tion Commission and the lands are bought by the Forest Service of the Department of Agriculture. Areas that have not yet been submitted for the approval of the commission include lands in Mississippi, Kentucky and eastern North Carolina.

Areas recently approved by the commission, which are being bought by the Forest Service, Mr. Kneipp explained, are 100,000 acres in southern Vermont, and areas near Lake City, Florida; in Wisconsin, the upper peninsula of Michigan, upper Minnesota, other parts of Michigan, Louisiana, and eastern South Carolina, and privately-owned lands within the National Forests of Choctawhatchasee and Ocala, Florida.

The general program of national-forest purchases, according to the National Forest Reservation Commission, divides the 9,600,000 acres to be acquired into the following four subdivisions:

Consolidation of federal ownership within nationalforest units heretofore approved by the commission, and situated on the headwaters of navigable streams; approximate area to be acquired, 4,000,000 acres.

Establishment of necessary additional nationalforest units for protection of headwaters of navigable streams and reduction of floods thereon; approximate area to be acquired, 2,000,000 acres.

Consolidation of federal ownership within nationalforest units on watersheds of navigable streams heretofore approved by the commission in Michigan and Minnesota, primarily to aid in timber production and demonstrate forestry practice; approximate area to be acquired, 1,100,000 acres.

Creation of a limited number of additional nationalforest units in southern pine region and northern Lake States, primarily to aid in timber production and demonstrate forestry practice; approximate area to be acquired, 2,500,000 acres.

## INSTITUTE OF TROPICAL MEDICINE AT THE UNIVERSITY OF CALIFORNIA

TENTATIVE plans for the University of California Institute of Tropical Medicine have been announced at the Hooper Foundation, research center of the medical school, providing for lectures in the summer of 1930, according to a statement made by Dr. Alfred C. Reed, professor of tropical medicine.

The purpose of the new organization is threefold, Dr. Reed explains. It will provide the only western center for the treatment and study of tropical diseases and for research in general problems of health and food preservation in the tropics or locally as a result of conditions having their origin in the tropics.

Research, public education and treatment of individuals suffering from tropical diseases are given as the three phases of work to be carried on.

Under research are included the practical problems of health and disease in tropical countries; the problems arising from shipping between the United States and tropical countries, both as regards cargo and the personnel of the ships, passengers and crew, and the problems presented by epidemics of tropical diseases such as meningitis, cholera, yellow fever, etc.

Under public education Dr. Reed lists four lines of endeavor. First, regular courses in tropical medicine for graduate physicians from every part of the world. Second, courses in tropical public health service for nurses going to tropical countries or on ships touching at tropical ports. Third, courses on tropical medicine for students in the University Medical School, as desired. Fourth, public instruction in tropical hygiene and public health through popular lectures and a course for prospective travelers, merchants, soldiers and others intending to visit tropical countries.

Under treatment of individuals is included all such treatment as can not well be taken care of elsewhere. It is thought that the university center will care for people in all parts of the west, as the next closest center for the treatment of tropical diseases is in Galveston. Another is in New Orleans, but the rest are on the Atlantic seaboard. None of them, Dr. Reed says, is as wide in scope as that planned for the University of California.

Concerning the shipping problems to be studied, San Francisco, Los Angeles and other Pacific Coast ports are unloading places for innumerable cargoes of tropical goods, from copra, oil, forest products and foodstuffs on down. This commerce not only offers a means of entry for tropical diseases and parasites of many kinds, but is itself often hampered by the action of parasites in cargoes en route. This, is particularly true in the case of cargoes of foodstuffs, recent reports having been received of the spoilage of large cargoes of cocoa-beans by an insect parasite.

## CENSUS OF MIGRATORY WATERFOWL

Data on the bulk movement of migratory waterfowl, such as ducks, geese, swans and coots, during their spring and fall migration, and on the limited areas of their winter concentration, are being accumulated through waterfowl censuses under the leadership of the Biological Survey of the Department of Agriculture. This census taking, which was inaugurated about eighteen months ago, is carried on through the cooperation of about 3,500 volunteer observers.

The waterfowl are widely distributed at various seasons throughout North America. In order to get definite information regarding their occurrence, numbers and migratory movements, direct observations must be made at regular intervals at a great number