

that with $\frac{1}{2}$ lb of mustard seed after rectifying, and kept in a cool cellar, that it is safe; but if any desires to try it without the mustard or cannot get it, they have a good prospect of success without that expense. The first not costing the fourth of a cent per barrel, and I know that in some parts of England by using only ripe sound apples to make cider from, letting it work clear racking off about twice, properly rectifying, bottling, &c. Cider is kept as many as 20 years. When cider is drawn off and bottled it should not be corked until the next day after filling the bottles, or many of them will burst.

Vinegar in three days without drugs.—You will take 3 barrels, or 2 barrels, and saw one of them in two in the centre, and put one half on the top and another half at the bottom of the whole barrel. The middle barrel is to be filled with maple, beech, or basswood shavings, which are to be planed from the edge of boards only two or three feet long, which allows the shavings to roll, and prevents them from packing tight, and also allows air to circulate through them which is admitted through a number of inch holes which are to be made near the bottom of the barrel and just above the faucet which lets the vinegar run into the tube below. The top tube has its bottom pierced with small bit holes having several threads of twine hanging in them to conduct the vinegar evenly over the top of the shavings *in the middle barrel*. Air must be permitted to pass out between the top tub and barrel which comes in at the holes in the bottom. The shavings which fill the barrel must be soaked three or four days in good vinegar before they are put in. When thus arranged, for every gallon of water, I use half a pound of sugar (that which comes out of molasses barrels is as good as any). If I wish to make vinegar from whiskey, I put in 4 gallons of water to 1 pint of whiskey, and if from cider put in one third water, and fill the top tub with this fluid putting one pint good yeast to each barrel making; and have the holes with threads or twine so arranged that it will run through every twelve hours,