

## CARBON DIOXIDE MAY MAKE DRINKING SAFER

In pre-Volstead days carbon dioxide was used in the preparation of alcoholic beverages to make them more drinkable. Now it may be used after drinking to revive "dead drunks" who have imbibed not wisely, but too much - so much, in fact that their lives are in danger.

Dr. F. T. Hunter and Dr. S. G. Mudd of Boston, have tried the effect of carbon dioxide administration in a few cases of acute alcoholic intoxication with results indicating a comparatively rapid revival from the coma. Also in studies of normal persons receiving measured doses of alcohol it was apparent that the increased ventilation produced by breathing carbon dioxide caused a more rapid fall in the concentration of alcohol in the blood than occurs when the breathing is not stimulated in any way. As the majority of deaths from alcoholism occur from the ingestion of lethal doses of alcohol and not from other poisons in the beverage the two physicians suggest that the administration of carbon dioxide may be of value in all cases of alcoholic coma.

The results are obtained by augmented respiration. Carbon dioxide can be diluted in air or oxygen for inhalation. A five fold increase in the volume of breathing, the doctors state, can be produced safely. It has been in wide use for some time for resuscitation after carbon monoxide poisoning and as a means of rapid deaerization after operations.

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"BIRTH CONTROL" AMONG PLANT LICE DUE TO LIGHT

An important step in the solution of one of the most puzzling biological problems that confronts students of crop pests has been announced in the publication of the results of researches on plant lice, carried on by Simon Marcovitch, entomologist at the Tennessee state experiment station.

Plant lice, or aphids, as they are more properly called, have a most peculiar system of reproduction. Each fall, after mating has occurred, the female lays her eggs and dies. In the spring these hatch, and the young are all females - the plant louse is about the most advanced feminist in the lower animal world. These spring-born females have no wings, but many of her first broods of offspring (for she rears many families) may have wings, which enable them to migrate to other plants, frequently at a considerable distance. The really remarkable thing about the spring and summer broods, however, is that the young are produced without fathers. Males seem to be totally unnecessary in this Adamless insect Eden all summer long, and these "parthenogenetic" females have everything to themselves. ("Parthenogenetic", by the way, is simply Greek for "virgin-born").

But in the fall, when the days grow short and chill, males appear among the fatherless children, and the next generation - the eggs that will lie in sheltered places over winter - are the results of ordinary matings. Thus the cycle is completed.

The question has always been, why should males appear in the fall, after having been kept out of the way all summer? The answer commonly accepted until now is that the cool weather is the stimulus. But Mr. Marcovitch's experiments indicate that length of day, and not temperature, is the cause.