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? WHY THE WEATHER ?

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DUST WHIRLS

Amusing, and sometimes unpleasant, whirls of leaves and dust are common beside tall buildings on windy days and in more open country on quiet, sunny days in summer. Small convectional dust whirls are caused by overheating of the lower air to the height of a few feet, and are favored by barren surfaces in level regions. Thus dust whirls were observed frequently, sometimes at regular intervals of eight to ten minutes, on a Texas parade ground. The tops of their columns were found to rise about ten feet per second, and at times to become capped with a cloud in 10 to 15 minutes. The whirls may turn either clockwise or counter clockwise; with diameters seldom more than a few yards near the ground. They are too small to be much influenced by the direction of the earth's rotation. In arid, tropical countries, dust whirls may become truly formidable the dense and dark "dust devils" of the desert, lasting sometimes several hours. But, as Dr. W. J. Humphreys points out, "however violent, this sort of storm is never a tornado; it originates near the surface and is sustained by the supply of warm air below, while the true tonado is generated and developed by conditions that occur at the cloud level."

(Tomorrow: Sandstorms)

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