into the world with a low power of vitality and states of central brain exhaustion, which are ever seeking relief; and alcohol, by its narcotic action, supplies the demand. This impulse to degeneration may pass down one or two generations before appearance as inebriety again." We however, cannot concede to the existence of a so-called hereditary inebriety, notwithstanding the plausible and scientific precision Dr. Crottes would like to stamp it with. A direct parental transmission of inebriety, or rather of the drinking habit is just as impossible as the direct parental transmission of morphinism or cocainism. Still, to do away altogether with his theory would be unjust. To be sure, inebriate parents may transmit defective morbid impulses, an abnormal mentality, a debilitated body, a perverted nervous mechanism and mal-developed organs, which will but imperfectly perform their offices but *never* can such parents *directly* implant the morbid desire for any stimulus, particularly so for alcohol.

Having obtained some glimpses of the history and the causes of the drink evil, we may now appropriately ask, what is alcohol? To answer this question we must first analyze its chemical composition, and secondly investigate the range of its activities.

Alcohol is an organic substance belonging to the group of hydrocarbons. in which the radicle hydroyl is chemically incorporated with the base ethyl. That is to say, it is a hydrate of ethyl, or ethyl alcohol—  $C_2 H_5 OH$ . Chemically, therefore, it contains all the elements entering into the composition of starch and sugar substances so absolutely necessary for nutrition and for the creation of heat and force. Thus we see that alcohol contains the elements of a food. Whether it really is such we shall now critically examine.

To carry on this investigation with tolerable precision we must ask ourselves, what is a food? This may be defined to be a substance which, when ingested, furnishes the body its natural constituents, or contributes to the elaboration of available force and heat, thus acting as a nutrient. Nutrients, again, are of three kinds:

- 1. Nitrogenized or albumuninous food stuffs,
- 2. Carbo-hydrates or starches, and
- 3. Hydro-carbons or fats.

The first kind lends to the body its musculature and force, the second kind furnishes it with heat and force, and the third kind contributes to the rotundity of the body and gives tone to the nervous system by supplying it with phosphorized fat.

Judging alcohol from chemical composition we find it to simulate the starches very closely. That the latter are the chief sources of heat and energy cannot be disputed. Now, the question arises, is this equally true of alcohol? We will answer this by describing its physiological action. But before doing so it may not be amiss to state that the ingestion of starches and sugar indirectly contributes to the formation of alcohols and ethers within the gastro-intestinal tract, being absorbed as such. At a first glance at the formula of starch or sugar we notice that they can be readily converted into alcohols by the primary action of acids, and the secondary neutralization of the salt by alkalies found