

accepted because of its historical relationship to the Jewish feast of the Passover.

The feast of the Passover celebrates the liberation of the Hebrews from Egyptian bondage. It was on the first day of this festival that Jesus and his disciples ate the Last Supper. The next day, Friday, was the day of the Crucifixion and the following Sunday the day on which he arose from the dead—the first Easter.

In time a serious controversy arose between the Jewish Christians and those of Gentile descent as to the correct day on which Easter should be observed. To the former, the relationship of Easter to the Feast of the Passover was all-important, and the day of the week was immaterial. The Gentile Christians, unfettered by Jewish traditions, insisted that the Resurrection should always be celebrated on Sunday and placed Good Friday, which commemorates the Crucifixion, on the preceding Friday.

The Council of Nicaea in 325 A.D. put an end to this controversy by deciding that Easter should always fall on a Sunday. The vernal equinox, the first day of spring, was fixed for March 21. This Council further ruled that if the Paschal full moon occurred on a Sunday, Easter should be celebrated on the following Sunday, so that Easter would always follow the Feast of the Passover and never coincide with it. This Jewish memorial feast was celebrated on the fourteenth of the month of Nisan, that is, the first full moon of spring.

The difficulty of having two dates for Easter can be blamed on the fact that the earth takes an uneven time to circle around the sun. The solar year consists of 365 days, 5 hours, 48 minutes and 45.51 seconds.

The moon takes 29.531 days, another odd interval, to finish its trip around the earth. The Egyptians, who calculated the solar year as 365 days, divided the year into 12 equal months each of 30 days, the remaining five days being devoted to festival holidays. Their weeks, however, were ten days long.

The Julian calendar as instituted by Julius Caesar did not include a seven-day week. This was an eastern invention, used both by the Babylonians and the Jews. Not until the fourth century was the week definitely established in Christendom and Sunday proclaimed as the day of worship.

Upon the advice of the Alexandrian as-

tronomer Sosigenes, Julius Caesar adopted 365¼ days as the true length of the year and ordained that every fourth year should contain 366 days. The solar year is, however, 11 minutes 14 seconds shorter than this, so in the course of 1,000 years, the Julian calendar developed a lag of nearly eight days.

In 1582, Pope Gregory XIII, advised by the astronomer Clavius, ordered the calendar corrected by dropping ten days. To avoid further displacement of the beginning of spring, Gregory decreed that the rule of adding an extra day every fourth year should be followed except in the case of those century years whose number is not divisible by 400.

The Gregorian calendar has never been accepted by all Christian churches for calculating Easter or even for calculating other Holy days.

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#### MEDICINE

## Narcotic Drugs Unpleasant

➤ **WHETHER MORPHINE**, heroin or other narcotic drug causes a pleasant or unpleasant feeling depends a lot on the person getting it and the situation in which it is given.

Morphine and heroin, for example, do not give normal persons the "kick" and pleasant sensations they are supposed to give.

Amphetamine, or Benzedrine, known as "pep pills," on the other hand, is most likely to produce pleasant sensations in normal persons. This drug also may be useful for chronically ill persons because it seems to relieve pain and therefore give a pleasant feeling to such patients.

These are among findings reported by Drs. Louis Lasagna, John M. von Felsinger and Henry K. Beecher of Harvard Medical School and Massachusetts General Hospital, Boston, in the *Journal of the American Medical Association* (March 19).

The Boston doctors tested the effects of morphine, heroin, amphetamine, the sleeping medicine pentobarbital and as a control, sodium chloride, or salt.

The tests were made on normal students, chronically ill patients and "postaddicts" at the U. S. Public Health Service Hospital, Lexington, Ky. None of the persons getting the drugs knew what they were getting. Some of the "postaddicts" were able to guess correctly which drug was given, but some mistook one drug for another.

The effects of the drugs were determined by having the subjects answer questions designed to show whether the effect was pleasant or unpleasant or nothing at all.

In the normal persons and to a lesser extent in the chronically ill, amphetamine surpassed morphine, heroin, pentobarbital and the salt solution in its ability to produce a pleasurable state. The drug most likely to produce an unpleasant state was morphine.

#### MEDICINE

## Find and Make Key Life Stuff Building Block

➤ **DISCOVERY AND** synthesis of a key building block of living matter was announced by the American Cancer Society in New York.

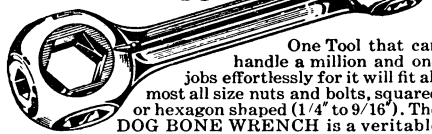
The new chemical is carbamyl phosphate. It is involved in the building up of such key compounds in the body as urea and the nucleic acids of the cell nucleus.

Its existence was discovered through enzyme studies by Dr. Fritz Lipmann, Nobel Prize winner, and his associate, Dr. Mary Ellen Jones, both of the Massachusetts General Hospital, Boston.

Synthesis of the new chemical was achieved by Dr. Leonard Spector, also of Massachusetts General Hospital.

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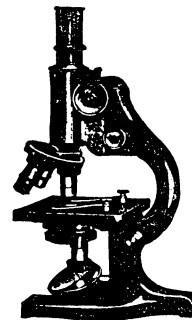
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