

TEMPERANCE.

SCIENTIFICALLY CONSIDERED.

The Action of Alcohol Upon the Brain and Nervous System—The Four Stages of Alcoholic Disease—The Horrors of Drunken Tremens.

In one of a series of articles by Prof. A. B. Palmer, M. D., LL. D., in *The Wide Awake*, the writer says:

The strong resemblance between the narcosis of alcohol and that of chloroform or ether is apparent; but that of alcohol is much more likely to become habitual. The essential character of the condition is so similar that the same terms may be applied to each. If chloroform is a narcotic, so is alcohol; if one is a depressing, lethal agent, so is the other. If chloroform is a poison, so is alcohol. The greatest difference in their immediate action is, that the chloroform is more speedy in its effects and sooner over, and its secondary consequences are less severe.

But in studying the effects of alcohol on the brain and nervous system we must go beyond the speedy action of a shock or a few doses, and consider the more important, because the more permanent, effects of its continued use. These effects are varied by the quantity used, the length of time it is continued, and by the temperament and power of endurance of the drinker.

In its habitual use, four stages of alcoholic change are recognized, corresponding in many respects with the four acute stages that have been described.

There is a *first stage* where only small quantities are used, as when an occasional glass of light wine or beer is taken with the meals, and when such limits are not exceeded. In this the condition of the brain and nerves is but little changed from the physiological or natural state.

There is a *second stage* where a change from the normal state is more perceptible, where the force and regularity of brain and nerve action is impeded, but not in any extreme degree; but where the tone of the intellect, and particularly of the moral character, is lowered, but yet where the subject of it is not regarded as a drunkard.

There is a *third stage* where there is unquestionable intemperance or imbecility, where the subject is called a "drunkard" or "drunken;" accorded to the degree of indulgence, and there is still a more advanced or *fourth stage*, where the victim is a complete set, given up to continued and extreme indulgence, whenever the means are within his reach, where there is the greatest debasement, physical, mental and moral, where there is a disregard of all social and moral obligations, and the victim is almost sure to die a drunkard.

Death to our natural instincts is a fearful thing come in what it may; fearful when kind friends and family and loving care made less appalling by affection earned by years of self-control or duty done, of virtue, kindness and love. It is a terror when life passes away with these surroundings, that induces again and again, and subsequent attacks generally follow. With each recurrence of the disease the chances of recovery diminish until death closes the earthly scene. Subsequent attacks of this particular disease may not occur death following from other forms of alcoholism, or from complications of other diseases; but when the brain is so far impaired as to produce delirious tremens permanent reform is almost hopeless, and the victim is almost sure to die a drunkard.

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All are ready to admit the very great, the almost inexpressible, evils to the brain and nerves of individuals, to the happiness of families, to the interests of communities and the economy, of the third and fourth stages of habitual alcoholism in influence. The changes of the brain are usually discoverable in its structure, but which more certainly exist in its functions, in its actions and tendencies are most profound; and are all in the direction of physical, mental and moral degradation.

The structure of the brain is changed in various ways from its normal state. It is sometimes hardened from the increase of its connective tissue, and sometimes softened from a term of fatty degeneration, and in both cases the proper brain cells, the seat of cerebral action of physical and mental power, are more or less diminished in number, altered in structure, and impaired in activity. The vessels are often found degenerated, and are liable to great distension and rupture, constituting congesion and apoplexy. The membranes of the brain are often found inflamed and thickened, the transparency and pliability impaired, and, in short, the whole organ is degenerated, enfeebled and perverted.

Under the immediate effect of the liquor the drunkard is regardless of his duties and obligations to himself, his family and to society. He is in efficient, improvident, unthrifty, unreliable, often violent, dangerous and criminal. When deprived of his accustomed dram, he is morose, despondent and often incurably writhed with a craving for the liquor, which in the pervert state of his brain is irresistible. His depression and despair sometimes lead to suicide, preceded, it may be, by the murder of his family, with the motive of relieving himself and them from their living death. Mingled with this despair are often fits of fury which the drunk exerts, and his enemies and unfeeling vengeance may be inflicted indiscriminately on himself, his family, his friends, or strangers, as well as on imagined or real foes. In many cases nothing is too shameful or too depraved for him to do, and no suffering is too severe for him to endure.

The drink which for a time relieved his agony, a length of time to do so unless exerted to the extent of stupefaction and unconsciousness. This quantity is therefore taken, and this increasing in indulgence, if it does not induce sooner some fatal form of disease, brings him to the fourth and extreme stage of habitual drunkenness, which, though it sometimes is endured for a considerable period, usually soon results in death.

Besides rendering other diseases and accidents much more severe and fatal, this excessive drinking produces several peculiar diseases of the brain and nervous system.

The one least known to persons not of the medical profession, because of the striking character of the symptoms, is delirious tremens. In this terrible disease the brain becomes so affected by the alcoholic poison that all its functions, physical and mental, are performed in the most irregular and frantically perverted manner. There is usually a premonitory stage in which the patient is restless, wakeful and apprehensive of some violence, misfortune or calamity. When attempting to sleep, he is awoken with frightful dreams which are so vivid as to appear to be realities for a time after awaking. These and other symptoms may cause the patient to stop his drink, but too late to prevent its effects. In other cases, quite as numerous, the premonitory symptoms are less regarded, and the full development of the disease comes on in the midst of gross indulgence in drink; but the phenomena in either case are similar. The face now becomes paler, the surface is covered with a profuse sweat, there is trembling in every muscle, the patient looks wildly about him, seeing in his delusions frightening objects in every quarter, and though his pulse is weak and fluttering and his whole appearance indicates great debility, he still

RELIGIOUS READING.

THY WAY.

Have Then Thy way with me, O God!
Although I beg my own;
But not the body's noisy cry,
But the soul's undivine.
Have Then Thy way with me, O God!
This is my only choice;
Time unmeasured may not meet me
For some divine desire.
Have Then Thy way with me, O God!
That just the will to do Thy will
Is not all given me best.
Have Then Thy way with me, O God!
And, O my soul, take care
To keep thyself in the way
—Charlotte E. Baker, in *Contemplation*.

HAPPINESS IN THE HOME.

Precious Possession and How It May Be Retained—Christian Love and Principles the Best and Most Enduring Foundation.

Usually, home has a precious possession which we do not hold lightly. It is a case, a gem, a picture, a flower, it cost labor and trouble, care and expense to bring it to the adornment of our homes, and we are conscious of its value, and oblivious that it shall neither be marred nor mislaid. It is the tangible evidence of a part of our wealth, and we know how much we prize it by our tenderness in its handling. In the protection we bestow upon it, and the manner in which we display it to our friends.

There is an intangible and precious thing which may be a part of our person and wealth, but which is held by a tenure more subtle and less easy of definition than that by which we own the material possessions. It is the reprobates in others' instinct, for nothing can be plainer than the fact that he is not giving his true reason for refusal. He is bound to admit—he always will admit, when pressed—that they are genuine Christians, and that a genuine religion is a noble thing. That others are not living that he is a fundamental fact, but it has no bearing whatever on his own duty. "You admit that genuine religion is good; very well, why not be genuinely religious?" you say to him. And his reply is: "Because Smith and Jones are hypocrites."

The absurdity and irrelevance of his reason are evident—as evident to himself, one must think, as to anybody. So transparent a subtlety can not long impose upon any man, even on him who uses it to deceive himself. The man must wake up to the fact in brief time that his answer is not an honest one. His admission that genuine religion is admirable leaves him no escape from the duty to become himself an example of that admirable thing—no escape, that is to say, but a simple refusal to do what he acknowledges to be his duty. All there have it at last, the true reason why men will not be Christians. Their reason is the essence of unreason: a stubborn refusal, grounded on nothing of which they can give account to themselves or to others. Their "why not?" is a will not, nothing more. They do not decline to follow Christ, because of the imperfections of Christianity, but because of a settled unwillingness to submit themselves to a Master. Their wills are set against God. They are of whom the Apostle wrote: "The light is come into the world, and men loved the darkness rather than the light." —N. F. Lerner.

PURE IN MIND AND HEART.

The Reverential and Religious Side of General Grant's Character.

Rev. Dr. Newman, in a recent letter, wrote us as follows:

"I became his pastor in 1863. I have seen his guest many times, and at all times inside White House at Washington, or at his cottage in Long Branch; he always had family prayer, in which he usually requested me to lead. I have been with him in private and in public, and with all classes of people, yet I never heard him use a profane word or indulge in an improper story, nor have I ever seen him smile uponly at an immodest story which some person present happened to have the audacity to relate. He was altogether the purest man in conversation of whom I ever had knowledge. During my pastorate of six years in Washington, which includes the greater part of his Presidency, he was a regular attendant at church. Storms of no kind ever kept him away. He was the most attentive and appreciative listener I ever had."

"Recurring to his love of family prayer, I recall a visit to his Long Branch cottage, where daily we had prayers after breakfast. One morning an English gentleman called while we were at the table. He remained so long that there was no opportunity that day for morning devotions. The next morning the President brought the old family Bible. Handing it over to me, he said: 'Doctor, we were cheated out of our Bibles yesterday, but, to make sure that it should not happen again, we will have devotions after this before break fast.'

"Once I asked him, I remember, what he considered his most providential experience. Without hesitation he said: 'My resignation from the army in 1854. I was then a Captain. If I had staid in the army I would have been still a Captain on frontier duty at the outbreak of the war and would have been deprived of the right to offer my services voluntarily to the country. That opportunity shaped my future.'

"In connection with the sick room I have spoken of the prayerful spirit that pervaded it. I might add that the General never allowed suggestions for the relief of his infirmities to interfere with his reverence for the Sabbath. On Saturday night, lately, when he was nervous and weary and very restless, his son, the Colonel, hoping to divert his mind, suggested some amusement. The General brightened at the idea of diversion, but presently, with a grave face, he implored the hour. It was nearly midnight. 'Never mind,' the General said, with perfect resignation: 'it is close to the Sabbath to commence any diversion.'

CHOICE SELECTIONS.

—Not failure, but low aim, is crime.—J. R. Lowell.

—Powe in a sinful course is one of the greatest of curses.—Bhagwan.

The aching head may cease to throb when laid upon that softest pillow for human pain—"God knows."

—There is no leveler like Christianity, but it levels by lifting to lofty table, and accessible only to humanity. That is only that is humble can rise, and rising lift.

—It is only cowardice that says I have a miserable disposition, because my grandparents had the same. An individual to make use of another individual as an excuse! Very much of a slave is he to his self, if he allows himself to employ such a pretext in palliation of his want of effort.

—Christian charity is too often like a large bank-note which may be flourished on occasion to excite the wonder of bystanders, but which is never broken up into small change to meet every day occasions. Little favors are willingly to be turned for life's common needs. Do not be content with merely discharging your charity by large professions of liberality, but prove by those little deeds of pity and grace for which you may get no popular applause.—S. A. Finch.

It is worthy of note, also, as a com-

panion fact, that nobody has ever charged that Christianity has made the world worse than it was before Christ came. No man was ever depraved by attempting to lead a Christian life. He may not be made especially better, or he may not be made so much better as other people think he ought to become, but he is certainly not made worse. A Christian profession encourages the growth of no vices; it affords no excuse for selfish indulgence or for dishonest conduct; it offers no opiates to relieve the stings of outraged conscience; it does not "debase the moral currency," by clothing sin in the garb of virtue, by speech or set. In short so far as that influence goes, a Christian profess on breeds a man's moral nature, elevates his standard of duty, and makes of him in every way a better man.

If a religious life never learns but always helps a man, if Christianity does not blight wherever it goes, the man who preaches it, the imperfections and inconsistencies of Christians as his reason for not entering the service of Christ corrupts himself of the very sin he reproaches others for.

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