



royal lady Hatshepsut took the throne of Egypt and assumed the title of king. This important event happened while Hat-nufer's burial arrangements were going on. Part of the jars are stamped with Hatshepsut's personal name and her title as royal consort. That was before she won the throne in a bold coup. Another jar and on two linen marks on the mummy, however, Hatshepsut is named as king. The feminist queen therefore assumed the throne in the seventh year of the reign of Thutmose III, and the time is narrowed down to the last three and a half months of the year.

Hat-nufer, who died at this exciting time—when her son Senmut was destined to become right-hand-man of the new queen—had no title but House-mistress.

So baled in wrappings was the mummy of House-mistress Hat-nufer that it took the Egyptologists four days to record and remove fourteen sheets, 80 bandages, and other cloths. Inside they found an old woman, short and, though delicately boned, distinctly fat. Her sparse gray hair was tricked out with two switches of false hair made of an enormous number of fine, tapering braids of black, human hair. Her left hand and wrist glittered with signet rings and scarabs. Her coffin was handsomely adorned in black and gold.

Hat-nufer was well-to-do in her own right, the Egyptologists infer. Her husband, Ramose, was a commoner, probably a peasant. So miserably was he buried that he is summed up by the Egyptologists as exceptionally poor and insignificant.

Alluding to Senmut's own flourishing career, and his apparent indifference to his father's burial, Mr. Lansing and Mr. Hayes state:

"Clearly, the style with which an ancient Egyptian was buried depended on his own state of prosperity at the time of his death rather than upon the filial

piety of his children, which, however elaborately protested it may have been, did not, in this case at least, include the outlay of benefits of a material nature."

One basket in Hat-nufer's array of possessions is revealed as containing bread and fruits.

"The bread is of two kinds," the Egyptologists report, "one light brown with a hard, glossy crust like that of modern Vienna rolls, the other dark, grayish brown, with a rough surface." One type of loaf is shaped rather like

BIOCHEMISTRY

Fate of Alcohol in Body Challenges Wit of Chemists

THE ALCOHOL that gets into a man's body after a cocktail party or on other occasions may be burned like food and thus disposed of. More likely, however, it is changed into some other substance which is either stored or used by the body.

The exact solution of this problem of what the body does with alcohol remains a challenge to physiological chemists, it appears from the report of Dr. Thorne M. Carpenter of the Nutrition Laboratory of the Carnegie Institution of Washington.

Dr. Carpenter described in a lecture at the Institution his own experiments which "point to the conclusion" that instead of being burned in the body, alcohol is converted into some other substance which may then be either stored or used.

Alcohol itself cannot be stored by any organ, he said. The amount present in any organ after drinking depends chiefly on the amount of blood circulating through the tissues of that particular organ. The highest amount of alcohol per unit of weight goes into the blood,

OLDEST
Remains of Egypt's oldest horse, carefully wrapped in linen cloths, was found in the Thebes tomb of the self-made man Senmut. At the left is the cloth saddle found with the horse—the oldest ever unearthed.

a human figure, and there are lumps of black matter containing raisins in the basket, "which look as wedding cake might if kept for three thousand years."

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after it has been taken into the body, and nearly as large an amount per unit of weight is found in organs well supplied with blood such as brain, kidneys, spleen, heart, lungs and liver.

What happens to the alcohol between the time it gets into the blood and organs and the time it disappears from the body is the question scientists have yet to settle, it appeared from Dr. Carpenter's talk.

Hormones, produced by the glands of the body, may be concerned in this alcohol question. Injections of insulin, the diabetes remedy, make alcohol disappear very much faster than normal from the bodies of animals, other investigators have found. In fact, the disappearance is so fast that it does not seem possible it could be due solely to burning of the alcohol. Other conditions besides an excess of insulin may make alcohol disappear quickly, Dr. Carpenter suggested, adding that further investigation along these lines is needed.

The idea that exercising helps the sobering-up process by speeding the removal of alcohol from the body got a

set-back in Dr. Carpenter's studies. Performance of muscular work did not hasten materially the disappearance of alcohol from the bodies of the men who drank measured amounts of alcohol for Dr. Carpenter's experiments. An hour's work on the ergometer did not work off all the alcohol, his measurements showed. The only effect work or exercise could have would be to remove some of the alcohol by simple vaporization through the breath. But not very much alcohol is dissipated this way. Dr. Carpenter said that any such attempt to remove alcohol through increased ventilation "would require a perfect whirlwind through the lungs in order to be really effective in diminishing the amount of alcohol in the body."

Getting rid of alcohol by drinking large amounts of water also does not, in the light of Dr. Carpenter's experiments, seem a successful method. Gallons of water would have to be taken immediately after the alcohol, he found,

in order to flush the alcohol out of the body. The amount of alcohol gradually diminishes by itself, he explained, and "there would be no point in taking large quantities of fluids when the alcohol had reached a low point."

Other interesting points about alcohol were described by Dr. Carpenter. It is absorbed very rapidly, distributed very rapidly through the body, and has the unique characteristic of being identifiable in the body as long as any of it is left. Alcohol furnishes energy, the amount being between that furnished by fat and that furnished by sugars and starches. It can get into the body without being drunk, being very readily absorbed from the air by breathing. Dr. Carpenter made use of this characteristic in some of his studies with chickens. The chickens were placed in an atmosphere saturated with alcohol so that they inhaled some with each breath and thus accumulated it in their bodies.

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of Minnesota Man's antiquity will give America a longer human history than some scientists have been willing to concede. It has been one theory that man did not arrive in America via Bering Strait until after the last ice sheet retreated, clearing the way. To reconcile this theory with the evidence that hunters in this country actually shot mammoths and other Ice Age animals, it has usually been suggested that the animals survived their own glacial era, perhaps by some thousands of years.

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PSYCHOLOGY

Fascist Attitudes Found In America's Midwest

A PARALLEL between conditions in Italy and Germany that brought Fascist dictators to power and present conditions of thought in the United States has been traced by a psychological study just made public.

Using an "opinion scale" made up of the same questions found to be revealing in a study of Fascism in Germany and Italy, Dr. Ross Stagner, of the University of Akron, has studied the political ideas and prejudices of about 500 men and women from the Main Streets of America. Of these about 100 were college students, 100 adults from rural Minnesota and about 300 from the Chicago region, including unemployed persons, shop workers, office workers, and business and professional men of all kinds.

Direct questions like "Are you a Fascist?" or "Do you approve of Nazi Germany?" had no place in the tests for there is too much stereotyped thinking about Fascism in Nazi Germany and in Italy, Dr. Stagner found.

"Seventy-three per cent. of the population endorsed a position of strong disapproval (of Germany)," he said. "Most of this 73 per cent, did not know anything about what has really happened in Germany. They have heard certain atrocity stories—many are Jewish, and know personally of the persecution of their relatives—and without further ado they indicate strong disapproval." (*Jour. Social Psychology*, Nov.)

A more subtle method was used by Dr. Stagner to elicit the true opinions of the individual. "Opinions about the Depression" was the title of a list of statements for which each person was asked to indicate agreement or disagreement.

First on the list was the innocuous comment that "Conditions are likely to

ARCHAEOLOGY

Earliest American Girl Was Drowned, Not Stabbed

AMERICA'S oldest murder mystery is closed.

Drowning was the fate of the earliest known American girl, who died while out on a Minnesota lake. The accident happened about 20,000 years ago, according to the date estimated by Prof. A. E. Jenks of the University of Minnesota, and the girl's skeleton he pronounces the most ancient human remains yet revealed on this continent.

When dug up in 1931, the girl's skeleton was marked by a cut in the right shoulder blade, and this was thought to be the death wound caused by dagger or arrow. A dagger was found near the skeleton.

Now, however, in a formal published report on the skeleton, which he has studied with great care, Prof. Jenks announces that the shoulder cut proves to have been made by a shovel during the first rescue work. The Minnesota girl came to light when state highway workers struck a layer of silt formed in the last stages of the glacial age, and found in it bones of a human being.

The skeleton continues to be known for convenience as Minnesota Man, Prof. Jenks explains, since that name has become attached to it, but there is

definite evidence that Minnesota Man was a girl. Various traits of body and skull testify to the sex.

When she died, the girl was about 15 years old, Prof. Jenks concludes from the fact that she had cut all teeth except the wisdom teeth, and from the still immature state of the long bones of the body.

The teeth of this early American girl are larger than those of ten Old Stone Age types famous in scientific records.

Prof. Jenks sums up that the traits of the skeleton "proclaim it to be a primitive *Homo sapiens*, of an early type of evolving Mongoloid, already prophetically suggesting American aborigines, especially the Eskimo, more than the present Asian Mongoloids."

Geological evidence for the time when the girl lived and died is summed up in the report by Dr. George A. Thiel of the University of Minnesota. He regards glacial Lake Pelican, where the skeleton was found, as about 2,000 years older than famous Lake Agassiz of the glacial period, and therefore the skeleton and its earthen bed are assigned to an antiquity of 20,000 years.

If generally accepted by geologists and anthropologists, this interpretation