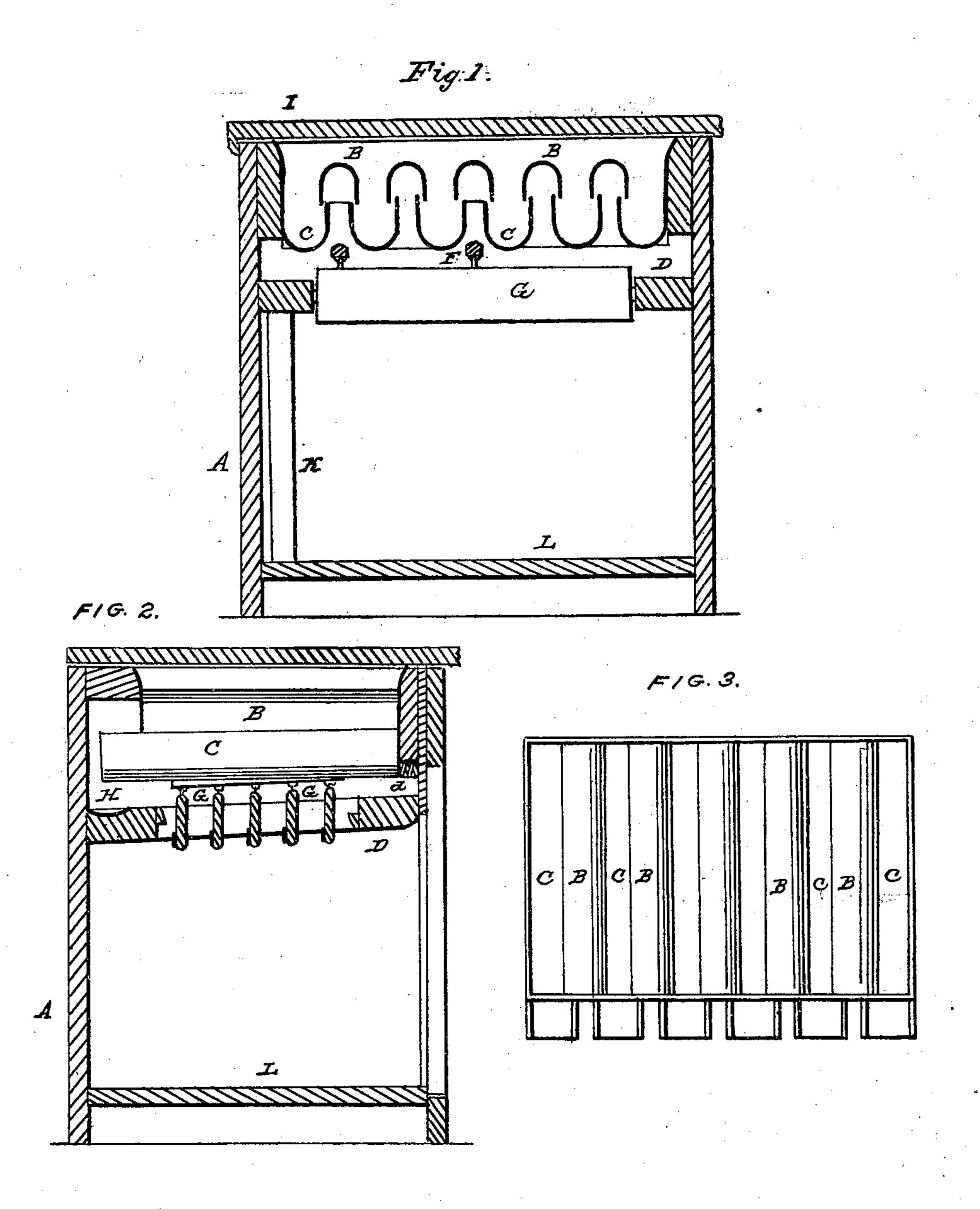
No. 55,085.

Patented May 29, 1866.



WITNESSES! charles alexander

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## United States Patent Office.

JOHN C. GOVE, OF CLEVELAND, OHIO.

## IMPROVED REFRIGERATOR.

Specification forming part of Letters Patent No. 55,085, dated May 29, 1866.

To all whom it may concern:

Be it known that I, John C. Gove, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Refrigerators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

Figure 1 represents a longitudinal vertical section. Fig. 2 represents a cross-section. Fig. 3 represents a plan view of the tubes on which

the ice is deposited.

In the drawings herewith presented and making a part of this specification, A represents the refrigerator, which is made in box form or similar to the ones now in use, having a lid at the top and a door at the front or at one of the sides. A short distance below the lid I is the ice-box. This ice-box consists of a series of inverted fluted tubes, B, which extend from side to side of the refrigerator. Directly beneath the tubes B is another series of fluted tubes, C, not inverted. There is a vacant space between each tube, both of the inverted tubes B and the non-inverted tubes C. The tubes C are firmly secured to the box at one side and extend slightly beyond the tubes B, as seen in Fig. 3, for the purposes hereinafter set forth. The inverted tubes are placed above and overlap the right and left top edge of the two noninverted tubes beneath, allowing a small space between the edges of both tubes.

Beneath the ice-box is a frame which is secured to the bolts on its four sides, (shown at D.) Hinged within this frame are a series of slats, G, which act precisely similar to the ordinary window-shutters now in use, being attached by loops to slides E and F, by which they are closed or thrown open. At the front end of slide F is a wire or other spring, d, which is attached to the box A, Fig. 2. The slide E, being attached to each of the slats G by the loops, works the slats open or closes them by means of the door in the box, said slide extending beyond the door-sill for that purpose. When the door is closed it passes the slide E inward, thereby opening the slats G as shown in Fig. 2. When the door is opened the spring d draws the slide F outward, closing the slats G.

H, Fig. 2, represents a gutter or trough which is directly upon or made within the hindmost portion of the shutter-frame D.

K represents a pipe, Fig. 1, extending from directly beneath the gutter H to and through the bottom of box A.

L is the receptacle wherein meats, vegetables, or other articles are to be placed.

In the use of this refrigerator the ice is placed upon the inverted fluted tubes B, and the articles to be preserved within the receptacle L, as heretofore shown. When the door is closed the air will pass through the openings between the slats G up to the tubes C, and between the openings of said tubes and tubes B onto the ice, as seen at x.

It will readily be seen that by this refrigerator a direct action of the air is had upon the ice, whereby the moisture will become condensed and make the refrigerator cooler than otherwise, and take much less quantity of ice to preserve the same amount of stores. When the door is closed the air has full access upon the moisture, whereas, the door being open, the slats of the shutter are closed and prevent the access of air upon the ice and moisture. The drippings of the ice are caught in the tube C and flow to the end of the same, where they are carried from the box by the pipe K. It is not necessary that the ice-box should be in the top of the box, but may be placed in one end or in the center of the box.

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

1. The frame D, with slats G, and slides E and F, with spring d, constructed, arranged, and used as and for the purposes herein set forth.

2. The box A and ice-box B C, with shutter-frame D, constructed in manner substantially as and for the purposes herein specified.

As evidence that I claim the foregoing I have hereunto set my hand in the presence of two witnesses.

JOHN C. GOVE.

Witnesses:

S. G. WILSON, CHARLES T. GOVE.