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A Science Service Feature

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? WHY THE WEATHER ?

Dr. Charles F. Brooks,
Secretary, American Meteorological Society,

Tells of:

THE RAGGED FRACTO-CUMULUS

Occasionally of a summer afternoon we see the beautiful cumulus clouds begin to disintegrate as they sail along the blue sky. Their clean-cut rounded upper edges begin to wispy out, torn by the wind. Their bases are no longer the sharp-drawn horizontal lines. They cease to be the cumulus, and become what the meteorologists call fracto-cumulus, a name descriptive enough in itself to require no explanation.

A chief reason for the breaking up of the cumulus cloud is the dissipation of the warm air masses whose original upthrust formed the cloud. The sun's rays raise the temperature more quickly upon some areas of ground than upon others; a woodland heats more slowly than an open pasture, for instance. As air over more heated areas is warmed it expands and overflows, causing neighboring cool air to press in under it to start an upward motion. A sufficient ascent will so cool the warm air as to cause condensation in the form of the cumulus cloud. The growth continues till the cooling stops with cessation of upward motion. Then the cool cloud falls back, is warmed by compression and is thinned and dissipated.

(Tomorrow: Typical Thunderstorm)

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Science Service,
1115 Conn. Ave.,
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