

J. C. MOORE.
Refrigerator.

No. 210,464.

Patented Dec. 3, 1878.

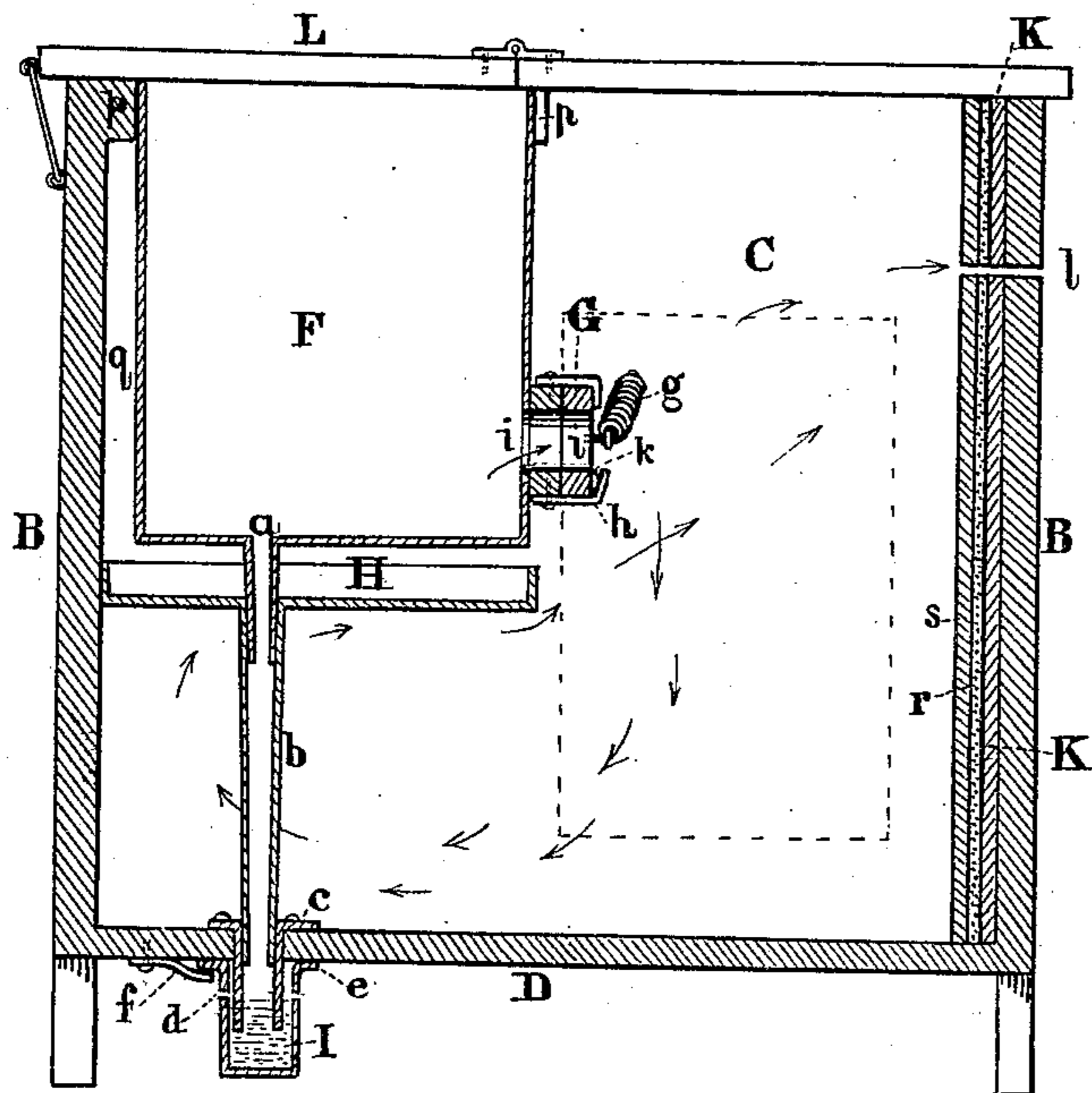


Fig. 1.
(vert. sec. on line
aa, fig. 2.)

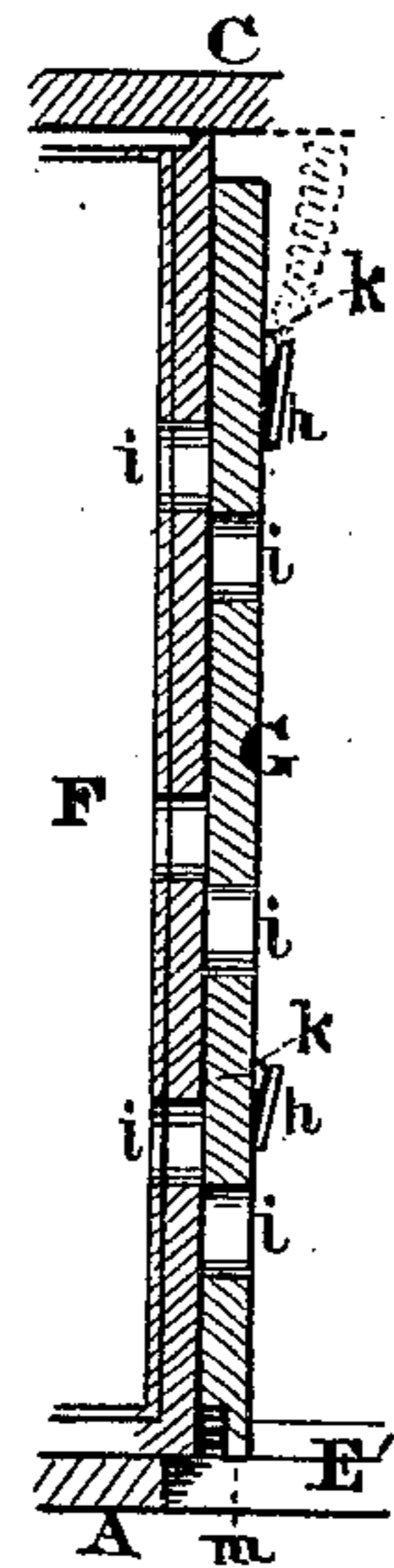


Fig. 4.
(Hor. sec. of Slide)

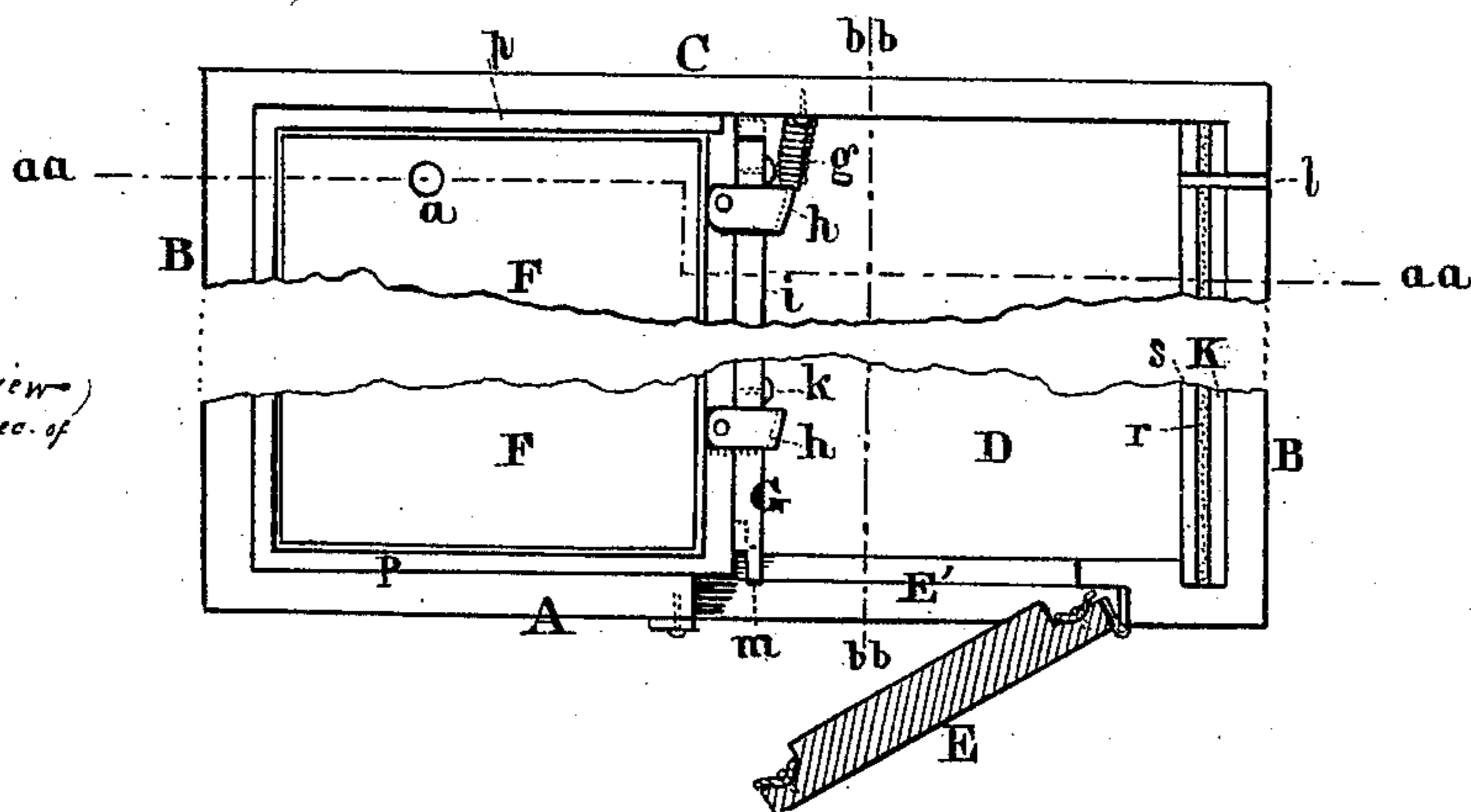


Fig. 2.
(Superficial view
with horizontal sec. of
Door E)

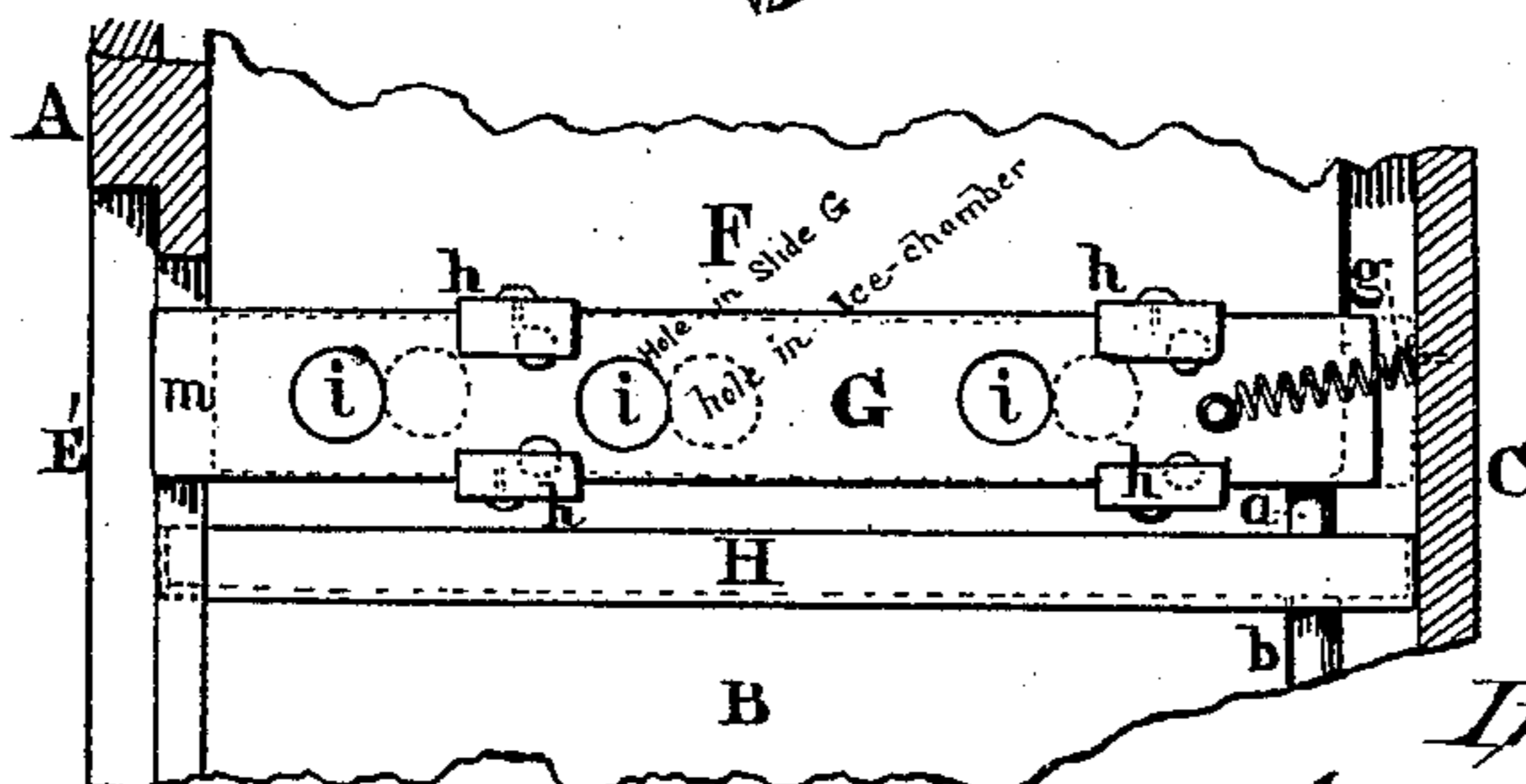


Fig. 3.
(Vert. cross sec. on line
bb, fig. 2)

Witnesses

Clarence Shurlow
Barth Shurlow

Inventor:

James C. Moore,
by E. Shurlow, atty.
in fact

UNITED STATES PATENT OFFICE.

JAMES C. MOORE, OF PEORIA, ILLINOIS.

IMPROVEMENT IN REFRIGERATORS.

Specification forming part of Letters Patent No. **210,464**, dated December 3, 1878; application filed March 27, 1878.

To all whom it may concern:

Be it known that I, JAMES C. MOORE, of the city of Peoria, in the county of Peoria, in the State of Illinois, have invented an Improvement in Refrigerators or Ice-Chests; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a vertical section through the ice-chamber and the provision-receiver; Fig. 2, a superficial view (the cover removed) with the slide sprung outward by the opening of the door; Fig. 3, longitudinal elevation of the slide of the ice-chamber with slide in same position as in Fig. 2; Fig. 4, horizontal section of slide and adjoining wall of ice-chamber along the line of the air-passages *i*.

This is an improvement on that form of refrigerator in which the ice-chamber is cut off from the provision receiver or chamber by means of slats or devices moved by opening or shutting of the door to retain cold air the better within the ice-box when the door is open.

My invention consists principally of small knobs or wedges projecting from the surface of the cold-air slide, in combination with the inclined surface of the cleats or guides next to said slide, for the purpose of jamming the touching surfaces closer than would happen without such devices, and produce a more perfect contact with the ice-chamber.

One of the forms in which I make this refrigerator is as follows: A is the front; B, sides; C, back; D, bottom; E, door; E', door-opening; F, ice-chamber, suspended to cornice *p*, projecting from top edge of the safe, and provided with a horizontal row of holes, *i*, in the side, which are covered by a horizontal slide, G, provided with corresponding holes *i*, moving in cleats *h*, so as to move in a line with said first-mentioned series of holes, *i*, and cut off the outflow of cold air from said ice-chamber, when the spring *g*, extending from the slide G to the casing-wall C behind, is released by the opening of said door.

The spring exerts an extensive action and keeps the slide end *m* against the closed door, at which time and in which position the passages between the two chambers are open.

The shoulders of the cleats *h* are inclined on the surface facing the slide G, to admit a

knob, *k*, between said incline and said slide, in order to jam the latter against the surface behind it and make the joint more complete.

The ice-chamber F has a drain-pipe, *a*, passing into the corresponding pipe *b* below.

H is a shallow pan or water-receiver beneath the chamber F, and drained by a pipe, *b*, which passes into the next pipe, *c*, below, in the floor of the safe.

I is the cold-air cup or trap at the outer end of pipe *c*. It has a flange, *e*, or lip, by which it is held upon the cleat or catch *f*, attached to the floor above. The flange may be cut away at one side, to allow the cup to pass said catch, and be removed, while to replace it a slight turn of the flange will extend the latter above the catch *f*, so as to retain the cup.

The upper part of the cup, above the end of the pipe *c*, has several small apertures, *d*, around it for the escape of water, whereby the pipe is the better prevented from being choked.

K is a layer of compressed paper, intended to be placed next to the inner surface of the outer casing throughout the safe A B C D, side by side with a layer of sawdust, *r*, or charcoal, or similar packing, next to the inner casing of wood or metal, *s*—in short, the paper packing and sawdust, &c., are placed in the casing of the refrigerator.

Through the casing into the outer air and in the upper part of the safe is a small opening, *l*, designed to carry off tainted air or constantly-forming warmer strata of air, naturally rising, caused to rise by the fall of the cold air to the lower part of the safe from the ice-box.

What I claim as my invention is—

1. The combination of door E with slide G, having knobs *k* and cleats *h*, as described.
2. In combination with cut-off G, the cleats *h*, with inclined surface next to said slide, and the knobs or projections *k*, for the purpose of jamming said slide when closed against the face of the box F or ice-chest, substantially as shown.

In testimony that I claim the foregoing improvement in refrigerators I have hereunto set my hand this 21st day of March, A. D. 1878.

JAMES C. MOORE.

Witnesses:

H. W. WELLS,
JAS. M. MORSE.