter on account of her long-continued and anxious attempt to restrain the mother in the gratification of a morbid appetite for morphine. The plausibility of its existence is strengthened by reference to the fact of her frequent change of physician and nurse. Assuming then this to be the case presented, the next question is whether or not testatrix had an "intelligent comprehension of the business in hand"? If she had, the issue demanded must be refused; but if she had not then it must be granted.

OPINION BY THE JUDGE.

It is essential to the exercise of testamentary power that the testator shall understand the nature of the act and its effects, shall understand the extent of the property of which he is disposing; shall be able to comprehend and appreciate the claims to which he ought to give effect (*Banks vs. Goodfellow*, 5 Law Rep., 2 B., 565; *Grubbs vs. McDonald*, 91 Pa., 236); and

with a view to the latter object, that no disorder of the mind should poison his affection, prevent his sense of right, or prevent the exercise of the natural affections; that no insane delusion shall influence his will in disposing of his property and bring about a disposal of it which, if the mind had been sound, would not have been made. Here then we have a measure of the degrees of mental power which should be insisted upon. If the human instincts and affections or the moral sense become perverted by mental disease, if insane suspicion or aversion take the place of natural affection, if reason and judgment are lost and the mind becomes a prey to insane delusions calculated to lead to a testamentary disposition due only to their baneful influence, in such cases, it is obvious that the condition of the testamentary power fails, and that a will made under such circumstances ought not to stand (*Banks vs. Goodfellow, supra*). It is obvious that in an inquiry of this kind the evidence ought not be confined within a narrow range; but that everything which tends to show testator's mental condition should be received (*Bitner vs. Bitner, 65 Pa., 347*).

"The fact that a man's will," said Mr. Justice Agnew, in *Bitner vs. Bitner, supra*, "is unaccountably contrary to the common sense of the country is not sufficient, *ipso facto*, to set it aside. The testator's will is the law of his property. But certainly that which outrages common feeling and displays a want of ordinary natural affection is a fact to be considered along with other evidence on the question of unsoundness or delusion." Where, therefore, a will is impeached for want of testamentary capacity the intrinsic evidence of the will itself arising from unreasonableness or injustice in its provisions, taking into view the state of testator's property, family, and the claims of particular individuals, is competent and proper; it is not only proper, but in some cases, in connection with other circumstances, it may be evidence of the most decisive kind: *Baker vs. Lewis, 4 Rawle, 356*. Taking into view this testatrix's property, family, and the claims of Mrs. Jackman, both



on her natural affection and gratitude, the disposition made is manifestly unreasonable and unjust. So far as appears Mrs. Jackman had not only done nothing to forfeit her natural right, but her self-sacrifice had merited a marked recognition from her mother.

Another important consideration is the total revolution which seems to have taken place in the character of Mrs. Callery. Her failure to visit her son when lying at the point of death, and leaving her daughter at a critical point in her married life, evince a painful weakening of natural affection: *Bitner vs. Bitner, supra*. The change which had taken place in Dougal, whose testamentary capacity was in question in *Wilson vs. Mitchell*, 101 Pa., 495, was perhaps greater than here; from having been keen and strong he had become so weakened by reason of age at the time of the alleged will that he failed to recognize his old friends, would repeat questions again and again at short intervals without reasons, and was unable to leave his room without assistance, and yet an issue was refused, but his condition and environment were different from those of Mrs. Callery; he had no children, no morbid habits warping his mind, and rightly made those to whom he was under obligations for care-taking the objects of his bounty. The case carried the right of testamentary disposition farther perhaps than any previous decision, but was followed by a reaction whose latest expression was given in *Miller's Appeal*, 179 Pa., 645, in favor of liberality in granting issues. The flood of contests which has arisen since the later decision shows the meaning drawn from it by the profession.

So Mrs. Callery's total disregard of the trust for equal division among the children under which she had acknowledged she had accepted her husband's estate, is another indication of want of testamentary capacity. Mere change of intention taken in connection with other circumstances is evidence admissible to show want of capacity: *Titlow vs. Titlow*, 54 Pa.,

216; much more should a change made in disregard of moral obligations.

So assuming that the facts as presented suggest that the will grew out of a delusion, this furnishes a very important element. Conceding that testatrix was competent in all other respects, if her treatment of her daughter was the result of a delusion it must fail. "An intelligent consciousness of the nature and effects of an act," said Mr. Justice Agnew in *Bitner vs. Bitner, supra*, "is not plainly inconsistent with the existence of a delusion leading to and producing the act." A testator may have been perfectly conscious of the nature of his testamentary provision, and aware that its effect was to disinherit some of his children, and yet laboring under a delusion of fact as to their conduct which led him to consider and do the thing which he contemplated consciously and intelligently. He may have an apparent right use of his faculties in many other respects, and yet such delusion so strongly influences his conduct toward those against whom he exhibited this new trait of character as to make his disposition invalid.

If these considerations be viewed in connection with the character of the morphine habit which dominated Mrs. Calery, against whose insidious growth she had struggled so long in vain, and the opinion of the experts called, **testamentary capacity is more than doubtful. No attempt was made to show that the former had used any undue influence to induce their mother to make this will; indeed, so far as appears, they do not seem to have known of its existence prior to their mother's death. It was conceded that the brothers had on another occasion interfered to prevent the execution of a will drawn to disinherit their sister; and so far as appears she has as much right now as she had then to an equal share in her father's estate, and to their recognition of the justice of her claim.**

This case came before a jury for trial in January last. Dr. Samuel Ayres of Pittsburgh, Pa., and Dr. T. D. Crothers of Hartford, Conn., swore as experts on the mental impairment

which would follow the use of morphine, and the strong probability of incapacity to realize her duty in the equitable division of her property.

The case was suddenly closed by a private settlement and taken out of court.

---

POINTS IN FAVOR OF THE USE OF ALCOHOL AND  
THEIR REFUTATION.

Dr. Bienfait (*Gaz. Hebdom. de Méd. et de Chir.*) examined point by point the various objections to total abstinence:

1. Is alcohol a digestive? No; its ingestion produces a **passing excitation**, interrupts the proper action of the muscles of the stomach because alcohol acts as an anæsthetic after having irritated the walls of the stomach, and it drives the blood to the skin and so hinders the action of the gastric juice.

2. Is alcohol an appetizer? No; it produces an excitation of the stomach which causes a sensation taken for hunger.

3. Is alcohol a food? No; it does not correspond to the definition of a food, and the heat that it seems to produce does not serve as an actual warmth.

4. Is alcohol heating? No; it causes a flow of blood to the skin and a lowering of temperature.

5. Is alcohol a stimulant? In no case, either physical or **intellectual**.

6. Is alcohol a protector against contagion? No; it **pre-disposes** the body to contagion.

7. Can we live without alcohol? This idea that we cannot live without alcohol is a prejudice that numerous facts **contradict**.

8. Is alcohol good for children? It should never be given to children.

9. Does alcohol increase longevity? According to reliable statistics alcohol diminishes longevity. — *Med. Rec.*

ANNUAL ADDRESS ON THE SOCIETY FOR THE  
STUDY OF INEBRIETY AT JANUARY  
MEETING, 1900.

---

By WILLIAM WYNN WESTCOTT, M.B., D.P.H.,  
*President.*

---

Ladies and Gentlemen: Nearly sixteen years have passed away since the learned and enthusiastic Dr. Norman Kerr founded this Society for the Study and Cure of Inebriety, and ever since its institution the Society has never failed to have its regular meetings for the reading of lectures and for discussion upon the subject of inebriety — its history, causes, prevention, and cure.

The lectures which have been read have all helped to throw light into the dark corners of our research: they have been representative of the most varied opinions, and have treated of the causes of inebriety, both public and personal, of the symptoms, diagnosis, and chances of the cure of the inebriate. And there have been essays on the treatment of individual cases; but the greatest amount of time has been spent upon discussions relating to the suppression of intemperance by legislative measures, and the rescue of inebriates from their surroundings, and their cure by confinement in asylums, homes, and state institutions.

It has been in this direction that the work of Dr. Norman Kerr, and the earnest support of this Society, and of its individual members, have been of the greatest use, for it is impossible to doubt that the amendment of the Habitual Drunkards' Act passed in 1888, and the Inebriates' Act of 1898, were

both largely the result of the labors, personal energy, and untiring industry of Dr. Norman Kerr, and was ably supported by the Councillors of our Society, and by many of those who had contributed by their lectures to our knowledge of the subject.

The first attempt to cultivate public opinion in favor of temperance legislation by means of medical men and their associates united in a Society was made in New York in 1870; your late president visited the United States and became well known to many of these pioneers of inebriate reform; at his request the president of the American Society, Dr. Parish, and the secretary, Dr. Crothers, have visited us, and have addressed our meetings, and they gave much valuable advice and information.

As a temperance reformer Dr. Kerr established a world-wide reputation, both by means of his lectures and his printed works.

Our Society has also at various times been assisted by other eminent foreigners from Norway, Austria, and Poland; the aged Mr. Wicobycki will be remembered by many, and Axel Gustafson, as will the Chevalier de Preskow Marstoff, who gave important data as to drunkenness in Moravia.

Our own members and associates have contributed most valuable information, results of research and statistics; mention must be made of Dr. Alfred Carpenter, Dr. W. B. Carpenter, Sir Benjamin Ward Richardson, Dr. George Harley, Dr. G. K. Poole, Dr. Usher, Dr. H. W. Williams, Dr. F. R. Lees, Dr. C. R. Drysdale, Dr. J. J. Pitcairn, Dr. W. H. Kesteven, and Brigade Surgeon Lieut.-Col. Pringle.

During the last year we have been very much excited over Dr. Archdall Reid and his contentions on the temperance fallacy, so called; this discussion was initiated by Dr. Norman Kerr himself, who declaimed against Archdall Reid on the subject. In reply to this Dr. Reid kindly gave a new statement of his views here in January last. In April we listened to Dr.

Crothers on Treatment; in July to Prof. Sims Woodhead, one of our vice-presidents, who, by his address on "Heredity as a Factor in Inebriety," caused so great an interest in this branch of the subject that a special committee on "The Heredity of Alcoholism" was appointed, and has been holding regular meetings for research, and the collection of facts and opinions. A summary of these proceedings will be laid before the members in a future quarterly report. In October last very great interest was shown in the lecture given by Dr. Harry Campbell on "The Craving for Stimulants," and a useful discussion followed.

The society has, however, not restricted its researches to alcohol alone, for papers have been read upon cocaine habit and ether inebriety. In this last case again the attention called to ether-drinking by our Society and by the late Dr. Ernest Hart, resulted in an immediate check to the practice, excise regulations being the means.

Our friend and member Dr. W. L. Brown gave us in January, 1898, a most valuable summary of "Intemperance among the Ancients," and he pointed out the absence in those times of any organized public scheme for the promotion of temperance, adding that their efforts were directed rather to the production of a state of immunity in the individual, so that he might become able to drink any amount rather than that he should be discouraged from drinking.

Until this century was well into the thirties there was hardly any attempt made in this country in the direction of total abstinence as a virtue, and great credit for this new departure must be given to a Roman Catholic priest in Ireland, Father Matthew, who led a crusade against the excessive whisky drinking among the Irish. His eloquence and enthusiasm in the cause caused a universal awakening of the public conscience in condemnation of intemperance; this occurred in 1838, and from that date onward teetotalism became a by-word, and total abstinence a public virtue.

The pendulum of opinion swung in the direction of the formation of national and local societies, designed to make our people abstainers, and much success have been obtained. Even in the present year, however, there is a terrible amount of drunkenness, and its evil effects not only on drinkers but on their families are constantly before our notice.

Temperance reformers, finding much success in the combat with intemperance as a personal indulgence, then turned their attention to the province of medical treatment, and boldly declared that all disease could be cured without alcoholic preparations of drugs, as well as with them. A few eminent physicians subscribed to this opinion, but the idea has never freely permeated the medical profession.

Failing in obtaining widespread acceptance of their doctrine, the teetotal reformers then called public attention to the assertion that beyond the needlessness of alcohol as a medicine there was a further mischief done by doctors, inasmuch as by advising the use of alcoholic drinks as means of hastening recovery from illness, they often founded in their patients a love of alcohol for its own sake, and so created many inebriates.

So wide an assertion, involving so large a proportion of our population, produced, of course, a considerable number of recorded instances of the occurrence; but the medical profession as a whole repelled the insinuation and your late president, an ardent abstainer and a doctor in extensive practice, denied the prevalence of the evil, and boldly stated to our Society that the charge was an exaggerated one, and that his large experience showed that the prescription of alcohol as a medicine could only be accountable for an inebriety of half per cent. among 4,000 recorded cases. See Society Report, April, 1897.

Earnest reformer as he was, Dr. Kerr bravely insisted on truth even in urging reform; his great experience taught him that exaggeration is apt to meet its own condemnation.

Our late president was a man of the widest sympathies, and we shall never replace him. From the first founding of our

Society he invited into its ranks all who were interested in the study of inebriety and its cure, without reference to the personal habits of the candidate, and at all times every visitor has had the right of free speech whatever his or her views may have been. That the total abstainer has very largely figured in our annals is obvious, and the largest share of public reform has been attained by such members, but no good could ever come from the making of the Society into a total abstinence coterie, for truth can mostly be found in the assembly of persons of all views. Our Society consists of medical members who must be the more learned in the knowledge of the evils of intemperance than are laymen, but we invite by our associates a tender of the results of the investigations of all others, who have really the cure of intemperance at heart, for our consideration. The people of our nation cannot be made temperate by argument alone, but by education and by legal pressure, and our principal object must be the consideration of the best modes of restraint, and of regulations which tend to limit the opportunities for free drinking, and we must teach the cultivation of habits of personal cleanly life. Judging by analogy, the moderate drinker cannot be exterminated. Let us devote our energies to the restraint of the moderate drinker within limits defined by the medical profession, and to the absolute cure of those who have passed the borderland of moderation, who are ruining their own lives and the lives of those dependent upon them; for such must be deprived of their personal liberty until they have survived the craving which ruins them body and soul.

---

In Minneapolis the sale of spirits is restricted to a single section of the city. It is found necessary to have two-thirds more policemen in this section than in other parts of the city.

---



ALCOHOLISM.

---

By DR. JULES MOSEL, MONS, BELGIUM,  
*Directing Physician of the State Asylum for the Insane.*

---

The history of heredity conducts us to alcoholism, and these two should be considered the principal causes of degeneration. Authors are unanimously agreed that there is no way of controlling alcoholism without total abstinence from alcoholic liquors. Alcoholic victims are innumerable. We encounter them in all classes of society, as well in the asylum as in the privileged classes. Alcoholism is not merely dangerous in relation to mental diseases, but it is a public evil, because it affects different functions of the human being. France, as well as Belgium, holds the record in this matter. The only good use of alcohol is as an anæsthetic to diminish the sensation of fatigue. It also produces a cerebral excitement which momentarily antagonizes moral pain, which dissipates annoyances by inducing an artificial quiet, and this is desired with avidity by those who do not know its consequences.

The popular belief that alcohol imparts energy is a gross error. The proof has been given by many experiments during recent years. Alcohol gives strength to no one. Workmen who believe that the use of water enfeebles and that alcohol sustains them for labor give a wrong interpretation to facts. It is true that, if we stop the use of alcohol as a habitual stimulant, we induce feebleness, but the same thing occurs with morphine-takers, with whom deprivation of their poison plunges them into a pitiable state. That which we have affirmed of spirits is true of wine and of all other drinks which

contain alcohol. The civilization which developed inside the Græco-Roman world, that of the Arabs, does not know alcohol and its results because its legislator and prophet, Mahomet, forbade the use of wine. Alcohol, as Gladstone has said, makes in our day worse ravages than the three historic plagues — famine, pestilence, and war. It decimates beyond the pestilence and famine; it kills more than war; and it does worse than slay — it dishonors. Famine has become rare. Medicine has vanquished the plague. War is an intermittent evil. But alcoholism is a continual and degrading evil. Some nations release themselves from it by energetic measures, but there is need of a similar energy and courage in other nations to annihilate the greatest enemy of the world. To conquer alcoholism would be to reduce the hereditary causes of nervous and mental disorders to a minimum, and to diminish the number of asylums for insanity, crime, vagabondage, and pauperism: and also, consequently, the orphanages, hospitals, and hospices for the aged. This would be a notable contribution to the physical and moral welfare of the people, and to the happiness of numberless families.

Professor Delman of Rome has made a very interesting study of hereditary inebriety. One woman, named Ada Jaske, born in 1740, deceased at the beginning of this century, was an old drunkard, a thief, and a vagabond. She left a progeny of 834 persons, of whom 700 have been studied in their history. Of this number there have been 106 illegitimate children, 142 mendicants, 64 sustained by charity, 161 women gave themselves to prostitution, 76 members of this family were criminals, and among them seven assassins. In seventy-five years this single family, according to official estimates, has cost for maintenance, expenses of imprisonment, and interest, a sum of five million marks.

This statement deserves special notice; it confirms the importance of improving social education. While many governments and other institutions busy themselves with trifles

of instruction and also impose intolerable burdens on teachers who desire progress, they leave untouched the great questions to which we have called attention.

Many physicians to the insane, and they among the most celebrated, have abandoned the prescription of wines and spirits. Other practitioners have ridiculed the assertion that wines are tonics, and declare that they are more hurtful than helpful. Dr. Koch, who has written splendid and immortal works on degeneracy and prophylaxy of mental diseases, insists strongly on the uselessness of wine in therapeutics. Dr. Wearanden and Dr. Toulouse, celebrated French alienists, take the same view. Hereditary neuropaths especially manifest very often inability to endure alcoholic drinks. And since neuropaths are quite numerous, and among them many are predisposed to insanity, it is indispensable that they should abstain from every drink of this nature.

It is important to note here the objection one may make to abstinence from alcoholic liquors for neuropaths. Many of the predisposed remain apparently insensible to alcohol, while in reality this poison unconsciously inflicts upon them ravages which at a certain stage of the malady they are powerless to control. One should show himself much more severe in the recommendation of total abstinence when he deals with persons who manifest neuropathic symptoms. It should not be forgotten that generations issued from neuropaths will be more predisposed to insanity if their ancestry have used alcoholic drinks freely.

At the end of the last century medicine, assuming a scientific character, began to undertake the study of alcoholism. Legions of authors have occupied themselves with this problem, and all without exception agree in recognizing the danger. It is impossible to cite the names of all in that illustrious company of workers and fighters who see in inebriety a menace against the very existence of the rebellious nations.

The injury done by alcohol in addition to causing insanity

and degeneration is proved not only by the medical profession, but also by the insurance companies. It is important to notice these results. M. Jaquet of Bale, in a work on the English insurance companies, declares that three companies for insurance against loss of work by reason of sickness have had between 1884 and 1889 an average of twenty-six weeks of sickness to each individual, while the treasury of the Sons of Temperance, a society which admits only abstainers, has had during the same period only seven weeks of sickness to each individual; an enormous difference if we consider that the first three companies are not recruited among the intemperate. These happy differences are also found in certain English companies which make a distinction between the temperance section and the general section; the premium is 28 per cent. lower for the abstainers than for the others. These figures have their value because a good part of the results may be involved to prove that alcohol is a cause of degeneration.

In respect to the proportion of insanity caused by alcohol one cannot appeal to the statistics of Belgium, which in general do not merit much confidence. French tables mention a proportion of 38 per cent. with men and of 12 per cent. with women. It is evident that this is under the truth, since many cases of alcoholism are not officially mentioned. In fact, there are many inebriates who manifest mental disorders without on that account being shut up in asylums; and there are many insane inebriates who, under the influence of alcohol, have become licentious, quarrelsome, ill tempered evil-doers, but whose troubles are not judged to be important enough to make confinement necessary. Not all these insane inebriates figure in statistics; but we encounter many of them in prisons, work-houses, etc.

Many of these victims might have escaped this destiny by means of a wholesome mode of living if alcohol had not diminished their power of resistance in their nervous system. If alcohol has not induced in them insanity there is no doubt

that it has subjected the drunkards to a mental defect which they will transmit to their posterity in the form of imbecility, idiocy, moral insanity, hysteria, epilepsy, future inebriety, criminality, etc. It is sufficient to say that the struggle against inebriety is the most certain prophylactic measure, not only against different kinds of mental disease, but also against various other maladies of the body, against crime, vagabondage, mendicity, etc. The prisons swarm with inebriates, as the hospitals and workhouses abound with vagabonds and mendicants. The orphanages count numerous victims of the inebriety of parents, as well as the asylums for the aged. The French attribute a part of the diminution of births to alcoholism, and it would not be difficult to prove the exactness of their assertions. Dr. Debone, in his chemical lecture on alcoholism, recalled these good words of Plutarch: "Those who wish to approach a woman to beget ought to do it before drinking wine, or at least after very moderate use, because those who are begotten of drunken parents ordinarily become drunkards, as Diogenes once said to a disorderly and debauched young man: 'Young friend, thy father begot thee in his drunkenness.'"

Observations made in Belgium and in France contrast in a remarkable way with the statistics where alcoholism is decreasing. In Sweden from 1830 to 1834 the annual consumption of alcohol being about 23 liters to a person, there were 59 homicides, and 2,281 thefts. From 1875 to 1878 the consumption being reduced to 5.5 liters, there were 18 homicides and 1,871 thefts. In Norway in 1814 there were consumed 5 liters to the person, and there were 294 crimes to 100,000 inhabitants; in 1876 the consumption being reduced to 2 liters, there were only 180 crimes. Sweden and Norway, therefore, prove that the reduction of alcoholism reduces crime. Mental alienation and other maladies and vices due to alcohol have also diminished. We regret that we cannot state the figures of this decrease. Inheritance of evils caused by alcohol has not been

merely discussed by physicians. Before them the moralists saw in the ancestors a bad example. To-day physiological heredity is admitted without a doubt. Professor Debone proclaims it aloud. Alcoholism destroys the race in two ways: by augmenting mortality or by producing degenerates. The conviction is supported by indisputable figures cited for countries where increase of population is very high. Germany doubles its population in ninety-one years, Sweden in eighty-nine years, Denmark in seventy-three years, Austria in sixty-seven years, Norway in fifty-one years, while France would require 334 years.

What remedies may be proposed for this frightful evil? Debone says they are of two kinds: counsels given individually to those who are willing to hear and coercive means applicable to all.

One does not know how to approve too strongly the wisdom of those who are content to drink pure water. But if one does not possess this virtue, he can drink hygienic drinks — boiled milk, tea, coffee. Whatever is said it is not possible to determine the quantity of alcohol which one can drink with impunity, since we must take account of individual susceptibility. That which seems harmless for one is an abuse in another. It is difficult to say when the quantity is innocent, for a slight excess which may not be noticed, even if it does not affect the brain, may expose other parts of the body to serious injuries.

Alcoholism may be considered one of the capital causes of mental disorders and human degeneracy. It is against this evil that all should labor with united forces and by all means which tend to annihilate it.

Also the societies for preventing the abuse of alcoholic drinks have great reason to be congratulated. In Holland Dr. Buysch, inspector of asylums for the insane, and in Belgium Dr. Frank, have become valiant champions of the noble cause, and have made appeal to woman and have taught her

to comprehend the grand part she can take in social reform by contributing to the contest against alcoholism.

Alcoholism being a public danger it is necessary to use in combating it public measures, that is, laws and reforms which assist in the struggle. It has been proposed to raise to the highest point the duties on alcohol, to increase the price of licenses to wine merchants, to limit the number of drinking-places, and to forbid the sale of unwholesome drinks. Thus far none of these reforms has succeeded. Candidates as well as electors have an interest in maintaining present conditions. Dr. Legrain has demonstrated by statistics that in France there are about four millions of inhabitants who derive some profit from the trade in alcoholic drinks. These millions of alcohol dealers, says Dr. Debone, have an admirable understanding with the other millions of alcohol drinkers whose deepest desire is to increase their malady rather than to cure it.

In America, England, Denmark, and Switzerland numerous women of generous hearts have been found to enter the conflict. It is indispensable that the other civilized countries should follow the beautiful example. Woman is able to act as a mother, as sister, as friend. In the home which she exalts by order and delicacy she will provide a center of attraction for her husband, her children, her friends. She will be trusted by the friends of the family, and especially by those who are characterized by an orderly life. She will put forth every endeavor to persuade the members of her family and her acquaintances who abuse or are tempted to abuse alcoholic drinks, and in case of despair of success will reject those of them to whom she has no special obligation.

Woman will not only by her social position be able to exercise a great influence on her family, but even when heredity has struck the children she may be able by careful education to induce total abstinence from alcoholic drinks to diminish the tendency to degeneration, and to ameliorate the mental and moral life of those who are dear to her. The

moment has not come for a radical law against alcoholism. It is necessary to prepare the people by popular writing and conferences. It is necessary to reach the public before knocking at the door of the legislature. The contest with alcoholism should form a part of political programs, for all parties will accept this article when the multitude has once comprehended the permanent danger and destructive nature of this plague. It is necessary that the physicians and public men should make known their opinions far and wide, that there be unanimity among them, and that they affirm the urgent need of measures which tend to restrict the consumption of alcoholic drinks, and to restrict the use of alcoholic drinks to those which are entirely pure.

History teaches us that it is not unreasonable to seek a conquest over a vice by suggestions, and condemnation to a legal penalty is one of the most powerful means. The law should authorize the forfeiture of the rights of a father or mother who is an inebriate; this would be a social protective measure of incontestable value, and one which would cause many husbands and wives to reflect.

Dr. Jouffroy divides the alcoholics into several categories: The category of simple drinkers who do not manifest any mental trouble or any grave visceral lesion. Being strong they might be helped by a method which would establish an active habit in a house of abstinence and labor. Among these patients we should find the most of the proselytes who, once healed, would go out to speak a good word to others. The second category includes alcoholics affected by mental troubles and who suffer from affections of the stomach, liver, or kidneys. Dr. Jouffroy proposes to confine the former in asylums of abstinence and the others in hospitals of abstinence. The celebrated professor of the faculty of medicine at Paris does not recommend sending all the insane alcoholics to a special asylum, but he proposes to send the incurable, the general



paralytics, and demented cases into asylums for the insane in order not to crowd the special inebriate houses.

Dr. Serieux proposes to collect in a single establishment all alcoholics by classes, according to their physical and mental state, even taking account of their social rank and positions.

Dr. Toulouse in his excellent book, "The Causes of Insanity," limits himself to recommending as conditions of admission to a special institution the absence of mental disorders or their cessation. This measure, says the author, appears at first sight strange, and yet if one reflects that the purpose of those houses is essentially to correct habitual alcoholics it is important to undertake this work under the best possible conditions. It is for this reason that most authors agree on the principle that the disturbances provoked by alcohol are curable. When a person is attacked by a sub-acute delirium he is sequestered. He is subjected at the asylum for the insane to a régime of abstinence, which is not so rigorous as it will be in an asylum of abstinence, but is sufficient to permit him to become sound in mind, if this termination of the malady in a certain cerebral condition is possible. Observe that so long as he is delirious he usually remains in confinement, where it is difficult to procure alcoholic liquors at least in quantity to bring on his disorder. When he is cured comes the moment to send him to a special asylum, where he will be an abstainer, and where he will learn to form habits which will assure against future falls.

The asylums for abstinents, says Dr. Magnan, ought to be a field of suggestion. The physician and his assistants, the employes and nurses, ought to give the example and should drink water alone. It is important that there should be no discordant note, no jesting from any source, to interfere with the action of treatment. The reading of papers, conversation, conferences, all ought to be employed to strike the attention of the sick and to reassure their good resolutions. And when they go out the treatment is only begun, not completed. It belongs

then to another institution, to boards of relief, to help and watch over them.

Awaiting further legislative measures the temperance societies are doing vast good, and in several countries of Europe their number and influence increase from day to day, and their crusades are by no means near the end. It is necessary to arouse from indifference members of the higher social classes. The inferior classes will not be long in following them.

We merely remind the reader of the abuses of morphine and other drugs which contribute to the increase of insanity. The remedy here is easily found. It would be sufficient to impose a fine on all druggists who dispense such medicines without the prescription of a physician.

---

#### AN ANTI-TOBACCO CONGRESS.

The second International Congress Against the Abuse (which is here synonymous with "use") of Tobacco will be held in Paris during the summer of 1900. The work of the Congress will be divided into seven sections, dealing severally with (1) history, statistics, various methods of the employment of tobacco; (2) chemical and physiological researches on tobacco; (3) diseases caused by tobacco; (4) hygiene and sociological questions; (5) education as a means of restricting the use of tobacco; (6) the morality and criminality of tobacco users; (7) miscellaneous. Papers may be read in English, French, German, Spanish, Italian, or Russian. Those desiring to become members of the Congress are requested to signify their intention to the president of the Committee of Organization, M. E. Decroix, 20 bis, Rue Saint-Benoit, Paris. The subscription to the Congress, which has been fixed at five francs, should be sent at the same time.

## ALCOHOL IN ACUTE PSYCHOSIS.

Dr. Knapp, of the Harvard Medical College, in the Boston Medical and Surgical Journal, makes the following suggestive reference to alcohol in psychoses:

The almost hopeless confusion which the effort to reconcile various opinions in regard to the so-called acute psychoses produces may naturally lead us to consider, if not to take refuge, in alcohol. The pathological changes produced in the cortical nerve cells by alcohol have, of late years, been carefully studied, and it is recognized that alcoholic poisoning causes degenerative changes in the cortical cell. In acute alcoholic poisoning, however, in the "simple drunk," we are familiar with various mental states. The intoxicated man may be verbose, jocose, lachrymose, morose, bellicose, or comatose. The mental conditions due to chronic alcoholic poisoning are also of various types. One of the most familiar forms is, of course, the ordinary delirium tremens. — an acute hallucinatory delirium with ideas of persecution, of short duration and often terminating fatally; a condition which, clinically, is not unlike acute delirium.

A short time ago I saw on the same day two patients who presented two familiar types of mental disturbance due to alcohol. One was a young man of thirty-two who, for ten or twelve years, had indulged in alcohol to excess. The family history and previous history were not remarkable. Three months before he had had a light attack of "the horrors," lasting about a week; since that time he had had the delusion that his enemies were influencing him with an electric machine: that he could hear them talking about him, threatening to arrest and kill him. They knew his thoughts and everything

which he did. Certain muscular twitchings, due perhaps to a very slight neuritis, were interpreted as taps from the electric influences; after which he heard his own name and the names of his enemies spoken. His enemies repeated everything he thought, and told him they would kill him with electricity. Their suggestions were often indecent. He never had any hallucinations of sight. At times he recognized the voices as false, but more frequently they were real. In consequence of his persecutions he was depressed, irritable, and unable to keep his mind upon his business, but there was no failure of memory or judgment, no confusion, and no other mental impairment. After three weeks of total abstinence the delusions and hallucinations were much diminished.

On the same day I saw a woman of forty-four, possibly approaching the menopause, who had indulged very freely in alcohol. For three weeks she had had some bronchitis, with digestive disturbance and elevation of temperature, for which she entered the hospital. She was found to be very weak and tremulous, and somewhat delirious, getting out of bed frequently at night, but never becoming especially violent. On account of her getting out of bed, restraint became necessary. On examination she was found to have a moderate degree of neuritis, and to show very marked mental confusion and loss of memory. She gave the characteristic account of having made several visits to her friends outside during her two weeks' stay in the hospital, with circumstantial statements as to the events which had happened during those visits. There was much confusion as to dates, and much of the time she was not certain where she was. After total abstinence from alcohol she improved so much that in the course of a month she was able to return to her friends.

In yet a fourth type, which is seen only in more advanced cases, there is still more marked dementia, great muscular weakness, more marked loss of memory and confusion, disturbances of speech and occasional convulsions, the whole

suggesting general paralysis. The course is protracted, the prognosis grave, and complete recovery is rare. In this last form we find edema and opacity of the pia, atrophy of the cortex, and more marked atrophic changes in the cells and in the glia, the familiar "wet brain" of chronic alcoholism. Other forms might be described, and mixed transition types exist.

In all these types of mental disturbance, — which, clinically, are distinct, if we disregard the transition forms, which spoil our classifications, — the etiology is the same, the anatomical changes differ only in degree, but the clinical aspect is widely different. Is it not fair to suppose, therefore, that the difference in the symptoms is due to the difference in the extent of the cortical changes, or, perhaps, to a difference in their localization? In other diseases of the brain — hæmorrhage, abscess, tumor — we know that the extent and location of the lesion are of much greater importance than the etiology or the precise anatomical nature. Is it not probable that the different manifestations in general paralysis are dependent upon the extent and localization of the changes in the cortex, excepting, of course, those manifestations clearly referable to changes in the spinal cord? The paralyzes and convulsions of general paralysis are probably to be referred to local changes, and, although we cannot as yet accept Flechsig's speculation that disturbances of personality are due to changes in the anterior association center, the clinical differences in the mental symptoms of general paralysis are more satisfactorily explained by differences in the part of the cortex affected and by differences in the extent of the degeneration than by any other causes. At any rate, both in alcoholism and in general paralysis it seems safe to claim that the degree of the dementia is dependent upon the number of cortical neurones that are put out of function; the rapidity with which the dementia develops depends upon the rapidity with which these neurones are affected by the morbid process; and the permanence of the dementia depends

upon whether the neurones are wholly destroyed or are capable of repair. The study of the pathological changes in the cortex in the early and late stages of general paralysis establishes this point beyond dispute.

Let us now consider for a few moments the so-called psychoses. What they are it is hard to say, since, as I have said, the list varies with each treatise on psychiatry consulted. They would include, however, many of the cases now classed as acute mania, acute melancholia, acute dementia, dementia precox, katatonia, acute delirium, acute paranoia, and acute confusional insanity. The pathology of these conditions is defective, and any satisfactory pathology in mental disturbances is at present wholly impossible, yet, in a few instances, an acute degeneration of the cortical neurones, occasionally in the severer cases associated with proliferations of the glia, has been found. These changes are not unlike those produced by certain poisons such as alcohol, or those produced as a result of acute infectious processes. In fact, it is generally admitted that, with our present methods of research, it is impossible to detect from the anatomical differences in the affected cortical cells whether the degeneration be due to alcohol, other poisons, acute infection, or acute mental disease.

Clinically, these psychoses resemble each other in that they often seem to be produced by toxic causes, that they may affect the healthy brain, that they are of comparatively rapid onset, and that they may run a tolerably acute course. Furthermore, one cause may produce several different clinical types of psychosis. I have already referred to some of the varying conditions, with probably a similar pathological basis, produced by alcohol — acute delirium, acute delusional insanity, an acute confusional condition, and a more marked and more chronic form of dementia. As a result of child-bearing, or more probably of the acute infection associated with the puerperal state, we see various types of puerperal psychosis — mania, melancholia, and the acute hallucinatory confusional in-

sanity so often confounded with mania. Manifestations of febrile delirium, when not associated, as it often is, with alcoholic poisoning, show a similar variety in the mental symptoms. All these psychoses, moreover, show certain likenesses in their course: they may vary, of course, in severity, but we must admit that in all the so-called types of mental disease to which I have referred, even in katatonia and acute delirium, recovery is possible. The cases which do not recover, however, either die of exhaustion after a comparative short illness, or they end in one of two ways — they either pass on to a more or less marked dementia or to a state associated with hallucinations, and not very well systematized delusions, with considerable mental impairment. We may explain the course by imagining that the cell degeneration has in some cases been slight, and that a process of repair has followed, leading to a complete recovery. In other cases there may have been a sudden and widespread degeneration of many cortical cells, causing death, or there may have been a more complete degeneration of a greater or smaller number of cells, from which repair was impossible; and in case of the destruction of these cells, either mental impairment with delusions or a more complete dementia would be the inevitable result.

Many of these cases, if studied throughout their course, present various changes in their psychical manifestations. The old descriptions of mania and melancholia used to tell of the stages of depression or exaltation, respectively, preceding or following the period of excitement or depression that gave the name to the disease. This description may have been founded upon the cases of unrecognized circular insanity, but the fact remains that in so-called mania and melancholia, as well as in other affections, we may have various changes in the clinical picture — what Ziehen calls the polymorphous psychoses, which often present a course beginning with depression, going on to excitement, then confusion, and finally dementia. Other cases may begin with vague delusions of persecution

and hallucinations, which may be permanent or go on to the more marked confusion and considerable dementia, and yet make a good recovery. Often the depression or excitement is merely a secondary condition, the consequence of delusions, fancied ill-treatment, the bad effects of environment in the violent ward of an asylum, and the like. In a very large number of cases of acute psychoses recent studies have shown the existence of marked mental confusion going on to stupor.

The conclusions to which these various facts tend is that in these acute psychoses we have to do, not with a variety of different diseases, but, after all, with one single affection, whose anatomical basis may be an acute degeneration of the cortical neurones, and — if we adopt Wernicke's suggestion (which seems to me the most sound one) that insanity is a disease of the association system — a degeneration which causes a greater loss of function in the association neurones of the cortex than in the neurones which belong to the projection system. This affection may vary in its severity and in its clinical manifestations. It is most frequently due to some toxic process such as alcohol, post-infectious toxins, or, perhaps, autotoxins, or to exhaustion (toxins of fatigue). It is often attended at the onset with some febrile disturbance; a slight rise is not uncommon in milder cases, and a marked rise is the rule in delirium grave. Under certain conditions (perhaps a marked virulence or a very large dose of the poison) the symptoms are of sudden onset, with stages of active delirium which may speedily cause death by exhaustion. Under ordinary conditions, states of confusion or hallucinatory delusion are produced, which may remain through the course of the disease or which may go on more or less rapidly to dementia. If the changes be not too complete and too extensive, recovery may ensue, or, in some cases, recovery with some persistent mental defect. The variation in the clinical picture is due to the varying extent and severity of the morbid changes, or, perhaps, to a varying localization.



## REPORT OF WALNUT LODGE HOSPITAL.

A private asylum where special, personal medical care and study of each case can be made approaches very near an ideal place for the restoration and cure of inebriates. To combine in a home the best appliances of a large asylum and concentrate them in the treatment of a few cases is the highest achievement of medical science. Personal treatment, not only by drugs, but by the removal of the exciting causes and building up the brain and nervous system, is the only practical road to a possible final cure. In all inebriates there are poison states to be removed, and conditions of exhaustion to be overcome by elimination, rest, and nutrition. States of mental, muscular, and organic fatigue, with irritation and degeneration, must be treated by special personal remedies adapted to each case. The causes and conditions of inebriety are more complex than insanity and require more personal care, with a greater variety of means and measures. Patients often expect elaborate medication from drugs and by other appliances, and are disappointed when they find that natural measures are used of which tonics, hygienic living, baths, and nerve rest are the principal means. Regulation of the surroundings, with regularity of eating, sleeping, and exercise, also the correction of errors of living, are often of more value than other measures. No restoration can be permanent unless it begins and includes the hygienic conditions of life and living. The first step is to have all surroundings and external conditions helpful as well as medicinal. Then, with the removal of the exciting causes and all conditions which weaken and depress the organism, the cure can be effected. An asylum or hospital is not a hotel for luxurious living and indolence. It is a home for the best scientific care and conditions which will develop health and

vigor, and antagonize disease and disease tendencies. It is a place where the degeneration from alcohol and the injuries of which the demand for alcohol is a symptom, can be antagonized and removed. The experiences of many persons in the study and treatment of a large number of cases agree that there are no specific remedies, and that the subsidence of the desire for spirits is not evidence of cure. Each year's history in this hospital brings these facts into greater prominence, and the recognition by the patient that serious changes of the brain and nervous system are the result, as well as the cause, of his craving for drink is a hopeful promise of final restoration.

The purpose of this hospital is not to create a temporary mental disgust with alcohol with a delusion of final cure, but rather to ascertain the causes which provoke the desire for drink and to remove them, and to create an intelligent appreciation necessary for a normal life. The increasing number of persons who yearly go out from this hospital comprehending the gravity of their disease and the need of a vigilant use of means to keep up vigor and health is most gratifying evidence of the real success of this work. The following records of some general facts show that statistically the same class of cases, with about the same conditions, have been treated during the past year. The proportion of periodical drinkers is much larger; also the number of educated men who come under treatment. Physicians as usual are more largely represented than men of other professions. During the year 1899 one hundred and one inebriates were received and treated. Eighty-eight were discharged. Of this number fifty-six were periodical inebriates or persons who drank at stated intervals, with distinct free periods of total abstinence. The return of these drink periods in some cases is exact as to time, and often can be predicted in advance. As an example, in one instance, sixty-four days and six hours was the length of the free interval, with no intermissions of the attack up to

within an hour of its recurrence. In most cases a premonitory symptomatic period precedes the drink storm. Frequently these symptoms are noted in emotionalism, unusual benevolence, or extreme selfishness, and other reckless conduct. This form of inebriety resembles epilepsy, and frequently merges into this form of mental disease, and is curable only after a long, careful treatment. Thirty-one inebriates were classed as constant drinkers, persons who used spirits at all times and occasions, and often with great regularity as to time and quantity of spirits drank. In many cases the time was irregular, often only at night or early in the morning. One man never drank until the work of the day was over. Another seldom until late at night and just before retiring, abstaining the rest of the time.

This class always suffer from the delusion that their use of spirits is moderate and safe. They seldom realize that any injury could follow or that they are not able to stop at any time. Delusions of sight and hearing are much more common with them, and while seldom intoxicated, they are more feeble mentally and physically, and recover slowly when spirits are removed. Twelve persons used morphine and cocaine and other drugs with spirits. Only six were simple opium-takers: the others were complex users of spirits and narcotic drugs. Two were chloral and bromide takers who found opium more pleasing, and returned to it. Several of these cases began the use of narcotics from conditions of exhaustion, insomnia due to malaria, and other states. In the history of the ancestors of these cases, fifty-four had inebriate and moderate-drinking parents. In twenty-one instances both parents used spirits. In twelve of these cases the parents were wine drinkers, only using it at the table, and not regarded as inebriates. In two cases the fathers were clergymen, using wine and spirits as medicines and tonics. In twenty cases there was a history of inebriety in the grandparents and in collateral branches of

the family. Ten persons began to use spirits following severe illness and profound injuries which seemed to have changed and damaged the brain centers. Nine cases were clearly due to the contagion of surroundings and general states of debility, and in six cases no clear trace of any special causes could be found. In all probability farther and more exact studies would have revealed physical or psychological influences which developed into this use of drink. In the other instances the causes were so prominent there could be no mistake as to the natural consequence in inebriety. In hereditary a predisposition or tendency to find relief in drugs for every ache and pain and feeling of discomfort is inherited. Often this tendency may take on other forms and be latent, and only burst into activity by the accidental use of spirits or narcotic drugs. A low vitality and weak resisting power to suffering and pain is inherited, and alcohol or any narcotic is a most grateful remedy. The fact that over one-half of all inebriates have inebriate ancestors is very significant. It also shows that a certain proportion of their descendants may escape and live temperate lives. A study of the descendants from such parentage who do not drink reveals the presence of many allied diseases and neurotic troubles, of which consumption, hysteria, epilepsy, and a great variety of nervous troubles are common. These hereditary cases are curable, but often require a radical change of surroundings, occupation, and living, with continuous counsel and direction of the family physician for a long time. Many unknown and very obscure facts of atavism are noted, in which the peculiar form of drinking passes over two generations, then reappears. In one instance a strong, vigorous, temperate man suddenly drank to stupor on the Fourth of July. At all other times he was a teetotaler, but on the recurrence of this holiday the drink storm broke out. A great-grandfather of this man drank in this way and at no other time. He was a Revolutionary soldier, and his excesses on these occasions did not attract much attention. In

another case a temperate man became intoxicated at the wedding of his son, and from this time only drank on such occasions. It was found that his great-grandfather and two uncles drank to excess on like occasions, and were total abstainers the rest of the time. These and other curious facts in the history of cases enable the physician to understand some of the obscure causes and predispositions which enter into the drink craze. In a study of the social condition of these cases sixty-four were married and living with their wives. Eight were widowers, twenty-one were single, and eight were married and separated from their wives. The occupations of these patients were as follows: Of physicians there were nine, two lawyers, one artist, one actor, one musician, three engineers, four druggists, six spirit dealers, four mechanics, three agents, four hotel-keepers, two barbers, one author, two speculators, nine manufacturers, three bankers, three railroad men, two farmers, four clerks, ten drummers and merchants, four horsemen, six capitalists, and ten without any business. Seven women were treated during the year: six were married and one was single. In the education of the patients: forty-one had a college training, twelve had a university education, and twenty-one had passed through academies, and twenty-five had common school training. The ages of these persons were as follows: Two were under twenty, thirty were from twenty to thirty, and forty-four from thirty to forty, and eighteen were between forty and fifty, and five were between fifty and sixty, and two over sixty. In the duration of inebriety, ten persons had been drinking less than five years, forty-six had been using spirits from five to ten years, thirty-one had been drinking from fifteen to twenty years, and ten had been drinking over twenty years, and four over twenty-five years. In the former treatment, forty-five had taken some form of gold-cure, seventeen had been treated in hospitals, thirty-nine had never taken treatment before. The results of treatment may be summarized as follows: Fifty-two persons were discharged as

recovered, thirty are noted as only temporarily improved, one died, and five were removed for treatment elsewhere. Of those marked as recovered, many of them gave every promise of permanent cure, especially where the exciting causes were found and removed. The withdrawal of alcohol frequently revealed sources of irritation and diseases not suspected before, and the treatment of these conditions was literally removing the causes at the fountain head. The mental treatment is also found to be valuable, and along these lines the prayer, the pledge, and hypnotic suggestions, are very practical. The power of these means increases with the restoration of health and the removal of alcohol, and in some instances proves to be very effective. In all these cases the object of remedial measures was directed to the entire man, including his moral, physical, and mental states, aiming to build up an all-round degree of vigor and health. The statistical facts of the effects of the poison of alcohol on certain organs of the body bring additional evidence of the value of the Turkish bath in treatment. The very common condition of all inebriates who are poisoned not only by alcohol, but the retention of the waste products in the system, and other palsied and congested conditions, point out the necessity of elimination by the bath as one of the most practical remedies. The failure both of the friends and of the patient to realize the injury from alcohol and the organic changes often manifest in the desire for drink, continues to be a very serious obstacle to permanent restoration. As a result, the patient considers the subsidence of the drink craze to be a cure and his delusive confidence in his ability to stop drinking sends him away from the institution long before any permanent changes are or can be made. When this is followed by relapse the patient and his friends blame the asylum and its management for the failure. Some of these cases go to different asylums, remaining a few weeks, going away and relapsing, then going to another institution. Finally, after several years of this experience, they are taken to insane hospitals and

die. Had they remained long enough in one place for full restoration, this unfortunate experience would have been averted. Each year's experience brings additional evidence of the curability of inebriety. This can only be accomplished by the use of scientific, practical means adapted to the needs of each case, and continued with the full co-operation of the patient and his friends. There is no mystery in this or secret drugs or mysterious application of unknown means. The usual scientific studies of heredity and the damage inflicted by alcohol on the organism have been continued during the year with most gratifying results. Some of these studies have been published in the *JOURNAL OF INEBRIETY* and other publications, and the intention is to embody them in a volume in the near future. While the work of this hospital is growing along many lines, the central object and purpose to study the inebriate scientifically and adapt exact treatment to each case has made most gratifying advances during the year. New means and appliances are being tested and adopted whenever found useful, and a continuous effort is made to enlarge and improve the work in this direction. For many years a large number of persons have been continuously submitting for examination and opinion new prescriptions of medicines and new formulæ for treatment. These efforts are treated with scientific fairness and frankness, and tested on their merits purely. Whenever any new discovery of more exact means and methods are found they are used, and the work of this hospital is open and free for the study of all students in this field. In this and many other ways Walnut Lodge Hospital is doing double work in educating the public, enlarging the bounds of scientific knowledge, and restoring individuals to health again. The year's record of patients treated, while it is practical, scientific, and replete with promise, is only an outline which will be seen in clearer detail in the future. The constant effort to widen the frontiers of exact scientific knowledge is the slow movement of evolution, apparent and traceable, and the change of pub-

lic sentiment recognizing the disease of inebriety and its curability becomes more prominent and personally hopeful. Walnut Lodge Hospital has become a center for the study and treatment of inebriates, and its work and influence is steadily widening and growing with each year.

---

#### ALCOHOLIC MULTIPLE NEURITIS.

Larkin and Jelliffe make an important contribution to our knowledge of this condition in a paper recently contributed to the *Medical Record*.

They report a case that was carefully examined and watched for two weeks, when an autopsy was held, especially looking for changes in the nervous system. The case was simple and uncomplicated, and the pathological picture showed the effects of sudden acute alcoholic poisoning. All other factors in the case could be excluded. She was admitted suffering from paralysis of, with excruciating pains in, both arms and legs, slight catarrhal jaundice and gastric disturbance. She had always been a moderate drinker; one year ago, having family trouble and bereavement, she began a series of periodical debauches, lasting for weeks at the time, taking no food at all during these sprees.

The autopsy was held three hours after death. Some hypostatic congestion and œdema of the lung, slight hypertrophy of left ventricle, liver in a condition of beginning mild cirrhosis.

Marked ganglionic degeneration from the upper cervical cord to the conus in both horns. Nearly every described grade of chromatolysis was observed, but central chromatolysis so characteristic of axonal degeneration was most prominent.

The cell involvement was much greater on the left side.

Marked degeneration of the entire column of Clarke.

Portions of the brain examined; degenerative changes in the anterior central convolution and irregularly scattered throughout other parts of the brain.

The authors conclude that "in fatal alcoholic multiple neuritis grave variations from the normal structure of the ganglion cells of the anterior and posterior horns, the columns of Clarke, the nucleus of Stilling, and the nuclei of the medulla, are always to be found when studied by appropriate methods."



## Abstracts and Reviews.

---

AN APPEAL TO TRUTH. An Analysis of Prof. Atwater's Statements regarding the Nutritive Value of Alcohol and of his Tables in Bulletin 69, based on the Results of Recent Scientific Investigation. A Study of the Question presented to the public, Jan. 1, 1900, by the Committees of Fourteen Different Societies. Published 23 Trull St., Boston, Mass.

This pamphlet of sixteen pages represents the criticisms of committees of four church societies and eight temperance societies, and three other bodies in which total abstinence is the central object. The spirit and judicial fairness in which Prof. Atwater's conclusions are criticized is admirable. The conclusions of Prof. Atwater are examined scientifically and their errors pointed out in a most convincing way. The enthusiastic credulity which welcomed Prof. Atwater's defense of spirits is clearly dispelled in this examination, and the errors which have grown out of it are made clear above all sentiment and theory. It is a good evidence of the value of this paper to find it so kindly welcomed by the press reviewing it at length and publishing large parts of it, showing that The Appeal to Truth was not a partisan reply, but a dignified answer and examination of so-called facts. As a contribution to the literature of this subject it is invaluable. As a study of the latest teaching of alcohol it is a most timely, useful contribution, and is warmly welcomed. Copies of this publication can be had by addressing the publisher, 23 Trull St., Boston, Mass., and inclosing ten cents.

DIAGNOSIS BY THE URINE, OR A PRACTICAL EXAMINATION OF URINE WITH SPECIAL REFERENCE TO DIAGNOSIS. By Allard Memminger, M.D., Professor of Chemistry and Hygiene and Clinical Professor of Urinary Diagnosis in the Medical College of the State of South Carolina. Second edition, enlarged and revised. P. Blakiston's Son & Co., Philadelphia. 1900.

This hand-book of one hundred and twenty pages considers the subject of the value of the physical diagnosis of the urine with the purpose of dealing with the characteristics in the simplest manner possible. To this end, first of all the urine in health is described, after which its deviations from the normal are taken up. The tests for the normal and pathological constituents are taken up according to their relative value, and the sources of error pointed out. Both quantitative and qualitative tests are provided for in the case of all the more common constituents and morbid products. The microscopical appearance of the sediment receives due attention. The results of the examination of the urine of Bright's disease are given in tabular form. Illustrations are used where necessary. There is a list of all the apparatus required for the conduction of the analysis given, together with the formulæ for the requisite solutions. The contents include about all that is necessary for the general practitioner. Taken as a whole, it is a compend of what one wants to recall for immediate use.

ALCOHOL A DANGEROUS AND UNNECESSARY MEDICINE—HOW AND WHY. WHAT MEDICAL WRITERS SAY. By Mrs. Martha M. Allen, Supt. of the W. C. T. U. Dept. of Non-Alcoholic Medication. Charles C. Haskell & Son, Publishers, Norwich, Conn. Price, \$1.25. 1900.

This book of 425 pages, farther divided into nineteen chapters, is an admirable grouping of the testimony and widely-

varying statements of physicians who doubt the value of alcohol as a medicine. The object seems to be to give a fair view of all the leading physicians in this country and Europe concerning the value of alcohol in medicine. This literature has been gathered from a very large mass of papers, lectures, and books which are not readily available to the ordinary reader. Care appears to have been exercised in quoting only reliable authorities and avoiding extreme statements so common among partisans. The book will be a surprise to not only the ordinary physician, but to the philanthropist, who is supposed to be familiar with the temperance literature of the day in showing the extent of the revolution of medical theory concerning alcohol as a medicine.. Much of this matter is given in the author's own language or summarized in a popular form by the editor, and the aim of the book is to furnish facts for study and quotation. The author has no doubt done a real service to the cause of medicine and reform, and while some critic may find fault with the arrangement of topics and the quotations, it cannot be denied that great fairness and justice is done in the compilation. Such works are really valuable as indications of the literature and the change of public sentiment up to the present time. We heartily commend this book to all our readers, as both a valuable and welcome addition to every working library. The publishers have brought out a very attractive volume.

**THE SOUL OF MAN.** An investigation of the facts of physiological and experimental psychology. By Dr. Paul Carus, Chicago, Ill. The Open Court Publishing Co. Cloth, \$1.00; paper, 50 cents.

Those who are interested in psychical studies should read this work, for while it does not give a clear definition of man's spiritual nature, yet many of its thoughts may act as guide-posts to the student, bringing him nearer to the spiritual elements in man's dual nature. More we cannot expect at the

present stage of our knowledge. Yet, if we cannot see the land it is something to have ideas presented to us that, like the birds that came to Columbus, demonstrate that it is near.

THE SURGICAL DISEASES OF THE GENITO-URINARY TRACT, VENEREAL, AND SEXUAL DISEASES. A Text-Book for Students and Practitioners. By G. Frank Lydston, M.D., Professor of the Surgical Diseases of the Genito-Urinary Organs and Syphiology in the Medical Department of the State University of Illinois; Professor of Criminal Anthropology in the Kent College of Law; Surgeon-in-Chief of the Genito-Urinary Department of the West-Side Dispensary; Fellow of the Chicago Academy of Medicine; Fellow of the American Academy of Political and Social Science; Delegate from the United States in the International Congress for the Prevention of Syphilis and the Venereal Diseases, held at Brussels, Belgium, September 5, 1899, etc. Illustrated with 233 engravings.  $6\frac{1}{2} \times 9\frac{3}{4}$  inches. Pages xvi-1024. Extra cloth. \$5.00 net; sheep or half-russia, \$5.75 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia.

This is an exceedingly practical work, covering a wide range of topics, and giving general principles more than exact details. The author is a clinical teacher of unusual clearness and happy power of expression. The chapters devoted to the general topics are the best in the work, giving a broad outline which is very helpful to both physician and surgeon in their application to the particular case. Some of the methods urged are original and indicate a fertile mind, able to adapt itself to any conditions which may arise. Altogether the book is by far the best single volume which has appeared in the English language. The reader will have before him a library of facts from which he can draw conclusions which will apply to every case. Both the style and the clearness are to be commended. The arrangement of topics and the preparation of each is

happily apportioned. The printer has done his work well. The clear type, good paper, and the excellent illustrations make a volume very valuable to all surgeons and physicians who are called to treat cases of this class.

DER ALKOHOLISMUS is the title of a new quarterly published in Dresden, and edited by four leading scientists and medical men of Germany, of whom Dr. A. Baer of Berlin is chief.

This is one of the most ambitious efforts made to discuss the problems of alcohol from the scientific side. The journal is well printed and contains 112 pages of closely-printed matter. The object as announced on the title page is to study the scientific explanation of the various questions which gather about alcohol and alcoholic problems. The first paper discusses the Battle Against Inebriety in the Nineteenth Century. The second paper is on the Alcoholic Question viewed from the popular standpoint and its influence on individuals and communities. The third paper points Some Harmful Effects of Alcohol on the Organs and Functions of the Human Body. The fourth paper calls attention to the Influence of Alcohol in Life Insurance. The fifth paper points out the necessity of amalgamation of all efforts in Germany to study and regulate the question of inebriety. The sixth paper describes in detail the various asylums for the treatment of inebriates, and urges them all to unite in an association for the purpose of better study of the means and methods of cure. The rest of the journal is made up of quotations and items of general interest. We learn from this journal that there are twenty-four asylums or special homes for the treatment of inebriates. All of them seem to be prosperous and successful in the treatment of cases. This journal evidently is trying to concentrate the efforts of these asylums the same as our journal did in 1876. There is something very pleasing in the thought that after thirty years of battling for the medical treatment of inebriety

and its study as a disease we find the stolid German scientist taking up the same idea and beginning on the same lines, and attempting in this journal to do what we have been so many years trying to do. The American Association for the Study and Cure of Inebriates and its organ, the *JOURNAL OF INEBRIETY*, sends its warmest greetings to *Der Alkoholismus* as the first journal to join us on these purely scientific lines. It is a pleasure to know that its editor in charge, Dr. Baer, has been an honorary member of this society for many years.

In February last a new medical society was organized in New York city for the special purpose of studying the alcoholic problem in all its many phases. It is called the New York State Medical Alliance. The following officers were elected: Andrew H. Smith, M.D., president; C. A. Kinch, M.D., first vice-president; C. H. Sheppard, M.D., second vice-president; W. N. Hubbard, M.D., recording secretary; T. A. MacNicholl, M.D., corresponding secretary; A. Y. Reid, M.D., treasurer; executive committee, F. B. Carpenter, M.D., W. L. Stowell, M.D., W. D. D. Garmo, M.D., G. H. Cocks, M.D., A. T. Hussey, M.D., C. R. Allison, M.D. This society will hold monthly meetings for the presentation of papers and the discussion of alcoholic problems and facts along these lines.

**CYCLOPEDIA OF CLASSIFIED DATES.** By Charles E. Little, compiler of *Biblical Lights*, etc. Funk & Wagnalls Co. New York and London. 1900.

This is a very rare book with a special object of grouping facts and events relating to the histories of various countries of the world from the earliest recorded dates. Each country is grouped by itself, and mention is made of all the different events under sub-titles, of which the following are prominent: Settlement, Discovery, Exploration, Society, Church, Science, Nature, Letters, Births, Deaths, Army and Navy, and other topics. Events occurring in each year are grouped under

these different heads, so that one can read a statistical history of the country from year to year under these various titles. Great care seems to have been exercised in noting only those events and persons who have occupied a prominent place or been influential in the history of the country. Under different heads one can find the birth and death of nearly every prominent man, as well as special laws, accidents, and changes of affairs in society and government. In the index a very elaborate grouping of events is arranged alphabetically. As an example, under the head of Temperance there are nearly five hundred separate references. Under the word Library are three hundred titles. Under the word London there are over two thousand references. This gives some idea of the great value of the work to every scholar or person who wishes to know the date of an event in the history. Such a book has a value equal to and more important than that of a dictionary, and constitutes a library of itself. The publishers have brought out an elegant volume of clear type, fine binding, and a beautiful book for the office table. This is one of the few books which is a library of itself that should be owned by every scholar and reader of this Journal.

The *Scientific American* is a most welcome weekly to every scholar and person interested in the advance of practical science.

The *Homiletic Review*, published by Funk & Wagnalls Co., is a very pleasing record of the religious thought of the day by the great theologians and clergymen. It is especially a minister's magazine, addressed to ministers, but has additional interest to all intelligent readers. Theologic thought, like that along scientific lines, is rapidly widening, and it is very interesting to the common reader to watch this movement. The April number contains some excellent sermons, as well as classic reviews. The Easter Sermons, Texts and Thoughts, is a very suggestive department, as well as the other section — Side

Lights from Various Sources. These topics are very helpful to all readers, and this journal should have a place and be read by all scholars and thinkers.

The *Medical Temperance Review*, under the editorial care of Dr. Ridge, is a very valuable monthly devoted to the study of alcohol as a medicine. As the organ of the British Temperance Association it publishes a large variety of statements, opinions, with statistics on this subject. Copies can be had by addressing Dr. J. J. Ridge, Carlton House, Enfield, England.

The *Bulletin of the American Medical Temperance Association* is the organ of a similar society in this country. Like its English prototype it seeks to group the opinion of physicians on the alcoholic question and the value of alcohol as medicine. Some very interesting papers have been published during the past year, and the journal as a whole gives promise of filling a very large place in the literature of this country in the future. Dr. Kellogg of Battle Creek is editor, assisted by Drs. N. S. Davis and T. D. Crothers.

The *Temperance Record*, published in London, the organ of the National Temperance League, is a weekly, giving a great variety of temperance news covering all departments of this most important study. Its comments and criticisms are very generous and fair, and its attention to the medical side contrasts very strikingly with that of some of the medical journals in this country of the same class. It is no doubt one of the most influential temperance publications abroad. It is under the editorship of the well-known reformer, Mr. Robert Rae, who has done more to awaken public sentiment along moral and philanthropic lines than any man in England.

*The Bookman*, the well-known literary journal published by Dodd, Mead & Co. of New York city, has a very strong serial story by Dr. John Uri Lloyd, which is exciting a great deal of



interest. The scene is laid in Kentucky, and is called "Stringtown on the Pike." The characters are not creations, but actual persons put on the stage with slight changes, and the literary setting of action and scenery. So far the story has strong character tracings, with natural dramatic grouping of persons, and very marked local interest. Such a story in this magazine is evidence of its high character and literary excellence.

*Gould's Pocket Dictionary*, fourth edition, containing thirty thousand words with pronunciation and definition, is really a marvel of compact, useful book so much in demand by the busy physician. The type and arrangement, as well as the fullness of practical words, plainly show that its author is a genius in lexicography. No more valuable little book for one dollar can be put on the office table. P. Blakiston's Son & Co. are the publishers.

The *Popular Science Monthly* grows with each issue in practical interest and value to every physician. No more valuable monthly can come to the office table of the physician. Send to D. Appleton & Co. for a year's subscription.

---

#### AN OPIUM HABITUE OF NINE MONTHS.

W. F. Boggess, in the *Archives of Pediatrics* for May, 1899, reports a child nine months old, small, weighing but eight or nine pounds, but bright and well nourished. Six months before coming under observation the mother had begun administering laudanum for colic. The dose administered varied from four to twenty drops, and the daily quantity was from one to two drachms. While under the influence of the drug the infant was bright and apparently quite comfortable, but as soon as it was withdrawn there was pain and fretfulness. The drug was rapidly reduced in quantity, and was followed by a prompt recovery. The report is of interest from the fact that it is the earliest case of opium addiction on record, and the remarkable tolerance of the drug shown by so young a child.

## Editorial.

---

### THE EXPERIMENTS OF PROF. ATWATER.

Researches in the realm of exact science are valuable in proportion to their accuracy and freedom from error. While it is impossible to eliminate all sources of error and mistake, it is the aim of every scientist to reduce these to the lowest fraction. When this is done the facts are still open to farther correction from new studies along other sides of the subject. In astronomy no observation, however accurately made with the most precise instruments and by the most expert scientist, is accepted as final unless it is confirmed by other researches. In this the most important question is to find and correct the possible errors, mistakes, and misconceptions which impair the value of the discovery. In physiological chemistry the search for facts must be equally exact, and no conclusions from any one class of experiments can be trusted until they have been confirmed by others and all sources of error reduced down to the smallest limit. Prof. Atwater has conducted a series of experiments on two men to test and compare the value of alcohol as fuel with that of fats, sugar, starch, and ordinary food. The results from these experiments have been widely published and defended by Prof. Atwater as authoritative and final facts. It has been assumed that as the apparatus was novel and exact and the experimenter expert as a chemist the sources of error were insignificant and the conclusions must be true. A very general examination will show that the reverse is the case, and that there was no recognition of the most common sources of error in these experiments; also that no attempts were made to verify the conclusions and to elimi-

nate the physiological and psychological factors which would enter so prominently into the results. Thus the physiologico-chemical changes are in a general way uniform in their action on the body, yet in individual instances there are wide variations both in the man and at different times. This variation is due to personal idiosyncracies and physiological states of the body, and also to many complex external influences and degrees of health and organic activity. The results from the study of one or two persons however carefully made can never be accepted as final and authoritative facts. Only from the examination of a large number of persons at different times and under different conditions will any general facts appear which may be considered as reliable. The study of any one person many times at intervals will reveal a general average of facts from which to draw comparisons with other researches in different conditions. In this way the effects on the body of drugs and different foods are ascertained. Such studies extending over many years in widely differing conditions bring out facts which are authoritative by continued correction and revision. No ultimate or final conclusions are ever reached; they are always facts from the present point of view, subject to continued change. The energy from certain foods and waste products thrown off always vary in each person, and when alcohol or other drugs are added the chemical and physiological changes will be increased, retarded, or diverted, and so altered that no conclusions from any small number of cases can be trusted. The general results from a large number of experiments can never do more than approximately point out facts which must be confirmed by repeated examination and test. Psychologically, the influence of the mind on the metabolism of the body is always a very prominent factor. This is seen from psychological studies and measurements by instruments of precision in which the heart's action, nutrition, energy, and waste of the body, the senses and mental activities, are found to vary markedly from the influence of the mind. This is also recog-

nized in its influence upon digestion, retarding or checking it, causing an increase or diminution of the waste products and energy evolved. The effects of remedies on the body are dependent largely upon this factor. In all persons there are widely-varying degrees of susceptibility to mental and physical surroundings which alter the chemical changes of foods in the body. In some persons this is very marked and must be recognized in all exact researches. The same food used under different circumstances, both mental and physical, varies in its effects, and only from the study of these variations in a large number of persons can any general facts be obtained. Experiments on two men in new surroundings and unusual conditions would of necessity bring into activity this mental factor which consciously or unconsciously would seriously alter the chemical changes of heat and energy. This factor could only be determined by a study of the person in normal surroundings, and from this a basis for comparison with the results obtained in the calorimeter would appear. Giving alcohol in these conditions without taking into consideration the mental and physical elements of the man would negative all results. To tell the person experimented on the purpose and object of the experiment would rouse the element of expectation and seriously affect the natural results. The fact of having used spirits or being an abstainer would vary the action of alcohol on the body materially. The quality of foods used, the character of exercise, hereditary tendencies, and other factors in the history of the man would be very influential. In these experiments the numerous possible errors unless eliminated would invalidate no accurate conclusions. The study of two men would give no reliable data, for the reason that the same experiments at different times on the same men would differ. No calorimeter studies can be accurate unless these sources of error are eliminated, and even then they must include a large number of persons. The statement that alcohol in small doses is always oxidized or lost in the body is open to so many exceptions as

to be practically worthless. Both chemical and physiological experience show that the elimination of alcohol through the breath and otherwise varies widely with each person. In some cases a very small quantity is apparent in the exhalations, the system throwing it off unchanged with great rapidity. In others it is cumulative and not apparent in small doses. No researches have indicated any fixed condition or uniform absorption of alcohol in the body. Here the accuracy of facts must depend upon the observation of a large number of persons and the recognition of exceptions and of obscure conditions unknown at present. Here, as in other fields of science, the results from any one or more series of experiments, although conducted with skill and accuracy, are insufficient to determine the truth. Repeated studies by other observers and repeated correction of errors, personal equations, and faults in the observations, are necessary to establish the facts. The chemico-physiological action of foods is unfortunately largely a field of theory and speculation at present, hence all dogmatic conclusions from narrow researches only confuse and increase the mistiness of the subject. Prof. Atwater's experiments are only obscure data, giving little or no intimation of the actual facts or even pointing out possible sources for future discovery. His assertions made in defense of his conclusions have such a strong personal bias as to destroy the scientific aspect. The effort to use these doubtful experiments to support opinions and force convictions on the minds of others degrades the subject to the level of partisan controversy unworthy of all scientific recognition.

---

#### INEBRIETY IN THE NAVY.

Some recent inquiries made at the Navy Department regarding the losses of government ships have brought out the strong probability that many of these cases were due to the failures of officers who were spirit-drinkers. It has been known

semi-officially that at least the disasters occurring to two government ships were intimately associated with and followed from the drink excess of the officers. In one instance where a subordinate officer was in active command, and at the time using large quantities of spirits, the ship was wrecked. The inquiry did not disclose this fact because of the responsibility of the superior officer. A number of instances have occurred of the wrecking of warships belonging to other countries, whose officers were intoxicated at the time of the disaster. Officially grave errors of judgment and blundering stupid conduct appeared entirely unusual for officers of experience. Probably one of the most prominent disasters was the capsizing of the English battleship "The Royal George" many years ago. The officers had been intoxicated the night before and were still drinking.

The extraordinary behavior of an English admiral who went down with his ship from a stupid blunder was explained by his alcoholic excesses the night before. In many of these cases official inquiry covers up the real facts to save the reputation of the officers and the management of the navy. Several great liners have gone down in mid-ocean whose captains were known to be alcoholic drinkers. At least three ships have disappeared manned by the same class of men. One of these recent ships loaded with passengers, which disappeared in mid-ocean, was officered by moderate drinking men. The merchant marine has for many years suffered so much from this possible cause that the underwriters are becoming more strict in refusing insurance to any ships which are not officered by total abstainers. Two of the great Atlantic lines have issued strict orders that no officer shall use spirits on duty or off duty under pain of dismissal. One of the leading underwriters in New York asserts as his opinion that fully half of the ships wrecked are due to the alcoholism of the officers. The fact is becoming recognized that both the moderate or occasional drinker is unfitted for accurate work.

Such persons have defective judgment, do not think quickly, and are confused in times of excitement and peril. On shipboard the incompetency of such men is fatal and cannot be corrected. The delusions which grow out of the palsy of the senses from wine with the unhygienic conditions of life on shipboard unfit officers for exact duties of any kind. The teaching of the danger of alcohol in a naval academy is carried on with a great deal of enthusiasm, and already the graduates realize the importance of this study. In the Navy Department the former drinking officers who spent most of the time while ashore under the influence of spirits are rapidly disappearing and a new class of men who are total abstainers, not from any sentiment or theory, is taking their place. It is understood in the department that the losses and wrecks due to the carelessness of drinking officers are to be severely punished in the near future, and no farther attempts will be made to conceal and cover up the real facts.

---

We are startled at the fact that all but two states in the Union have passed compulsory laws, making it obligatory to give temperance instruction in common schools. This fact is eloquent in meaning, and indicates a public sentiment rapidly concentrating along lines of scientific instruction against the drink evil. The perils from the use of alcohol must be taught to the children and pointed out as of equal importance to that of abstract truth of any kind. It is an educational topic which cannot be ignored or put aside. This is recognized in the rising sentiment which demands such instruction. In view of these facts how childish the objections to the school books and the assertions that they teach error. How startling the statement that any one man has discovered facts which show ignorance and delusions on the part of those who support and recognize the value of instruction in the schools.

There is something sad in the disappearance of the "Gold Cure" discoverers down the same road which they emphatically claim to have found a cure and "switch-back." Such persons starting out from the dissolving armies of inebriates, asserting that they have discovered some specific cure with wonderful results, and after a time fail to apply the remedy on themselves, then sink back and are lost with the submerged. A few of these specific promoters have sought relief from other sources, others have abandoned all hope and have dropped out on the same road. The last kindly diagnosis of "heart disease," "Bright's disease," or pneumonia, falls like a flash of sunlight over the name and memory of the specific discoverer. Behind this are drink storms and strains to conceal and explain the mysteries of curing others and failures to cure themselves. The motives may be concealed, but the realities can never escape the searching test of time.

---

In a recent address before a graduating class of medical students occurs the following most sensible advice: "While fewer physicians become insane than members of other professions, a larger proportion become addicted to the use of morphia. Opium in any form is exceedingly dangerous when self-administered. No physician should attempt to treat himself, but always take the advice and follow the direction of another physician."

---

Is the use of morphia increasing among physicians? This question was answered by an old traveling man from a noted drug manufactory as follows: "Within ten years my orders from physicians for morphia have rapidly increased. I have a number of regular customers who order from two to five thousand one-fourth grain and one-half grain tablets of mor-



phine for hypodermic use every month. Some of these physicians buy for their patients, others clearly use morphia themselves. Many of these doctors have a large practice, and are not known to be morphine-takers. Other physicians buy very largely of deodorized tincture of opium and opium pills. In a small village of five thousand, where seven doctors practice, one physician bought over five gallons of tincture of opium every year. In another town where the practice was limited, large quantities of opium pills and preparations of codeine were sold to two of the physicians. Other narcotics, such as chloral hydrate, hyoscyamin, and cannabis Indica, are called for in large quantities beyond the natural demand of practice."

---

The decline and disappearance of the "Gold Cure" asylums brings into greater prominence a class of incurables who are more degenerate and importunate than ever. They come to asylums demanding positive medication and are dissatisfied, except when under the influence of some narcotic. At the Gold Cure asylums it was found by repeated experiment that alcohol was distasteful and nauseating. The same experiment is tried while under treatment at other places, and not finding this condition, they lose all confidence in the treatment. After a brief time they become clamorous to leave, claiming to be cured or doubting the value of this kind of treatment. Most of these cases are degenerates who should be in an insane asylum or locked up and forced to pursue some rational course of treatment. These are the men who go to every new asylum, and if freely treated with narcotics, are satisfied and are extravagant in their praises of the value of such treatment. They are neurotics of a very low type, who are always seeking medical relief for physical and mental conditions, and are willing to take anything that is offered from any source or in any way if it only brings relief.

Two religious papers which have warmly defended Atwater's experiments to prove the food value of alcohol are both edited by wine-drinking clergymen, and these conclusions are most grateful testimony in support of their personal habits and conduct. This is repeated in almost every circle where any new conclusions are in accord with the habits of the critic or person who gives opinions.

---

#### SOME IMPORTANT MEETINGS.

The World's Temperance Congress, which convenes at London on June 9th, and holds over to the 18th, gives promise of being a gathering of great importance and scientific interest. The Bishop of London, assisted by the Archbishop of Canterbury, will preside. The special feature of this convention will be the historic addresses of the work done during the past century. Few persons, even those deeply interested, realize how much effort has been made to check the great evil and how large the literature of lectures, sermons, pamphlets, and books. The central purpose to summarize this work in historic addresses will give new interest and point out new paths for future progress, making it easier for all efforts to carry on this evolution and revolution of the race. The work done in this country will be clearly given by members of our association and others prominent, and we shall look forward with great interest to the published volume of transactions as marking a new era in this field.

---

The annual meeting of the American Medical Temperance Association at Atlantic City, June 6th, will be a most notable one. The subject of alcohol has become more prominent than ever during the past year. Medical men are called upon to decide questions which are coming into prominence in every community in the land. They are appealed to for informa-

tion concerning the value of alcohol and its dangers more than ever before. The Atlantic City meeting promises to be very popular. A number of prominent men will read papers, and the discussion following will materially contribute to the advancement of this question.

---

Our Association for the Study and Cure of Inebriety will hold a semi-annual meeting at Greenwich, Conn., June 20th. It is the object to gather all the superintendents of private asylums and to organize them into a closer relation for the work of the future. The "Gold Cure" asylums have called new attention to the asylum treatment of inebriates, but unfortunately have propagated the delusion that drugs can cure in a brief time and restore the patient to health again. The study of inebriety and its treatment is more imperatively demanded than ever, and our Association has now a great opportunity to unite all efforts in this direction more fully than ever before. The union of the German asylums into a society called The Association of Physicians for the Study of Alcoholism, is a move of the same character, and is very encouraging. Our Association, while working on this line for many years has failed to enlist but a limited number of institutions into a confederation. The purpose is now to broaden these lines and to enlarge our work so that we may act in concert on the great questions which are constantly appearing. This field meeting at Greenwich will gather nearly all the prominent men in this country who have private asylums, and we anticipate a great impetus to the work. Programs and circulars will be sent later.

---

## Clinical Notes and Comments.

---

### BROMIDIA IN THE TREATMENT OF EPILEPSY.

The *New Albany Medical Journal* for November, 1898, contains an article on "Epilepsy Treated by the Use of Bromidia," by T. Edward Converse, M.D., of Louisville, Ky., which, after discussing the use of medicines chiefly relied upon in the treatment of that disease, and giving the needful hygienic measures in considerable detail, concludes by referring to "the question often raised: How long will the patient have to keep up the treatment?" If the bromides are given they should be continued for at least two years after the last convulsion, or if combined with the chloral hydrate in the form of bromidia, a year and a half is sufficient in most cases. If the patient is having several attacks during the day a teaspoonful of bromidia after the attack and repeated in an hour will abort the next attack; but, as a rule, one teaspoonful will be sufficient — *Sanitarium*, April, 1899.

---

### CAUTION REGARDING HEROIN.

The April *Druggists' Circular and Chemical Gazette* says in substance: Under the above heading we mentioned in our March issue two cases in which persistent vomiting followed the use of this drug, in one of which a fatal termination was at least partly chargeable to this action. These cases, as we stated in our note, were reported by Dr. Thomson in the *New York Medical Journal*. This report has brought to the journal from Dr. Wm. J. Robinson a statement of two cases in his own practice of a similar nature. Dr. Robinson suggests that there is a possibility that heroin, which is diacetyl-morphine, may in such cases have become transformed into apomorphine or some

similar body. Dr. Manges calls attention in the same journal to a statement of his in a report on a study of heroin, that "vomiting might occur after its use." He makes it a rule to tell patients that when vomiting does occur to discontinue the drug. The doses given in the case that ended fatally he thinks were excessive. These new statements add further proof to the uncertain action of the drug; and we think that it is quite plain that it needs more watching than opiates in general. The untoward and even serious after-effects of heroin bring forcibly to mind the many excellent and time-tried remedial qualities of codeine — always safe, always certain and uniform. The combination of codeine with antikamnia presents a most desirable mode of obtaining the full value of these two excellent remedies, and there is no better form in which to exhibit them than in the well-known antikamnia and codeine tablets, each containing four and three-fourths grains antikamnia and one-fourth grain codeine.

---

According to Van Laer, who has been studying the special diseases or bacteria which affect beer, there is such a thing as beer disease. It appears that a bacillus develops in beer associated with viscous fermentation and converts practically the carbohydrates into lactic, acetic, and butyric acids. This practically destroys the quality of the beer, and makes it in the language of beer-men "double-faced." Its flavor may be increased, but its effects are depressing and resemble those of narcotic poison. It is said that many beers on the market are injured by this bacillus, whose presence is largely unknown. It is evident from this that beer is not the simple, harmless beverage supposed.

---

Don E. Ashley, M.D., Guy's Mills, Pa., says: "After the mania produced by improper use of alcoholic beverages has been controlled I know of no better compound than *Celerina*

to restore tone to the nervous system and vigor to the whole human economy. I find it an excellent remedy for colliquative sweats, especially in convalescent cases of typhoid fever. I speak not from the experiences of other physicians, nor from hearsay, but from knowledge obtained from the careful observance of happy results brought about by the administration of this useful medicine.

---

*Blanke's Kafeka* has come to fill a very important demand. Users of coffee frequently call for something less stimulating and more wholesome. To supply this demand this compound of wheat and rye makes a most palatable food as well as drink. In some sections of the country it is very largely used, and is one of the best of its class of substitutes for coffee.

*Pond's Extract* is an old remedy for a great variety of affections, particularly external lesions, and it continues to be among the great remedies that, like Tennyson's brook, go on forever.

Among the sanitarium advertised in our columns the one at Dansville, under the charge of Dr. Jackson, approaches an ideal home for rest and restoration. After the removal of alcohol and opium a long period of invalidism follows. This is really an ideal place to overcome this condition. The surroundings, the home, and the conditions and appliances to build up are all that could be desired. We most heartily commend it to all our patrons.

*The Princess Anne at Virginia Beach* has remarkable attractions as an ocean resort. The beach, the pine forest, and the quietness and restful surroundings, are very attractive for nerve-exhausted and tired men and women. We most heartily recommend it as an ideal resting place to all who wish to recover strength and health.

*Horsford's Acid Phosphate* has reached long ago the upper regions of recognition and merit where there is no crowding and ample room for each one. This is one of the few medical prescriptions that have ever risen to those upper stories.

*Wheeler's Tissue Phosphates* follows the trail of the great white plague, consumption, and is the real remedy and a most valuable preventative of this disease.

*Rickine*, made by the G. F. Harvey Co. of Saratoga Springs, is rapidly coming into prominence as a valuable remedy for all forms of neuralgia. It has the rare merit of having no distressing after effects. It should be tried in all the various nerve troubles which are so puzzling and difficult to treat.

*Ammonol* has the unusual combination of being both a stimulant and a hypnotic. Its stimulant qualities are noted in the distressing influenza cases so common at this season of the year. As a hypnotic its value as a substitute for morphia and the various congestive headaches is very prominent. We take great pleasure in calling attention to this coal tar product, and believe when its value is known it will be used very extensively, not as a proprietary drug, but as a prescription which is applicable to a large number of cases. Send to the Ammonol Chemical Co. of New York for samples.

*Bovinine* is undoubtedly a nutrient preparation of rare value. In principle and theory it is a combination that should appeal at once to every scientific physician. In practice it is found to fully confirm most of the expectations of its friends. The extent in which it is used is apparent from the fact that eight hundred barrels of beef's blood are required yearly for its manufacture. Wherever it has been used its value has been appreciated and its use increased. We hope to give some researches into its effects on the blood in the near future.

The new morphine derivative, *Dionin*, fills a very important place in the withdrawal of morphia, particularly in removing the withdrawal symptoms and lessening the irritation which follows. It is one of the alkaloids of opium which has come to stay, and will have an equal place with morphia and codeia and other derivatives. Merck & Co. deserve the gratitude of the profession for introducing it into this country.

*The Test of Time and Experience* is the name of a little pamphlet issued by J. I. Fellows, devoted to the Syrup of Hypophosphites. It seems hardly possible to write anything new on this line, particularly wherever the drug is used, and yet its value is increasing in unexpected directions and its use is widening everywhere. In debility caused by the poisons of alcohol and opium it fills a very large place, and seems to be of great value in certain cases.

*The Old Dominion Steamboat Co.*, from New York to Fortress Monroe and Norfolk, is one of those pleasing coast lines where the welfare of the passenger is very prominently considered by the management. The trip to Southern waters down the coast has many rare attractions, and the boats are of palatial character and management, making tours of this class ideals in many ways. This company issues a monthly, called "The Pilot," which has quite a literary stamp, and deserves to be ranked among the best and most attractive journals calling attention to the pleasures of tours along the coast. When going South always go by the Old Dominion Steamship Co. line.

---



AMERICAN ASSOCIATION FOR THE STUDY  
AND CURE OF INEBRIETY.

(Organized November 29, 1870.)

---

I. The active membership of this association is composed of the resident, attending, and consulting staff of all hospitals or sanitoriums, private or public, where alcohol, opium, or other drug neurotics are treated, either alone or in conjunction with other forms of nervous or mental disease.

II. All such institutions organized and conducted in proper conformity with the laws of the several states in which they are located are entitled to representation in this association.

III. The active membership of this association is composed of physicians in good and regular standing who are actively connected with such institutions or who have been honorably retired from active service in connection therewith.

IV. Physicians not connected with such institutions, and members of boards of direction of such special hospitals, asylums, etc., are eligible as associate or lay members of this association upon payment of the dues of membership.

V. The object of the association is:

First, to promote the scientific study of alcoholic inebriety and kindred drug habits, and to encourage desirable and special legislation with reference to the care and control of alcoholic and other drug inebriates.

Second, to isolate the chronic pauper inebriate from the insane and criminal class, and secure the erection and maintenance by the several states of institutions for the segregation and special treatment of chronic pauper inebriates, and to incorporate farm colonies, or other forms of institutional relief, which shall combine medical care with proper occupation, judicious control, and discipline.

Third, to secure in all states the special supervision and inspection of all institutions for the care and control of inebriates or other drug habitués.

Fourth, to discourage and prevent all efforts to treat alcoholic inebriety or the opium or other drug habits with secret drugs and so-called specifics, and to prohibit the sale of all nostrums which claim to be absolute cures and which contain alcohol, opium or its alkaloids, or other pernicious and harmful drugs, or which contain substances which are inert and so are fraudulent impositions on the public.

Fifth, to encourage, as an association, every individual and organized effort to study scientifically and practically all the various means and methods of both cure and prevention which may be used in the care and treatment of alcoholic and other forms of drug addiction.

There are many institutions in this country which wholly or in part treat the alcoholic and other forms of drug addiction. These institutions should be organized and follow some general principle and method of practical work. By this means public opinion could be more effectually influenced, and legislation secured, resulting in a great advance in the successful and scientific treatment of this class of cases. Every such asylum and institution in the United States is urged to join this association, and by their united effort lift the subject out of the realm of quackery and unscientific treatment into that of exact scientific work, and to place the status of the treatment of alcoholic inebriety and kindred drug habits on the same level with that of other similar diseased conditions, and secure the same medico-legal and institutional advantages. A membership fee of two dollars is charged yearly, which includes the annual subscription to the *Journal of Inebriety*, the organ of the association.

Address:—


T. D. CROTHERS, M.D.,

*Secretary and Treasurer.*

HARTFORD, CONN.

# Horsford's Acid Phosphate

---



**R**ECOMMENDED and prescribed by physicians of all schools for **Dyspepsia, Nervousness, Exhaustion**, and all diseases arising from imperfect digestion and derangement of the nervous system.

Sample size furnished physicians by mail free, or full size without expense, except express charges.

Prepared according to the directions of Prof. E. N. HORSFORD, by the Rumford Chemical Works, Providence, R. I.

---

Be sure to designate

**“HORSFORD’S”**

when prescribing.


---

RUMFORD CHEMICAL WORKS, Providence, R. I.

Beware of Substitutes and Imitations.


For sale by all Druggists.

# ARDENDALE



A private sanitarium  
for the care and treat-  
ment of cases of neu-  
rasthenia, alcoholic  
and drug habituation.

Delightfully situated  
in a private park of  
34 acres at Greenwich,  
Conn. Forty min-  
utes from Grand Cen-  
tral Station by express  
trains over N. Y., N. H.  
& H. R. R.



#### Consulting Staff.

L. D. MASON, M.D.,  
J. C. SHAW, M.D.,  
W. H. BATES, M.D.

#### Visiting Staff.

WM. BROWNING, M.D.,  
C. F. BARBER, M.D.,  
A. S. AMBLER, M.D.,  
J. J. O'CONNELL, M.D.,  
J. T. DUBYEA, M.D.

ADDRESS,

**J. J. WAGNER, M.D., Medical Supt.,**

P. O. Box 478.

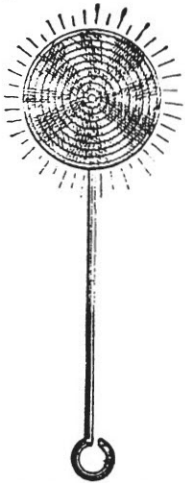
**GREENWICH, CONN.**

*Telephone Communication.*

# TAKE NOTICE

---

**T**HE JOURNAL OF SUGGESTIVE THERAPEUTICS, published monthly by THE PSYCHIC PUBLISHING COMPANY, Times-Herald Building, Chicago, was begun in August, 1896, and is now a recognized authority upon Scientific Mental Therapeutics.



The Easy Hypnotizer.  
A FREE GIFT.

Translations from current articles in the *Revue del Hypnotisme* are a feature of each number.

Contributors are residents of every State in the Union, Canada, England, India, and Australia.

A postal card, if you mention this Journal, will bring you a sample copy.

We send *The Journal of Suggestive Therapeutics* one year, with the premium instrument, "THE EASY HYPNOTIZER," both for \$1.00.

Begin Your Subscriptions with the June Number.

In the September number, the Editor begins a Series of Lessons on "How to Hypnotize."

Address:

**THE PSYCHIC PUBLISHING COMPANY,**

211-212 Times-Herald Building,

CHICAGO, ILL.

# LIST OF ALL THE LEADING WORKS

— ON —

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

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

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

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

Charcot, Spinal Cord. \$1.75.  
Corning, Brain Rest. \$1.00.  
Dowse, Syphilis of the Brain and Spinal Cord. \$3.00.  
———, Brain and Nerves. \$1.50.  
Ferrier, Functions of the Brain. \$4.00.

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

- Ireland**, The Blot on the Brain. \$3.00.  
**Ireland**, Through the Ivory Gate. \$3.00.  
**Letchworth**, Insane in Foreign Countries. \$3.00.  
**Meynert**, Psychiatry. \$2.75.  
**Tuke**, Insanity and its Prevention. \$1.75.  
**Althaus**, Diseases of Nervous System. \$3.50.  
**Beard**, American Nervousness. \$1.50.  
**Stearns**, Insanity, its Causes and Prevention. \$1.50.

LEA BROTHERS & CO.,  
706 AND 708 SANSOM STREET, PHILADELPHIA

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

WILLIAM WOOD & CO.,  
43 EAST 10TH ST., NEW YORK CITY.

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

D. APPLETON & CO.,  
72 5TH AVE., NEW YORK CITY.

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

E. B. TREAT,  
241-243 W. 23D ST., NEW YORK CITY.

- Spitzka**, Insanity; Its Classification, Diagnosis, and Treatment. \$2.00.  
**Beard**, Nervous Exhaustion. \$2.00.  
**Corning**, Headache and Neuralgia. \$2.00.  
**Howe**, Excessive Venery. \$2.00.  
**Crothers**, Inebriety. \$2.00.  
**Beard and Rockwell**, Sexual Neurasthenia. \$2.00.  
**Hamilton**, Medical Jurisprudence of Nervous System. \$2.00.  
**Shaw**, Epitome of Mental Diseases. \$2.00.

# LOUISVILLE SANATORIUM,

2103 W. Walnut Street,

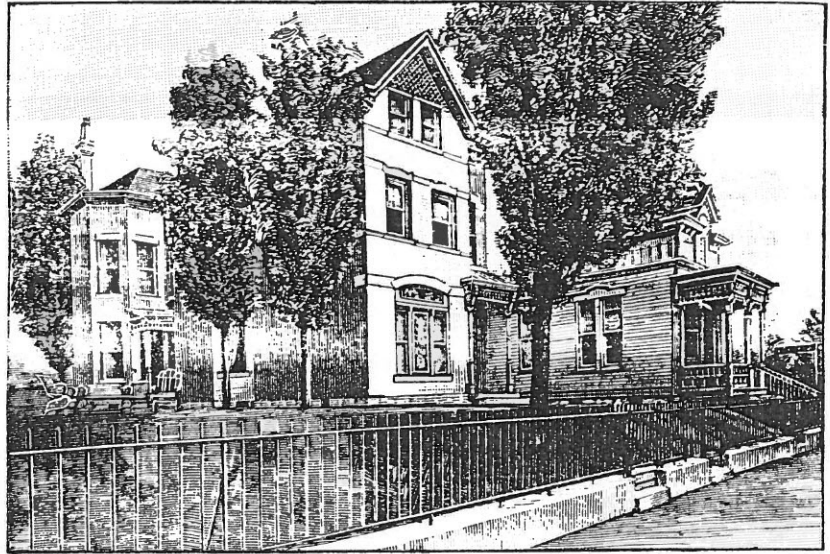
LOUISVILLE, KY.

FOR THE TREATMENT OF THE

## Opium and Morphine Habit.

SUPPLIED WITH ALL MODERN APPLIANCES.

From a personal knowledge and an examination of facts, we believe that any case of OPIUM or MORPHINE habit can be cured in this Institution, no matter how long the drug has been taken or how much is taken daily, or in what way it is taken. The treatment has been tested for over two years without a single failure, and can be taken with perfect safety to the patient, and without pain.



All correspondence kept in strict confidence. The treatment is painless, absolutely sure and safe. The patient, after being cured of the morphine habit, is left in a weakened condition, and will need after-treatment, and rapidly regains flesh and strength lost during the continuance of the habit. For further particulars address,

**SAM COCHRAN, M.D., Louisville, Ky.**

### REFER BY PERMISSION TO

Gen. Basil Duke; Hon. Henry Waterson; Mr. W. N. Haldeman; Senator Wm. Lindsay; Hon. J. C. S. Blackburn; German Insurance Bank; and Kentucky School of Medicine.



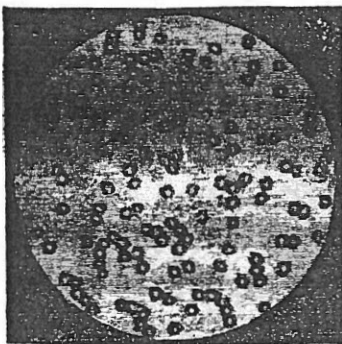
*"The greatest therapeutic discovery of the age, and of the ages, is that where we cannot produce good blood we can introduce it."*

## What is Hæmathery?

A New Thing—and a New Name which, though literally translated (Blood Treatment), may not convey to every one a definite idea. It is a treatment which consists in opposing to a condition of disease the very power—good and sufficient Blood—that would naturally prevent it, that would still cure it spontaneously, and that actually does cure it spontaneously, wherever the blood-making work of the system is perfectly efficient; and therefore also *will* cure it, if a deficiency of the vital element be supplied from without, under proper medical treatment.

That Blood is such a power as here described, is an undisputed physiological fact. Its transmission from one

A FILM OF BOVININE:  
Showing the Blood-corpuscles Intact.



Micro-photographed  
by Prof. R. R. Andrews, M.D.

animated organism to another, for the purpose of supplying a defect in the latter, is the substance of the Blood Treatment; and How to Do this, in different cases, is the form or description of the same. Blood may be taken from a healthy bullock (arterial blood—elaborated with due scientific skill); or it may be obtained in the well-attested living conserve known as bovine, from any druggist; and may be introduced into the veins of the patient in either of four ways, that may be most suitable to the case: viz.: by the mouth and stomach; by injection, with one-third salt water, high up in the rectum; by hypodermic injection; or by topical application to any accessible lesion.

### THE CURE OF PULMONARY CONSUMPTION

is one of the latest and most wonderful developments of Blood Power—introduced mainly by the mouth, and sometimes also by spraying bovine into the trachea by an atomizer. Every week of judicious internal blood treatment, with proper medical and hygienic care, has resulted in steady improvement as to all symptoms, with scarcely an instance of check, much less of relapse, until complete apparent cure, and that in the more advanced stages of the disease. As further examples, may be mentioned: Anæmia, Cholera Infantum, Typhoid Fever, Hæmorrhagic Collapse, and many other of the most dangerous and aggravated diseases.

### IN SURGERY: A CHRONIC ULCER,

of no matter how long standing or obstinate and aggravated character, can be cured with certainty—at least, the first instance of failure has yet to be heard of—by constant application of bovine to the wound with proper surgical treatment and sterilization. Such cases are usually cured in from four to six weeks. So of traumatic injuries of all kinds; carbuncles, fistulas, abscesses, and even gangrene.

### NUMEROUS CLINICAL REPORTS

of well known Physicians and Hospitals, where the Power of Supplied Blood is constantly relied on as a cardinal factor in the cure of disease and support of surgery, are at the service of every practitioner who desires to keep up with the progress of his profession, and may readily be obtained (including, of course, the technique and subsidiary treatments pursued) by applying to

THE BOVININE COMPANY, 75 West Houston Street, New York.

LEEMING, MILES & CO., Montreal, Sole Agents for the Dominion of Canada.

# SOUND VIEW HOSPITAL,

STAMFORD, CONN. (Fifty minutes out from New York.)

FOR the treatment of Medical and Surgical Cases, by all the approved methods and appliances of advanced modern practice both medical and operative; specially including those of

**Hæmathraphy, or Treatment with Supplied Blood,** in which the most memorable progress has been made in the last three years.

Every patient will have special nursing as the case may indicate, and a competent physician and surgeon in constant attendance; together with mature scientific adaption of the

### Power of Supplied Blood

to the case from day to day.

The staff of Visiting Physicians and Surgeons comprises some of the brightest professional minds in the metropolis.

### The Hospital is Beautifully Situated,

occupying a sequestered country seat on a high point of land, with extensive grounds, grove, and water front; is less than an hour's ride from New York City by the New Haven Railroad; and is also reached daily by the New York and Stamford boat.

T. J. BIGGS, M.D., Surgeon-Director, STAMFORD, CONN.

### VISITING STAFF.

Dr. Percy Friedenbergh, Dr. J. Stafford, and Dr. J. J. Dooley, New York. Western Consultant, Dr. R. W. Conant. 5490 Washington Ave., Chicago.

---

## ATTLEBORO SANITARIUM.

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

For references, terms, etc., address

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

---

**Dr. Henry Waldo Coe's** Sanitarium and Cottage Homes  
For Nervous, Mental, and Drug Cases.

Separate or collective care as desired or indicated.

The humid, equable, temperate climate of Portland, throughout the year, is often of great value in the treatment of nervous conditions, notably in those troubled with insomnia. Address,

"The Marquam Office." HENRY WALDO COE, M.D., Portland, Orego



INSERTING THE NEEDLE.

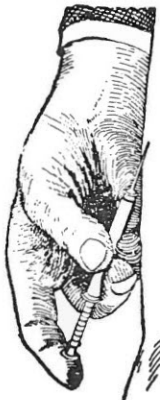
THE DETMERS-ROBINSON

**Aseptic  
Hypodermic  
Syringe**

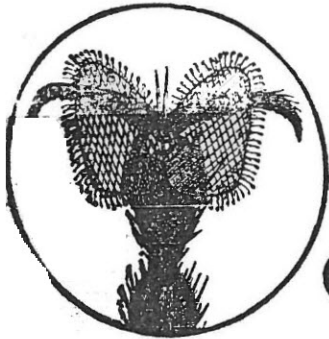
Descriptive  
Matter and  
Sample Copy of  
Journal of  
Applied Micro-  
scopy, FREE.

Only Three  
Pieces.  
Can be Boiled  
for Hours.  
No Packing  
Whatever.

**Bausch & Lomb Optical Co.**  
ROCHESTER, N. Y.

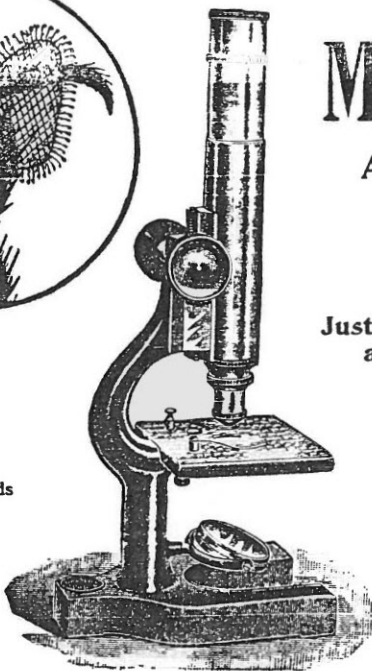


INJECTING.



This is a  
**FLY'S  
FOOT**

one of the thousands  
of interesting and  
instructive things  
which may be  
examined by any  
one with this  
microscope



Magnifies 180 diameters (32,400 times).

A First-Class  
**MICROSCOPE**

And Outfit for Work for

**\$16.00**

A Reliable Scientific Instrument

Just the Thing for Winter Evenings  
as well as Summer Afternoons

An inexhaustible mine of amusement and information for young and old. Easy to use. Perfect optical results. "One may use the microscope a lifetime and never look at the same thing twice."

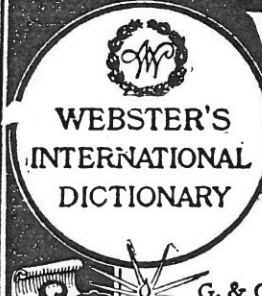
Outfit consists of microscope as shown, twelve prepared objects, such as fly's wing, foot of insect, etc., book describing and illustrating 1,000 common microscopic objects, glass slides, and covers for mounting objects, forceps, etc.

Microscopes, all prices, up to \$500.00

**BAUSCH & LOMB OPTICAL CO.**  
Rochester, N. Y.

NEW YORK CITY

CHICAGO




**WEBSTER'S**

Hon. D. J. Brewer, Justice of U. S. Supreme Court, says: "I commend it to all as the one great standard authority."

It excels in the ease with which the eye finds the word sought; in accuracy of definition; in effective methods of indicating pronunciation; in terse and comprehensive statements of facts and in practical use as a working dictionary.  
*Specimen pages, etc., sent on application.*

G. & C. Merriam Co., Publishers, Springfield, Mass., U. S. A.



**INTERNATIONAL DICTIONARY**

12th YEAR.

R. L. POLK & CO.'S  
**Medical and Surgical Register**  
 OF THE UNITED STATES AND CANADA.

This is positively the only national Medical Directory published.

*Embraces names of over 112,000 Physicians, with college of graduation, list of Colleges, Societies, Boards of Health, Journals, Mineral Springs, Hospitals, Sanitariums, Asylums, and other Medical Institutions; also Medical Laws of each State.*

☞ Physicians who have not given their names to our canvassers for insertion in the Register are requested to send them to R. L. Polk & Co., Detroit, Mich., immediately.

**R. L. POLK & CO., Publishers,**

NEW YORK, CHICAGO, BALTIMORE, DETROIT.

**OPEN COURT PUBLISHING COMPANY,**  
924 DEARBORN STREET, CHICAGO, ILLINOIS.

BY ALFRED BINET.

**THE PSYCHIC LIFE OF MICRO-ORGANISMS.**

Pages, xii, 120. Cloth, 75 Cents; Paper, 25 Cents.

**ON DOUBLE CONSCIOUSNESS.**

New studies in Experimental Psychology. Pages, 93. Paper, 15 Cents.

BY PAUL CARUS.

**THE SOUL OF MAN.**

An Investigation of the Facts of Physiological and  
Experimental Psychology.

With 152 illustrative cuts and diagrams. Pages, xvi, 458. Cloth, \$3.00.

BY TH. RIBOT.

**THE PSYCHOLOGY OF ATTENTION.**

Pages, 121. Cloth, 75 Cents; Paper, 25 Cents.

**THE DISEASES OF PERSONALITY.**

Pages, 157. Cloth, 75 Cents; Paper, 25 Cents.

**THE DISEASES OF THE WILL.**

Pages, vi, 121. N. B.—Full Set, \$1.75.

BY PROF. EWALD HERING.

**ON MEMORY AND THE SPECIFIC ENERGIES  
OF THE NERVOUS SYSTEM.**

Pages, 50. Paper, 15 Cents.

---

# FALKIRK,

---

JAMES FRANCIS FERGUSON, M.D.

M. LANGDON BIRD, M.D.

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

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

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

# THE AMERICAN JOURNAL OF INSANITY.

(ESTABLISHED IN 1844.)

## EDITORS.

HENRY M. HURD, M.D., Baltimore, Md.  
E. N. BRUSH, M.D., Baltimore, Md.  
G. ALDER BLUMER, M.D., Utica, N. Y.  
J. M. MOSHER, M.D., Albany, N. Y.

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

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

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

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

YOUR SUBSCRIPTION IS INVITED.

SUBSCRIPTION PRICE, | ADDRESS |  
\$5.00 PER ANNUM, | JOHNS HOPKINS PRESS,  
IN ADVANCE. | Baltimore, Md.

## A NEW TREATISE ON INSANITY.

## A PRACTICAL MANUAL OF **Mental Diseases.**

SECOND EDITION.

By DR. É. RÉGIS.

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

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

AUTHORIZED TRANSLATION BY H. M. BANNISTER, M.D., CHICAGO, ILL., WITH A  
PREFACE BY THE AUTHOR. PRESS OF AMERICAN JOURNAL OF INSANITY.

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

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

The quality of a treatise on insanity is perhaps nowhere better shown than in the chapter on classification. . . . Judged by this standard, M. Régis' book is one of marked originality and precision of thought. This chapter alone will be a contribution of inestimable value to the American alienist, both for its clear philosophic method and for the fullness of its subject-matter. — *Medical News*, Phila., Nov. 3, 1894.

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

# THE HIGHLANDS.

A FAMILY HOME FOR NERVOUS AND MENTAL DISEASES.

WINCHENDON, MASS.

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

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

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

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

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

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

Are you nervous?

Are you troubled with Insomnia?

Have you Dyspepsia in any form?

Do you like a delicious breakfast  
beverage?

THEN DRINK

# *Blanke's Kafeka.*

---

A cereal product of  
"North American Fields"!

Absolutely Pure and  
Wholesome!!

*Recommended and used by many of the most eminent physicians in  
the United States and England!!!*

---

A few facts about **KAFEKA**:

1. It is more pleasant to the palate than any other beverage.
2. It is more wholesome than tea, coffee, cocoa, or any other beverage.
3. It has absolutely no harmful effects.
4. It is nutritious as well as satisfying.
5. It is better than coffee, tea, or cocoa, that costs three or four times as much.
6. It is cheaper than any other beverage, excepting water.
7. It builds up the system and makes rich, healthy blood.
8. It is absolutely free from alkaloids that would injure the system. All other popular beverages contain alkaloids that are injurious.
9. Dyspepsia and all other stomach troubles are relieved by the use of it.
10. The more you drink, the more good it will do you; the oftener you drink it, the better you will like it.

Manufactured by  
C. F. BLANKE & CO.,  
St. Louis, Mo.

CUSHMAN BROTHERS CO.,  
78 Hudson St., New York.  
Eastern Selling Agents.



**NOW READY. 49th Year.**

**The Physician's Visiting List for 1900.**

Will be sent by mail, postage prepaid, to any address upon receipt of price, or may be ordered through any Bookseller, News Agent, or Wholesale Druggist.

**Descriptive Circular Free upon Application.**

**SIZES AND PRICES.**

*Bound in Strong Leather Covers, with Pocket and Pencil, Gilt Edges.*

REGULAR EDITION.		PERPETUAL EDITION, without Dates.	
For 25 Patients weekly,	\$1.00	No. 1. Containing space for over 1300 names. Bound in red leather,	\$1.25
50 " "	1.25	No. 2. Same as No. 1. Containing space for 2600 names,	1.50
50 " " 2 vols. { Jan. to June {	2.00	<b>MONTHLY EDITION, without Dates.</b>	
July to Dec. }		Requires only one writing of patient's name for the whole month. Plain binding, without flap or pencil, 75 cts. Leather cover, Pocket and Pencil, \$1.00.	
75 " " 2 vols. { Jan. to June {	2.00		
July to Dec. }			
100 " " 2 vols. { Jan. to June {	2.25		
July to Dec. }			

**A plain, systematic method of keeping physicians' accounts, well printed, strongly bound, durable, convenient, and small.**

**P. BLAKISTON'S SON & CO., 1012 Walnut St., Philadelphia.**

*THE PLACE TO REGAIN TONE OF NERVE AND MUSCLE.*

**THE JACKSON SANATORIUM**

**At Dansville, New York.**



Main Building Absolutely Fire-proof.

For thirty-nine years the leading Health Institution in America, is under the personal care of regularly educated and experienced physicians, and is distinctive in its methods and character.

A delightful home for health and rest seekers in which every provision is made for recreation, comfort, and good cheer, as well as for skilled medical care and treatment.

A beautiful illustrated pamphlet with full information will be sent on application. Address

J. Arthur Jackson, M.D., Secretary,  
P. O. Box, 101.

**The Princess Anne Hotel,**

AT

**Virginia Beach.**

*The Ocean and Pine Forests  
make an Ideal Climate.*

*Finest Beach on  
Atlantic Coast.*

**An Ideal Place for New England Invalids in the Fall and Early Spring Months.**

Golf, Riding, Wheeling, Bowling, Billiards, Bathing, Music.

For terms, please address **KENNEDY & MORTON,**  
Managers, Virginia Beach, Va.

# SYR. HYPOPHOS. CO., FELLOWS

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

The Oxydizing Agents — Iron and Manganese ;

The Tonics — Quinine and Strychnine ;

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

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

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

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

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

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

## NOTICE—CAUTION.

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

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

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

*Medical Letters may be addressed to—*

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

# The History of the First Inebriate Asylum in the World

\*\*\*  
Located at Rinehampton, N. Y.

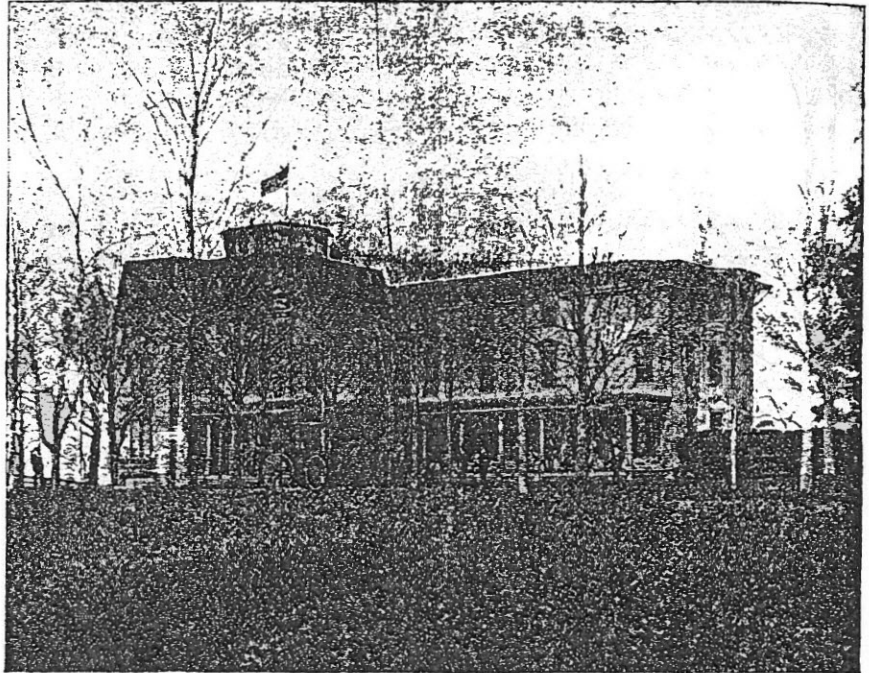
\*\*\*  
By Dr. J. E. Turner, the Founder and Projector

\*\*\*  
**T**HIS is a most graphic, fascinating story of the difficulties and trials of one of the most important enterprises of the age. Dr. Turner, the founder, was finally turned out, and the asylum was changed to an insane hospital. This history was written a few years ago, and the copies are now out of print. We have recently succeeded in getting a part of the original edition from the publisher, and we will send to any one for sixty cents a volume post-paid. It is a large cloth-bound volume of five hundred pages, well printed and illustrated, and will be a rare work in any library. **SEND FOR A COPY.**

Address Journal of Inebriety,  
Hartford, Conn.

# Walnut Lodge,

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



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

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

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

All letters and inquiries should be addressed,

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