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INEBRIETY.

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T. D. CROTHERS, M.D., Editor,
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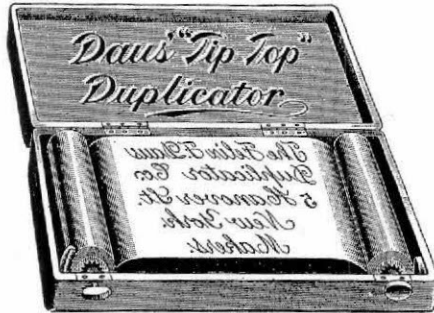
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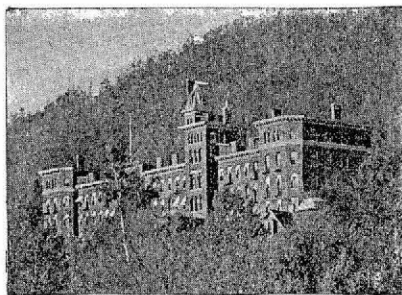
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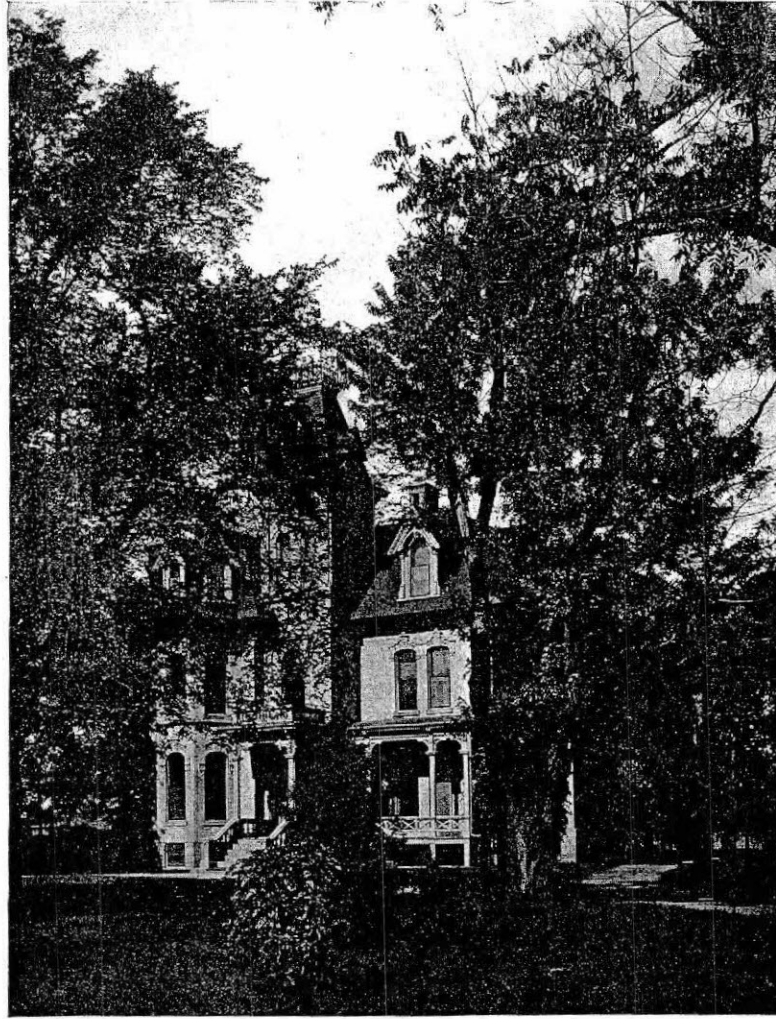
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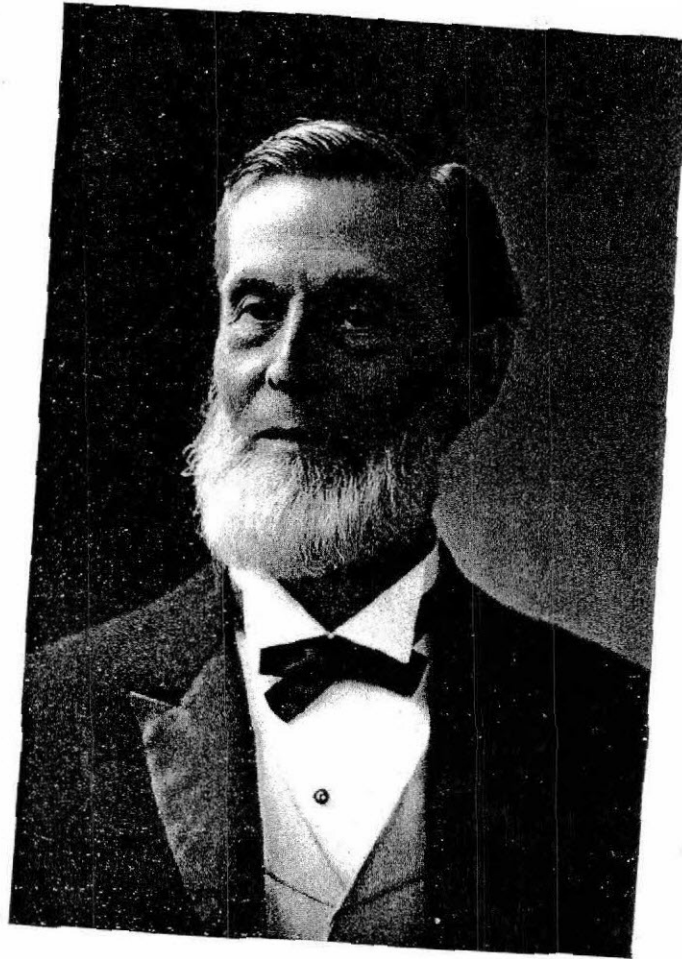
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This Journal will not be responsible for the opinions of essayists or contributors, unless indorsed by the Association.

PATENT AND PROPRIETARY MEDICINES AS THE
CAUSE OF THE ALCOHOL AND OPIUM HABIT
OR OTHER FORMS OF NARCOMANIA—WITH
SOME SUGGESTIONS AS TO HOW THE EVIL
MAY BE REMEDIED.

By LEWIS D. MASON, M.D.—Brooklyn, N. Y.*

President of the Association

It is not my purpose to occupy your time with a formal address—reviewing the history of this association, its needs and its aims, which would indeed be profitable and no doubt interesting—but rather to discuss some subject of public need from a practical standpoint; and therefore, laying aside the formality and routine of an address as usually delivered on such occasions as this, let me call your attention to an important subject, fully within the scope of our association, an evil often overlooked, or if tacitly acknowledged not faced, but too frequently evaded; an evil that is growing and that

*Delivered on the thirty-second anniversary of The American Association for the Study of Inebriety, held in the Washingtonian Home, Boston, Mass., Dec. 18, 1902.

we believe so largely and constantly contributes to that ever-increasing population of alcoholics and narcomaniacs that dwell in our midst and are ever with us. We refer to the evil attending the *indiscriminate* use of so-called *patent* or *proprietary medicines* as the cause of either the *alcohol* or the *opium* habit or other forms of drug addiction.

Lamentable examples are on record where persons have ignorantly and innocently become the victims of the alcohol or opium habit, or that of other drugs of pain-relieving or hypnotic properties, through these drugs being artfully concealed in proprietary or patent medicines, and such persons anxious to be relieved of either habit have ignorantly continued to use alcohol or opium, which are frequently the basis of the so-called "cures" with which the market is flooded.

We may divide these patent medicines or nostrums into two classes.

First. Those advertised for the relief of various painful affections, such as neuralgia, rheumatism, gout, etc., the basis of which is opium or its alkaloids, or a class advertised as "tonic", the basis of which is alcohol in some form.

Second. Patent medicines advertised as "cures" for the liquor or opium habit, the basis of which is frequently in the former case *alcohol*, and in the latter, *opium* or its alkaloids.

Let me relate a case to illustrate the former class, the nostrum being used and advertised as a tonic:

Prof. S. was called in consultation to see a case of "multiple neuritis". No history of alcohol habit could be established. Patient was an elder in the church—a total abstainer, a temperance advocate, and a Prohibitionist. He did not use alcohol as a beverage or in any way, according to his personal testimony. Family physician reported patient as strictly temperate. Investigation showed that patient was taking a patent preparation, recommended and prepared by a "retired clergyman", and it was called "Balm of Gilead". Analysis showed 70 per cent. of alcohol. The dose was a tablespoon-

ful three times a day, and this man was taking *one pint daily*, and liked the effect of it. It may seem strange that he was ignorant of the fact, but he was consuming daily more alcohol than the average intemperate person, who takes several drinks of whisky regularly. The result was chronic alcoholic poisoning, and multiple neuritis.

Let me recite a case in which the patent medicine was advertised and used as a cure for neuralgia, etc. This occurred in my practice some years ago, in which a young woman in moderate circumstances innocently became the victim of the morphine habit through a preparation known as "Feeley's Rheumatic Mixture", taking it for a neuralgic affection. She had spent over six hundred dollars, and used over 1,000 bottles of the "nostrum" before she came under my care. Each bottle contained from five to six grains of morphia. She had therefore taken the equivalent of 5,000 or 6,000 grains of morphia during her period of addiction. She recovered after several relapses.

Let me report a case in which the nostrum was advertised as an opium cure, but was inert, simply a harmless fraud.

Dr. D., morphia addiction—several years' duration—received a circular stating that a "retired clergyman", a victim of the habit, discovered in the West Indies on a moonlight night, accidentally, a fruit of which he partook. The result was immediate recovery from the habit. The circular stated that he now gave his life and time to his fellow men who were unfortunate victims of this terrible habit. No charge was made except for actual cost.

An examination showed a bad solution of nutmeg in alcohol, easily detected by taste, smell, and vision. The vial and its contents were not worth five cents commercially. The cost was five dollars and expressage C. O. D. No charge for experience.

Let me dwell for a while on the "trade marks" of charlatanism in the treatment of the alcohol or opium habits :

First. Always a remarkable discovery, at great cost, under particular and peculiar circumstances, the discoverer and originator being, like Santa Claus, mythical, unrevealed, unapproachable, *because* a fictitious personage. "Grand, gloomy and peculiar, he sits upon his throne a sceptred hermit, wrapt in the solitude of his own originality."

Second. The ingredients or composition of this remarkable remedy are not given, nor easily attainable, and all possible means are taken to prevent analysis and have the nostrum remain a "secret remedy." Remove the mystery of its composition and the delusion vanishes.

Third. There is always a list of so-called first class indorsements or testimonials, fictitious or otherwise; if possible, however, of respectable, and it may be influential persons, who are willing to stand sponsor for this bastard of illegitimate medicine, who is thus foisted on the public, and placed in the public lap, to be nourished at the public paps.

Fourth. Unparalleled and unfailling success under all conditions, in every instance in which the purchaser exchanges the good coin of the realm for the vile contents of each bottle.

Fifth. A slap at the regular profession, their failure to secure satisfactory results under similar conditions and the great expense attending their employment. All this in retaliation, and as explanatory of the reason why the regular profession are opposed to the sale and use of patent medicines or nostrums.

Sixth. A charitable glamour or haze is thrown over the whole scheme, on the supposition, we suppose, that "charity covereth a multitude of sins", but it is only the usual phase of the wolf in sheep's clothing, the devil as an angel of light, or masquerading as a saint.

Seventh. An attractive, euphonious, and original name,

that will kindle and appeal to the imagination; and last, but not least, extensive and attractive advertising with lying circulars, in the secular and not unfrequently in the religious press, and cheaper class of popular monthly journals, thus metaphorically fishing in all channels where the thoughtless, ignorant, credulous public can be caught.

You are familiar with the attractive form in which these advertisements are written. We have already referred to some of their characteristic "trade marks." The footprint of the cloven hoof is always stamped upon them.

They are "secret" remedies: "Home treatment"; "No time lost; go to business every day"; "Immediate relief"; "Slight expense"; "Can be given by any one to another without the knowledge of the other," and thus an unconscious cure effected; "No dread last stage"; "Purely vegetable and harmless", etc., etc.; but

"Age cannot wither or custom
Stale their infinite variety."

Let me relate a case which will explain the method from "start to finish":

A young man, a patient of a physician who related the instance to me, entered his office one day, and asked him what would be the best method to prepare a patent medicine that would create a public demand, and sell well. The physician in an offhand way, not expecting that the matter would receive serious consideration, said: "Oh, well, make the basis whisky; put in some opiate; disguise the whole with a bitter tincture; get high-sounding testimonials or indorsements, and especially give it an attractive, "taking" name. Then extensively advertise it from "Dan to Beersheba" and the thing is done. The young man got up such a preparation, called it "Scotch Oats Essence"; and secured indorsements and testimonials of a high character and advertised extensively. He spent over forty thousand dollars on the invest-

ment. Another friend of mine analyzed the preparation, published the formula, showing it contained morphia. As a result the sales fell off, insolvency and financial ruin followed. Then the proprietor drank himself to death, mortified at his failure and public exposure. We have all read "The Confessions of an Opium Eater" by De Quincey, but we think the "confessions of a teetotaler" would form very interesting reading, racy and full of startling developments, as the sensational press has it. Verily, verily, what fools these mortals be.

But not only must we as an association study the law of cause and effect, as related to habituation, resulting from the use of patent or proprietary medicines, containing alcohol, opium or other narcotic drugs, but also the relation which *new and comparatively unknown remedies* bear to a possible habituation, we mean remedies in the field of *legitimate medicine*—especially drugs of analgesique or hypnotic properties. We should watch their action carefully, and we must safeguard the public against their indiscriminate and irrational use. New drugs are being constantly placed on the market and we can recall the time when bromism, chloralism, cocaineism, were uncoined words, because the bromides, chloralhydrate, cocaine, had not yet emerged from the laboratory of the manufacturing chemist and their danger to heart and brain was yet to be experienced in actual practice. And let it be here noted—in parenthesis—that too often the child of the laboratory is a product not only for good but frequently for evil, so that we might almost say, "Would that it had never been born." Since then we have had a long list of drugs, which is constantly growing, belonging to the analgesique or hypnotic class — heroin, hedonal, sulphonal, tryonal, etc.; and are these newer drugs perfectly effective?—and at the same time perfectly harmless? Is there no danger of habituation? Can they be handed over the counter by the cheerful and accommodating druggist with the full assurance, "If they cannot do any good they cannot do any harm"? How many un-

suspecting ones have received their death warrant over the counter of the druggist or at the hands of a careless practitioner, in the dispensing of new and comparatively untried drugs, or if they have escaped this danger only to become habituated in their use. Is not the only safe rule to suspect all comparatively unknown and new remedies, and not exclude them from the list of drugs the use of which may result in habituation and all its attendant evils?

“Suspicion sleeps at wisdom’s gate.” So let us be wise and with narrow gaze scrutinize all drugs of active properties, reputed to be perfectly effective, and at the same time perfectly harmless, especially such as belong to the narcotic class. We may refer to the common and indiscriminate use of the various *alcoholic tinctures*, especially when these are given as tonics in teaspoonful or larger doses, and suggest the use of the fluid or solid extracts, or those preparations in which glycerine is the solvent basis or menstruum. Acetic acid has been successfully used as a substitute for alcohol in the extraction of the active principle of drugs in the laboratory of the pharmaceutical chemist.

How shall we remedy this great evil that tends not only to physical and mental degeneration but death itself—the *indiscriminate sale and use of patent medicines containing alcohol, opium and other narcotic drugs?*

Primarily—a campaign of education should be begun at once. The tocsin of alarm should be sounded; public apathy in regard to the matter should be aroused. From the pulpit and the rostrum the cry of warning should go forth. The medical profession, the intelligent public, the press (medical, secular, and religious), by timely articles, should help save the ignorant and thoughtless from the results of their folly—the habitual use of patent medicines, concerning whose composition they are entirely ignorant, especially the class of medicines we have described.

The press, both secular and religious, have a great respon-

sibility in this matter. Financial interest, of course, is the obstacle, for the proprietors of these patent medicines pay well for advertising space.

We would influence the entire press in this matter, and especially would we urge the religious press not to be influenced by any financial consideration, and exclude from its advertising columns all preparations the composition of which they are totally ignorant and the use of which results not only in physical and mental degeneration, but often has a fatal issue in case of persistent use. What an incongruity for a religious journal to assume in its religious columns to point the way to everlasting life and in its advertising columns to stand as sponsor and promotor for that which means *everlasting death*. In the name of religion and humanity we denounce the strange inconsistency of that journal which attempts "to serve God and mammon" and in the same pages publish the gospel that proclaims "Peace on earth and good will to men" and advertises secret nostrums that will not only ruin the bodies but the souls of men.

The work of our society along this channel is on the line of "preventive medicine," or the knowledge of the *cause* and *prevention* of disease, and so we must study the underlying causes of disease and habit or we would be recreant to our trust.

Any man or any organization that would devote his or its time and influence to the labor of unearthing and exposing the pernicious results of the average patent medicine would confer a great boon upon humanity. Let us turn the searchlight of scientific analysis and of truth upon this evil that lurks in the darkness and shadow of ignorance and credulity.

One way to meet the evil is for the state or government to appoint a salaried chemist, whose duty it shall be to analyze all patent preparations suspected to contain deleterious drugs and refuse to grant or allow a patent or proprietary right to be taken out in case such drugs were used in the preparation,

and if such preparations were sold in the absence of such patent or proprietary right or privilege and found to contain deleterious drugs, then heavy penalties of fine or imprisonment or both ought to be inflicted upon either the proprietor or the vendor of such preparations.

The only safeguard is to exclude from the market all patent medicines containing all drugs *harmful to health* or dangerous to life, especially of the *narcotic class*.

It remains, therefore, for all interested in this problem for the suppression of the manufacture and sale of patent medicine and all preparations of the class under consideration whether patented or not—to awake a public interest that shall secure prohibitory legislation with such *punitive* measures as shall have a deterrent effect.

In accordance with this view of our duty this association has a "committee on nostrums," a standing committee whose business is to report at the regular annual meeting and at stated meetings the result of its analysis of so-called cures or specifics for the cure of alcoholism and other drug habits. The efficient chairman, Dr. N. Roe Bradner of Philadelphia, in 1898, and his associates, did most effective work. We can only now refer to the very full report which was most favorably received by the medical profession and the press. In this report it was demonstrated from the analysis of many specimens that the so-called cure was either *inert* as far as active principles were concerned and so were mere frauds, or when an active agent was employed, alcohol "substituted" alcohol when the "cure" was for "drunkenness," and opium or its alkaloid when the cure was for the "opium habit." We then commended this report to all interested persons, and hoped that the committee would extend its examinations by chemical analysis, not only to the so-called cures for the alcohol and opium habits but to that large class of patent medicines for various painful affections, as neuralgia, rheumatism, or gout, the basis of which is not unfrequently a narcotic,

disguised in some form and speciously advertised as "purely vegetable and perfectly harmless."

We cannot close the consideration of this subject without referring to what we may call "*institutional quackery*," nothing more or less than charlatanism in the concrete.

It is a matter of surprise to note that institution after institution can be established under any form of charlatanism, without leave or license from town, county, or state, receiving and treating persons whose mental condition is at the best very feeble, presenting opportunities for concealed fraud, and even secret acts within the confines of the penal code. Such a condition could not prevail in Europe, ought not to prevail here, and it would be well if this association would reaffirm a resolution passed at a meeting of this society held March 23, 1893, at the New York Academy of Medicine, in order to discuss the subject, "Secret and Specific Cures for Alcohol and Opium Inebriety."

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

The passage of such a law, based on this resolution, would drive "*institutional quackery*" out of the land.

This association at the meeting referred to was ably seconded by the medical press. At that time and at all times this society has opposed all forms of quackery, and all legislation or public action favoring such, and, as a rule, has been successful. As an association we should be strongly organized to secure legislative action in the various states, favorable

to the advancement of the objects for which this association was founded, and opposing all forms of legislation detrimental to the interests we have endeavored to establish.

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

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

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

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

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

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

In order to secure the sense of this association I would request that the secretary read the following resolutions and move their adoption:

Resolved, That it is the sense of this association that the indiscriminate sale and use of patent medicines and so-called "cures" for the alcohol and opium habits are not infrequently the cause of the formation as well as the continuance of these habits.

Therefore be it resolved, That this association memorialize the proper authorities not to issue any patent or proprietary right to any one desiring said patent or right for any remedy or medicine or "cure" or any compound whatever containing alcohol, opium, or other narcotic drug in which there is danger of habituation from its use.

Resolved, That all proprietary or patent medicines for which a patent is issued have a label on which are distinctly printed the ingredients of said preparation; said label being placed or affixed to the bottle, box, or wrapper in which said preparation is dispensed; and furthermore, that a heavy penalty of fine or imprisonment, or both, be imposed upon any one who may manufacture, prepare, buy or sell, or have for sale in stock, all such preparations not duly patented and labeled under conditions specified.

Resolved, That we reaffirm and indorse a resolution passed at a meeting of this society held March 23, 1893, in reference to the licensing and proper inspection of all institutions for the care and treatment of inebriates, morphia habitués, or other form of narcomania.

Resolved, That a copy of these resolutions be published in the medical and secular press.*

Count Douglas has introduced a revolutionary measure in the lower house of the Prussian Diet dealing with the drinking evil. The chief provisions of the bill are the following: No fusel oil will be permitted in alcoholic beverages. The sale of alcohol will not be permitted before 7 o'clock in the summer and 8 in the winter. Alcohol is not to be sold or served to persons under 16 or to notorious drunkards, whose names will be supplied to publicans by the police. The government is to arrange for public lectures setting forth the evils of intemperance, its effect on the growth of crime, etc. Institutions for the cure of drunkards are to be raised at the public cost, also institutions for the care of those who have been ruined by drunken relatives. This provision refers chiefly to children. In railway waiting rooms and similar places where people congregate tracts against drunkenness are to be posted on the walls, and, finally, school children are to be carefully instructed on the evils of intemperance.

Dr. Brauth of New York, in an article on cleft palate in the *New York Medical Journal*, refers to heredity as follows: "In all the cases the writer has seen, the patient was of bright mental condition; the bodily condition depended largely on the feeding of the patient, a matter of almost persistent occupation to the mother or the nurse. In the majority of cases, where I was able to get a frank statement from the mother, it was learned that alcoholic intoxication existed in one or both parents during the sexual act followed by conception. Dr. Lambert quoted statistics to show the enormous number of defective and diseased children among the progeny of alcoholic parents."

*NOTE—These resolutions were read by Dr. Crothers, seconded by Dr. Rod - baugh, and unanimously carried by vote of the association.

GENERAL PRINCIPLES OF TREATMENT.*

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

The treatment of inebriety will depend on the theory of what inebriety is, and the causes. If the physician believes that so-called moral agents are active factors in the development and growth of inebriety, his plan of treatment will be governed by this belief. If he thinks the trouble is in the stomach, which is cured when the craving stops, the remedies will be directed to this organ.

Commonly the theories of the nature of inebriety are confused and unsettled, and the prevalent notion that alcohol is the only cause obtains. This confusion of theory of the nature of inebriety is the reason for the existence and growth of specific cures. Wherever inebriety is recognized and understood all specific remedies disappear. In all cases it is necessary to have some idea of the nature of the disease and the conditions present, then the effort of treatment will be rational. First there is always cirrhosis of the liver in different degrees. To this there is no exception. This cirrhotic condition extends to the kidneys and seriously impairs the functions of other organs. The glands of the stomach are also enlarged and thickened. In many cases local patches of inflammation occur. The heart is always deranged.

In beer drinkers and in some persons who use spirits the heart is either hypertropic or atropic. Its muscular walls are enfeebled. Both the nutrition and power of control is diminished. The strain and relaxation from the action of

*Read at the thirty-second annual meeting of the Association for the Study of Inebriety at Boston, Mass., Dec., 1902.

alcohol suddenly increasing its activity and then slowing it down below the normal, breaks up both function and nutrition of the organ.

The arteries are in a sclerotic condition, with fibrous thickening of the walls at different parts. Vaso-motor paralysis is always present, deranging the finer arterial circulation in the arterioles, hence the blood passes in irregular jets, distending the coats of the arteries at some points and thickening them at others. The breaking up of the natural rhythm of the circulation of the blood in the brain reacts sharply on cell nutrition. The blood itself is interfered with. Its oxygen carrying powers are diminished and hence the cell nutrition is lessened. In addition to these mechanical obstructions and interference with the nutrition, there are many unknown toxins which come from the spirits used and are formed by its action on other substances. These toxins form centers of irritation and depression both of the vitality and nutrition of the organs. Chemical derangement of the processes of metabolism of the body follows, forming a very large part of the disease which comes from the use of alcohol. Another fact to be recognized in many cases is the presence of hereditary predispositions and defective organic states associated with conditions of exhaustion that are due to strain and stress; hence in each inebriate there is debility of both brain and nervous system, and disturbance of the organic activities of the body. In addition, the narcotism from alcohol and the toxins are prominent, and followed by deranged nutrition, mechanical destruction, and breaking down of the delicate nerve cells. These are some of the general conditions present in all instances. The first principles of treatment must be directed to remove the poison and secure total abstinence from alcohol. The formation of toxins in all parts of the body must be checked and prevented. This is accomplished by elimination through the skin, bowels, and kidneys, and means that will promote rapid elimination. Next the nutri-

tion must be regulated. Foods that are easily assimilable which will not tax the digestive organs are required. The strong appetite manifested by persons in the early treatment is morbid and should be controlled; then the regulation of the metabolism of the body. This can be done by acids and salines with restricted diet and baths. Iron can be used when the blood count is deficient. Bitters, so-called tonics, and stimulants are not good remedies and cannot be used in every case with success. The remedies which will aid in removing the poisons, in increasing the elimination, and improving the metabolism of the body will suggest themselves to every physician and should be peculiar to each case. The organic and psychical changes which together constitute inebriety seem to have one symptom in common, that is, the intense desire for relief and the supreme confidence in the value of alcohol for this purpose.

This desire is literally a craze for narcotism and relief and is not infrequently self-limited, that is, it dies out after awhile with or without the use of drugs. In the periodic cases there is a distinct disgust and revulsion to this desire for alcohol which lasts for a definite period and then springs out again. This is evidently an expression or symptom of some organic change and brain psychoses which is not always clear to the physician. It may die out permanently, which is the object desired in the treatment. No known drugs can do more than temporarily cover or break up this impulse. The disgust which some drugs produce is simply a form of chemical restraint and has no basis in organic change to sustain the impulse. If by medicinal measures the poisons can be removed and the organism strengthened and built up, this hope of breaking up the desire for spirits may be accomplished, but this does not mean a restoration of the damaged brain and liver cells or the restoration of the control of the nerve centers and the absorption of the fibrinous deposits in the arteries and veins. This can only be accomplished by the most careful hygienic living and care of the brain and body for many

months and years under the most favorable circumstances. All our asylum work is largely preliminary, removing the active causes and ascertaining the real conditions and assisting in the natural process of growth and repair. The famous Dr. Mott of New York very aptly characterized the treatment of inebriety as a surgical operation, calling asylums the splints and bandages necessary to keep the broken bones in contact, and after a sufficient growth had taken place these appliances could be removed, but the treatment should be continued under other circumstances and conditions. There are two facts which should be prominent.

First, there can be no specifics for inebriety because the disease is complex and extends to all parts of the body, beyond the reach of any special drug medication or action; also that all remedial means must be along general lines for the removing of causes and placing the body in the best condition for natural restoration. The second fact is the attempt to reach and control these conditions by moral means. While it is possible to do a great deal through the influence of the mind and suggestion and these measures should always be used, yet they cannot be depended upon to the exclusion of other means. I think the ideal treatment so far can be summarized in an institution where baths, electricity, massage, exercise and mental diversion can be concentrated in everyday work. The mind must be treated the same as the body, and both must be occupied most of the working hours. Open air treatment is invaluable. Exercise on the farm with manual labor, diversion of the mind from old channels of thought, and culture and growth in opposite directions are all very effectual remedies. It will be evident from these general principles that no methodical treatment applicable to each case can be applied with success, that each person must be treated according to some general conditions, and on special conditions present depending on the history, causation, and personal state of the person.

NOTE ON THE HIGHER USE OF HYPNOTISM AND
SUGGESTION, WITH SPECIAL REFERENCE TO
THE TREATMENT OF INEBRIETY.*

BY R. OSGOOD MASON, M.D.,

Author of "Telepathy and the Subliminal Self" and "Hypnotism and Suggestion in Therapeutics, Education, and Reform."

The more I consider it, the more I am convinced that Socrates was right in his well-known *dicta*: "Vice is ignorance," "Virtue is knowledge." If virtue is knowledge the virtue can be taught, impressed, suggested; but men must be brought to see, to realize the good and true — otherwise they will not choose it, nor be influenced by it.

There is, however, a vast difference between believing in a general way that a thing is so — is good or true — and *realizing* it with a home-coming force in such a way that it becomes a part of one's own psychic entity — a part of one's self. It is like the difference between having a general, hazy impression of how a thing looks, or, on the contrary, *visualizing* it definitely, so that it stands out distinctly in all its parts as if it were a solid object that could be touched, placed in different attitudes and examined critically.

A young friend of mine is a mechanical engineer and draftsman — intelligent, educated. A piece of machinery is described to him to be elaborated and drafted so that a working model can be made from the drawing. He at once sees the piece of machinery perfected, distinct in all its details, so that when he begins drafting it is already on the paper before

* Read at the thirty-second annual meeting of the Association for the Study of Inebriety, at Boston, Mass., Dec. 18, 1902.

him. He reproduces it with ease and the whole thing is finished exactly, without a measurement, in perhaps an hour. His fellow draftsmen hear the same description — they lay out the work, make elaborate measurements and calculations and then make the drawing, working diligently perhaps twelve or twenty hours. My friend is able to *realize* the piece of machinery at once — the others at first have only a general idea, and can only fully realize it as they work it out and see the finished drawing.

My friend is a psychic — in other words, he has a subconscious mind which comes to the front and acts according to its higher perceptive quality; acts in harmony with his conscious mind, and so together they easily produce results which those who work by conscious intellect only achieve by the expenditure of much time and labor, or perhaps do not fully achieve at all.

How may this power of realization be acquired? One practical way is by intense application — concentration of the mind, especially the perceptive faculties, upon the thing to be realized, until everything else disappears, as it were, from view, and the whole psychic force is directed to the one thing to be realized. This is considered perfectly proper and scientific, yet it is a species of self-hypnotization; it is realization secured in the same manner as that which comes to the ecstatic or devotee, dwelling intently upon the realistic representation presented by the crucifix until bleeding wounds appear upon his own hands and feet.

Few are capable of this realization, even by long continued and painstaking effort. Especially is the inebriate, in his weakened, errant, and often degraded condition not capable of it; and yet unless this realization of the grossness, squalor, ruin of health and happiness, consequent upon the vice of drunkenness comes to him, and also the brightness, beauty, health, prosperity, happiness, which come with abstinence, sobriety, and self-control — unless these ideas can be realized,

to some degree at least, all means of cure will be only temporary or futile; and in proportion as they *are* realized, however that may be accomplished, will there be true and lasting success.

It is at this point that hypnotism and suggestion come in as powerful aids. The acute stage of inebriety is passed. Perhaps the patient is indifferent or discouraged, perhaps he has remorse and desires in a general way to reform. Now is the time to arouse, stimulate, encourage; to make him believe in himself — that he has forces within himself sufficient to keep him secure against his old enemy. Then present vividly to his mind the pictures just now briefly sketched — the degradation of the life of alcoholism, the elevation, beauty, health, of sobriety and self-control — presenting higher ideals, lifting him up for the time being at least, and placing him on a higher plane of thought. From that standpoint show him his old degraded course of life — let him wonder that he could ever have been on that low plane; then bring him back to higher, brighter, more hopeful views and ideals. Show him that all this is possible for *him*, and if it is in your own mind — and I truly hope it may be — you will also impress upon him the thought that these forces that are in himself are divine; that he himself is a part of the divine which is in nature and which constitutes its life and moving force; so he is not by nature weak and debased, but was intended to be strong and pure and useful, and it is only because he has not seen things aright — has not seen the beauty there is in the better life — that he has not chosen it. It was ignorance that made him blind; now he *sees* that better life, realizes it perfectly and chooses it. Help him to dwell in this atmosphere of elevation, assurance, selfhood and higher ideals. How is it possible that he will not be influenced and strengthened by it?

But these things cannot be presented in a perfunctory way; they must be impressed with force, and with a personal magnetism which makes them vital and sure to be in some degree realized.

I have suggested this line of thought as useful to be presented to the fully conscious mind of the recovering inebriate; they should be so presented; but some of you at least know the help to a true seeing — a more perfect realization of the thing presented — that comes from addressing this same line of thought, these same ideals, to the *subconscious mind*. The drink habit with so many patients has become automatic — a part of their character, of their subconscious mind — and if we would reach it we must go where it resides, to its habitat *in* the subconscious mind, and this can be done most effectually by means of the induced or hypnotic condition; it is there that suggestion becomes most powerful.

With a patient in the hypnotic condition I have visualized — formed a picture in my own mind, for instance of a beautiful landscape; perhaps one which I have seen, perhaps one wholly imaginary. I have minutely described this picture to my passive patient — the meadow with its winding stream flowing through it, graceful trees in little groups or standing alone, gentle foothills beyond meeting the meadow, patches of grain and cultivated fields; a farmhouse, mountains in the distance, a distant horizon, a gorgeous sunset; and I have said: "This picture will remain in your mind when you awake — it will seem to you like a beautiful dream, but it will be distinct and easily recalled." On awakening the same scene would be perfectly reproduced and described by the patient. It had been distinctly visualized and *realized*.

Now, if a scene like that can be impressed upon the mind so that it is distinctly seen and thoroughly realized, why should not a picture representing the evils of inebriety and the beauty of sobriety and self-control also be distinctly seen and thoroughly realized, and in such a way that purposes, ambitions, ideals, yes, character, would all be modified, elevated, improved? This is what I would call the higher use of hypnotism and suggestion. It is educational, and in the line with Socrates's dictum, "Knowledge is virtue." It is not

sufficient to suggest in a routine way, "You will not take intoxicating drinks any more; they will be distasteful to you and will make you sick." That is very well as an expedient, and is often helpful; but it is not the best that can be done with hypnotism, it does not touch character — does not present motives that permanently influence the will. These suggestions may be used, they may be helpful; but have in mind *also* those higher uses of hypnotism and suggestion which affect character.

A word about the objection to hypnotism which some people are putting forward, namely, that it disintegrates personality. The people who make this objection are simply ignorant of the real uses of hypnotism, and are still influenced by the prejudices which the sometimes unwise use of hypnotism has engendered. It is through hypnotism that the fact and the supernormal faculties and uses of the subconscious mind have been discovered — a discovery which is revolutionizing psychology; and it is by means of hypnotism that double and multiple personalities have been successfully studied; but that hypnotism properly used tends to the weakening or disintegration of mind or of personality is an assertion quite without proof and is an indication of prejudice and false sentiment as well as lack of knowledge of the facts; however, a single case in point is of more value than chapters of theory and sentiment, and a case in point is one reported by J. Allen Gilbert, Ph.D., M.D., of Portland, Oregon, in the *Medical Record* of August 9 and 30, 1902.

Briefly stated, this case presented three distinct personalities or strata of consciousness. The history extended over six years from the age of sixteen to twenty-two; ten States and Territories, from Tennessee to California and Oregon; and embraced a variety of occupations — farmer, soldier, miner, fireman, prisoner, and Salvation Army man. The personalities were entirely distinct. While any one of them was present there was no knowledge whatever of anything that had

transpired in either of the others. Disintegration was complete; yet under the skillful and humane treatment of Dr. Gilbert, by thorough hypnotization and healthful suggestion, these different strata of personality were harmonized and unified so that the patient has the satisfaction of knowing and realizing his whole unified life in its various and most unusual phases — all distinct and in their consecutive order.

Hypnotism does not tend to disintegration of personality, but to discovery, *integration*, enlightenment, and development.

The growth of alcoholism in Chili is rapidly increasing. According to the figures adduced during a recent discussion, the number of persons addicted to the excessive use of alcohol in thirty-three departments is 68,592. Santiago, with only 300,000 inhabitants, counts over 24,000 persons who are addicted to the excessive use of intoxicants. As a result of so much drunkenness new and stringent laws have been enacted. The distilleries and breweries are all placed under strict government control, not only as to quantity but as to quality of product. Public inspectors and chemists are put in charge of the works and all liquors are to be kept free from adulterations. Licenses are to be sold to the highest bidder once in three years, but no license will be issued for the sale of liquor within two hundred yards of any church, school, charitable institution, or soldiers' barracks. No liquors may be sold at any theater, at any railway station, or on any railway trains. No mayor of any city, no alderman or other officer of government, may own or control any license. Sections of cities which so vote may constitute themselves prohibition districts. No liquors may be sold after midnight or before six o'clock in the morning. Offenses against the law must be tried summarily. No case can be continued beyond ten days and no judge can withhold decision more than five days, and sales to all minors are strictly prohibited.

RESTRAINT AND MORAL MEASURES IN THE
TREATMENT OF INEBRIETY.*

BY S. B. ELLIOT, M.D.,

Medical Director of the Willard Hospital, Bedford, Mass.

Restraint in treating inebriety must depend largely upon the cases treated, methods of treatment adopted, spirit in which it is conducted and surroundings of the institution where treatment is carried on.

There are inebriates so thoroughly in earnest in overcoming their affliction, with self-control so little impaired, that but a moderate amount of restraint of any kind is necessary in treating them. A small allowance of stimulant taken regularly and in decreasing quantities or at longer intervals, with a little encouragement and proper medical treatment, is usually all that is required. Such cases are often treated at a physician's office, or at the patient's home, with little more trouble than is given by the average patient suffering from any other disease.

Those cases which have progressed to stages where voluntary restraint from excessive use of alcoholics is impossible require different treatment. This class of cases includes what may be regarded as those which are probably curable and those which are not likely to be benefited for any length of time by treatment. For our purpose we will first consider restraint in treating the latter class.

Those cases that have advanced to extreme stages where hope and ambition are gone, who have tried without success almost every means of treatment, who often do not wish to over-

* Read before the thirty-second Annual Meeting of the American Association for the Study of Inebriety, December 18, 1902.

come their failing, and who if they would are no longer able to make any appreciable effort to help themselves, should be considered in a distinct class by themselves. These cases have been a great stumbling block to physicians who have taken up the treatment of inebriety as a specialty. Treatment has almost invariably proved futile, the patient himself has become more and more confirmed in his infirmity, and the physician has become more and more discouraged with his specialty. It is just as futile to attempt to treat all cases of insanity indiscriminately, with success, as to treat all cases of inebriety. It is only by the most careful methods of discrimination that the present results in the treatment of insanity have been obtained. We must, to secure the best results in treating inebriety, weed out the hopeless cases. Little effort, so far as we know, has been made to do this. Institutions, private and public, for treating dipsomania, make little discrimination as to the class of patients taken. It is sufficient that they are inebriates; but this must cease if we are to obtain the best results, and if we, as physicians who are devoting special attention to this subject, are to have our efforts count to best advantage.

It is these chronic cases who give us the trouble as to restraint. These are the ones who become adepts at smuggling in stimulants for themselves and others, or in running away and boasting of it afterwards, and when these cases are eliminated from our hospitals half of our troubles will be overcome. Treatment of such cases with a view to curing them is of little use, and the measures of restraint adopted should be such as to keep them out of harm's way. They should be committed to large State institutions for long periods, where they can be kept regularly occupied under strict control.

The cases which concern or should concern the progressive physician giving attention to the treatment of inebriety are those which present at least a probability of being permanently benefited. The first essential in treatment here is hearty coöperation on the part of the patient. Without this

there is little use in undertaking his case. He should be so thoroughly in earnest that he is willing to follow out in the minutest detail every instruction laid down.

On the physician's part the spirit in which treatment is carried out is of the utmost importance. It should be just as sincere, as enthusiastic, as in treating a case of pneumonia, for instance. He must be hopeful and confident himself to instill hope and confidence in his patient. In institutions where chronic cases are taken a feeling of resentment and contempt toward the inmates, on the part of the attending physician, often exists owing to the perverse actions of some of the patients. The inebriate under treatment should be considered as a patient, not a criminal or a necessary evil in one's daily rounds to be disposed of as soon as possible.

Granted that the physician has the patient's confidence and hearty coöperation in his efforts to help him to help himself, restraint in treatment is a simple matter. For the first few days the attention, in part at least, of an attendant or other patient is generally necessary. If a regular amount of alcoholic stimulants, generally whisky, is given, not a half ounce diluted with water, but from one to two ounces of a good quality, at definite intervals, and the patient knows he can count on this, there is little object in his running away. Once the digestive apparatus gets into a normal condition and the nervous system is quiet, with more or less natural sleep, the patient becomes more rational, and restraint even of a moral character is largely unnecessary. If a saloon is within easy access the temptation of course to seek it is at times hard to withstand, but in most cases a little moral suasion coupled with the proper medical treatment and tapering off as above referred to is all that is required.

At the Willard Hospital the nearest saloon is over ten miles away. The nearest drug store is a mile and a half away, and no harmful drug or alcoholic could possibly be obtained by an inmate of the hospital, so that the temptation to slip

away is very much lessened. At the same time the patient knows that he need not go away from the hospital to get all the whisky he needs and of the best quality. Restraint here in treating patients is a matter of no concern whatever except possibly for the first day or two. When a patient is found who is not sincere in overcoming his failing, who does not mean to thoroughly coöperate in what is being done for him and who wants to go away, he is given to understand that he is at perfect liberty to go, but he must never come back. In the one or two cases of this kind which have occurred this has had an excellent moral effect. At this hospital the patient has comforts and congenial surroundings which could hardly be surpassed in his own home, and the best way to keep him here has been found to tell him he cannot remain if he does not show the right spirit. As soon as possible patients are induced to walk about, to drive, in some way to get into the open air and remain there as long as possible, to engage in healthy recreation or occupation of some kind. This takes them out of themselves and no doubt has a great deal to do with our not requiring measures of restraint except of a moral nature.

The sooner the patient under treatment feels that confidence is placed in him and that he can go about at will without succumbing to his enemy, the better. It is an easy thing by detaining a patient to keep him from resorting to stimulants, but our purpose is to so help him that he can stand alone when he is away from our influence, and if he cannot do so while with us, supported by all that we can do for him, what help is there for him when he has gone from our hospitals?

Moral measures in the treatment of inebriety are of prime importance. Here again we are confronted with those chronic cases to influence whom is like changing the shape of a tree after it has matured. It is unreasonable to expect that the moral standard of the patients at an institution will be very

high when among them are men who live entirely in the past, and who have been degenerating morally for many years, who have a story with a bad flavor at every turn and cold water to throw on every project advocated, who never fail to tell the excessive smoker how many there are all over the world who use the weed inveterately and who are in better health today and will live longer than those who have never used it, who, whenever occasion offers, proclaim how much good they have known a little stimulant do and how much fun is missed by those who refrain from taking it, who have no ambition in life themselves and who do a great deal to stifle hope and ambition in others. The physician who expects to accomplish much in an institution where these cases are mixed in with the others will have very many bitter disappointments.

Nothing can be more important than the moral atmosphere about an institution for the treatment of inebriety. It must be not only up to a normal standard but should be above it. Not only should patients have hopeful thoughts, but these very thoughts should prompt them to new ambitions and make them energetic and anxious to use their physical and mental powers. Chronic cases of inebriety are not only generally moral degenerates but chronic idlers and have an injurious effect upon the energetic action of others.

At the Willard Hospital, where the patients can walk half a mile in one direction without going off the grounds, where there are acres of woods, a large amount of live stock, and many different ways for healthful recreation and occupation, the difficulty of keeping up the moral standard is greatly lessened. Believing that "an idle brain is the devil's workshop," a patient is no sooner able for it than he is given some light occupation to suit his condition and endeavor made to keep his attention occupied. Professional men, bankers, merchants, may be seen with their coats off in the woods, in the fields gardening or indulging in some healthful outdoor occupation. The patients are made to feel an interest in the insti-

tution which is helping them, and their natural desire is to become a part of it — to help it on and so help other unfortunates to come who are afflicted as they are. This outdoor recreation and occupation has not only a splendid moral effect upon the patients, bringing them in contact with what is beautiful and uplifting in nature, but gets them into a robust physical state. They go back to their homes and their customary occupations with plenty of red blood corpuscles, hardened muscles and good digestions, and drugs play but a small part in it. There is no reaction from a long course on strychnine or other powerful nerve stimulants, but a healthy, robust condition of body and mind which makes them fit for the best that is in them.

To sum up, restraint in treating inebriety can be reduced to a minimum if the hopeless cases are weeded out and put by themselves out of harm's way, and if the hearty coöperation of the curable case is obtained and his treatment undertaken in a spirit of confidence by his physician. The best way to insure proper moral measures is to introduce a positive influence into the patient's life, to take him out of himself and surround him with a vigorous, healthy atmosphere, moral and physical.

Iodoform delirium is a new species of intoxication due to iodoform changed into iodine and saturating the system. It has been supposed that iodoform as a dressing for wounds was harmless, hence it has been used very liberally. Two or three drachms of the powder is not unfrequently used in a single surgical dressing. It was found that patients whose wounds were treated by this dressing became greatly depressed and after a short time delirium came on, followed by acute dementia and not unfrequently death. For a long time these conditions were unknown; finally it was traced to iodoform and when this was abandoned no delirium followed.

THE TREATMENT OF DRUG ADDICTION.*

BY J. H. KELLOGG, Supt. Battle Creek, Mich.

I desire to state at the outset, that in this paper I shall not attempt an exhaustive consideration of the subject, but shall merely endeavor to present a few suggestions in relation to the practical management of cases of drug addiction which are, in large part, the outgrowth of my personal experience in this class of cases.

First of all, I wish to present the fundamental proposition that drug habits are not to be cured by drugs. Of course, symptoms may be palliated. Temporary relief may be obtained. Patients may be, for the time being, persuaded to renounce the use of some drug to which they may be addicted, but sooner or later the patient will relapse, or will fall into the clutches of some other enslaving drug equally baneful in character, or even more pernicious in its effects. The only radical cure for a drug habit is to lift the patient out of the slough of vital bankruptcy into which he has fallen, to improve the quality of his tissues, and to place his functional activities on a higher vital level.

The drug habitué is not simply a man possessed by a perverted appetite, a craving for artificial felicity, but, if his drug addiction is continued for some time, he is thoroughly perverted physically, often mentally, and in a majority of cases, morally. In the therapeutic management of such cases it has been found necessary to bring to bear physical, mental, and moral remedies.

*Read at the annual meeting at Boston, Mass., December, 1902.

The result of moral influences is well shown in the multitude of drunkards who have been reclaimed by various temperance organizations, slum missions, and the Salvation Army. Many a drunkard, under the influence of strong religious feeling, has broken loose at once and forever from the fetters which had for years enthralled him. I am personally acquainted with scores of instances which illustrate this fact.

The weakening of the will, the loss of fortitude and morale which result from long enslavement to a drug, together form a most serious obstacle in the way of permanent recovery in a large proportion of chronic cases. Unless the patient can be restored to a normal condition in these respects, actual and permanent recovery cannot be hoped for; for however completely he may be delivered from the physical thralldom into which he has fallen, he will sooner or later relapse, unless traits of character are developed which may serve as a safeguard to prevent his falling into the same pit again.

I desire, however, to dwell especially upon the physical means employed for restoring the patient to such a degree of physical soundness as will, as far as possible, diminish the temptation, and the tendency to relapse. The substitution of one drug for another will not meet the requirement. The patient must be vitally changed; he must be placed in a physiological condition. In many cases this requires that he shall be made better than before the drug addiction began, for, in not a few instances, the fundamental cause of drug addiction has been a predisposition to the drug from long continued mental strain, or disordered digestion, which has undermined the patient's general health, and developed a neurasthenic state, abnormal nervous irritability, and a general physical decadence with the mental and moral deterioration which naturally follows.

It is not sufficient to simply help the patient through the ordeal of relinquishing the drug and escaping from his re-

liance upon daily or periodical dosing with morphia, cocaine, alcohol, or whatever may have been the poisons to which he has been in subjection. He must be free from drugs of every sort. He must be supplied with better nerves, a better store of nervous energy, better metabolism, cleaner blood, — richer in red cells and hemoglobin, and with a higher degree of alkalinity. His hepatic and renal activity must be improved, and all his nutritive processes brought as nearly as possible to the normal state. Tonics apparently work well so long as the patient's vital capital is large, but when the actual store of nerve energy has been reduced to the minimum, the tonic acts only as an irritant whereby the patient is enabled to exhaust his small capital to the point of danger, perhaps actual physical bankruptcy.

Nerve sedatives also seem to afford substantial relief until the recuperative powers have been wasted to that degree that the vital functions can no longer maintain their integrity under the depressing influence of the drug. Every hypnotic adds to the burden of the liver and the kidneys; the one, as a destroyer of poisons, and the other as an eliminator of substances dangerous to the interests of the vital domain. A person who has been long addicted to the use of drugs has taxed these organs to such a degree that their functional activity is greatly impaired. The natural body-wastes are left to accumulate, especially the class known as the purin bodies which result from proteid and nuclein metabolism.

No method of cure can be substantial or permanent which does not take account of this factor, and which does not provide for the relief of the burdens which have been imposed upon the great vital organs upon which the essential processes of life depend. Opium, cocaine, alcohol, theobromin, caffeine and other drugs of kindred character exert a remarkable influence in perverting metabolism. They lower the alkalinity of the blood and diminish the resistance of the tissues, and lower the general vital resistance.

A man under the influence of alcohol has less ability to resist cold, and is more liable to contract pneumonia and other infectious disorders than the man who is in a normal state. The same thing is true, in a greater or less degree, of other narcotic drugs. Hematogenesis, leucocytosis, diapedesis and other functions which lie at the very foundation of a healthy life, and which are essential to a successful combat with the enemies of health with which every human being is surrounded, are all more or less seriously interfered with by drugs of every description.

This has been clearly shown by Roger, Charrin, and others, who have demonstrated that while various drugs lower vital activity and diminish vital resistance, there is no drug by which vital resistance may be increased; that is, there is no medicine that a man can take which will render him less liable to contract smallpox or pneumonia or typhoid fever, or which will diminish his vulnerability to la grippe or any other infectious malady, except, of course, such remedies as may by arresting gastric or intestinal fermentations, or cleansing the alimentary canal from putrefactive material, lessen autointoxication by temporarily removing the cause. The only measures which can possibly prove permanently effective in restoring the victim of drug addiction to physical soundness, which will enable him to stand, are those physiological measures by which the natural resisting powers of the body are enhanced, the normal curative processes facilitated, and the vital functions promoted.

The methods of dealing with common forms of drug addiction which I have been led to adopt in dealing with a large number of cases of this sort during the last twenty-five years, based upon the above principles, may be briefly outlined as follows:

1. The patient's thorough coöperation must be secured in the effort to restore him to a physiological state. He must understand that we are seeking to accomplish something

more than simply to relieve him of the necessity of taking a drug in order to be reasonably comfortable. If we do not do this, the patient is certain to insist upon returning to his ordinary life within a week or two, for the immediate demand for the drug can be very quickly conquered by the measures which I shall briefly outline later, and the result of a too early suspension of treatment in a great majority of cases, will be a speedy relapse. So long as all goes well with the patient, physically and mentally, he will maintain his freedom; but pain, business complications, disappointments, domestic trouble, whatever brings upon him any unusual nerve stress, will almost certainly drive him back to his familiar refuge. The patient must be brought to a state in which he will be able to bear any reasonable degree of nerve strain and worry without succumbing physically and morally to the strain to which he is subjected.

To accomplish this, requires from a few weeks to several months—reasonable time for tissue renovation. It takes as long to secure a crop of health through tissue regeneration as to raise a crop of corn. In extreme cases many months are required to place the patient upon a physiological footing. Of course, there are cases in which the drug addiction has existed for only a short time, in which functional and structural perversion are not yet to any extent developed. In such cases four to six weeks or even a shorter length of time may suffice, but these cases are generally managed successfully by the home physician and rarely come under the care of an institution.

When these principles have been made clear to the patient and he has accepted the situation, we are ready to begin active therapeutic work. There is no use to temporize. We must attack the roots of the upas tree which has grown up within the patient and spread its branches over all his life.

The first step in the treatment of a case of morphia addiction, for example, will be the employment of sweating baths

for a few days, usually three to five. Turkish, Russian, and vapor baths are employed, or even a hot water bath—any form of sweating will answer very well—but the electric light bath is to be preferred. The patient's temperature should be taken before the bath, and at intervals of ten to fifteen minutes during the bath. The bath should be prolonged sufficiently to raise the patient's temperature two or three degrees. A febrile temperature is necessary to secure the increase of oxidation of proteids which is necessary to burn up uric acid and allied wastes, with which the body, in these cases, is always supercharged. By getting rid of these nerve irritants which produce spasm of the smaller arteries and capillaries, and thus exhaust the heart with overwork and seriously interfere with the eliminative processes, we are relieved of two of the greatest inconveniences which immediately follow the withdrawal of the drug: namely, cardiac failure, and unendurable nervous irritability.

Another advantage gained by these baths is improvement of the skin functions. The skin of old morphine habitués is often so inactive as to closely resemble parchment. Thermic stimulation rouses the activity of the sweat glands and relaxes the skin vessels, thus withdrawing from the congested viscera a large part of the surplus blood with which they are overwhelmed, leaving a venous stasis which impairs the function of the liver, stomach, and other chylopoietic organs. From one-half to two-thirds of all the blood in the body may, by these heating measures, be thus drawn into the skin. There are no means so powerful for preventing the diarrhœa which is often present, preventing or combating intestinal congestion and activity which gives rise to watery stools in these cases.

To give permanence to the dilation of the skin vessels the hot bath must be followed by a short but very vigorous cold application. This may be a shower bath, a needle spray, a wet sheet rub, a shallow bath, a towel rub, or a cold mitten

friction, according to the vigor of the patient and his power to react. The duration of the hot bath should ordinarily be not more than fifteen to twenty minutes. It may be repeated twice daily. The proper gauge for the duration of the bath is the patient's temperature. The bath should be terminated as soon as the temperature reaches 101° to 101.5° .

The diet and general regimen of patients are highly important, and these should be established before beginning the withdrawal of the drug. Flesh foods and animal broths of all sorts should be discarded for the reason that they are nerve irritants. What the patient needs most of all, is food that is easily digested and which may be readily converted into healthy nerves, and from which stores of nervous energy can be easily drawn, while, at the same time, there is no increase of uric acid and other tissue poisons which are already present in the body to an excessive amount.

Professor Hall, of Owens College, Manchester, England, has shown within the last year, that beefsteak contains sixteen grains to the pound, of uric acid, while the liver contains nineteen grains, and the sweat glands seventy grains to the pound. Beef tea, beef broths, and beef juices contain little or no nutriment, but practically all the uric acid and other tissue wastes.

My experience warrants me in saying that the withdrawal of these nerve irritants greatly facilitates the cure of drug addiction in every form. The craving for the drug is, in some instances, entirely removed by the withdrawal of flesh foods and their derivatives. Proteid nutriment may be readily supplied in much more easily digestible and assimilable form by means of eggs, kumyss, kumyzoon, kephir, and buttermilk. Patients who have good teeth and are fond of nuts may be liberally supplied with them, especially by blanched almonds, Turkish hazelnuts, pecans, and other fresh edible nuts. Nuts are even richer than beefsteak and proteids, while containing a large quantity of easily assimilable fats and carbohydrates, and a large amount of salts. It is only necessary to take care that

mastication is performed in so thorough-going a manner that there are left no irritating particles to disturb the stomach or bowels. Mustard, pepper, pepper sauce, and irritating condiments of all sorts must be wholly discarded. The diet must be made very plain and simple, but inviting and tasty. Fruits, especially stewed fruits, prepared with the smallest possible amount of cane-sugar, or better by mixing sour and sweet fruits, and such ripe fruits as strawberries, peaches, and grapes are highly useful in these cases. Oranges may be freely used with advantage except in extreme cases of gastric catarrh and gastric ulceration.

The patient must be encouraged to live as much as possible in the open air. In cold weather he should sleep with the windows open, being protected by plenty of blankets and necessary wraps about the head and shoulders.

During the preliminary period in which the above treatment and regimen are being carried out, the patient is encouraged to reduce the quantity of the drug as much as possible. But the withdrawal is not carried to the point of inducing great nervous disturbance, pain, or sleeplessness. In most cases the quantity may be easily reduced one-half in the first three or four days without the patient's suffering any particular inconvenience. Sometimes even a larger amount may be withdrawn during this preliminary period.

When, finally, the patient's condition is believed to be satisfactory, preparation is made for complete withdrawal of the drug. The patient is placed in a room containing a bath tub, or having a bath room adjacent. Two attendants are provided, and preparations are made for a busy and interesting time. For twelve to eighteen hours there will be an earnest struggle,—not that the patient is going to suffer to an extraordinary degree, but the attendants will have their hands full to do all the things that may be done and should be done to help the patient in his struggle for freedom. It is generally wise to begin the withdrawal by omitting the morning dose

the day before the drug is to be withdrawn altogether. The next day the evening dose is omitted. The following morning the patient receives the usual treatment, but stays in bed. He is urged to eat as much as his appetite will permit, of easily assimilable food, particularly such foods as rice, white bread, zwieback, sweet fruits, peas purée, vegetable broths, fruit purées, fruit toast, fruit soup, eggnogg made with fruit juice or kumyss, no brandy or alcoholics of any sort, buttermilk or kumyss, and perhaps some simple nut products. It is, in most cases, better to make the food consist almost wholly of fruits and light cereals, as these tax the digestive organs to the smallest extent possible and do not disturb the liver and kidneys.

Soon after the time for the evening dose the "tug of war" begins. The patient should be encouraged to drink freely of fruit juices, hot lemonade, apple juice (not cider), grape juice, and similar preparations. He may eat as freely as he likes of apples and other fresh fruit, taking care to masticate well. He should be given a fomentation to the spine, a wet towel should be wrapped about his trunk, covered with warm, dry flannel, and great care should be taken to keep his arms and legs warm by vigorous rubbing and warm wrapping. Rubber bags filled with hot water may, if necessary, be placed about the feet and legs. He should be encouraged to remain as quiet as possible, and should be cheered with the thought that, while he may suffer some from inconvenience for a few hours, the struggle will be over by nine or ten o'clock the following morning, which will be found to be true almost universally, and in many instances some hours sooner.

By nine or ten o'clock P. M. the patient will very likely become very nervous. This nervousness may be relieved by a prolonged wet sheet pack or a prolonged neutral bath. The temperature of the neutral bath should be from 92° to 96°. The wet sheet pack should be managed in such a way that while the patient warms up well he will not be overheated so

as to produce perspiration. Care should be taken to keep the head cool in the pack. For full directions respecting the pack the reader is referred to the author's work on hydrotherapy.*

The calming effect of the neutral bath and the wet sheet pack is, in many cases, simply marvelous, and in nearly every case very marked results are obtained. The patient may remain in the bath or the pack from an hour and a half to two hours. Often a little sleep is obtained. Sometimes the patient will sleep soundly for an hour or two if the bath is managed in such a way as to make him comfortable. Care should be taken not to overheat the bath nor to make the temperature so low as to produce the slightest degree of chilliness. The patient may be rubbed, with advantage, in the bath, especially if he feels slightly inclined to chilliness. The temperature should never be higher than 97° , nor lower than 92° ; 94° to 96° is about the average temperature required. The exact regulation of the temperature is a matter of the highest importance. Either the bath or the pack may be repeated several times during the twelve hours following the complete withdrawal of the drug. No harm will result if the patient is kept in the bath or pack continuously for eight to ten hours. Water at a neutral temperature is not depressing. Very hot baths and very cold baths are exhausting, but the neutral bath produces sedative effects without exhaustion by excluding the irritating effects of external stimuli, and by obtunding the nerve-endings of the skin through the inhibition of water.

When not in the bath or pack the patient should receive, almost constantly, attentions of some other sort, such as rubbing the head, rubbing the arms or the legs, massage of the back, alternate applications of hot and cold compress to the back, or alternate sponging of the back. These manipulations serve not only to occupy the patient's mind and divert his at-

*Rational Hydrotherapy, the F. A. Davis Co., Philadelphia, Pa.

tention from his sufferings, and thus relieve the tedium of the ordeal through which he is passing, but also maintain an active circulation in the skin and so lessen the congestion of the nerve-centers and the important viscera. The general circulation of the blood is assisted and thus the heart is relieved, and evidences of cardiac failure do not appear. If, however, there are symptoms of this sort, relief is very promptly obtained by the application of the ice-bag or a cold compress over the heart, and by alternate applications to the spine. Alternate applications are made as follows: A very hot fomentation is applied for one minute; it is then removed and the spine, from the base of the brain down to the lumbar region, is rapidly rubbed for fifteen to twenty seconds with a piece of ice placed upon the bare skin; the fomentation is then reapplied for one minute, and followed by the cold, repeating six to ten times.

Applications of this sort have an excellent effect in toning the heart, while at the same time lessening the nervous irritability.

An ice-bag applied to the back of the neck exerts an excellent tonic effect upon the heart.

Troublesome looseness of the bowels requires a large hot enema followed by cold compresses applied to the abdomen, and changed every five to ten minutes, or as soon as the compress is perceptibly warm. Hot enema should be administered after each movement. The patient should be kept in bed, if possible, which not only facilitates treatment, but also saves the patient's strength, lessens the labor of the heart, and diminishes portal congestion. Very great exhaustion requires frequent rubbing of the limbs with the hands dipped in cold water, or with a wet friction mitt. Each limb should be rubbed in this way until it is red, and it should be then wrapped in warm flannels, and the other limb treated in like manner.

It is very rare indeed that a patient treated in this way

will not be quite relieved of the extreme craving and nervousness which appear after the total withdrawal of the drug, within ten to twelve hours. He will be left quite weak, of course, but will be relieved of the extreme nervousness, and able to rest quietly in bed. The alternate applications to the spine, above referred to, the cold towel rub, or the cold mitten friction should be employed every two or three hours for a few days, or at least three times daily.

The patient should be fed chiefly on liquid foods, especially fruit juices, toasted bread and granose, stewed fruits, ripe fruits in season, vegetable broths, buttermilk or kumyss, and boiled rice. If the quantity of food taken at the meal is small and chiefly liquid, the patient should be fed four times a day.

For a few days the patient is likely to suffer from insomnia. The wet sheet pack and the neutral bath may be relied upon for relieving this condition in by far the great majority of cases. During the first night or two the patient may be allowed to sleep in a bath or pack. Generally, however, the application of the pack for an hour, or an hour and a half, will be sufficient to bring the patient into a condition favorable for sound and natural sleep without drugs of any sort. I rarely ever find it necessary to resort to hypnotics of any kind, and when I do so I usually regret that I have done so. I find that the patient's sufferings are only postponed and thus prolonged by this means.

In some instances the neutral douche is preferable to the wet sheet pack or the neutral bath. The douche is administered at a temperature of 92° to 94°, and with sufficient force to redden the skin; it accomplishes the same results as the neutral bath, but in a much shorter time, the duration required being three to four minutes.

The general nervous weakness which follows the withdrawal of the drug in these cases may be successfully combated by cold rubbing three or four times a day, and especially by the cold douche to the back. A cold percussion douche

is preferable to the ordinary jet douche. The patient should be thoroughly warmed before the application is made, either by a very short electric light bath or some other hot bath of brief duration, or by dry friction of the whole surface of the skin.

Very delicate patients who do not well endure general cold applications must be carefully trained by a graduated course of treatment, beginning with the cold wet hand rub, and advancing by regular stages to the cold friction, the cold towel rub, the wet sheet rub, the shallow bath, the rubbing wet sheet, and finally the cold douche or shower bath.

Such a course of training may require several weeks, even two or three months; but it is essential, as a means of building up the patient's vital resistance, and fortifying him against relapse. The effect of such a course of treatment will be to improve the patient's digestion and all his metabolic processes; his leathery skin will become clear, his countenance fresh, his cheeks rosy, his eyes bright, the muscles will become elastic and enduring, his appetite will improve, oxidation will be increased, uric acid will diminish, and the processes of the body will gradually approximate the physiological state.

These promises are not based upon theory, but are constantly verified in practice at the Battle Creek Sanitarium and its more than seventy branch establishments in different parts of the world where these methods are in daily use. The manual Swedish movements, massage, graduated gymnastics, especially out-of-door exercise, the sun-bath, the out-of-door exposure of the body to the air and light in the outdoor gymnasium, the swimming bath, the sand bath, — all these and other measures whereby the body may be hardened and the constitution built up in natural and physiological ways are essential for the health-training of the victim of drug addiction, so that he may be made a normal man, and thus be prepared to resist successfully the evil tendencies which he may

have acquired as the result of an unnatural life, or may suffer because of unfortunate hereditary entailment.

The treatment of chronic alcoholism, the opium habit, the tobacco habit, addiction to tea, coffee, chloral, ether, and other drugs, rest upon essentially the same principles. Alcoholism and the cocaine habits present practically the same problems as the different forms of opium addiction. The tobacco, tea, coffee, and other drug habits are easily overcome, provided the patient gives sympathetic coöperation.

The regimen above outlined, and a simple course of sweating baths, followed by tonic cold applications, are the only measures required to cure the tea-toper or the most inveterate tobacco-user. While some of the ideas presented in this paper may seem to be radically opposed to prevailing notions, I trust that a careful study will suffice to show that they rest upon a physiological basis, and I know, from my own experience, that a practical application of the methods suggested will be sufficient to persuade the most skeptical of the practical value of the procedures described.

Persons who become inebriates have often a history of what is called odd spells before alcohol is used. These so-called spells are either fits of depression, great excitement, or strange indifference and neglect of the ordinary duties. Alcohol is taken as a medicine, either from the advice of the physician or from desire for relief. As one man expressed it, hypos bothered him for years before he used spirits; since then he had been free from it. Dr. Brower describes a condition in which the peculiarities of the patient were relieved and he was brought back to a normal condition after the use of spirits. He described such a case as when under the influence of liquor he was a sober, rational person. When abstaining he was flighty, erratic in speech, manner, and acts, and in reality he was never sober and rational unless he was under the influence of spirits, and was always crazy and wild when sober.

ALCOHOLISM; ITS CONTROL AND CURE IN SANATORIIUMS.

BY GEORGE H. MCMICHAEL, M.D., Buffalo, N. Y.

Superintendent Sanatorium for Inebriates.

There are probably as many proposals for the solution of the liquor problem as there are sides to the question. As the evil is to some extent one of the people's own choosing, it has been suggested that a popularly elected body for the control of the sale of intoxicants would have the effect of doing away with as much of it as would be found to be desirable. Some people profess to believe that the poor quality of the alcoholic beverages on sale in the saloons has much to do with what we know as excessive drinking, and they assert that by the prevention of adulteration and by the enforced maturing of spirits a great amount of inebriety might be stopped. This view is not held by scientific men and is not tenable, because it is the ethyl alcohol in all intoxicants which produces drunkenness, and well-matured whisky is as powerful an intoxicant as any new liquor that can be obtained. Further, in some cases "bad" whisky and "poor" beer are comparatively harmless, as they have been largely diluted with water before being sold.

A second class of reformers say that no more need be done than simply to enforce the law as it at present exists, and drinking to excess would soon be a thing of the past. This remedy, however, involves a technical definition of what constitutes "excess", and it ignores the all-important fact that alcoholism is something more than a bad habit.

A certain number of persons advocate total prohibition of the sale of liquor whether the majority of the inhabitants wish it or not, and these gentlemen are not averse to a sacrifice of the opportunities of the many in order to save a few excessive drinkers. As is now well known, legislative experiments outside New York State have shown that prohibition has little practical result and leads to a considerable amount of illicit drinking, which is obviously objectionable.

As the law now stands in this state (N. Y.), excessive drinkers are regarded as criminals, and are usually sent to prison, when they are not able to pay a fine. Some of them, however, are committed to the lunatic asylums now known as "state hospitals", where they derive no more benefit than those sent to the penitentiary, because they receive neither medical nor moral treatment. They are simply detained for a period, and are then discharged as "not insane"; and they usually resume their drinking habits as soon as they are outside the asylum. Compulsory abstinence alone has never cured alcoholism — and never will. My idea of the detention of excessive drinkers, — reputable persons, who have not been guilty of any crime, — is not the idea carried out at the prison or the insane asylum. I propose to describe it in detail hereafter, but at this point I may mention the general mode of treatment which I have adopted for a number of years and which has proved eminently satisfactory. Briefly stated, it consists of suitable medical attention specially adapted to each case, — for there is no specific for alcoholism, any more than there is for other diseases of the nervous system, — proper diet, baths, and general hygienic measures, in addition to such moral influence as will control the patient's action during his daily exercises, and semi-freedom until the time when he becomes able to take care of himself. The assistance of carefully selected attendants is, of course, necessary.

There are, and have been for years, a number of scientific men, chiefly physicians, who consider that the only way to

deal with alcoholic inebriety is to face the undoubted truth that excessive drinking is a disease — not a mere bad habit — and that it can be cured by medical treatment, always provided that the patient is placed in a sanatorium where he will have proper care, suitable surroundings, and a satisfactory diet. For fully twenty years, the medical profession has told the public that there is a period in all excessive drinking when the vice becomes a disorder, when the alcoholic should be called a patient, and when he can no more be held capable of choice or of self-restraint in the matter of drinking than an epileptic can be supposed to be capable of avoiding a fit by an effort of will-power. Accordingly, it has been and is the recommendation of science and of medicine that the drinker should be cared for in a sanatorium where only this class of patients is treated. If I have repeated somewhat frequently the necessity of sanatorium treatment, I have done so in order to make it plain that alcoholism cannot be cured unless the patient lives in the house with the physician under whose care he is.

The law of the State of New York in regard to inebriety is most unsatisfactory. A statute is needed which would enable the friends of alcoholics to obtain medical treatment for them, if they are unwilling to submit voluntarily to it. The county judge or any Supreme Court judge ought to be empowered to grant an order upon the certificate of any duly licensed physician, requiring the patient to remain in a sanatorium for one or two months, during which time he would be regarded as a sick man and treated as such. This method would stop the drinking to excess of a certain number of persons who cannot, at present, be restrained by law, and who persistently refuse medical aid in any form. They are unable to cease drinking of their own will, and yet they cannot believe that they are suffering from a serious disease. The "control" of which I have written should take the form of a suitable companion or nurse who would accompany the patient in his walks and daily

exercises, so long as he was unable to take care of himself. My experience is that as soon as the excessive drinker realizes his condition, and finds that his health has been benefited by his brief stay of a month or two at a sanatorium, he regains his normal self-control and feels and acts as a man among men. It is to the credit of alcoholics that when they are under treatment they pay every attention to the necessary details and are anxious to get well.

My belief is that a court order to compel an excessive drinker to take treatment would not be necessary in most cases, because I feel confident that just as soon as the state recognizes that alcoholism is a disease, and provides a law for the advantage of those who suffer from it, the inebriate will understand the position in which he is placed, and will voluntarily accept the advice of his friends to take treatment at a sanatorium for his own good, and without resort to coercive measures. It is true that today many good men hesitate to place themselves in the hands of so-called "specialists" who profess to treat alcoholism, and the reason is not difficult to find. Experience has shown that these "specialists" give every patient the same stock prescription without individual attention or hygienic measures. In some instances the "treatment" consists simply of a certain number of hypodermic injections for a fixed number of days, in exchange for a certain amount of money. No words are strong enough to condemn this process, which has done so much to bring the treatment of alcoholism into disrepute. The persons who are guilty of the practice are not infrequently itinerants, and their stay in any town or city is usually short. It is not surprising that they have failed to secure the confidence of intelligent men. I would go so far as to suggest that sanatoriums for the treatment of alcoholism should be licensed by the state, and that such institutions should be regularly inspected, — perhaps four times a year. If this were done, good results would soon be obtained, and a permanent benefit would be quickly felt in every circle in which a patient had been cured.

Alcoholism is a disorder which kills its victim surely, but quite slowly, and during its course it brings much misery to the sufferer, to his family, and to the community in which he lives.

As it is certain that the children of excessive drinkers inherit a predisposition to fall victims to the disease to which their parents were predisposed before them, it is most important that these boys and girls should be protected from the example of a domestic environment in which drinking habits are prevalent. As we cannot at present interfere with the right of any man to marry and beget children, the proper remedy for the evil is to take the drinking parent away from his home until such time as he is cured, even if he is at first unwilling to be separated from his family.

I am probably well within the mark in saying that for one man who is born with the alcoholic susceptibility there are three who are educated to excessive drinking by their environment.

Fortunately, the educational influence of scientific treatment is almost certain not only to cure such men, but also to immensely increase their children's chances of overcoming the inherited predisposition.

If efforts were made to carry out successfully such a statute as I have suggested, time would undoubtedly prove the necessity of extending the period of detention of those for whom a few months' treatment is found insufficient. Still later perhaps a statute might be necessary which would provide for the detention of all persons who have come before a court as a result of crimes committed under the influence of drink, or to which drunkenness has contributed, and for a similar detention of all offenders who have been convicted three times in any one year of acts of drunkenness which the law regards as offenses. This system would be of permanent benefit to the patient himself and to the taxpayers, which is far more than can be said from the existing system. As I have already said,

as the law now stands, the habitual drinker returns to his former way of living just as soon as he gets out of the penitentiary or the asylum.

The general effect upon the community of the scientific treatment of alcohol seen among all classes would be most beneficial. As a result, posterity would have to bear the greater part of the blame for its drinking habits, because the present generation would have taken the necessary precautions to cure, wherever possible, those who would be looked back upon as "drinking ancestors" if such method had been adopted.

New York State, the Empire State of the Union, ought not to lag behind in any matter which is of vital importance to the people. It is no exaggeration to say that here are no problems which equal the drink question in its far-reaching effects. The legislature ought to deal with the subject without delay, for the evil is increasing every day, and will continue to increase until some measure similar to the one outlined in this article is placed upon the statute book.

Morphin Dipsomania. Krafft-Ebling uses this term to express the temporary resort to morphine to relieve an attack of melancholia. The subject in the case he describes was not addicted to morphine and had a horror of it; but sought oblivion in it, the equivalent of alcoholic dipsomania. The case demonstrates anew that dipsomania belongs to the epileptic neuroses. The epileptic character was established in this case by a traumatic origin, the vertigo, the great irritability during the attacks, the ideas of persecution, the twilight state, deambulatis, and amnesia. It is possible that melancholia, with its reactive impulse to drink, may be a psychic equivalent for an epileptic insult. It is remarkable, he adds, that there are so many clinical points in common between dipsomania and epilepsy. The abuse of alcohol may have an epileptogenic tendency, and renewed abuse of it may arouse this latent tendency and induce epileptic phenomena.

IS MODERN PHARMACY INIMICAL TO MORAL
HEALTH?*

BY N. ROE BRADNER, M.D., WISSINOMING, PA.

It is not the noble art, nor yet the justly respected pharmacists, we would question, but the abuse of both. There is probably no avenue to success open to the enterprising student that is unwatched by unscrupulous amateurs, first to dabble, then to become obnoxious mountebanks.

From time immemorial human nature has had a weakness for medicinal cures and their venders; and, strange as it is, it is no less true that the more ignorant the quack and the more worthless his nostrum — the more the one is unlikely to be acquainted with the nature and cause of disease, and the longer common sense ignores his fluids and filters — all the greater is the faith of the multitude in them. Time and time again have I seen both men and women, even those possessed of competent small fortunes, to travel hundreds of miles to consult an Indian or idiot doctor. Just let such an aspirant have long hair, and a long and gaudy watch chain, and — well, that is enough. I must, and I do, freely confess that I believe this miserable infatuation is less prevalent now than formerly, at least its votaries are less numerous, or at any rate, less conspicuous; but I am not sure that the change is wholly a desirable one. Formerly it was usually an ignorant man or woman, whose agents were simple, usually inert, such as burnt hair, herb tea, and such like; but, as we've inferred, American people have grown wiser, and thrown superstition overboard. But, alas! in their places have sprung up a more dangerous

* Read at the semiannual meeting at N. Y., Sept., 1902.

class of quack doctors, many of them graduates of perhaps respectable medical or pharmaceutical colleges. These with some knowledge of medicine, and its preparation, but wholly without principle, without an honorable inspiration; untrammelled alike by any fear of doing evil or desire to do good; able to use catching phrases, and perhaps talk well, if not wisely — such men are our real antagonists today, and they are menacing the moral health and safety of our present generation.

Within a few days I saw an authorized report of the cost of last year's newspaper advertising of such an one, and it was eight hundred thousand (\$800,000) dollars! Another recently offered to donate to his city two million (\$2,000,000) dollars to build some kind of an institution of his fancy. These are hardly exceptional cases. They are numerous, and when we contemplate the number of people who must contribute the money to support such princely extravagance, why, it is astounding. And what is the consequence? Why, millions of people, of every section of our country, are becoming drug habitués. The foolish nostrums of ignorant Indian doctors, witches, seventh son of a seventh son, etc., were surely fraudulent, but generally harmless; but not so the beautifully prepared tablets and cordials of the impostor armed with a college degree, and a smattering of learning. The first thing such a man learns is to make his remedies actually felt, nay, alluring — seductive; aye, imperative and positively indispensable; and how easy to do this with a little morphine, cocaine, or, if not, indeed the most dangerous of them all — chloral. But the poor victims, they are already in the toils, and their name is legion. Your own hands are full of them. Every one of you, my colleagues, knows our country to be today full of wretched men, and wrecks of minds of men and women, young and old, many of whom were thus taught the tenacious drug habit through quack medicines, nostrums advertised to be harmless, labeled some catching pharmaceutical

name, but secretly, criminally, containing soul-destroying narcotics.

We doubt if the curse of alcohol itself, in all its reign of thousands of years, has produced more dreadful havoc of the soul resting in thought's mysterious seat than have these new remedies, all, with the exception of opium, having come to human knowledge within the past very few years; those remedies, so useful in skillful, honest hands, so dangerous in the hands of the ignorant and unprincipled, and so much more dangerous in the hands of the unscrupulous, the renegade doctor, the worst of villains.

So far, I think all must agree with me; but now I would go a step further, whither all may not be willing to accompany me. I think the superabundant manufacture of all kinds of narcotic and intoxicating agents, made up in the most convenient and sedative style, even though designed for, and at first only distributed to, members of the profession, is dangerous, and that already we've seen fearful results. Alas, doctors themselves are but human, after all, and who could number those who have fallen?

The factories and the manufacturers of these various new and elegant preparations are not merely numerous, they are almost innumerable, and millions of their missiles go unopened into our waste baskets, while your desk and mine, and about one hundred thousand doctor's, in every section of the United States, are littered with samples of this, that, and the other, ever so many new remedies, most artistically put up. Let us analyze a case or two.

In an idle moment the doctor picks up one of these recent communications, with the accompanying sample, first to glance at it, while finishing his cigar. He thinks it foolish to send him so much of this kind of stuff that he doesn't want; but reads on, including the testimonial of some other M.D., perhaps a double-titled professor, peradventure himself a silent partner in the business. Hello! this is for insomnia.

Now it chances that the poor doctor is often too tired to sleep, and this attracts his attention.

I won't take morphine, soliloquizes he, but suppose I quietly try this fool thing just once. He tries it; he sleeps, for even mild sedatives are apt to effect a result at first, even if their effect is soon powerless. The next night he tries it again. Then the third night, the fourth, and so on until he finds his sample box empty and orders another, accompanied, perhaps, by his own testimonial as to its efficacy, not yet dreaming of the insidious consequences of the drug beautiful, or the baneful influence tightening about himself.

This is no dreamy sentimentalism. It is true. I tell you too many medical men begin in just this way to take something to induce sleep or alleviate pain, and then keep it up from sheer force of habit, until it seems indispensable, and then loses its power over him, leaving the wretched man in a condition to suggest something stronger, perhaps chloral, morphine, or cocaine, and thus begins the fall of another good man. But it is not always the doctor himself who is the victim. Sometimes, and too often, it is a poor woman, broken down with labor, sorrow, and nervous trouble. The kind-hearted doctor gives her the sample, box and all, thinking to save her a little drug store expense. Fatal mistake! The woman is relieved, she becomes exhilarated and keeps on until the last tablet or capsule is reached, but she treasures the box. It is empty now, but she knows its value. Does she return to the doctor? What is the need? No! She takes the box to the apothecary, saying: "This was prescribed by Doctor ——. I want another box." She gets it. Or, if the druggist has it not in stock he tells the woman he is just out, will have it tomorrow, when she calls and gets it.

There is no trouble about it. Every druggist cannot be expected to keep on hand all the thousand new remedies, especially as a postal card will fetch it next day.

Now this woman is doomed. She revels in the intoxica-

tion of the new remedy for a period, longer or shorter, according to its degree of power, until her condition demands stronger nervines, and she gets them. How? Oh, it is easy. The facility with which the ignorant or the public can obtain dangerous drugs is one of the shameful things of our times. I have learned that negroes have been taught the intoxicating properties of cocaine, and that they are very fond of it. I've read of communities where it is common for negroes to frequent drug stores for ten cents' worth of cocaine, and where they get it without trouble or question. Knowing its danger, as you do, gentlemen, what, I ask you, is to be the consequence of this criminal negligence? It is not my purpose to dwell at this time upon individual drugs, but rather to direct your attention to what seems to me a tempting presentation of a dangerous class of drugs in which I think should be included perhaps a score of coal-tar derivatives. Many of these, unquestionably useful to the medical practitioner, become extremely dangerous when they fill the mantel shelves and closets of half our residences. Some of these surely possess properties sufficiently dangerous in themselves to restrict their distribution to physicians; but I think their chief and crowning danger lies in the irresistible appetite they produce for more potent drugs of the same general class. From my own personal observation I believe the two most dangerous drugs of all our great pharmacopœia are cocaine and chloral. Their seductive charm to the novice, their irresistible and unrelenting grasp upon any one who once yields to their influence, and their sure and rapid destruction of body, mind, and soul, all are terrible to contemplate. During the short time it has been known to the profession cocaine alone has caused the destruction of more doctors than probably any other drug ever did within the same period.

Oh, then, is it not to be feared by the strong and the wise man, and is it not to be regretted and sadly deplored that there are so many tempting preparations of tablets, wines, pills,

and powders containing cocaine and all so easily obtainable by anyone?

Thrice have I spoken of the soul and its destruction, and yet we believe the soul to be indestructible, wherefore my expression should be explained. Far be it from my desire to enter into any metaphysical discussion, so I freely confess I know not what the soul is. I believe in the accepted theory that it is the invisible, indefinable part of us that is to represent us hereafter when our bodies have decayed and disappeared, and that during our natural lives represents us in any communication with our Creator. Wise men are prone to think of these things, and when we contemplate the awful responsibility of giving tenancy to an ambassador, as it were, from the Court of Heaven, man regards the tenement, keeps it clean and in order. Not so the drunkard, deprived of these sublime thoughts. He cares not, he thinks not, of them. He is reduced to animal existence. His soul, his mentor, his guardian angel, is silent. He is lost to his own soul, and this is what I mean when I say these demoniacal drugs destroy body, mind, and soul.

Lombroso, who is the greatest living authority on criminology, recently had an opportunity to test scientifically the effects of alcohol in developing latent criminal tendencies. The subject of his experiments was a man who had surrendered himself to the police with the avowal that Anarchists wished to make him their instrument for assassinating the King of Italy. The man seemed sane, but no corroboration of his story could be obtained. Unexpectedly, after drinking wine, he broke out into Anarchistic threats. Acting upon this hint, Professor Lombroso administered alcohol to him in carefully measured quantities, and discovered that after he had drunk a certain amount he developed violent criminal tendencies, all recollections of which appeared to have vanished from his mind when the effects of alcohol had passed off.

THE EFFECT OF ALCOHOL UPON THE NERVOUS
SYSTEM, THE MIND AND HEREDITY.*

BY ALBERT E. STERNE, A.M., M.D.,

Supt. Sanitarium for Mental and Nervous Diseases, Indianapolis, Ind.

Alcohol has a twofold effect upon the nervous system, a *direct* or *primary*, and an *indirect* or *secondary*. Either of these may act physiologically (*i. e.*, functionally) or pathologically (*i. e.*, structurally). Either may and does unfold its force upon every part of the nervous system, brain, cord, and peripheral nerves; in fact, upon every organ and tissue of the body, notably upon the *blood vessels*, particularly of the brain, the kidneys, and the liver.

As you realize, the subject is too big to render justice to within the limits of a paper like this, and I shall therefore be forced to confine my remarks to a narrow domain.

Upon the nerve tissues alcohol has an *acute* influence. This can be best studied by experiments upon animals and by the effects shown in fatal poisoning with large amounts of alcohol in persons unused to its influence. Of the ordinary state of acute intoxication, I need not speak. That picture is familiar to all of us.

In a very able paper, Dehio¹ some years ago demonstrated changes in the ganglion cells of the cerebellum produced by acute alcohol poisoning. A year later, Stewart²

* Read at Boston meeting of the Association for the Study of Inebriety, Dec. 16, 1902.

¹ Heinrich Dehio—Experimentelle Untersuchungen über die Veränderungen der Ganglienzellen bei der acuten Alkoholvergiftung. *Centralbl. für Newenheilkunde und Psychiatric*, 1895. N. F. 6-113.

² Influence of Acute Alcohol Poisoning on Nerve Cells.—Colin C. Stewart. *Jour. of Experimental Medicine*. Vol. 1, 1896, p. 623.

confirmed and extended the observations of Dehio, which consisted in the diminution of the chromophile granules of the nerve cells of the cerebral cortex, the Purkinje cells of the cerebellum, and the large multipolar cells of the spinal gray matter. The importance of these changes is vastly increased in the light of the theory that the ganglionic cells possess certain powers of motility of an amœboid nature which permits them to extend and to retract their cell-prolongations to a slight degree, producing normally a contiguity of structure *without* continuity. In this theory I believe, for it is the only one which explains to me the phenomena of life, both in rest and in activity. Into that, however, I cannot enter further at present.

I have in mind a unique, unpublished case which may bear a close relation to the observations of Dehio and Stewart. It is that of a young man who, about one year ago, was referred to me. The patient presented a most curious complex of symptoms, which I have nowhere found described, and which I herewith take the opportunity to record.

Mr. F. W., white lad, farmer, age 19 years, had up to about seven months previous to my seeing him been quite well, constantly engaged at work upon his father's farm. During a period of perhaps a year before any symptoms had become manifest he had been drinking somewhat, but had never indulged to intoxication, I was informed. Gradually a general lack of nutrition set in, he began to lose weight and strength, and, almost imperceptibly at first, peculiar spasmodic seizures supervened. These attacks were wholly motor in character, occurring, as the malady developed, more and more frequently until, when he came to my Sanatorium, they were almost constant, recurring at the actual rate of about once every two minutes, day and night. During the entire period of the affection the appetite was excellent, no symptoms were shown by any of the internal organs, no sensory changes were manifest, nor were the secretions altered, save that the urine

was somewhat scant and perspiration slight. In fact all symptoms related to the motor nerve sphere, though at *no time* was there the *slightest degree* of *paralysis* noted. The seizures were characterized as follows:

Every few moments the muscles became tense and rigid, apparently all over the body — trunk and limbs — face, neck, eyes, tongue, larynx, cesophagus, etc. During the attack he could usually make voluntary movements, but he would walk, talk, breathe, and swallow with difficulty. The facial muscles and masticatory muscles became “set” and the neck stiff. There never was any inclination to opisthotonus nor the slightest loss of consciousness. No vasomotor signs were present, the cutaneous and pupillary reflexes were normal, but the deep tendon reflexes were somewhat increased. He suffered no pain whatever, but some muscular soreness existed, doubtless due to the muscular contractions.

At the first examination, I declined to give a positive opinion of the case, but expressed the conviction that the malady would not remain stationary, that it would either prove rapidly fatal, or he would recover under proper treatment within a few weeks, advising careful observation and treatment at the Sanatorium. At the time I felt sure I could bar out an hysterical affection of which no symptom was shown. My advice was followed, and the patient remained under my immediate care for nine weeks. During this period he steadily improved under static electricity, massage, and the use of Tr. Gelsem., ten drops thrice daily, until complete recovery occurred. The seizures gradually decreased in frequency and intensity until they ceased altogether. I would perhaps not have mentioned this case in this connection except for two facts.

First, the only etiologic factor to be elicited was that he had used alcoholic drinks before the affection obtained, and, secondly, upon three separate occasions, when he had almost recovered, friends came to visit him and he indulged in a glass

of wine with the result that each time the attacks recurred with their former force and frequency, proving to me conclusively that there existed the most direct relation between the seizures and the use of alcohol, which produced this peculiar multiple paramyotonic condition. I have never heard of a similar case.

Undoubtedly, many other examples of the toxic character of alcohol and its influence upon the nervous system could be cited. I need merely make mention of the analogous states known as delirium tremens, due to the excessive use of spirits containing large amounts of fusel oil; of the ordinary phenomena of acute intoxications in which the loss of inhibitory power in all spheres is of such common occurrence, that it is usual to accept the opinion of the stimulating effect of alcohol upon mental activity. This opinion I regard as decidedly erroneous. There is a vast difference between increased functional brain power and diminished inhibitory power, but momentarily the apparent effect may be similar.

When we come to speak of the more chronic condition called "alcoholism" we meet with a very different entity. Here can be best seen the effect of the poison upon the nervous system, owing to the fact that widespread changes have taken place in the central nervous organs.

Of these changes those of the vascular system of the brain are by far the commonest. It would appear, therefore, that the effect upon the nerve tissue itself is purely secondary,—due, in other words, largely to malnutrition of the nerve elements. The alterations in the structure of the artery walls are widespread and frequently reach a high degree, even to obliteration of the blood-vessel lumen and consequent softening of the brain tissue. Even a slight degree of textural change in the arterial structure is apt to be followed by an array of symptoms, made up chiefly of those in the motor field, such as tremors, weakness, etc., and those appertaining to the highest

functions of judgment, memory and other intellectual faculties.

Of the many pathologic conditions supervening upon the use and abuse of alcohol through a long period of time, it is surely unnecessary to speak at length to this assembly. I need merely mention the frequent inflammatory processes of the peripheral nerves, termed "alcohol neuritis," and reiterate the importance of the structural alterations of the blood-vessel walls, with increased arterial tension, loss of vascular elasticity, consequent infiltration with calcium salts, producing arterio-sclerosis and endarteritis, which makes the danger of apoplexy lie close at hand. It must be recollected that *no healthy blood-vessel ever bursts save and alone as the result of traumatism. Whenever and wherever an artery breaks, except it be due to injury, the vessel must be diseased.* Moreover, no single factor contributes so largely to disease of the blood vessels as much as the chronic use of alcohol poison. I have already alluded to the psychical changes of such individuals, to the loss of judgment, memory, and the other intellectual faculties, inducing changes in the products of the brain,—the mind and morals. It is this which brings this question into close relation to civic life, which makes it the greatest civic psychosis.

Before speaking of the influence of alcohol upon the mind, let me preface by saying that there exists in almost every case of insanity a well-marked predisposition of the individual to the development of mental disease. It would follow, therefore, that few persons of actually sound condition, anatomically and physiologically, ever fall victims to these affections. Again it naturally follows that the weaker the inducing cause, the more pronounced should be the tendency toward deterioration. Conversely, it may be said, the more marked the atavistic tendency is, the less will be required to assist in the transition from the realms of sanity to those of mental disease.

Of the minor — practically merely contributing — factors may be mentioned overwork, overstudy, emotional effects of an occasional character, the strain of acute diseases, and religious influences. You will understand that I nowise under-rate the dignity of these elements, whose import is disproportionately increased if they become coincident with the physiologic periods of life.

Among civilized peoples, it has for generations been rightly deemed necessary to segregate the mental sewage of humanity. It should, therefore, be recognized as equally incumbent to thoroughly inquire into the chiefest causes through whose malignant influences these channels are kept full to overflowing. By such investigation, and by the lessons it teaches, can we alone hope to stem the steadily — if slowly — increasing tide of human forces whose awful effect is best seen in our insane asylums and in their close relations, the penitentiaries.

I have long adhered to the view that every disease has a basis to start upon, and that no so-called "drug habit" forms an exception to this rule. Chronic alcoholism and its sister maladies, like morphinism, develop upon a pronouncedly neurotic basis, and it seems to me the lack of success in the treatment of these affections is largely due to the fact that this neurotic element has been neglected. Allow that foundation to remain and the malady recurs. Alcoholism and similar vices belong to the realm of borderland, that great expanse abutting upon insanity, and it takes but slight contributing cause to pass over into the latter.

It has already been intimated that every individual case shows more or less predisposition to deviation from normal mental and moral standards. While this is true, the import of this is almost lost in comparison with noxious social and civil influences which are unfolding widespread effects. I realize fully the importance of the assertion when I say that society and its social laws, civil life and its license, are almost

wholly responsible for the overcrowded condition of the insane hospitals and prisons, homes of the mental and moral degenerates. A charge so serious should be well founded. I shall seek to justify it.

The evolution of the human race is but the evolution of the individuals composing it. To evolve a perfect race, perfect individuals must be evolved. No nation passes into decadence and degeneracy save through the decay and degeneration of its components. Such truths must be quite apparent. Let us ask ourselves, then, what elements are mainly at work in the production of individual mental and moral deterioration, for the time being leaving entirely unheeded the many minor incidental factors.

The main causes I have already stigmatized as social and civic evils. To these I count habits of all kinds, yet most of all the use of alcoholic drinks; to these I count the lack of hygienic principles which permits the gross spreading of diseases; to these I count, most important of all, the total disregard shown throughout the world to the bringing into it of human beings unfit to live. Daily thousands of poor bundles of humanity are born into life with infinitely less concern for their future welfare and perfection than is exercised in breeding of our commonest cattle.

Alcoholism is a disease, an enormously frequent disease, whose ravages are tenfold worse than any other known to me, for, unlike them, its effects are not arrested by death. It is neither my purpose nor my desire to inveigh against the use of alcohol, but to bring to your notice the malignant effect of its abuse. You must recognize alcoholism in its chronic form as a disease. It is attended by a huge array of symptoms. Suffice it to say that chief among them is the material change in the structure of the blood vessels, notably in the brain and kidneys, and that secondarily—and sometimes primarily—minute alterations in the intrinsic nature of the brain cells occur, which ultimately bring about total wreck-

age, physical, mental, and moral. Unfortunately, there is nearly always a marked tendency of neurotic character present which permits the development of any vicious habit, and this tendency is decidedly transmissible and augments by transmission. The appalling truth of the latter statement is amply verified by experience with the innocent offspring of alcoholists. Go into our homes for the feeble-minded, enter the reformatories for boys and girls. There, surely, personal histories repeat themselves. There, surely, the traits and tendencies of ancestry can best be studied and the secrets of hereditary burdening and bondage be learned.

The influence of heredity has never been questioned in the domain of psychology, normal and perverted. Yet it must be plain that to speak of heredity means simply to accentuate certain phases of transmission, good and bad. With few specific exceptions, disease is never handed down to the progeny from the ascendants. As we inherit peculiar quantitative traits, so we assume peculiar qualitative elements from those to whom we owe existence. As children inherit looks and features, so, too, they show certain characteristics of disposition, which, when they become predominant, form a *predisposition* or tendency in the one or other direction. That this predisposition can be checked or fostered is a well-known fact to every student of evolution; it is even known to every breeder of live stock, who studiously seeks to eliminate the bad and foster only the good qualities of sire and dam. Shall we, human beings, gifted beyond all other forms of animal life, be less faithful in the pursuit of developing ideal offspring? Yet, as a rule, that is exactly what is being done. Mental cripples crowd our asylums for the insane, moral cripples constitute our criminal classes, and these crowd our prisons and reformatories. The two are closely related and both are manifestly the results of existing social and civil principles. I most earnestly believe that the factors I have spoken of are the main causes — aided, it is true, by many of lesser degree

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— which make it necessary to maintain the many institutions for the care of the insane and the imprisonment of the criminal, all for the sake of protection to the welfare of the general public.

In conclusion let me emphasize by repetition the import of the foregoing. As I frequently tell my students, "it is not the man who occasionally becomes intoxicated who gets into trouble, but the man who drinks much and never gets drunk, or he who is nearly always drunk, that becomes a candidate for disease." His are the blood vessels that early grow less elastic and more brittle, his are the chances of apoplexy and consequent infirmity, his are the weakened will-power and moral force, his are the nerve tissues that show slight vitality. His again are the offspring of stunted intellectual mold, who lack the ennobling qualities of men and women, but show to a marked degree the signs of mental and moral and physical degeneracy, which make them easy victims of epilepsy, imbecility, and idiocy on the one hand, and on the other, gives them the inherited and acquired right to a berth in the insane hospitals, the jails and the penitentiaries.

If but the true import of the alcohol question were understood, and a proper conception of the effect of alcohol upon the physical and mental qualities were gained, I believe few generations would pass ere we would find in place of our institutions for restraint and punishment hospitals for the care and cure of a class of patients more ill often than those whom we generally regard as sick or diseased.

There are 3,745 distilleries in the United States, annually producing 124,530,599 gallons of alcoholic spirits. The total cost of aging the 142,119,231 gallons of whisky annually carried in bond in the United States, including loss by evaporation, interest, storage, insurance, etc., is estimated at about \$14,000,000 a year.

WHAT IS THE CAUSE OF THE INCREASED NUMBER OF SUICIDES, HOMICIDES, AND MURDERS?

BY N. S. DAVIS, M.D., LL.D., CHICAGO, ILL.

A few days since, one of the best Chicago daily papers, in referring to the extraordinary frequency of suicides and reckless homicides in all parts of the country, said: "It indicates that the American people are becoming morbid, and unstable in character," and then asked, seriously: "What is making the American people morbid and recklessly impulsive?" a question of sufficient importance to challenge the attention of every good citizen, regardless of partisanship in either politics, religion, or sociology. If the number and character of the crimes, both of personal violence and of property interest, recorded in every issue of the daily press as occurring in this country, were detailed as taking place among any other people, we would regard it as evidence that such people were barbarians shrouded in moral darkness, and sadly in need of the services of a whole army of Christian missionaries. And yet here, in the shadow of our churches, schools, and even police offices, the housebreaker, the highway robber, the suicide, and the murderer, plies his vocation both at midnight and at noonday. Neither is the evidence of a "recklessly impulsive" spirit confined to the so-called criminal classes, but it is abundantly manifest in our sixty-miles-an-hour railroad trains, forty-mile bicycle and automobile riders, with their destructive collisions, and in all our athletic exercises and contests.

Looked at superficially, it would seem as if we had developed a generation in which each individual is striving to out-

do his neighbors, either in gathering riches, displaying better clothes, riding or running faster, or exhibiting more brutal force regardless of consequences. Analyzed more closely, it is all seen to rest on an uncontrolled selfishness, with but little regard for the rights or interests of others. It is all illustrated by the man who mounts his bicycle or automobile, and runs it over the public highway at the rate of thirty or forty miles an hour, regardless of men, women, or children, as if the road were all his own.

But from whence comes this widespread, domineering selfishness in a people who boast of a Christian civilization resting on the golden rule, "Do unto others as you would have others do unto you"? Investigation will show that a large majority of those whose unbridled selfishness drives them to criminal acts against life or property are in the early period of life, or less than thirty years of age. Of those engaged in housebreaking, highway robbery, suicide, and murder, a very large proportion are between fifteen and twenty-five years. Still further investigation will show that three-fourths of these were either habitual users of alcoholic drinks and tobacco, or other narcotic drugs, or they were begotten and nursed by parents whose blood was, at the time, being daily impregnated with the same alcoholic and narcotic drugs. There is no fact within the range of human knowledge more perfectly demonstrated than that the habitual use of anæsthetic and narcotic drugs — that is, alcohol, opium, cocaine, and tobacco — cause such impairment of the individual's sense of propriety and self-control, and so benumb his conscience, that he becomes the obedient and often reckless servant of his own selfish instincts and passions. Nor is this all; there is abundant evidence that the presence of alcohol in the blood so changes the quality of the protoplasm of both the organized tissues and of the corpuscular elements of the blood that children begotten and nursed by such parents are possessed of less vitality, and those who survive infancy and childhood

are characterized by such mental defects or impulses as to cause many of them to become recruits for the various grades of vice, imbecility, and crime, as shown in an article published in the *Bulletin* for October, 1899.

It is here that we see the truth of the startling declaration: "The sins of the fathers are visited upon the heads of the children unto the third and fourth generation." And the ever-increasing ranks of the imbecile, the insane, the recklessly impulsive, and the criminal will continue as long as the people of this country consume annually two or three billions of dollars' worth of the anæsthetic and narcotic drugs already alluded to.

ALCOHOLISM.

It is a well-attested fact that the regular and immoderate consumption of alcohol acts as a virulent poison to the human system. Its baneful effects are especially manifest upon the brain and nervous system, and, sooner or later, if the habit is persisted in to excess, it leads to mental impairment.

Alcohol insanity is a well-recognized form of mental alienation, and its victims are to be found largely in towns and cities where the drinking customs are most prevalent.

The chief danger of the drink habit lies in the insidious inroads which it makes upon the mind of the deluded victim.

There is a gradual process of mental impairment, which he is incapable of realizing, and which quite unfits him for seeing himself as others see him.

His moral perception becomes dulled and his reasoning sense so defective that all appeals to him for reformation are in vain, and he gradually degenerates, stage by stage, into a physical wreck and mental imbecile.

Every subject of chronic alcoholism is *de facto*, if not *de jure*, insane, and should be confined in an institution for treatment.

In recent years the gold cure treatment has been the panacea for the cure of drunkenness. It is all humbug; there are no medical specifics for its cure. The true and only remedy is complete abstinence from the poison, and this can only be done by enforced discipline and treatment in an institution appointed for the purpose.—*Dr. Russell on the Causes of Insanity, in the Canada Practitioner.*

MEETING OF THE ASSOCIATION FOR THE
STUDY OF INEBRIETY.

The thirty-second annual meeting of the association was held in the hall of the Washingtonian Home, Boston, Mass., December 18, 1902. A symposium on the treatment of inebriety was opened by a paper by Dr. Crothers of Hartford on "The General Principles to be Observed in the Treatment." Dr. C. H. Shepard of the Brooklyn Sanitarium read a paper on "The Hydropathic Treatment of Inebriety." Dr. S. V. Elliott of Willard Hospital, Bedford, Mass., presented a paper on "Restraints and Moral Measures in the Treatment of Inebriates." Dr. Agnes Sparks of the Home for Female Inebriates gave some clinical history of cases of female inebriates and the plans of treatment. Dr. Edward Coles of the McLean Hospital of Waverly, Mass., described the methods of legislation for the control and treatment of inebriates. Dr. V. A. Ellsworth of the Washingtonian Home presented a paper on "The Treatment of Delirium Tremens." Dr. H. D. Rodebrough of the Parkview Sanitarium, Columbus, Ohio, described the value of surgery in certain cases of inebriety. Dr. C. A. Drew of the Asylum for Insane Criminals, State Farms, Mass., discussed the relations of inebriety, crime, and insanity, with a clinical history of cases. Dr. J. B. Mattison of the Brooklyn Narcotic Asylum made a strong plea against the sale of nostrums and drugs which produced addictions. Interested discussion followed each of these papers. The evening session in the same place was opened by an address from the president, Dr. L. D. Mason, on "The Evils following the use of Proprietary Medicines and the Possible Remedies," after which resolutions were offered by Dr. Crothers, which were unanimously adopted.

Meeting of the Association for the Study of Inebriety. 69

Dr. Crothers of Hartford read a paper on "Inebriety in Ancient Egypt and Chaldæa." This was followed by addresses from Dr. H. O. Marcy, Boston, Mass., and Dr. H. D. Didama, Syracuse, N. Y., and Mrs. Mary H. Hunt, Boston, Mass., which were very highly applauded. The nominating committee presented the following nominations for the ensuing year: For president, L. D. Mason; first vice-president, C. H. Shepard; second vice-president, V. A. Ellsworth, Boston, Mass.; secretary and treasurer, T. D. Crothers, Hartford; executive committee, T. D. Crothers, L. D. Mason, H. D. Rodebrough; for recording secretary, J. J. Wagner, Brooklyn, N. Y. Resolutions were passed of thanks to the superintendent, Dr. Ellsworth, of Washingtonian Home, for the use of the hall and other courtesies. Committee on proprietary medicine, Dr. J. B. Mattison chairman, was appointed. The society then adjourned. Next morning, by an invitation, a visit was paid to the Massachusetts Hospital for Inebriates at Foxboro, an account of which is presented elsewhere.

Dr. W. T. Ridenour of Toledo says: "Beer drinkers are peculiarly liable to die of pneumonia. Their vital power, their power of resistance, is so lowered that they are liable to drop off from any form of acute disease, such as fevers, pneumonia, etc. As a rule, when a beer drinker takes the pneumonia he dies. Beer drinking produces rheumatism by producing chronic congestion and ultimately degeneration of the liver, thus interfering with its function by which the food is elaborated and fitted for the sustenance of the body, and the refuse materials oxidized and made soluble for elimination by the kidneys, thus forcing the retention in the body of the excrementitious and dead matter I have spoken of. The presence of uric acid and other insoluble effete matters in the blood and tissues is one main cause of rheumatism."

Abstracts and Reviews.

THE REPORT OF THE GOVERNMENT INSPECTOR OF RETREATS AND HOMES FOR INEBRIATES FOR THE YEAR 1901.

It will be new to many of our readers to know that inebriate reformatories, retreats and homes for the care and control of inebriates and drug-takers in Great Britain are all licensed and under the control of an inspector appointed by an act of Parliament. This inspector, Dr. R. W. Brantwaite, a physician of very large experience in the practical treatment of these cases, gives his whole time to the inspection, advice, and control of all the institutions in the country. His annual report of the work done in these places is printed and is a part of the government blue books and records of the secretary of state. No quack or cure asylums are licensed, and all institutions who aim to do useful work come under some central control and management. The report is made up of an outline of the laws and their practical workings, also report of each retreat, particularly of the number of persons and the success of the methods of treatment; also the plan, statistics, and information gathered from each institution of value in a general consideration of the subject. Three classes of institutions are recognized: The first, called retreats, where a limited number of persons are received, who pay for their care and treatment. Second, certified inebriate reformatories, where indigent patients are taken, managed by cities or corporations, and receiving persons of moderate means as well as the very poor. Third, report on state inebriate re-

formatories. These are hospitals to which criminal and the most incorrigible classes are sent. Occupation is provided and patients are permitted for a long time and allowed to go out on parole. The method of treating such cases, the expense and the results are presented at some length. The following quotation is worthy of note: "I have recently had occasion to make inquiries with regard to certain of the secret remedies and drug specifics which are from time to time vaunted as cures for inebriety, but I have yet to find one which will bear the test of strict investigation, or one whose statistics of 'cures' can be best supported by trustworthy evidence. There is no royal road to 'cure' for the confirmed inebriate; he has to be broken from his habit, brought back to physical health and taught by moral influence to live his life without resort to alcohol in any shape or form. I am quite in accord with those who insist, as a first principle, upon the value of long-continued, enforced abstinence; and I am inclined to agree with the licensees of some retreats who, as a matter of principle, decline to accept any patient for treatment who will not consent to a term of detention extending to twelve months or over. There is no doubt whatever that the longer residence cases do better than those of shorter terms. It is, however, undesirable that every institution shall make a hard and fast line not to admit short term cases. There are many inebriates, especially men, who are tied to their occupation and cannot afford to retire into seclusion for long periods. It is such persons, finding themselves blocked from treatment in a recognized institution by the necessity of signing for impossible months, who are driven to resort to 'cures' which promise recovery in three or four weeks. I cannot help thinking that some good results might be obtained among persons who could manage to undergo control and treatment for short periods only. I am not prepared to advocate the admixture in one retreat of short with long term cases, but I do think, especially near London, that there is a great

demand for an institution entirely devoted to the reception of patients able and willing to sign for a month, or even less. Such an establishment should more closely approximate to a hospital than to an ordinary retreat of the 'home' type, and should be designed for, and be prepared to receive at the shortest notice, the most acute type of cases. Although the percentage of permanent good results would necessarily prove smaller than the long period homes produce, still a retreat such as I suggest would at least afford a chance of recovery to many who are at present debarred by commercial and other ties from the benefits of longer control. It is possible, also, that many patients, having tried the shorter periods and experienced failure would, when circumstances permit, willingly consent to more extended treatment."

We hope in the future to quote largely from this report and give many tables which are very valuable and suggestive.

The last report of the Alabama Bryce Hospital for the Insane is a very interesting one. The observations of the superintendent, the well-known Dr. Searcy, are very suggestive. He calls attention to the fact that insanity is inseparable from high civilization. Rapid evolving from lower grades of mentality is at the expense of brain instability. Newly acquired brain structures are more liable to defects, degenerations, and injuries, particularly from toxic or pathogenic agents. With the increase of civilization there will be increase of mental abnormalities. He cites the effect of civilization on the eyes, showing that a very radical change has taken place in the use of the eyes in the past generations, in the attempts to readjust the structure to the changed condition. The prolongation of life, following from civilization, creates new efforts to increase the capacity and enlarge its activities. The old selfish principle disappears and the lives of the weakly, unstable, and defective are protected and pre-

served; hence insanity and degeneration are part of the results of civilization. He speaks of bad habits and conditions which deteriorate and destroy mental capacity, and continues as follows:

“One bad habit for a number of generations, in civilized countries more than others, has had this effect particularly. I allude to the so general use, as luxuries, of agents that ought to be held solely as medicines; they are anodyne and anæsthetic in effect and classification, and have chemically, and in time toxic, effect upon the brain. They have a pleasant effect because they dull sensation and relieve discomfort. To this kind of agents belong nicotine and alcohol, which are the ones most generally taken. Those members of society who, from causes already mentioned, are degenerating, are most liable to acquire these habits and are most injured by them. The deteriorating ill effects, in time, of these drugs, are not only apparent in the habitués themselves but in their posterity. The drugs hasten along and increase milder forms of nervousness and defective thinking, and more rapidly bring them to a grade which becomes insanity. An anæsthetic like alcohol is more rapidly toxic in this way than as mild an anodyne as nicotine.”

The increased insanity among the negroes is explained by the revolution in their habits of living, which falls most heavily on the brain, and the conclusion is that they are rapidly degenerating mentally.

INCREASE OF INEBRIETY.

You will further observe from the tables of statistics appended, that in no less than twenty-one of the admissions, that is in more than seventeen per cent., the insanity was thought to have been caused by the abuse of alcohol. This may be a higher per cent. of such cases than exists in some state institutions, but it corresponds quite accurately with

our own history in this respect. In fact, alcohol plays so important a role in the production of insanity and crime, especially in cities and large towns, that society should use every means to educate the rising generation as to the danger attending its use as a beverage. The effects of alcohol upon the elements of the nervous system are much greater before twenty years of age than afterwards. The brain is more sensitive to the effects of all toxic influences during the period of adolescence, and young persons acquire habits of using both alcohol and tobacco much more readily than during later periods of life. When once formed during this period, they are much more likely to become incorporated with the development of the system and thus become permanent. They may eventuate in some cases in a degeneration of the cells of the brain and the vaso motor portion of the nervous system. In other cases, before such a stage is reached, there may result morbid changes in the mental activities of the individual, attended by cravings which become very difficult, and in some cases impossible to resist. The will power becomes much impaired, and the higher ideals of the individual are lost.

The importance, therefore, that some effective measure be adopted, if those already in existence are not adequate, to have instruction given to the pupils of the public schools of the State regarding the nature and effects of alcohol when used as a beverage, can hardly be overestimated. Such a course should be continued if at the expense of less important subjects of study.

This can be done more effectually than elsewhere in the higher grades of schools, and should be done mainly by means of conversations and oral instruction in the form of questions and answers by both teacher and pupils. In this way and by illustrative examples and plates, pupils will more readily become interested than by reading any amount of dry material which deals with physiology.—*Dr. Stearns in Annual Report of Hartford Retreat.*

ALCOHOLISM AS A PREDISPOSER TO DISEASE.

Not only does drink in the various forms in common use in this country directly lead to morbid conditions, but it is accountable indirectly for much impairment of health, spread of disease, and undue mortality.

The tissues of the chronic alcoholic are so impaired as to readily predispose to certain infectious conditions, and so lowered in vitality as to make recovery from accident and many diseases doubtful.

Experiments as well as clinical observation go far to show that alcohol renders persons susceptible to infective disease. This is particularly exemplified in the case of that "white plague" which so devastates our land—consumption or phthisis.

But, irrespective of the direct action of alcohol on the body, it must not be forgotten that the alcoholic environment is fruitful in breeding disease and disseminating influences making for death.—*Dr. T. N. Kelynaik, London, Eng., in "Alcoholism and the Health of the People."*

Dr. Dickenson, consulting physician to St. George's Hospital, in a recent lecture, gave the following valuable evidence, as regards the relation of alcohol to tuberculosis:

That alcohol does not prohibit but favors the growth of tubercle.

His observations were made on patients in the London Hospitals, and in the post mortem examinations he found in 149 cases that 61 had tubercle of the lung, and in the same number of cases of non-alcoholics 44 had tubercle of the lung. In regard to other organs and structures liable to tubercle—the brain, the liver, the kidneys, the spleen, the bowels, the mesenteric glands and the peritoneum, every one of these in the alcoholic class displayed tuberculosis at least twice as often as the non-alcoholic.

He therefore concludes that alcohol promotes tubercle, and that not because it begets the bacilli, but because it impairs the tissues and makes them ready to yield to the attacks of the parasites.

INTEMPERANCE AND INFANTILE MORTALITY.

The unavoidable infantile death rate is at present usually estimated as 100 per 1000. But the actual waste of child life in many districts is enormous. Dr. E. W. Hope, the Medical Officer of Health for Liverpool, in his recent annual report, refers to this matter. In the course of a systematic investigation of 1,082 families in which death of an infant had occurred it was found that the total number of children born in these families had been 4,574, but that 2,229 had died, practically all in infancy, thus representing a death rate of 487 per 1,000, a waste nearly five times as great as the standard above mentioned. In twelve families in which the large total of 117 infants had been born no less than 98 perished. The circumstances of the families in which upwards of 1,000 consecutive deaths had occurred were investigated. In 21 per cent. the families were extremely and exceptionally dirty; in 18 per cent. the mothers went out to work, leaving the infant in the custody of others, frequently merely in the charge of another child; about 11 per cent. were living in homes unfit for habitation. But drunkenness seems answerable for an enormous amount of the neglect and suffering which bears so heavily on child life. In upwards of 25 per cent., and these are the cases where the mortality appears to be highest, the parents were markedly intemperate. The prospects of the life of the infant are indeed poor if the drunkenness of the mother results in starvation and neglect during her bouts of drunkenness. In many cases, also, the intoxicated state of the mother leads to accidents and serious or fatal injury to the child. But, sadder still, violence and brutality play a large part. The extreme suffering inflicted upon child life by intemperance, and the loss

of life immediately resulting from it, present one of the saddest features of city squalor and seem beyond the powers of sanitation to effect a lasting reform.

TWO OLD FRIENDS.

We have received some Five-grain Antikamnia Tablets, and also tablets of this drug combined with Codeine. Antikamnia, as its name implies, is an analgesic and anodyne and it has gained much favor in the United States, both for this and for its antipyretic action. It has been proven not to depress the heart, after the manner of many other coal tar preparations. Each Antikamnia tablet contains 5 grs. of the drug (the usual dose), which can be repeated every fifteen or twenty minutes, until three or four doses have been taken. Antikamnia and Codeine tablets consist of $4\frac{3}{4}$ grs. of Antikamnia and $\frac{1}{4}$ gr. of Codeine and have been especially brought forward for the treatment of pain where spasm or physical causes of irritation exist. Neuroses due to suppressed or irregular menses, particularly during the menopause, seem more amenable to this combination than to Antikamnia alone. Antikamnia and Codeine tablets are especially indicated in membranous affections of the lungs, throat, and bronchii. Both tablets merit a trial in neuralgia and spasmodic ailments,² and as their freedom from injurious action upon the heart and circulation is invariable, they will certainly continue to be received by the profession with favor.—*Edinburgh Medical Journal.*

PATHOLOGY OF INEBRIETY.

Abstract: In all cases changes of the capillaries and vascular system, beginning with irritation, inflammation, and merging into sclerosis and cirrhosis, are present. The cells and dentrites are atrophied, retracted, and eroded. Changes

occur in the middle and inner coats of the artery in the brain, liver, and kidneys.

Arteritis and neuritis are prominent in all cases.

The heart is either atrophied or enlarged.

Fibrous and calcinous deposits with thickening of the meninges and hyaline degeneration are common.

Aploptic foci are found throughout the brain with infiltration of the connective tissue. These conditions are both inherited and acquired. Alcohol in many cases lights up and intensifies the condition.

Inspector-General Sanger of the army of the Philippines sends the following note of an investigation into the drinking habits of the troops. In 342 companies in the service, in 60 of them every man used spirits; in 130 companies from 90 to 100 per cent. used it; in 58 companies there were from 80 to 90 per cent.; in 26 companies, from 70 to 80 per cent., and in 20 companies, from 60 to 70 per cent. used spirits. These rather startling figures reflect very sharply on the character of the officers and men. During the Civil War there were regiments and divisions in which not more than 20 or 30 per cent. were drinking men, and it is somewhat remarkable, if true, that our modern armies are composed of more drinking men than the volunteer service in the Civil War. It is estimated that of the 20,000 railroad men in the transportation service of the great railroads less than 10 per cent. of them are drinking men. One of the great trunk lines, employing several thousand men, reports that less than 3 per cent. of its employees use spirits. If these statements are true, the contrast between the army with absolute control of the men and the railroad companies whose control is limited to certain special duties reflects sadly on the army and its management. Another startling statement is made by Colonel Sanger, that in 71 of the companies in the Philippines from 10 to 35 per cent.

were chronic inebriates, who drank at all times and places to excess. There is evidently great need of some more exact investigations and changes in the service and its management.

RADICAL CURE OF CHRONIC ALCOHOLISM. By Edward Hooker Dewey, M.D., author of *The True Science of Living*. Published by the author.

This book of four lectures attempts to prove that the brain centers need rest and not food to do the best work; that alcohol paralyzes them and should be removed at once; that over-indulgence in food is another source of toxicity and should be guarded against. In the cure of alcoholism, the withdrawal of alcohol should be absolute and food should be very sparingly used to give the digestion time to recover its palsied state. Only the simplest nutrients, of which fruits, grains, and milks are the principal things, should be given. He believes every case can be radically cured by resting the stomach and regulating the diet so that only the smallest amount of most nutritious food should be used to meet the absolute requirements of the body. This little book contains a great many truths worthy of consideration.

PROCEEDINGS OF THE SOCIETY FOR THE STUDY OF INEBRIETY. Edited by Heywood Smith, M.D. London: H. K. Lewis, 136 Gower street, W. C.; paper covers, 2s. 6d.

The English Society for the Study of Inebriety has issued its proceedings in the form of a volume for the year 1901-02, edited by the secretary, Dr. Heywood Smith. It contains six excellent papers, with a discussion following, which were read at the society's meetings during the past two years. It is a very interesting volume, containing some good papers which are contributions to the subject. We are pleased to note the fact that the association is still popular and is doing good work.

Dr. Lagraine, who has for many years been superintendent of the French insane hospital at Ville Evrard, has recently opened a private inebriate asylum in the suburbs of Paris, situated in the Park of St. Maur. Our readers will remember Dr. Lagraine as one of the most enthusiastic writers on the question of inebriety and alcoholism, and who was president of the Anti-Alcoholic Congress in 1890. This is the first high-class asylum for inebriates established in France, and we have no doubt it will be a great success. It is a pleasure to note that Dr. Lagraine has been a voluminous reader of American literature, and has been inspired to undertake this new work by the experience of institutions in this country.

The Bulletin of the Vermont State Board of Health is a quarterly publication giving papers and studies of health matters by health officers in that State. Its popular style and intensely practical character make it a most valuable publication, not only in the State but elsewhere. Its editor, who is secretary of the State board, Dr. H. D. Holton of Brattleboro, is to be congratulated for having projected and carried out a most useful and profitable means of educating people in health matters in towns and cities of the State.

The Popular Science Monthly for January has a continuation of the paper on "Heredity Among the Monarchs of Europe." This is the most valuable contribution to heredity which has been made in a long time. It is to be continued in future numbers. Other papers of great interest appear in each issue. This is one of the best monthlies published for the specialist and doctor who wishes to keep in touch with the progress of general science.

The Temperance Record in its new form as a monthly will commend itself to all readers. This Journal is particularly valuable in its clear reviews of the progress of the temperance work in all departments, both religious, moral, and scientific.

It is undoubtedly the best journal published as a popular review of the movements in this direction. Send to 23 Paternoster Row, London, Eng., and receive a copy of the *Record* for examination.

The Scientific American gives a very interesting review of the progress in various departments of science during the past year. It is one of the few weeklies that is carefully read, the contents of which are always interesting and practical to every class of readers. A year's subscription to this journal would be a very welcome gift to any man with scientific taste. Send to Munn & Co., New York City.

The *National Temperance Almanac and Teetotaler's Year Book* for 1903, edited by Rev. Dr. Dunn, is a very valuable compilation of statistics on the alcohol question, also of societies and other matters pertaining to the growth of temperance reform. Why should all reference to the scientific societies working to clear away the delusions concerning alcohol and the inebriate be left out?

The Physician's Visiting List for 1903. Philadelphia: P. Blakiston, Son & Co. The fifty-second year of this list appears to be a book of greater value than ever. The tables, statistics, and arrangement for making notes gives it a peculiar eminence and practical value to all physicians.

The Homiletic Review is a magazine of popular theological papers always of interest to every thinker. It is broad and liberal in its tone and singularly free from dogmatism, hence it appeals to every general reader. The publishers are Funk & Wagnalls Co., New York City.

The Open Court monthly magazine is devoted to the science of religion and the religion of science, and should be read by every physician who would keep in touch with the great revolutions in this field. Published in Chicago, Ill.

Editorial.

It is a pleasure to announce that the *Bulletin* of the American Medical Temperance Association will be consolidated with the JOURNAL OF INEBRIETY and published together. This excellent little journal, which has been published for nine years as the organ of the American Medical Temperance Association, has been ably edited by the venerable Dr. N. S. Davis and Dr. J. H. Kellogg, and has done good work and built up a large circle of friends. The rapidly increasing interest in the subject of alcohol and experimental studies of its effects have expanded the literature to such an extent that no small journal can hope to present even an outline of it; hence it is thought better to combine with the JOURNAL OF INEBRIETY, and in this way attempt to give its numerous readers some conception of the tremendous advances made in this field of medicine. Original papers and abstracts will appear in the usual department, and under the head of "Editorial Notes and Comments" the personality of the *Bulletin* will be continued. Dr. W. S. Hall, professor of physiology in the Northwestern University and president of the association, will continue as editor, together with Dr. C. E. Stewart, Battle Creek, Mich., who is corresponding secretary. Drs. N. S. Davis and J. H. Kellogg will continue to make contributions and assist in contributing papers and reviews of the literature and progress of the subject.

Our association, which was organized thirty-two years ago for the study of inebriety, was occupied for over twenty years in presenting the facts and evidence to show that inebriety was a disease and curable as other diseases are. This first

stage of denial and contradiction has been followed by the second period of credulity and expectancy noted in the empiric wave and faith in drug and gold cures, which for the past ten years has attracted public attention. The decline of this period is marked by the beginning of another stage of exact scientific study above the levels of doubt and controversy. The old issues have passed away and the broader fields of the neurosis and psychosis of this border land disease, with all its pathological, psychologic, and therapeutic possibilities, are coming into view. In 1891, Dr. N. S. Davis and a number of very enthusiastic followers, believing the time had come for a special study of alcohol, organized the American Medical Temperance Association for this purpose, and arranged to have its annual meeting at the same time and place with the American Medical Association. Soon after the *Medical Bulletin*, the organ of this association, appeared, and has been published ever since, giving the transactions of the association and general abstracts of papers on this topic. The English society, having the same purpose, was organized a few years before this association, and later two other societies, in France and Germany, composed of medical men, have been studying the same subject with the object of clearing up the delusions concerning alcohol and its uses. These four societies have already created a great revolution in the current beliefs of medicine.

While controversies over the value of alcohol are still going on, a clearer and more exact knowledge of its physiological action is becoming more prominent every day. The two American societies, one for the study of inebriety, the other the physiologic effect of alcohol, will henceforth have the same organ to represent them in the *JOURNAL OF INEBRIETY*, and will go on mutually aiding each other, gathering and condensing the new facts and pointing out their practical application in therapeutics and preventive medicine. The London *Lancet*, commenting on the temperance work in America,

spoke of the JOURNAL OF INEBRIETY as being far ahead of the times in the study of this subject, and predicted that in the future, when the progress of science would point out the exact relations of alcohol and inebriety, there would be many journals occupying this same field.

ALCOHOLIC NEURITIS.

In railroad accidents, blows on the back of the head of trivial character are followed by most severe symptoms. A muscular strain, as in jumping from a wagon or falling on a stony pavement, has developed symptoms of great severity not easily explained. In an examination of a number of these cases it appeared that a large proportion of these persons were secret alcoholic drinkers, and the severe symptoms following were due to alcoholic neuritis. The following is a typical case: J., a respectable merchant, supposed to be in good health and temperate, was thrown off the car seat in an accident and suffered a slight bruise on the arm and shoulder. Following this there was intense pain and great rigidity and tenderness over the shoulder and arm. There was loss of muscular power and later derangement of digestion, with some fever and great sensitiveness to surroundings. This condition lasted some time and was finally diagnosed as acute alcoholic neuritis. The patient had been a secret drinker for a long time and the blow on the shoulder was the exciting cause of acute nerve inflammation. In a second case a passenger, who fell while stepping off a moving train, bruising his thigh and leg, had symptoms of paralysis, great pain and fever, which lasted a long time. There were some symptoms of malingering until finally it was discovered that he had been a constant drinker for a long time, and this was simply neuritis following the fall. Some of the so-called spinal concussion cases can be traced to similar condition. Persons arrested on the street, receiving a blow on the head from a policeman's

club or a fall, may have very severe symptoms of inflammation of the nerves and cords, which can be traceable to a long period of alcoholic addiction. The blow or injury is the starting point for the acute inflammatory action. Many of these after-symptoms are treated as rheumatic or malarious and no connection is recognized between the history of alcoholic drinking and the acute inflammatory condition which follows. In a recent case, a so-called temperate man received a blow on the spine from snow falling from a building which he was passing. Acute symptoms of paralysis, inflammation, and great tenderness of both extremities followed, and two days later a well marked case of delirium tremens developed. He recovered, but the fact of his alcoholic drinking was not known to his family or friends. The physician diagnosed the cause and directed the treatment accordingly. Neurites coming on suddenly in a person supposed to be healthy should always suggest an alcoholic origin, and at least careful inquiry into the history and habits of the person.

STATE HOSPITAL FOR INEBRIATES AT FOXBORO, MASS.

At the close of the recent annual meeting of our association at Boston, the officers and members paid a visit to this hospital, which is situated about twenty miles south of Boston. Foxboro is a quiet farm village and the hospital is situated a mile from the center of the town in the midst of a rolling, wooded country. The buildings are on the cottage plan and are of brick, two stories in height with high basements, containing dormitories and large day rooms facing the south. Each of the cottages or dormitories accommodate from fifty to seventy persons, and are graded according to their condition. The dining room and kitchen occupy a separate building. The chapel, recreation hall, and bath-rooms are in another building. The broom factory is by itself,

and the boiler house, with dynamo and laundry, are also separate. Each of these buildings are large, well kept, warm and well ventilated. The day rooms at the end of the hall are cheerful, sunny parlors, supplied with books and papers, resembling a good club room. Many of the patients are employed in the large broom shop and in the work of the farm, also in the duties of the house and surroundings. They are all committed from the courts with a history of from five to twenty years of excessive use of alcohol. Most of them are in middle life and of the chronic classes; others are police court repeaters who have served short sentences for intoxication in the jails and reformatories of the state. Others come from the better class who through reckless dissipation have lost friends, money, and home, and are sent here to prevent them from becoming permanently insane or incurable paupers. The capacity of the hospital is two hundred. At the time of our visit one hundred and ninety were under treatment. The general plan of treatment is modified restraint, giving liberties to those who can be trusted, and military restraint to those who are unable to care for themselves. One of the special measures of treatment, which seems to be more thoroughly carried out here than in any other institution, is physical culture and hydrotherapy. In the application of the former, patients are divided into classes and made to drill and exercise regularly so many times a week in a systematic manner adapted to their condition. A special teacher of physical culture gives his entire time to this work. Measurements are taken of the capacity of the lungs, the muscular strength, also of the heart's action, weight and shape of the body, and records are kept showing the changes and improvements which follow. The tables indicating the net gains in physical vigor and improved health following this exercise are very significant. At the close of the physical culture exercises, each patient is given a warm or cold shower bath, depending upon his condition, which is regulated by the teacher of phys-

ical culture. The baths are very elaborate and modern in all the details, and are well adapted to give new vigor and produce a powerful remedial action on the body. Both Russian and Turkish baths are freely used and few, if any, institutions in the country have more complete hydropathic means and measures for successful application of a remedy that is too much neglected in neurotic and other diseases. These two remedial measures, physical culture and baths, are the most advanced and promising means of treatment known up to the present time for neurotics of this class. Notwithstanding the supposed incurability of such persons, the statistics of those who have been under treatment here show a number of recoveries, and in the future, when more curable cases are admitted, this percentage will increase rapidly. The Foxboro Hospital has been for a long time the center of much criticism, but fortunately this is decreasing. The management has been continuously embarrassed by an ignorant public sentiment, who expected them to treat the most incurable of all cases on the most economical scale and to the satisfaction of all persons. The delusion that the inebriate was simply vicious and suffering from moral disease within his control has made the public very uncharitable in their criticisms. Now that the fact is being recognized that inebriety is a disease and curable as other diseases are, the management of the hospital can concentrate their efforts in the solution of the problems of treatment rather than in continuous efforts to educate the public. After looking over the buildings and the patients and the measures adopted to help them, our association expressed a unanimous sentiment that this institution in facilities, surroundings, and conception of the work was a great credit to both its managers and the state of Massachusetts. Plans for the organization of similar institutions in at least two states are being perfected and will no doubt be established in the near future. The asylums at Binghamton and Fort Hamilton attempted to solve the problem in the care and

treatment of the wealthy inebriate. They failed from political interference. The hospital at Foxboro, beginning with the pauper and indigent spirit drinkers, is going to succeed and prove what a few private asylums have been so long urging, namely, that the inebriate could be scientifically, practically, and economically treated and restored. This must be done in a hospital where the management can be independent and free from the criticisms of patients and their friends, and above all, political influence for position and gain.

DR. CHARLES H. SHEPARD.

Our readers will be pleased to see in this issue a portrait of Dr. C. H. Shepard, the well known superintendent of the Brooklyn, New York, Sanitarium. A short sketch of his life will be welcomed. Charles H. Shepard was born in Ogdensburg in 1825, and after receiving an academic education went into a printing office, and finally came to New York, where he studied medicine and graduated from the New York Medical College in 1859. In the meantime, he had taken a very active interest in hydropathy and resolved after graduation to make a specialty of the Turkish bath in the treatment of disease. In 1863 he established the first Turkish bath in America at Columbia Heights, Brooklyn, N. Y. Two years later he made a tour of Europe, visiting Constantinople, Athens, Rome, and every large city where baths and hydropathy was used in the practice and art of medicine. From this time he became prominent as the pioneer, leader, and student in the development of the bath and the therapeutic use of water in both health and disease. For over forty years Dr. Shepard has been a continuous preacher and teacher of the value of Turkish baths in disease. For the last twenty years he has written voluminously on this subject and many of his papers have been epoch-making in their broad practical application of this remedy, founded on the newer principles of hygiene and physi-

ology in the treatment and prevention of disease. His practical studies have included most of the common diseases, together with the neurosis and psychosis of inebriety. This journal has published many of his papers on this subject which have been copied abroad and attracted a great deal of attention. The use of Turkish baths in hospitals, homes, and sanitariums today is largely due to his persistent efforts in keeping the subject constantly before the public in papers, lectures, and letters. For many years Dr. Shepard has been a member of the American Medical Association, the Public Health Association, and many other societies, both national and local. In 1899 he was a delegate to the International Congress against alcohol, held in Paris, and contributed a valuable paper which attracted much attention at the time. He has been an active member of our association, occupying the office of vice-president, and has served as chairman of several important committees with great credit. As a writer on the treatment of inebriety, he has pointed out many new facts and contributed largely to our knowledge of the therapeutic measures most useful in this disease. Personally, Dr. Shepard is a remarkably young old man, who, with all his years, gives but few signs of age, and is as actively engaged in his professional work today as he was years ago. Optimistic and cheerful, he moves serenely down through the years, enjoying each day's sunshine and applying the principles of the bath which he advocates so strenuously in his everyday life. Oblivious to storms and trials (of which he has had his full share), he goes on quietly pursuing the central purpose of his life, which is to revive the old Roman and Turkish baths and show their value, and make them popular in this new civilization. In this he has succeeded in a large measure, and has well earned the name of reformer and pioneer in hygienic science, a name used in its best sense of one who makes permanent contributions to the science of the day. His work in the field of preventive medicine will be recognized in the years to come, and

his conceptions of the use of the Roman and Turkish baths will be realized in the near future, both in public and private hospitals in every city and town in the Union. Already we are beginning to understand in some measure the power of the baths and their intimate association with the great problems of preventive medicine. To have opened up a new field for human culture and development, and pointed out a new pathway to a better and more complete life, is a grand achievement, which Dr. Shepard has practically accomplished. But not until the next generation will this be understood and realized.

THERAPEUTICS OF HOT DRY AIR. By C. E. Skinner, M.D., LL.D., Professor of Theramo-Therapy in the New York School of Physical Therapeutics; Superintendent of the Newhope Hot Air Sanitarium, New Haven, Conn., etc. E. L. Chatterton Co., publishers, New York, N. Y.

This work of two hundred pages gives in a very graphic way the theories, physiological processes, and therapeutic possibilities of dry, superheated air. The author writes very frankly in the preface: "It is simply a rational therapeutical element which alone or in combination with other remedial agents will greatly increase our power to overcome pathologic processes." The apparatus and technique of treatment are described at some length and the physiological action, both local and general, are presented with great clearness. The remaining chapters discuss the specific effects in various diseases where it has been found of unusual value. The tone and style is eminently conservative and practical, and the author's experience is very convincing and devoid of the extravagant enthusiasm of many specialists while writing on their favorite subjects.

As a remedy for rheumatism, sciatica and many blood diseases it has been found of unusual value, and in no case has

it been contraindicated. After following the author through the pages of the book, the reader is prepared to agree with him that superheated air has a very important place in therapeutics. Dr. Skinner has been prominent for his broad scientific papers on this and other subjects and has won the reputation of being an authority, hence his book will take a very prominent place as the best summary of the literature of this subject up to the present. The publishers have presented a fine work in type and illustrations, and we are confident that this book will have a very large circulation.

The fight against the temperance school books has many grotesque sides. Several of the medical critics show hysterical alarm at some of the statements concerning the action of alcohol, which are new to them and consequently untrue. A medical editor who evidently has not read much of the literature in this direction is very confident that the statements of the school books are dangerous. A state medical society had a committee appointed to pass on the value of these books. The chairman of this committee reported that he had examined over fifty books, a larger part of which contained great inaccuracies and exaggerated statements concerning alcohol and tobacco, and he recommended very strongly that these books should be supervised by medical men and not by the laity. This is equal to the report of another medical man who deplores the fact that Mrs. Hunt is the author and promoter of all temperance school books. This has the familiar sound of the excited protests which the leading medical journals in both New York and Philadelphia in the fifties made against using sulphuric ether as an anæsthetic in surgical operations. They condemned the credulity of Boston physicians in believing that Dr. Morton was the discoverer, and pronounced the whole thing a fad opposed by all science and experience. Foolish condemnation and denials always give new interest and greater prominence to any subject. If these critics

would promote the cause of temperance teaching in school and increase the sale of the books, nothing more could be desired than finding fault and condemnation. A correspondent of this journal wrote as follows: "I am chairman of our school board. Dr. ———'s report, asserting that text-books were inaccurate, roused my attention so that I made a personal examination of the books used in the schools of this town and other cities about, and found that they were correct and well written by authors who were much more trustworthy than the critics who discovered inaccuracies in them." Another physician wrote: "I have been examining the temperance text-books on physiology taught in our city, and been surprised to find them so clear and accurate on many of the questions which ignorant critics condemned so sharply. While the books are not perfect and will be no doubt improved in many ways, it is foolish to say that they do not represent the facts concerning alcohol which are believed to be true by the best authorities today."

A number of very excellent religious and active temperance journals are received at this office and read with great interest and pleasure. Many of them contain very helpful articles and are doing grand work in the cause of temperance reform. The wisdom and enthusiasm displayed to make its readers better are sadly marred by the display on the advertising pages of the most dangerous fraudulent efforts to deceive and injure its readers. Thus cures for consumption, for epilepsy, for drunkenness, for morphine taking, for Bright's disease, also tonics to build up and strengthen lost energies and other most notorious fraudulent drugs occupy prominent places and are sustained by most flattering indorsements. A consumptive cure which has been repeatedly analyzed and found to contain 30 per cent. of alcohol is indorsed by several clergymen. A secret cure for the drink

habit made up of morphia is presented in the most attractive light. To most readers these advertisements are understood to be literally indorsed by the editors and management. In one journal the Sunday-school lesson for the week, on the topic of Honesty and Love to our Neighbors, is surrounded by several of the most dangerous fraudulent advertisements on the market.

The new inebriate act which came into force January 1st of this year in England contains some very advanced measures. One of them gives police power and makes it their duty to arrest anyone suspected of harboring a drunken person. If the holder of a license shall be proven to have aided in the drunkenness of the person, he can be fined and his license removed. If the managers of a clubhouse or barroom should knowingly sell liquors to persons in a state of intoxication they can be fined. All persons who are arrested for drunkenness are to be registered and barkeepers are supposed to know who these are and to refrain from selling them spirits. No divorce or separation shall be granted on the claim of drunkenness unless the person has had opportunity to receive reformatory treatment, and indicates by his conduct that he is incurable. In this case the order of detention in a public reformatory will be indefinite or until he shall exhibit evidence of being cured.

The ideal inebriate asylum in the minds of many persons is an island in the ocean only rarely visited, where all spirits are excluded without any possibility of getting any. There are three islands of this class known in the South Pacific. One is the Pitcairn Island, inhabited by the descendants of the mutineers of the "Bounty." The other is the Norfolk Island, a hundred miles to the south of the Pitcairn, inhabited by the overflow population from Pitcairn. The third is the Corus Keeling Islands, the largest of which is Acuna. These latter

islands were settled by Scotch sailors, and as the climate is warm and the soil very rich, living is very simple and easy. All of these islands are run on teetotal principles. No spirits are used, and the few ships that visit them are not allowed to land any spirits. These are all under English rule, and the governor of each island dictates what the inhabitant shall do. These are evidently ideal places for the inebriate, particularly in the absolute freedom from all spirits.

The ninth international anti-alcoholic congress will be held in Bremen, Germany, from April 14 to 19, 1903. The last congress, held in Vienna in 1901, had over 1,600 delegates and members, and the papers and discussions covered every possible phase of the alcoholic problem. Curiously enough there was no American representation at that congress. In the seventh congress at Paris, the delegates from this country were Drs. Shepard, Kellogg, and Crothers. The secretary of the ninth congress, Dr. A. Delbruck, 127 Humboldt street, Bremen, Germany, earnestly solicits a representation from this country. The editor of this JOURNAL will give any information to any who may wish to attend. As the papers are all arranged beforehand as to the time and matter, it is essential that an early notice should be sent to the committee.

Dr. Horsley claims that the criminal population of England consists of two classes: one of men and women who should never have been committed to prison, and the other of persons who when once committed should never be let out. In the latter class from 80 to 90 per cent. are inebriates and persons with inebriate ancestry who are past all redemption and possibility of recovery. Of the former class 50 per cent. are inebriates whose crime was accidental, and who could be saved if placed in proper surroundings and given exact scientific treatment.

The November number of the *Washingtonian*, a monthly journal published at the Washingtonian Home, Chicago,

Ill., makes the startling announcement that "Inebriety is not a disease and Inebriety is not the result of heredity." For many years Brother Jasper in Richmond, Va., argued with great earnestness that "the earth he do stand still and the sun he do move around." Thirty years ago a reverend doctor in Boston wrote very positively that inebriety was a possession of the devil, which could be only exorcised by whipping and starvation.

All members of the American Medical Temperance Association, not subscribers to this JOURNAL, will receive copies of the first two issues. The subscription price to the JOURNAL will be \$2.00 a year, which will include a membership in the American Medical Temperance Association. No other journal published is devoted exclusively to the scientific study of alcohol and the inebriate. Hence our readers will have the satisfaction of receiving the very latest facts from the frontiers of scientific research in this field.

The second annual course of lectures before the students of the New York School of Clinical Medicine began January 6, 1903, by Dr. Crothers on "The Neurosis of Spirit and Drug Taking." Two lectures are given the first Tuesday of every month at 11 A. M. and 8 P. M. in the hall of the college. Inebriety, morphinism, cocainism, and other drug addictions are discussed at some length. Cases are presented, and charts and illustrations help make the subject more interesting to the reader. The public are invited.

Dr. Boughton's Sanitarium for drug takers, at Rockford, Ill., has many advantages over similar places and can be very warmly commended by all persons who wish a quiet, congenial place for the breaking up of opium and other drug habits. The cut in our advertising pages correctly represents this beautiful place.

The MacMichael Sanatorium of Buffalo is a small private inebriate asylum where each person can have the advantages of seclusion and personal care. The surroundings are excellent, and the appointments of the building and management are all that could be desired.

The Good Templars of Sweden have petitioned Parliament and the executive government to institute a professorship at the Royal Medical College at Stockholm on "Alcohol, Its Uses and Abuses."

A new home for inebriates at Waitati, New Zealand, has been opened, with Dr. Truby King as superintendent.

The oldest temperance book urging total abstinence from alcohol was published in 1622.

Clinical Notes and Comments.

ALCOHOL AND NUTRITION.

Foods are distinguished from poisons in this, that they have no energetic action upon the tissues, neither disturbing nor destroying sensibility, power of contraction, or nutrition, nor do they alter the texture of the tissues. The neutrality and the absence of salient chemical properties distinguish some foods from poisons without direct experiment, but with many poisons, especially those of vegetable origin, experience is necessary to distinguish them from foods.

Has alcohol the property of accelerating the nutritive molecular renewal of organic tissues; in other words, does it favor digestion, assimilation of nutritive substances, and the elimination of the products of decomposition? Has it not rather an energetic action upon the tissues by which it disturbs or destroys the sensibility, the contractibility, and by which it alters the texture? Is it distinguished by the absence of salient chemical properties? If we are in doubt on this subject, examine the results of experiments made by a large number of impartial and conscientious observers.

If we examine all the researches that have been made in the entire domain of physiology and pathology, we are forced to the conclusion that alcohol can neither strengthen nor nourish the body, but that its anæsthetic and sedative influence renders it injurious in proportion to the amount taken. As a medicine its indications are extremely limited. In the majority of cases there are other substances that could replace it to advantage.

It is not necessary to go further to be convinced that alcohol is not truly a tonic, and that its apparently beneficent action is in reality false and dangerous.

Nor is it any more a food, as some physicians still declare, without having verified this too superficial opinion.

If this were true, alcohol would equal in value a respiratory food, whose combustion would furnish the calories necessary for the preservation of the heat of the body. The fact of its combustion being admitted, in order for alcohol to be a food it would be necessary, evidently, that there should be (for the body) no quantitative difference in the calories which the latter produced and those furnished by one or another of the carbohydrates.

But the most superficial observation shows that this is not so. There is an actual difference between the absorption of an equal quantity of alcohol or of sugar. This difference must therefore proceed from the manner in which the combustion takes place. And, in fact, a whole series of purely chemical observations force upon us an entirely new conception of the action of alcohol in the living organism. Physiological experiments entirely confirm this idea, but the literature upon alcoholism has not taken it sufficiently into account.

According to these observations we may consider alcohol as a respiratory poison, which in the vital process of respiration hinders the physiological course of the gaseous exchange either in the lungs or in each of the cells of our tissues in general.

This action is due to the promptness of its combustion, to its great affinity for oxygen, to its considerable reductive ability on the one hand, and to its easy diffusability on the other. We must in general admit that for the preservation of our bodily heat there must be regular and continuous processes of combustion. The supply of fuel must undergo a regular and progressive oxidation, so that the charge of carbon in the form of calorifics admitted at one time does not burn instantaneously, but is consumed at a regular time, due to a current of air regulated in harmony.

The special kind of coal that corresponds to one system of stove heat may be looked upon as its physiological aliment, while with another fuel either one could not obtain heat, or else an explosion even would be produced.

Now we may likewise affirm that only certain hydrocarbons are appropriate for fuel for our bodies. These are those that by a progressive combustion, exactly regulated by the automatic nervous centers, liberate the heat necessary to the vital processes of the organs without exciting a superfluous afflux of oxygen to those that produce the normal respiration.

We see already at first sight that alcohol does not answer to these essential requirements of respiratory food. Moreover, we have reason to believe that on these two accounts alcohol produces a double damage: first, because it burns with too much energy, and the normal respiration is not able to provide for the sudden increase of the demand for oxygen; second, because the carbon dioxide produced by the more intense oxidation is not eliminated with sufficient rapidity.

This being admitted, we have matter for an active and a passive poisoning, for the time. The first mode of intoxication is produced by the rapid passage of the alcohol from the stomach into the blood. The oxygen of the blood not being sufficient for the energetic combustion of this alcohol, there must be produced, reflexly, a greater amplitude of the respiratory movement in order to increase importation of oxygen. It is this that confirms the experiments of Zuntz, who has shown an acceleration of nine per cent. of the respiration, and those of Geppert, which indicated seven per cent. at least after the ingestion of small doses of alcohol.

Nevertheless, the organism may not sufficiently incorporate the oxygen to correspond to the increased necessity for this gas produced by the alcohol. Wolfers has demonstrated this by a conclusive experiment upon rabbits, to which he gave alternately alcohol and other hydrocarbons. As measured by the gasometer, the ratio between the carbon

dioxide exhaled and the oxygen inspired showed for the oxidation of alcohol only a quotient of two-thirds. Now, although the rabbits of Wolffers consumed by the gasometer much more oxygen when they were given alcohol than when they took other hydrocarbons, the respiratory quotient remained extraordinarily elevated, and increased at times the unit. That is to say, the quantity of carbonic dioxide expired exceeded the corresponding quantity of oxygen inhaled.

This result can only be explained in two ways: Either with the other hydrocarbons a greater quotient should have been consumed in the same time as with the alcohol—and Wolffers admits that the rabbits in his experiments had fasted a long time; or else, and this seems to be more reasonable, it must be believed that the alcohol, not finding in the oxygen in the circulation a sufficient quantity for its combustion, borrowed even from the cells of the tissues the oxygen that should serve those tissues for their very life.

And thus the anatomical, pathological diagnosis of alcoholism is explained in an entirely natural manner, for it institutes, as we know, a degeneration of the cellules of practically all of the organs. Degenerations particularly typical of acute poisoning are observed in the organs where the vessels of absorption are closest, primarily in the liver.

In serious poisoning with alcohol, this degeneration is very pronounced, even so far as the complete destruction of certain cells; for example, in the brain, as they are shown in the fine preparations of Nissel and Delio.

This shows us that we should distrust the physical advantage to be derived from the heat which without doubt is formed by the oxidation of alcohol, and which has gained for the latter the reputation of being a respiratory aliment. This mistrust is increased when we consider the final results of this production of heat.—*La Revue Médicale, Geneva.*

Prof. John Uri Lloyd's famous satires, the first of which, "The Mother of Sam Hill's Wife's Sister," was published in the September *Criterion* (1901), are resumed in the January number with the fourth paper of the series, "Sam Hill, Sheriff of Knowlton, Kaintuck," and purport to be related by "Chinnie Bill Smith," the famous story-teller of "Stringtown-on-the-Pike." These satires, written exclusively for the *Criterion*, will be illustrated by Martin Justice, whose character studies are second to none in the magazine field. Prof. Lloyd's inimitable style, and daring yet kindly humor, will be a rare treat to *Criterion* readers. A deeper meaning will be read between the lines of these unusual papers by thoughtful minds. The next paper, "Why a Kentuckian Stands With His Back to the Stove; the Testing of Melinda," by Sam Hill, will appear in the March *Criterion*, and the remaining stories during the year 1903.

In *Papine* advanced pharmacy has given us a perfect opium preparation. It possesses the anodyne virtues of opium and not the constipating and untoward actions. *Papine* may be briefly defined as the only opiate which is free from the evil effects which I have just named. It is very prompt, in this respect excelling any other opiate, and it never produces nausea, constipation and the usual woes that go hand in hand with the old-time opiates. *Papine* is, therefore, the remedy which is indicated in all forms of inflammatory pain. It is given in doses of one teaspoonful every one, two, or three hours, until its anodyne action is attained. In giving *Papine*, we can bear in mind that a teaspoonful represents the strength of one-eighth of a grain of morphine. Having this fact in mind, the dosage which is appropriate in any case will at once suggest itself.—Extract from "Remedial Measures Indicated in Affections Attended with Pain," by G. S. Trotter, M.D., New Albany *Medical Herald*.

For many years all physicians treating inebriety have felt the need of a bitter tonic which would combine sedative qualities to be given after the withdrawal of spirits. The tinctures on the market, while valuable in many cases, contain such a large proportion of alcohol as to be unfit as remedies for this period. In our work we used infusions of cinchona, gentian, and other bitters with good results. Finally by accident we found quassia in large doses to have a peculiar sedative effect very marked in these cases. As a result of some experiment we found a preparation of quassia, which is put up by the Central Chemical Company, 18 East 17th street, as *Quassone*, from our prescription, to be very uniform and useful in its effects. This is given immediately after or during the time of withdrawal of spirits and is followed by a deep disgust to the effects of alcohol, with a disappearance of the craving and a relief of many of the symptoms of irritation. This preparation has been improved and we are now using it constantly. In some instances it approaches a specific in quickly allaying the craving for the drug and the emotional disturbances which follow. It is not asserted that this drug *Quassone* is a specific, although in many instances it has brought about a complete restoration, and in all cases it may be said to be the most useful and valuable medicine now known in the treatment of these diseases.

As illustrating the value of *Bovinine*, the following incident reported to have taken place in a mining town in Montana is worthy of note. Through the mistake of a shipping-clerk, two cases of *Bovinine* were shipped to a saloon in a mining town in the place of whisky. Soon after the goods were received, a blizzard blocked up the roads and shut off all railroad communication for nearly two weeks. The saloon keeper with the advice of a physician served out *Bovinine* to his customers as a new tonic. After the first day it became a very popular drink and sold with great rapidity. Some time later when the whisky arrived there was manifest a great dis-

taste for it, each drinker asserting that the whisky was very poor and inferior to the *Bovinine*. The saloon keeper, not being able to procure more *Bovinine*, had to educate his customers up to the use of spirits again. The story concludes that had the stock in *Bovinine* continued a large part of the village would have given up all use of spirits. This is not an improbable story, as experience shows that *Bovinine* given freely to a drinking man after a time produces a disgust for spirits.

Hedonal is a most valuable preparation of the new synthetic drugs which proves to be a very safe and reliable hypnotic. The great German manufacturing firm of *Farbenfabriken* of *Elberfeld Co.*, with an office at 40 Stone street, New York city, manufactures this and other new remedies which are attracting a great deal of attention. They will be pleased to send literature concerning these new preparations to any who will make application.

Fellows' *Syrup of Hypophosphites* is prepared and sold in enormous proportions, proving its value and popularity beyond all question. It is one of the very few remedies that the physician can recommend to the patient under nearly all conditions with safety and confidence, containing iron, quinine, strychnine, lime, manganese, potash, and combined with hypophosphites. Its good effects as a tonic are marked in nearly all cases.

The Lambert Chemical Co. of St. Louis has made *Listerine* one of the most valuable antiseptic remedies now known. It also prepares *Lithiated Hydrangea*, which is almost a specific for uric acid diseases. Send to this firm for some literature.

The Rio Chemical Co. prepares and has sold enormous quantities of a drug called *Celerina*, whose analgesic properties have made it a very useful remedy. In the treatment of drug diseases it has come to be an almost indispensable remedy.

We are using the Daus Tiptop Duplicator with great satisfaction and believe it to be, next to the typewriter, one of the most valuable assistants which can be put into any office. See notice in our advertising pages.

Horsford's *Acid Phosphates* has a powerful remedial action in all nervous debilities following alcohol and drug addictions. It is a standard remedy to be kept in every pharmacy of public and private hospitals.

The Jackson Sanatorium at Dansville, N. Y., is a model hotel hospital for invalids, with every appliance and means to restore and make its inmates comfortable.

Dr. Punton's private home for nervous invalids at Kansas City, Mo., is an excellent asylum home and conducted on the most scientific manner.

Ammonol continues to win new friends wherever it is used and appears to be one of the best of the coal-tar derivatives in use.

AMERICAN ASSOCIATION FOR THE STUDY OF INEBRIETY

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The object of this Association is to promote the scientific study of Inebriety from alcohol, opium, and other drugs, and to encourage special legislation for the care and control of these neurotics. It also aims to organize all legitimate asylums to follow some general principle and method of practical work. Every hospital and institution in the country should join this Association and assist to rescue the treatment of Inebriety from the realms of quackery, and place it on the same level with the treatment of other neurotic diseases and thus secure the same medico-legal and institutional recognition which is given to the Insane Asylums. The membership fee is \$2.00 a year, which includes the annual subscription to the *JOURNAL OF INEBRIETY*, the organ of the Association. All communications should be addressed to

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The object of this Association is to encourage and promote the clinical, therapeutical, pharmacological, and chemical study of alcohol in health and disease. It also aims to gather, compile, and make available the studies and experiences of medical men in all parts of the country concerning the use of alcohol and to formulate such definite facts as can be utilized and made available in the practice of medicine. It is assumed that all physicians interested in the study of alcohol should approach it from the scientific side alone, unbiased by any personal considerations of custom or habit, and with no object other than to ascertain the facts concerning this question irrespective of all possible conclusions. This is the spirit and purpose of the Association and it is entirely independent of any other object except the purely scientific question of the nature and character of alcohol.

All regular practitioners of medicine may become members by a two-thirds vote of the Association at any regular meeting, after signing the following form of application and transmitting the same to the Secretary of the Association:

APPLICATION.

I desire to become a member of the American Temperance Medical Association and am willing to comply with the requirements of its by-laws and promote the object of this Association.

Name

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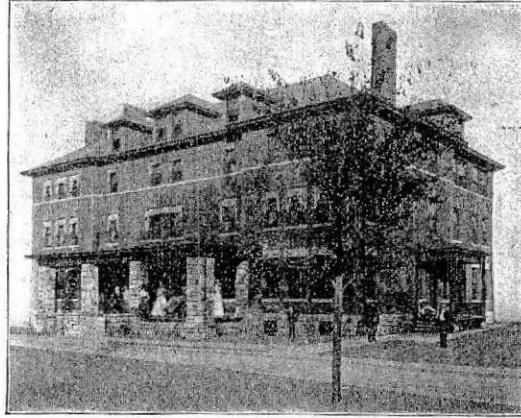
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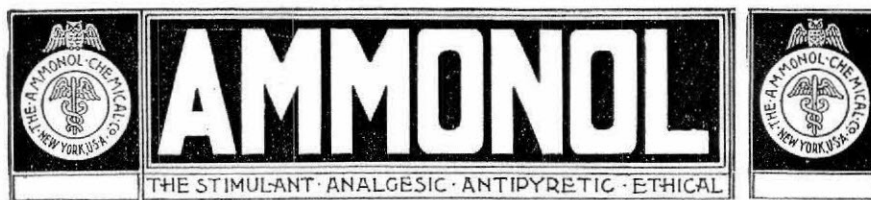


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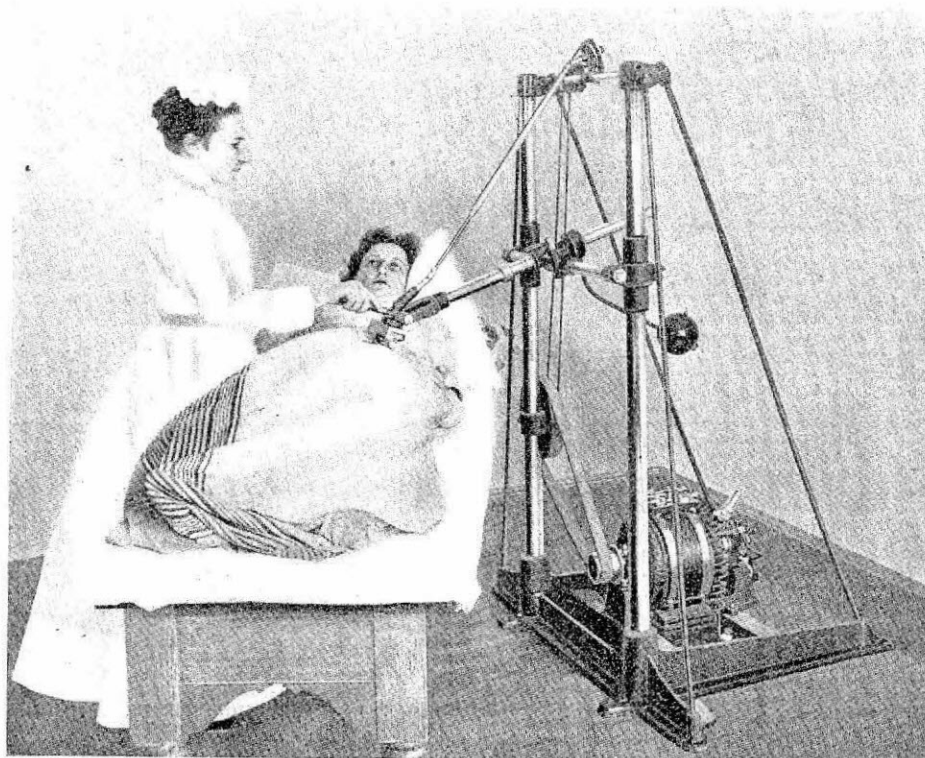
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