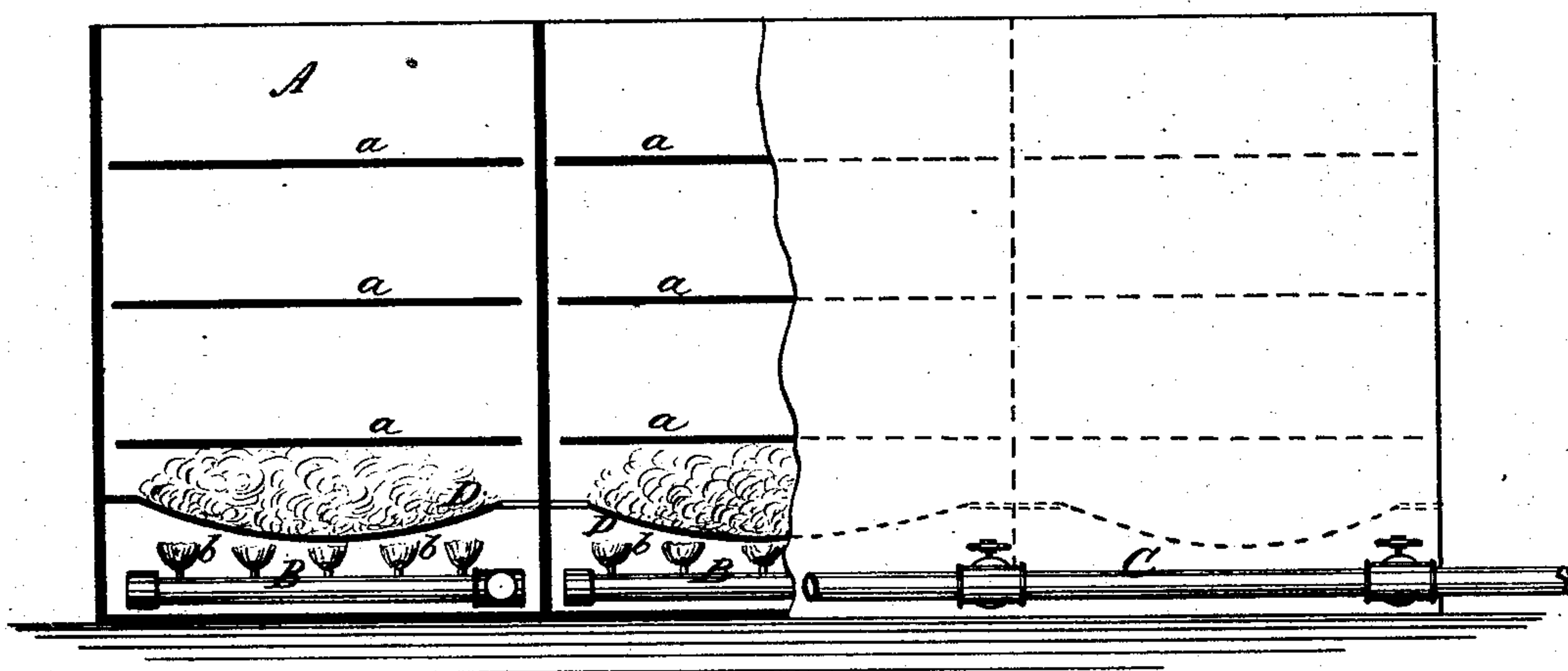


D. SNEDEKER.
Preserving Food.

No. 157,107.

Patented Nov. 24, 1874.



Witnesses.

W Edwards

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Inventor.

David Snedeker
per
James A Whitney
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UNITED STATES PATENT OFFICE.

DAVID SNEDEKER, OF JERSEY CITY, NEW JERSEY, ASSIGNOR OF ONE-THIRD HIS RIGHT TO PETER C. SCHUYLER, OF NEW YORK CITY.

IMPROVEMENT IN PRESERVING FOOD.

Specification forming part of Letters Patent No. 157,107, dated November 24, 1874; application filed March 21, 1874.

To all whom it may concern:

Be it known that I, DAVID SNEDEKER, of Jersey City, in the county of Essex and State of New Jersey, have invented an Improvement in Methods of Preserving Foods, of which the following is a specification:

The preservative action of sulphurous acid upon vegetables, fruits, meats, &c., has long been known, but it has been found by experience that the characteristic odor of the gas being permanently communicated to the substance treated renders it very objectionable as food. It is the object of this invention to obviate this drawback to the successful use of sulphurous acid for the purpose stated, by neutralizing the odor thereof in the substances treated, and thereby fitting them for common use. The invention consists in the impregnation of the fruit, vegetables, or flesh, as the case may be, with the vapors or gases arising from the simultaneous combustion of sugar, or equivalent saccharine substance, and sulphur.

The drawing is a side elevation of an apparatus designed for carrying my improved method into effect.

In the practice of my invention I provide a closed chamber, vessel, or compartment, of any suitable size and configuration, and provided with shelves, horizontal slats, hooks, or other devices for supporting the substance to be treated in such position as will most effectually permit the permeation of vapors through the same, these internal appliances being capable of modification according to the nature and character of the substance to be treated. In the bottom of this chamber, or otherwise suitably located, is a furnace, brazier, or other device for insuring the combustion of sugar and sulphur, mixed together, preferably, in the proportions of one part, by weight, of sugar, and two parts, by weight, of sulphur. In place of sugar, molasses or other equivalent saccharine material may be used.

The fruit, vegetables, meats, &c., any or either, being arranged, as hereinbefore indicated, in the chamber, and the mixture of sugar and sulphur being heated—the former to the point of decomposition, at which it is

converted into vapors or gases, and giving out a strong, characteristic, and not unpleasant odor—the last-named material, sulphur, is volatilized, and, assuming the admission of air to the chamber, forms sulphurous-acid gas. The commingled aeriform products of the sugar and sulphur thoroughly permeate or impregnate the substance under treatment; and, as long-continued experiment and practical trial have fully demonstrated, the sulphurous fumes, while exerting to the utmost their well-known and positive preservative action upon the substance, have their sulphurous odor neutralized by the powerful and characteristic odor of the sugar vapors, which are caused to permeate the substance simultaneously with the action of the gas from the sulphur.

After treatment in this manner during a period which must, in the nature of the case, depend much upon the quantity of mingled gases produced, the pressure under which they are confined in contact with the substance under treatment, and the nature of the said substance, the latter is removed from the chamber and subjected to treatment with water, or other liquid capable of serving the same purpose, to remove any surplus of the gases which may have remained unfixed in the substance.

In carrying into effect my process—a method heretofore set forth—I propose to make use of an apparatus substantially such as represented in the accompanying drawing. In this a number of chambers, A, are arranged immediately adjacent to each other, and are provided with shelves *a*, upon which is placed the material to be treated. In the bottom or lower part of each chamber A is a gas-pipe, B, connected with an outside main, C, in such manner that the gas to any one or more of the pipes B may be shut off at will. Each of the said pipes is furnished with any desired number of burners, *b*, and has above it a brazier, D, which is heated by the flame or jets from the burners below. The mingled sulphur and saccharine matter being placed upon the brazier in each chamber, and being dissipated into vapors, the latter rise and permeate the mate-

rial placed on the shelves, to secure the result set forth.

What I claim as my invention is—

The process of preserving fruit, vegetables, meats, &c., by subjecting them to the simultaneous and combined action of the vapors or gases resulting from the combustion

of sugar and sulphur, substantially as and for the purpose set forth.

DAVID SNEDEKER.

Witnesses:

JAMES A. WHITNEY,
WILLIAM B. PHAIR.