## P. Numain,

Preserving Fish Meats &c, by Freezing. Nº83,533. Patented Oct. 27, 1868.

Fig.1.

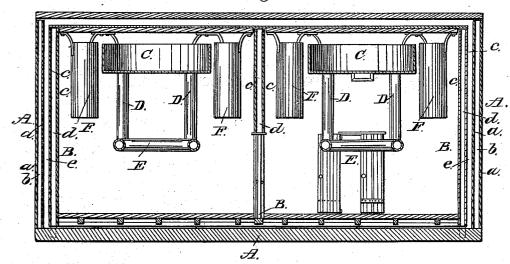


Fig. 2.

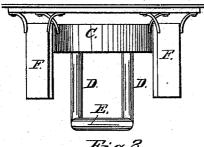
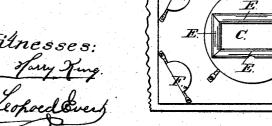


Fig. 3.



Inventor:

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## PHILIP NUNAN, OF SANDUSKY, OHIO.

Letters Patent No. 83,533, dated October 27, 1868.

## IMPROVEMENT IN APPARATUS FOR PRESERVING AND FREEZING FISH, MEATS, &c.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, PHILIP NUNAN, of Sandusky, in the county of Erie, and in the State of Ohio, have invented certain new and useful Improvements in Apparatus for Preserving and Freezing Fish, Meats, &c.; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and general arrangement of a double house, with an apparatus for producing cold, thereby preserving and freezing fish, meats, or anything else placed in the same.

In order to enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation, referring to the annexed drawings, which form a part of this specification, and in which—

Figure 1 is a longitudinal section, and

Figure 2 is a side view of the apparatus, in one of the chambers of the house.

Figure 3 is a bottom view of the same, of reduced dimensions.

A represents the outside casing of my freezing-house, constructed of two walls, a a, all around which walls are, at a suitable distance from each other, and the space b between them, filled with sawdust, or other non-conducting material.

Inside of the outer easing A is placed an inner easing, B, which is constructed, in like manner, of two walls c c, and a space, d, filled with non-conducting material.

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The inner casing B is so placed as to leave a space, e, between it and the outer casing, which is left vacant, and serves for ventilating-purposes, openings being made, for that purpose, at convenient places, through both casings.

The inner casing B is divided into two or more apartments, as shown in fig. 1; the partitions between the different apartments to be made in the same manner as the walls, that is, double walls, the space between them filled with some non-conducting material.

Doors, at suitable places, lead into the inner casing, and to all the different apartments.

From the centre of the roof of each apartment is suspended a circular vessel, C, from which pipes D D lead downward, the lower ends of these pipes being connected by other pipes, E E, as shown.

On the sides of the circular vessel D, near each corner of the apartment, are also suspended cylinders or vessels FF, all of them being so high up that persons may walk erect under them.

The vessels D and F F, instead of being suspended from the roof, may be placed on supports on the floor of the inner casing, if so desired.

The fish, meat, or other article to be preserved, is placed either on the floor of the inner casing B, or suspended from rafters in the same, and the vessels D and F F filled with a compound, consisting of pulverized ice, salt, and crystallized muriate of lime, which produces intense cold, freezing the articles put in the house in a short time, thus preserving them, so that they may be kept for any period desired.

Any liquid that may escape from the above-mentioned compound is carried off, by means of hose or pipes, attached to the pipes E E and the vessels F F.

I am aware that preserving-houses, for meat, fish, &c., with receptacles suspended from the inner side of the same, filled with ice and freezing-mixtures, are not new.

What I claim is-

In a meat and fish-preserving house, having compartments B B, with walls, as herein described, the combination of the vessel C, pipes D and E, and vessels F F F, all suspended in the house, so as to allow a space below them, for the articles, substantially as herein shown and described.

In testimony that I claim the foregoing, I have hereunto set my hand, this 11th day of August, 1868.

PHILIP NUNAN.

Witnesses:

LEOPOLD EVERT, A. A. YEATMAN.