

MEDICINE

Storms Spread Disease

► **TORNADOES** MAY provide the solution to a disease mystery that has puzzled scientists for almost a decade. And a group of health scientists are hoping now for a good tornado of the right kind and location to help them prove the solution they suspect.

The mystery concerns the distribution and spread of a fungus disease of the lungs, histoplasmosis. The disease has been present constantly in certain areas of the country and at certain spots or "land islands" within those areas. In these "land islands," the population is heavily infected with the fungus disease.

These islands suggested the possibility that if the infection is air-borne, as seemed likely, it might be carried by strong winds. And since the islands of infection were spotted here and there in the Mississippi River Valley, the region's frequent tornadoes were suspected of being the winds that spread the infection.

Available "before and after" health records have been checked against Weather

Bureau records. The percentage of persons reacting to histoplasmin, showing they had acquired the fungus infection, increased after tornadoes in certain of the "islands."

So plans are being made to use the next available and suitable tornado for a natural laboratory. A Christmas Seal grant from the National Tuberculosis Association will aid the study, being made under the direction of Dr. Carroll E. Palmer of the U. S. Public Health Service. Announcing the grant, Dr. Esmond R. Long, director of medical research of the NTA, New York, said:

"Specifications for the tornado are that it be in a histoplasmosis endemic area and cover a wide path and that local health authorities in the area be so interested in the problem that they will cooperate.

"The scientists hope that their tornado will blow only good. They have carefully eliminated destruction from the specifications."

Science News Letter, January 1, 1955

GEOGRAPHY

Chance Saved Columbus

► **A COMBINATION** of chance circumstances saved Columbus' third voyage to the new world from being a complete failure, a British geographer reports.

If Columbus' servant, Antonio Perez, had not by the merest chance climbed to the crow's nest at noon on July 31, 1498, the ship would have passed north of its destination, the continent of South America. Columbus called it a "miracle."

Prof. Arthur Davies, head of the geography department at the University College of the South West, Exeter, England, reports this version of the voyage in the American Geographical Society's *Geographical Review* (Oct.). The finding was deduced from original letters and documents.

What the servant saw far on the horizon were the peaks of three mountains on the eastern corner of Trinidad, an island off the north coast of South America.

Columbus set out from Spain with the original intention of bringing stores to colonists in Hispaniola, in the Caribbean. At the Canary Islands, Columbus suddenly decided to separate from the rest of his ships and sail south of the equator to seek South America himself. Prof. Davies suggested that Columbus learned in Madeira, before reaching the Canaries, of the Portuguese discovery of Brazil and he decided to continue the exploration.

But half way between Africa and Brazil, Columbus wrote, his ship was beset by great heat and his stores were wasting away. He decided to give up the attempt and head for Hispaniola.

On the way to meeting his other ships

his servant sighted the peaks, Prof. Davies said. Columbus named the island Trinidad, after the Holy Trinity, and explored the area. He then set his course northwest and reached Hispaniola five days later.

In 1950, Prof. Davies told the British Association for the Advancement of Science that Columbus deliberately falsified the log of his first voyage to cheat the Portuguese explorer, Ferdinand Dulmo, of the discovery of America.

Science News Letter, January 1, 1955

PUBLIC HEALTH

Roaches a Disease Factor If Conditions Are Right

► **THE IMPORTANCE** of sewer cockroaches as disease spreaders was described by William B. Jackson and Paul P. Maier of the Communicable Disease Center, U. S. Public Health Service, Phoenix, Ariz., at the meeting of the American Association for the Advancement of Science in Berkeley, Calif.

The government scientists stated that "the possibility that sewer cockroaches might serve as elevator mechanisms, bringing disease organisms from the underground sewer systems up to areas of human contact" prompted the study.

Experiments on the movements of American cockroaches from sewer manholes in Phoenix revealed that low winter-time temperature inhibited large-scale movement.

During the late spring, however, warmer temperatures resulted in quite different ob-

servations. The warmer weather, together with either natural or forced overpopulation, caused the roaches to emigrate en masse.

These results led the scientists to conclude that while a single roach from a sewer is of relatively little importance in the spread of disease, "extensive emigrations, such as might result when sewers become flooded, could convert cockroaches into important elevators of disease-producing bacteria and viruses."

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PSYCHOLOGY

Teen-Age Girls Seen Middle-of-Roaders

► **TEEN-AGE GIRLS** are less likely to take extreme views and more inclined to middle of the road choices than boys and men, it appears from a study reported by Norman Young of New York and Frank Mayans Jr. of Brooklyn, N. Y., at the meeting of the American Association for the Advancement of Science in Berkeley, Calif.

The adolescent girls "may have a greater tendency than males to give middle-type avoidance of the extreme responses on personality questionnaires," the scientists reported from studying responses to 1,000 Columbia University Citizenship Education Project questionnaires.

The purpose of the study was to learn whether there were any response tendencies which differentiated the sexes when dealing with responses of the type answered "Yes," "Sometimes" or "No."

Science News Letter, January 1, 1955

PUBLIC HEALTH

Snake Venom May Activate Malaria

► **GETTING SNAKE** poison into the system can activate latent malaria, Dr. Norman L. Corkill, health adviser to the Aden Protectorate at Mukalla, Aden, told scientists at the first International Conference on Animal Venoms held with the American Association for the Advancement of Science meeting in Berkeley, Calif.

Dr. Corkill reported on work performed while he was with the Sudan Medical Service.

It might be possible, he said, to tell whether a person has been bitten by a deadly snake or by one from a non-deadly species by examining the urine for red blood cells. This might also serve as a guide to predicting the outcome.

In communities where there is seasonal dryness, shortage of animal protein in the diet and deficiency of vitamin A, riboflavin and especially vitamin C, the victims of snakebite, particularly victims of vipers, may be handicapped, since the scurvy their poor diet may have induced and the "hemorrhagin" effects of the snake venom would combine to make both poisoning and scurvy worse.

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