

Cider, Preservation of

[This is from an article in "The Homestead", an agricultural journal of the nineteenth century. This particular volume is dated Dec. 16th, 1858.]

How to arrest fermentation in cider.

When the cider has attained a lively fermentation, add to each gallon three-fourths of a pound of white sugar, and let the whole ferment again until it possesses the taste, which you desire of your hard cider. Pour out a quart of the cider, and mix with it $\frac{1}{4}$ of an ounce of sulphite of lime for every gallon the cask contains. Stir until it is completely mixed, and pour the mixture into the liquid. Shake the contents of the cask thoroughly for a few seconds, then let it rest, so that the cider may settle. Fermentation will be arrested at once, and will not be resumed. It may be bottled in the course of a few weeks, or it may be allowed to remain in the cask and be used as draft. If bottled, it will become a sparkling cider; better than what is called champagne wine.

The sulphite of lime should cause no concern about ingesting, as it is completely insoluble, and remains at the bottom of the bottle/cask. It is important that you use sulphite of lime, not sulfate of lime.

The use of sulphurous acid, or its salts, (sulphites of lime, soda, potash, etc.) to arrest fermentation is not new technology; the process of fermentation is one of oxidation; that is, fermenting substances attract oxygen, and by it are converted into other forms.

Sulphite of lime may be regarded as gypsum (sulfate of lime), which has lost a portion of its oxygen, and chemically, wants to get it back, and thus will take oxygen from anything that will give it up.

Nothing can ferment, unless it gains oxygen, or is in contact with a fermenting substance; so if sulfite of lime is present, it absorbs this oxygen so closely that no fermentation can take place.

The yeast, or ferment, which makes cider, or anything of the kind *work*, consists of allumenous bodies (which are substances containing nitrogen) in a state of decomposition, or decay, and this decay consists, when air is excluded, of a sort of exchange of particles of oxygen between the substances present. This the presence of the sulphite prevents, and brings the whole fermentation to a halt, no matter at what stage it is at.

The hard cider that has completed this process should be kept under refrigeration, to prevent the fermentation process from starting up again.