but the deepest part of the shadow, in an exposure time of 40 seconds. This darkest core of earth's shadow was only about 1,000 miles across, measured on the photographs.

Phases of partial eclipse were secured in about ½ second exposures on slow lantern slides, the emulsion being quite insensitive to yellow and red. The exposures secured during totality were made upon Panatomic Cut Film, a fine-grain emulsion furnishing more contrast than Supersensitive Panchromatic film. These exposures

ranged from ten to forty seconds.

Areas of lunar surface, including Linné, Aristarchus, and Plato, were photographed enlarged through the orthoscopic eyepiece, and furnish considerably better results than enlargements made from the focal images. These three regions thus depicted in more detail were photographed immediately after the shadow had passed from them. The crude measurements of Linné, from this enlarged view, do not disclose with certainty any change in size when compared with photographs enlarged from the other negatives. However, with the aid of a measuring machine, and measurement of density of image, some effect which has otherwise escaped detection might be found.

TREES OF THE GREAT SMOKY MOUNTAINS NATIONAL PARK¹

H. M. TENNISON

Associate Naturalist Technician, Great Smoky Mountains National Park, Elkmont

A classified list of 124 species of trees of known or probable occurrence in the Park was presented, together with a paper about the trees and forests of the Smokies. The later is addressed to a miscellaneous audience and in it such topics as the following are discussed: The Species Concept, Plant Classification, Tree Names, When is a plant a tree? Big Trees, Forests of the Smokies.

¹Abstract of paper presented before the Botanical Section of the Tennessee Academy of Science at the Nashville meeting, November 29, 1935. This paper constituted a part of Dr. Jennison's monthly report on Wildlife Activities (U. S. National Park Service) for the period from October 15 to November 14, 1935.