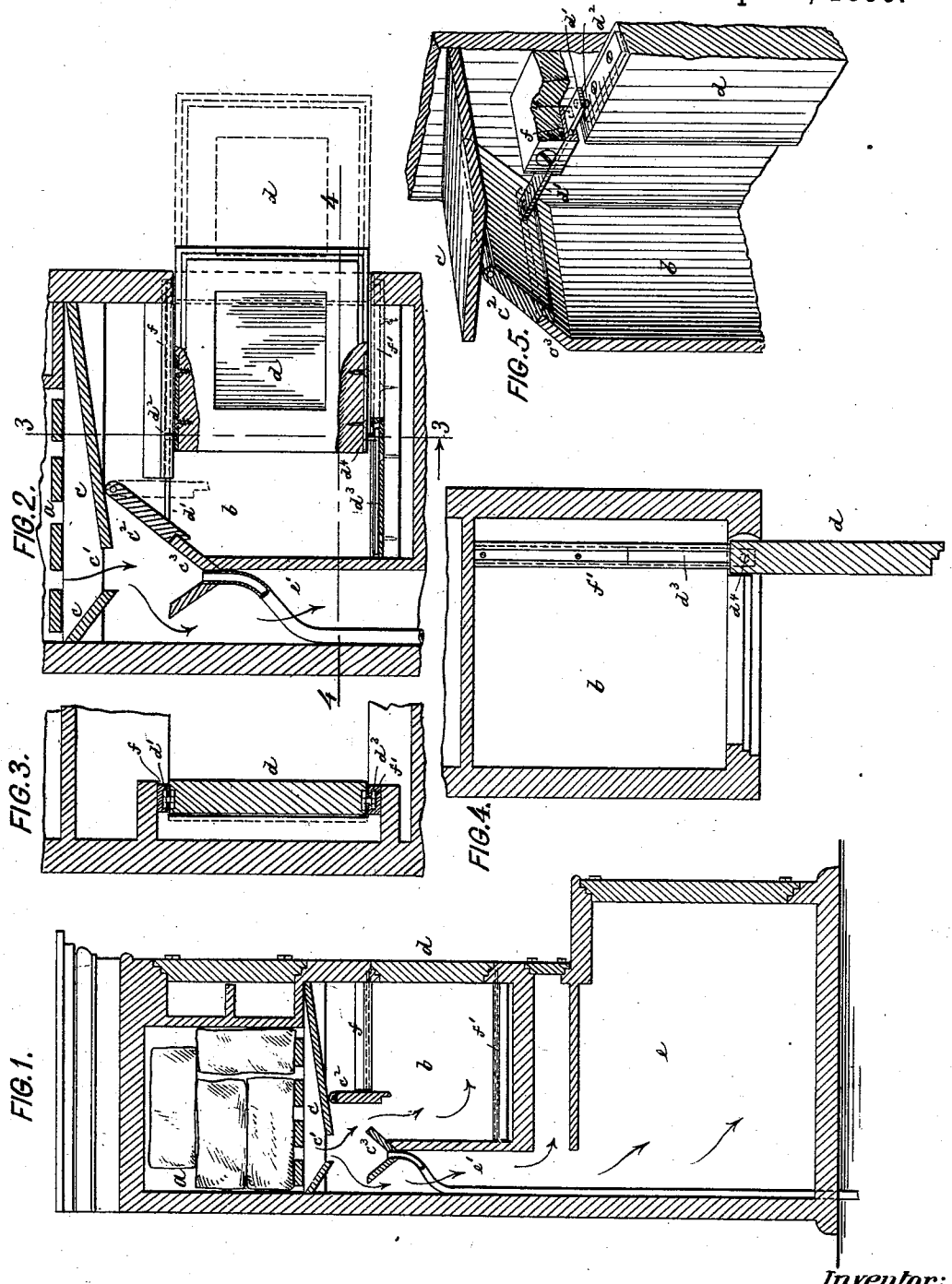
(No Model.)

J. GOETZ.

REFRIGERATOR CUT-OFF.

No. 537,193. Patented Apr. 9, 1895.



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UNITED STATES PATENT OFFICE.

JOSEPH GOETZ, OF BROOKLYN, NEW YORK.

REFRIGERATOR CUT-OFF.

SPECIFICATION forming part of Letters Patent No. 537,193, dated April 9, 1895.

Application filed January 17, 1895. Serial No. 535,181. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH GOETZ, of Brooklyn, New York, have invented an Improved Refrigerator, of which the following is a specification.

This invention relates to that class of refrigerators in which the communication between the ice chamber and cold storage chamber is automatically cut off, when the door to the storage chamber is opened, so that the cold air cannot escape.

The invention consists in the peculiar construction of mechanism for accomplishing this result in a simple and effective manner.

In the accompanying drawings, Figure 1 is a vertical central section of my improved refrigerator. Fig. 2 is vertical section through the storage chamber; Fig. 3, a vertical section on line 3, 3, Fig. 2; Fig. 4, a longitudinal section on line 4, 4, Fig. 2, and Fig. 5, a perspective view of the valve operating mechanism.

The letter *a*, represents the ice chamber of a refrigerator, which communicates with the main storage chamber *b*, by means of an opening *c'*, of the partition *c*. This opening is controlled by a valve lid c^2, which is hinged to the partition and is normally held in its open position by gravity.

d, is the door of the storage chamber *b*, which is pivoted at its upper corner to a slide *d'*, by pivot d^2, and at its lower corner to slide d^3, by pivot d^4. The slides *d'*, d^3, move in grooved rails *f*, *f'*, which extend along the top and bottom of the storage chamber *b*, from the front toward the rear thereof, at the right hand side of such chamber. The upper slide *d'*, when in its rearmost position engages the valve c^2, and closes the same against its seat c^3, while it releases the valve when drawn forward.

In use the door *d*, is opened in the usual manner, and when at right angles to the front of the refrigerator, (Fig. 4) is pushed into the storage chamber *b*, together with the slides *d'*, d^3. The slide *d'*, will in this way close the valve c^2, and cut off the supply of cold air from the storage chamber. The full supply of cold air will now flow through the opening *c'*, and through a rear passage *e'*, to a supplemental cold storage chamber *e*.

When the door *d*, is drawn out, with its slides *d'*, d^3, the valve c^2, will be liberated and will open by gravity, so that the cold air is again admitted to the storage chamber *b*, immediately before the door *d*, is closed.

The advantage connected with my construction lies in the great ease with which the door *d*, may be manipulated, and that it need not be bodily raised, as is the case with doors which must be swung into a horizontal position and slid along the roof of the storage chamber to cut off the cold air supply.

What I claim is—

1. The combination in a refrigerator, of an ice chamber with a storage chamber, an intervening partition, a valve controlling an opening in said partition, a door adapted to close the storage chamber, and a slide to which the door is pivoted, said slide being adapted to move from the front to the rear of the storage chamber and to close the valve when in its rearmost position, so that the supply of cold air is cut off from the storage chamber when the door is opened and projected into said chamber, substantially as specified.

2. The combination in a refrigerator, of an ice chamber with a storage chamber, an intervening partition, a valve controlling an opening in said partition, a door adapted to close the storage chamber, an upper and a lower slide to which the door is pivoted, rails extending from the front to the rear of the storage chamber and engaged by the slides, all being so constructed that the door when opened can be pushed backward into the storage chamber together with the slides, and that one of the slides when in its rearmost position is adapted to close the valve, so as to cut off the supply of cold air from the storage chamber, substantially as specified.

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