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WOOD ACIDS

"Acid" is a term used by many people to designate almost any kind of chemical which has a corrosive action, and, in the same loose sense, the term "wood acid" is used in explanation of any unusual quality in a wood, such as taste, odor, or corrosion of metals in contact with the wood. As a matter of fact, in the research of the Forest Products Laboratory, only three chemicals correctly called acids have been found existing free in wood; these are tannic acid, acetic acid, and formic acid. Tannic acid is very feeble and has very little corrosive action on metals. The other two acids are also feeble in comparison with sulphuric, nitric, or hydrochloric acids.

A very small amount of acetic acid and a still smaller amount of formic acid apparently exist in all native woods, probably as a result of a slow action of water on wood at ordinary temperatures. All native species are also alike in that both of these acids can be produced very readily from them by the simple action of steam or hot water, a reaction for which there is no simple preventive treatment. Acid formed in the wood by the agency of steam or hot water are doubtless responsible for the results frequently attributed to acid supposed to have been in the wood originally.

The amount of acid normally present in any native wood is not sufficient to warrant its rejection for any purpose involving contact with metals.