

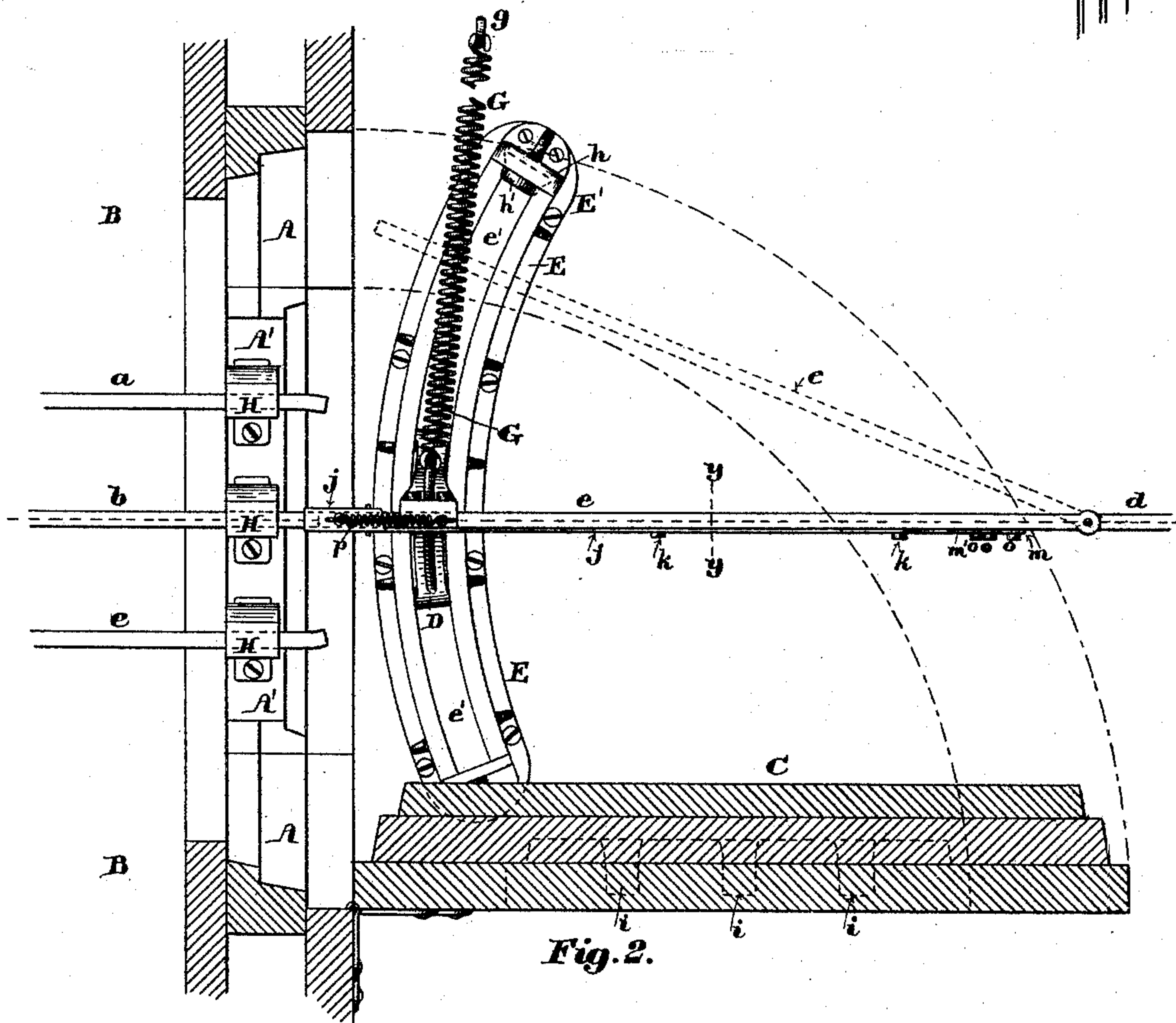
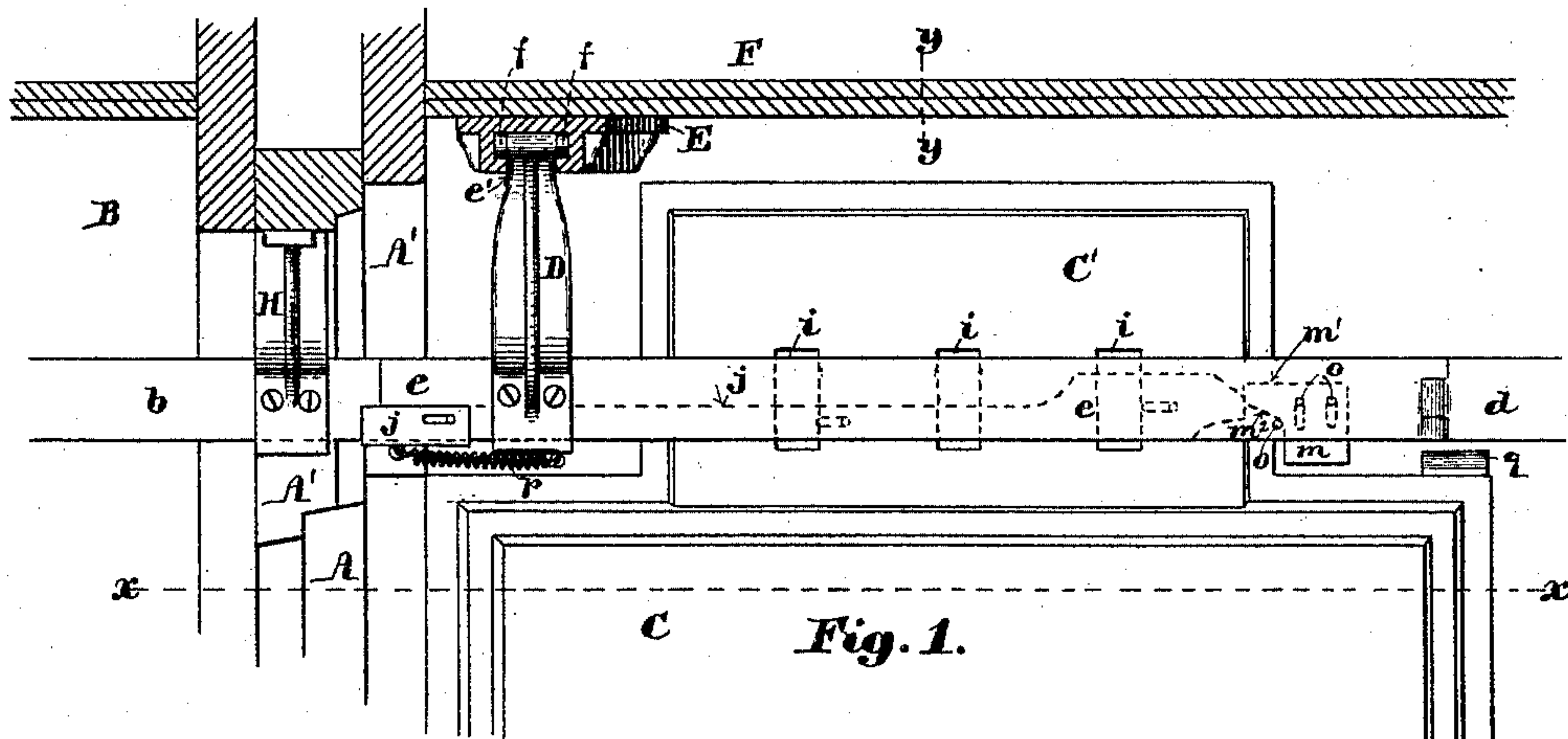
(No Model.)

G. W. PITMAN.
REFRIGERATOR SWITCH.

2 Sheets—Sheet 1.

No. 476,962.

Patented June 14, 1892.



Witnesses:
Walter E. Lombard.
W. E. Lombard

Inventor:
George W. Pitman,
by N. E. Lombard
Attorney.

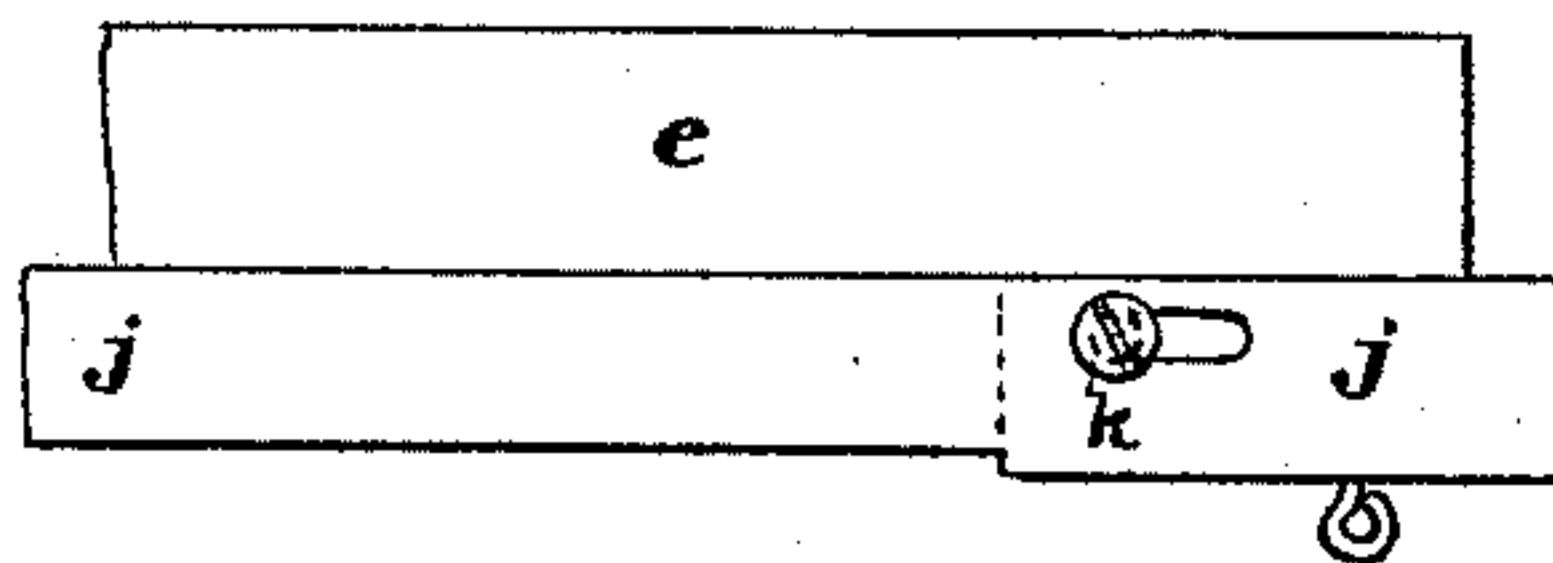
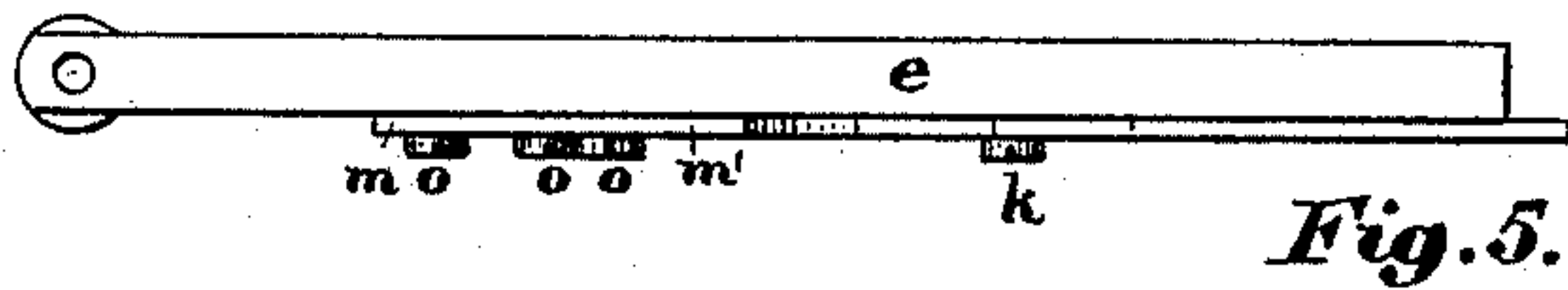
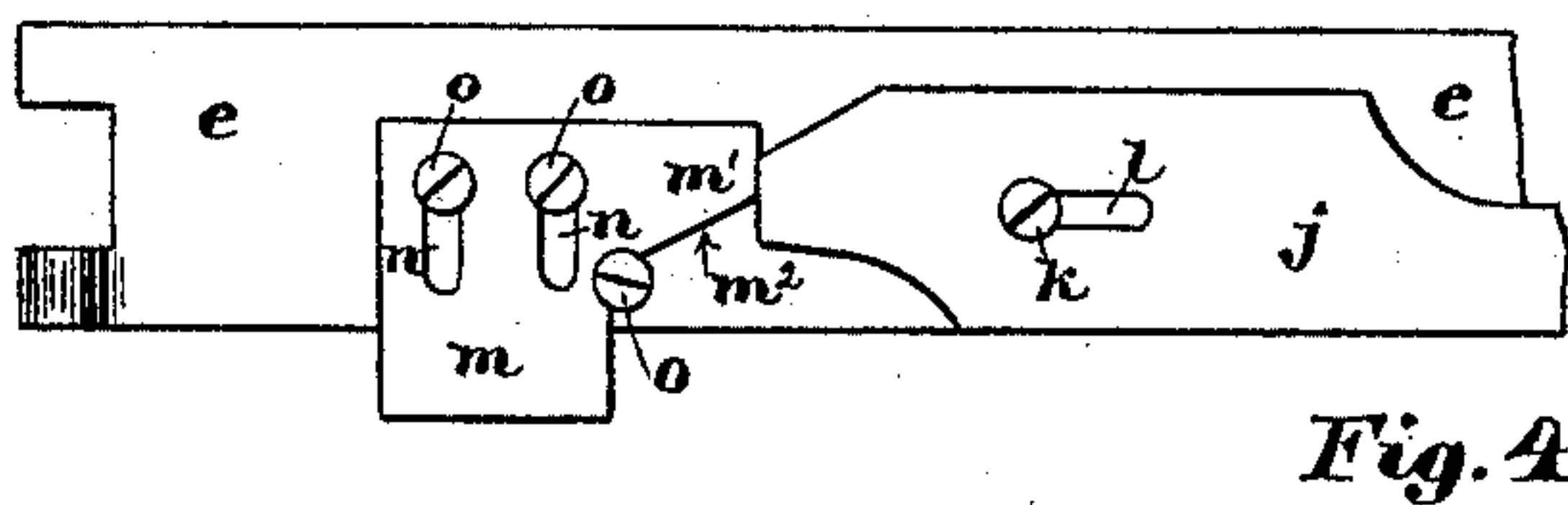
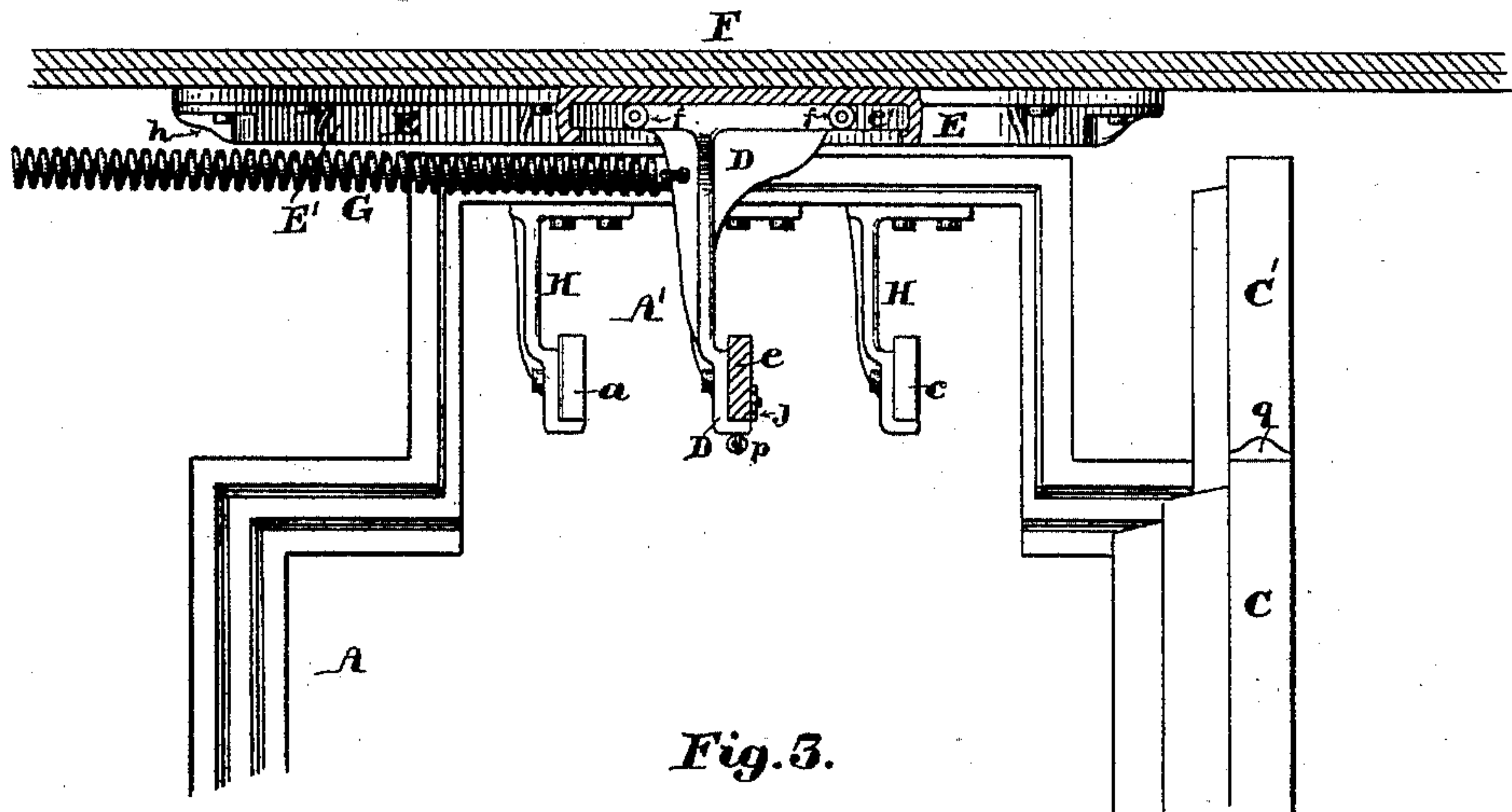
(No Model.)

2 Sheets—Sheet 2.

G. W. PITMAN.
REFRIGERATOR SWITCH.

No. 476,962.

Patented June 14, 1892.



Witnesses:
Walter C. Lombard
H. C. Lombard

Inventor:
George W. Pitman,
by N. C. Lombard
Attorney.

UNITED STATES PATENT OFFICE.

GEORGE W. PITMAN, OF SALEM, MASSACHUSETTS.

REFRIGERATOR-SWITCH.

SPECIFICATION forming part of Letters Patent No. 476,962, dated June 14, 1892.

Application filed March 16, 1892. Serial No. 425,180. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. PITMAN, of Salem, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Refrigerator-Switches, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to switches in overhead tracks for conveying dressed meats and other articles to different parts of a refrigerating-room; and it consists in certain novel features of construction, arrangement, and combination of parts, which will be readily understood by reference to the description of the drawings and to the claims hereinafter made, and in which my invention is clearly pointed out.

Figure 1 of the accompanying drawings is a vertical section through the upper part of the doorway of a refrigerator-room and showing the tracks and switch and open door in elevation. Fig. 2 is a horizontal section on line *x x* in Fig. 1 and showing the tracks and the switch in inverted plan. Fig. 3 is a vertical sectional elevation, the cutting plane being on line *y y* in Figs. 1 and 2 and looking toward the left of Fig. 1; and Figs. 4, 5, and 6 are respectively an elevation, a plan, and an end view of the switch-rail and its locking devices.

In the drawings, A is the doorway or opening into the refrigerator-room B. C is the door for closing said opening.

a, *b*, and *c* are three track-rails suspended from the ceiling of the room B and the upper side of the doorway A.

d is the fixed track-rail outside of the refrigerator, and *e* is the switch-rail pivoted at one end to the rail *d* and supported at its opposite end by the traveling hanger D.

E is a guide-plate secured to the ceiling F or other suitable support outside of the refrigerator-room and provided in its under side with a T-shaped groove *e'* in the form of a segment of a circle, the center of which is in the axis of the pivotal connection of the switch-rail *e* to the rail *d*, and in which groove the traveling hanger D is supported by means of the tracks *ff*, which project from each side of said hanger into the lateral expansions of the

T-shaped groove in said plate, as shown in Figs. 1 and 3.


The hanger D has connected thereto one end of a spring G, the opposite end of which is connected to some fixed part of the structure, as at *g*, the tension of which spring tends to move the hanger D and the movable end of the switch-rail toward the end E' of the plate E.

The groove *e'* in the plate E is closed at the end E' by the removable abutment *h*, in the inner face of which is secured the cushion *h'*, of rubber, felt, or other suitable yielding material, to serve as a stop to arrest the hanger D in its movement in that direction with the minimum of shock or noise.

The doorway or opening A has an upward extension A' of about two-thirds the width of the main opening, from the upper side of which are suspended the hangers H H H, to which are secured the outer ends of the track-rails *a*, *b*, and *c* at a level above the upper end of the wider portion of the doorway, as shown in Figs. 1 and 3. The door C has a corresponding upward extension C' to close the extension A' of the doorway, said extension C' being made of less thickness than the main body of the door, as shown in Fig. 3. The inner face of said extension C' has formed therein three recesses *i i i* to receive the ends of the rails *a*, *b*, and *c* when the door is closed.

The switch-rail *e* has mounted thereon, so as to be movable endwise thereof, the coupling-plate *j*, the inner end of which is made to extend around and inclose the lower portion of said switch-rail, and has its outer upper corner beveled or inclined and is secured to said rail by screws *k*, which pass through slots *l* in said coupling-plate and screw into the rail *e*, all as shown in Figs. 4, 5, and 6. A locking-plate *m*, provided with the vertical slots *n n* and the lateral projection *m'*, having its under side inclined, as at *m²*, is secured to the switch-rail *e* by the screws *o o o* in position to lock the plate *j* in the position shown in Figs. 4 and 5, with its inner end projecting beyond the end of the rail *e*. The plate *m* when in its normal position projects below the lower edge of the rail *e*, and the end of the lateral projection *m'* is in engagement with the end of the plate *j* to hold it in its ad-

vanced position against the tension of the spring *p*, which acts to retract the plate *j* when the plate *m* is moved upward to disengage the end of the projection *m'* from engagement with the plate *j*. A cam-like projection *q* is secured to the upper edge of the broader part of the door *C* at the corner farthest from the hinged connection to the door-jamb, said cam projection acting upon the plate *m* to move it upward, thereby releasing the coupling-plate *j* and permitting it to be retracted by the tension of the spring *p*, secured by one end to said plate *j* and by its other end to a pin, stud, or screw set in the hanger *D* or rail *e*, all as shown in the figures.

When the refrigerator-door is opened for the purpose of conveying meat or other articles into or from the refrigerator-room, said articles being suspended from a suitable trolley arranged to roll upon said tracks, the movable end of the switch-rail *e* is moved to a position in front of the rail *a*, *b*, or *c*, as may be desired, and the coupling-plate *j* is moved toward the movable end of said switch-rail till its -shaped end engages said rail *a*, *b*, or *c* and the locking-plate *m* drops into position to lock said coupling-plate, as shown in Fig. 4. When the coupling-plate is retracted by the tension of the spring *p* after the plate *m* has been lifted by the action thereon of the cam-like projection *q* on the door *C*, the tension of the spring *G* causes the switch-section of the rail to be moved into the position shown in dotted lines in Fig. 2, when it is entirely out of the path of the narrow extension *C'* of the door *C*, so that the switch-rail presents no obstruction to the closing of the door. This is a great advantage, as the unlocking of said switch and moving it out of the path of the door is entirely automatic instead of the switch having to be unlocked and moved out of the path of the door by hand before the door is closed as has heretofore been necessary.

I claim—

1. The combination of a fixed track, a plurality of other fixed tracks removed therefrom, a switch-section of track pivoted at one end to the end of said first-mentioned fixed track and arranged to connect at its other end with either of the fixed tracks, a locking device for connecting said switch to either one of said fixed tracks, a traveling hanger for supporting the movable end of said switch-track and provided with revoluble anti-friction bearing-surfaces, a guideway for said hanger to travel in, and a spring to move said switch laterally when it has been uncoupled from either one of said fixed tracks.

2. The combination of the fixed track *d*, a plurality of other fixed tracks, a switch-section of track pivoted to the end of the rail *d*

and arranged to connect at its movable end with either one of the fixed tracks, a traveling hanger for supporting the movable end of said switch-track section, a guideway for said hanger to travel in, a spring to move said switch laterally when it is uncoupled from a fixed track, and mechanism having provision for automatically unlocking said switch-section from either one of said fixed tracks.

3. The combination of a door-frame opening into a refrigerating-room, a door for closing said opening, a plurality of fixed tracks located in the refrigerating-room, with their ends terminating within the doorway or opening, a fixed track outside of said refrigerator-room, a switch-section of track pivoted to said outer fixed track and adapted to connect at its movable end with either of said fixed tracks, a traveling hanger connected to the movable end of said switch, a guideway for said hanger to travel in, a spring to move said switch-track laterally when disconnected from either of said fixed tracks, a coupling device for connecting the movable end of said switch-track to either of said fixed tracks, a locking-plate for holding said coupling in engagement with a fixed rail, a cam-like projection on the upper outer corner of the door, adapted to engage and raise said locking-plate to unlock said coupling device, and a spring for retracting said coupling device when unlocked.

4. The combination of a door for closing an opening in a refrigerator-room, a plurality of fixed tracks located within the refrigerator-room, a single fixed track outside of said room, a switch-section of track pivoted to said outer fixed track and arranged to connect with either one of the tracks within the refrigerator-room, a traveling hanger connected to said switch-section, a guideway for said hanger to travel in, a yielding abutment at one end of said guideway, a spring to move said switch-track and hanger about their axis of motion when disengaged from the refrigerator-tracks and maintain said hanger in contact with said abutment when the switch is not in use, a coupling device to connect said switch with either of said refrigerator-tracks, a device for locking said coupling in engagement with a refrigerator-track, a cam-like projection upon said door, arranged to engage and operate the locking device to release the coupling, and a spring for retracting said coupling.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 12th day of March, A. D. 1892.

GEORGE W. PITMAN.

Witnesses:

N. C. LOMBARD,

WALTER E. LOMBARD.