

For Your Temperance Meeting

-- "Alcohol and the Human Body" --

Herbert Spencer wisely said that "for complete living it is necessary that there shall be escapes to the incapacity and the slow annihilations which unwise habits entail." That the drink habit incapacitates multitudes and leads to fierce ravages is strongly set forth in a manifesto which was placarded officially in various parts of Paris several years ago by the Committee of Supervision of the relief of the Poor. One of the statements of the report was: "Alcoholism is one of the most frightful scourges, whether it be regarded from the point of view of the health of the individual, of the existence of the family, or of the future of the country."

It is worthy of note that in France, as well as in other continental countries, the medical profession has been striving for some time to arouse public anxiety on this matter of the danger of alcohol, a danger which that country as a whole is now beginning to recognize. The scientific study of the whole question of the influence of alcohol on the human system is being widely prosecuted. This question is one of fact alone, and not even the tragedies and the poverty which result from its habitual use can prejudice its consideration. The present state of knowledge of alcohol solely on the basis of experimental, anatomical, and statistical evidence is set forth with greater clearness than we have ever seen elsewhere in the book whose title appears at the head of this article. Written by Sir Victor Horsley and Mary D. Sturge, with a chapter by Arthur Newsholme on "The Influence of the Drinking of Alcoholic Beverages on the National Health," and published by the Macmillan Company of Canada, Toronto, at a net price of 75 cents, it will afford our young people an unequalled opportunity of acquainting themselves with the results of the most thorough scientific investigation that has perhaps ever been put before the public in any one volume.

The first chapter is devoted to the examination of alcohol as a drug, and official figures are given to show that in recent years, in the best hospitals, alcohol and milk have practically changed places as regards the extensiveness of their use. Where a few years ago alcohol was freely used, milk is now substituted, with infinitely better results. Prof. Flek says that there is no reason for being in doubt as to the justice of calling this substance (alcohol) a poison, and the judgment of the late Sir Andrew Clark is fully borne out: "Alcohol is a poison; so is strychnine; so is arsenic; so is opium. It ranks with these agents. Health is always in some way or other injured by it." The weakening influence of the use of alcoholic drinks on even the strongest nerves is summarized in the terse sentence: "A man who desires to use his entire force on behalf of himself or his fellow-men can do so best and longest by entirely avoiding alcohol."

Following this preliminary view of the special nature of alcohol, succeeding chapters show how it acts upon the various tissues and systems of the body, prefacing the discussion of these effects with a chapter on what alcohol is from a chemical point of view.

It is demonstrated clearly that animal and vegetable protoplasm is deleteriously affected by even very small quantities of alcohol, which is, in fact, thus proved to be a drug which is very poisonous to living tissues and cell-life. The bearing of this upon the question of the effect of relatively small doses upon the constitu-

ent elements of the human body is obviously most important.

The influence of alcohol on the nervous system—the changes it causes in the intellect, the emotions, the volition, and the functions of the brain—are shown to be most damaging, and the result is summed up in several logical conclusions, one of which is thus stated: "It is now beyond question that alcohol, even in so-called dietic quantities, diminished the output of muscular work, both in quantity and quality, and that the best physical results are obtained under total abstinence from its use." The evidence given by Dr. Robert Jones before the Inter-Departmental Council on Physical Deterioration, is fully sustained by the scientific investigations described: "Alcohol perverts the moral nature, affects the judgment, and impairs the memory; it, moreover, especially affects the motor system, and creates an enormous loss to the community through destroying the productiveness of the skilled craftsman."

The degeneration and disease of the nervous system, due to alcohol, are given extended examination. Alcohol tends to shorten life, both by causing widespread deterioration and also by bringing on prematurely the special changes of old age. In the case of the nervous system these are, of course especially to be dreaded, because of the accompanying mental degeneration, which frequently makes life a misery, and which, at the very least, renders it useless and ineffective. The report of Dr. Clouston, of the Morningside Asylum, says: "Alcoholic insanity steadily goes up. . . . It is certain that for every man in whom excessive drinking causes absolute insanity there are twenty in whom it injures the brain, blunts the moral sense, and lessens the capacity for work in lesser degrees. It is most sad and discouraging that this preventable cause of the most terrible of all human diseases should thus continue to increase. It is a veritable plague spot in our social life."

Alcohol lowers the temperature of the body instead of raising it, as is popularly supposed, and this lowering of the temperature often ends in loss of life. Many cases of so-called "deaths from exposure" are due in reality to alcohol, and many verdicts would be more accurate if they stated that death was due to the combined effects of alcohol and exposure. The experience of all Arctic explorers is unanimous on this matter: indeed, it is regarded by them as indicating a lack of energy if a man takes alcohol with a view of warming himself, seeing that by so doing he is in reality cooling his body and possibly risking his life. In fact, the failure of certain expeditions has been partly due to ignorance or neglect of warning on this point. Sir Ross many years ago testified: "I was twenty years older than any of the officers or crew, yet I could stand the cold better than any of them, who all made use of tobacco and spirits. I entirely abstained from them. The irresistible proof of the value of abstinence was when we abandoned our ship and were obliged to leave behind us all our wine and spirits. It was remarkable to observe how much stronger and more able the men were to do their work when they had nothing but water to drink." And Dr. Nansen was: "My experience leads me to take a decided stand against the use of stimulants and narcotics of all kinds. . . . The best course is to banish alcoholic drinks from the list of necessities for an Arctic expedition."

The influence of alcohol on the digestive system is carefully analyzed, and its impairment of the various organs of the body concerned in the digestive process fully set forth. "The pertinent question is asked: "Is it worth while, for the sake of a fleeting pleasure, to take a substance which is continually urging glands to secrete and which delays the operation of digestion? Above all, can it be worth while to take a drug like alcohol, which has ultimately such an injurious influence upon the digestive system, upon the liver, and upon tissues vitally as a whole?"

That alcohol is not a food and never ought to be called such is urged on the ground that it is unscientific to describe as a "food" any drug like alcohol, which so entirely fails to fulfil the functions of a food-stuff, or to come up to the standard of what we expect and obtain from genuine food—i.e., something which, while being wholly innocuous in its effects on the body, is also able to afford ample means of work production and of tissue growth.

The effect of alcohol on the liver, kidneys, heart, and blood circulation is examined and described, and it is shown, as the late Sir Andrew Clark maintained, that more than three-fourths of the disorders in what we call "fashionable life" arise from the use of alcohol.

The tables illustrating the diseases caused by alcohol are startling. Indeed, it is shown that the normal, healthy chemical changes going on in the body by the use of strong drink, and that, as Dr. Harley exclaimed, "for every real drunkard there are fifty others suffering from the effects of alcohol." The terrible results of the use of alcohol, as shown in the children of drinking parents, is accompanied by a warning against the influence of parental alcoholism upon the race, and the undoubted conclusion of all who weigh the evidence of this character is that alcohol affects diastase—the children of drinking parents and unborn children and babies in whom it is born. Lunier, Paris, is true when he says: "Alcoholism strikes a man not only in his own person, but also in his descendants," and fully bears out the report of the Royal Commission on Feeble-minded, 1908: "Alcoholism in one of both parents exerts its influence. . . . In the production of feeble-mindedness, and epilepsy, and also by lowering the normal resistive power in the offspring renders them liable to break down under various stresses later in life, and so become insane."

The added chapter bearing on "The Influence of Drinking Alcoholic Beverages on the National Health" is very conclusive, and compels one to the decision that even what is commonly called moderate drinking has a most injurious effect on health and life, and that the best practice, both in the interests of health and morality consists in the total avoidance of alcoholic drinks as a beverage. The words of Mr. Joseph Chamberlain are in point: "If I could destroy to-morrow the desire for strong drink in the people of England, what changes we should see! We should see our jails and workhouses empty. We should see our lives saved in many months than are consumed in a century of bitter and savage war." Prof. Brouardel spoke truly when he said: "A universal cry of despair rises from the whole universe at the sight of the diseases caused by alcoholism. . . . This invasion of alcoholism ought to be regarded by everyone as a public danger, and the principle that the future of the world will be in the hands of the temperate ought to be inculcated into the masses as a truth that is incontestable."

It is surprising to us that a book so comprehensive, so splendidly illustrated, and so well bound can be sold at so low a figure.

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