

Fire.



WHAT is the right thing to do at the right time to prevent heavy losses by fire? The putting out of a fire depends upon bringing into operation either of two conditions: All air should be excluded, and the fire will die out for want of oxygen, or the burning materials should be cooled below the point of ignition.

Air may be excluded by wrapping a blanket tightly around the burning object, or by placing a lid on a pot of flaming grease, or by covering the burning object with a fine non-combustible powder, such as washing soda, fine sand, or clay.

Some people have the false idea that kerosene, gasoline, alcohol, and benzol are in themselves explosive, and will burn in the absence of air. This idea is erroneous, as the liquids cease to burn when the air is cut off. To demonstrate this one has only to fill a small vessel with gasoline, or any one of the other liquids above mentioned, and set fire to the liquid in the vessel. Then slide a cover horizontally over the vessel, and we will see that the flame is severed from the gasoline as if it were cut off by a knife.

Burning materials may be chilled to a temperature below the point of ignition by throwing cold sand, clay, snow or water over the burning surface, or when a rapid current of air removes the heat more rapidly than combustion can produce the heat. Every substance may be chilled below a temperature, when it will not burn.

Everyone is familiar with the blowing out of a match by the wind, which cools the match below the point of ignition. Grass fires are put out by beating the burning grass into the colder earth, and thus chilling the stubble below the burning point.

Everything burns, that is, oxidizes, at almost any temperature. Wood withers and decays at ordinary temperatures, and iron rusts and oxidizes in the cold air of winter. We do not think of it as burning, because it burns, or oxidizes, so very slowly. The word burning, or combustion, is used here in the popular sense of being oxidized so quickly that the chemical reaction is accompanied by a flame, or a visible glowing surface.