

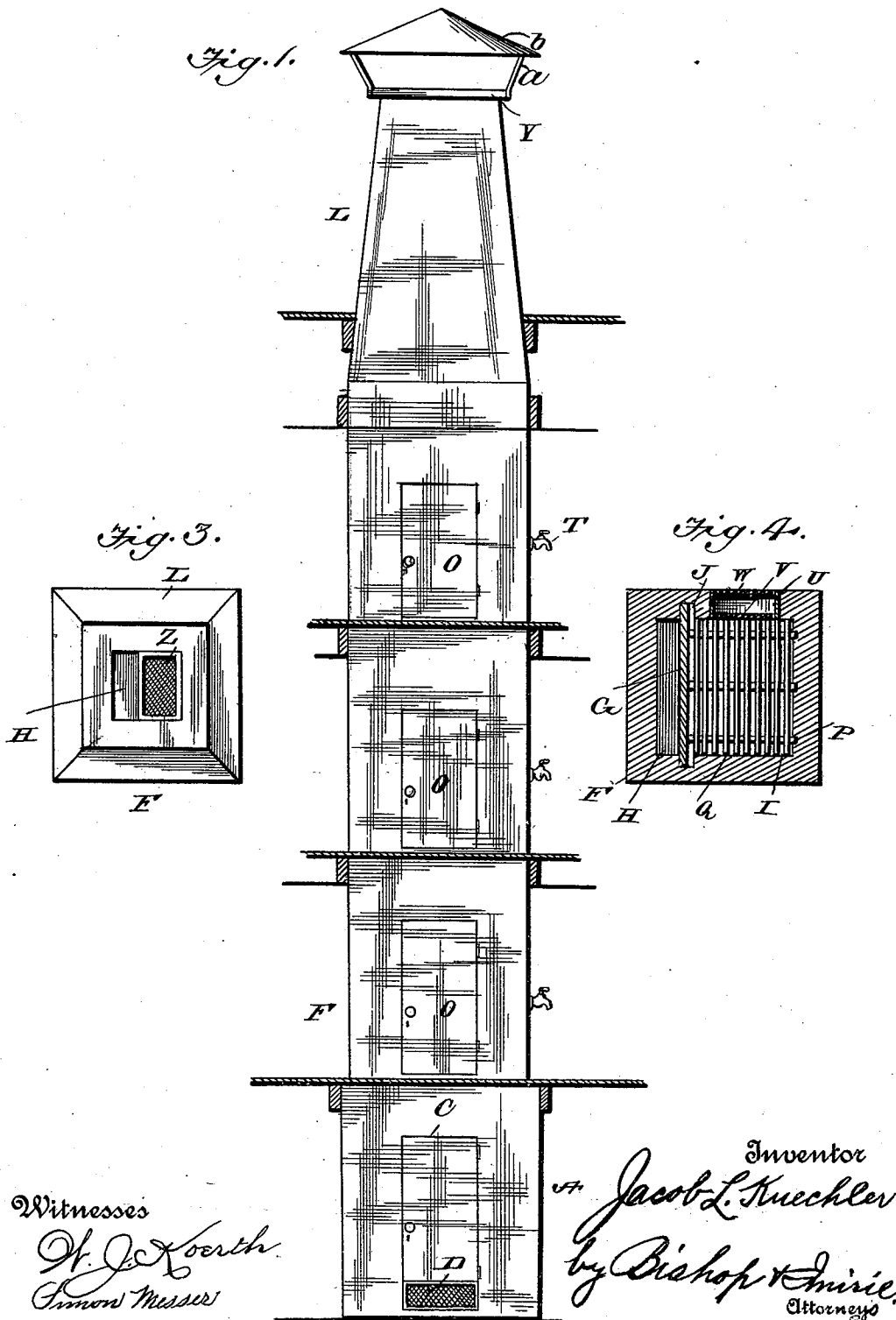
(No Model.)

2 Sheets—Sheet 1.

J. L. KUECHLER.
PROVISION SAFE.

No. 542,859.

Patented July 16, 1895.



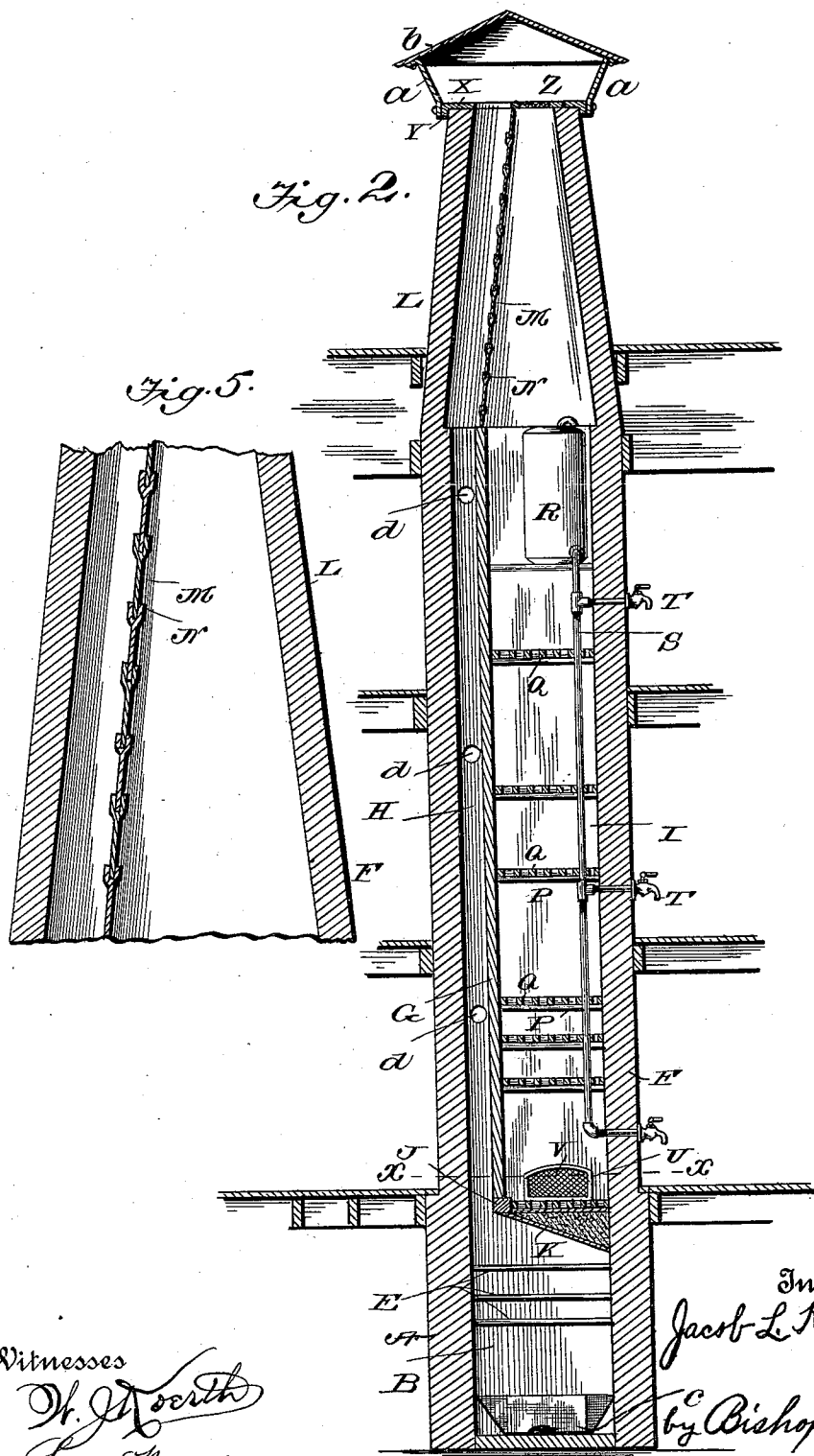
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PROVISION SAFE.

No. 542,859.

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Witnesses

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UNITED STATES PATENT OFFICE.

JACOB LOUIS KUECHLER, OF KUECHLER'S ROOST, PENNSYLVANIA.

PROVISION-SAFE.

SPECIFICATION forming part of Letters Patent No. 542,859, dated July 16, 1895.

Application filed February 26, 1895. Serial No. 539,799. (No model.)

To all whom it may concern:

Be it known that I, JACOB LOUIS KUECHLER, a citizen of the United States, residing at Kuechler's Roost, near Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Preserving Food; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in apparatus for preserving food; and its object is to provide a structure in which meats and vegetables may be preserved without the use of ice.

It consists in certain novel features hereinafter described and claimed.

In the annexed drawings, which fully illustrate my invention, Figure 1 is an elevation of a structure embodying my improvements. Fig. 2 is a vertical section of the same. Fig. 3 is a plan view of the top of the structure with the cap removed. Fig. 4 is a horizontal section on the line *xx* of Fig. 2; and Fig. 5 is a view, on a larger scale, of a portion of the upper end of the device.

In carrying out my invention I build a foundation A of rough stone, forming a smoke-chamber B. This chamber is provided with an air tight door C, having a screened opening D in its lower end, and an open space should be formed in the ground around said door to provided the necessary draft when the chamber is being used to smoke meats. Within this chamber I provide a series of transverse rods E, upon which the meats are hung while being smoked.

Upon the walls of the smoke-chamber I build the walls F of brick, which may rise to any desired height and form a narrow column, as clearly shown. Within the column or tower thus formed and adjacent to one side thereof I build the partition-wall G, which divides it into a smoke-flue H and a cold-air flue or chamber I, as shown most clearly in

Fig. 2. This partition-wall is supported on a transverse supporting bar or beam J, secured in the opposite walls of the foundation or smoke chamber, and the air-chamber is separated from the said smoke-chamber by an inclined deflector K in the top of the latter chamber. This deflector and the partition-wall should be lined or covered with some non-heat-conducting material, in order to prevent the heat which passes off through the smoke-flue from raising the temperature of the air-flue. The upper portion of the tower formed by the outer walls is tapered, as shown at L, and the partition-wall is continued within this tapered portion by metal plates M, each of which is provided with a shouldered flange or lip N at its upper edge, which receives and holds the lower edge of the next superadjacent plate. The draft in this extreme upper portion of the structure will be so strong as to prevent the excessive heating of the partition, and I effect an economy in the cost of the device as well as simplify the construction by employing these plates, as will be readily understood.

In the innermost wall of the air-flue I provide a number of air-tight doors O, (one for each floor of the dwelling,) and within the said flue, at suitable intervals, I secure the transverse rods P, upon which meats may be suspended, or slatted platforms Q may be placed on these rods to support vegetables or other articles which it is desired to preserve. In the extreme upper portion of the air-flue I provide a tank R to contain water, and a pipe S leads downward from the same and is provided with a faucet T at each floor to supply the water for use. In the lower end of one of the outer walls of the air-flue I form an opening U, which is covered by a screen V on its inner side and by grated bars W on its outer side.

Around the top of the structure I secure the tie-frame X, which covers the top edges of all the walls and has a depending flange Y, which fits around the sides of the walls to hold the frame in position. A screen Z is secured to this frame and extends over the upper end of the air-flue to prevent the en-

trance of insects thereto. At the corners of the frame I erect the short posts or standards *a*, which support a small roof or cover *b* to prevent snow and rain from entering the same.

A pan or vessel *c* is placed in the bottom of the smoke-chamber to hold sawdust for the purpose of making smoke when it is desired to smoke meats, as will be readily understood. The products of combustion from the various stoves in the dwelling may be led into the smoke-flue through stovepipe-holes *d* and pass off therethrough, if so desired.

It will be readily seen from the foregoing description, taken in connection with the accompanying drawings, that I have provided a very simple and efficient apparatus in which water may be kept cool for drinking purposes and various articles of food preserved for a long time without the use of ice or any attention. Cold atmospheric air enters the air-flue through the opening *U* and rises through the same, the high narrow construction of which insures a constant and steady draft to prevent the air stagnating therein. The walls, it will be understood, are of sufficient thickness to prevent the air in the flue from being heated.

Meats can be smoked in the smoke-chamber and then placed in the cold air-flue, where they will be kept in good condition for a year without any attention. Furs and similar articles may be placed in the extreme upper portion of the cold-air flue, where they will be entirely safe from vermin.

In winter the space between the screen and the grated bars over the opening *U* must be filled with straw or similar material to pre-

vent the excessively-cold air entering the flue and freezing the articles therein.

My device may be built as a part of a dwelling or as an independent structure.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A device for the purposes described consisting essentially of a tower-like structure provided with an internal partition dividing it into a narrow smoke flue and a larger or cold air flue.

2. A device for the purposes described consisting of a tower-like structure having a smoke chamber at its lower end, a vertical partition rising from the smoke chamber, and a deflector in the upper end of the smoke chamber extending from one side of the same to the lower end of the partition.

3. A device for the purposes described consisting essentially of a tower-like structure, an internal partition dividing the same into a smoke flue and a cold air flue, and a water tank in the upper end of the cold air flue having a pipe depending therefrom provided with a plurality of faucets.

4. In a structure of the character described, the combination with the outer walls, and a vertical partition forming two flues of a tie-frame covering the upper edges of the same and carrying a screen covering the top of one of the flues.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB LOUIS KUECHLER.

Witnesses:

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