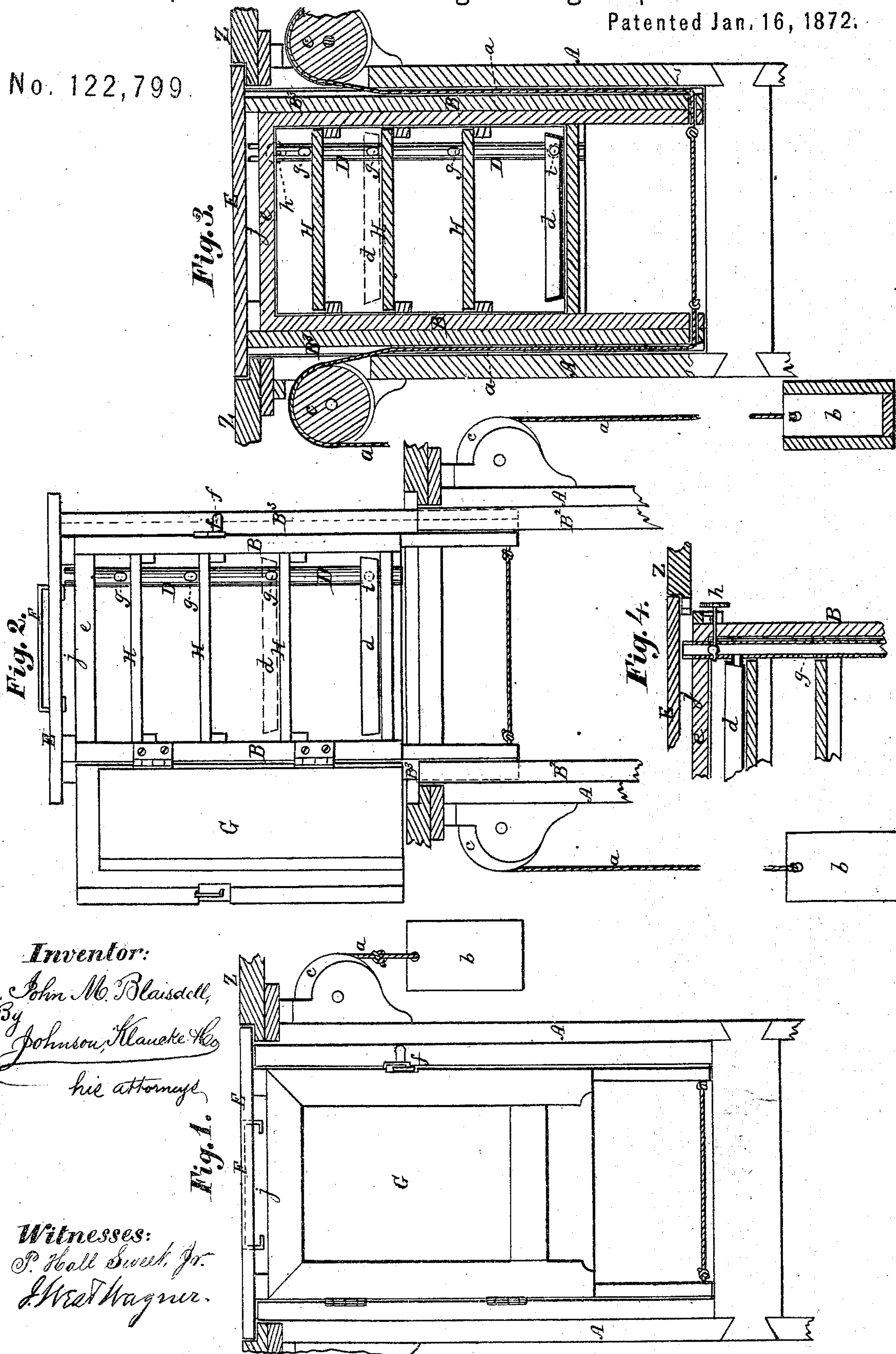


(16.)

JOHN M. BLAISDELL.  
Improvement in Refrigerating Cupboards.

Patented Jan. 16, 1872.

No. 122,799.



Inventor:

John M. Blaisdell,  
By Johnson, Klauke & Co.  
his attorneys

Fig. 1.

Witnesses:

P. Hall Sweet, Jr.  
J. West Wagner.



# UNITED STATES PATENT OFFICE.

JOHN M. BLAISDELL, OF SANBORNTON, NEW HAMPSHIRE.

## IMPROVEMENT IN REFRIGERATING-CUPBOARDS.

Specification forming part of Letters Patent No. 122,799, dated January 16, 1872.

*To all whom it may concern:*

Be it known that I, JOHN M. BLAISDELL, of Sanbornton, in the county of Belknap and State of New Hampshire, have invented a new and Improved Subterraneous Refrigerating-Cupboard, of which the following is a specification:

My invention consists in the construction and combination of the several parts of a cupboard in which the top is flush, when closed, with the floor of a room or kitchen, and which extends downwardly into the cellar or suitable excavation below such floor, and is arranged to slide upwardly in suitable ways, being balanced by weighted boxes on each side so as to remain stationary at any height to which it is raised, and provided with a ventilating valved tube communicating with the ice-box and the several compartments by openings, in any one of which the ice-box may be fitted. This cupboard is provided with suitable shelves, and has a lower compartment for the reception of ice, from which a valved tube extends upwardly, opening just above each shelf, to convey cold air to all the shelves and their contents not only from the ice-box but from the cellar.

In the accompanying drawing, Figure 1 is a front elevation of my improved cupboard when its top is flush with the floor. Fig. 2 is a similar view, the cupboard being raised up above the floor and its door shown as open. Fig. 3 is a vertical cross-section of the same when in position, as shown in Fig. 1; and Fig. 4 is a section showing the valved ventilating-tube.

In applying my invention an opening is made in any suitable portion of the floor Z of a room or kitchen, and if the latter be over a cellar suitable frames A are secured to the joists, between which the cupboard B moves freely up and down in proper ways B<sup>2</sup>. Cords or chains a extend from the lower ends of the sides of the cupboard (which sides extend downward a suitable distance beyond its bottom) and pass upwardly through grooves in the ways B<sup>3</sup> over rollers c suitably arranged below the floor, carrying at their free ends boxes b, which serve to contain weights sufficient to counterbalance the weight of the cupboard. The cupboard has a door, G, which is secured by a pivoted spring-latch, f, and may be so arranged with

springs as to open automatically when the latch f is raised. The inside of the cupboard may be provided with any suitable or desirable number of shelves, H, the lowest compartment so formed being used for ice, which may be placed in a pan, d, which connects with a tube, D, which extends in one corner of the cupboard from the top e to the bottom and through both, and is provided with an opening, g, just above each shelf, and also with a valve, h, to regulate the circulation, a short pipe, i, connecting it with the pan d placed in one of the compartments. The valve h in the ventilating-pipe D is arranged at its upper end, and held open or closed by a spring pressing upon the square stem thereof, as shown in Fig. 4. When the valve is open the air passes directly through the cupboard, and when it is closed the circulation through the cupboard is stopped, thereby regulating the supply of air, as too much tends to sour the articles of food and too little to dry them. The cupboard has a second and larger top, E, which fits snugly in the opening of the floor, and thus forms part of it when the cupboard is down. Between the tops e and E is a small space, j, into which the tube D opens, and which allows of a free circulation of air in and through the cupboard. If there is no cellar under the house an excavation may be made of suitable size and depth for the reception of the cupboard. A handle, F, by means of which to raise the cupboard when desired, is so arranged on the top as to rest in a recess in the latter, in which it fits snugly so as to be flush with the floor and not to offer any obstacle to the foot.

When it is desired to place anything in the cupboard the same is raised by means of handle F, and as it is evenly balanced by the weight-boxes b no great exertion of force is required to raise it. The spring-latch f being raised, the door opens automatically or otherwise, and the articles to be kept are placed on any or all of the shelves, the open door supporting the same meanwhile. The door being closed, the cupboard is returned by pressing it down and the handle secured in its recess. The lower compartment of the cupboard being supplied with ice, the cold air ascends to the other compartments through the tube D, while the melting water from the ice passes off from

the pan *d* through tube D downwardly into a receptacle placed under it, or into the ground, and thus cools the ascending air.

The cupboard may be lined with tin or any other suitable sheet metal, and its internal arrangements may be made to suit the requirements of different persons.

It being lowered into the cellar or an excavation in the ground, the ice will keep much better on that account.

The weight in the boxes *b* may be increased or decreased, as occasion may require, so as to always keep the cupboard perfectly balanced.

Having thus described my invention, I claim—

The combination and arrangement of the refrigerating-cupboard, consisting of the shelved frame B, ventilating valved tube D *g*, ice-pan *d*, connecting-cords *a*, pulleys *c*, and variable weighting-boxes *b*, with the frame A and top E, arranged to fit within a recess in the floor Z, the several parts being constructed and arranged for use as described.

Witnesses: JOHN M. BLAISDELL.

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(58)