

Temperance

The Voice of Science in Regard to Alcohol.

[We have been asked by one of our readers, keenly alive to the need of continuous temperance teaching in the Sunday-school, to take up this subject of alcohol as a medicine, and we gladly do so.—Ed.]

It is an astonishing fact that, though the present day is one in which 'the man in the street' prides himself on his adhesion to the dicta of science, there is one point upon which that dictum is constantly disregarded, to a large extent, indeed, totally ignored, that is the question of alcohol and its use or abuse as an actual medicine or general tonic.

There never was a time when so telling an array of facts or such a list of opinions well worth while could be marshalled against the presence of this enemy of mankind among the ranks of beneficent remedies. Temperance people are not half awake to the weapons lying ready at hand to use against alcohol, and, for the others—well, Caesar only expressed a well-recognized truth, as true today as in the days of the Gallic wars, when he said, 'Men as a rule willingly believe what they wish.'

That a very large proportion of sickness, poverty, insanity and crime is directly chargeable to the liquor traffic is beyond dispute, and that much of the rest is indirectly traceable to the same source is also pretty generally acknowledged. But all this, it is urged, is due to immoderate use of alcoholic beverages. True enough, and since all 'immoderates' were once 'moderates,' and these in turn very, very often took their first glass in response to the medical advice of some authorized physician, or perhaps of some well-meaning and otherwise intelligent friend, it is well to keep constantly in mind the warrant, if there be any for this first step. Is there any such warrant? In the vast majority of cases, science, we firmly believe, says 'No.'

We are indebted to the Department of Non-Alcoholic Medication of the National W.C.T.U. for not a few of the facts we quote, and are glad to refer to the excellent little handbook* prepared by the superintendent and to various smaller pamphlets and other literature issued by the Department. They will be found most useful to those who wish to arm themselves more fully with strong arguments against the medicinal use of alcohol in any form.

First, as to nutritive value of alcoholic beverages. Take, for example, beer, which in its various forms is so frequently prescribed as a general tonic, 'food as well as drink.' Analyses by eminent chemists show an average of 90 percent water, 4 percent alcohol and 6 percent malt extract. The latter includes gum, sugar, various acids, salts and hop extract, very little of these constituents being digestible.

The eminent German chemist, Liebig, said: 'If a man drink daily 8 or 10 quarts of the best Bavarian beer, in a year he will have taken into his system the nutritive constituents contained in a five pound loaf of bread.' At the low rate of five cents a pint, this beer would amount to \$292—a rather expensive alternative to the same amount of nourishment to be bought for five cents in the form of a simple loaf of bread!

In wines, the averages run, water 80 percent, alcohol 15 percent, the residue, 5 percent, containing various substances, the only one of which having food value is sugar, and that is present only in a small proportion.

As for distilled liquors, Dr. Nathan S. Davis of Chicago says that they contain, if unadulterated, 'literally nothing but water and alcohol, except traces of juniper in gin, and the flavor of the fermented material from

* 'Alcohol a Dangerous and Unnecessary Medicine.' By Mrs. Martha M. Allen, 27 Broad street, Oneida, N.Y. Published by Chas. Haskell & Son, Norwich, Conn. \$1.25.

which they have been distilled.' This testimony is confirmed by the Standard Dictionary, where, in regard to brandy, Mr. C. F. Chandler, in Johnson's Universal Cyclopaedia, is quoted: 'Brandy is almost pure alcohol and water, the percentage of alcohol varying from 48 to 56 percent.'

So that unless absolute alcohol has an indisputable food value, which no one is rash enough to maintain, the case for alcoholic beverages as a tonic is somewhat weak!

The analysis of milk as given in the Standard Dictionary varies for different animals—that of cow's milk stands thus:—Water, 84.28 percent; solids, 15.72 percent; the latter being fat, 6.47; casein, 3.57; albumen, .78; milk sugar, 4.34; ash, .63.

These solids may be divided from another standpoint into nitrogenized 4.35 percent, and non-nitrogenized 10.81 percent.

The judgment of Sir B. Ward Richardson is specially significant in connection with this comparative analysis. 'Alcohol contains no nitrogen; it has none of the qualities of the structure-building foods. It is incapable of being transformed into any of them; it does not supply caesine, albumen, fibrine or any other of these substances which go to build up the muscles, nerves and other active organs.'

These analyses show pretty clearly the comparative food values of milk and alcoholic beverages.

Dr. Ernest Hart, editor of the 'British Medical Journal,' stated some years ago that 'the medical profession were nearly all agreed that alcohol is neither a food nor a tonic.'

Dr. August Forel, of Switzerland, says of alcoholic liquors that 'they cannot be regarded as sources of nourishment or force.'

Sir Benjamin Ward Richardson, that eminent English physician, said:—'I would earnestly impress that the systematic administration of alcohol for the purpose of giving and sustaining strength is an entire delusion.'

Sir Wm. Gull, late physician to the Royal family, said before a select committee of the House of Lords on Intemperance:—'There is a great feeling in society that strong wine and other strong drinks give strength. A large number of people have fallen into that error and fall into it every day.'

The very function of food is to give strength—repeated experiment, with gangs of workmen, regiments of soldiers, athletes, explorers, show conclusively that alcohol does nothing of the kind. Of the results of such tests, Sir Andrew Clark, physician to the late Queen Victoria, said:—'It is capable of proof beyond all possibility of question that alcohol not only does not help work, but is a serious hinderer of work.'

As to the effect of alcohol on the vital organs, Dr. W. F. Pechuman, of Detroit, Mich., in his book on 'Alcohol, is it a Medicine?' says:—'Alcohol destroys the very life force that alone keeps the body in repair,' and, quoting the effect of alcohol on white of egg, blood, raw meat, etc., goes on to say: 'Alcohol acts the same on food in the stomach as it does on the same substances before introduced into the stomach, and acts just the same on blood and all the living tissues in the system as out of it. This alone is enough to condemn its use as medicine.'

Observations in connection with the remarkable case of Alexis St. Martin, some seventy years, went to show what more recent experiments have confirmed, that alcohol acts on the juices of the stomach in such a way as to greatly hinder its proper disposal of the food supply.

Dr. Henry Munroe, one of the English experimenters in this line of research, says:—'Alcohol, even in a diluted form, has the peculiar power of interfering with the ordinary process of digestion.' To this testimony is added that of Dr. Newell Martin, in 'The Human Body,' of Sir B. Ward Richardson, of John Kirk, M.D., in 'Medicinal Drinking,' and of numerous other reputable physicians. As to the effects of alcohol on the blood, these, too, are unfavorable. The processes of waste and repair going on continually in a healthy body are cellular processes, the building up of new cells and the elimination of broken-down cells. This work of carrying the cells to the proper part is performed by the blood, and since alcohol, even in very small quantities, retards all cellular change, either of waste or repair, it is clear that it hinders the nutritive work of the blood.

(To be continued.)

HOUSEHOLD.

Discoveries.

Little drops of knowledge,
Little grains of sense
Solve the mighty problem
Of the home expense.

Had the little leakage
Earlier been checked,
Then the mighty vessel
Never had been wrecked.

Thus the little trifles
Make the sum of life—
Making home an Eden,
Or an endless strife.

—Phila Butler Bowman.

Furnishing the Porch.

(Annie Balcomb Wheeler, in the New England 'Homestead'.)

It is poor economy to use the furniture of the house upon the porch in summer. It exposes it to dust, dews and varying weather, it is sometimes forgotten and left out over night, and soon grows too shabby for the living rooms. Better have bona fide porch belongings which during the winter may be safely stored against the need of the next season.

Almost every attic will afford in discarded furniture just what is wanted. A few screens, a little glue and the dislocations are mended, and the article is ready for a second life of usefulness upon the porch, in the summer camp or in the children's playhouse; and if varnish or fresh paint be employed, the results are most happy, the articles are attractive and in most cases far more comfortable than the modern product of the factory, for which one has to pay quite a little sum.

Cane seats seem to give the most trouble when rejuvenating the castaways, while re-caning always pays, for it makes the chair or settee as good as new. There are two very satisfactory seat substitutes, the perforated wooden seats and the straw seats so popular for doorstep uses. The perforated seats cost from 15 cents upward, according to size, and are tacked upon the frame by brass heads.

The straw seats come for even less, and to my mind are the better, they are so much more comfortable; but one must be sure that the broken cane is first made strong in some way. Strips of burlap tacked across both ways will answer. Then the straw seat may be fastened on by a few wire nails. I have bought straw seats of excellent quality for six cents each.

Glorifying Drudgery.

In his lecture on 'Vocations' at the Brooklyn Institute, recently, Professor Howard Griggs, lecturing under the auspices of the Women's union, touched on that most prosaic of occupations—dish-washing, and glorified it by pronouncing it an excellent means of culture. Of an dull, blind, sordid drudgery the ne plus ultra, to my mind, is dish-washing, he is quoted as saying. 'Washing dishes is so much worse than getting them dirty,' continued the lecturer. 'That's good, wholesome work. But to wash your way through a lot of dirty dishes and put them all back in their places with the certain confident knowledge that four hours later they will all have to come down and get dirty again, and to keep it up meal after meal, week after week, year after year, is the essence of blind, dead work. And yet to do that blind, dead work is to build character and to get culture. For what is culture but patience, fidelity, quiet wisdom, loyalty to trust—those simple, primitive qualities on which human life is based?' Prof. Grigg's view is worth bearing in mind while in the kitchen. It will brighten up the monotony of the everlasting work that so many women despise.

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