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A Science Service Feature

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? WHY THE WEATHER ?

By Dr. Charles F. Brooks,
of Clark University.

ROLLING OF THUNDER

Why does thunder rumble and roll sometimes for so long and with such variations in intensity? The suggestion that the peculiar sound is due to moving of trunks in the sky is not quite a satisfactory explanation for adults. Lightning flashes through the sky almost instantaneously, heating and expanding the air in its path with explosive force. This violent explosion produces in the air the compression waves which reach our ear as thunder. Sometimes the column of air heated by the lightning discharge is several miles long. Sound travels about 1100 feet per second. ^{That} Sound from the nearest part of the path is heard first, waves from the more distant portions arrive later, and prolong the thunder. If the lightning has taken a crooked path, sound waves from several equally distant points may reinforce one another, giving an exceptionally loud crash. Successive lightning discharges over the same path may be responsible for prolonged and irregular rumblings. Echo plays a slight part in producing the characteristic roll of distant thunder, for the noise is somewhat accentuated among high mountains.

(Tomorrow: Calm Evenings)
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