

Reports indicate that in middle July the atmospheric conditions prevailing in Washington and Oregon were the worst ever known, and fires were burning in all parts of these states. Within the last few days northern California was visited by many fires, and the situation was aggravated by high temperature and low humidity, but at last account these fires have been controlled with the exception of one large fire burning on the Klamath National Forest in northwest California.

—*Communication to THE BULLETIN from the U. S. Forest Service.*

“DRY LIGHTNING”

People in most parts of the country, when they think of lightning and thunderstorms, associate rain with the phenomena of lightning and thunder and may not understand why it is that lightning sets so many fires in the western forests, where this year there is a very serious forest-fire situation, with “dry lightning” largely responsible.

So-called dry lightning, or the dry thunderstorm, is due to the same causes and occurs in the same manner as any other thunderstorm, says C. F. Talman, in charge of the library of the Weather Bureau. The ordinary wet thunderstorm is due to a violent vertical convection of air that contains enough moisture to be condensed into an abundance of rain-drops. Under conditions where the lower air is even moderately humid the rain forms at such low levels that only a part of the condensed moisture evaporates as it falls to earth. On the other hand, in regions where the lower air is relatively very dry the rain forms so high up that all of it, or nearly all of it, evaporates in mid-air as it falls. All thunderstorms are equally wet in and just beneath the clouds.

When the rain all evaporates before it gets down, the thunderstorm, to the man or the forest on the ground, is a dry one. In the present forest-fire situation in the West this “dry lightning” sets the forests afire in many places, and, with no accompanying moisture reaching the ground to wet the burning forest material, the fires, being so numerous and so scattered, are very hard to fight.—U. S. Dept. of Agriculture *Official Record*, Aug. 11, 1926.

RODS AND LIGHTNING DAMAGE

Nobody now need doubt the value of lightning rods in affording considerable protection against damage by lightning. Prof. J. Warren Smith, in his instructive book “Agricultural Meteorology,” presents statistics on lightning damage to rodded and unrodded farm buildings in the central part of the United States. He shows that the chance of being struck by lightning is more than 10 times greater for the unprotected building. In some sections not one of several thousand rodded buildings has been materially damaged by lightning in the course of several years. When rodded buildings did happen to be struck, usually only about five in a 100 burned down. In cases where buildings were struck, but not