

MEDICINE

Latin America Menaced by Disease Causing Blindness

Tropical Malady Due to Parasitic Roundworm Transmitted By Widely-Distributed Group of Blood-Sucking Insects

THE TROPICAL DISEASE, coastal trypsin, which causes blindness, can become a Pan-American problem like malaria and yellow fever, in the opinion of Dr. Alfons Dampf, chief entomologist of the Mexican Government, who reported his investigations on the subject in the Chiapas region of southern Mexico to the Pan-American Medical Association.

Spreading from Interior

The disease is caused by a parasite which spends part of its life in blood-sucking insects like buffalo gnats or black flies. Dr. Dampf made a special study of these bloodsucking insects and found that one of them is distributed from Trinidad, West Indies, to northern Mexico and another of them from British Honduras to the state of Vera Cruz and from Guatemala to the state of Oaxaca. As the disease in Mexico is slowly spreading from the interior to the coast, and as the transmitting insects are present in a much greater area, the conclusion is inevitable that onchocercosis, as the disease is known scientifically, can become distributed over the greater part of Central America, invading perhaps also South America.

The parasite which causes the trou-

ble is a nematode or roundworm of the *Filaria* family, from one to twenty inches long. It lives coiled up in tumor-like swellings under the skin of human beings. The larvae of this worm, in the form of the so-called microfilaria, swarm up from the cysts or swellings to invade the peripheric lymphatic ducts and are there picked up by bloodsucking insects of the Simulid family (buffalo gnats or black flies). The larvae undergo a transformation in the gnats, after which, the next time the gnat sucks blood, the mature microfilaria are passed from the proboscis of the fly or gnat to another person, Dr. Dampf explained.

As a result of the joint efforts of the commission of the Harvard Medical School under Prof. Richard P. Strong, working in Guatemala, and of the various commissions of the Mexican Public Health Department, of which Dr. Rafael Silva is chief, which studied conditions in Chiapas and Oaxaca, the clinical aspects of the disease and the biology of the transmitting insects were learned. These investigations also showed that the vision of man is affected by actual invasion of the eye by the microfilaria. What species of Simulids and how many were concerned in the spread of the disease had still to be

shown. Dr. Dampf's study supplies this necessary information.

In view of the danger of spread of the disease, the Mexican Government, through the Public Health Department, has begun an active campaign against the Simulids, the transmitting insects, in Chiapas. The people are being forced to clean the breeding places in the mountain brooks and rivulets, to avoid in this way the imposition of the flies on the submerged vegetation. A special Onchocercosis Commission, under the leadership of Dr. S. Gonzalez Herrejon, sent a staff of medical officers to the infested places, with the order to operate on every person having tumors and in this way to eliminate the danger of infection.

According to Dr. Dampf's report, the parasite was probably brought from Africa with Negro slaves who escaped their masters and found a refuge in the interior of Guatemala, where transmitting Simulids are plentiful. In the same way two other disease-producing parasites, *Filaria loa* and *Dracunculus medinensis*, were once brought from Africa to South America.

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ETHNOLOGY

White Men Copy Indians Who First Copied Them

NAVAJO Indians, famed for their dyed-in-the-wool conservatism, are taking to new ideas in house building. Navajo hogans with glass windows and stovepipes may be seen along roads in the Navajo reserve in New Mexico and Arizona. Other hogans are made of stone and discarded railroad ties—a ven-



NEPTUNE'S BODYGUARD

Plesiosaurs or giant long-necked sea-lizards and fish-lizards—creatures which were terrors of the seas one hundred and twenty million years ago, as restored in a large mural painting recently presented to Field Museum of Natural History by Ernest R. Graham. Charles R. Knight is the artist.