

(No Model.)

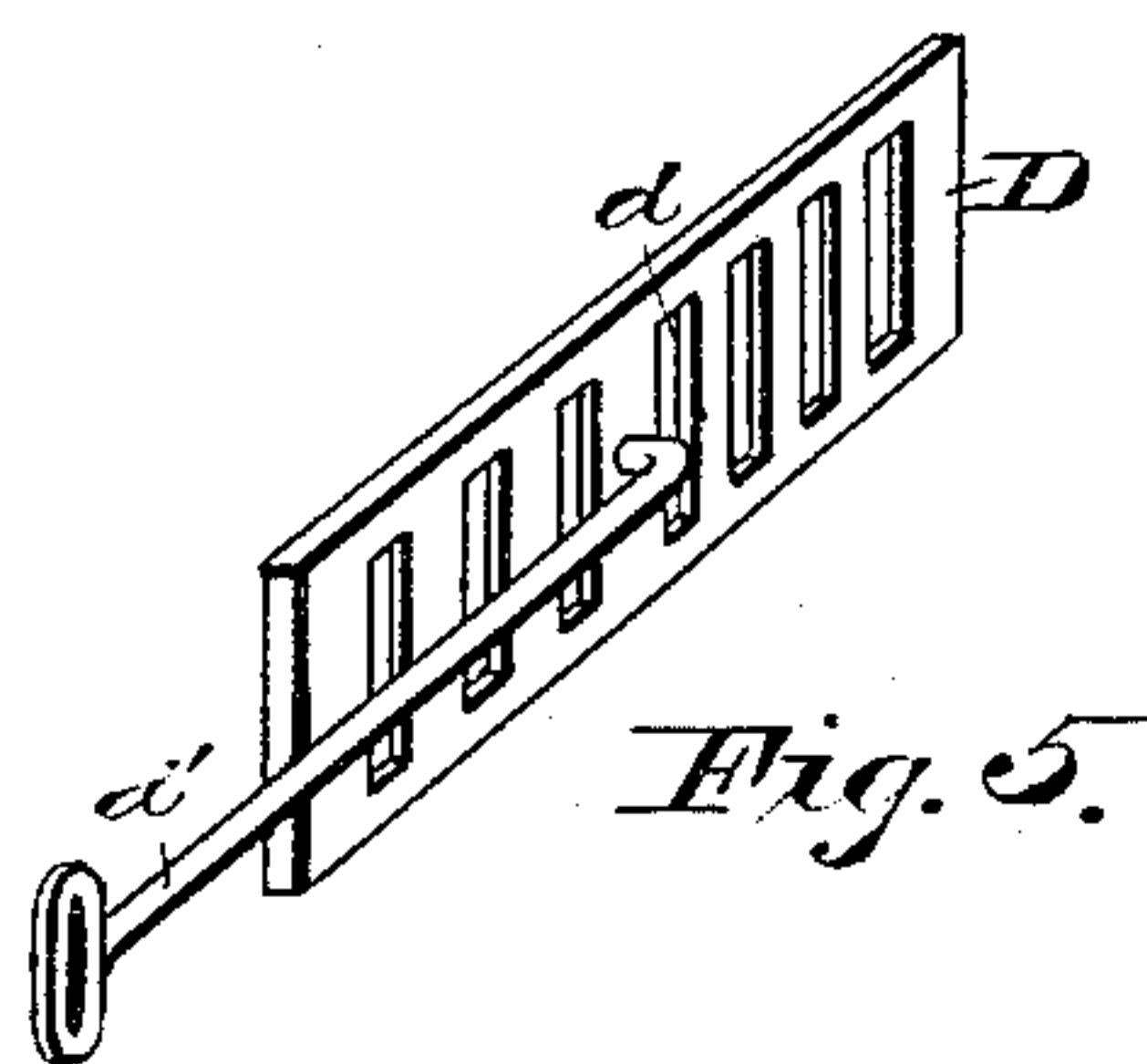
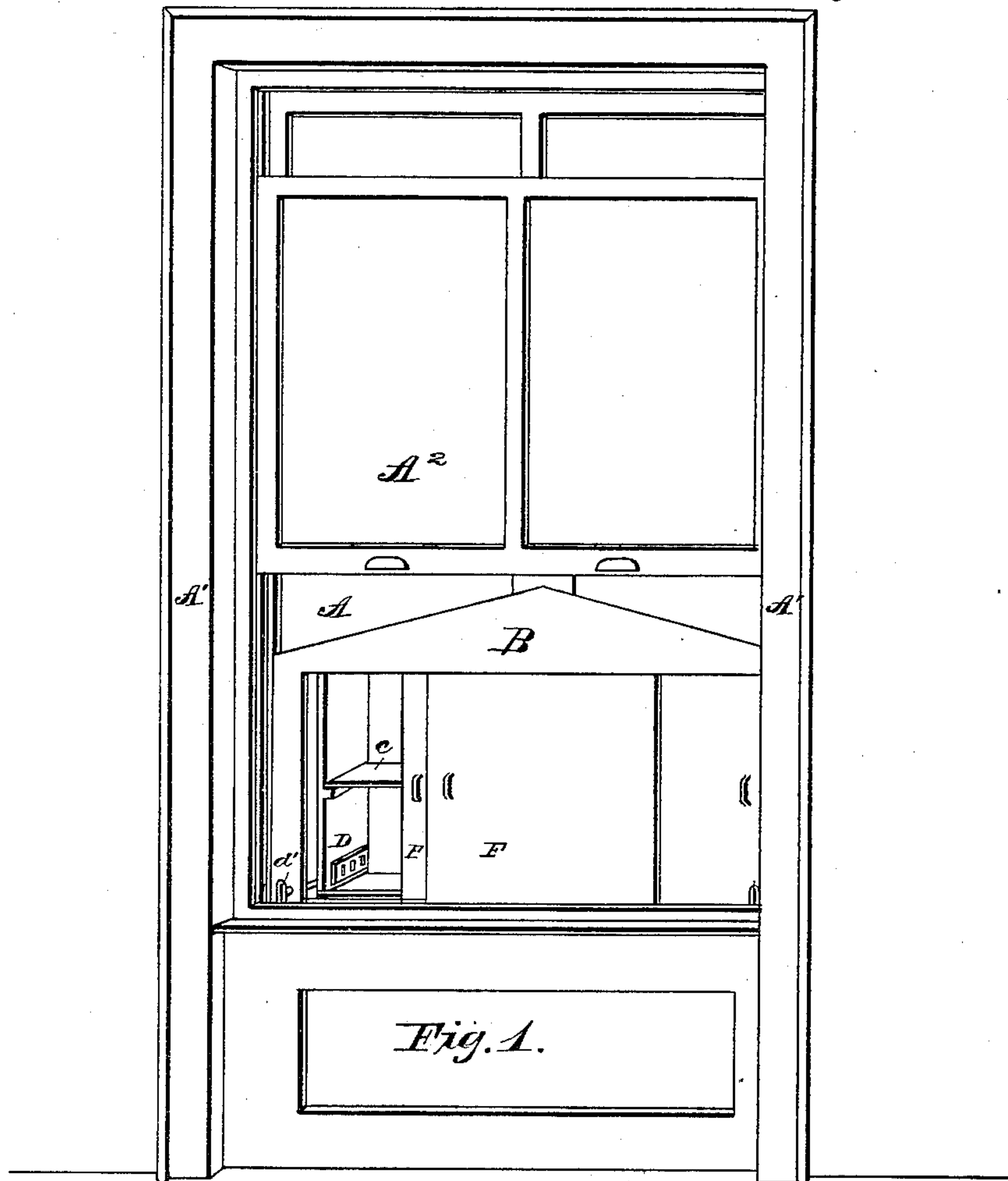
2 Sheets—Sheet 1.

C. W. ROTH.

WINDOW COLD AIR REFRIGERATOR.

No. 318,507.

Patented May 26, 1885.



WITNESSES:

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J. Rudolph.

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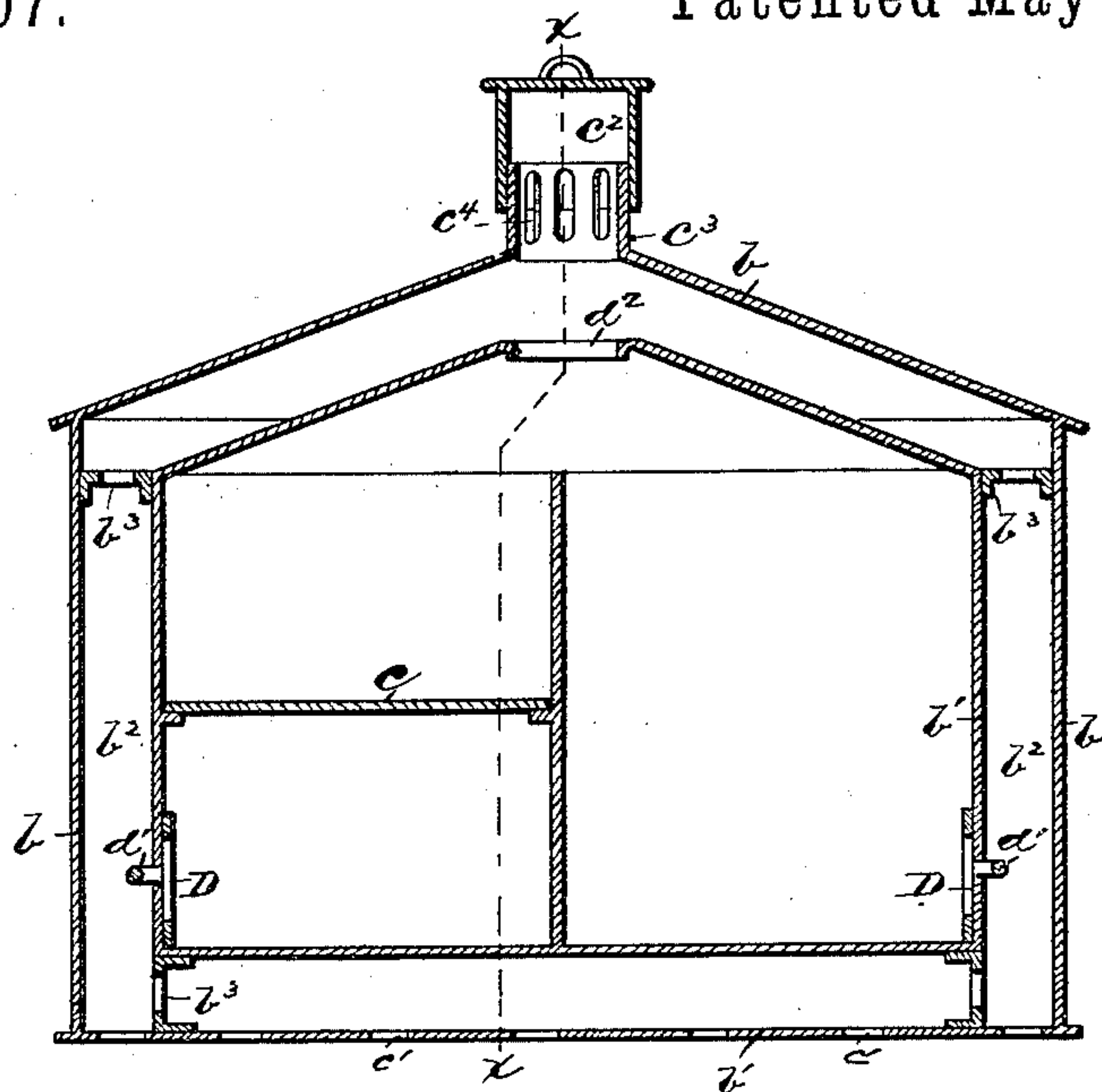


Fig. 2.

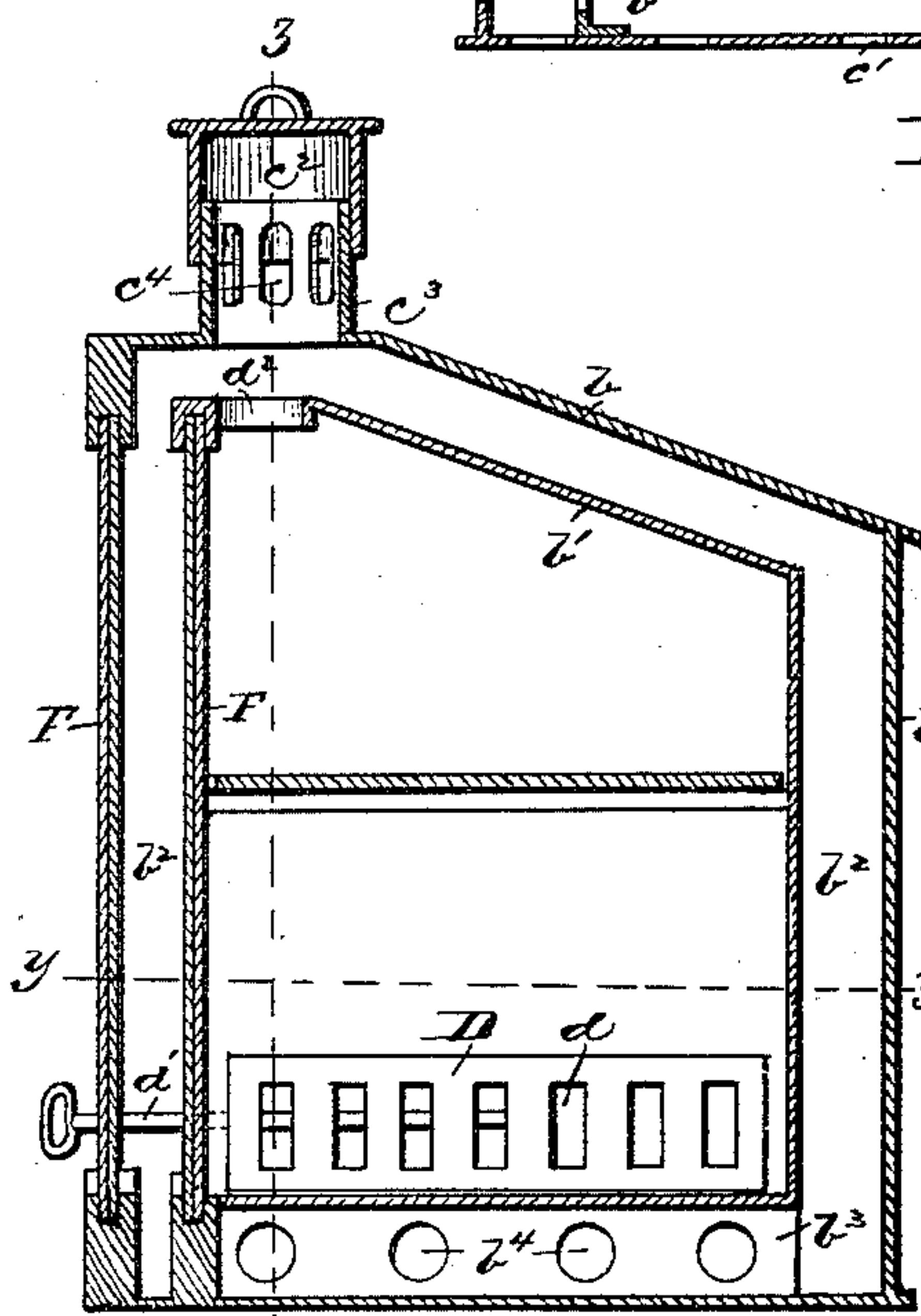


Fig. 3.

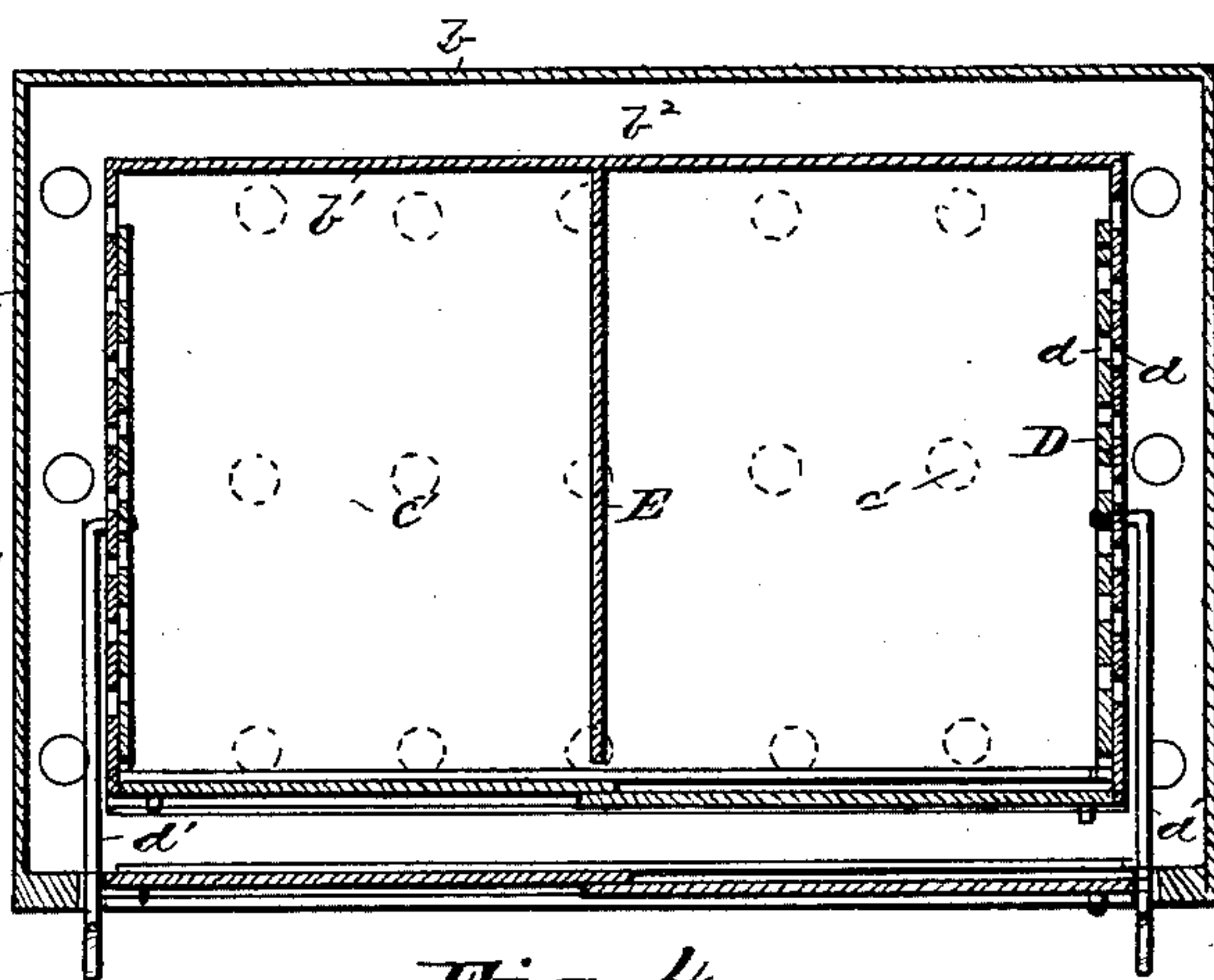


Fig. 4.

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UNITED STATES PATENT OFFICE.

CHARLES W. ROTH, OF NEW YORK, N. Y.

WINDOW COLD-AIR REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 318,507, dated May 26, 1885.

Application filed February 6, 1885. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. ROTH, of the city of New York, in the State of New York, have invented a new and useful Improvement in Window Cold-Air Refrigerators, of which the following is a specification.

My invention relates to a window-refrigerator for apartment-houses; and it consists in a novel combination of air-spaces and ventilating-flues and other mechanism, hereinafter more fully described and claimed.

In the accompanying drawings similar letters of reference refer to corresponding parts throughout the several views.

Figure 1 represents a front view of my window cold-air refrigerator in place in a window-opening, showing the lower sash of the window raised and the front doors of the safe partially open. Fig. 2 represents a section view of the same, taken at line $z z$, Fig. 3. Fig. 3 is a section view taken at line $x x$, Fig. 2. Fig. 4 is a section plan view of my refrigerator, taken at line $y y$, Fig. 3. Fig. 5 is a perspective view of the air-damper.

Having described my invention by reference to the figures illustrated in the accompanying drawings, I will now proceed to describe it by reference to the letters marked thereon, in which—

A represents an ordinary window-opening in the walls of a house. A' is the casing surrounding the ordinary window-opening.

A² represents the sash, which moves in the casing of the ordinary window.

B represents my refrigerator, placed outside of sash A² in the window-opening, and secured to the casing of the window, the front of the refrigerator facing the room, and so located in reference to the sash as to permit the same to be opened or closed, the object being to furnish an easy and convenient mode of access to the refrigerator, and to secure a cool apartment for food and like articles used by families living in apartment-houses. The walls of the refrigerator are double and form a ventilating and cold-air chamber between them for the free circulation of air.

b represents the outer walls, which surround the six sides of the refrigerator, and b' represents the inner walls. b^2 is the ventilating and cold-air chamber formed between the outer and inner walls.

$b^3 b^3 b^3 b^3$, Fig. 2, represent supporting-braces for holding the inner walls in place. These supporting-braces are provided with apertures or ventilating-passages, as indicated in Fig. 3.

b^4 represents the passages.

C represents the bottom of the outer wall, which is perforated with apertures, to allow the free passage of the air into and through the ventilating-chamber.

C' represents the perforations for the passage of air into the chamber.

C² represents the ventilating-cap fitted over the ventilating-flue C³ in the roof of the refrigerator. This flue is provided with slotted apertures C⁴ in the sides, for allowing the free passage of air through the ventilating and cold-air chamber, the current of air being regulated and controlled by moving the cap up or down on the flue. The cap being raised to uncover the slots in the flue allows the air to escape, thereby creating a draft of fresh air through the air-chamber and ventilating-flue.

D D represent air-dampers covering ventilators through the inner wall. The dampers are constructed to move in ways in the wall for opening or closing the ventilators in the inner wall. Air may be admitted through the lower ventilating-flues from chamber b^2 through the slotted ventilators d in the inner walls.

$d' d'$ represent connecting-rods, one end of each attached to the movable dampers, and the opposite ends protruding through the walls for moving the dampers. By opening these dampers or the inner door, or both, a draft of air will pass from chamber b^2 through the refrigerator by way of the opening in the roof d^2 . By closing the dampers and the door in the inner wall the circulation of air in the refrigerator is prevented.

E represents a partial partition, and e a shelf in the refrigerator.

F F represent an outer and an inner sliding door for opening or closing the refrigerator. These are constructed to move in ways in the walls, and may be operated by raising the sash A². The refrigerator is made of sufficient size to fill the window-opening, so that the same may be fastened to the sides of the window-casing.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, in a window cold-air refrigerator, of the ventilating and cold-air chamber between the outer and the inner walls of the refrigerator, having perforations in the bottom and a slotted flue in the roof, covered by a movable ventilating-cap for regulating the circulation of air through the ventilating-chamber, arranged substantially as described.

2. A window cold-air refrigerator having an outer and an inner wall with an air-chamber between, in combination with window-opening A and sash A², the refrigerator being held or secured in the opening to the casing, arranged substantially as described.

3. The combination, in a window cold-air refrigerator, of a ventilating and cold-air chamber between the outer and inner walls of the refrigerator, as described, with slotted ventilators near the bottom of the inner wall,

controlled by dampers D D', and opening d² in the roof, for circulating air through the refrigerator, substantially as described. 25

4. The herein-described cold-air refrigerator having a cold-air chamber between an outer and an inner wall, opening C' in the bottom, flue C³ in the top, with slots C⁴ in the sides of the flue, covered by movable cap C², for controlling circulation of air in the chamber, slotted ventilators d in the inner wall, controlled by dampers D D by means of connecting-rods d' d', opening d² in the roof of the inner wall, for controlling the circulation of air, sliding doors F F, the refrigerator held in the window-opening, as shown, all combined and arranged as described. 35

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Witnesses:

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