

# ALCOHOLISM

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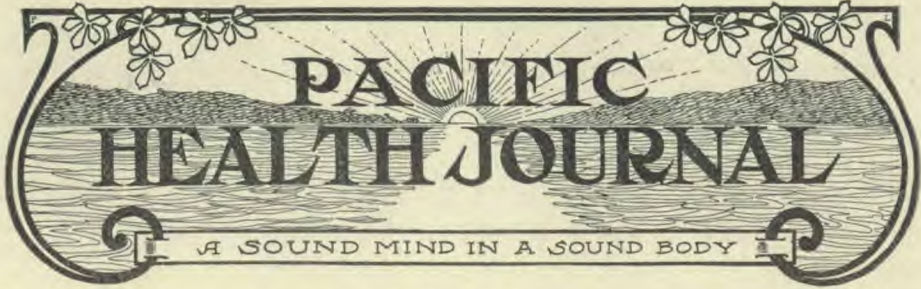
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**"LOOK NOT UPON  
THE WINE WHEN  
IT IS RED,  
WHEN IT SPARKLETH  
IN THE CUP,  
WHEN IT GOETH  
DOWN SMOOTHLY;  
AT THE LAST IT  
BITETH LIKE A  
SERPENT,  
AND STINGETH  
LIKE AN ADDER."**

PROV. 23: 31, 32  
P. V. MORGAN



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No. 1

## Is Alcohol a Food ?

By T. D. Crothers, M. D.

Supt. Walnut Lodge Hospital, Hartford, Conn.; Editor, the *Quarterly Journal of Inebriety*; Secretary, American Association for the Study and Cure of Inebriates, and of the American Medical Temperance Association.

**S**UCH a question would sound strange to many persons, and yet it is seriously asked and answered in a very confusing way. Many years ago alcohol was recommended by eminent medical men, as a valuable stimulant very useful in many forms of disease. In those days, disease was thought to be a state of low vitality and depression requiring correction. Alcohol was supposed to keep up the energies of the body until nature could come to the rescue and drive out disease. This theory has fallen into disuse and the causes of disease which were supposed to be this or that are now found to be entirely different. Alcohol is supposed by some to give energy to the body, similar to that furnished by food; and this view is based on the evidence of the senses, and the supposition that the increased heart's action following a dose of spirits is due to increased vigor. Now all is changed; studies on the physiological action of foods or of alcohols is conducted on a higher plane and with more perfect instru-

ments of precision. Still the old delusions of food values linger among those who have not kept pace with modern discoveries.

A few years ago a noted chemist announced as the result of some new investigations, that alcohol has a food value which can be demonstrated by exact researches. Later when this was questioned and the proof for such statements called for, he was unable to give them, and when the experiments, which he said sustained his theory, were examined, the errors were so numerous that his conclusions were found to be unsupported. The dogmatic way in which he defended his theories created a stir in scientific circles, and stimulated more exact investigations, all of which failed to find any real value in alcohol other than that of a depressant and narcotic. The evidence is conflicting and many of the authors affirmed that alcohol is a food in a very limited sense, but was a dangerous one, and hence should not be used. Other authors agree that it is expensive as a food, and,



while it liberates some energy which can be utilized to sustain the strength of the body, it is impractical to use it.

In these discussions there is so much confusion and so many sources of error, that no author cares to defend authoritively the theory of its food value. The principal contention is, that by the oxidization of alcohol in the body certain force elements are liberated, which are in the nature of concentrated foods. A second theory, is that alcohol increases the digestive fluids and in this way aids digestion and the assimilation of foods. To this there are so many exceptions and qualifying conditions that any clear statements are impossible. A noted chemist has shown conclusively that while the quantity of digestive fluids is increased by the action of alcohol, the quality is greatly diminished and that one who takes spirits before or after eating with a view of creating an appetite succeeds, but at the expense of weakening the digestive powers, making it harder for the system to take up and appropriate the food introduced. In other words, the man who drinks to create an appetite for food eats more than his system requires, and therefore increases the waste matter to be disposed of in the body. He is practically making a gormand of himself and destroying his capacity to make use of the food taken in the body. The best answer to this question, Is alcohol a food? which science gives, has been made from a study of the effects of alcohol on the senses and organic activities of the body.

If alcohol is in any possible way a food, it can not depress or lower the activities of the body. Foods do not do this. Experiments have been made

in Germany and in this country, on the effects of small doses of alcohol on the brain and sense activities, which have shown that instead of giving any new power and vigor to the body, alcohol actually detracts from it.

Thus Professor Krapelin, of Heidelberg, has made many experiments, examining the senses, muscular powers, and mental strength of healthy persons for the purpose of determining their normal condition and to find some standard from which to judge of the effects of spirits. These persons were then given small quantities of alcohol, and measured to determine the difference between the conditions following the use of alcohol, and the previous one in health. It was found that the eyesight was notably affected; a person who normally could see letters thirty feet away could not, after using alcohol, see them at a greater distance than twenty or twenty-five feet. The sense of sight was diminished and obscured. Where sounds were heard in health two feet from the ear, after using alcohol they had to be brought up to fifteen or eighteen inches.

The same with muscular power; the capacity of life to push and to pull was diminished markedly by alcohol, although the person was unconscious of this condition. The rapidity of thought tested by a stop watch and an electric battery showed slowing down of the mental process. Memory tests both before and after spirits were taken showed the same failure. The heart's action, which at first was increased, was later depressed as far below the normal as it had been raised above it. The temperature of the body was also lowered. In all this there was a marked paralysis, or slowing up of the normal activities of the



body. If alcohol were in any sense a food this could not happen, or if alcohol added any energy to the body which it did not have before, these results would be different. The amount of alcohol given was half an ounce and upwards, equivalent to a small dose of whisky or other spirits.

These experiments constitute the most important advance in the accurate study of the effects of spirits on the body and prove without question that alcohol can in no way act as a food or force producer. Further researches show that alcohol is a toxin, that is, a substance poisonous to the body. It is known to be a water absorber, and wherever it comes in contact with the substance of the body it soaks up the water rapidly and so becomes an irritant. When alcohol is used on the surface of the body, the rapid absorbing qualities, extracting the water from the surface produces intense redness and burning when applied continuously. Alcohol taken in the mouth has the same sponge-like action, burning the throat in its passage to the stomach, and drinking up water from all tissues it comes in contact with. Chemists have shown that when taken into the stomach it stops digestion until this water-absorbing property is satisfied, and that it is quickly absorbed into the blood-vessels, affecting the blood cells and diminishing their power to carry oxygen to all parts of the system.

The poison of alcohol, no matter what changes it undergoes in the stomach or other parts of the body, favors the growth of other poisons and destroys the capacity to utilize the food particles; in this way increased waste follows, and general derangement of all the delicate chemical pro-

cesses so essential to health. These are only some of the facts which are becoming more and more settled from each new observation and study. Its real condition and activity is concealed; for while it paralyzes force and diminishes the general power of the body, the person is unconscious of the actual condition. Thus, the supposed action of increasing the heat of the body is found to be literally cooling it off. The increased flow of blood to the surface causes a sensation of heat, but chills the body more rapidly. The supposed greater strength is followed by greater exhaustion. Its value as an appetizer is quickly followed by indigestion and other stomach troubles. The common, every-day experience shows that persons who use alcohol are less vigorous, more imperfectly nourished, more subject to colds and liable to disease than persons who do not use it. A large part of the mortality due to pneumonia occurs in persons who have used spirits both in moderation and to excess. A large number of rheumatic cases are traceable to the injuries which come from the use of spirits. Now, if alcohol is in any way a food or force, this condition would not follow.

The contention of many persons that these pronounced effects only occur in large doses is not sustained by a careful study of cases. When alcohol is taken in small doses it may not show its effects at once, but it is cumulative, that is, one dose added to another constantly grows until by-and-by the action of all breaks out in some derangement of the body. The claims that alcohol may have acted as a food in sustaining the body are clearly explained by its narcotic properties slowing down all the processes of the body,



always at the expense of permanently deranging and disturbing the normal conditions of life. Many years ago Dr. Adams of London sought to prove that alcohol, if properly administered, would lengthen out and perpetuate life. He found two persons willing to make the experiment. Alcohol was given with foods and without it, and they were permitted to exercise in conditions most favorable for strength and vigor. The result was, that in a few weeks, debility, exhaustion, and delirium followed, and the experiment was a failure.

The common observation is that persons who use spirits continuously show great inferiority of vigor, with lowered vitality and extreme susceptibility to many very serious and fatal diseases. In fact, all physicians recognize that the use of alcohol is the foundation and a prominent predisposing cause of disease. The supposed vigor of beer-drinkers is a delusion. Workmen on the docks at Liverpool and in the breweries, who are given large quantities of beer, have very low vitality and die early, mostly from heart disease. The supposed antagonism of spirits to contagious disease, snake-bites, and other poisons, is found to be a myth and not sustained by careful examination. It is difficult to understand, in view of the vast array of facts from the laboratory, from the sick room, and from the common observation, how alcohol can be considered to have any food value! Breeders of dogs find that the continuous use of alcohol retards the healthy growth and is necessary to make dwarf dogs, or to diminish the natural

growth. All this indicates clearly that the food value of alcohol is a fiction, or that its force or power producing quality is also a delusion, and that these appearances are explainable in another and more satisfactory way.

The arguments so often used, based on the cases of persons who have used spirits for a long time, and still are able to do the ordinary work of life, are always found delusive, when examined. I have never found persons of this class to confirm the impressions which seem real from a general study of their history. Thus, one man for a long time was considered to illustrate the food value of alcohol, having used large quantities in his daily work. In reality it was found that his use of spirits had been very irregular with long intervals of abstinence and active outdoor work; also for many years he had been growing feebler, mentally and physically. He was boastful, childish, and stupid. Alcohol had destroyed his moral sense and made him an automaton at his work. He was found dead in his bed, and all of his family which followed him were degenerates and died early. In this case alcohol used as a food, was at least the most dangerous one. This, I think, is a fair example of other cases quoted to illustrate the value of alcohol, as a food. The general rule may be laid down that alcohol is a tissue-poison in all quantities and that in no way can it properly be said to be a food, or even a proximate food in any particular. Clinical experience and careful observation more thoroughly settle this question than any chemical theorizing.



## Is Alcoholic Medication Necessary?

IN OTHER WORDS, IS ALCOHOL, AS IT EXISTS IN THE VARIOUS  
FERMENTED AND DISTILLED LIQUORS, A NECESSARY  
REMEDY IN THE TREATMENT OF DISEASES  
OF ANY KIND, OR IN ANY STAGE  
OF THEIR PROGRESS?

By N. S. Davis, A. M., M. D., L.L.D.

[President American Medical Temperance Association.]

**I**N answering the above question it is proper to state that any substance to be necessary for either preventing or curing disease of any kind, must be capable of neutralizing or destroying the causes of the disease; or of directly controlling the morbid processes constituting the disease itself; or of sustaining the vital processes and functions of the living human body until the disease has terminated by its own natural limitations. At the present time it is freely admitted that alcohol, as it exists in beer, ale, wine, whisky, brandy, rum, and gin, is the product of vinous or saccharin fermentation, and is the only active or important ingredient in the several fermented and distilled liquors just named. Consequently whatever may be said concerning the effects of alcohol on the human system, whether in health or in disease, must be regarded as equally applicable to the effects of each and all of the several fermented and distilled liquors.

To decide whether the use of alcohol is necessary for the successful treatment of any of the various forms of disease, we must learn both by direct experiments and by faithful and accurate observations the changes the alcohol undergoes while in the human

body, and its effects upon the structures and functions of the various organs, and upon the constituents of the blood.

By such experiments and observations conducted by eminent chemists, physiologists, and physicians, both in this country and in most of the countries of Europe, it has been clearly demonstrated that alcohol, when taken into the living human body, undergoes no digestion or assimilation in the digestive organs, but is rapidly absorbed into the blood, and in it is carried into every organ and structure as alcohol, the same as ether, chloroform, morphine and other anesthetic and narcotic drugs. It is conceded by all, that it furnishes no material for the nutrition, growth, or repair, of any of the organized structures of the living body, and therefore can not be properly called food. Some of it is eliminated unchanged through the skin, kidneys, and lungs, but much the greater part is oxidized by uniting with the free oxygen in the blood and is converted into carbonic acid and water, with some evolution of heat.

By such union with the free oxygen of the blood, however, it diverts that important agent from its natural and necessary action on the hemoglobin and corpuscular elements of the blood,



and on all the organized structures of the body; and thereby diminishes all nerve sensibility, muscular strength, tissue metabolism, and the excretion of waste products in direct proportion to the quantity of alcohol used. By thus diminishing the sensibility of all nerve structures, and the activity of the various excretory functions, by which not only the natural products of excretion, but also the toxic or delaterious agents producing disease are retained in the system, the presence of alcohol becomes a positive predisposing agent favoring attacks of almost every variety of disease and rendering them more persistent and more fatal.

So true is this, that every standard writer on practical medicine mentions the habitual use of alcoholic drinks as one of the most important agents favoring attacks of tuberculosis, pneumonia, influenza, typhoid fever, and all other infectious diseases of adult life. They also state that attacks of these diseases in such patients yield a much higher ratio of mortality than in patients who are total abstainers from alcoholic drinks. No fact is better established in the domain of medicine and surgery, than that the daily use of alcoholic liquors diminishes man's vital resistance to the action of all the known causes of disease, and consequently, it can not be used with benefit as a preventive of disease of any kind.

If alcohol can not be used successfully for the prevention of attacks of disease, can it be so used as to control the active symptoms of any form of disease and thereby hasten the recovery of the patient? Until near the middle of the nineteenth century, alcohol was very generally regarded as a stimulating tonic and anodyne, and was used

more or less freely in almost all forms of disease accompanied by pain, restlessness, and a sense of weakness. But the same experiments and clinical observations, aided by all the modern instruments and appliances for insuring accuracy of results, that had shown that the presence of alcohol in the blood and tissues directly lessened all nerve sensibility, muscular strength, tissue metabolism, and excretion of waste products, showed also that it diminished the activity of the mental faculties, the depth and efficiency of respiration, and the activity of leucocytes, thereby favoring the retention of the toxic agents producing the disease and prolonging its duration, as well as increasing its ratio of deaths.

The chief purposes for which alcohol or alcoholic liquors are recommended by writers and practitioners of medicine at the present time, are to relieve pain, promote rest or sleep, and to prevent failure of the heart and circulation of the blood in acute inflammatory and febrile diseases. It is true, that by its anesthetic or anodyne properties, when given in liberal doses, it relieves pain and promotes rest. It does so, not by removing the cause of pain or restlessness, but by so far diminishing the sensibility of the brain and nerves as to render the patient unconscious of their existence, while the causes remain ready to renew their irritating effects as soon as the alcohol has ceased to act. Its relief is therefore not curative, but temporary, and is more than counterbalanced by retarding the excretory action of the kidneys, liver, and other eliminating structures of the body.

That alcohol does not increase the force and efficiency of the heart or blood-vessels in circulating the blood,



in either health or disease, has been proved by the most ample observations at the bedside of the sick, and by direct experiments upon persons in good health. Dr. R. C. Cabot has recently published in the *Medical News* the results of 1260 carefully recorded observations on 309 patients suffering from a variety of diseases, (41 from typhoid fever), while they were taking ordinary medical doses of alcohol, in which he states that "the alcohol seemed to have no action on the circulation."

In health and in many cases of disease an ordinary medicinal dose of whisky or brandy or wine will almost immediately cause the heart to beat three or four times more each minute, and to continue doing so from ten to twenty minutes, and during the same time the volume of the pulse is slightly increased.

It is this very temporary quickening of the heart beat and expansion of the pulse that has caused the alcohol to be regarded as a heart tonic or stimulant. But further observations show that the increased frequency of heart-beat is in part from reflex irritation of the alcohol on the stomach branches of the pneumogastric nerves, and in part from diminished sensibility of the inhibitor nerves of the heart, while the increased volume of the pulse and capillary circulation is the result of diminished sensibility of the vaso-motor nerves caused by the anesthetic properties of the alcohol in the blood. In other words, the so-called stimulant effect of the alcohol on the heart and general circulation is only the result of diminished sensibility of the vaso-motor and inhibitor nerves. If the alcoholic dose is not repeated, both the heart beat and the

pulse return to their previous condition, or below it, in from 15 to 45 minutes.

If the doses are repeated often, the alcohol accumulates in the blood and tissues faster than it can be either oxidized or eliminated and soon begins to develop all the depressing effects of large doses, and if continued, in acute diseases, generally causes the patient to die in from one to four days with failure of capillary circulation, and dilatation of the right cavities of the heart. Therefore, its use for combating the symptoms of disease is not only not necessary, but is more or less injurious to the patient.

It is claimed by some, however, that though alcohol neither neutralizes the causes of disease, nor controls its active symptoms, yet, by undergoing oxidation in the blood and tissues, it liberates some force or energy by which the patient may be sustained until diseases of an acute or self-limited character have completed their course and convalescence has ensued. When such have been asked what force or energy is liberated by it, the only answer has been that it liberates *heat* by uniting with the free oxygen in the system and being converted into carbonic acid and water.

But, as before stated, by uniting with the free oxygen it diverts just that much of the oxygen from its supporting molecular or metabolic changes, both nutritive and excretory, and from maintaining nerve sensibility and thereby resulting in the presence of less, instead of more, free heat. That it does not evolve or generate vital or protoplasmic force is abundantly proved by the fact that the presence of its vapor in the air of a room diminishes the growth of plants, and



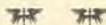
if the alcohol is mixed with the water used for watering plants or growing vegetables, it soon causes them to die. When given to young animals, either by mixing it with their food or injecting it into their blood in small quantities, it retards their growth and sooner or later causes them to sicken and die. And if taken by human beings daily in moderate doses, only sufficient to cause the constant presence of some alcohol in the blood and tissues, it retards the growth of the young and prevents the nutritive processes by encouraging fatty and fibroid tissues and ultimately all the well-known changes constituting chronic alcoholism. It does this by its strong affinity for the hemoglobin and corpuscular elements of the blood, and for the protoplasm of the organized structures of the body. Consequently, its presence lessens every known force or energy belonging to the living body; and yet it often deceives both physician and patient by its anesthetic effect in diminishing the sensibility of the brain and nerves and promoting rest; in other words, by rendering the patient less conscious of his real condition.

Indeed, the only useful indication

that the internal use of alcohol is capable of fulfilling, is to temporarily quiet restlessness and relieve pain as an anesthetic. But for that purpose we have so many more active and efficient anesthetic and anodyne remedies that there is no necessity for using alcohol or any kind of alcoholic liquor in the treatment of any form of disease.

I have practised medicine continuously more than 66 years; the first 12 in New York, the last 54 in Chicago. It took me the first ten years to learn the real nature of alcohol and its delusional effects in the treatment of diseases, and during the last 54 years spent in Chicago, I have not found it necessary or beneficial, to prescribe for my patients any alcohol or alcoholic liquors, either fermented or distilled. During the last half century I have been actively engaged in the treatment of every variety of disease that has prevailed in the city, whether epidemic, endemic or sporadic, and if any bad effects have followed my refusal to allow my patients alcohol or any kind of alcoholic liquors, the people have been very slow in detecting the same.

*Chicago, Ill.*



*Knopf, the great authority on tuberculosis, after mentioning climate, ventilation, venereal diseases as predisposing causes of tuberculosis, says: "Alcoholism predisposes to pulmonary tuberculosis to a still higher degree. Children of alcoholic parents are particularly susceptible to tubercular disease."*

*Thousands of experiments upon large bodies of men have been made, and have led to the result that, in peace and war, in every climate, in heat, cold, and rain, soldiers are better able to endure the fatigues of the most exhausting marches when they are not allowed any alcohol at all.*

—Bunge, "Physiological and Pathological Chemistry."



# The Physiological Effects of Alcohol

By C. E. Stewart, M. D.

Of the Medical Staff, Battle Creek Sanitarium; Professor of Physiology, American Medical Missionary College of Chicago; Assistant Editor, *Modern Medicine*.

**A**LKOHL, an Arabic word from which our English word alcohol, is derived, means something subtle. A careful study of the physiological effects of alcohol shows us how comprehensive this word is. Because of its subtle action, alcohol is extremely deceptive in its influence upon the human economy. It leads a man to think that he is becoming warm, when, in fact, the opposite is true; it makes him think that he is stronger, when in fact, he is weaker; in other words, it is a "nerve fooler," and the seeming beneficial effects experienced by its use have, as we shall see, been proved to be false. Notwithstanding the fact that the ingestion of alcohol gives to the user a sensation of well-being, careful investigation has shown that in so doing it produces disastrous results, which are in nowise compensated for by the feeling of well-being which it is said to produce.

The individual who indulges in the use of some form of alcoholic beverage for the purpose of warmth does so because of the sense of increased warmth and well-being which result. But what are the actual facts? Is he in reality warmer, or has he been deceived by this "subtle" substance?

When alcohol is absorbed into the blood, it is carried to all parts of the body, exerting its paralyzing influence upon the delicate nerves which control the caliber of the blood-vessels.

As soon as this occurs the smaller blood-vessels of the skin dilate, this being evidenced by the increased redness which results from the increased amount of blood passing through them. This increased amount of blood bathing the sensory nerves of the skin gives to the individual a feeling of warmth, but at the same time the increased amount of blood passing through the skin causes more heat to be eliminated from the body. As a consequence the amount of heat disposed of in this way is considerably greater than the amount produced within the body in the same period of time, so the body temperature is lowered instead of increased. This can easily be proved by the use of the thermometer.

A practical demonstration of these facts has frequently been observed in the case of Arctic explorers. It has been noted that those who used alcohol in any form for the purpose of increasing the bodily temperature, suffered much more and succumbed much more readily, from the effects of the cold than those who abstained from its use.

It is often claimed that alcohol is an aid to digestion. The reason for this idea is undoubtedly the pleasurable sensation experienced after taking alcohol into the stomach. But the truth of the matter is that decidedly injurious results are produced by its use, even in comparatively small



amounts. In one instance which the writer is familiar with, a chemical examination of the stomach contents showed, after a regular test meal, 32 milligrams of hydrochloric acid. On another occasion, a similar examination of the contents of the same stomach, after a regular test meal, with the addition of two ounces of brandy, showed a total absence of hydrochloric acid. Many other cases might be cited to substantiate these facts.

The very large number of cases of acute and chronic gastritis and diseases of the liver and kidneys occurring in those addicted to the use of alcoholics, attest to the pernicious influences exerted upon the digestive and eliminative organs.

The deceptive and injurious influences of alcohol upon the human system can not be better illustrated than in its weakening influence upon the muscular system, as is evidenced by the amount of work done by healthy young men before and after the ingestion of two ounces of whisky. In making these observations an instrument by means of which the strength of the various groups of muscles could be accurately ascertained was used. The results showed that while the individuals were certain in their own minds that their strength had been increased by the use of the whisky, there had been an actual decrease of about one-third their total strength.

Observations with reference to the effects of alcohol upon the acuteness of the senses of hearing and vision have clearly demonstrated that they are perceptibly less acute after the use of even small amounts of alcohol.

The vitiating influence of alcohol is readily observed in the large number

of its victims who fall a prey to so many of the acute diseases, particularly pneumonia. The reluctance with which surgeons attempt to operate on those addicted to the use of alcohol because of the slowness with which wounds heal in such cases, is another illustration of devitalizing influence.

A decided practical demonstration of these facts has been made by Dr. A. C. Abbott, in which he showed that the normal vital resistance of rabbits to infection by disease-producing germs is very materially diminished through the influence of alcohol. In performing these experiments it was noticed that the animals to which alcohol had been given showed the effects of disease earlier than others similarly treated, with the exception that they were given no alcohol. It was also observed that the animals to whom the alcohol had been administered were very much more seriously affected than the others.

The white corpuscles of the blood, whose function is to guard the body from the inroads of disease, are very greatly influenced by the use of alcoholics. This is one reason why alcohol has such a powerful influence in rendering the body less capable of resisting infection, and also why such diseases as pneumonia, pleurisy, yellow fever, cholera, etc., are so much more frequently fatal in those addicted to the use of alcoholics than in abstainers. White blood cells placed in water kept at the temperature of the body, and to which a small amount of salt has been added, will live for hours; but as soon as a small amount of alcohol is added, these cells begin to show evidence of diminished activity, and in a short time are dead.

Alcohol is absorbed directly into



the blood, and were it not for the fact that in passing through the liver its poisonous action is greatly modified, small amounts of alcohol would have a very decided and destructive influence upon the various cells of the body. All cells of the body may be said to be under water,—they are all bathed by the blood or lymph, thus making it possible for all soluble substances to come directly in contact with all parts of the body.

The liver is a safeguard to a certain degree, against the poisonous effects of many substances which enter the body, and in the case of the use of alcohol it not infrequently shows the

effects of the combat it has had. Sometimes it becomes enormously enlarged; again, when it has had to keep up this combat for many years, the organ has become shrunken and roughened, producing what is commonly known as "the hob-nailed liver."

Many other facts might be brought forth to show the injurious effects of this "subtle" substance, but space does not permit at this time, and we can only sum up this evidence by stating that alcohol is a "nerve fooler," a tissue poison, and is in nowise a substance that can be used either as a medicine or a beverage to produce permanent beneficial results.



## Mental, Moral, and Social Aspects of Alcoholism

By W. S. Sadler

**A**LCOHOL is directly and indirectly responsible for a vast number of deplorable conditions, mental, moral, physical, and social. At every turn we behold the devastations wrought by this drug upon both the individual and the community.

### MENTAL EFFECTS.

The effect of drink upon the mind, while it has a tendency to produce a delusive sensation of temporary exhilaration, is such as to dethrone the reason, impair the judgment, and, in general, confuse and stupefy mental activity. The stimulation of the mental powers produced by alcohol is purely a deception, for the good feeling of to-day is only procured at the

expense of a proportionately bad feeling to-morrow. Dr. Bunge, an eminent physiological chemist, says: "The stimulating action which alcohol appears to exert on the physical functions is only a paralytic action. The cerebral functions which are first interfered with, are the powers of clear judgment and reason. As a consequence, emotional life comes into free play, unhampered by the guiding strings of reason. The individual becomes confiding and communicative. He forgets his cares and becomes gay. In fact, he no longer sees clearly the dangers and difficulties of life. Hence, the lightheartedness which prevails at a carouse." Thus it would seem that alcohol is but a counterfeit way of securing the normal exhilaration and



good cheer which it is the privilege of every human being to enjoy, and which comes, not from alcohol, but from a clear conscience, an active mind, and a healthy body; which things, in turn, are dependent upon proper habits of life, and more particularly upon a nutritious and hygienically prepared dietary, and consequent good digestion.

There is a direct parallel between the effects of alcohol and the symptoms of insanity. An intoxicated person is, for the time being, insane. He has lost control of his mental faculties. Alcohol is his master. Such a course surely, even if slowly, lays the foundation for, and creates a tendency to permanent derangement of the mind. Delirium tremens, a form of insanity, is directly traceable to alcohol. Alcohol and similar drugs have sent their thousands of victims to the insane asylum. The increased yearly consumption of alcoholic liquors, in all modern civilized nations is quite equally balanced by the increased ratio of insanity. This significant fact would suggest the relationship of cause and effect between intemperance and insanity: drink the cause, insanity the effect.

This influence of alcohol is handed down to posterity. It is believed that a very large percentage of epileptics, defectives, and degenerates, is produced by the intemperance and dissipation of their parents or ancestors. Some idea of the increasing number of such degenerates may be gathered from the fact that many of our leading institutions for the reception of feeble-minded youth are so over-crowded that candidates for admission have to wait years after their application before they can be received. Both

statistics and careful observation reveal the fact that the ranks of defectives and degenerates are largely recruited by the children from the drunkard's home.

Alcohol is a foe to clear thinking and deliberate acting. Many a strange transaction in the business world, and queer episode in social realms, would be shown, upon investigation, to be directly traceable to drink. Men who, when sober, are clear thinkers and ordinarily successful in their worldly pursuits, are easily overcome and left behind in the race by their more sober competitors.

#### MORAL EFFECTS.

Perhaps nowhere does alcohol produce such deplorable and far-reaching effects as in the realm of the spiritual life. The once truthful and conscientious father, under its terrible influence, becomes a deceiver, an embezzler, or a betrayer of the most solemn promises and sacred trusts. The girl, once so pure and gentle, under its demoralizing influence is found to sink to the lowest level of the social quagmire; and when intoxicated, to be capable of the grossest crimes against society and morals. An affectionate father becomes a terrorizing fiend. Little by little, the finer sensibilities of mind and soul are so benumbed and blunted that the unfortunate victim of drink is led into hopeless captivity by the vice and immorality invariably associated with intemperance. Thousands of the victims of drink have found, only too late, the truth of Prov. 23:33, "Do not look on the wine when it looketh red, when it giveth its color to the cup; when it glideth down so readily. At last it will bite like a serpent, and like a



basilisk will it sting." (Jewish translation.)

Under the influence of this foe of human happiness, a loving husband is transformed into an unreasoning brute, wholly inconsiderate of his wife and children. Natural affection and family devotion sustain one blow after another, until they are well-nigh obliterated. The moral powers are more and more blunted. Human sorrow and misery and domestic wreckage are strewn all along the track of the drink demon.

Morality and alcohol do not belong to the same family. They are total strangers. True, many are accustomed to drink, who do not exhibit external evidences of vice and immorality; but it must be remembered that the beginning is not the ending, the seed-sowing does not always reveal the harvest, and, too, appearances are not always a safe criterion. Heaven can best judge in the moral realm. But this one thing we are sure of: that alcohol, which has been the means of wrecking the morals and ruining the lives of so many thousands, has no place among the noble and uplifting agencies which tend to promote temperance, strengthen morality, and advance spirituality.

#### SOCIAL EFFECTS.

Not the least noticeable of the ravages of alcohol upon the human race may be observed in the shape of poverty. Undoubtedly a very large proportion of the physical misery and social wretchedness in our large cities may be directly or indirectly traced to alcohol. Some years ago a "Committee of Fifty" was appointed to inquire into various phases of the liquor problem. The statistics gathered by this committee, and presented in their

public report, contain much information of great value, especially the chapter devoted to "The Relation of Alcohol to Poverty." After a careful investigation of thirty thousand cases of pauperism, this committee found that thirty-seven per cent of the cases owed their unfortunate situation to the calamity of drink. In the face of this, how absurd is the argument that saloons are a help to the community by the license they pay! Rather should it be recognized that the liquor traffic is responsible for about one-half of the pauperism calling for public support. The percentage of actual poverty traceable to alcohol is, however, only partially indicated by the returns of such investigations. Heaven alone could reveal the entire number of poor widows struggling at the midnight hour to support the children of a degenerate and depraved father, as well as thousands of other innocent and unwilling victims of alcohol sacrificing their lives in the desperate battle to prevent their becoming objects of public charity.

The daily newspapers tell the story of increased frequency in the occurrence of great disasters by rail and in our large manufacturing establishments. Many of these disasters are directly traceable to negligence or blunders committed by men whose minds were more or less stupefied by alcoholic liquor, or whose mental faculties were beclouded and paralyzed by the "moderate drinking" delusion. Superintendents of great railroads and other large enterprises employing hundreds of men, universally recognize that it is a wise policy to insist upon total abstinence on the part of their employees. But an evil which strikes so deeply at the very



vitals of society, can not, of course, be fully eradicated by corporation rules, reformatory organizations, nor even by legal enactments. Our only hope is the reformation of the individual.

The average laboring man who has acquired an uncontrollable thirst for alcohol, spends a sufficient amount each day for drink, to well-nigh support a family of three or four persons, if judiciously invested in such cheap but nourishing articles of diet as dried beans, peas, bread, oatmeal, or other similar food-stuffs. On the other hand, it is not improbable that a dietary insufficient for bodily nourishment, or food prepared in an unwholesome and stimulating manner, by the addition of much spice and condiment, might be regarded as one of the exciting causes leading to alcoholism.

Thousands of individuals are swelling the ranks of the unemployed not because of a lack of work, but because they have little will-power and mental capacity. They lack force of character; they have not sufficient determination and purpose to enable them to satisfactorily perform even ordinary manual labor. Consequently, they find themselves tossed about, creatures of circumstance.

One of the most pernicious influences of alcohol is observed in its fertility in producing criminals. The writer has had abundant opportunity to inquire into the causes, which have resulted in sending a large number of men to prison; and almost invariably it has been disclosed that alcohol, in some way, was responsible for the crime committed, and the consequent imprisonment. This may be readily understood, when it is remembered

that the influence of alcohol is such as to distort and deteriorate the whole mechanism of mind and body. It places its unfortunate victim fully within the grasp of the evil power that tempted him to drink, very often leading him to commit crimes and inflict injuries, which he would never have dreamed of while in his right mind. Sobriety is the friend of right doing, the enemy of crime; drunkenness is the companion of vice and the handmaid of iniquity.

The habitual use of alcohol, by its blunting influence of the higher sensibilities, distorting the judgment, and deranging the nervous system, gradually leads its victim to regard many phases of crime as of trivial importance.

The Committee of Fifty before mentioned, in the investigation of the cases of thirteen thousand convicts, found that intemperance figured as the cause of crime in about fifty per cent of the cases, and was the *first cause* in thirty per cent.

Whatever the advocates of alcohol may be able to say in its favor, it must be apparent to the careful observer, that its influence is first and last, to weaken and impair the judgment, undermine the morals, induce poverty, and produce a long train of undesirable and unholy consequences. So long as the use of alcohol continues, and in proportion to the increase in its consumption, so long, and in exactly such proportion, will the moral and spiritual stamina of the race be undermined, and the more certain and inevitable will be its ultimate decline.

28 Thirty-third Place,  
Chicago, Ill.



## The Liquor Traffic and Prohibition

By Mrs. E. G. White

THE WORK OF THE LIQUOR-SELLER.

“WOE unto him that buildeth his house by unrighteousness, and his chambers by wrong; . . . that saith, I will build me a wide house and large chambers, and cutteth him out windows; and it is ceiled with cedar, and painted with vermilion. Shalt thou reign, because thou closest thyself in cedar? . . . Thine eyes and thine heart are not but for thy covetousness, and for to shed innocent blood, and for oppression, and for violence, to do it.”

This scripture pictures the work of those who manufacture and who sell intoxicating liquor. Their business means robbery. For the money they receive, no equivalent is returned. Every dollar they add to their gains has brought a curse to the spender.

For the sake of gain, the liquor-seller deals out to his victims that which corrupts and destroys mind and body. He retails on the drunkard's family poverty and wretchedness. When his victim is dead, the rum-seller's exactions do not stop. He robs the widow, and brings children to beggary. He does not hesitate to take the very necessities of life from the destitute family, to pay the drink bill of the husband and father. The cries of the suffering children, the tears of the agonized mother, serve only to exasperate him. What is it to him if these suffering ones starve? What is it to him if they, too, are driven to degradation and ruin? He grows rich

on the pittance of those whom he is leading to perdition.

For the sick and the exhausted, there are the widely-advertised “bitters,” consisting largely of alcohol.

To create the liquor appetite in little children, alcohol is introduced into confectionery. Such confectionery is sold in the shops. And by the gift of these candies the liquor-seller entices children into his resorts.

Day by day, month by month, year by year, the work goes on. A vast army of fathers, husbands, and brothers, the stay and pride and hope of the nation, are steadily passing into the liquor-dealers' haunts, to be sent back wrecked and ruined.

More terrible still is the curse that is striking the very heart of the home. More and more, women are forming the liquor habit. In many a household, little children, even in the innocence and helplessness of babyhood, are in daily peril through the neglect, the abuse, the vileness of drunken mothers. Sons and daughters are growing up under the shadow of this terrible evil. What outlook for their future, but that they will sink even lower than their parents?

From so-called Christian lands the curse is carried to the regions of idolatry. The poor, ignorant savages are taught the use of liquor. Even among the heathen, men of intelligence recognize and protest against it as a deadly poison; but in vain have they sought to protect their lands from its ravages. By civilized peoples,



tobacco, liquor, and opium, are forced upon heathen nations. The un-governed passions of the savage, stimulated by drink, drag him down to degradation before unknown, and it becomes an almost hopeless task to send missionaries to these lands. For one soul converted by the gospel, multitudes are ruined by the demon drink. Through their contact with peoples that should have given them a knowledge of God, the heathen are led into vices that are proving the destruction of whole tribes and races. And in the dark places of the earth the men of civilized nations are hated because of this.

#### THE RESPONSIBILITY OF THE CHURCH.

The liquor interest is a power in the world. It has on its side the combined strength of money, habit, and appetite. Its power is felt, even in the church. Men, whose money has been made, directly or indirectly, in the liquor traffic, are members of churches, "in good and regular standing." Many of them give liberally to popular charities. Their contributions help to support the enterprises of the church, and to sustain its ministers. They command the consideration shown to the money power. Churches that accept such members are virtually sustaining the liquor traffic. Too often the minister has not the courage to stand for the right. He does not declare to his people what God has said concerning the work of the liquor-seller. To speak plainly would mean the offending of his congregation, the sacrifice of his popularity, the loss of his salary.

But above the tribunal of the church is the tribunal of God. He who declared to the first murderer, "The

voice of thy brother's blood crieth unto Me from the ground," will not accept for His altar the gifts of the liquor-dealer. His money is stained with blood. A curse is upon it? God says:—

"I hate robbery for burnt-offering." "To what purpose is the multitude of your sacrifices unto Me? . . . When ye come to appear before Me, who hath required this at your hand, to tread My courts? Bring no more vain oblations. When ye spread forth your hands, I will hide Mine eyes from you; yea, when ye make many prayers, I will not hear; your hands are full of blood."

The drunkard is capable of better things. He has been entrusted with talents with which to honor God and bless the world; but his fellow-men have laid a snare for his soul, and built themselves up by his degradation. They have lived in luxury, while the poor victims whom they have robbed lived in poverty and wretchedness. But God will require for this at the hand of him who has helped to speed the drunkard on to ruin. He who rules in the heavens has not lost sight of the first cause or the last effect of drunkenness. He who has a care for the sparrow and clothes the grass of the field, will not pass by those who have been formed in His own image, purchased with His own blood, and pay no heed to their cries. God marks all this wickedness that perpetuates misery and crime.

The world and the church may have approval for the man who has gained wealth by degrading the human soul. They may smile upon him by whom men are led down step by step in the path of shame and degradation. But God notes it all, and renders a



just judgment. The liquor-seller may be termed by the world a good business man; but the Lord says, "Woe unto him." He will be charged with the hopelessness, the misery, the suffering, brought into the world by the liquor traffic. He will have to answer for the want and woe of the mothers and children who have suffered for food and clothing and shelter, and who have buried all hope and joy. He will have to answer for the souls whom he has sent unprepared into eternity.

And those who sustain the liquor-seller in his works are sharers in his guilt. To them God says, "Your hands are full of blood."

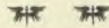
Houses of prostitution, dens of vice, criminal courts, prisons, almshouses, insane asylums, hospitals, all are, to a great degree, filled with the products of the liquor-sellers' work.

Like the mystic Babylon of the Apocalypse, he is dealing in "slaves and souls of men." Behind the liquor-seller stands the mighty destroyer of souls, and every art which earth or hell can devise is employed to draw human beings under his power. In

the city and the country, on the railway trains, on the great steamers, in places of business, in the halls of pleasure, in the medical dispensary, even in the church on the sacred communion table, his traps are set. Nothing is left undone to foster and to create the desire for intoxicants. The victim who attempts to break from its power is hunted, watched, enticed. Every possible effort is made to draw him back. On every corner is the liquor-dealer's den. The display in the windows, the fumes from whisky-besprinkled sidewalks, appeal to old habits, and arouse the slumbering appetite.

To the ordinary saloon, free lunches, hot with thirst-exciting condiments, attract the working classes. To the high-class establishment, music and art, elegant apartments, brilliant lights, amusement, welcome and good cheer, invite the prosperous man, the wealthy idler, and the unsuspecting youth.

In private lunch-rooms and fashionable resorts, ladies are supplied with popular drinks, which under some pleasing name are really intoxicants.



## Masked Alcoholism

By T. J. Evans, M.D.

[Supt. St. Helena Sanitarium.]

ALCOHOL is one of the principal ingredients of most of the patent medicines sold in the market in the form of tonics and bitters. It is frequently used to disguise and preserve the so-called remedial agents that are of themselves the most poisonous and dangerous drugs found in the *Materia Medica*. Not only is the alcohol con-

tained in these poisonous combinations injurious to the human system, but it is combined with *nux vomica*, *strychnin*, *morphin*, *quinin*, and other preparations that should never be used except on the recommendation of a careful and conscientious physician. They are all powerful agents, and once they have a victim within



their grasp, they bind him with chains that can never be broken.

It is surprising to see the confidence that people have in the many prepared mixtures which are advertised for the common ailments, with the promise of a sure cure. There is a prevailing superstition that a mythical power, an essence of life, lies locked up in these concoctions. Unless matter has the power to build tissue by replacing the waste of the body, it is a foreign substance and is not tolerated by the system. This intolerance causes the organism to react against the poisons of the drug. It is supposed that reaction is due to some beneficial, vital force contained in the medicine, but it is done at the expense of the reserve forces which nature has stored up in the body for an emergency.

Patent medicine may be classed under three heads: first, those for relieving pain; second, those whose base is alcohol; third, those which are supposed to cure the liquor and opium habits.

It is this second class that I especially want to call your attention to. In the many tonics and bitters which are to be found in the drug-stores, are large quantities of alcohol. Peruna, Lydia Pinkham's Vegetable Compound, Liquid Peptonoids, Nutritive Liquid Peptone, Tonic Beef, Mulford's Predigested Beef, Paine's Celery Compound, and Hood's, Thayer's, and Ayer's Sarsaparillas, each contain from fifteen to twenty-five per cent of alcohol. Warner's Safe Tonic Bitters contain over thirty-five per cent alcohol.

The medicine advertised so extensively under the name of "Balm of Gilead," contains about seventy per cent of alcohol. By taking a dose of one tablespoonful three times daily,

one would be taking about twenty drams of pure alcohol per day. A person in this way is taking more alcohol than the average intemperate man. Chronic alcoholism can result from the extensive use of patent medicines.

There are many who are strong advocates of temperance, who are at the same time encouraging the use of patent medicines, which contain more alcohol than any of the intoxicating drinks sold over the bar. Brandy, whisky, gin, and rum contain from forty to sixty per cent of alcohol, while the "Balm of Gilead" and Jamaica Ginger are said to contain from seventy to ninety per cent.

Some of these contain more alcohol than rum, brandy, or whisky; and all contain more alcohol than wine and cider, which have from ten to twenty per cent, or of beer and ale which contain from four to six per cent alcohol. Swamp Root has as much alcohol as beer or ale. To take the doses advertised by many of these preparations would be equal to taking from two to six ounces of whisky, or about one-half gallon of beer.

Many of us little realize what we are doing when we encourage the use of these concoctions. The safer the name the more dangerous the preparation. It is much safer to go direct to the saloon for your liquor if you must have it, because in this masked form you get not only the alcohol itself, but other poisons that are even more dangerous,

"Wine is a mocker, strong drink is raging; and whosoever is deceived thereby is not wise." It is especially deceitful if clothed in another garment, masked in a different robe, and backed by a Christian nation.



## Some Untoward Results in Alcoholic Prescriptions

By A. J. Sanderson, M. D.

THERE are no legitimate cross-roads in nature,—no substitutes for the natural performance of her functions. Artificial means may be utilized, and for a time the stimulants thus employed may seem to yield good results; but the conclusion is too hasty, for there is always a day of judgment set, when the true reckoning will be manifest. Action and reaction are alike and equal. As far as an unnatural stimulant has been used to raise a function, just so far will nature drop when the stimulus is withheld. In this fact lies the foundation of most of our bad habits.

When the system once comes to depend upon a certain mode of stimulation it has to be continued in order to maintain its activities. The beginning of an injurious habit is the only time it can be checked without a struggle with one's physical forces, as well as the moral impulses of the individual.

Alcohol, even prescribed as medicine, is just as apt to create false habits in the system as though it were used for any other purpose. Hence, we must look essentially alike upon all causes which may possibly lead to the formation of alcoholic habits. We accustom ourselves to the use of spices, condiments, eat heavily of flesh foods, use wines or often stronger liquors in order to whip up exhausted functions, to keep pace with our fast ideas, then, too often, we resort to hypnotics, opiates, cocain, or some other drug to give rest to the nervous system that has been forced to lay aside its self-control or self-regulating habits.

Among these various injurious substances which we begin to use in a mild way, alcohol is the most seductive, and is resorted to the most frequently. Public sentiment revolts against the man who periodically turns away from his business and his family obligations, and is led by the demon drink to poverty and disgrace; yet the table that is regularly set with wine, or the individual who prescribes for himself, or has prescribed for him, the regular cocktail or other beverage of the alcoholic class, passes as an ordinarily temperate man. The latter, however, is the very one who is laying the foundation for the certain retribution that is to follow in later life.

The periodical drunkard, with uncontrolled appetite, charges the system with such a load of the poisonous enemy that it revolts at once. The man becomes sick, loses his appetite, is forced to rest, and, for the time being, the craving for the stimulant is removed. With this respite, nature has a chance to recuperate and the evil effects are in a great measure repaired. In this way individuals grow old with such habits, and age may find them with organs comparatively sound; but with the moderate drinker, with regular, prescribed doses and self-controlled habits, the ultimate danger is greater. Nature has so gradually accustomed herself to her enemy that she makes no effectual protest. She is stimulated to undue activity; and with this her master is pleased. He imagines he is being benefited, feels better, and goes about his daily duties with greater zeal and apparently less



fatigue. Nature, thus subdued, submits gracefully to the situation and goes to work with the best of courage to do away with the unwelcome visitor.

Every organ bears its part of the burden, and hence feels the influence of this foe. The nerves, thus excited, work faster, and at great expense. The steadiness with which they formerly acted passes away, and they become incapable of responding to a task unless whipped up by some artificial means. When the time comes for rest or sleep they know not how. The delicate self-adjusting mechanism which a normal person has, and which enables him to rest or sleep at the approach of weariness or fatigue, is thrown out of order, and natural, refreshing sleep no longer restores the system's waning functions. The natural blessings of life go as the artificial are supplied. One by one, the organs of the whole system become altered by their contact with the foreign substance. The glands of the stomach no longer furnish gastric juice, which has the normal digestive power. If the alcohol is present in the stomach in any large proportion at the time when the gastric juice is flowing, its digestive agents become neutralized, and indigestion must follow.

When the alcohol is once absorbed, the liver is the first organ to be reached. Here the delicate liver cells ever stand on guard as the sentinels, and gather out of the circulation all things that can possibly do injury. They work perfectly at it; but with the regularly-prescribed alcohol their task is arduous. They have no rest. Their extra work in time causes them to become congested; and finally chronic inflammation and a hardening process follows, which

gradually destroys the liver functions, and may lead to the occluding of the whole portal circulation, which traverses this organ, giving rise to the usual fatal malady of the drunkard's liver, which condition besets the individual who has never been accounted as a hard drinker. The circulation is dammed up here only by degrees. Each of the thousands of doses which have been used by the individual has had its proportionate effect in bringing about this condition. Each drink, as it has been taken, has been the tiny particle of foreign substance, as it were, of the thousands of atoms which have thus impeded the circulation in this vital organ.

Should the liver fail to eliminate most of the alcohol, or the organ survive, without serious results, the arduous task which has been placed upon it, the other organs along the circulatory tract must take up a similar burden and cope with the same influences. Too often the kidneys fail in their function or become diseased because of this intruder. Scarcely any tissue of the body can escape the injurious results of alcohol that is daily thrown into the circulation through the alimentary canal. Perhaps the arteries themselves, which carry in the circulation all things that are taken into the system and absorbed, are affected more injuriously and more quickly than other tissues. Their normal, elastic properties become curtailed, and they perform their function with less efficiency, and become aged by this extra burden; and the man becomes old in condition while he is still young in years. Hardened arterial walls are the cause of many subtle diseases; and frequently men in the prime of life are suddenly cut down with apoplexy or some similar disease, because the blood-current rushing madly on, through the effect of some stimulant which has been recently taken, forces itself through the wall of the artery which has been thus diseased, and fatal issues are precipitated.





## To the Rescue

By \* \* \*

THERE'S an ugly black blot on our nation's fair name,  
There's a stain on her record of chivalrous fame;  
A wild demon's devouring bright children of worth,  
Playing ruinous havoc 'mong the millions of earth.

He degrades, and benumbs, and brings to the brink  
Of a great yawning gulf,—this foul demon, Drink.  
And many's the soul he hurls to its deeps,  
While close to its brink wife and mother there weeps.

Men perish, but, lo, there's a legacy left,—  
Crushed hopes, ruined homes, wife and mother bereft  
Of comfort, happiness; and children, the blight  
Of transmitted appetite ever to fight.

The picture is awful; no pen can portray  
The work that this demon is doing to-day,  
As we note this sad picture, the souls led to doom,  
The light of life quenched in the depths of sin's gloom,

And the fierce, awful tempter so horribly strong,  
We tremble and cry, How long, Lord, how long?  
'Tis hopeless to accomplish a nation's reform  
To sweep all away by a death-dealing storm.

Then let us arouse to the work of the hour,  
To save *one by one* from the great tempter's power;  
To keep our own loved ones in the depths of our hearts,  
Ere they're snatched by the demon or pierced by his darts.



## The Love for Drink Created by the Mother

By Mrs. Lena K. Sadler

**T**HERE is a way to rid the garden of troublesome and noxious weeds. Merely trimming off their tops will only yield unsatisfactory results. The last portion of their top roots must be eradicated from the soil. So in deal-

ing with the problems of alcoholism, the attention of temperance reformers and Christian workers needs to be turned to the "beginning" of this evil much more than to the final result—the drunkard.

There are evils lying at the root of



this great calamity that befalls many among "America's finest and best" young men. We hope to point out some of the stepping-stones which lead to one of the saddest of sights—an intoxicated young man or young woman.

#### THE INFANT.

Dr. Oliver Wendell Holmes has said that we are but omnibuses in which our ancestors ride, and that the training of a child should begin 100 years before its birth. The law of heredity, of children reaping the harvest of iniquity from the sins of their parents, even unto the third and fourth generation, has its place in the cause of intemperance, and frequently does this prove to be the predisposing cause in producing inebriety, but the problem of heredity and its far-reaching results—witnessed in every asylum throughout our land—is too great a one to be dealt with at length in this short article, so let us take a glance at the next stepping-stone.

The pernicious practise of "cradle drugging" occupies no small place in the early causes of the production of inebriety. Heaven alone can know of the terrible results of the immoderate dosing of quieting syrups in infancy.

Some one has said, "Where Herod slew his hundreds, a certain well-advertising soothing syrup has undoubtedly slain its thousands." The child is often fed with improper food which sours on its stomach, and, as a consequence, its nerves cry out with pain. A spoonful of soothing syrup soon quiets the cries of the child by actually anesthetizing its nerves so they are deadened, and the unconscious child cries out no more. An unnatural sleep follows. The nervous system is

thus deranged and the result is the setting up of an unnatural rhythm and an abnormal clamoring. A law of rhythm prevades all nature. The sun rises and sets. The heart beats at certain intervals. The lungs work with rhythm.

The nervous system presides over the rhythm of the human body. We can plainly see that if the nervous system is deranged these periodical impulses are interfered with, and they are seen manifesting themselves in the fitful outbursts of childhood, and inebriety and debauchery of manhood.

The young man whose nervous system became so deranged in infancy, has been largely robbed of the will-power and self-control a beneficent Creator bestowed upon him when first he breathed.

#### BOYHOOD SURROUNDINGS.

Many a home is not made attractive to the boy, and so the boy is not attracted to the home. The alley, the barn, most any place is a more attractive place to meet his playmates than the home where the phrase, "Don't do this," or, "Don't do that" is constantly sounding in his ears.

Too often "his room," if he is so fortunate as to possess a whole room, is anything but an inviting place. Most every home possesses a spare bedroom, a parlor, a sitting-room, and a dining-room; but the children are not often allowed to play in any of these. Provision is made for guests, but the poor children—where do they come in? Too often they "don't come in" at all; they go out—out into the street, the alley, where their innocent, believing minds are laid open to the wickedness and vice of the street "Arab."



It is here the boy gets his first lessons in cigaret-smoking and in novel-reading. His already deranged nervous system finds stimulation in the exciting and blood-curdling stories and the narcotic effect of ciga-rets. A young man who was serving a life sentence in prison, was one time asked where all his troubles began. He said, "The work of ruination was completed before I was eight years old. Although my parents were well-to-do, and I was associated only with the neighbor's children, yet it was the influence exerted by these children that has proved to be the seed of my ruination."

Evil associates are bad, but, if possible, bad books are worse. These stories mar the mind and cripple the memory. Mothers and wives can do more far-reaching work for the cause of temperance, purity, and righteousness, more to save their sons and husbands from the evils of drink and worldliness, by making home the more attractive place, than by seeking to exert their influence at the ballot.

One word might be mentioned, in passing, of "domestic tranquility." Fireside happiness and family harmony are among the greatest possible influences with which to promote the cause of temperance. Let every effort be put forth to make home the choicest place on earth for the children. Let home hold the youth so securely that it is impossible for the enemy of truth and unrighteousness to gain an influence over him.

#### ERRORS IN DIET.

Many articles in diet which appear upon modern tables are so highly seasoned and stimulating in character that they can only lay the foundation for the stimulant habit in those who constitute the rising generation.

So much of the natural flavors of the foods are completely destroyed by the use of condiments, that the children acquire a taste for "the seasonings" rather than for "the foods" themselves.

The natural flavors of the grains and vegetables are unknown to many people. The burning flavor of mustard, vinegar, pepper, and spices, so irritate the mucous lining of esophagus and stomach that an unnatural thirst is set up that water can not quench. Further stimulation is demanded. This further stimulation is found in ciga-rets by the boy, and in intoxicating drinks by the young man.

There is no longer any doubt as to the stimulating properties of flesh foods. Uric acid, which is present in all flesh foods, is a direct means of producing an unnatural craving for stimulation.

Veritable "grog shops" are manufactured in the stomach when sweetmeats and improper combinations of foods ferment. Considered from a chemical standpoint, moisture and heat is all that is necessary to convert cane sugar into alcohol.

These conditions are both met with in the stomach, and in cases of weak digestion every opportunity is afforded for the fermentation of the stomach contents and the production of alcohol.

By the circulation of the blood, these products of alcohol find their way to the tissues. Nerves are thus irritated, and a condition of affairs is created which can only be satisfied by the taking of larger quantities of alcohol.

The children who partake of candies and sweetmeats the least are those who are less likely to fall victims to the liquor habit.



## Strictly Temperance

By M. Elisabeth Burns-Howell

ONE day not long since, as I passed along the city streets, glancing up, the above words caught my eye, and, being interested, I gave another look. "Strictly Temperance Grocery," that was the sign. So? Well, very good, thought I. The world needs more such.

But what is that? Do my eyes belie me, or is the sign a misnomer after all. See that array of bottles there right under the very letters of the sign. Old Bourbon, surely, or Hunters' Rye, perchance? But no, a close inspection reveals, "Tomato Catsup."

Ah! "Strictly temperance," is it, delectable compound! Vinegar, mustard, and ginger, and pepper, all burning red hot, as biting and blistering as any "firewater," ever distilled.

Strictly temperance? If ever demon masked in monk's hood leading simple souls astray; if ever wolf in lamb-skin prowled; if ever slimy serpent steal among the summer grasses, with venom hidden 'neath his tongue, my heart tells me that yonder seeming sign of good bespeaks a snare.

Strictly temperance. What is the flame without the fuel, my good grocer friend? Are you aware that you are one of the recruiting officers for your much despised neighbor, the saloon-keeper?

Do you not know that the Lord God never put into the mouth of man the curse of craving? Try to put out your mustard and pepper fire next time you are at table with a simple draught of pure, clear water, will you?

Inspid? Very likely, to your be-

scorched and smarted gullet. You must have something stronger, eh. Mayhap a cup of "harmless" tea or a swig of "strengthening" coffee would harmonize with your "strictly temperance" proclivities, quenching your catsup-created thirst and soothing your sensitive conscience meanwhile.

But how about your brother over there who is not troubled with your nice sense of scruple? "Toddy for him?" So I surmised.

\* \* \*

"Turn back to earth thine eyes again,  
And mark the winding ways of men."

O, for an apostle in the wilderness, whose meat is the wild honey of the forest trees, and whose drink is the clear crystal of the mountain spring as it bursts forth pristine pure from its native rock, to speak forth in trumpet tone to the wild-wandering, hungering, thirsting race, and call it back again to the fountain of life, to the well-spring of God's own living water.



## How to Overcome a Perverted Appetite

By Mina Mann

THE reward is promised only to the overcomer, and there is doubtless no one thing in our perverted natures harder to overcome than a perverted appetite. From time immemorial has man been a slave to his gustatory desires. As has been pertinently remarked, "For the sake of pleasing the first few inches of his alimentary canal, he will inflict burdens grievous to be borne upon the rest of the twenty-five feet."

Children grow to manhood and



womanhood with the idea that the one thing to be considered in the selection of their food is their appetite, and that appetite one which, from the very start, has been wrongly educated. We have only to glance about us to know that the appetite is almost invariably a thing of education. Watch the Frenchman's delight over the flavor of *esfoetida* with which his food is seasoned; or the German's pleasure while partaking of his Limburger; or the Indian smacking his lips over his maguey butter, made from the fat worm that lives on the maguey plant, and you will realize that the appetite can be made to call for strange dishes.

But the question before us is: How to overcome a perverted appetite, and learn to take pleasure in simple, wholesome food. Perhaps one has become accustomed to some artificial stimulant, wine, beer, or some of the various liquors containing more or less alcohol, and the system seems to demand these unnatural products. To such we would say, that if you are really desirous of living a clean, wholesome life, you must drop all such things, and partake only of clean, wholesome food.

The very first requisite to the overcoming of an unnatural appetite, is a genuine desire to be free. The second is the possession and use of a little will-power. Study your own system and its demands, and then how to meet those demands. Bathe frequently that the excretory pores may be free to eliminate the wastes. Take plenty of outdoor exercise that you may bring to the table the best of all stimulants—a good healthy appetite. There is more danger of overeating than not eating enough. The system does not demand a great amount of food, and

when we eat too much it is like putting too much fuel in the fire-box,—it clogs the delicate machinery of the body, and causes dullness and a heavy feeling. It creates biliousness and gives a muddy complexion. Become intelligent regarding your body, and then use the moral and physical will-power with which the Creator has endowed you, and life will take on a new aspect, and you can live naturally instead of artificially. "Whether therefore ye eat, or drink, or whatsoever ye do, do all to the glory of God."

*Hanford, Cal.*

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## Effects of Food on the Face and Character

By Mrs. M. C. W.

MANY of our readers are women who have the preparation of foods that compose the physical elements of the character, as well as training the mind. Then, O my sisters, if you long for physical beauty, as well as mental, look well to the pure, unstimulating class of foods you place before the children; see that no love for strong drink is formed at your table, that no abnormal thirst is created there by rich and highly-spiced foods, abundance of sweets, and wrong combinations. It is impossible to have a clear and beautiful skin, a bright and lustrous eye, and to think pure and beautiful thoughts with an inflamed stomach and clogged system. Many, many a life has gone astray because of the appetite formed at the mother's table. Meditate upon these things, my sisters.

Study the beautiful, think the beautiful, live the beautiful, and you will *be* beautiful in both character and face.



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Family Hygiene and Home Comfort

G. H. HEALD, M. D., Editor

H. H. HALL, Business Manager

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All contributions, exchanges, and matters for review should be sent to the Editor, Sanitarium, Cal.

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NO. 1.

## Sanitarium Notes

Mr. and Mrs. Naftzger of Los Angeles, are enjoying the beauties of our more northern winter.

Dr. J. E. Barrow of Berkeley, has returned to her home after a few weeks stay at the Sanitarium.

Mr. and Mrs. Warren of the Seaman's Institute, Port Costa, recently spent a day at the Sanitarium.

WE note the recent arrival of one of our old guests, Miss M. A. Vester, Assistant in the Post-office at Nashville, Tennessee.

Dr. R. A. Buchanan, of the San Francisco Branch, has recently made two trips to the Sanitarium in the interests of medical work.

Sanitarium people are truly enjoying the bright sunshine, and the fresh appearance which nature has put on, after a steady rain of two weeks.

A very pleasant Thanksgiving Day was spent at the Sanitarium. In the evening a short, but interesting, program was rendered, one of the most instructive features being a paper by Dr. Margaret Evans, on "The Origin of Thanksgiving,"

Messrs. R. E. Naftzger, A. E. and R. J. H. McNee, students of Stanford University, spent their "Thanksgiving" vacation, at the Sanitarium.

The Business Manager, L. M. Bowen, has returned from a week's trip, visiting Sacramento and Stockton in the interests of the Sanitarium work.

Mr. L. C. Duff, of Berkeley, who as a guest for two years and a half has occupied the little "Russet" cottage on the hillside, has gone to his home, but, as we understand, only for a short visit.

Mr. and Mrs. Arthur Morton of Seattle, Wash., who are spending a portion of the winter at the Sanitarium, are enthusiastic believers in the physical culture and all that pertains to the preservation of health.

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## HEALTHFUL LIVING

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We understand that the Eastern stock of "Healthful Living" is exhausted, and that the plates were destroyed in the Review and Herald fire. We still have on hand a limited number which we will mail at the regular price, which is fifty cents each. As most of our readers know, this book consists of quotations from the writings of Mrs. E. G. White on the subject of right living.

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# Pacific Health Journal

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### SPECIAL NUMBERS:

Alcohol Number, January

Tobacco Number, April

Tea, Coffee and Drug Number, July

Healthful Dress, October

### REGULAR NUMBERS WILL HAVE THE FOLLOWING FEATURES:

*Ministry of Healing, by Mrs. E. G. White*

*Simple Lessons in the Preservation of Health*

*How to Treat the Sick in their Homes*

*"Gill the Doctor Comes," Accidents, Emergencies, Poisoning, Etc.*

*Experiences in Right Living by those who have Tried It.*

*Woman's Realm, Editorial, Medical Missionary News*

*Reports from Institutions, Sanitariums, Restaurants, Food Stores, Etc.*

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