

# UNITED STATES PATENT OFFICE.

ALFRED H. ISAACSON, OF NEW ORLEANS, LOUISIANA.

## MANUFACTURE OF SIRUP FROM CANE-JUICE.

SPECIFICATION forming part of Letters Patent No. 253,712, dated February 14, 1882.

Application filed January 10, 1882. (No specimens.)

*To all whom it may concern:*

Be it known that I, ALFRED H. ISAACSON, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Manufacture of Sirup from Cane-Juice, of which the following is a specification.

Prior to my present invention sirup from the sugar-cane taken from the open kettles before the formation of sugar has been a favorite article for table use in the sugar-cane-raising States; but this sirup ferments or granulates so as to form sugar in a comparatively short time, so that heretofore it has been used only during the season for grinding the cane and a short time after.

It is the object of this invention to prepare and put up such sirup so that it can be kept ready for use in a perfect state of preservation not only in the localities where the sirup is produced, but also so that it can be shipped to other portions of the country, where it can be kept for an indefinite period, which prior to my improvement has never been accomplished. To such end I take the sirup as soon as it comes from the cane-mills on the cane-growing plantations, where it has been expressed from the cane, and run a suitable quantity into a large boiler, and then heat and evaporate the same nearly to the boiling-point, so that it will not granulate or be converted into crystallized sugar. I then strain it into a large vat, and from thence run it while hot into metal cans, glass bottles, jars, or other vessels, which after being filled are hermetically sealed.

It will be found that while the heat to which the sirup is subjected is not sufficient to convert it into crystallized sugar, it will effectively destroy all germs of fermentation, so that after the sirup has been heated and canned it will keep for an indefinite length of time.

The cans can be made of various sizes and can be hermetically sealed in any convenient way, those having a screw-threaded nozzle and cap being preferred.

Various means can be employed for regulating the heat in order to prevent the sirup from reaching the boiling-point—as, for example, the boiler can be placed in a sand bath,

whereby the temperature can be regulated accurately.

It will be found that sirup thus prepared and put up will, even after a very long time, be entirely free from fermentation and granulation, and it will be as fresh and palatable as when first canned; also, it will not be affected by changes of temperature, so that it can be shipped to all parts of the country. If the sirup were partly cooked and then filled into barrels, it would granulate and spoil; but by closing it in hermetically-sealed metal cans or other air-tight vessels it will be perfectly preserved, kept sweet and fresh.

The sirup thus prepared and put up is of about the consistency and color of ordinary table-sirup, and is sweet and agreeable to the taste. The integument inclosing the sirup must be hermetically sealed, so as to prevent the admission of external air, and hence such integument can consist of metal, glass, stoneware, or other analogous substances.

I also treat and prepare the molasses or drippings from sugar in the same way as sirup and put it up in hermetically-sealed or air-tight cans or other vessels for preventing fermentation, so it will keep an indefinite time.

Having thus described my invention, what I claim is—

1. The herein-described process of preserving sirup or molasses, consisting in heating to a degree below the boiling-point the sirup after it has been expressed from the cane, and then filling the sirup while hot into cans or other receptacles and hermetically sealing the same, for the purpose specified.

2. As a new article of manufacture, sirup from sugar-cane or molasses put up in a hermetically-sealed can or other vessel after the sirup has been heated to a degree below the boiling-point to kill the germs of fermentation, and before it has been converted into crystallized sugar, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

ALFRED H. ISAACSON. [L. S.]

Witnesses:

E. G. WELLS,

JOS. E. HATREL.