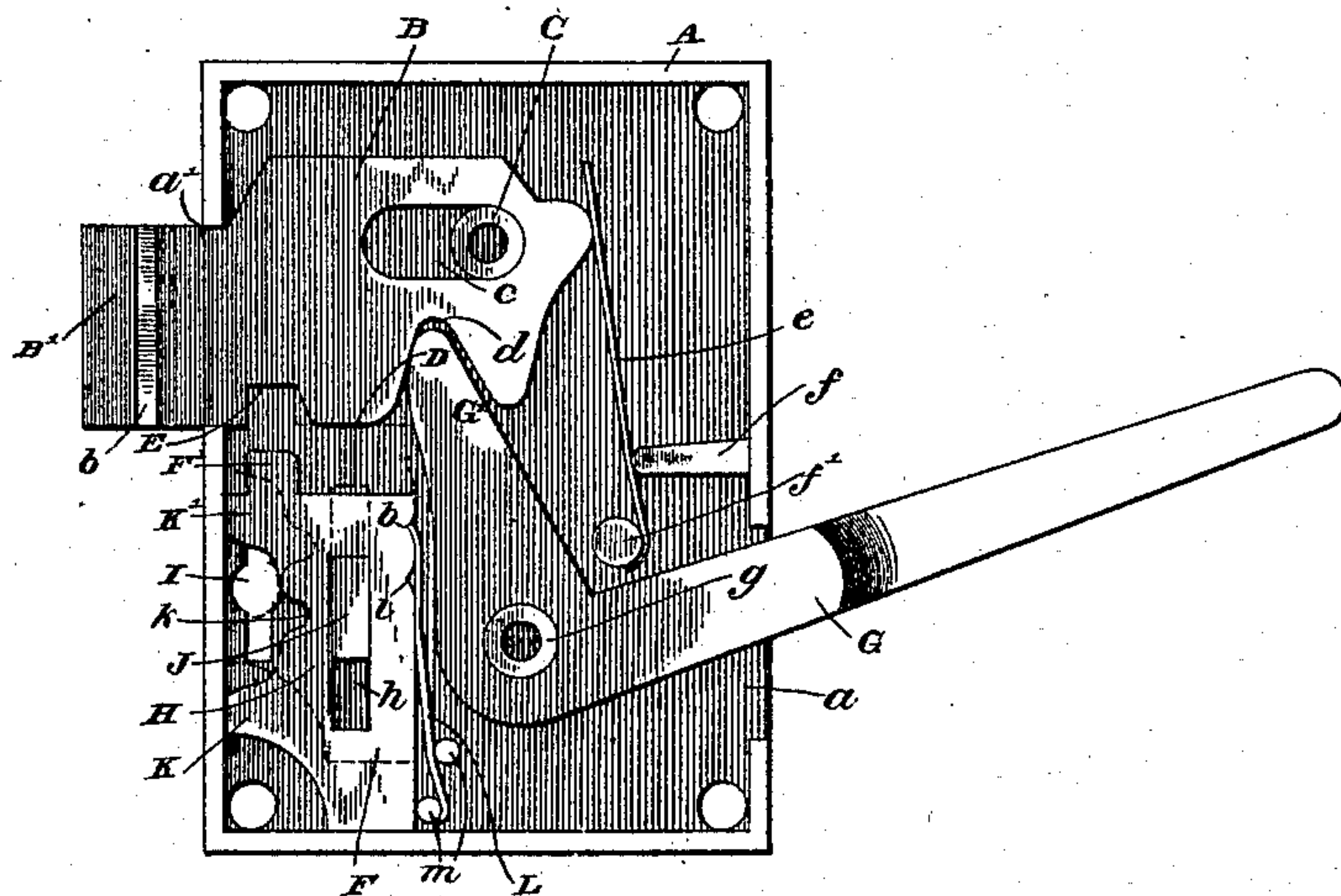


(No Model.)

A. BURBEE.
LOCK AND LATCH.

No. 503,649.

Patented Aug. 22, 1893.



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. 503,649, dated August 22, 1893.

Application filed October 31, 1892. Serial No. 450,536. (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.

This invention has reference to a combined lock and latch adapted especially for use on refrigerator doors, but equally serviceable for other purposes, the object of the invention being to provide a cheap and simply-made device, and the invention consists in the construction, arrangement and combination of parts, substantially as will be hereinafter described and claimed.

In the annexed drawing, I have delineated an elevation view showing the interior arrangement of the several parts of my improved combined lock and latch, the cover of the casing being removed so that the relative positions of these parts may be more easily seen.

A denotes the casing of my device which may be of any suitable size and shape, being preferably rectangular and constructed with the usual removable covering plate whereby access can easily be had to the interior parts. This casing is provided on one side with a slot *a*, in which lies the long operating lever G, whereby the unlatching is accomplished. The casing A is also provided on its opposite side with another slot *a'* within which is located the latch bolt B. The latch bolt or plate B lies horizontally within the casing projecting through the slot *a'* and provided on its outer end with the latch B' and the shoulder or offset *b*. This latch bolt is formed with a slot *c*, which receives the rigid pin C cast on the lock casing. The bolt B is furthermore shaped on its lower edge with the indentation *d*, the notch E and the intervening projection D, which lies between the notch and the indentation. A flat spring *e* bears against the inner end of the latch bolt B and tends to throw the latter outward, said spring having one end secured to the rigid pin *f'* on the lock casing and the spring like-

wise bears against the horizontal pin *f*. The elongated handle or operating lever G lies loosely within the lateral slot *a* and is formed on its inner end with the right-angled extension G' having a blunt pointed end which lies within the indentation *d* in the latch bolt, which indentation is suitably shaped to receive it and permit it to play loosely therein, the result of which play will be to actuate the latch bolt and withdraw the latter into the lock casing when desired for the purpose of accomplishing the unlatching. The lever G is pivoted at its angle between its main length and the right angled extension G', by means of a rigid pivot pin *g* carried on the lock casing and entering a perforation in the lever G. It will be obvious that by manipulating the projecting portion of the handle G, the latch bolt may be withdrawn into the casing until its shoulder *b* strikes against the outside edge of said casing, and further that the action of the spring *e* will be to again throw the latch bolt in an opposite direction so that its latch will be engaged with whatever catch may be provided on the contiguous portion of the refrigerator or other article to receive it.

Below the latch bolt B and alongside of the lever projection G', is located the vertically moving locking slide F, having at that end nearest the latch bolt B, a projection F' which is adapted to enter notch E in the latch bolt and thereby lock the latch bolt in its rigid position so that the manipulation of the handle G will be ineffective in acting upon the latch bolt while it is thus locked. The locking slide F is provided with a rectangular slot *h* within which is a rectangular lug J, said lug being cast on the lock casing and having the function of guiding the locking slide in its movement and keeping it in proper position. Furthermore, it will be observed that the locking slide is located contiguous to the key-hole I, formed in the lock casing and that the edge of the slide F nearest this key-hole I is indented at *k*, there being projections K K' on either side of the indentation *k*, the edges of these projections adjacent to the indentation being compoundly curved substantially as shown. The key which is entered into the key-hole I engages the indentation *k* and operates to lift or de-

press the locking slide, that is to say, moves it in one direction or the other so as to either engage it with the latch bolt or cause it to become disengaged therefrom.

5 On the edge of the locking slide, opposite to the key indentation *k*, is a flat spring *L*, which bears against the slot and serves to hold it in whatever position it may be placed. One end of said spring *L* is located between
10 the small pins *m m*, to one of which it is secured, while its opposite end is slightly bent so as to enter the small notches *l l* in the edge of the locking slide near the upper end thereof.

15 The operation and use of my improved combined lock and latch will be obvious from the foregoing description of the construction and arrangement of the several parts. It may manifestly be constructed so as to be
20 used either with a right or left hand latch. Furthermore any convenient kind of catch may be used for engagement with the latch *B'*. Also numerous changes may be made in the exact structure and details of these several
25 parts without departing from the invention. Whenever the latch is engaged with a suitable catch, the door being closed air tight at this time, it will be seen that the locking of the latch can easily be accomplished by simply
30 using the key, and causing the locking slide to be swung into engagement with the latch bolt. By reversing the movement of the key the unlocking can be accomplished with equal facility. The long handle *G* projecting
35 outward some distance from the lock casing affords a convenient device for unlatching the door and the spring which acts on the latch bolt within the casing, quickly returns the latch into its projected position so
40 that it will automatically engage its catch whenever the door is closed. Thus the arrangement of parts is simple and effective and the lock is at once efficient and inexpensive.

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

1. The combination with the casing, of the latch bolt *B*, having slot *c*, receiving rigid pin

C and having also the latch *B'* and the indentations *d* and *E*, the spring *e* acting on the inner end of the latch bolt and the long handle *G* projecting outward from the casing and pivoted within the casing and having an angular extension *G'* which engages the indentation *d*, substantially as described, 50

2. The combination with the latch bolt *B* having the indentations *d* and *E* on its edge and having the latch *B'* on its outer end, of a lever handle having a projection that enters the indentation *d*, and the key-operated locking slide *F* having a projection that enters the indentation *E*, substantially as described. 55

3. The combination of the bolt *B*, having latch *B'*, slot *c*, receiving pin *C*, indentations *d* and *E* on its lower edge, the pivoted elongated operating lever *G*, having extension *G'* engaging the indentation *d*, locking slide *F* guided by the lug *J* and having the key-indentation *k*, substantially as specified. 60

4. The combination with the casing, of the latch bolt *B*, having the slot *c*, adapted to receive the pin *C* and having also the integral latch *B'* and shoulder *b* and the indentations *d* and *E*, the spring *e* secured to the casing and acting on the inner end of the latch bolt, the long handle *G* pivoted to the casing and extending through the slot *a* and provided with the angular extension *G'* which is adapted to engage with the indentation *d* of the latch plate, the vertically moving locking slide *F* provided with the projection *F'* which is adapted to engage the notch or indentation *E*, said slide *F* being provided with the rectangular slot *h* within which is the rectangular lug *J*, the indentation *k* and the projections *K K* formed on said slide, and the flat spring *L* located between the pins *m m* to one of which it is secured and being bent slightly so as to enter the notches *l l* in the edges of the locking slide, substantially as described. 70 75 80 85 90

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

AARON BURBEE.

Witnesses:

AMBROSE E. HUGHES,
JOAB D. WOLVERTON.