

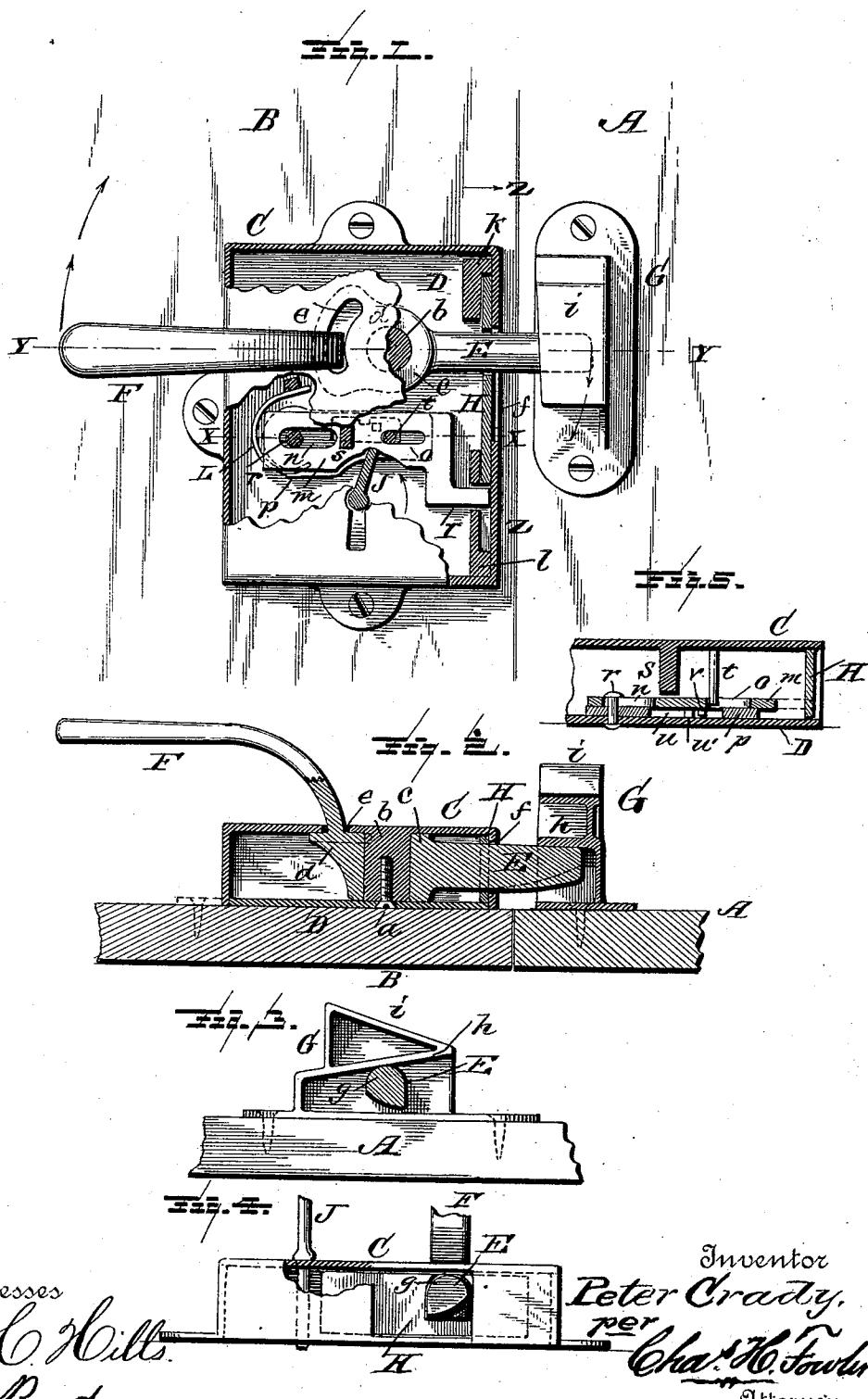
(No Model.)

P. CRADY.

LOCK.

No. 450,220.

Patented Apr. 14, 1891.



# UNITED STATES PATENT OFFICE.

PETER CRADY, OF BURLINGTON, VERMONT.

## LOCK.

SPECIFICATION forming part of Letters Patent No. 450,220, dated April 14, 1891.

Application filed January 16, 1891. Serial No. 378,020. (No model.)

*To all whom it may concern:*

Be it known that I, PETER CRADY, a citizen of the United States, residing at Burlington, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Locks for Refrigerators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

Figure 1 of the drawings represents a front elevation of my improved lock, partly in section, to show the interior construction thereof; Fig. 2, a longitudinal section taken on line  $y-y$  of Fig. 1; Fig. 3, a detail view on line  $z-z$ , showing the position of the latch with relation to the keeper. Fig. 4 is a side view of the lock with the case thereof partly broken away, and Fig. 5 a detail view in section taken on line  $x-x$  of Fig. 1.

The present invention has for its object to provide a secure lock for refrigerators or other purposes that will be easy of operation as well as simple in its construction, and will securely hold the door of a refrigerator or other like receptacle tightly closed, which objects are attained by the construction, substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents a portion of a refrigerator or other receptacle, and B the door, to which my improved lock is applied, the case thereof, as shown at C, being of any suitable construction and provided with any desirable and well-known means for securing it in place upon the door.

The case C has a base-plate D to form a complete inclosure for the operating parts of the lock, said plate being connected thereto by a screw  $a$ , engaging with a screw-hole in a stationary pivot or bearing  $b$ , depending from the under side of the case. This pivot or bearing  $b$  forms a means of pivotally connecting a latch E to the casing, said pivot extending down through an eye  $c$  of the latch, as shown more clearly in Fig. 2.

The latch E has an extension  $d$  to cover the curved slot  $e$  in the case C and prevent any dirt or dust working into the case, and the

handle F of the latch extends up through this slot, whereby the latch may be operated.

The latch E extends out through an opening  $f$  in the case C and has an inclined bearing  $g$  at its end to operate in connection with the inclined bearing-plate  $h$  of a keeper G, which is secured by screws or other well-known means to the refrigerator or other like receptacle. I shall term this bearing-plate the "inner one" in contradistinction to the second bearing-plate of the keeper, which is shown at  $i$ , both of which serve their purpose in connection with the latch, and which will be hereinafter described. A sliding locking-plate H is held within the case C by means of the guides  $k$   $l$ , and the latch E passes through a hole in said plate. A bolt I locks the plate H stationary when in the position shown in Fig. 1, the bolt passing under the lower edge of the plate and forming a support therefor, thereby holding the latch E in engagement with the keeper G. The bolt I has a plate  $m$  with slots  $n$   $o$ , and said plate rests upon a friction-plate  $p$ , which is pivotally connected to the base-plate D by means of the pivot  $r$ , which extends up through the slot  $n$  and forms an additional means of connecting the plates  $m$   $p$  together.

The under side of the case C has a lug  $s$  and pin  $t$  to hold the plate  $m$  in position, the pin extending down in the slot  $o$  to form a guide therefor.

The friction-plate  $p$  has a slot  $u$  and lug  $u'$ , and a lug  $v$  extends from the under side of the plate  $m$  into the slot, the lugs forming stops to limit the movement of the upper plate.

Connecting with the friction-plate  $p$  is a suitable spring L, and both plates are operated by a suitable key, as shown at J, whereby the latch may be locked in engagement with the keeper or released, as desired.

In the position shown in Fig. 1 the door is securely locked, the latch engaging with the keeper, and to unlock it the key is inserted in the key-hole and turned in the direction of the arrow, Fig. 1, which will raise up the friction-plate to bring the lug of the slot above the lug of the upper plate of the bolt. Now this will allow the plate, with its bolt, to move back out of line with the lower edge of

the locking-plate and remove the support therefrom, when by pressing upon the handle of the latch it will be disengaged with the keeper and admit of the door being opened. 5 By means of the weighted handle of the latch or by any other means found best adapted to the purpose, such as a spring or any equivalent device, the latch is automatically brought to a horizontal position. I have shown the 10 handle of sufficient weight for this purpose, and the spring above described will bring the friction-plate back to its normal position when released by the key. When the handle of the latch is pressed up, the latch will be forced 15 down out of engagement with the keeper and carry with it the locking-plate, through which the latch passes, the weight of the handle, as previously stated, bringing the latch and plate back to the position shown in Fig. 1. 20 after the door is opened. When the bolt is drawn, as above described, it is held in this position by the lug on the plate engaging with the lug on the friction-plate upon the opposite side. When the door is swung closed, the 25 end of the latch will strike the inclined plate upon the outside of the keeper and force it down sufficiently to engage with the keeper, and by pressing down upon the handle of the latch the curved portion or inclined bearing 30 thereof will come in contact with the inclined plate on the interior of the keeper, and by its action will draw the door tightly closed, when the bolt may be again forced out by the key to lock the plate through which the latch 35 passes in a stationary position, as shown in Fig. 1.

In describing my invention there are many features in the details of construction that may be variously modified or changed, as 40 might be found necessary. For instance, the

slotted plate of the bolt and the friction-plate upon which it rests and the spring and also the parts immediately connected therewith are not absolutely necessary, as other means of well-known construction might be 45 substituted, and any bolt, therefore, that would serve the purpose of holding the locking-plate of the latch stationary and thereby locking the latch to the keeper may be substituted for the means shown. The case of the lock may 50 be also changed, as circumstance would require, and any well-known form of case could be used that would serve the purpose intended.

I do not wish to be understood as limiting myself to the construction shown and described of the several parts of the device, as it is evident that many changes may be made in the several details of construction without departing from the principle of my invention, and I reserve the right to make any such 60 changes or modifications as would come within ordinary mechanical skill.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a lock, the combination, with a keeper having inclined bearings extending in opposite directions, of a pivoted latch operating in connection therewith, a vertically-sliding locking-plate, and a bolt for supporting the 70 plate in an elevated position and also for releasing it, substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence 75 of two witnesses.

PETER CRADY.

Witnesses:

H. E. WOODBURY,  
S. M. ATHERTON.