

consider the question of their annual gatherings, at which refreshments are provided, and to dispense with the use of wine and other intoxicating liquors whereby many of their members are conscientiously prevented from attending and enjoying their fraternal greetings.

W. E. Bessey, M.D., then read the following paper on the

THE RELATIONS OF ALCOHOL TO VITALITY IN HEALTH AND IN DISEASE.

In the present paper I propose to consider briefly the relations of alcohol to vitality in the human system, in a state of health and in disease, with a view to set forth the true character of alcohol as a negative agent in relation to animal life or vitality; and also its negative character as a *health restorer*, or remedial agent, when introduced into the human system in a state of disease.

That alcoholics are *life destroyers*, and not *life supporters*, will be made clear by a brief review of some of the many instances in which, under intelligent and scientific observation, it has been subjected to a crucial test.

That it is a *health destroyer*, or anti-hygienic agent, common observation should be sufficient to establish. But when we come to a consideration of its value as a remedial agent, we find here, singularly enough, a conflict of medical opinion, furnishing another illustration of "how doctors differ," and also how tenaciously the conservatism of a profession will lead many to cling to time-honoured dogmas, even in the face of the most unanswerable and convincing evidences.

To demonstrate the accuracy of my first proposition, "that alcohol bears a negative relation to vitality, or animal existence," and is a life destroying and not a life supporting, agent, in all its tendencies, it will only be necessary to refer to its uses by persons in health under various external circumstances.

First, however, it is well to observe that alcohol, in its chemical constitution, bears no relation to the tissue of the human body, which might cause it to be regarded as an alimentary substance, capable of feeding and repairing tissue, and therefore of supporting life; nor is it capable of furnishing fuel even for the combustion necessary to the maintenance of animal heat; although this has stoutly been claimed for it, to be abandoned only before the force of overpowering evidence in like manner with its fabulous strength-giving and invigorating properties.

But the snare is not, in my opinion, so much in any charm which alcoholics possess in themselves to lead individuals at the outset to adopt drinking habits, as it is in the fallacious notions which are so universally entertained by the mass of mankind concerning their fancied beneficial properties, and which only those who have applied the test of experiment have discovered to be but a social fraud, a delusion, and a snare.

These fallacies it is our duty, as temperance men, to refute and destroy by disseminating among the people correct information concerning the nature and properties of alcohol. For there is no lever so mighty to work the reform of vicious errors and customs, of whatever nature, or however ingrained in the daily habits of the people they may be, as an enlightened public opinion. This is the agent which moulds the manners of society, and what it sanctions is certain to assume gigantic proportions, and, *per contra*, what it discourages is certain to dwindle into the insignificant proportions of the pigmy, or become obsolete altogether.

But to our argument. We have now passed mid-winter; the cold has been searching and intense enough. Cold being a negative influence as regards vitality, every artificial aid is brought into requisition to enable the human system to successfully withstand it, such as good food, comfortable and well-warmed houses, warm clothing, &c., a neglect of any of which conditions the most illiterate knows by experience, is certain to impair health and endanger life; while prolonged exposure to cold invariably imperils existence. Added to man's precautions, there is provision made by nature in the purity of the air in winter and the greater relative supply of oxygen which enables animals and man to consume more carbonaceous materials—such as fats and sugars—in the lungs, and thereby