

## ARCHAEOLOGY

# Birth Record Dates House

Exact date and time of child's birth, as shown in horoscope giving aspect of heaven at the time, help to date archaeological ruins.

➤ A BABY born at 10 o'clock in the evening of July 3, in the year 176 A.D. has helped twentieth century archaeologists to date the ruins of the house where he first saw the light of day.

Dr. Jotham Johnson, of the Yale expedition to the Roman fortress city of Dura, tells the story of how this happened, in *ARCHAEOLOGY* (Summer, 1951).

It was because the child's family was interested in astrology. They had a horoscope made, showing the aspect of the heavens at the moment of the baby's birth and the horoscope was, for safe keeping, cut deeply into the plaster of the courtyard wall. Later the house was redecorated and a new coat of plaster laid on over the old, hiding the horoscope and preserving it for centuries.

Dr. Johnson, like many archaeologists, does not put aside his interest in his science when he lays down his digging tools for the day. In walking back from the Palmyra Gate to the camp of tents, he frequently wandered from his path to follow the outline of ancient buildings showing through the thin soil. Along the way he noticed here and there private houses or single rooms that had been more or less cursorily excavated. These, Dr. Johnson learned, had been dug, for fun, by a squad of soldiers stationed at Dura to prevent clandestine digging.

Cut on one of the house walls, Dr. Johnson found an ellipse with cross lines dividing it vertically and horizontally and Greek letters written at 12 points corresponding to the hours on a clock face. With the aid of a Greek dictionary, he figured out that this was a true horoscope, and it occurred to him it might be used to determine the date of the site.

On his return to Yale he presented the horoscope to the astronomer Dr. Dirk Brouwer and enlisted his aid in figuring out the date on which the heavens would have had the appearance indicated. Working together, they were able to find, not only the year, 176 A.D., but the month and day, July 3, and the hour, about 10 p.m.

During the study, it also became evident that at Dura in 176 A.D., under Roman occupation, the Seleucid Era, the Macedonian month names, and some form of lunar calendar were all still in use and the correspondence between the Dura date Panemos 9, 487 S.E. and the Julian date July 3/4 176 A.D. could be used to solve other archaeological and astronomical puzzles.

Dura, located on the Middle Euphrates, was discovered about 30 years ago. Since

then it has become famous among archaeologists for the extraordinary light excavations there have thrown on the Greco-Arab society of Mesopotamia.

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## MEDICINE

## Polio Epidemic Decided In Next Week or So

➤ THE NEXT week or so will tell whether infantile paralysis is going to jump to epidemic heights this summer, in the opinion of public health experts.

Places to watch now are the big centers of population in the northern part of the country.

A prediction of 27,000 cases for the year 1951, made by Dr. Fay M. Hemphill, University of Michigan statistician, may be upset by what happens in the big cities of the north. If they do not have much polio, his "guesstimate" will probably be too high. If the disease does flare up in the north, his figure may be too low for the national total.

Of the northern states, Minnesota so far has been running a very low count on polio cases. Recent reports show cases up a little

in Illinois and New York and Michigan.

Although cases throughout the nation so far have been lower than last year, the peak of the epidemic last year did not come until late.

A peculiar feature of polio this year is that so far there has been nothing like an epidemic area. Possible exceptions are Shreveport, La., although cases there are not going up very fast, and Corpus Christi, Tex. This outbreak now is stationary.

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## BIOPHYSICS

## To Match Colors, Don't Lie Down on the Job

➤ WHEN YOU are matching colors do not lie down on the job. The way you see colors is affected by the position of your body, Dr. J. N. Aldington of the Lamp Research Laboratories, Siemens Electric Lamps and Supplies, Ltd., at Preston, England, reported in a communication to the British science journal *NATURE* (July 14).

Standing upright on your feet, both your eyes see colors in about the same way. This is usually your posture when you are trying to match the color in a sample. And when you are lying down on your back the color vision of both eyes is alike, also. But if you roll over on one side, the lower eye is more sensitive to red than is the one on top, Dr. Aldington reports. The upper eye is more sensitive to blue. If you turn over on the other side, the color sensitivities of the two eyes are reversed.

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**"FARMYARD FOWLS"**—These three chickens, painted by Audubon, reportedly in one morning, are Sultans. Sultans apparently resulted from a cross between White Polish and Booted White Bantam hens and were imported into Europe from Turkey in the 19th Century.