

if a man consume daily eight or ten quarts of the best Bavarian beer, he will obtain from it, in the course of twelve months, no more nutriment than is contained in a five pound loaf of bread.

Professor Moleschott, in his "Theory of Food" asserts that "spirits, in their proportionate amount of nutritious matter, do not even bear comparison with sugared water. Alcohol, their essential element, and the most important substance in wine or beer, is not transformed into any blood constituent. It does not, therefore, deserve the name of an alimentary principle." The designation, therefore, of Licensed *Victuallers*, assumed by the vendors of spirits, is as flagrant a misnomer as can be conceived.

The reason for the above stated facts is obvious from the nature of the process of fermentation, which destroys the albuminous, or flesh-forming principle in the grain, or other substance subjected to its action. "Fermentation," says Liebig, "is nothing else but the putrefaction of a substance containing no nitrogen. . . . It begins with a *chemical* action, which is opposed to a *vital* one.

. . . Life is opposed to putrefaction. . . . Fermentation and putrefaction are stages of the return [of organic matter] to less complex formations." Hence alcohol can be formed from the most loathsome and putrescent substances, even from carrion flesh. In the latter case, however, the presence of nitrogen gives an intolerable odour to the product. A scheme has actually been projected for the manufacture of alcohol from the sewage of the city of Chicago.

Animal life is maintained, almost exclusively, upon organic matter stored up in vegetable formations or in other animals. But alcohol, says Liebig, cannot be evolved from vegetable matter till after vinous fermentation sets in, which, he asserts, is its death or decomposition, and the process of disintegration to the inorganic elements.

Alcohol is not food in any sense, moreover, because it is not assimilable into any of the tissues of the body, into nerve, brain, muscle, or bone. "It passes out of the body," says Dr. Story, "just as it goes in, unchanged, undigested alcohol." Dr. J. K. Chambers, physician to H. R. H. the Prince of Wales, asserts the same thing. "It is clear," he says, "that we must cease to regard alcohol as in any sense an aliment, inasmuch as it goes out [of the body] as