

(No Model.)

A. BURBEE.
LOCK AND LATCH.

No. 502,276.

Patented Aug. 1, 1893.

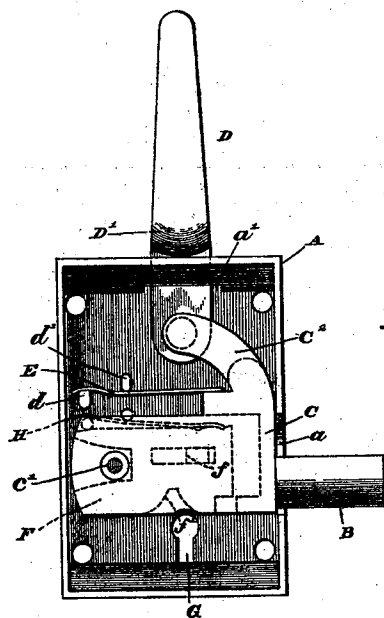


FIG. 1 -

FIG. 2 -

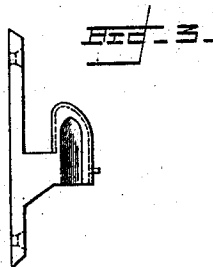
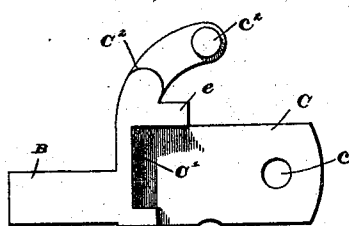


FIG. 3 -

Witnesses

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UNITED STATES PATENT OFFICE.

AARON BURBEE, OF GRAND RAPIDS, MICHIGAN.

LOCK AND LATCH.

SPECIFICATION forming part of Letters Patent No. 502,276, dated August 1, 1893.

Application filed October 31, 1892. Serial No. 450,537. (No model.)

To all whom it may concern:

Be it known that I, AARON BURBEE, a citizen of the United States, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in a Combined Lock and Latch; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a combined lock and latch, the same being designed for use primarily on a refrigerator door, but adapted for practical application to other articles also, the object of the invention being to provide a cheaply-constructed and easily-operated lock and latch, consisting of as few parts as possible and occupying as little space as is consistent with the effective arrangement of the various elements, and the invention therefore consists in the construction, arrangement and combination of parts substantially as will be hereinafter described and claimed.

In the accompanying drawings illustrating my invention: Figure 1 is an inner elevation of my improved combined lock and latch, the covering plate of the casing being removed so that the arrangement of the interior parts may be more fully seen and understood. Fig. 2 is a detail elevation of the pivoted latch plate which forms an important element in the construction of my device. Fig. 3 is an edge view of the catch which is engaged by the latch.

Like letters of reference designate like parts in the figures.

A designates the lock casing having any suitable size and shape and provided with the ordinary removable cover secured in place in any suitable manner, as by means of screws or other fastening devices. This casing A is provided on one of its sides with a slot *a*, through which projects the latch B, carried by the pivoted latch plate C, and the casing A is furthermore provided at its upper end with another slot *a'* within which is located the lengthened handle D, which acts as an operative lever in connection with the latch plate, as will be hereinafter fully specified.

C denotes the latch plate, having the latch

B which projects through the lateral slot *a*, as above stated. The plate C is perforated at its inner end with a small round opening *c*, which contains a rigid pin *c'*, cast on the lock casing. The plate C being hung in this manner is adapted for oscillation upon its pivot *c'*, the result of which oscillation will be to lift or lower the latch B after the manner of any ordinary latch bar and the slot *a* has sufficient length to allow of this vertical play of the latch. The latch plate C is provided on its upper side with a curved arm *C'*, having at its end a horizontal pin *c''*, which passes through a perforation in the lower end of the operating lever D, and in this way forms a pivotal connection between the latch plate and said lever. The plate C is also provided with the shoulder *e*, contiguous to the curved arm *C'*. The plate C is furthermore provided on one of its sides, preferably the side nearest the permanent or non-removable back plate of casing A, with a rectangular recess *C'* in the face of plate C, formed so that it may be engaged by any rectangular or angular bar, so connected and arranged with other parts, that the engagement of said bar with the latch plate, will hold the same in a horizontal position and thereby keep it locked.

The operating lever D is preferably curved at D', outside of the casing A and it extends for some distance above said casing and this curvature provides a shoulder which rests upon the upper side of the casing A so that the lever is in this way pivotally mounted in the slot *a'* and by its manipulation to the right or to the left, it will in consequence of being pivotally connected to the arm *C'*, oscillate the latch plate C upon its pivot *c'* and raise the latch B whenever it is desired to disengage this latch from the staple or catch with which it may be engaged. The latch B is normally held in its lowermost position, which is its position of engagement with its catch, by means of a flat horizontal spring E, attached to a pin *d*, and passing beneath another pin *d'*, the other end of said flat spring, bearing firmly upon the shoulder *e* of the latch plate C. Thus the function of the operating lever D, is by its manipulation, to lift the latch B against the force of the spring E, and when thus lifted, the spring E will readily and

quickly return the latch to its former position after the operator releases his hold from the handle D.

In the casing A is the keyhole G, preferably located at the lower part of the casing. Behind the latch plate C, or in other words, between it and the permanent back of the casing A, is a horizontal sliding plate F, longitudinally slotted to contain a rigid pin *f* on the back plate of the casing, by which pin the sliding plate is held and guided truly in its horizontal movement. Said plate F is provided on its lower edge with a curved-sided indentation *f'*, which is adjacent to the keyhole G and on the upper edge of plate F, bears a flat spring H, which serves to hold the plate in any position to which it may be adjusted. Obviously this plate will be operated by means of the key, the result of which operation will be to shift the plate either to the right or to the left. When it is shifted toward the right, its ends will enter the face recess C' of the plate C and thereby the plate C will be locked in the position where the latch B is in engagement with its catch. By shifting the plate F in the opposite position, it will be freed from the plate C and the latch B will then be free to be lifted by operating the handle D.

The operation of my improved combined lock and latch will be readily understood from the foregoing description. It may be used either as a right hand or left hand lock and therefore is available for application to all kinds of doors. When used in connection with a refrigerator door, it forms a tight joint and prevents air from entering the refrigerator. Numerous slight changes may be made in the exact construction and arrangement of

the parts without departing from my invention.

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

1. In a combined lock and latch, the combination with a pivoted plate having a latch thereon and an upwardly extending arm, of a lever mounted pivotally in a slot in the upper side of the casing and pivoted to the aforesaid arm, substantially as described.

2. The combination of the latch-provided pivoted plate, the operating lever mounted pivotally in a slot in the upper side of the casing and pivoted to said plate and a locking key-operated slide between the plate and the casing adapted to engage a recess in the said plate, substantially as described.

3. The combination of casing A, plate C, pivoted on the post *c'* and having a latch B, spring E bearing on said plate, handle D pivoted to the arm C² of the plate, substantially as described.

4. The combination with the slotted casing, of the plate C having latch B, curved upward arm C², shoulder *e* and rear-faced recess C', the curved handle lever D, mounted pivotally in the casing slot and pivotally attached to the arm C², the spring E bearing on the shoulder *e* and the key-operated slide adapted to engage the recess C', substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

AARON BURBEE.

Witnesses:

AMBROSE E. HUGHES,
JOAB D. WOLVERTON.