

June 8

? WHY THE WEATHER ?

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

HAIL IS HOT WEATHER'S ICE

Hail is a phenomenon of spring and early summer in the South, and of spring and summer in the North. It is a feature of intense thunderstorms. Thus hail occurs in hot weather and practically never falls in winter. Sleet is an entirely different formation. Only when the weather is hottest and most humid do we have hail, and the hotter and more humid the larger the hailstones are apt to be.

When convection is most violent, air currents are ascending at the rate of 10 or more miles an hour, raindrops cannot fall, and many of them are caught by the uprushing air and carried high up into the cloudtops, which, under these atmospheric conditions, tower into the regions of extreme cold, where the temperature is far below freezing and often even below zero. On mixing with snow they freeze as globules of cloudy ice. Getting into descending currents they fall into the rain levels, and take on a clear layer of ice from contacts with rising drops to provide a clear layer of ice, and again the growing hail is tossed on high, to receive another coat of snowy ice. This process is sometimes kept up until on rare occasions stones with 25 layers and as big as baseballs result, such as at Annapolis, Md., June 22, 1915.

When the upward wind pressure is removed and gravity is permitted to work its will, then the hailstones fall to the earth, seldom doing greater damage than to cut up growing things, because the stones are small. But sometimes the great stones are a serious danger, they play havoc with crops, even to the point of complete ruin, destroy light structures and glass everywhere, and even kill cattle in the fields.

(Tomorrow: The Terrible Tornado.)

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