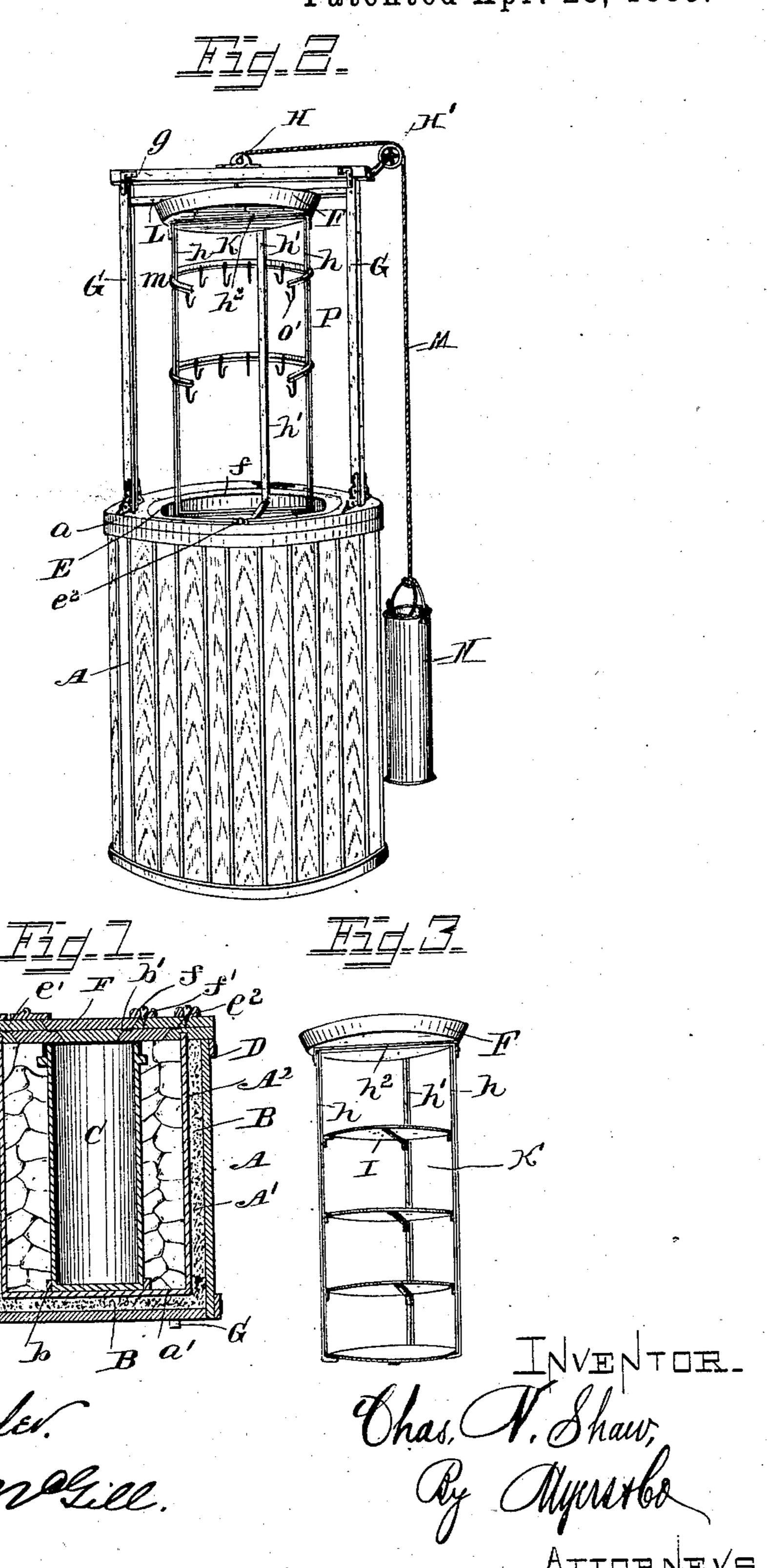
C. N. SHAW.

MEAT FREEZER.

No. 316,840.

Patented Apr. 28, 1885.

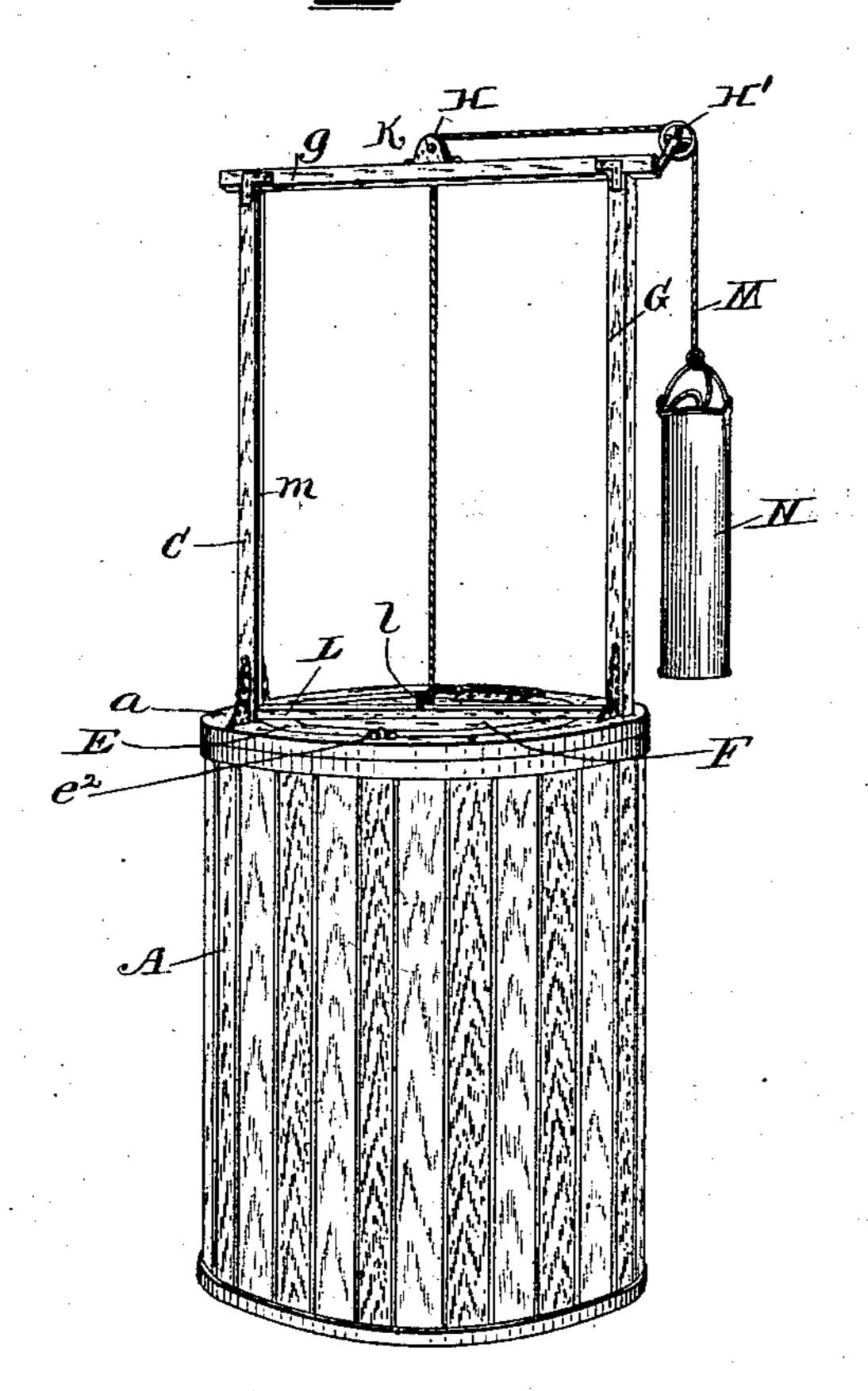


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WITNESSES. Hofdelmeider. Der En malie. ENDOW, Chaw ATTORNEYS.

United States Patent Office.

CHARLES N. SHAW, OF PETOSKEY, MICHIGAN.

MEAT-FREEZER.

SPECIFICATION forming part of Letters Patent No. 316,840, dated April 28, 1885.

Application filed November 26, 1884. (No model.)

To all whom it may concern:

Beit known that I, Charles N. Shaw, a citizen of the United States of America, residing at Petoskey, in the county of Emmett and State of Michigan, have invented certain new and useful Improvements in Meat-Freezers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention pertains to improvements in refrigerators, having for its object not only to keep meat, oysters, poultry, &c., in a frozen condition and state of preservation, but also to prevent ingress of air in the ice-chamber, and to expedite the storing and removal of the articles to be preserved; and it consists in the combination and arrangement of the parts, substantially as hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 is a sectional elevation of the refrigerator. Fig. 2 is a view in perspective embodying my invention. Fig. 3 is a detail view thereof, and Fig. 4 is a view in perspective of my invention in its closed condition.

In carrying out my invention I employ a refrigerator, A, preferably cylindric, comprising an outer wall, A', and an inner wall, A', forming a chamber, B, for reception of charcoal or other well-known non-conducting material. The two walls A' and A' are connected at the top by an air-tight cover, a. The bottom a' of the refrigerator is also constructed with two horizontal walls, forming a chamber, B, wherein is inserted non-conducting packing material.

To the inside of the bottom a of the refrigerator is rigidly secured or cast integral therewith a circular vertical strip, b, which is designed to prevent jarring or displacement of the inner cylindric receptacle or can, C.

The receptacle or can C is designed for reception of the article or articles to be frozen or kept in a state of preservation. The rim of the can or receptacle C has secured thereto rubber packing b', and in connection with cover Frenders can C air-tight.

The ice-chamber D is formed between the inner wall, A², of the refrigerator A and the can or receptacle C.

Removably hinged or secured to air-tight

cover a is a circular lid or cover, E, which covers the ice-chamber D air-tight, the inner edge of the cover a being provided with rubber packing e on the horizontal face of a shoulder, 55 e', on which the corresponding shoulder of the cover E fits, and is tightly and securely held in position by means of a pivoted thumb-piece, e^2 .

Disposed centrally in the cover E, and of 60 the same width as the can or receptacle C, is another circular lid or cover, E, hinged to the cover E, and is rendered air-tight in like manner, rubber packing f being secured on the outer edge of the shouldered opening therein. 65 The lid or cover E may be tightly secured by the pivoted thumb-piece f' or other ordinary means.

The coldest temperature that can thus be obtained from ice alone is about thirty-four 70 (34) degrees above zero; but by adding salt to the ice a temperature as low as four (4) degrees above zero may be produced. Consequently, by placing ice in the ice-chamber D and adding sufficient salt a low temperature 75 may be obtained, and the refrigerator being air-tight this temperature may be retained. The salt on the ice soon runs off with the drip from the ice through a drip-pipe, G, in the bottom a', leaving the temperature in the ice-80 chamber D about the same as before the salt was applied to the ice. The temperature in the can or receptacle C being much colder than that of the ice-chamber D, the temperature is equalized with that of the receptacle C, thus 85 causing the ice to remain solidly frozen and economizing its consumption. The temperature in the receptacle C is thus rendered sufficiently cold to keep fresh meats, fish, oysters, &c., in a frozen condition for several days.

From the foregoing it will be seen that access can be had to the receptacle C through the lid or cover F without exposing the ice in chamber D, which also greatly economizes the

My invention also embodies an elevator, K, which comprises a convenient means of storing therein such articles as fresh meats, fish, poultry, and game, and is especially adapted for the use of hotels, families, meat-markets, 100 &c.

To the air-tight cover a, I secure by brack-

ets two standards, G, of corresponding size. These standards G are connected at their upper ends by a cross-bar, g, to which is secured on its upper surface, directly over the center of cover F, a pulley, H, and on the outer right-hand corner is secured a pulley, H', the pur-

pose of which will appear further on.

To the inner under side of the cover F, I secure three vertical rods, h h and h', the rods to h h being directly opposite each other and connected together at their upper edges by a bar, h^2 . To these rods I attach two or more hoops or bands, o, having each secured thereto a series of hooks, o', for hanging thereon to be pre-15 served fresh meat, &c. The hoops or bands o extend only a short distance beyond the two opposite rods h h, to allow of more convenient access to the interior of the elevator K and storing or obtaining of articles to be pre-20 served. The bar or rod L has a tenon formed on each end, which is adapted to a corresponding mortise, m, provided in the standards G, which serves as a guide for the cupboard K.

To the key in the opening in the eyebolt l is secured an elevating-rope, M, which is passed up through an opening in the bar g and over pulley H, thence down over pulley H', and to the end of this rope is connected a counterbalancing-weight, N, for elevating the

30 cupboard K.

When desired, I dispense with the hoops or bands o and their hooks, and in lieu thereof I attach four or more shelves, I, forming a cup-

board, K', as clearly seen in Fig. 3.

It will be seen that my invention is both durable and economical, and that it prevents any waste of ice from exposure, that the lid or cover F when opened or removed does not expose the ice, as there is no connection between the receptacle C and chamber D, and thus constructed the article or articles in the receptacle C are not affected by the moisture of the ice-chamber.

I am aware that it is not broadly new to

construct in connection with a refrigerator an elevator for reception and storing of articles to be preserved; but my invention is designed as an improvement on such devices, and is intended mainly to provide in one and the same device means for retaining the ice in a 50 frozen condition for a greater period of time than heretofore, and to render the invention particularly adapted for the storage of fresh meats, which alone is an advantage over similar inventions as heretofore constructed, they 55 having been found not applicable for such purpose.

Another important feature of my invention is the manner in which I construct that part of the elevator which is inclosed within the 60 walls of the refrigerator to permit the ready access to the articles stored therein, and to convert the same into a cupboard, thereby rendering the invention specially applicable for the use of families.

Having thus fully described my invention, what I claim, and desire to secure by Letters

Patent, is—

1. The elevator K, having bars or rods h h and h', hoops or bands o, and hooks o', arranged for the purpose herein shown and described.

2. A refrigerator having the removable lid F, elevator K, and hoops or bands o, in combination with the cover E and air-tight cover 75 a, substantially as shown and described.

3. In a refrigerator, the chamber B, bottom a', rim b, receptacle C, having packing b', and chamber D, in combination with the hinged lid or cover E, removable cover F, and the 80 elevator K, substantially as shown and described.

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

CHARLES N. SHAW.

Witnesses:

B. B. POWELL, CLAY E. CALL.