

If you take your own automobile, whose carburetor is adjusted for the best gasoline consumption, and try an alcohol-gasoline blend in it you may get a lower mileage. Dr. Christensen claimed that some drivers will find a greater mileage, and Dr. Bridgeman agreed with this finding in part. But, on the average, for all cars tested the different mileage is quite negligible; two ten-thousandths of a gallon of fuel per mile of travel.

Or, said another way, if you drove a car 5,000 miles with alcohol-gasoline fuel it would take one more gallon of fuel than if you used straight gasoline.

Another Test

Still another way to test the two types of fuel is based on the octane rating of the fuels. Adding alcohol will increase the octane rating of the fuel slightly. Octane rating is a measure of the bumpiness of fuel explosions and is linked with smoothness of engine performance. In this test special engines designed to take advantage of the fuel characteristics are used.

Dr. Bridgeman reported on this third type of test:

"Equal or better power and acceleration per gallon of fuel consumed may be obtained from blends when comparing a gasoline and the same gasoline blended with ethyl alcohol, within the range of present-day gasolines."

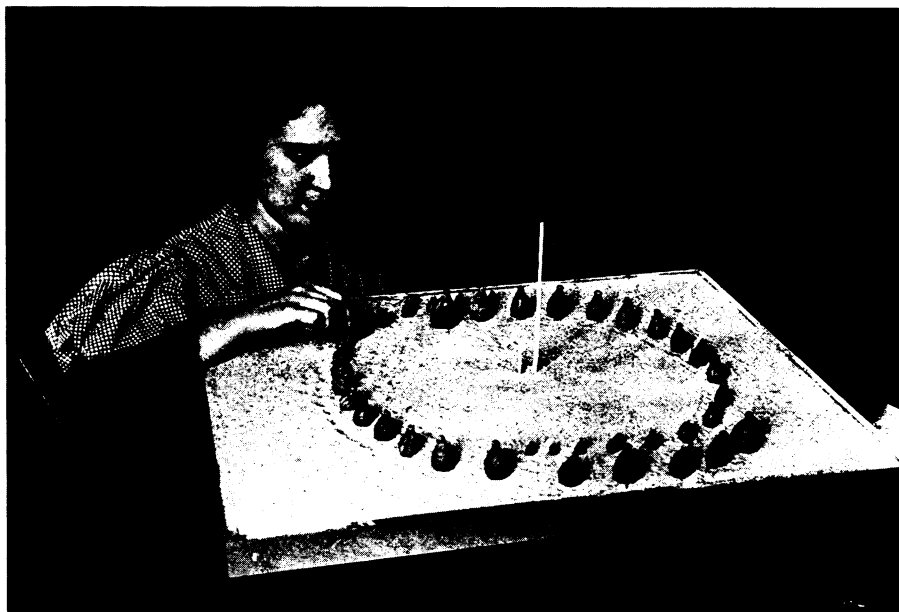
But returning to the economics of the alcohol-gasoline blend. The petroleum industry is represented by the statement of Drs. Egloff and Morrell:

"The cost of alcohol-gasoline is much higher than gasoline alone and there is nothing in prospect which would decrease this cost to make it competitive with gasoline at the same price level."

The slightly higher cost, in the opinion of the people advocating the alcohol blend, would be worth while in terms of the improved agricultural conditions.

For the future, however, when gasoline resources dwindle, as they must do some day, alcohol blend fuels or some substitute for gasoline undoubtedly will come still more to the forefront of the economic picture. Throughout the world where alcohol is blended with gasoline one finds that the nations without adequate resources of petroleum are the greatest users of the blend. Such a day will sometime come for the United States and then either a gasoline substitute or a blended gasoline will be used. The question still unanswered by the current survey of the problem is: "Shall it be now or later?"

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MOST PRIMITIVE GAME

A most primitive game of a most primitive people living in Venezuela, the Yaruro Indians, is being manipulated by Miss Ernestine W. Singer, of the staff of the University of Pennsylvania Museum. The stick put up in the sand represents the center of the world and of all things. Around it dance the people. In the inner circle are the men led by the "shamen" or priest; in the outer circle the women, led by the priestess. The figures are of clay and crude differences exist between the male and female figures.

MEDICINE

Prehistoric American Indians Suffered From Syphilis

SYPHILIS, blackest of plagues to modern humanity, was also a scourge to Indians who lived on this continent long before the coming of the white man. Such is the conclusion strongly indicated by evidence offered before the meeting of the American Association of Anatomists in Durham, N. C.

The evidence consists of disease-marked bones found by a joint expedition of Duke University Medical School and the University of Alabama, in ancient burials at Moundsville, Alabama. Archaeological conditions in the mounds make it practically certain that these burials are of pre-Columbian date.

Syphilitic lesions, as nearly unmistakable as can be judged from the examination of bones alone, mark many of the skeletal remains laid out in the exhibit viewed by the anatomists. These consist largely of thigh bones, but include skulls and other bones as well. They have the swollen, overgrown, loose-textured, "rotten" appearance characteristic of

bone syphilis in an advanced stage. There are one or two other bacterial infections that can have somewhat similar effects on bones, but a number of medical specialists who have examined these specimens agree that the weight of evidence points toward the diagnosis as given.

Other diseases also shortened and made unhappy the lives of these long gone early Americans. One skull, apparently of a man in the prime of life, had on its lower jaw a terrible outgrowth of bone, an osteoma or bone tumor, which must have been the cause of its victim's death. Other bone-diagnosed afflictions included rickets, osteomyelitis, arthritis, and fractures. What ills the flesh of these Indians was heir to, we can only guess, since nothing but their skeletons remain. But if the bones form a fair sample, life in ancient Redskin America was probably far from idyllic.

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