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A Science Service Feature

? WHY THE WEATHER ?

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ZIGZAG LIGHTNING

Only within the last four or five years has the motion-picture industry discovered the fact that lightning, however much it may twist and meander in its path across the sky, never turns sharp angles. Zigzag lightning was formerly the rule rather than the exception on the screen, just as it was once universal in the drawings and paintings of great artists, but it is unknown in nature.

The first person to call attention to the mistake of the artists in this matter was the Scottish engineer James Nasmyth, who was the son of a landscape painter. At a meeting of the British Association for the Advancement of Science in 1856 he stated that "in no instance among the many thunderstorms whose progress he had most attentively watched had he ever observed such forms of lightning as that usually represented in works of art; in all such the artists invariably adopt a conventional form, namely, that of a zigzag combination of straight lines." Nasmyth believed the error of the artists originated in the form given to the thunderbolt in the hand of Zeus as sculptured by the ancient Greeks.

Some decades after these remarks were uttered the photography of lightning began to be common, and the photographs all showed that he was right in believing that lightning is never truly zigzag. Its path generally includes many sinuous curves, and it often branches, but a sharp angle is very rarely seen in a photograph, and it is then doubtless an effect of perspective.

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