

Paris, 12th December 1861

Producing acetic acid.

I am taking a patent for the invention of the production of vinegar, or acetic acid. I have acknowledged that the acetification of alcoholic liquids is produced by vegetal species of the Mycoderma type, notably by the Mycoderma aceti. These plants have the property to determine the combination of the air's oxygen with alcohol. They also have the property of determining the combination of the air's oxygen with acetic acid and to completely transform this acid into water and carbonic acid. The result from this is that the secret to a good production consists in firstly, providing the plant with its food, and secondly, in placing it into conditions in which it operates the acetification of the alcohol, without going as far as the combustion of the acetic acid's elements. The acetification processes through the use of beech shavings are based on completely erroneous theoretical ideas. There is only one type of porous body that acetifies in the various processes used by the industry, and these are the ones I am talking about. The shavings only serve as a support for their development. These facts, which have been rigorously established by very accurate experiments, have led me to the following process of alcohol acetification:

The alcoholic liquid that we want to acetify, formed with 1 part of some fermented liquid, beer, cider, beetroot juice, wine... of 1 part of vinegar from a previous operation, and of 3 parts of alcohol (any type) to the desired degree in order to obtain the desired title of acetic acid, the alcoholic liquid, I say, is placed into quite shallow large vats, 10 centimeters deep more or less. Over the surface of the liquid, the plant is sowed and the vat is covered with an ordinary lid or with a vat similar to the previous one. The plant multiplies with extreme rapidity and determines the complete acetification of the liquid.

This process will enable us to provide trade with acetic acids of 7 or 8 per cent acid at the cost of 10 centimes per liter. Its application is limitless. It would be possible within a few days, with almost no labor cost or installation costs, to make thousands of hectoliters of vinegar or acetic acid of any strength and with almost no loss of alcohol. The process can be stopped or started at will without any inconvenience. It is also possible to make it continuous.

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