A Science Service Feature

Released upon receipt
but intended for use
April 13, 1934

? WHY THE WEATHER ?

Mailed April 6, 1934

FULGURITE FORMATION

Although fulgurites, or lightning-tubes, formed by the passage of lightning discharges through sandy soil, are generally regarded as rare, this is probably because the great majority of such formations are not recognized as such by persons who find them. Dr. E. H. Barbour, director of the Nebraska State Museum, says in a bulletin of that Museum, that fulgurites are often reported in Nebraska and seem to be of fairly common occurrence there, especially in well known sandy areas, where they are exposed to view when the winds blow the sand away.

Some investigations in regard to the formation of these tubes have been made in Nebraska by Oscar E. Hans. Mr. Hans attributes the development of lightning-tubes to a definite ratio of moisture in the sand. Hence, in certain seasons, many of the tubes seem to be formed, but in others, few or none. In digging them out, Mr. Hans finds them branching and diverging along various lines, presumably in response to the moisture content. They taper rapidly, branch more or less, and, at a depth of ten or fifteen feet, often end in flattened bubbles of glass which seem to represent the last effective energy of the electric current. Dr. Barbour has suggested calling these terminal bubbles "lightning-bubbles", or "fulgurphysae".

A fulgurite is hollow, its bore tending to be roughly quadrangular rather than circular, in cross-section. The inside of the tube is pearly-white glass, flecked and marbled here and there by black.

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