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? WHY THE WEATHER ?

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DENSE FOGS AND CLOUDS MAY HAVE LITTLE WATER

A fog differs from a cloud merely in location; it is a cloud which is touching the earth. Or, the aviator might say, a cloud is merely a fog up in the air. Similarly, a cloud touching a mountain top is often called a fog by people on the summit. Both fog and cloud are composed of great numbers of minute and widely separated water droplets of ice crystals.

In his recent book on "Fogs and Clouds", Dr. W. J. Humphreys, tells how very very little water is contained in even a dense fog. Wells and Thuras, while on ice patrol duty, measured the water content of a dense fog over the Grand Banks. Foggy air was warmed until the droplets evaporated, and the vapor content was then determined by the use of wet and dry bulb thermometers and hygrometric tables. This value, corrected to the temperature of the free foggy air, was then compared with the vapor content of ^{an} equal volume of the latter. The gain, of course, represented the vapor derived from the evaporation of the fog droplets.

In this manner, a block of fog 3 feet wide, 6 feet high and 100 feet long was found to contain less than one seventh of a glass of water. Yet this water was sufficient to make 60 billion drops.

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