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? WHY THE WEATHER ?

By Dr. Charles F. Brooks
of Clark University

IMPORTED MOISTURE

Every year water vapor to the weight of trillions of tons is imported into North America. If only a quarter of the annual precipitation of about 32 inches average over the United States is from the first condensation of imported vapor, then the annual imports of water vapor into this country alone total nearly two trillion tons. The moisture imported from the Pacific is about three fourths extracted from the air as it crosses the coast ranges and the Sierra Nevada-Cascades, therefore, leaving the plateau country to the east a semi-desert or desert except on the western slopes of high mountain ranges as high as or higher than those farther west over which the wind has already come. The west slopes of the Blue Mountains, the Wasatch, and the Rockies, receive much of the fourth quarter of moisture directly brought from the Pacific, leaving practically none for the basins and Great Plains beyond.

Fortunately, however, the eastern half to two thirds of our continent is open to rather free importation from the Gulf of Mexico and from over the Gulf Stream. One, two, or three days with south wind, and billions of tons of water vapor are drawn over much of the eastern half of the continent. At times the rate of entry per mile of shoreline, as along the south coast of New England Sept. 30, 1924, may reach about a thousand tons a second, providing ample moisture for such flooding rains as occurred then in central and northern New York and western Quebec.

(Tomorrow: Storms of the Great Lakes)

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