

MEDICINE

Fleas Can Probably Transmit Typhus Fever, Scientists Say

First Definite Incrimination of Fleas As Possible Carrier Made By U. S. Health Service Research Workers

FOR THE first time the flea has been definitely incriminated as a probable vector in the transmission of typhus fever in this country. Experiments indicating this have just been reported by Drs. R. E. Dyer, A. S. Rumreich and L. F. Badger of the U. S. Public Health Service.

Typhus fever in the Old World seems to be of slightly different type from the disease in the New World, and is transmitted by the body louse. It has been called jail fever and ship fever and was very prevalent in jails, crowded barracks and ships, city slums, and wherever people lived in congestion and filth. The disease has never reached serious epidemic proportions in the United States and for many years very few cases have been reported.

The fact that the disease occurred in people who were not infested with lice led American investigators to suspect that some other insect was transmitting typhus fever in this country.

Drs. Dyer, Rumreich and Badger investigated cases of typhus which occurred on premises in the immediate vicinity of food-handling establishments in Baltimore in the late summer and fall of 1930. They found these premises heavily infested with rats. These animals were trapped and combed for fleas. About three dozen fleas were obtained from the rats and their nests.

The fleas were ground up and the emulsion injected into guinea pigs, which contracted a disease like typhus fever. The clinical symptoms and the appearance of the organs and tissues corresponded with the symptoms and signs in guinea pigs that had been inoculated with a strain of American or New World typhus fever.

Guinea pigs which had recovered from an attack of endemic typhus produced by the New World strain were apparently immune to subsequent inoculation with the strain obtained from the flea emulsion.

Typhus fever is not to be confused with typhoid fever. The latter is caused

by a bacillus, the former by a virus too small to be seen through the most powerful microscope. Typhus fever is transmitted by the bite of infected lice and probably by fleas. Typhoid is transmitted by infected food, water or milk, and attacks the intestines chiefly. Typhoid fever is less often fatal than typhus fever. There is no known vaccine for typhus fever, while there is a preventive inoculation for typhoid.

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METEOROLOGY

Foggiest Spot of U. S. A. Brightened Up in 1930

THE FOGGIEST spot in the United States brightened up a little in 1930, and had only 1,562 hours of fog, so lighthouse keepers at Moose Peak, Maine, have reported to the Lighthouse Service of the Department of Commerce.

At Moose Peak, records for the past sixteen years show a yearly average of 1,607 hours of fog. Runners-up on Moose Peak's record are Libbey Island

and Petit Manan, also on the Maine coast. They are foggy a good deal of the time but cannot quite match Moose Peak's figures.

The U. S. Lighthouse Service states that Point Reyes Light Station holds the record for fog on the Pacific Coast, with an average of 1,398 hours per year for 45 years.

In 1907, Seguin Light Station in Maine threw its beams out in more fog than has ever since been recorded by any station: 2,734 hours of thick atmosphere. The fog horn was blowing a third of the time at this station during that year.

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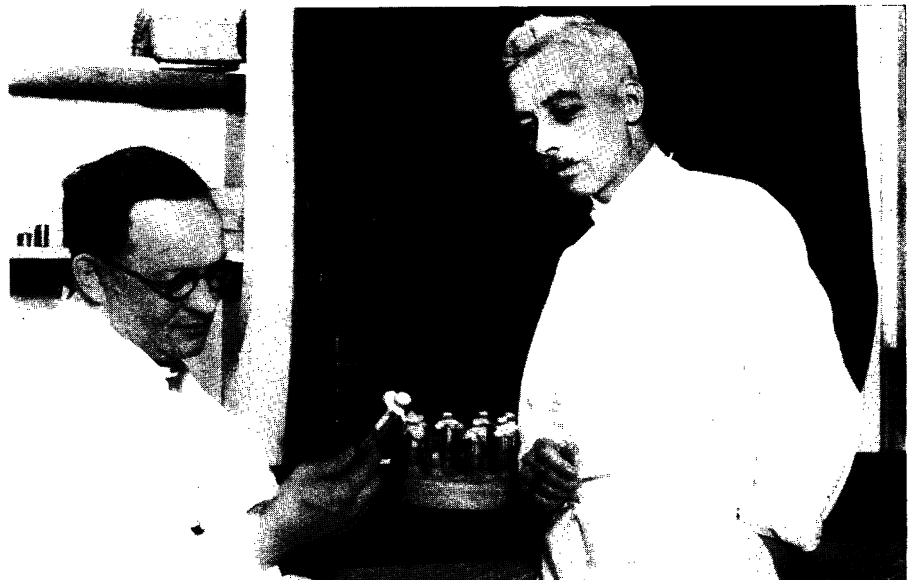
ARCHAEOLOGY

Round Temple Is Rare Find in Aztec Ruins

A ROUND temple of the Aztecs, built layer upon layer like a five-storied cake, each higher layer smaller than the one below it, is the rare discovery made by government archaeologists of the State of Mexico, who are working at Calixtlahuaca. The name of the site translated from the Aztec would be something like Prairieville.

The excavations at Calixtlahuaca recently begun by the state government under the direction of Jose Garcia Payon, are being made at nine different places. Numerous pyramids and terraces indicate that the ruins will rank among the most important of Mexico's newer archaeological sites.

The round temple is found to have a



FIND PROBABLE CARRIER OF NEW WORLD TYPHUS FEVER

Drs. L. F. Badger, left, and R. E. Dyer, right, who worked with Dr. A. S. Rumreich in the study of typhus.

grand stairway on the east leading to the topmost layer. Some of the layers have vertical sides, while the sides of other layers slant outward and downward. Like many other Aztec structures, the building was enlarged during its lifetime by covering the original smaller structure with earth and rock; and then re-facing it with stone and plaster. Judging from an interior stairway under the present outer stairs, and judging from other architectural features, there may be as many as three temples on the site, like a nest of boxes.

At the foot of the grand stairway a circular stone about three feet in diameter was found. This appears to be a smaller copy of a great Aztec sacrificial stone now in the Mexico City Museum. It is carved in symbols meaning "precious liquid," which referred to blood.

The round temple is believed to have been sacred to Quetzalcoatl, god of the wind or sky.

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VITAL STATISTICS

More Americans Killed By Autos Than by World War

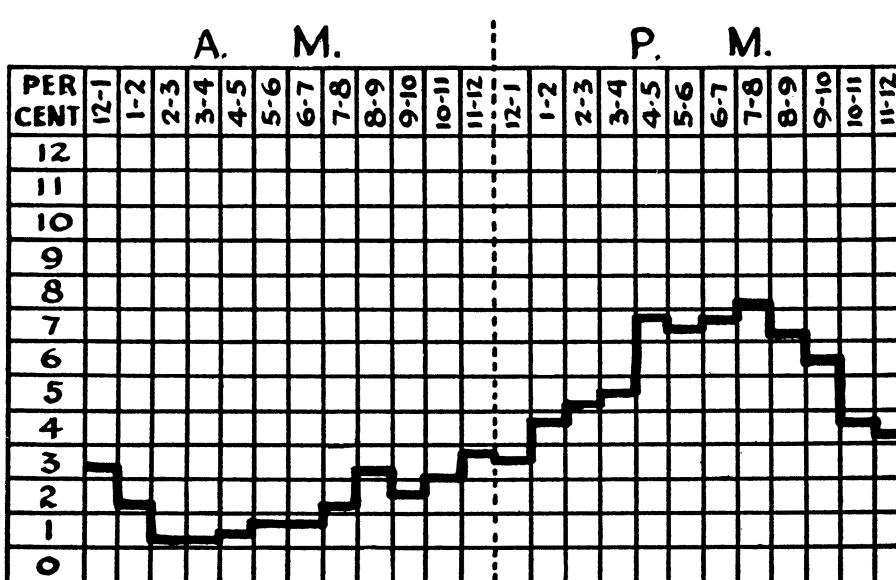
Accident Toll During Past 18 Months Was 50,900, While A. E. F. Lost 50,510 Men During Equal Time Period

MORE LIVES were lost in the United States during the last year and a half as a result of automobile accidents than in the American Expeditionary Forces during a year and a half of the World War, a survey by statisticians of the Travelers Insurance Co. here shows.

During 18 months of the World War 50,510 members of the A. E. F. were killed in action or died of wounds. During the last 18 months 50,900 persons were killed in automobile accidents in this country.

The 1930 total of deaths from automobile accidents was 32,500, the statisticians determined from reports of 40 states. This represents an increase of more than 1,200 over the 1929 total, although gasoline consumption dropped more than one billion gallons in 1930, with consequent reduction of mileage traveled by automobiles.

"Men were behind the wheel in 93 out of every 100 cars in accidents causing deaths and non-fatal injuries in



WHEN TO REMAIN INDOORS,

If you want to avoid traffic during the hours when the greatest number of fatal automobile accidents occur. In 1930, the hour between seven and eight claimed most victims, 2,665 people. Thirty-eight per cent of the accidents which resulted in deaths happened in the five hours between 4 and 9 p. m.

of the automobiles involved in these accidents were private passenger cars, though this class also represents most of the total motor vehicle registration in the country.

"Three specific driving violations by operators of automobiles were responsible, in whole or in part, for 68 per cent. of the 1930 accidents due to improper driving. They were exceeding the speed limit, driving on the wrong side of the road, and failing to grant right-of-way," the report stated. Violations of driving regulations by motorists played a part in over two-thirds of all the accidents.

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NATIONAL PARKS

Everglades Park Bill Now on House Calendar

THE bill providing for the establishment of a national park in the southern Everglades of Florida has been passed by the Senate and is now on the House calendar. Friends of the measure hope to see it enacted before Congress adjourns, so that the work of acquiring the land for presentation to the U. S. National Park Service may go forward.

The area is unique in that it shelters an almost unimaginable wealth of animal and plant life under tropical conditions and yet is easily accessible to thousands of persons of only moderate means and limited time for travel.

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1930, with women being the drivers in the remaining seven," the records showed. "Whether the better record of women drivers as to fatalities is due to better driving, or not being behind the wheel for as many miles as men on the average, is not indicated."

In over half the fatal accidents, the drivers were between the ages of 25 and 54. In nearly a third more, the drivers were between 18 and 24 years.

One-half the automobile fatalities occurred in collisions with pedestrians, one-fifth in collisions with other automobiles and about one-tenth in collisions with fixed objects.

Over half the non-fatal injuries were from collisions with other automobiles and one-third of such injuries occurred in collisions with pedestrians.

The large number of motor vehicle fatalities cannot be charged up to the automobile itself. About nine-tenths of the killed and injured were victims of automobiles in good mechanical condition at the time of the accident. Most