

MEDICINE

Spread of Ills Predicted

Tropical diseases may be carried over post-war world by dispersing armies and migrating peoples. Air transport increases danger. Sanitation a defense weapon.

► A WORLD-WIDE spread of tropical diseases can be expected after the war, Col. Thomas T. Mackie, of the Army Medical College, declared at the National Conference on Planning for War and Postwar Medical Services held in New York under the auspices of the Carlos Finlay Institute of the Americas.

The present war, Col. Mackie said, is unlike any in history in the enormous potential hazard of disease to which populations may and probably will be exposed. The peak of the hazard will come after the war as armies that have become reservoirs of disease return home and as masses of people in oppressed and disease-ridden countries emigrate.

Besides furnishing food and clothing to relieve malnutrition, semi-starvation and destitution, the United Nations will be faced with the "imperative need for the effective control and treatment of disease" in occupied nations, Col. Mackie said.

Public health practice and the practice of clinical medicine will be affected in many parts of the world, Col. Mackie declared, by the expected extensive migration of tropical diseases.

Tropical diseases do not stay in the tropics because of the climate, he explained. Malaria can and does occur in

such far northern regions as Canada and the British Isles. Even such a strictly tropical disease as filariasis, popularly known as elephantiasis, has existed near Charleston, S. C.

Sanitation and personal hygiene are more important than climate in keeping these diseases out of temperate regions. But they can spread wherever mosquitoes, ticks or other insects that carry the germs exist, and many kinds of insects capable of carrying tropical disease germs are widely prevalent all over the world. Other kinds, never before known to carry these germs, may acquire that ability, Col. Mackie pointed out.

Constant air transport between widely separated theaters of war may accidentally spread widely both the disease-infected persons and the mosquitoes or other carriers of the disease.

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Refugee Doctors Idle

► A PLAN for meeting the present shortage of doctors by having the War Manpower Commission issue special type temporary licenses to refugee physicians was suggested at the National Conference on War and Postwar Planning for Medical Services.

The suggestion was made on an unofficial and personal basis by Dr. Frederick P. Keppel, director of the Equitable Life Assurance Society of U. S., who is now in Washington serving on the War Relief Control Board and also on a two-man board of appeals on immigration visas for refugees.

The postwar practices of American doctors now serving their country with the armed forces would be safeguarded, according to Dr. Keppel's plan, by making these special licenses good only for the duration of the present emergency. The licensees, furthermore, would be limited to practice in certain localities such as the towns that have mushroomed around war industrial centers and army training camps.

The American people are ignorant and uninformed on the immigration problem at the present time, Dr. Keppel declared. (*Turn to page 198*)

QUININE PRODUCTION — *Natives are shown (extreme left) stripping quinine-laden bark from cinchona trees. After being ground, the bark is placed in the digester at a crude South American extraction plant (center) and mixed with oil and lime. Quinine, the anti-malarial so badly needed by the armed forces, leaves the bark and dissolves in the oil. At the rear of the photograph, two vertical tanks are shown where quinine is transferred from the oil to a water-acid solution. Placed in settling barrels (right) the quinine then separates out and is collected for drying.*



They are still laboring under the impression that hordes of unwashed, illiterate people are clamoring at the gates. Actually, Dr. Keppel said, if every application for a visa were granted, the number would be only one-tenth that allowed under pre-war immigration quotas. Only about one-half of the number is approved and only about half of these get to this country.

The immigrants today are to a large extent people of culture. A large proportion is made up of professional people, such as doctors, dentists, nurses and research workers. Dr. Keppel's suggestion for temporary, special type licenses for the doctors was made with the hope of helping to solve the problem of how to use these refugees to the best advantage of the United States and still protect the jobs of those Americans away at war.

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ENGINEERING

Dream Refrigerator

Touch of a button will open the door of future refrigerator for post-war housewives. Ice cubes will be automatically released.

➤ TOUCH OF A BUTTON may open a post-war household refrigerator that will provide automatic defrosting, zero chamber for frozen foods, ice cubes automatically released, ice water from a faucet and other revolutionary devices. These practical possibilities are offered by Glenn Muffly of Springfield, Ohio, in a report to the American Society of Refrigerating Engineers.

The door-closing rhumba will no longer feature the housewife's departure from the refrigerator with both hands full. Neither need she fumble to open the door while putting things away. Just touch a button with your elbow to make the door automatically open or close is the idea worked out in detail by Mr. Muffly.

Besides throwing away the door handle, the hinges can be so thoroughly concealed, he declares, that you couldn't hang a spider web on one.

Inside there should be a separate compartment for the frozen foods which will be much more popular after the war. This cubic foot or two of "freezer" space will have a separate thermostatic control. Ice cream, fish and frozen foods will be cooled whenever temperature

Japs May Spread Malaria

➤ THE JAPS as they retreat may introduce malaria mosquitoes into the areas our troops will occupy and which are now free of malaria, Prof. Henry E. Meleney, of New York University College of Medicine, declared at the meeting.

Not all the territory in the Pacific theater is malarial. The Pacific isles which were mandated to Japan after the last war are all entirely free from malaria mosquitoes, Prof. Meleney pointed out.

It is possible, he said, that these mosquitoes may deliberately be brought to the islands by the Japs as they leave. The Japs have been accused of similar tactics in the past, specifically of dropping plague-infected rat fleas into China.

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The post-war refrigerator might even provide the warm, dry storage space, needed for such things as crackers and breakfast food, by utilizing waste heat from the condensing unit.

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MEDICINE

Blood Plasma Successful Fighting Shock from Fever

➤ SUCCESSFUL use of blood plasma to fight shock from fever treatment for gonorrhea is reported, apparently for the first time, by Lieut. Arthur M. Pruce, chief of the section of physical and fever therapy at Stark General Hospital, Charleston, S. C. (*Journal, American Medical Association*, Mar. 20).

Lieut. Pruce explains that he is reporting this use of plasma "because our armed forces have instituted a rapidly expanding program of fever therapy to treat venereal diseases" and shock is one of the more dangerous complications of this kind of treatment.

Rise in the pulse rate and fall in blood pressure, indicating impending collapse, forced discontinuance of the fever treatment after about five and one-half hours in the case Lieut. Pruce reports. In spite of treatment with the usual antishock measures, the patient went into shock six hours after the fever treatment was discontinued. At this point about one-half a pint of blood plasma was injected into the patient's vein. Within 20 minutes the patient recovered from the shock condition.

"Interestingly enough," Lieut. Pruce adds, "the patient was cured of gonorrhea in spite of only five and three-quarters hours of therapeutic fever."

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INVENTION

British Armored Vehicle At Home on Land or Sea

➤ A KIND of steel hippopotamus, able to get around in water, through swamps, and on solid ground, is the invention offered by two Englishmen, G. M. Gibbs and T. R. Tusting of London, for patent 2,309,947. Armored, it might serve as a means for taking commandos over the narrow seas, up the beach and right on inland. The boat (if that's what you want to call it) has tractor treads for soft-ground maneuvering, and wheels for moving more rapidly over roads or hard terrain.

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