

PSYCHOLOGY

# Temper and Muscular Tension Result From Lack of Sleep

## Psychologist and Wife Find it Hard to Be Congenial After Getting Little Sleep For Two Weeks During Experiment

**I**F YOUR wife's temper suddenly becomes unreasonable, or if you greet her in the morning with a cantankerous outburst, it may be only because neither of you had sufficient sleep the night before.

Members of the New York branch of the American Psychological Association heard last week how lack of sleep upsets domestic tranquillity and of the effects it has on the body machinery.

Your working efficiency may be kept up to normal on the day after a serious sleep loss, they learned, but in that case you will operate under a high degree of muscular tension. And if you persist in your late hours, this tonic muscular compensation which enables you to keep your output up to par will tend to lose its efficacy.

These effects of loss of sleep were found by Dr. G. LaVerne Freeman, of Yale University, through experiments he has been conducting in the psychological laboratory of the newly formed Institute of Human Relations.

Dr. Freeman's first experiments were conducted on himself and his wife. He described the manner in which their social lives were affected by the sleep loss.

"One of the most interesting side-lights of the major experiment was the effect of the sleep losses upon general and social behavior," said Dr. Freeman. "Aberrations in mode of living, health, attitude toward work and other individuals become characteristic occurrences after the first week of experimentation.

"Both subjects began the work in unusually fine health and spirits. Subject S in particular did not expect to suffer any marked effect from the experimental variations. It was planned to continue the routine of living in the usual way.

"But this proved impossible. By the end of the second week, both subjects were finding it increasingly difficult to be sociable. F's contacts with his colleagues were frequently tinged with caustic jibes. And the cantankerous outbursts which occasionally occurred be-

tween the two subjects were often quite uncivil.

"Prior to the tests, both subjects were reputed to be very congenial. With the relative fatigue of these acquired 'graces' and the release of adjustment patterns of lower order, it became necessary to forego attendance at all social events in order to preserve this reputation.

"Irritability and childish behavior persisted throughout the experiment."

The experiments showed that you cannot "catch up" on sleep in a single night. Even a ten-hour period of sleep failed to make up for the effects of four hours loss of sleep on the night before, and eight hours on the third night still left the person not entirely recovered.

*Science News Letter, April 25, 1931*

ARCHAEOLOGY

## Explore Aztec Town Covering 12 Square Miles

**R**UINS of the big prehistoric town of Calixtlahuaca, which is to say "Prairieville" in Aztec, are now being excavated by the Mexican government under the direction of José García Payón.

The archaeological site over which the ruins of the ancient city spread covers no less than twelve square miles.

The plan, now traced, shows that a series of pyramids was built on the slopes of a range of low mountains. The pyramids were connected among themselves by giant terraces and paved causeways. A great quantity of pottery and other remains have been unearthed. These have been classed as ranging from the most primitive of Archaic art style to the finest of the styles known at the time of the Spanish Conquest. A method of sculpturing stone in relief not found elsewhere in Mexico has been located at this ruined city. One of the ruins, still only partially excavated, appears to have been the city's ball court where games were played.

A round temple, built in layers like a five-storied cake, was discovered several months ago and is still not fully unearthed. It is a special center of interest for archaeologists who point out that round buildings were rare in ancient Mexico and little is known of their use.

One other round structure is known to exist on the mainland of Mexico. This is at Cuicuilco, in the midst of a thirteen-mile lava flow and is a far more primitive building than the round temple found at Calixtlahuaca. Two other round structures are known at present in the Mayan peninsula of Yucatan.

Dr. Manuel Gamio, Mexican anthropologist, has explained that the newly excavated round temple at Calixtlahuaca may be planned after the type of Aztec round buildings built as temples for the Plumed Serpent, god of the air. Or, he adds, it may be a transition between the primitive round building at Cuicuilco and the typical Aztec style.

*Science News Letter, April 25, 1931*



**CONCRETE COOLING TOWERS AMERICA DOES NOT NEED**  
*These huge towers with an hourly circulation of 5,000,000 gallons cool condenser water at the modern Hams Hall generating station, Birmingham, England. In this country it is usually possible to build power plants near streams where a continuous supply of cool water is available.*

*Electrical World*