

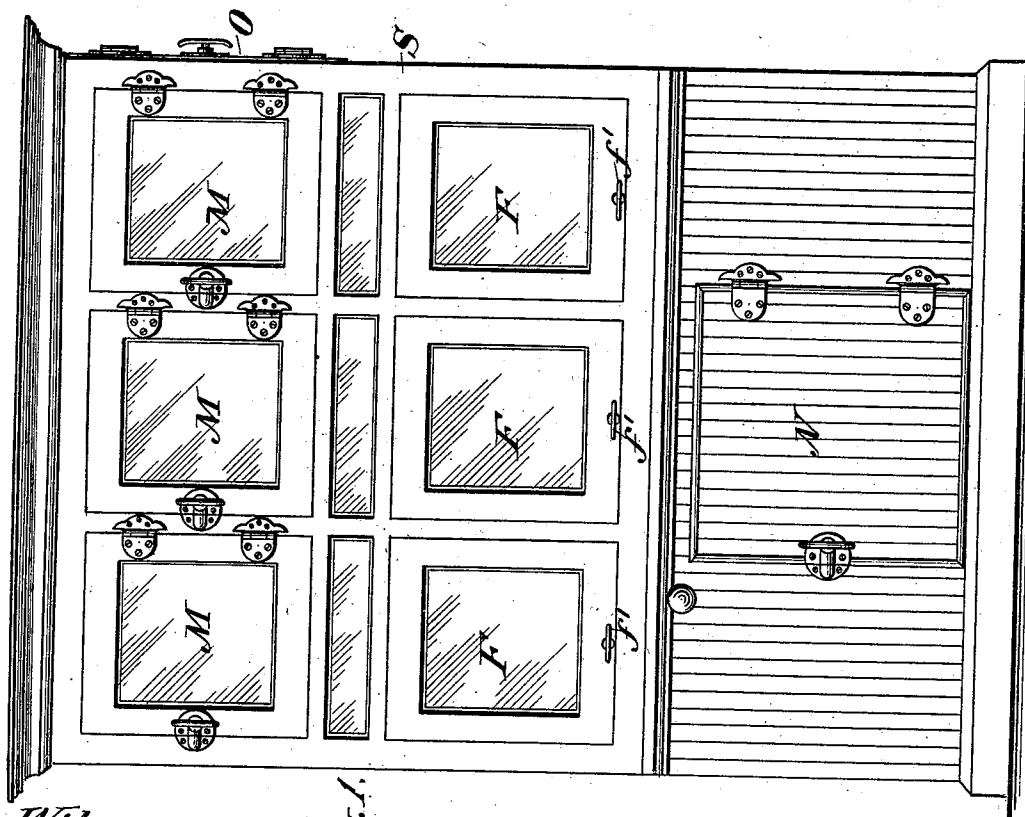
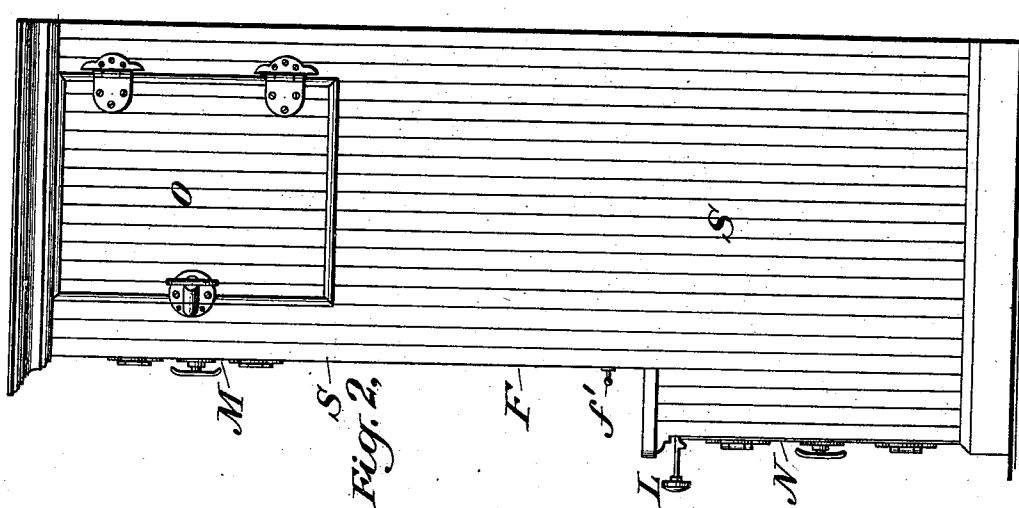
(No Model.)

2 Sheets—Sheet 1.

R. J. MILLS.
CUT-OFF FOR REFRIGERATORS.

No. 556,429.

Patented Mar. 17, 1896.



Witnesses:-

Asker Mayer

George W. Mills

Fig. 1.

Inventor:-

Robert J. Mills
by Witter & Kenyon
his attorneys

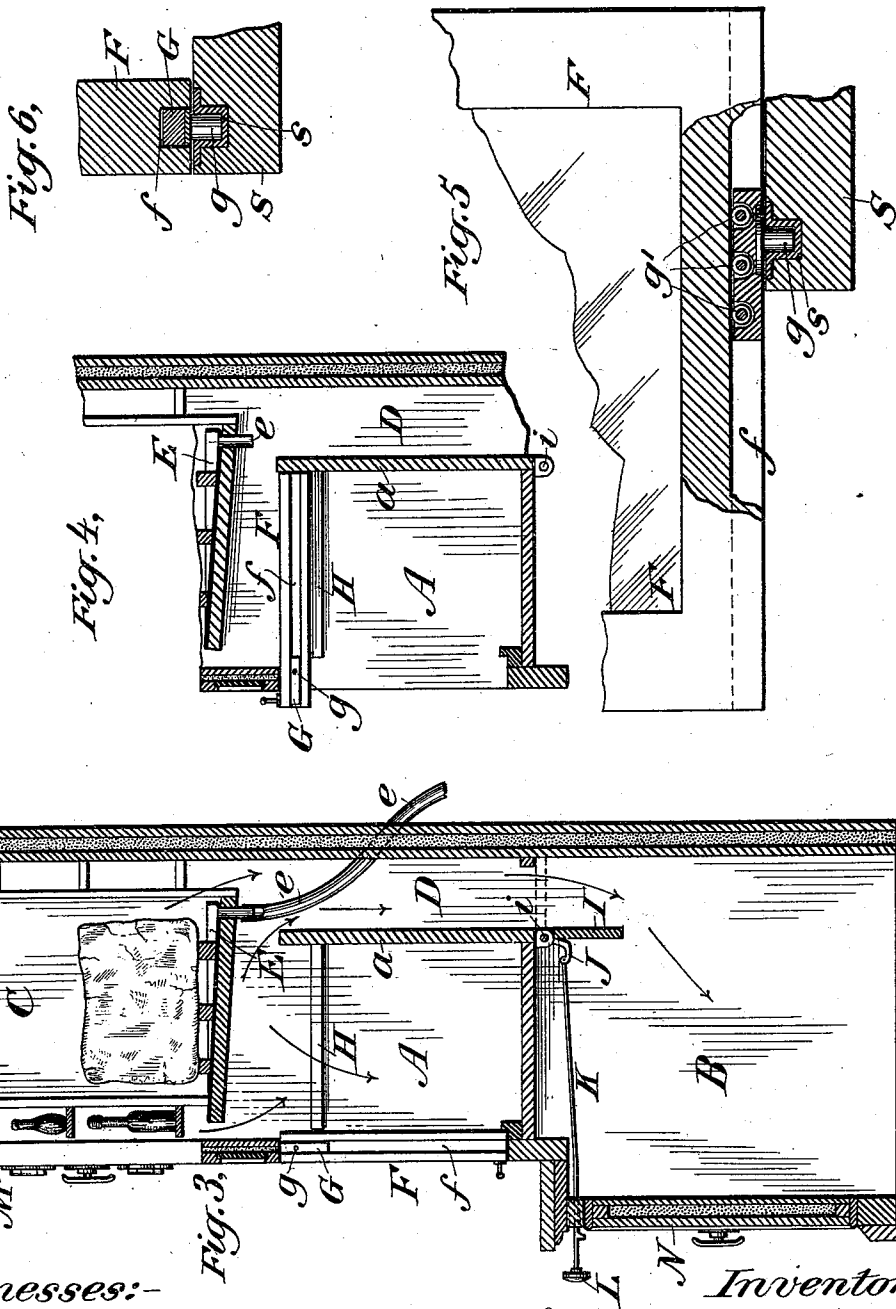
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UNITED STATES PATENT OFFICE.

ROBERT J. MILLS, OF NEW YORK, N. Y.

CUT-OFF FOR REFRIGERATORS.

SPECIFICATION forming part of Letters Patent No. 556,429, dated March 17, 1896.

Application filed June 6, 1894. Serial No. 513,604. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. MILLS, a citizen of the United States, residing at New York city, in the county and State of New York, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification.

My invention relates to refrigerators, especially of the kind used in stores where frequent access must be had to the main or storage chamber of the refrigerator.

It has for its object to produce a compact refrigerator, easily accessible, and one economical through prevention of the escape of the cold air.

It consists of the devices hereinafter shown and described and claimed in the claims at the end of this specification.

Figure 1 is a front elevation, and Fig. 2 a side elevation, of my improved refrigerator. Fig. 3 is a side sectional elevation through the same. Fig. 4 is a similar section through the main chamber and surrounding parts, showing the door when pushed inward. Fig. 5 is a view, partly in section, showing the door partly pushed inward upon the guide-blocks. Fig. 6 is a vertical cross-section through a guide-block and its surrounding connections.

M and N are doors in the casings or walls of the refrigerator. A is the main chamber of the refrigerator, C the ice-chamber, and B the usual storage-chamber.

E is a combined support and trough for the ice-chamber, *e* being the pipe for discharge of the waste water. The ice-chamber and the storage-chamber are permanently connected by a passage-way D. The arrows in Fig. 3 indicate the flow of cold air from the ice-chamber to the storage-chamber. This passage-way D is independent of the main chamber. In the ordinary use of the storage-chamber B this passage-way is preferably kept open. I have, however, arranged the gate I, having bent arm J and rod K connecting them with the handle L, so that this passage-way for the cold air can be shut off at any time desired. To close the gate I the handle L is pushed in and the notch shown on the arm K is caught and holds the gate I closed. In its open position this gate is held down by its own weight.

The main chamber A is inclosed on all sides except at the top. The rear partition-wall *a*

extends upward to at least the height of the upper part of the door. The door F is pivoted upon guide-blocks G. The guide-blocks G, as preferably made, are composed of a strip of wood or other suitable material pivotally secured to the casing of the door.

As shown in Fig. 5, the fastening consists of a plate secured to the block G, said plate having a pivot *g*, fitting into a cylindrical socket *s* fastened to the casings of the door. It also has rollers *g'*. The door has side grooves *f*. The guide-blocks G fit into these grooves *f*, so that the door not only swings outward upon the blocks G, as upon a pivot, but the door after being so swung outward can be pushed inward, the guide-blocks G remaining stationary while the door slides inward upon them.

H are rails for supporting the door as or after it is pushed inward. In the drawings these rails are shown as extending from the rear wall *a* nearly to the front of the chamber A. They need not, however, extend but a short distance from the rear wall *a*, only enough to support the inner end of the door F when pushed inward against the rear wall.

In Fig. 4 the door F has been pushed inward to its full extent and abuts against the rear partition *a*. In this position the door F effectually closes the top of the chamber A and prevents the cold air from the ice-chamber from passing down into the main chamber, A. In this way the escape of cold air from the refrigerator is prevented while access is being had to the main chamber.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a refrigerator, a door having guide-grooves, revoluble guide-blocks pivotally secured to the casings of the door and adapted to take into said guide-grooves, whereby the door may be swung outward and then be pushed inward upon said guide-blocks, substantially as set forth.

2. In a refrigerator, a door having guide-grooves, revoluble guide-blocks pivotally secured to the casings of the door and adapted to take into said guide-grooves, and rollers on said guide-blocks whereby the door may be swung outward and then be pushed inward upon said guide-blocks, substantially as set forth.

3. In a refrigerator, a door having guide-grooves, revoluble guide-blocks pivotally secured to the casings of the door and adapted to take into said guide-grooves, rollers on said
5 guide-blocks whereby the door may be swung outward and then be pushed inward upon said guide-blocks, and rails to support said door when pushed inward, substantially as set forth.
- 10 4. In combination with the door of a refrigerator adapted to swing outward and then to

be pushed inward, revoluble guide-blocks pivotally secured to the casings of the door, whereby the said door is pivoted and slides upon said blocks, substantially as set forth. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ROBERT J. MILLS.

Witnesses:

ASHER MAYS,

EDITH J. GRISWOLD.