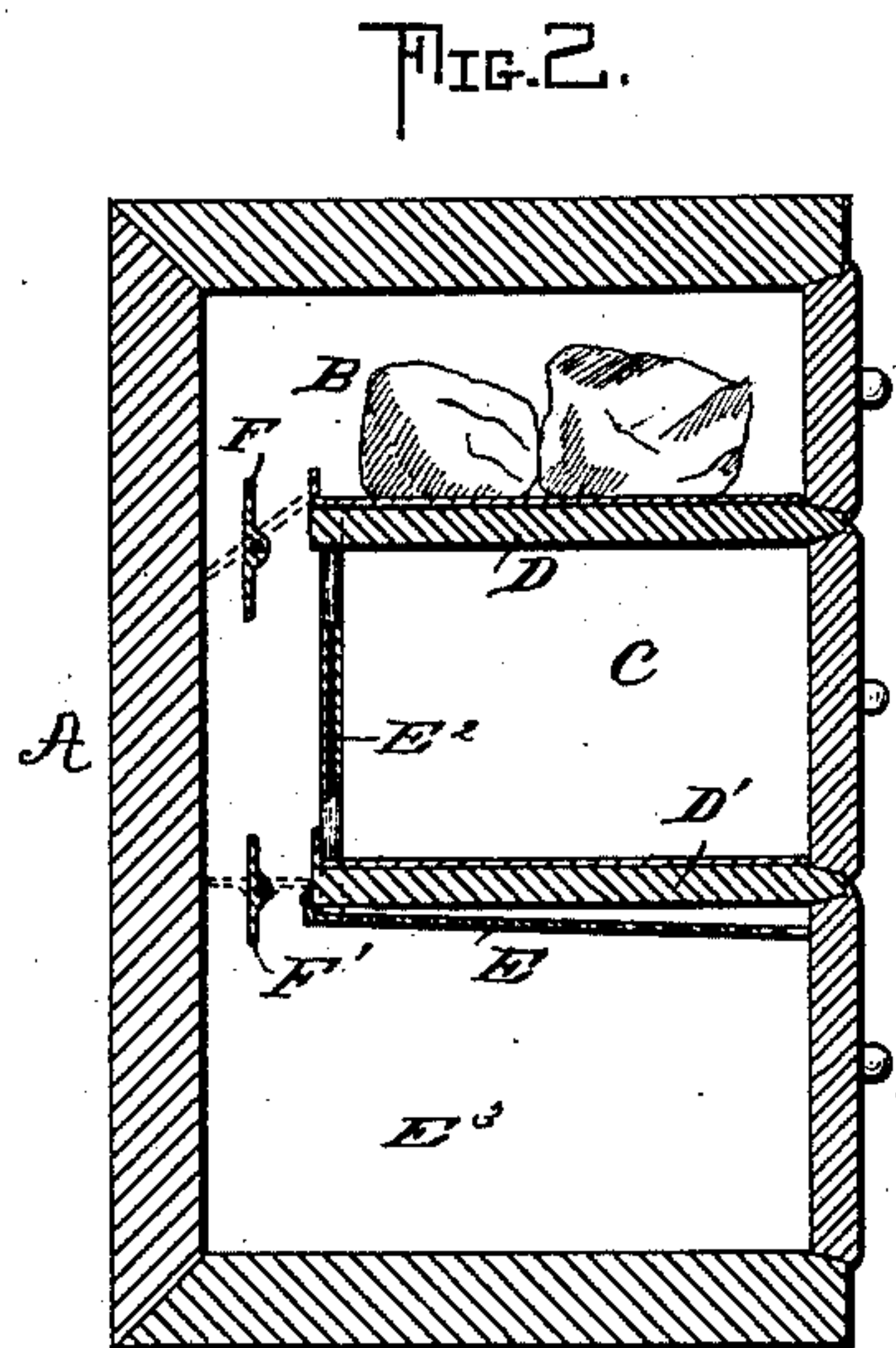
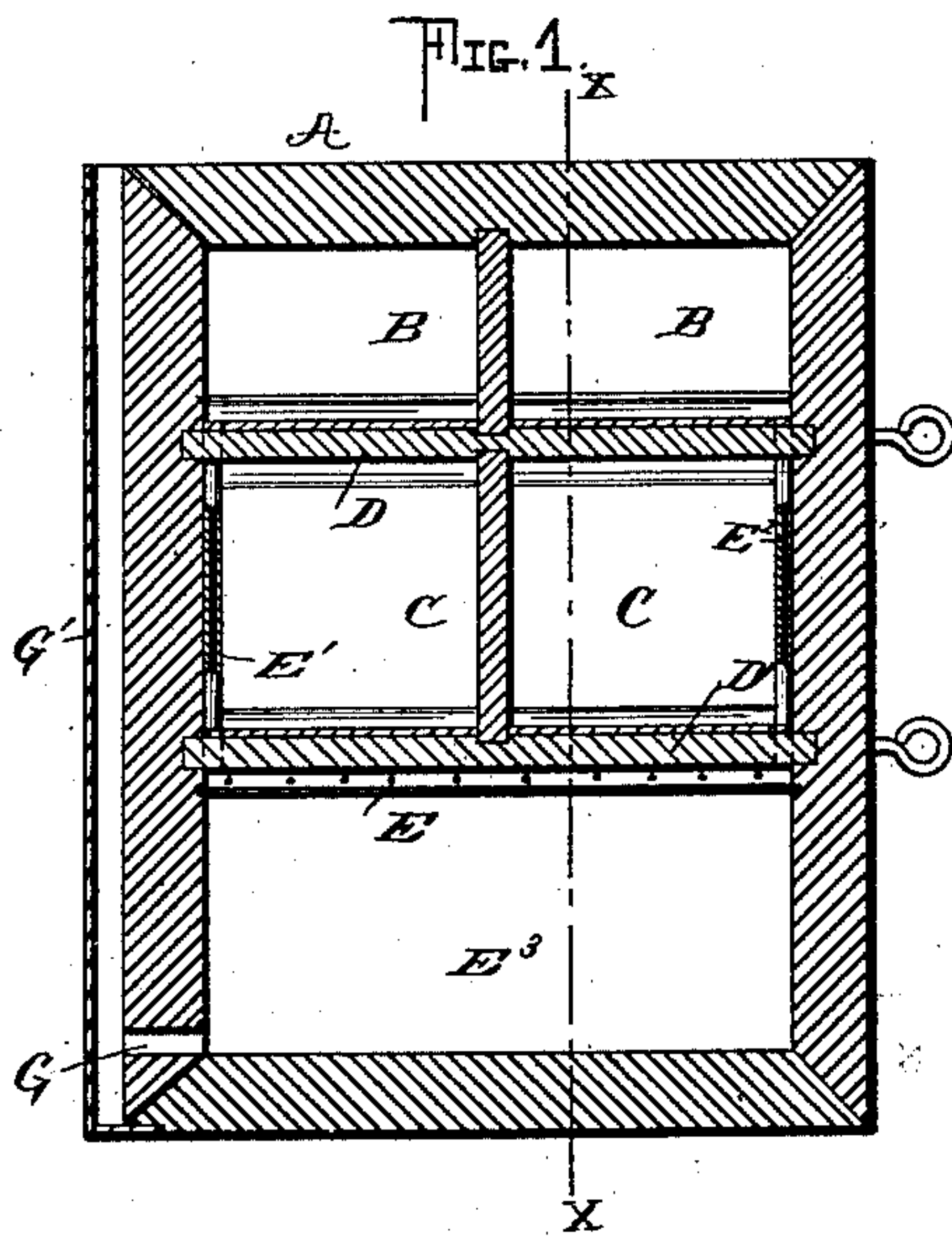


(No Model.)

G. S. VAN VOORHIS.
REFRIGERATOR.

No. 336,501.

Patented Feb. 16, 1886.



WITNESSES.

Wm. Rheem.
R. W. Bishop.

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UNITED STATES PATENT OFFICE.

GEORGE S. VAN VOORHIS, OF BUCYRUS, OHIO.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 336,501, dated February 16, 1886.

Application filed October 13, 1885. Serial No. 179,808. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. VAN VOORHIS, a citizen of the United States, residing at Bucyrus, in the county of Crawford and State of Ohio, have invented certain new and useful Improvements in Refrigerators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates more particularly to refrigerators designed to hold kegs of beer; and it consists in certain novel features, hereinafter described and claimed.

In the drawings, Figure 1 is a vertical section of a refrigerator provided with my improvements; and Fig. 2 is a vertical section on lines *xx*, Fig. 1, looking to the right.

A represents the inner refrigerator-casing, which is of the usual construction, and may be of any desired size. This casing will be provided with an outer casing, which will cover its back and two sides.

Between the casing A and the outer casing a space of two and a half or three inches will intervene, which provides the necessary dead-air chamber common in all refrigerators. This outer casing is not shown, as it forms no part of my invention. It can be plain or ornamented, according to the pleasure of the manufacturer, and the inner casing is secured in place by any well-known means.

The ice-chamber B is placed at the top of the refrigerator, as shown. One or more ice-chambers can be provided, as may be desired. Below the ice creeper or chamber I provide the dry chamber or chambers C. The ice-chamber and the dry chamber are formed by extending shelves D D' across the refrigerator from side to side, as shown in Fig. 1. These shelves do not extend entirely to the rear of the refrigerator, but a short space is left between the back wall of the casing and the rear edge to the shelves, as shown in Fig. 2. Just beneath the shelf D', I provide the perforated sheet-metal drip-pan E. Pipes E' E² pass through these shelves and convey the drip-

pings from the ice to the drip-pan E, through which they pass onto the beer-kegs, which are placed in the chamber E³ below said drip-pan. Valves F F' are pivoted at the sides of the casing, between the rear wall of the same and the rear edge of the shelves D D', respectively. These valves are used to regulate the circulation of the air and prevent the too rapid melting of the ice, as will be more fully described hereinafter. One side of the casing is provided near its lower edge with a ventilator, G, which opens into the wet chamber E³ at or near the bottom thereof, as shown. The air passes through this ventilator into a flue, G', arranged on the outside of the back wall of the casing and within the dead-air chamber between the inner and outer casings.

Instead of using the metallic flue G', as shown, the space between the two casings could be utilized for the same purpose by a construction of the same to that end. I prefer to employ the flue, as shown.

In practice the water formed by the melting of the ice will pass through the pipes E' E² onto the drip-pan E, through which it will drip onto the kegs, thereby cooling the beer, and will then pass off through a discharge-pipe in the usual manner. The cold air from the ice-chamber will pass downward between the rear wall of the casing and the rear edges of the shelves D D', cooling the dry chamber C, and also aiding the drippings from the drip-pan E in cooling the beer. The impure air and gases will pass off through the ventilator G and flue G'.

When it is desired to confine the cold air in the dry chamber C, used to preserve vegetables, &c., the valve F' is turned, as shown in dotted lines, Fig. 2, when the flow of air will be cut off and the desired result accomplished. When any of the doors of the refrigerator are opened, the valve F is turned, as indicated in Fig. 2, and the hot air will then enter the refrigerator while it is open and will be deprived of access to the ice-chamber.

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

1. A refrigerator comprising the following elements in combination: a casing, partitions or shelves extending from side to side of the

casing, leaving a space between their rear edges and the back of the case, and forming compartments, as B, C, and E³, and valves located in the space between the edges of the
5 partitions and the back of the casing, to establish or cut off communication between the several compartments formed by the shelves, substantially as and for the purposes set forth.

2. The combination of the case A, shelves D
10 and D', forming compartments B, C, and E', valves F F', perforated pan E, located below shelf D' and set at an incline, pipes E' E², communicating with the bottom of the compart-

ment B and terminating slightly above the pan E, whereby drippings may be conveyed from 15 compartment B to E³, and the communication between the several compartments be regulated as desired, substantially as and for the purposes specified.

In testimony whereof I affix my signature 20 in presence of two witnesses.

GEORGE S. VAN VOORHIS.

Witnesses:

D. C. CAHILL,
H. G. LANE.