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? WHY THE WEATHER ?

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EXPLOSIVE LIGHTNING

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Authority on Meteorology.

The action of lightning when it strikes a tree, building or other object is often violently explosive in character. Thus wooden objects are sometimes reduced to splinters, and pieces of stonework, bricks and the like may be thrown to distances of 100 feet or more. The cause of such damage is commonly attributed to the formation of steam at high temperatures within the pores of the material. This is not, however, the complete explanation. Steam doubtless often contributes to the explosive effects, but a much more powerful agency is the decomposition of compound substances into their elements and the disruption of the atoms of these elements themselves.

Dr. W.J. Humphreys says: "From the fact that the spectrum of lightning is of the line type it follows that at least a portion of the material along its path is decomposed into atoms, and, moreover, that the atoms are broken up into ions and electrons. Hence the explosive effects of lightning are due to the conversion of material along the path of discharge into gaseous and hypergaseous forms, and thus lightning is accompanied by the most complete and violent kind of explosion known."

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