

ment can be differentiated. Bones become clues to the migrations and changing fortunes of ancient American groups.

Hope of learning more about antiquity of the Peruvian surgical practice of trephining, or cutting a hole in the skull,

is held by Dr. Stewart. This major operation served to release pressure although the Indians apparently thought of it mystically as a way of letting out evil.

Science News Letter, February 22, 1941

MEDICINE

Sulfanilamide May Prove Rheumatic Fever Preventive

Establish Record of No Attacks Among 55 Patients Taking Treatment From November Through June Annually

INCREASED hope that sulfanilamide may prove the means of preventing rheumatic fever attacks appears in a report to the *Journal of the American Medical Association* (Feb. 15) and in editorial comment on that report.

A record of no rheumatic fever attacks among 55 patients while taking continuous sulfanilamide treatment from November through June of each year between 1936 and 1940 is announced by Dr. Caroline Bedell Thomas, Dr. Richard France and Dr. Franjo Reichsman, of the Johns Hopkins Hospital and University. During the same four years, 15 major attacks of acute rheumatic fever occurred among 150 patients not taking sulfanilamide during the control period.

Rheumatic fever is a very widespread disease which seriously damages the heart and leads frequently to early death. More than 900,000 persons in the United States are said to suffer from rheumatic heart disease. It is the chief cause of death among school children and is responsible for at least 30,000 deaths annually in the United States.

The exact cause of rheumatic fever has not been discovered. Infection with the beta hemolytic streptococcus usually precedes attacks and this germ is thought to play a significant role in starting the disease. This germ is the one over which sulfanilamide accomplished its earliest triumphs, saving mothers whose lives were threatened by this streptococcus during childbirth.

Because of these facts, sulfanilamide was tried as a treatment for patients suffering rheumatic fever attacks. It was not successful in these cases and there was some evidence that it might be dangerous. The Baltimore doctors, however, and Dr. A. F. Coburn and Dr. Lucile V. Moore, of New York City, decided to try it, not as treatment, but as

a preventive of recurring attacks of the disease. Authorities generally agree that the patient who survives his first attack of rheumatic fever would have a good chance of living out a normal life span if he could be protected from these repeat attacks with their added injury to the heart.

As early as 1939, the Baltimore and New York doctors reported that major attacks of rheumatic fever did not occur, or occurred in only 1% of patients given sulfanilamide prophylaxis during the winter and spring months when streptococcus infections are most numerous. The present report of experience over four years adds to the hope that sulfanilamide prophylaxis of rheumatic fever will prove successful.

The drug is given twice daily in doses smaller than those used for treatment of disease. No serious toxic effects were observed. The editor of the *Journal of the A. M. A.* comments on the "hopeful picture" the report gives and adds:

"The final evaluation of this method of prevention awaits results obtained in large, carefully controlled series of young rheumatic subjects. In view of the widespread occurrence and the crippling effects of rheumatic fever, it is to be hoped that interest in and support for such projects will be sufficient to permit a final evaluation of this promising lead in the prevention of rheumatic fever."

Science News Letter, February 22, 1941

NUTRITION

Frozen Dough for Cookies; Frozen Grass for Chickens

FROZEN cookie dough that can be kept a year before baking, frozen grass for chicken feed, and frozen flowers for wintertime parties are news from the chilly realm where research workers are

adding more and more things to the list that can be frozen for a convenient future.

Putting various kinds of batter and dough through the quick freezing process—that gives us fresh-tasting strawberries and peaches now at all seasons—three home economists at Purdue University have been baking with material kept frozen up to a year.

Cakes which they baked from batter frozen and stored four months taste just like fresh-batter cakes, they found by handing out samples to critical helpers. Stored longer than four months, the cake dough was not so successful, they stated, reporting these experiments to the *Journal of Home Economics*.

Cookie doughs kept frozen a year turned out cookies just like freshly mixed batches of cookies, they learned. Pies baked from pastry dough nine months in storage were like freshly made pies. Rolls were "acceptable" when made from frozen-stored dough kept up to six weeks. Beyond that time, "off" flavors were detected.

Prospect that quick-frozen batters and doughs of many kinds may become commercial products for bakeries and may be added to the line of frozen foods in groceries is foreseen as a result of these tests.

Frozen grass for human eating and for the chickens has passed the experimental stage and become a new commercial product. Made from cereal grasses, cut when the growing grass is at the peak



WORLD'S BIGGEST WHEEL

This giant is for the big Douglas Air Corps bomber and is about 23 times the weight of the young lady who stands beside it.