

Mayas Tried to Stop Predicted Eclipses

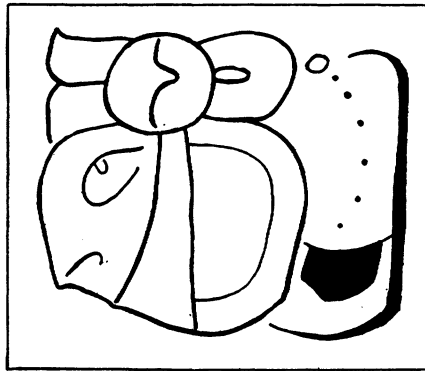
Archaeology

When Prediction Was Wrong They Said Their Magic Worked

HIGHLY accurate predictions of eclipses of the sun and the moon were made by the Maya Indians of Central America at least eight centuries before Christ, Dr. Herbert J. Spinden, curator of ethnology of the Brooklyn Museum, has discovered. But after the Mayas predicted an eclipse, they did their best to stop it, by magical means. When, occasionally, their predictions failed, and the eclipse did not occur, they attributed this to the success of their magic.

Dr. Spinden is now on his way to Europe where he will attend the meeting of the Twenty-fourth International Congress of Americanists at Hamburg, and will give a detailed report of his discoveries, which reveal a surprisingly extensive astronomical knowledge among these early Americans.

Before his departure he explained to Science Service that the Mayas, after observing and counting the



The moon face tied up in a bandage, Mayan symbol for lunar eclipses.

days between eclipses occurring over a period of a century or more, discovered how eclipses repeat after a certain period. In 752 B. C., on November 10, according to our present calendar, there was an eclipse visible from their capital city. These studies gave them the knowledge to predict them, and they worked out

a period of 260 days, each with a separate name, which in multiples made a table by which eclipses could be foretold. But eclipses, especially of the sun, were supposed to be forebodings of evil, and they tried to stop them when they found that they were due.

The Mayas were at the height of their temple building civilization during the first six centuries of our era, and in their inscriptions on these temples they frequently noted eclipse days. Their hieroglyphic symbols for them were very expressive, for a sun eclipse was represented by their sign for the sun combined with the one representing darkness, so that the symbol literally means "sun-darkness." Moon eclipses were represented by the moon face with a band as if it had a headache and wore a bandage. Dr. Spinden thinks that the idea intended was that the days of the moon were finished, and that it was tied up, ready for burial.

Science News-Letter, August 30, 1930

Dam Saves Pueblo

ATREACHEROUS little stream that flowed down a cliffside and threatened to destroy the prehistoric ruins of Chetro Ketl in Chaco Canyon, New Mexico, has been foiled by a dam which forces the stream to take another course. Rescuing of the valuable pueblo ruins was done by two Navajos, by the direction of the University of New Mexico and the School of American Research, which conducted new researches at the site this summer. The stream has been undermining the pueblo for years and has caused serious curvature in some of the walls.

The latest excavations show that the pueblo was a story taller than has been supposed, and that it stood five stories tall in its prime.

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The Answer Is In This Issue

Why did the Mayas try to stop eclipses of the sun and moon for which they had laboriously worked out a system of predicting? p. 130—How much of the output from an electric lamp can a person see? p. 131—Are sun spots increasing or decreasing? p. 131—What are the rings of Saturn made of? p. 133—To what possible use might an electronic motor be put? p. 135—How is castor oil being made to yield "things of joy and beauty"? p. 136—What did people think of Andree and what were the hopes of the explorer when he sailed away to the North Pole in a balloon 33 years ago? p. 138—What are the relations among sunlight, alcohol and protoplasm? p. 142—How can the baths of famous watering places be reproduced in the home? p. 143.

In Cotton Clothing

WOLVES in the clothing of sheep have been familiar, at least as metaphors, for a couple of millenia. More lately, since we have begun to pay close attention to our trees and shrubs, have we become acquainted with a tiny wolf disguised as a tiny tuft of cotton. The cottony cushion scale is one of the most bothersome of the parasitic insects that suck the life-sap of plants. The magnifying eye of Cornelia Clarke's camera has picked up one of these little monsters, and gives us a better idea of the details of his camouflage, as shown on the cover picture of this issue of the SCIENCE NEWS-LETTER.

Entomology

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SCIENCE NEWS-LETTER, The Weekly Summary of Current Science. Published by Science Service, Inc., the Institution for the Popularization of Science organized under the auspices of the National Academy of Sciences, the National Research Council and the American Association for the Advancement of Science.

Edited by Watson Davis.

Publication Office, 1918 Harford Ave., Baltimore, Md. Editorial and Executive Office, 21st and B Sts., N. W., Washington, D. C. Address

all communications to Washington, D. C. Cable address: Scienservice, Washington.

Entered as second class matter October 1, 1926, at the postoffice at Baltimore, Md., under the act of March 3, 1879. Established in mimeographed form March 13, 1922. Title registered as trade-mark, U. S. Patent Office.

Subscription rate—\$5.00 a year postpaid. 15 cents a copy. Ten or more copies to same address, 5 cents a copy. Special reduced subscription rates are available to members of the American Association for the Advancement of Science.

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