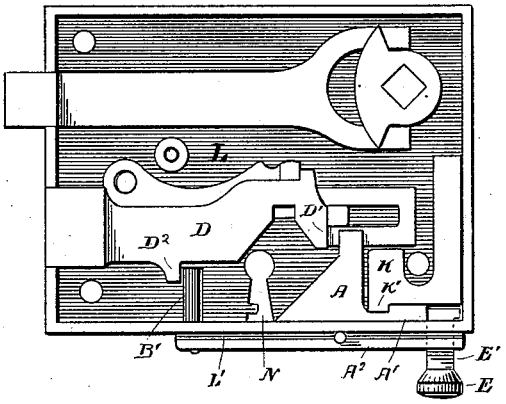
(No Model.) 2 Sheets—Sheet 1.

C. R. UHLMANN.

LOCK.

No. 347,664. Patented Aug. 17, 1886.

Fig. 1.



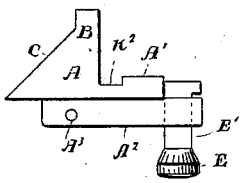


Fig. 2.

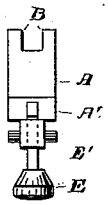
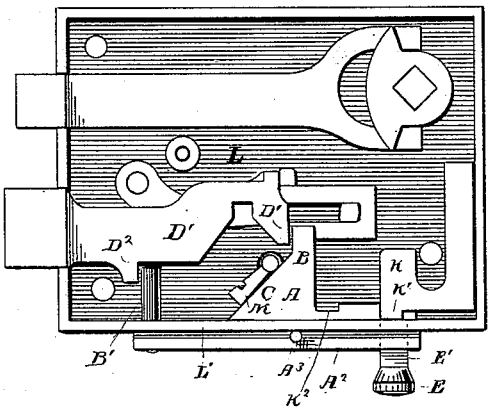


Fig. 3.

Fig. 4.



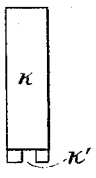


Fig. 5.

Witnesses;

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by A. B. Upham,

His Attorney.

N. PETERS, Photo-Lithographer, Washington, D. C.

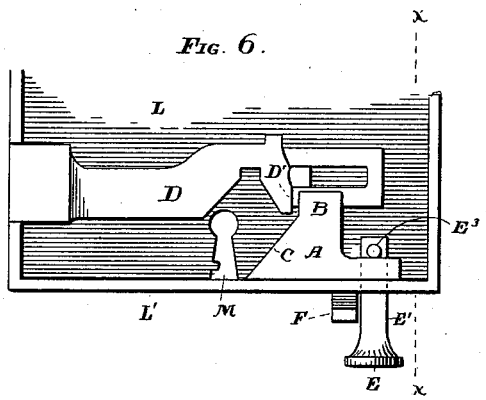
(No Model.) 2 Sheets—Sheet 2.

C. R. UHLMANN.

LOCK.

No. 347,664. Patented Aug. 17, 1886.

Fig. 6.



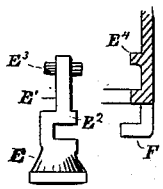


Fig. 10.

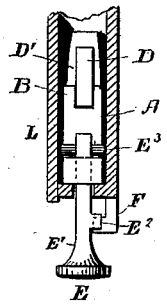


Fig. 7.

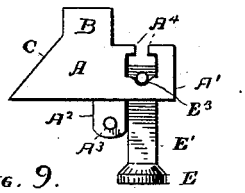


Fig. 9.

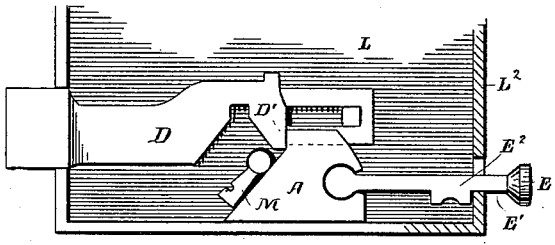


Fig. 8.

Witnesses:
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A. Keithley

Inventor,
Charles R. Uhlmann,
by A. B. Upham,
His Attorney.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHARLES R. UHLMANN, OF PEORIA, ILLINOIS.

LOCK.

SPECIFICATION forming part of Letters Patent No. 347,664, dated August 17, 1886.

Application filed June 28, 1886. Serial No. 206,437. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. UHLMANN, of Peoria, in the county of Peoria, State of Illinois, have invented an Improved Safety-Lock; and I do hereby declare that the following is a full, clear and exact description thereof.

The object of this invention is the construction of an improved device for enabling the bolt of what is termed a "rim-lock" to be so fastened from within the compartment as to be rendered incapable of being unlocked from the outside.

My invention for this purpose consists, essentially, of a block adapted, when the bolt is protracted, to be moved forward and partially cover the key-hole, preventing the withdrawal of the key, and at the same time abutting against projections or shoulders on the bolt to keep the same from being unlocked, means being provided for fastening said block in such position.

In the drawings connected with this application, Figures 1 and 2 are views of the interior of a lock, showing the bolt in its two positions; Figs. 3 and 4 are respectively side and end views of the block aforesaid. Fig. 5 is an elevation from right hand of the tumbling-block. Fig. 6 is a view of the interior of a lock provided with my most approved form of block and means for securing the same. Fig. 7 is a sectional view at *x x* in Fig. 6. Fig. 8 is a view of a modification of the lock. Fig. 9 is an elevation of securing-block; Fig. 10, a view of the button and finger.

In the drawings, L is the lock-case having its side plate removed. D is the bolt. M is the key, and N is the key-hole.

The block A, which I term the "securing-block," is formed with the sloping face C for engaging with the key M, as shown in Fig. 2, and also is provided with the lug or lugs B, which, by abutting against the shoulders D′ on the bolt D, serve to hold the latter in its protracted position when the block is fastened forward, as shown in Fig. 4. Two lugs, B, are usually formed on the securing-block, between which lies the lower edge of the tail of the bolt, so that said lugs shall engage with a shoulder on each side of the bolt, and thus assist in holding the latter in place. On the under side of the securing-block is a rib, A^2, projecting through a slot in the lower rim, L′, of the lock-case; and transversely through said rib below said rim is inserted a small pin, A^3, by which the securing-block is kept from rising from its place.

I sometimes prolong the rib A^2 some distance forward, as shown in Figs. 1 and 2, and have a projection, B′, extend from the end thereof up through a slot in the rim L′ of the lock-case. A lug, D^2, below the bolt D, is met by this projection B′, which assists in preventing the bolt from being retracted when the securing-block A is fastened forward. As indicated in Figs. 6 and 8, the said rib A^2 can be dispensed with and the securing-block A permitted to rest upon the rim L′, the tail of the bolt D keeping said block from being raised.

In using my safety-lock, the bolt D is first thrown into engagement with the keeper in the door-jamb by means of the key M. The securing-block A is then moved forward until its lugs B meet the shoulders D′ of the bolt, and the sloping face C presses the key M to one side of the key-hole N, so that said key cannot be withdrawn. The securing-bolt being now fastened in its present position, the bolt D cannot be displaced nor the key removed by any means applied from without the apartment. For thus fastening said securing-bolt, I have devised several devices, among which are those displayed in Figs. 1, 2, 6, and 8.

In Figs. 1 and 2 the fastening device consists, essentially, of the tumbling-block K, having a lug, K′, adapted to engage with a notch, K^2, in the arm A′ of the block A. A button, E, having stem E′, extending vertically through the rear end of said arm A′, enables the lug K′ of said tumbling-block to be raised from said notch, and the securing-block A to be moved to its fastening position, which, when reached, is maintained by the dropping of said tumbling-block between the end of the arm A′ and the side rim of the lock-case. To unlock the door the tumbling-block K is raised in the same way by the button E, while the securing-block A is moved back.

In Fig. 8 the button E has its stem E′ pivotally attached to the securing-block A, and passes therefrom horizontally through a slot in the side rim, L^2. By swinging the button upward, the lug E^2 of the stem E′ is disengaged from the lower end of the slot, so that

the stem and the securing-block A can be fastened in either of the two positions.

My preferred construction, which is that shown in Figs. 6 and 7, consists in the button E, having the stem E′, on which is the laterally-projecting lug E^2. Said stem is vertically movable in an aperture through the arm A′ of the securing-block A, being kept from falling therefrom by a small cross-pin, E^3. From the lock-case projects the bent finger F, with which the lug E^2 comes in contact when the button E is in its lower position. By raising said button until said lug is just above said finger, a side push on said button moves it and the securing-block. The button being allowed to drop at the other side of the finger, the interference of the lug E^2 and said finger holds the securing-block A in its new position.

The object in having the securing-block A fastened in its non-securing position is that the same shall not be moved by the jarring of the door, and thereby cover the key-hole when not desired.

Instead of the finger F and the lugs E^2, a projection, E^1, can be formed on the wall of the lock-case for the engagement therewith of the pin E^4. The button E being raised to bring said pin above said projection, the securing-block can be moved, as before. This construction is substantially the same as the arrangement of the finger and lug, and both constructions can be employed at the same time, if desired.

As shown in Fig. 9, there can be a short rib, A^2, formed beneath the securing-block A, and a cross-pin, A^3, put therein to aid in holding the said block in place on the rim L′. The abutting of the rear end of said rib against the stem E′ of the button E strengthens the position of said block when holding the bolt D, by means of the finger F, and the lug E^2. To keep the button E from being raised too high, I form the arm A′ with the projections A^4, extending over the upper end of the stem E′ of the button. When said button is raised to enable the stem to clear the finger F, the upper end of said stem meets said projections, and is thereby made to remain at the proper point. I prefer this stop, rather than the lug E^2 and its contact with the under side of the lock-case, on account of the friction resulting from this latter way, and the consequent less case of moving the securing-block.

What I claim as my invention, and for which I desire Letters Patent, is as follows, to wit:

1. In a lock, the combination, with the case and the bolt, of the securing-block A, adapted to engage with said bolt and having the sloping face C for securing the key, and a fastening for said block, for the purpose specified.

2. In a lock, the combination, with the case and the bolt D, having the shoulders D′, of the securing-block A, having the lugs B, adapted to engage with said shoulders, and formed with the sloping face C for securing the key, and the button adapted, substantially as set forth, for fastening said securing-block, for the purpose specified.

3. In a lock, the combination, with the case and the bolt, of the horizontally-movable securing-block adapted to engage with the bolt, and the vertically-movable button adapted, when raised, to permit itself and the said block to be moved, but when dropped to fasten the same, substantially as described.

4. The combination, with the lock-case and the bolt, of the securing-block adapted to engage with the bolt, and having the arm A′, the button having stem vertically movable in said arm, and having the lug E^2 and the finger F projecting from the lock-case, substantially as set forth.

5. The combination, with the lock-case and the bolt having the shoulders D′, of the securing-block A, formed with the lugs B, the sloping face C, and the arm A′, the button E, having stem E′ movable in said arm, and having a projection engaging with a projection from the case, substantially as and for the purpose specified.

In testimony that I claim the foregoing invention I have hereunto set my hand this 24th day of June, in the year 1886.

CHARLES R. UHLMANN.

Witnesses:
A. B. UPHAM,
A. KEITHLEY.